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REVISED

IMPACT ASSESSMENT REPORT

AMENDMENT OF ENVIRONMENTAL AUTHORISATION FOR THE EA DATED 18 AUGUST 2009 FOR THE PROPOSED RESIDENTIAL DEVELOPMENT ON A PORTION OF THE FARM VAALE VALLEY 219, MOSSEL BAY (HARETENBOS LANDGOED PHASE 2)

WESTERN CAPE PROVINCE

REPORT IN TERMS OF SECTION 32(1)(A) OF GOVERNMENT NOTICE NO. R326 OF APRIL 2017

PREPARED FOR:	Hartland Lifestyle Estate (Pty) Ltd	DATE:	27 February 2023
DEADP PROJECT REFERENCE:	16/3/3/6/7/1/D6/29/0051/22		
SES REFERENCE NUMBER:	15/HLA/MB/10/22		

GLOSSARY OF TERMS

Anthropogenic Impacts: Impacts originating in human activity, e.g. pollution, mining, destruction of vegetation etc.

Cumulative Impact: The impact of an activity that by itself may not be significant but combined with other existing and potential future impacts may be significant.

Department of Environmental Affairs and Development Planning (DEA&DP) - The Provincial Directorate of the National Department for Environmental Affairs and Tourism. This Department is responsible for evaluating the viability of the development proposal and issuing the appropriate Authorisation.

Environment - The surroundings within which humans exist and that are made up of

- i. The land, water and atmosphere of the earth;
- ii. Micro organisms, plant and animal life;
- iii. Any Part or combination of (i) and (ii) and the interrelationships among and between them; and
- iv. The physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and wellbeing.

Environmental authorisation – The authorisation by a competent authority of a listed activity.

Environmental Assessment Practitioner (EAP) – The person responsible for planning, management and co-ordination of environmental impact assessment, strategic environmental assessments, environmental management plans or any other appropriate environmental instrument introduced through regulations.

Environmental impact - An environmental change caused by some human act.

Impact Assessment Report (IAR) - A report assessing the potential significant impacts relating to the proposed changes to the EA.

Interested and Affected Party (I&AP) – Any individual, group, organization or associations which are interested in or affected by an activity as well as any organ of state that may have jurisdiction over any aspect of the activity.

NEMA EIA Regulations - The EIA Regulations means the regulations made under section 24(5) of the National Environmental Management Act (Act 107 of 1998) (Government Notice No. R 326, R 327, R 325 and R 324 in the Government Gazette of 04 April 2017 refer).

Public Participation Process (PPP) - A process in which potential Interested and Affected Parties are given an opportunity to comment on, or raise issues relevant to, specific matters.

Registered Interested and Affected Party – All persons who, as a consequence of the Public Participation Process conducted in respect of an application, have submitted written comments or attended meeting with the applicant or environmental assessment practitioner (EAP); all persons who have requested the applicant or the EAP in writing, for their names to be placed on the register and all organs of state which have jurisdiction in respect of the activity to which the application relates.

Significant impact – Means an impact that by its magnitude, duration, intensity or probability of occurrence may have a notable effect on one or more aspects of the environment.

Spatial Development Framework (SDF) - A document required by legislation and essential in providing conservation and development guidelines for an urban area, which is situated in an environmentally sensitive area and for which major expansion is expected in the foreseeable future.

ABBREVIATIONS

ACSA	Airports Company South Africa
CA	Competent Authority
CBA	Critical Biodiversity Area
DEA&DP	Department of Environmental Affairs & Development Planning
DWA	Department of Water Affairs
EAP	Environmental Assessment Practitioner
ECO	Environmental Control Officer
EMF	Environmental Management Framework
ESA	Ecological Support Area
HWC	Heritage Western Cape
I&AP	Interested and Affected parties
IA	Impact Assessment
IDP	Integrated Development Plan
LUPO	Land Use Planning Ordinance (Ordinance 15 of 1985)
NEMA	National Environmental Management Act, 1998
NHRA	National Heritage Resources Act, 1999 (Act No. 25 of 1999)
PPP	Public Participation Process
ROD	Record of Decision
SDF	Spatial Development Framework
SES	Sharples Environmental Services cc
WCPSDF	Western Cape Provincial Spatial Development Framework

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1. INTRODUCTION AND BACKGROUND

1.1. PROJECT BACKGROUND

Sharples Environmental Services cc (SES) was appointed by the Hartland Lifestyle Estate (Pty) Ltd (the proponent) to compile this Impact Assessment Report for the proposed Residential Development on a Portion of the Farm Vaale Valley 219, Mossel Bay, Western Cape. The property is owned by Mr. P. R. Steyn, Company K2011133641 (South Africa) (Pty) Ltd.

On 18 August 2009, a Record of Decision (ROD) was issued (**Ref: EG12/2/1-AM18-Farm Vaalevalley 219/B, Mossel Bay**) to the Hartenbos Landgoed (Pty) Ltd for the Residential Development on a Portion of the Farm Vaale Valley 219, Mossel Bay, Western Cape (See **Appendix A**). Authorisation was granted and the scope of the authorisation is as follows:

"The proposed development consists of 1265 residential erven (Zoned Residential I), Five townhouse erven (zoned residential III that includes 150 social housing units, a multi-purpose community centre and a +- 300m² split zoned Business II site located on Ptn 1302), an open space network and recreation area (zoned Open Space II) and a =- 3500m² split zoned Business II site (located on Ptn 1306), a road network and associated infrastructure services on the footprint as indicated on the layout plan HB/C/204/9 by Nel & de Kock dated February 2009. The Remainder of the property will be managed as a nature reserve.

Access will be from Main Road 344 through the culvert under the N2 National Road, which will be upgraded to four lanes. A second access will be provided to the south along the existing dirt track to Hartenbos Landgoed Phase 1. This road will be upgraded to two lanes and will have a paved/tarred surface.

Water will be provided from the proposed new 15Ml reservoir that will supply both the proposed Hartenbos Landgoed and possible future developments in the area. (see drawing M10607/002A dated 24 June 2008). A 5Ml reservoir and booster pump station is proposed for construction on erf 1313 of Plan No. HB/C/204/9 as part of this application (see drawing M1607/002B dated 24 June 2008).

Sewerage removal will be accommodated by means of a gravity sewer network in combination with sewage pump stations. From pump station PS01 on Erf 1308 next to the N2 national road, the sewage will be pumped to a point near Erf 1 from where it will gravitate and siphon to the Hartenbos Regional Sewage Treatment Works. (See drawing Number M1607/001 dated 24 June for the bulk sewer layout."



Figure 1: Farm Vaale Valley 219, Mossel Bay, Western Cape

On 18 December 2012, an amendment of the authorisation was granted for the extension of the validity period and for the change of ownership to K2011133641 (South Africa) (Pty) Ltd. On 12 January 2018, another extension of the validity period was approved.

IMPLEMENTATION OF THE EXISTING EA

Construction activities commenced in July 2019 and the following aspects of the EA have already been implemented to date.

EA aspect	Implementation
1265 residential erven (Zoned Residential I)	260 Single Residential units and 88 General Residential units have been implemented
Five townhouse erven (zoned residential III that includes 150 social housing units)	
a multi-purpose community centre and a +- 300m ² split zoned Business II site located on Ptn 1302)	
an open space network and recreation area (zoned Open Space II)	
a road network and associated infrastructure services	Partially implemented
The Remainder of the property will be managed as a nature reserve	Partially implemented
Access will be from Main Road 344 through the culvert under the N2 National Road, which will be upgraded to four lanes	Partially implemented, the road is currently two lanes and it is proposed to maintain it as such, this road will become the secondary access to the development
A second access will be provided to the south along the existing dirt track to Hartenbos Landgoed Phase 1. This road will be upgraded to two lanes and will have a paved/tarred surface.	Not implemented, it is proposed to make this the primary access to the development. The proposed road is being assessed and the application for EA is being undertaken in a separate application.

<i>Water will be provided from the proposed new 15ML reservoir that will supply both the proposed Hartenbos Landgoed and possible future developments in the area.</i>	Partially implemented, the reservoir has been constructed however the permanent connection to water pipeline has not been completed
<i>A 5ML reservoir and booster pump station is proposed for construction on erf 1313</i>	Not implemented yet
<i>Sewerage removal will be accommodated by means of a gravity sewer network in combination with sewage pump stations. From pump station PS01 on Erf 1308 next to the N2 national road, the sewage will be pumped to a point near Erf 1 from where it will gravitate and siphon to the Hartenbos Regional Sewage Treatment Works. (See drawing Number M1607/001 dated 24 June for the bulk sewer layout."</i>	Partially implemented, the sewer network is being constructed as the development progresses.

PROPOSED AMENDMENT

The applicant proposes to amend the current layout HB/C/204/10 (the EA authorizes layout HB/C/204/9 subject to conditions and as such HB/C/204/10 was developed to address the conditions of the EA).

The proposed amendments will not increase the total footprint of the development, only re-align internal roads and the density of the development. Additionally, as part of the initial authorization the municipality negotiated with the developer to accommodate 150 social housing units, community hall and split zoned business. It is however understood that the residents of Power Town (the beneficiaries for the social housing do not wish to relocate and as such the social housing aspect has become redundant). A new agreement with the Mossel Bay Municipality has been reached (Please refer to Appendix P) and is being implemented in line with the municipal densification policy. A new southwestern road, which will become the primary access, is proposed which has also resulted in the re-alignment of roads in the southwestern section of the site, this realignment forms part of a BAR compiled by another environmental company.

Sharples Environmental Services cc, on behalf of K2011133641 (South Africa) (Pty) Ltd, the entity undertaking the development of Hartland Lifestyle Estate, will therefore be submitting an application to amend the ROD/Amended EA (substantive part 2 amendment process) to change the project description to include the scope of the amended layout.



Figure 2: Current approved Layout (HB/C/204/10)

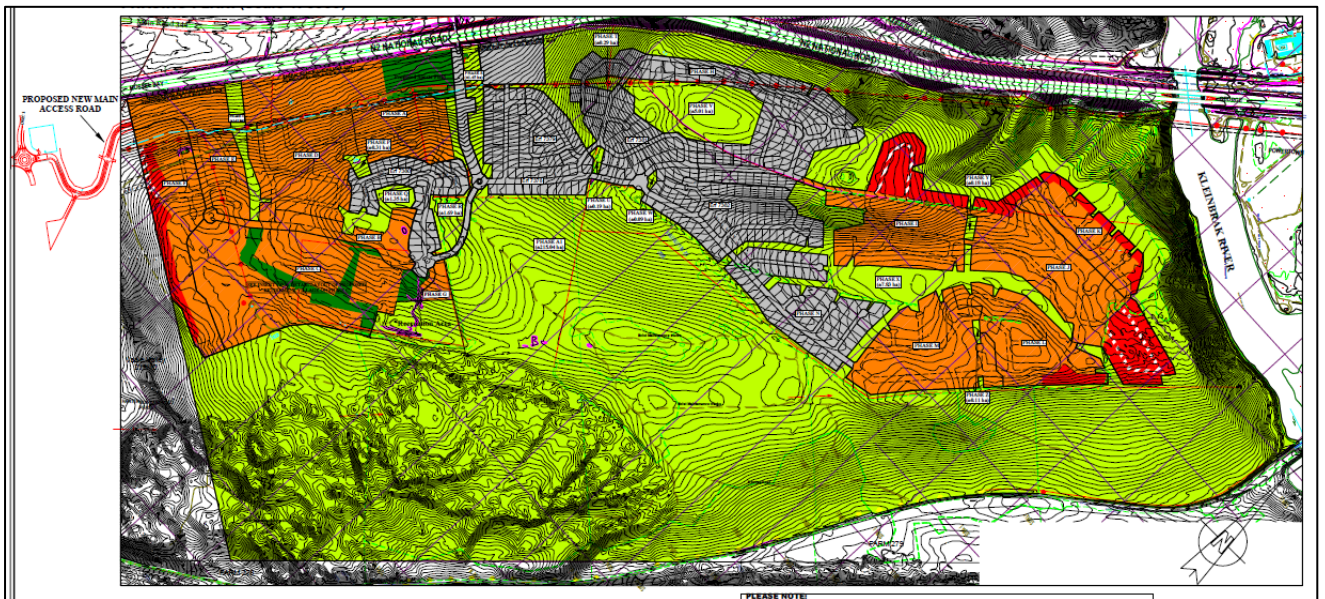


Figure 3: Proposed Layout Annexure to HB/G/206-4, dated March 2023 (already developed erven indicated in grey)

1.2. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Sharples Environmental Services cc is an independent environmental consultancy and has since 1998 been actively engaged in the fields of environmental planning, assessment and management. We advise private, corporate and public enterprises on a variety of differing land use applications ranging from large-scale PV and CPV renewable energy facilities, residential estates, resorts and golf courses to municipal service infrastructure installations and the planning of major arterials. SES has offices in George and in Cape Town.

MICHAEL BENNETT (Environmental Assessment Practitioner) Principal Author - Michael studied at the University of Cape Town completing a Bachelor of Science degree majoring in Environmental and Geographic Science and Ocean and Atmospheric Science. Michael joined SES in 2014 and has extensive experience in assessments and monitoring and has worked on a variety of technical projects.

BETSY DITCHAM (Managing Director - Environmental Assessment Practitioner) Report Reviewer - Betsy has a Bachelor of Science Honours Degree in Wildlife Management from the University of Pretoria and a Bachelor of Science Degree (Zoology and Ecology) obtained from the University of Cape Town in 2005. She has 10 years' experience in the environmental field, including environmental assessments, legal compliance, on-site compliance monitoring, cleaner production and business greening and sustainability (carbon and environmental footprinting). In her time as a consultant, she has compiled a number of environment assessments and management plans for both private and governmental clients.

Please refer to Appendix F to view the Curriculum Vitae for Betsy Ditcham and Michael Bennett.

2. LEGISLATION PERTAINING TO THE APPLICATION

2.1. THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT 107 OF 1998, EIA REGULATIONS, 2014 AS AMENDED

Regulation 27 of the EIA Regulations, 2014¹ provides for the amendment of EAs, provided the EA is still valid.

As the proposed housing development has already commenced as permitted by the Amended EA, all listed activities were commenced and the EA remains valid.

Regulations 28 to 32 of the EIA Regulations, 2014, as amended, describe two alternative EA amendment application processes depending on the type of amendment that is being applied for:

- A Part 1 Amendment relates to amendments where no change in scope or a change of ownership occur; and
- A Part 2 Amendment relates to amendments where a change in scope occurs.

¹ GN R982 of 2014, as amended by GN 326 of 2017

The ROD (Amended EA) amendment process would fall under a Part 2 Amendment (or Substantive Amendment) which requires the submission of an Impact Report (in line with Regulation 32(a) of the 2014 EIA Regulations, as amended), inclusive of the following:

- i. an assessment of all impacts related to the proposed change;
- ii. advantages and disadvantages associated with the proposed change; and
- iii. measures to ensure avoidance, management and mitigation of impacts associated with such proposed change.

For ease of reference, the activities previously listed under Schedule 1 of Government Notice No. R1182 of September 1997 that were authorised under the original ROD have been listed below and been matched with similar activities listed under the Environmental Impact Assessment Regulations Listing Notice(s) of 2014 as amended (7 April 2017).

Table 1: Previously Approved Listed Activities and corresponding Listed Activities from current Legislation

Previously Listed Activities in terms of Schedule 1 of Government Notice R1182 of 5 September 1997	Approved Activities in terms of No.	Similar Activities in terms of the Environmental Impact Assessment Regulations Listing Notice(s) 2014 as amended (7 April 2017)	Aspect of the new project description that relates to the applicable listed activity.
Activity Number: 1(c) The construction, erection or upgrading of – with regards to any substance which is dangerous or hazardous and is controlled by national legislation – (ii) Manufacturing, storage, handling, treatment or processing facilities for any such substance;		<i>GNR 327 Listing Notice 1: Activity 14</i> The development and related operation of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres.	This activity is similarly listed to Item 1(c) however it was authorised for small scale fuel storage (bowzers) during the construction phase. The capacity of bowzers will not exceed these thresholds and therefore the activity is no longer listed.
		<i>GNR 324 Listing Notice 3: Activity 10</i> The development and related operation of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of 30 but not exceeding 80 cubic metres. i. Western Cape i. Areas zoned for use as public open space or equivalent zoning; ii. All areas outside urban areas; or iii. Inside urban areas: (aa) Areas seawards of the development setback line or within 200 metres from the high-water mark of the sea if no such development setback line is determined; (bb) Areas on the watercourse side of the development setback line or within 100	This activity is similarly listed to Item 1(c) however it was authorised for small scale fuel storage (bowzers) during the construction phase. The capacity of bowzers will not exceed these thresholds and therefore the activity is no longer listed.

Previously Listed Activities in terms of Schedule 1 of Government Notice R1182 of 5 September 1997	Approved Activities in terms of Environmental Impact Assessment Regulations Listing Notice(s) 2014 as amended (7 April 2017)	Aspect of the new project description that relates to the applicable listed activity.
	<p>metres from the edge of a watercourse where no such setback line has been determined; or</p> <p>(cc) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined.</p>	
<p>Activity Number: 1(d)</p> <p>The construction, erection, or upgrading of roads, railways, airfields and associated structures;</p>	<p><i>GNR 327 Listing Notice 1: Activity 24</i></p> <p>The development of a road</p> <p>(i) for which an environmental authorisation was obtained for the route determination in terms of activity 5 in Government Notice 387 of 2006 or activity 18 in Government Notice 545 of 2010; or</p> <p>(ii) with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres;</p> <p>but excluding a road—</p> <p>(a) which is identified and included in activity 27 in Listing Notice 2 of 2014;</p> <p>(b) where the entire road falls within an urban area; or</p> <p>(c) which is 1 kilometre or shorter.</p>	<p>The development includes the development of various roads with widths which range from 8m to 20m.</p>
	<p><i>GNR 324 Listing Notice 3: Activity 4</i></p> <p>The development of a road wider than 4 metres with a reserve less than 13,5 metres.</p> <p>i. Western Cape</p> <p>i. Areas zoned for use as public open space or equivalent zoning;</p> <p>ii. Areas outside urban areas;</p> <p>(aa) Areas containing indigenous vegetation;</p> <p>(bb) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined; or</p> <p>iii. Inside urban areas:</p> <p>(aa) Areas zoned for conservation use; or</p>	<p>The internal road network will exceed these thresholds</p>

Previously Listed Activities in terms of Schedule 1 of Government Notice R1182 of 5 September 1997	Approved Activities in terms of Environmental Impact Regulations Listing Notice(s) 2014 as amended (7 April 2017)	Aspect of the new project description that relates to the applicable listed activity.
	(bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority.	
Activity Number: 1(k) The construction, erection or upgrading of reservoirs for public water supply	<i>GNR 327 Listing Notice 1: Activity 13</i> The development of facilities or infrastructure for the off-stream storage of water, including dams and reservoirs, with a combined capacity of 50 000 cubic metres or more, unless such storage falls within the ambit of activity 16 in Listing Notice 2 of 2014.	The combined capacity of the two reservoirs will be 2000 cubic meters (20MI) well below this 50000 cubic meter threshold.
	<i>GNR 327 Listing Notice 1: Activity 9</i> The development of infrastructure exceeding 1 000 metres in length for the bulk transportation of water or storm water— (i) with an internal diameter of 0,36 metres or more; or (ii) with a peak throughput of 120 litres per second or more; excluding where— (a) such infrastructure is for bulk transportation of water or storm water or storm water drainage inside a road reserve or railway line reserve; or (b) where such development will occur within an urban area.	This activity relates to the bulk services which will be installed. Their internal diameters will vary between 600mm and 300mm. The lengths will exceed the 1km threshold.
	<i>GNR 324 Listing Notice 3: Activity 2</i> The development of reservoirs, excluding dams, with a capacity of more than 250 cubic metres. i. Western Cape i. A protected area identified in terms of NEMPAA, excluding conservancies; ii. In areas containing indigenous vegetation; or iii. Inside urban areas: (aa) Areas zoned for use as public open space; or (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, or zoned for a conservation purpose.	The combined capacity of the two reservoirs will be 2000 cubic meters (20MI)

Previously Listed Activities in terms of Schedule 1 of Government Notice R1182 of 5 September 1997	Approved Activities in terms of Environmental Impact Assessment Regulations Listing Notice(s) 2014 as amended (7 April 2017)	Aspect of the new project description that relates to the applicable listed activity.
Activity Number: 1(m) The construction, erection or upgrading of public and private resorts and associated infrastructure	<p><i>GNR 327 Listing Notice 1: Activity 9</i></p> <p>The development of infrastructure exceeding 1 000 metres in length for the bulk transportation of water or storm water—</p> <p>(i) with an internal diameter of 0,36 metres or more; or</p> <p>(ii) with a peak throughput of 120 litres per second or more;</p> <p>excluding where—</p> <p>(a) such infrastructure is for bulk transportation of water or storm water or storm water drainage inside a road reserve or railway line reserve; or</p> <p>(b) where such development will occur within an urban area.</p>	<p>This activity relates to the bulk services which will be installed as associated infrastructure. Their internal diameters will vary between 600mm and 300mm. The lengths will exceed the 1km threshold.</p>
	<p><i>GNR 327 Listing Notice 1: Activity 11</i></p> <p>The development of facilities or infrastructure for the transmission and distribution of electricity—</p> <p>(i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts; or</p> <p>(ii) inside urban areas or industrial complexes with a capacity of 275 kilovolts or more;</p> <p>excluding the development of bypass infrastructure for the transmission and distribution of electricity where such bypass infrastructure is —</p> <p>(a) temporarily required to allow for maintenance of existing infrastructure;</p> <p>(b) 2 kilometres or shorter in length;</p> <p>(c) within an existing transmission line servitude; and</p> <p>(d) will be removed within 18 months of the commencement of development.</p>	<p>The internal network will be supplied from a 22/11kV substation, This activity will however not be applicable as the main electrical medium voltage reticulation throughout the entire Hartland Estate will be 11kV</p>
	<p><i>GNR 324 Listing Notice 3: Activity 5</i></p> <p><i>The development of resorts, lodges, hotels, tourism or hospitality facilities that sleep less than 15 people.</i></p>	<p>- Not listed in the Western Cape -</p>
	<p><i>GNR 324 Listing Notice 3: Activity 6</i></p> <p>The development of resorts, lodges, hotels, tourism or hospitality facilities that sleeps 15 people or more.</p> <p>i. Western Cape</p>	<p>This activity is not triggered by the development as it is no longer considered to have resort facilities</p>

Previously Listed Activities in terms of Schedule 1 of Government Notice R1182 of 5 September 1997	Approved Similar Activities in terms of the Environmental Impact Assessment Regulations Listing Notice(s) 2014 as amended (7 April 2017)	Aspect of the new project description that relates to the applicable listed activity.
	<p>i. Inside a protected area identified in terms of NEMPAA;</p> <p>ii. Outside urban areas;</p> <p>(aa) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; or</p> <p>(bb) Within 5km from national parks, world heritage sites, areas identified in terms of NEMPAA or from the core area of a biosphere reserve; - excluding the conversion of existing buildings where the development footprint will not be increased.</p>	
<p>Activity Number: 1(n)</p> <p>The construction, erection or upgrading of sewerage treatment plants and associated infrastructure;</p>	<p><i>GNR 327 Listing Notice 1: Activity 10</i></p> <p>The development and related operation of infrastructure exceeding 1000 metres in length for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes –</p> <p>(i) with an internal diameter of 0,36 metres or more; or</p> <p>(ii) with a peak throughput of 120 litres per second or more;</p> <p>excluding where—</p> <p>(a) such infrastructure is for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes inside a road reserve or railway line reserve; or</p> <p>(b) where such development will occur within an urban area.</p>	<p>The proposed development would include the construction of sewage infrastructure.</p>
	<p><i>GNR 327 Listing Notice 1: Activity 25</i></p> <p>The development and related operation of facilities or infrastructure for the treatment of effluent, wastewater or sewage with a daily throughput capacity of more than 2 000 cubic metres but less than 15 000 cubic metres.</p>	<p>The hydraulic loading of the sewage system is estimated at 1566,9 kl/day. This is fairly close to the threshold and as such this activity should be included</p>
<p>Activity Number 2(c):</p> <p>The change of land use from agricultural or zoned</p>	<p><i>GNR 327 Listing Notice 1: Activity 28</i></p> <p>Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture,</p>	<p>The site was and still is zoned for agriculture except where houses</p>

Previously Listed Activities in terms of Schedule 1 of Government Notice R1182 of 5 September 1997	Approved Activities in terms of Schedule 1 of Government Notice No. R1182 of 5 September 1997	Similar Activities in terms of the Environmental Impact Assessment Regulations Listing Notice(s) 2014 as amended (7 April 2017)	Aspect of the new project description that relates to the applicable listed activity.
undetermined use or an equivalent zoning to any other land use	game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development: (i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare; excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.		have already been constructed
	<i>GNR 324 Listing Notice 3: Activity 15</i> The transformation of land bigger than 1000 square metres in size, to residential, retail, commercial, industrial or institutional use, where, such land was zoned open space, conservation or had an equivalent zoning, on or after 02 August 2010. f. Western Cape i. Outside urban areas, or ii. Inside urban areas: (aa) Areas zoned for conservation use or equivalent zoning, on or after 02 August 2010; (bb) A protected area identified in terms of NEMPAA, excluding conservancies; or (cc) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act as adopted by the competent authority.		The Site is larger than 1000m ² and the site was zoned agriculture and as such this activity is required in the amended EA.
10: The cultivation or any use of virgin land	<i>GNR 327 Listing Notice 1: Activity 27</i> The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for— (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan.		Vegetation cleared for the footprint of the development will exceed this threshold
	<i>GNR 327 Listing Notice 1: Activity 28</i>		The site was and still is zoned for agriculture

Previously Listed Activities in terms of Schedule 1 of Government Notice R1182 of 5 September 1997	Approved Similar Activities in terms of the Environmental Impact Assessment Regulations Listing Notice(s) 2014 as amended (7 April 2017)	Aspect of the new project description that relates to the applicable listed activity.
	<p>Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development:</p> <p>(i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or</p> <p>(ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare;</p> <p>excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.</p>	except where houses have already been constructed
	<p><i>GNR 324 Listing Notice 3: Activity 15</i></p> <p>The transformation of land bigger than 1000 square metres in size, to residential, retail, commercial, industrial or institutional use, where, such land was zoned open space, conservation or had an equivalent zoning, on or after 02 August 2010.</p> <p>f. Western Cape</p> <p>i. Outside urban areas, or</p> <p>ii. Inside urban areas:</p> <p>(aa) Areas zoned for conservation use or equivalent zoning, on or after 02 August 2010;</p> <p>(bb) A protected area identified in terms of NEMPAA, excluding conservancies; or</p> <p>(cc) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act as adopted by the competent authority.</p>	The development will exceed the threshold and the site was zoned Agriculture
	<p><i>GNR 325 Listing Notice 2: Activity 15</i></p> <p><i>The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for—</i></p> <p><i>(i) the undertaking of a linear activity; or</i></p> <p><i>(ii) maintenance purposes undertaken in accordance with a maintenance management plan.</i></p>	The development site exceeds 20ha and as such this activity should be included in the amended EA.

2.2. PRE-CONSTRUCTION ENVIRONMENTAL APPROVALS REQUIRED

The following table identifies all of the required Pre-Construction Environmental related approvals required for the proposed development.

Table 2: Summary Pre-Construction Environmental Approvals Required

Competent Authority	In terms of Legislation	Type of Approval / Licence / Required
The Department of Environmental Affairs and Development Planning (DEA&DP)	National Environmental Management Act (NEMA) and the EIA Regulations (December 2014), as amended	Environmental Authorisation Amendment
Mossel Bay Municipality	Land Use Planning Ordinance (LUPO)	A rezoning application is required.
Heritage Western Cape (HWC)	National Heritage Resources Act (NHRA) – Section 38	A Notice of Intent to Develop was submitted to HWC and response received that no Heritage Impact Assessment was required – see Appendix K .

3. MOTIVATION FOR AMENDMENT

The Applicant would like to amend the layout to allow for higher densities, within the same approved footprint, which is more aligned with the desired densities of the municipal planning department. Additionally, the amendment will allow for the re-alignment of the internal roads. The applicant is also undertaking a separate Impact assessment and is applying for the construction of a road from near Hartenbos Landgoed to the western corner of the development. This road will then become the main access to the development and the current access road be used as an emergency access road. In the initial authorisation there was a social housing and community hall aspect which has become redundant as the community which was meant to move to the development was dealt with by the municipality by other means and an agreement was reached with the developer and the municipality, as such these aspects need to be amended out of the authorisation. The applicant now proposes to construct a school and sports field on the areas which were set aside for the social housing aspects of the development.

3.1. SPECIALIST INVOLVEMENT

As the proposed amendment falls within the ambit of a Substantive Amendment (Part 2 amendment) specialists' input was required to inform the impacts associated with the proposed amendments. This section will touch on the conclusions of the specialist's compliance statements for the proposed amendments.

3.2. SOCIO-ECONOMIC COMPLIANCE STATEMENT CONCLUSION

According to the Socio-Economic Compliance Statement compiled by Grant Hancock of Ramp Economic (Pty) Ltd (Appendix H3):

It is the reasoned opinion of the Ramp Economics team that the proposed amendments to the development plan for the Hartland Estate (as was originally provided development approval) will not result in any significant changes in the scale or nature of economic and social impacts experienced by the local economy as were determined by the Urban-Econ report of 2009.

It is further found that due to the increase in the number of units to be developed, and the expected increase in construction costs, that the net positive economic impacts may well be higher than originally calculated, even accounting for the removal of the social housing units from the development.

It is the view of this report that the removal of the 150 social housing units will not produce an adverse social / economic impact as alternative provisions have been made for the community in question.

3.3. AGRICULTURE COMPLIANCE STATEMENT CONCLUSION

According to the Agricultural Compliance Statement compiled by Johann Lanz (Appendix H5):

The impact of the proposed amendment to the development layout on the agricultural production capability of the site is assessed as being acceptable because, as discussed above, it will make absolutely no difference to the loss of agricultural land that was already authorised in 2009. From an agricultural impact point of view, it is therefore recommended that the amendment be approved.

The protocol requirement of confirmation that all reasonable measures have been taken through micro-siting to avoid or minimise fragmentation and disturbance of agricultural activities, is not relevant in this case. There are also no Environmental Management Programme inputs required for the protection of agricultural potential on the site.

The conclusion of this assessment on the acceptability of the proposed development and the recommendation for its approval is not subject to any conditions. In completing this statement, no assumptions have been made and there are no uncertainties or gaps in knowledge or data that are relevant to it. No further agricultural assessment of any kind is required for this application.

3.4. FRESHWATER COMPLIANCE STATEMENT CONCLUSION

According to the Freshwater Compliance Statement compiled by Dr James Dabrowski of Confluent aquatic consulting and research (Appendix H2):

Based on the results of the desktop review and the site survey, the sensitivity of aquatic biodiversity on Remaining Portion 11 of Farm 219 Vaale Valley can be confirmed as Low and a comprehensive specialist assessment is therefore not required.

3.5. TERRESTRIAL BIODIVERSITY AND ANIMAL SPECIES COMPLIANCE STATEMENT CONCLUSION

According to the Terrestrial biodiversity and animal species Compliance Statement compiled by Robyn Phillips of Cossypha (Appendix H4):

It is the opinion of the specialist that the impacts on terrestrial biodiversity and fauna will be very low to negligible considering the modified and currently disturbed state of the site, and that the project may be authorised subject to the recommendations in the EMPr being adhered to.

- This compliance statement is applicable to the study area as described in the EIA documentation and shown in Figure 5 (of the Terrestrial biodiversity and animal species Compliance Statement);
- Due to the disturbed habitat, the study area is of low sensitivity for terrestrial biodiversity and terrestrial animal species;
- It is likely that the proposed development will not have any impact on terrestrial animal SCC; and
- There are no conditions to which this compliance statement is subjected.

3.6. VISUAL IMPACT REPORT CONCLUSION

According to the Visual Impact Report compiled by Paul Buchholz (Appendix H6):

Although the visual impact of the development as a whole is significant and the intensity of the visual impact medium after mitigation, these impacts and their significance have already been approved. The proposed amendments themselves, however, when compared to what is currently approved, are not significant in terms of the visual impact. This is largely because the footprint will remain relatively unchanged (except for some increases in the open spaces) and the height restrictions of certain units on the edges of the development, remain in force with the proposed amendment.

The Retirement Resort, Business Zone III and the General Residential Zone III located directly next to the Retirement Resort will not be very visible due to the lower topography that screens views into this portion of the development. The remainder of the development will be very visible due to its location on the elevated topographical sections of the property

3.7. BOTANICAL COMPLIANCE STATEMENT CONCLUSION

According to the Botanical Compliance Statement compiled by Mark Berry (Appendix H1):

This report sets out the results from a desktop study, as well as a field survey conducted on 23 August 2022, to ascertain terrestrial biodiversity and plant species constraints and possible impacts associated with the amendment of the approved layout plan for a residential development on a portion of Farm Vaale Valley 219, Mossel Bay, in order to densify housing.

Due to the highly transformed state of the site, the impact posed by the proposed amendment on terrestrial biodiversity and plant species is expected to be of low significance. The amendment will not result in a notable loss of indigenous vegetation or plant species. However, a few ribbons of thicket and couple of milkwood trees will be affected, but not more than for the approved layout.

It is therefore recommended that the proposed amendment be approved, subject to the consideration of the proposed mitigation measures.

3.8. TRAFFIC IMPACT ASSESSMENT

Element Consulting Engineers compiled the Traffic Impact Assessment (TIA) for the proposed western primary access to the development. The proposed access road assessment is being undertaken by Hilland environmental “DRAFT BASIC ASSESSMENT REPORT (BAR) FOR THE REALIGNMENT AND CONSTRUCTION OF THE APPROVED SECONDARY ACCESS TO HARTLAND – BY WIDENING THE EXISTING APPROVED ROAD ON NEW VINTAGE DEVELOPMENT AND EXTENDING IT TO THE HARTLAND BOUNDARY” Please refer to Section 5.1.7 for additional information regarding the TIA and Appendix L for the full Assessment Report.

4. DESCRIPTION OF THE PROPOSED DEVELOPMENT

4.1. SITE LOCATION AND DESCRIPTION OF PROPERTY

The proposed development is located on a portion of the remainder of Portion 11 of the Farm Vaale Valley 219, Mossel Bay, Western Cape. The site is situated between Klein Brak River (northeast), Hartenbos (southwest), the N2 National Road (northwest) and the ocean (southeast).



Figure 4: Locality of the development

4.2. THE PROPOSED AMENDMENT

The following amendments to the Amended EA (**Ref: EG12/2/1-AM18-Farm Vaalevalley 219/B, Mossel Bay**) are being proposed:

The Title of the of the appeal EA dated 18 August 2009 (Ref:EG12/2/1-AM18-Farm Vaalevalley 219/B, Mossel Bay) should be amended to exclude “(Hartenbos Landgoed Phase 2)”.

The name of the development has since changed to Hartland Lifestyle Estate.

The Description of the activity in the appeal EA dated 18 August 2009 (Ref:EG12/2/1-AM18-Farm Vaalevalley 219/B, Mossel Bay) reads as follows:

The proposed development consists of 1265 residential erven (Zoned Residential I), Five townhouse erven (zoned residential III that includes 150 social housing units, a multi-purpose community centre and a +- 300m2 split zoned Business II site located on Ptn 1302), an open space network and recreation area (zoned Open Space II) and a +- 3500m2 split zoned Business II site (located on Ptn 1306), a road network and associated infrastructure services on the footprint as indicated on the layout plan HB/C/204/9 by Nel & de Kock dated February 2009. The Remainder of the property will be managed as a nature reserve.

Access will be from Main Road 344 through the culvert under the N2 national Road, which will be upgraded to four lanes. A second access will be provided to the south along the existing dirt track to Hartenbos Landgoed Phase 1. This road will be upgraded to two lanes and will have a paved/tarred surface.

Water will be provided from the proposed new 15MI reservoir that will supply both the proposed Hartenbos Landgoed and possible future developments in the area. (see drawing M10607/002A dated 24 June 2008). A 5MI reservoir and booster pump station is proposed for construction on erf 1313 of Plan No. HB/C/204/9 as part of this application (see drawing M1607/002B dated 24 June 2008).

Sewerage removal will be accommodated by means of a gravity sewer network in combination with sewage pump stations. From pump station PS01 on Erf 1308 next to the N2 national road, the sewage will be pumped to a point near Erf 1 from where it will gravitate and siphon to the Hartenbos Regional Sewage Treatment Works. (See drawing Number M1607/001 dated 24 June for the bulk sewer layout.

The Description of the activity should therefore be amended to read as follows:

The proposed development consists of a total of 2288 Residential units made up of single residential erven and general residential, a 0.88ha Business Zone, 3.24ha Community Zone (consisting of a school and sports field) and an Open Space of 235ha (excluding the internal Open Spaces), which will be managed as a nature reserve, a road network and associated infrastructure services will be accommodated on the footprint, as indicated on the layout plan HB/G/206-4 by Nel & de Kock dated March 2023.

Access will be from Main Road 344 through the culvert under the N2 national Road. This road will become the secondary road and the new primary access will be provided from the southwestern corner of the development.

Water will be provided from the proposed new 15MI reservoir that will supply both the proposed Hartenbos Landgoed and possible future developments in the area. In addition to a 5MI reservoir and booster pump station.

Sewerage removal will be accommodated by means of a gravity sewer network in combination with sewage pump stations. The sewage will be pumped to a point near the northwestern edge of the site from where it will gravitate and siphon to the Hartenbos Regional Sewage Treatment Works. See drawing Number 13061/C/BULK/S1 (Element Consulting Engineers).

4.3. AMENDMENTS TO THE EMPR AND EA AS PROPOSED BY THE AUDIT REPORT

An Environmental Audit Report was undertaken by Hilland Environmental (Pty) Ltd, the revised report is referenced MOS21/1027/18, attached to this Impact report Appendix O.

The audit report recommends that Condition 8.3 of the EA be amended to allow kikuyu lawns within the development. Additionally, the audit report recommends that Condition 25 be amended to replace the ELC with NEMA auditing.

Therefore, it is also proposed to amend the EA in accordance with the audit report recommendations.

The Proposed amendments to the EA:

Condition 8.3 of the EA which read:

The list of plant species that should be encouraged must include all the locally occurring indigenous plant species, as well as kweek grass and buffalo grass for lawns.

Should therefore be amended to read:

The list of plant species that should be encouraged must include all the locally occurring indigenous plant species, as well as kweek grass and buffalo grass for lawns, Kikuyu grass can be allowed.

Condition 25 of the EA which read:

25. An Environmental Liaison Committee ("ELC") must be established at the cost of the Applicant, prior to commencement of site preparation and construction.

25.1. The applicant must draw up the ELC's draft terms of reference ("TOR") or draft constitution and submit it to the Department. This must be approved by the Department prior to any land clearing or construction commencing.

25.2. The TOR must include but is not limited to the following:

25.2.1 the frequency of meetings and reports

25.2.2 chairmanship/membership

25.2.3 auditing requirements

25.2.4 duties and responsibilities during the construction phase

25.2.5 the termination of such ELC

25.2.6 the frequency of providing feedback to the local community.

Should therefore be amended to read:

25. The Holder must, for the period during which the environmental authorisation and EMPr remain valid ensure the compliance with the conditions of the environmental authorisation and the EMPr, is audited;

25.1. The frequency of auditing of compliance with the conditions of the environmental authorisation and of compliance with the EMPr, must adhere to the following programme:

25.1.1. During the period which the activities have been commenced with on site until the construction of the bulk internal service infrastructure (i.e. internal roads; water-, sewer-, electricity reticulation and bulk storm water) has been completed on site, the Holder must undertake annual environmental audit(s) and submit the Environmental Audit Report(s) to the Competent Authority.

A final Environmental Audit Report must be submitted to the Competent Authority within three (3) months of completion of the construction of bulk internal services and the post construction rehabilitation and monitoring requirements thereof.

25.1.2. During the period the development of the residential phases (i.e. construction of top structures) is undertaken, the Holder must ensure that environmental audit(s) are performed regularly and submit these Environmental Audit Report(s) to the Competent Authority.

During this phase of the development, the frequency of the auditing of compliance with the conditions of the environmental authorisation and of compliance with the EMPr may not exceed intervals of three (3) years.

A final Environmental Audit Report must be submitted to the Competent Authority within three (3) months of completion of the final phase of the residential development and the post construction rehabilitation and monitoring requirements thereof.

25.2. The Environmental Audit Report(s), must –

25.2.1. be prepared and submitted to the Competent Authority, by an independent person with the relevant environmental auditing expertise. Such person may not be the ECO or EAP who conducted the EIA process;

25.2.2. provide verifiable findings, in a structured and systematic manner, on–

25.2.2.1. the level of compliance with the conditions of the environmental authorisation and the EMPr and whether this is sufficient or not; and

25.2.2.2. the ability of the measures contained in the EMPr to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity.

25.2.3. identify and assess any new impacts and risks as a result of undertaking the activity;

25.2.4. evaluate the effectiveness of the EMPr;

25.2.5. identify shortcomings in the EMPr;

25.2.6. identify the need for any changes to the avoidance, management and mitigation measures provided for in the EMPr;

25.2.7. indicate the date on which the construction work was commenced with and completed or in the case where the development is incomplete, the progress of the development and rehabilitation;

25.2.8. indicate the date on which the operational phase was commenced with and the progress of the rehabilitation;

25.2.9. include a photographic record of the site applicable to the audit; and

25.2.10. be informed by the ECO reports.

25.3. The Holder must, within 7 calendar days of the submission of the audit report to the Competent Authority, notify all potential and registered I&APs of the submission and make the report available to anyone on request and on a publicly accessible website (if applicable).

4.4. CHANGE TO OPEN SPACES

Please refer to Figure 6 for the Google Earth Image highlighting the changes. The Black polygons represent the approved layout's opens spaces with the proposed open spaces represented by the White polygons. Only the southwestern portion of the layout is proposed to be amended and as such table 3 highlights the relative changes of each open space in that sector of the layout and the corresponding changes in area proposed.

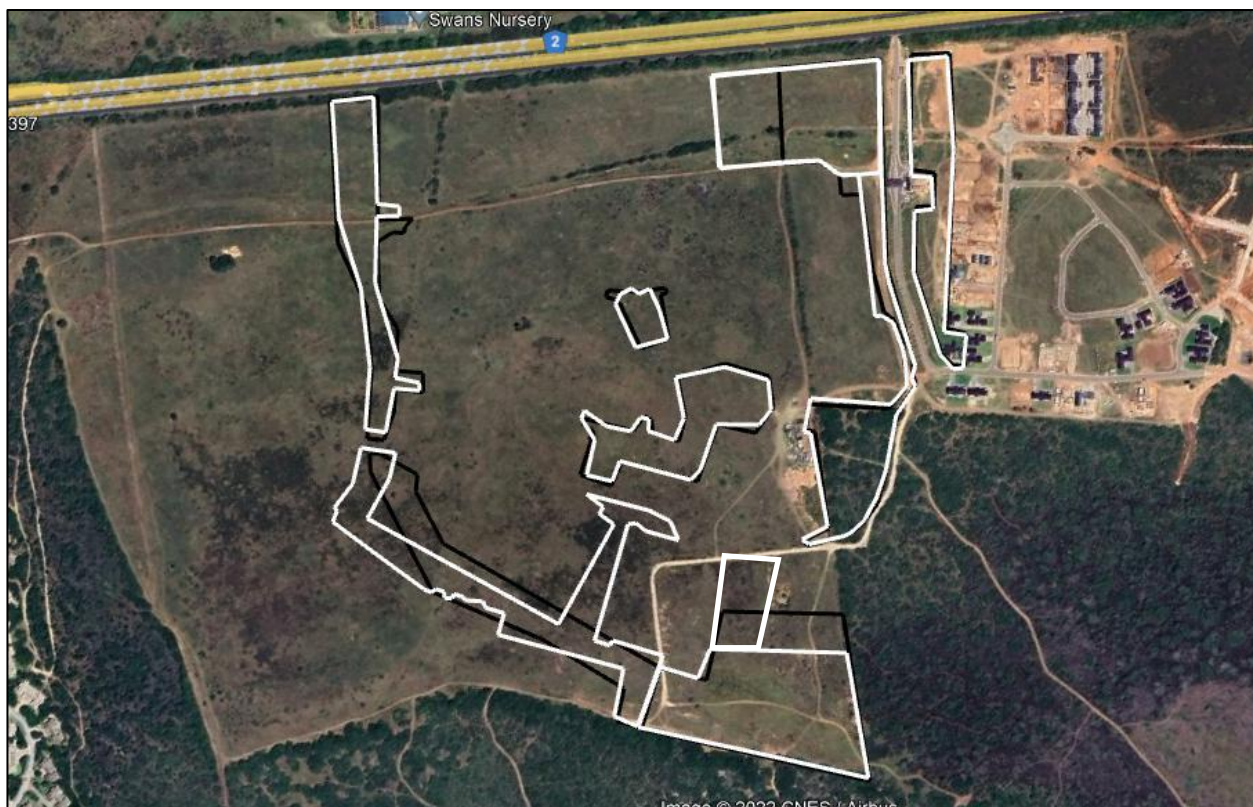


Figure 5: Change in Open Spaces (black is approved, white is proposed)

Please note that the “Phasing” in Table 3 refers to the Phase of the proposed layout (Attached as Appendix C)

Table 3: Open space footprint comparison

	Existing Layout	Proposed Layout	Phasing	Difference
OS 1	16211 m ²	14100 m ²	Phase O	- 2111 m ²
OS 2	18094 m ²	22236 m ² (+400m ² north-eastern corner of Phase C)	Within Phase C	4542 m ²
OS 3	13415 m ²	13500 m ²	Phase Q	85 m ²
OS 4	2756 m ²	2800 m ²	Phase P	44 m ²

OS 5	29508 m ²	15782 m ² + 21465m ² (sports field) = 37247m ²	Phase R + sports field	7739 m ²
OS 6	12854 m ²	12815 m ²	Phase S	- 39 m ²
REC AREA	32166 m ²	25478 m ²	-	-6688 m ²
Total	125004m ²	128176m ²		3572 m ²

As seen from Table 3 the total combined area of the internal Open Spaces has been increased by approximately 3572m² in the proposed layout.

4.5. PROPOSED HOUSING DENSITIES

Although the proposed amendments are limited to the western portion of the site the internal roads layout differ from the approved layout and additionally the number of units in each proposed Phase will also change in accordance with the Table 4, please refer to the proposed layout for the corresponding Phases.

Table 4: Proposed changes to housing unit numbers and densities

PHASE	AREA (ha)	TOT. NO. OF UNITS (±)	DENSITY (±)	OTHER
PHASE A	±11.34ha**	220	20 units/ha	
PHASE B	±3.05ha*	80	27 units/ha	
PHASE C	±15.05ha*	500	34 units/ha	
PHASE D	±7.36ha*	90	13 units/ha	
PHASE E	±5.56ha*	120	22 units/ha	± 0.31ha BZIV
PHASE F	±6.94ha*	110	16 units/ha	
PHASE G	±0.57ha*	N/A	N/A	± 0.57ha BZIII
PHASE I	±9.39ha*	120	13 units/ha	
PHASE J	±11.03ha*	250	23 units/ha	
PHASE K	±4.90ha*	60	13 units/ha	
PHASE L	±6.23ha*	90	15 units/ha	
PHASE M	±7.97ha*	100	13 units/ha	
PHASE O	±1.41ha***	N/A	N/A	±1.41ha OSZII
PHASE P	±0.31ha***	N/A	N/A	±0.31ha OSZII
PHASE Q	±1.35ha***	N/A	N/A	±1.35ha OSZII
PHASE R	±1.69ha***	N/A	N/A	±1.69ha OSZII
PHASE S	±1.45ha***	N/A	N/A	±1.45ha OSZII
PHASE T	±0.29ha***	N/A	N/A	±0.29ha OSZII
PHASE U	±0.19ha***	N/A	N/A	±0.19ha OSZII
PHASE V	±5.01ha***	N/A	N/A	±5.01ha OSZII
PHASE W	±0.09ha***	N/A	N/A	±0.09ha OSZII
PHASE X	±7.83ha***	N/A	N/A	±7.83ha OSZII
PHASE Y	±0.18ha***	N/A	N/A	±0.18ha OSZII
PHASE Z	±0.11ha***	N/A	N/A	±0.11ha OSZII
PHASE A1	±215.04ha***	N/A	N/A	±215.04ha OSZII
* Including SRZI and/or GRZII and/or GRZIII and/or OSZII and/or TZIII. ** Including GRZIII, TZIII and CZI (with sports field extending approx. ±2.39 ha). *** Areas dedicated for Open Space Zone II purposes.				

4.6. REVISED SERVICES LAYOUTS

Element Consulting Engineers compiled the bulk sewer layout, the electrical master drawing in addition to the stormwater management plan, please refer to Appendix M for the sewer and electrical layouts and Appendix N for the stormwater management plan and Appendix O for the Electrical Master Layout Plan.

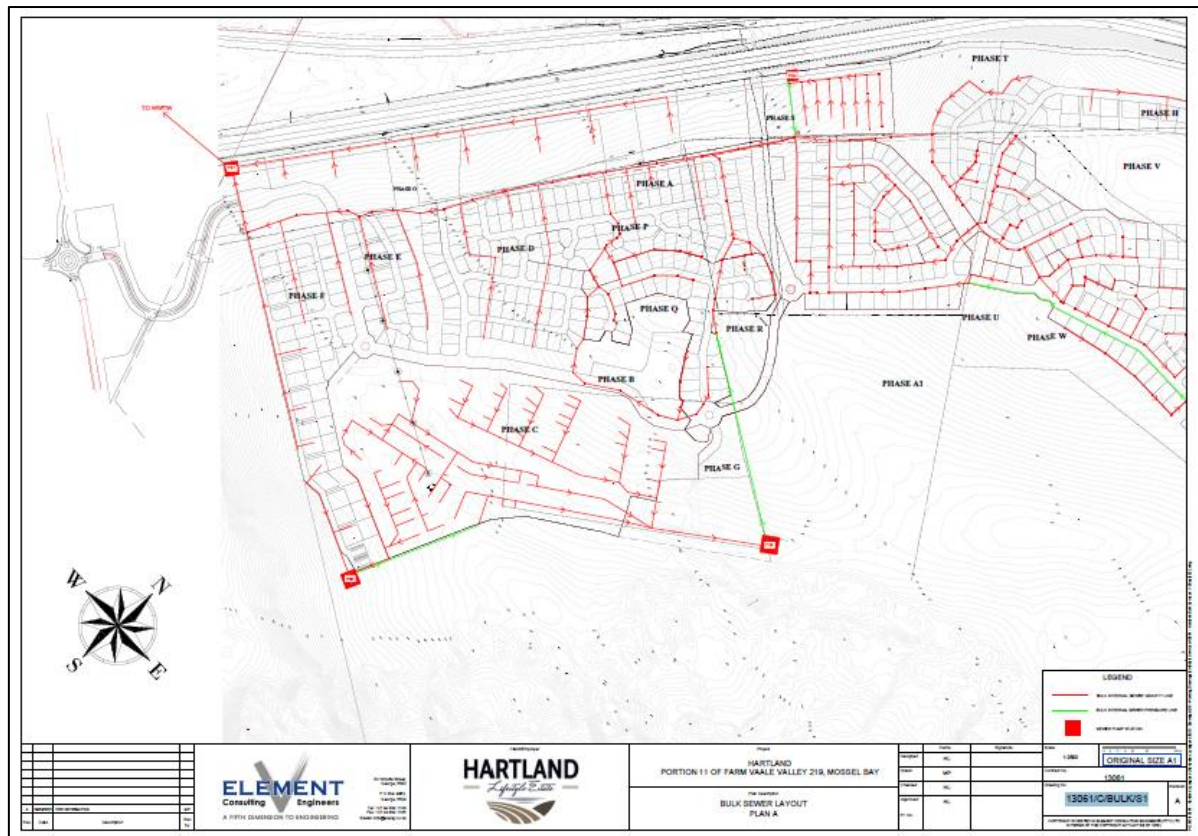


Figure 6: Bulk sewer – West

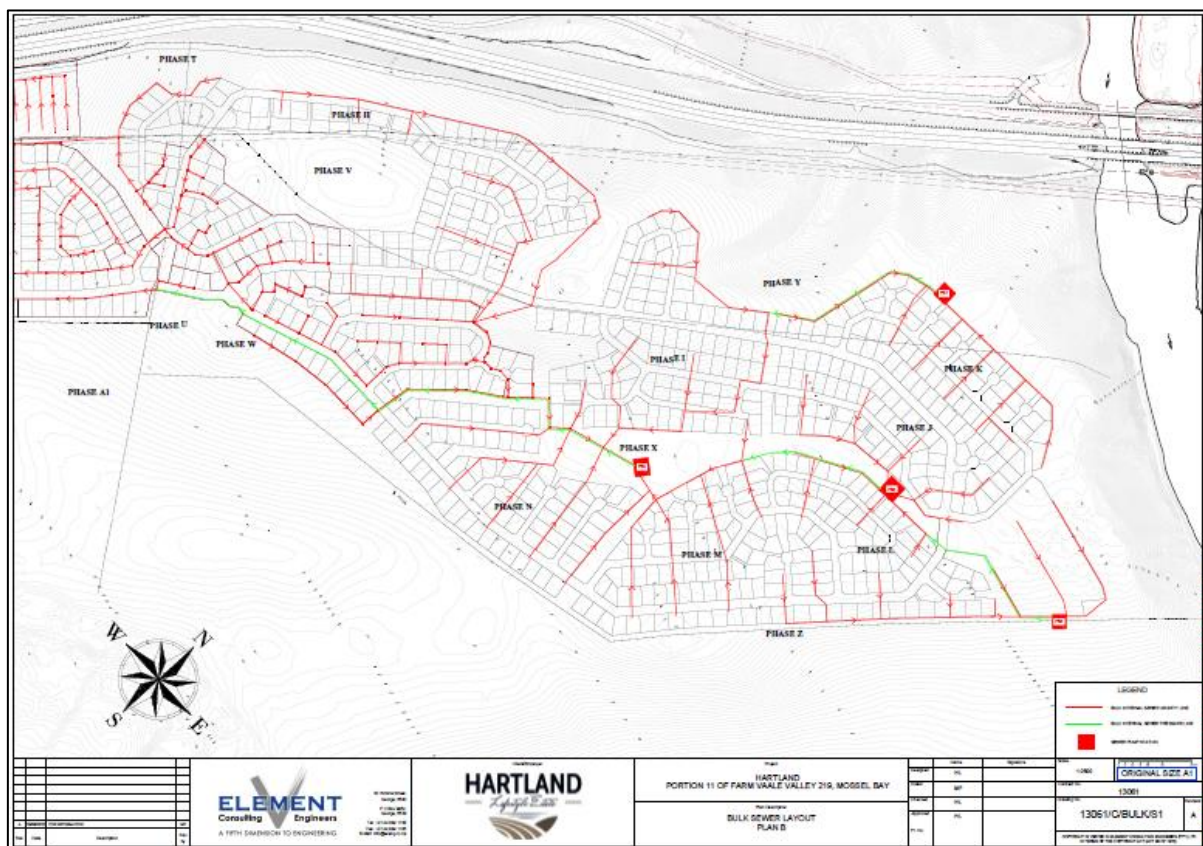


Figure 7: Bulk sewer - East

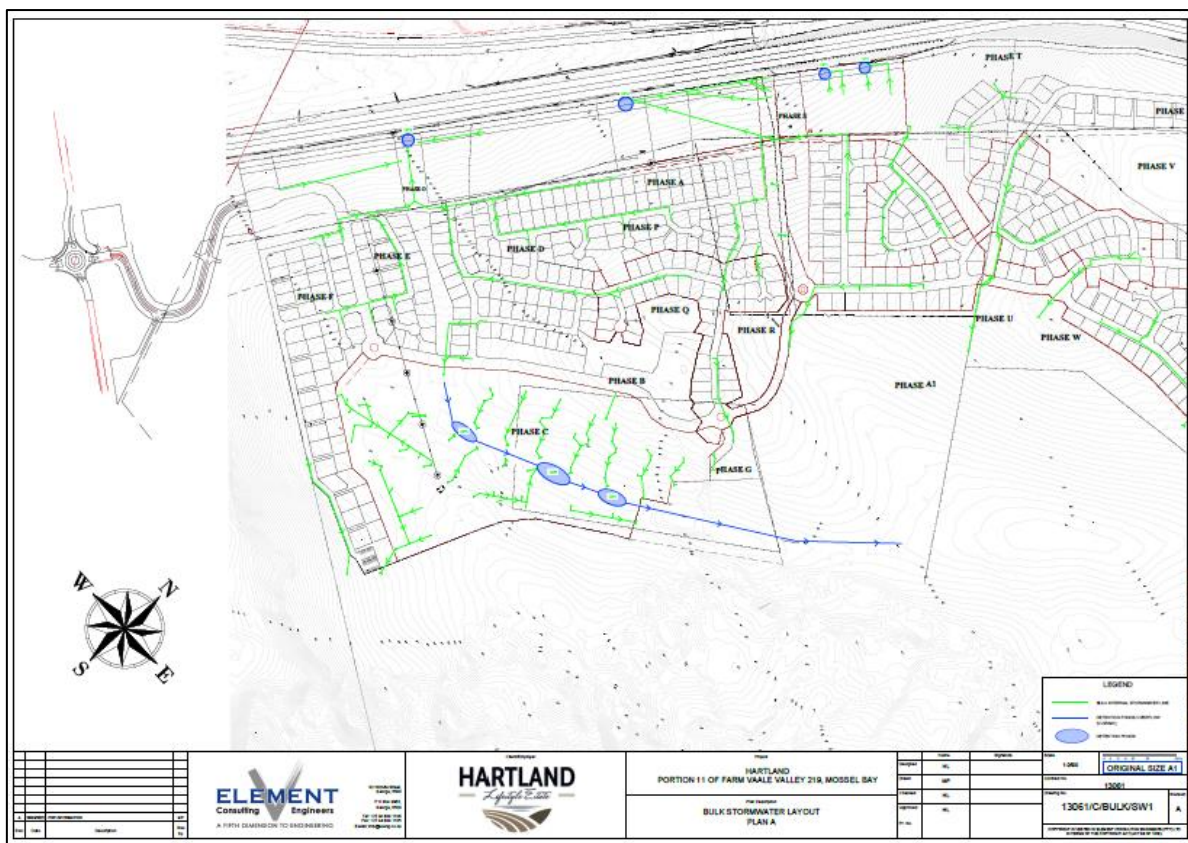


Figure 8: Stormwater management layout - East

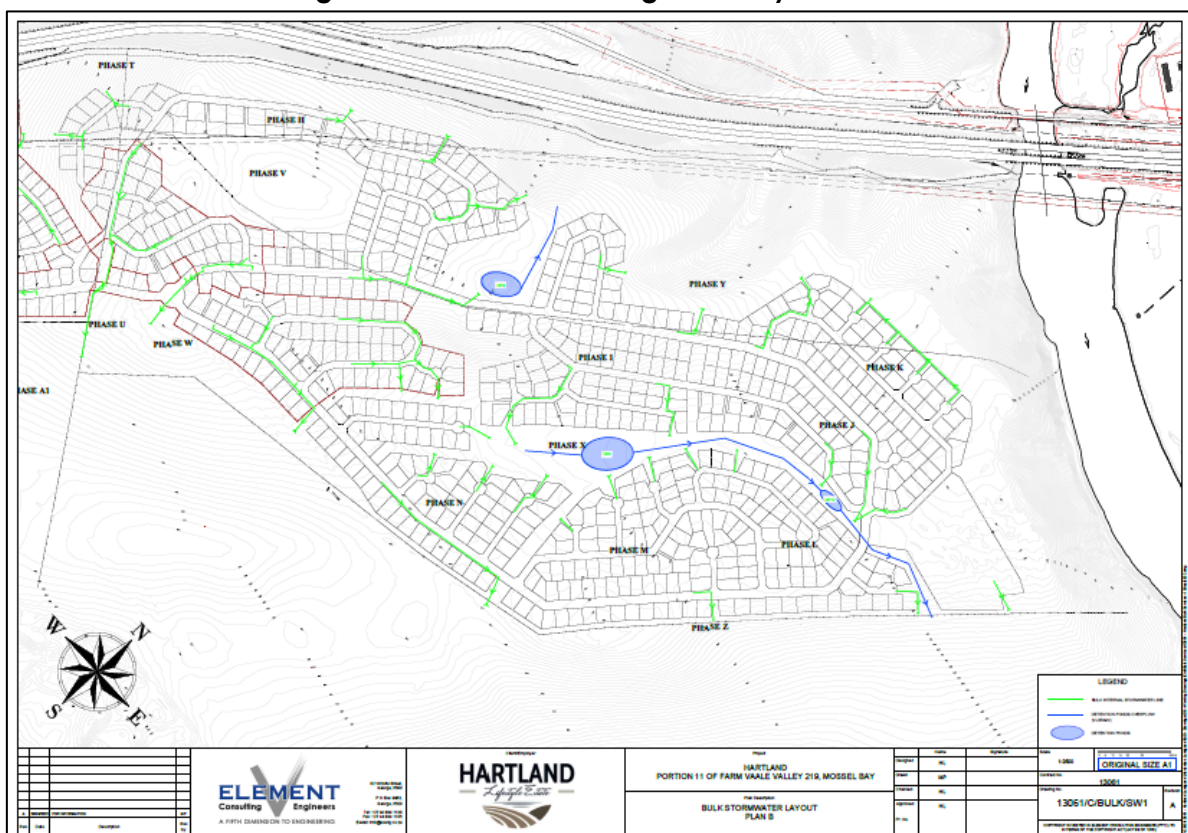


Figure 9: Stormwater management layout - West



Figure 10: Electrical Master Plan

5. DESCRIPTION OF THE AFFECTED ENVIRONMENT

As the development has already been authorised and the proposed amendments will remain within the existing footprint, apart from an increase in the open space areas within the development footprint, densification of the existing layout, albeit with realignments of the internal layouts to accommodate the increase housing density, the exclusion of the social housing aspects and the proposed inclusion of a school and sports field. As such compliance statements were requested from various specialists (as highlighted by the conclusions of their compliance statements above).

The Department of Environmental Affairs (DEA) has developed a screening tool for a part two Amendment of an Environmental Authorization which identifies potential environmental sensitivities on the proposed site. The results of the tool can be found in **Appendix D**. Table 5 shows the findings of the tool (dated 4 August 2022):

Table 5: Results of the DEA Screening Tool

THEME	VERY SENSITIVITY	HIGH SENSITIVITY	MEDIUM SENSITIVITY	LOW SENSITIVITY
Agriculture		X		
Animal Species		X		
Aquatic Biodiversity				X
Archaeological and Cultural Heritage	X			
Civil Aviation		X		
Defense				X
Paleontology	X			
Plant Species			X	
Terrestrial Biodiversity	X			

Based on these results, the Screening tool recommended the following specialist assessments be conducted:

- Agricultural Impact Assessment
- Landscape / Visual Impact Assessment
- Archaeological and Cultural Heritage Impact Assessment
- Paleontology Impact Assessment
- Terrestrial Biodiversity Impact Assessment
- Animal Species Impact Assessment
- Aquatic Biodiversity Impact Assessment
- Plant Species Impact Assessment
- Socio-Economic Assessment.

However, based on the fact that this is an EA Amendment process and that there will be no increase in the development footprint, therefore only the potential impacts of the proposed amendment need to be assessed, only compliance level input from the specialists were required.

5.1. BIOPHYSICAL ENVIRONMENT

6.1.1. Watercourses

A Freshwater Compliance Statement was compiled by Dr James Dabrowski of Confluent aquatic consulting and research (Appendix H2). According to the statement, the property falls within Primary Catchment K (Kromme) area and falls on the catchment divide of quaternary catchments K10B and K10F (Figure 12). The project area of interest (PAOI) (i.e. the surface area to be developed) falls within K10B. No freshwater features are indicated to occur within the development footprint (Figure 13). The PAOI was traversed by vehicle and by foot on the 26th of August 2022. No freshwater features were identified within the development footprint. Based on the results of the desktop review and the site survey, the sensitivity of aquatic biodiversity on Remaining Portion 11 of Farm 219 Vaale Valley can be confirmed as Low and a comprehensive specialist assessment is therefore not required.

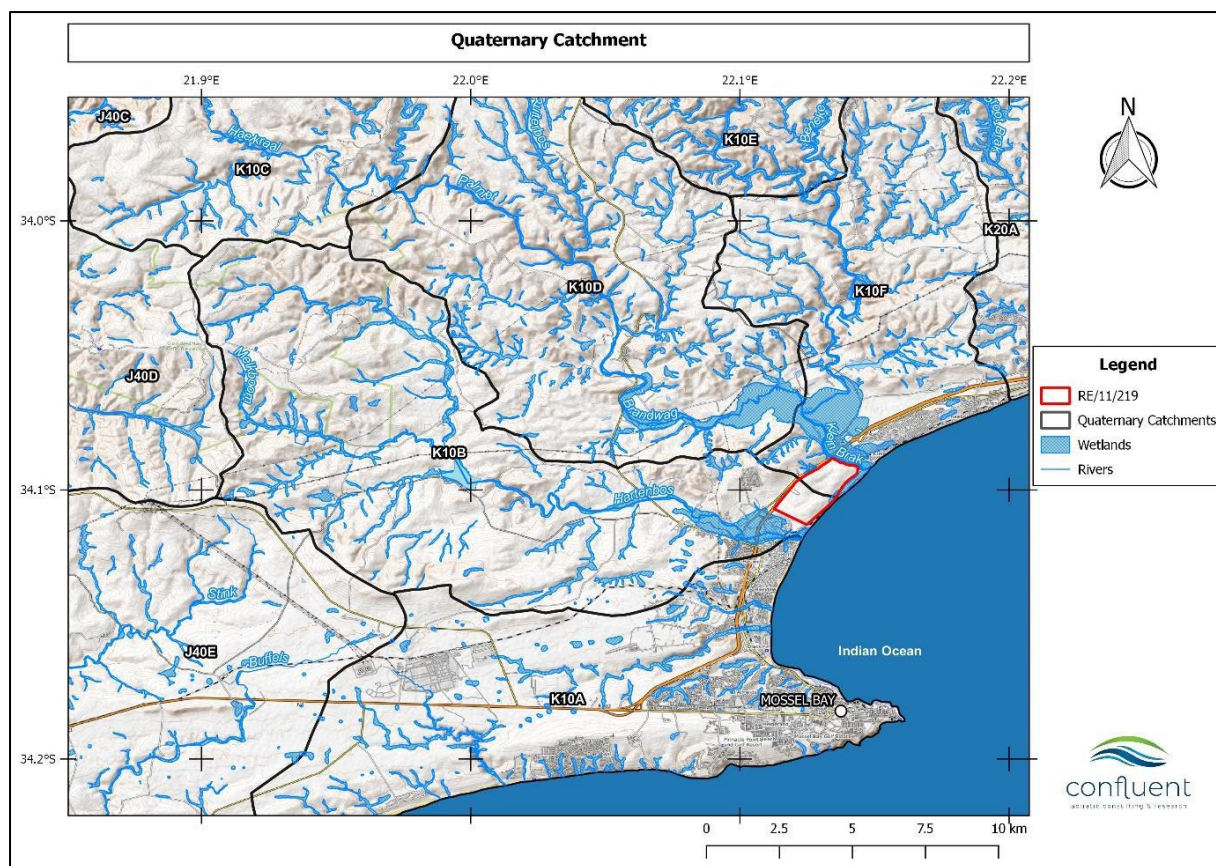


Figure 11: Map indicating the location of the property.

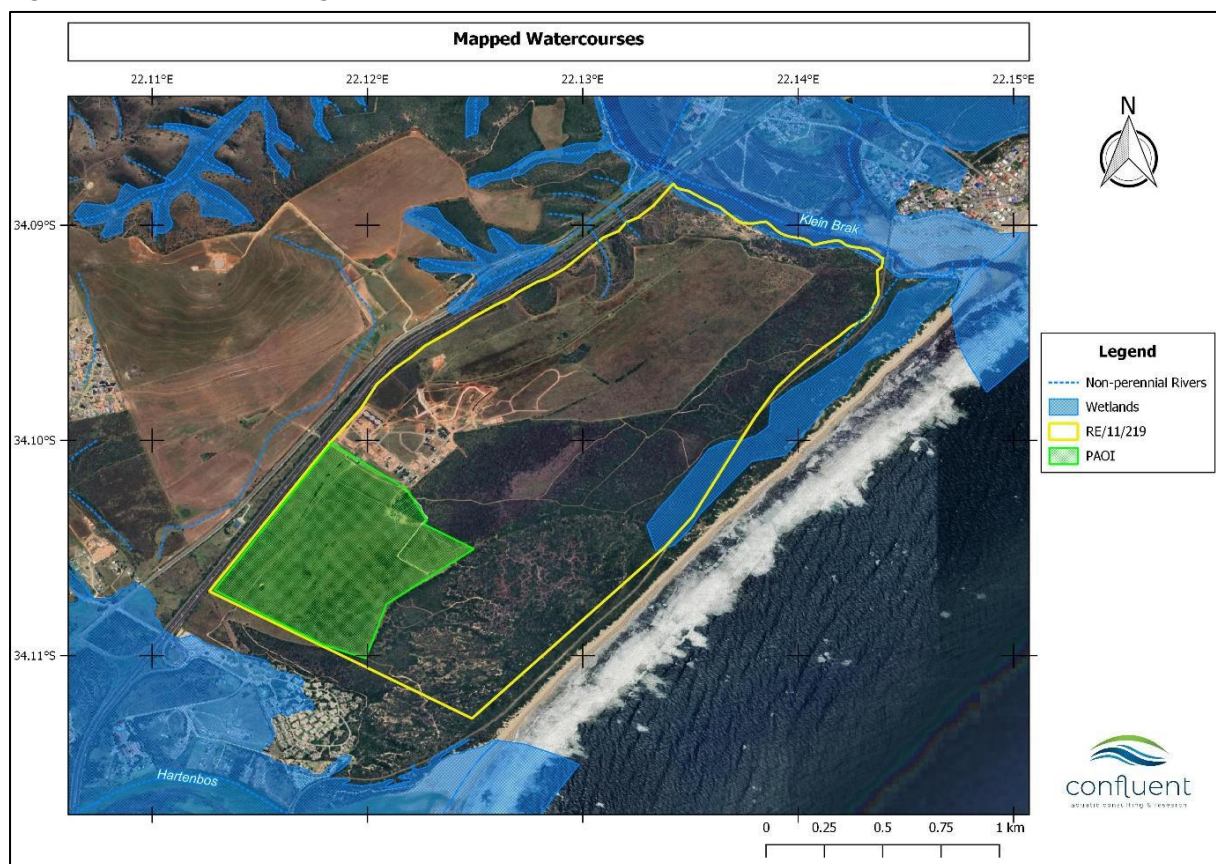


Figure 12: Location of the property and the development footprint in relation to mapped freshwater features.

6.1.2. Botanical

A Botanical Compliance Statement was compiled by Mark Berry. According to the Statement (Appendix H1):

The site, which is located between Hartenbos and Klein Brak, currently comprises an old land. According to the Vegetation Map of South Africa, the site is located inside a mixture of Canca Limestone Fynbos, Hartenbos Dune Thicket and Mossel Bay Shale Renosterveld. Only the latter is listed as a threatened vegetation type. However, it seems to be completely transformed in the study area. For its largest part, the site is excluded from the CBA network.

The study site is located in a coastal fynbos/thicket environment on the Southern Cape coastal plain. The indigenous species recorded in the vegetation adjacent to the site are typical thicket species, such as *Searsia pterota*, *Sideroxylon inerme*, *Schotia afra*, *Cussonia thyrsiflora* and *Aloe arborescens*. The 2018 Vegetation Map of South Africa classifies the main vegetation type found here as Hartenbos Dune Thicket. The latter is easy to spot with its impenetrable, thorny thicket structure. The Vegetation Map also shows Canca Limestone Fynbos and Mossel Bay Shale Renosterveld in the western part of the site, but this is speculative as the area has been almost completely transformed by past farming activities. There is evidence on site that the thicket may have extended across the site towards its western boundary.

Hartenbos Dune Thicket is found on the coastal plain from the Duiwenhoks River (east of Cape Infanta) to Glentana, about 19 km east of the site. All dune thicket types resort under the Albany Thicket Biome, which is more typical of the Eastern Cape. The latter extends slightly into the Western Cape in the Little Karoo and as valley thicket in the Gouritz and Mossel Bay region (Pool-Stanvliet, 2017). In the distant past, fynbos may have been the dominant element, but has subsequently been 'invaded' by thicket due to the exclusion of fire when farming and coastal developments have started to fragment the landscape.

Canca Limestone Fynbos stretches across the Southern Cape lowlands from Witsand (Cape Infanta) in the west to the Mossel Bay area in the east (Mucina, 2006). Like all fynbos types, limestone fynbos is maintained by a regular fire regime. Mossel Bay Shale Renosterveld, which is unlikely to have occurred on site, occurs on the coastal plains (undulating hills) and valleys from the Kruisrivier near Riversdale to Botterberg, west of the Robinson Pass, centred on the Gouritz River (Mucina, 2006). The renosterveld is mainly a medium dense, medium tall cupressoid-leaved shrubland dominated by renosterbos. Thicket patches are common.

Being well represented in the larger area (>80% still left), Hartenbos Dune Thicket and Canca Limestone Fynbos are currently not considered to be threatened (Skowno, 2019). However, due to their poor conservation status their protection in the coastal areas should remain a priority. Agricultural activities, alien plant infestation and coastal developments remain major threats for certain species restricted to Canca Limestone Fynbos. Less than 1% is formally conserved in the Pauline Bohnen and Geelkrans Nature Reserves (Mucina, 2006).

Mossel Bay Shale Renosterveld is the most threatened vegetation type found in the area and is currently listed as Endangered in the National List of Threatened Ecosystems (DEA, 2011). In CapeNature's 2016 threat status assessment this status was reaffirmed (Pool-Stanvliet, 2017), but interestingly elevated to Critically Endangered in the 2018 National Biodiversity Assessment Report (Skowno, 2019). About 40% of Mossel Bay Shale Renosterveld is still left, while 0% is currently protected (Skowno, 2019). A large percentage of it has been transformed in the past for pastures and croplands (Mucina, 2006).

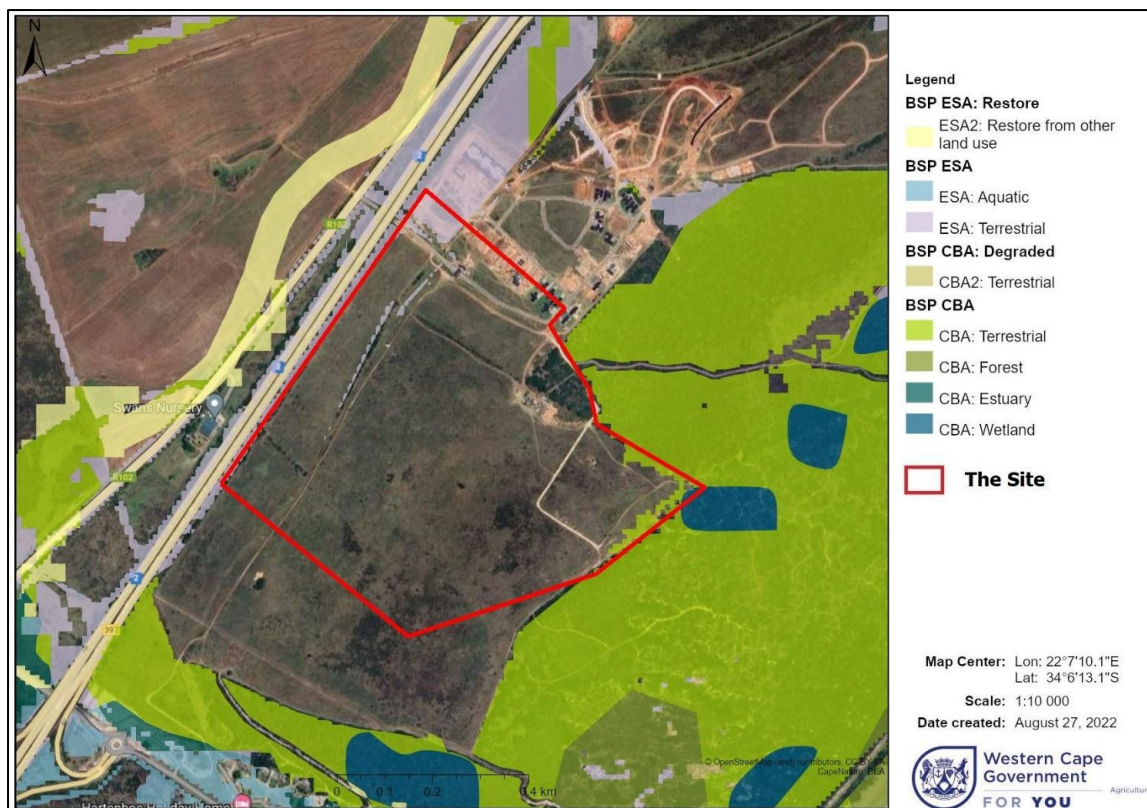


Figure 13: Extract of the Western Cape biodiversity network map

The site marginally encroaches onto the Western Cape biodiversity network (Figure 14). A terrestrial ecological support area (ESA) spills over the northern corner, while the eastern corner is encroached by both terrestrial and aquatic critical biodiversity areas (CBA's). The latter extends eastwards and coincides with intact dune thicket. It also forms part of an extensive coastal CBA link between the Hartenbos River and Klein Brak River estuaries. There is also a degraded ecological support area (ESA2) ribbon on the western side of the bypassing N2 and R102 that is aligned with a non-perennial watercourse. There are no formally protected areas within a 20 km radius of the site, only a few private game reserves. Reasons for the importance of the above-mentioned ESA's and CBA's include the presence of a SA vegetation type (Canca Limestone Fynbos), a threatened vegetation type (Groot Brak Dune Strandveld), threatened vertebrate habitat (bontebok) and a wetland type.

CBA's are defined as areas in a natural condition that are required to meet biodiversity targets, for species, ecosystems or ecological processes and infrastructure (Pool-Stanvliet, 2017). These sites are selected for meeting national targets for species, habitats and ecological processes (Pool-Stanvliet, 2017). Many of these areas support known occurrences of threatened plant species, and/or may be essential elements of designated ecological corridors. Loss of designated CBA's is therefore not recommended. ESA's, on the other hand, are supporting zones required to prevent the degradation of CBA's and Protected Areas.

As stated earlier, the site has been largely transformed by past agricultural activities and comprises a grassland (fallow land) covered by grasses, weeds and a few scattered shrubs and trees. However, there is a significant tract of dune thicket on the north-eastern side extending across a farm road towards an extensive area of thicket to the east. There are also a few thicket ribbons inside the site, probably remnants from past farming activities. These ribbons may contribute to the amenity value of the site but are probably of little ecological value due to its reduced (linear) habitat. They do however suggest that the dune thicket may have been more extensive on the site than shown on the

vegetation map. The thicket on the north-eastern and eastern side of the site is of good quality and considered to be of high conservation value. It is also a climax community, probably the result a long period of fire exclusion. Only a few woody aliens were noted. Disturbances noted include the presence of farm roads, a contractor's yard and stockpiling/dumping in a few places.

Using Campbell's classification of structural forms in the Fynbos Biome (Campbell, 1981), the dune thicket can be described as a tall closed large-leaved shrubland. Apart from the thicket, the site is significantly degraded or transformed, with the chance of rehabilitation slim. Figure 15 shows the botanical attributes of the site, with the open spaces overlaid. The dune thicket on the north-eastern side is included in OS5.



Figure 14: Botanical attributes of the site.

PLANT SPECIES:

Indigenous shrub species recorded inside the fallow land include *Felicia muricata*, *Helichrysum foetidum*, *Osteospermum moniliferum*, *Leysera gnaphalodes*, *Gnidia squarrosa*, *Drosanthemum intermedium*, *Delosperma litorale*, *Carpobrotus edulis*, *C. deliciosus* (or *C. deliciosus* x *edulis*), *Mesembryanthemum aitonis*, *Aizoon secunda* (dominant), *Euphorbia burmannii*, *Clutia daphnoides*, *Crassula multicava*, *C. expansa*, *Cotyledon orbiculata*, *Aloe ferox*, *Lycium cinereum*, *Searsia glauca*, *Sideroxylon inerme*, *Carissa bispinosa*, *Pelargonium capitatum*, *Anthospermum galioides*, *Exomis microphylla* and *Selago corymbosa*. The *Carpobrotus* species are excellent soil binders and should be salvaged for rehabilitation purposes. Geophytes recorded include *Oxalis pes-caprae*, *Drimia capensis*, *Bulbine lagopus*, *Brunsvigia orientalis* and *Moraea polyanthos*. The taller shrubs and trees, such as *Sideroxylon inerme*, *Carissa bispinosa* and *Searsia glauca*, are typically associated with dune thicket. *Sideroxylon inerme* (milkwood) is a protected tree species and a permit is required for its removal.

Indigenous species recorded in the dune thicket include *Schotia afra*, *Sideroxylon inerme*, *Pterocelastrus tricuspidatus*, *Myrotilon aethiopicum*, *Gymnosporia buxifolia*, *Putterlickia pyracantha*, *Searsia glauca*, *S. pterota*, *Azima tetracantha*, *Diospyros dichrophylla*, *Phyllica axillaris*, *Colpoos compressum*, *Hermannia holosericea*, *Agathosma apiculata*, *Aloe arborescens*, *Jordaaniella dubia*, *Crassula muscosa*, *Cussonia thyrsiflora*, *Pelargonium peltatum*, *Rhoicissus digitata* and *Commelina africana*. *Thamnochortus insignis* is the only restioid recorded inside the thicket.

All the recorded species are widespread and fairly common. Due to the time of the survey, spring flowering bulbs, especially members of the Iridaceae and Orchidaceae families, were not picked up. These will show themselves later in the spring season. Floristic association with dune thicket (Hartenbos Dune Thicket in this case) is strong with most of the recorded species regarded as important taxa in the unit. No SCC or regional endemics were recorded.

Only a few woody and succulent exotic species were recorded, namely *Acacia cyclops* (rooikrans, category 1b), *Eucalyptus* sp (gum, 1b) and *Opuntia robusta* (blue-leaf cactus, 1a). As indicated above, all three species are Category 1a and 1b invaders. In terms of the National Environmental Management: Biodiversity Act (NEMBA) (Act 10 of 2004) Alien and Invasive Species List (2016), category 1a and 1b invasive species require compulsory control as part of an invasive species control programme.

POTENTIAL IMPACTS

Due to the transformed state of the site, the impact posed by the adjustment of the open spaces on biodiversity is not regarded as significant. The adjustment will actually result in a 3172 (+400m² in north-eastern corner of Phase C) m² gain in open space, but this will not result in a positive impact, nor be detrimental. In other words, there will not be a gain or loss of natural vegetation. With regards to mitigation during development, efforts should rather be directed to the protection of the remaining dune thicket, especially during the construction phase. With regards to the biodiversity network, only a small loss of mapped terrestrial CBA is anticipated in the eastern corner of the site where the open space is trimmed back. This is a minor concern and will not impact on the functionality of the network.

An effort must be made to keep the dune thicket area clear of invasive aliens, such as rooikrans and *Opuntia* species. The former adds to the fuel load and may increase the risk of wildfires in the long term. As stated earlier, it is a legal requirement for the landowner(s) to clear/control the invasive aliens on their land. In addition, a firebreak (to be determined by a fire safety specialist) is needed between the development and the dune thicket on eastern side. This will aid in safeguarding the development from wildfires.

The impact on plant species, including potential SCC and protected species, is also expected to be of little significance or concern at this point in time. All the recorded species are common and widespread. The only gap in the information provided above is the possible presence of spring flowering bulbs, which may include threatened or sensitive species. This can only be ascertained during a survey later in spring. A few milkwoods, which is a protected tree species, are scattered around the site. Several more are expected in the mapped thicket ribbons in the northern part of the site. If they cannot be accommodated in the development, a permit will be needed for their removal. The probability of SCC listed in the Screening Report to occur in the vicinity of the site is indicated in Table 6. Given their habitat preferences, eight species have a medium or higher probability to occur on the property. Those with a lesser probability to occur here have not been recorded in Mossel Bay or were recorded in different habitats or vegetation types.

Table 6: Threatened plant species as listed in the Screening Report

Sensitivity	Feature(s)	Habitat & probability of presence
Medium	<i>Lampranthus diutinus</i>	Limestone fynbos; Low
Medium	<i>Lampranthus fergusoniae</i>	Limestone dunes; Low
Medium	<i>Lampranthus pauciflorus</i>	Rocky coastal slopes; Low
Medium	<i>Ruschia leptocalyx</i>	Gouritz Valley Thicket; Low
Medium	<i>Argyrobium harmsianum</i>	Dune and limestone fynbos; Low
Medium	<i>Lebeckia gracilis</i>	Coastal sandy flats; Low-medium
Medium	<i>Leucadendron galpinii</i>	Sandy coastal flats; Low
Medium	<i>Leucospermum praecox</i>	Sandy coastal flats; Low
Medium	<i>Wahlenbergia polyantha</i>	Coastal sands; Low-medium
Medium	<i>Selago ramosissima</i>	Clay flats; iNat record from dune thicket south of the site
Medium	<i>Selago villicaulis</i>	Limestone and sandy slopes; Medium
Medium	<i>Freesia fergusoniae</i>	Renosterveld; Low
Medium	<i>Erica unicolor</i> ssp. <i>mutica</i>	Hills and middle slopes; Low
Medium	<i>Hermannia lavandulifolia</i>	Coastal flats; Medium
Medium	Sensitive species 153	Sandstone flats; Low-medium
Medium	Sensitive species 633	Renosterveld; Low
Medium	Sensitive species 268	Gouritz Valley Thicket, rocky slopes; Low
Medium	<i>Thamnochortus muirii</i>	Coastal sands often with limestone; Low
Medium	<i>Marsilea schelpeana</i>	Wetland species; Low
Medium	<i>Duvalia immaculata</i>	Dry coastal ecotone vegetation; Low-medium
Medium	Sensitive species 1024	Dry to moist stony slopes; Low
Medium	<i>Oedera</i> (= <i>Relhaia</i>) <i>garnotii</i>	Renosterveld; Low
Medium	<i>Agathosma eriantha</i>	Coastal limestone hills; Medium
Medium	<i>Agathosma muirii</i>	Coastal hills; Medium
Medium	<i>Euchaetis albertiniana</i>	Coastal sands and limestone; iNat record from dune thicket northeast of the site
Medium	<i>Muraltia knysnaensis</i>	Dry flats and hills; Medium
Medium	<i>Polygala pubiflora</i>	Renosterveld and sandstone fynbos; Low
Medium	Sensitive species 980	Renosterveld at Gondwana; Low
Medium	<i>Nanobubon hypogaeum</i>	Sandy coastal fynbos; Low-medium
Medium	Sensitive species 516	Renosterveld; Low
Medium	<i>Drosanthemum lavisii</i>	Renosterveld; Low
Medium	Sensitive species 800	Alkaline sands and limestone; Medium
Medium	Sensitive species 500	Recent sand; Low-medium
Medium	Sensitive species 654	Coastal sand flats; Low-medium
Medium	Sensitive species 763	Coastal renosterveld and fynbos; Low

Medium	<i>Diosma passerinoides</i>	Silcrete slopes; Low
Medium	<i>Agathosma microcarpa</i>	Renosterveld, lower shale slopes; Low

6.1.3. Terrestrial Biodiversity and Animal Species

The terrestrial biodiversity and animal species compliance statement was compiled by Robyn Phillips of Cossypha. According to the compliance statement (Appendix H4):

The field investigation was undertaken on the 6th and 7th of September 2022 when terrestrial biodiversity and faunal elements within the study area were assessed. Daytime surveys were conducted on foot by meandering through the assessment area. Changes in land cover, habitat, and vegetation were observed and any fauna present on site noted. Photographs were taken at a series of sample points to illustrate the condition of vegetation, habitat, and representative areas of the site. A total of 24 sample points were photographed and are described in the results section below. Coverage of the study area was deemed to be sufficient. Note that no sampling was conducted in the adjacent indigenous dune thicket vegetation.

During the field survey the following aspects pertaining to terrestrial biodiversity and fauna were assessed:

- Current land use of the site and immediate surrounds;
- Current ecological state of habitats on site;
- Presence of terrestrial faunal SCC, protected species, or suitable habitat for such species on site; and
- Significant landscape features, ecological corridors, and landscape connectivity.

REGIONAL VEGETATION

The study area is located within the Fynbos Biome, within the Eastern Fynbos-Renosterveld Bioregion. The site falls mostly within the Hartenbos Dune Thicket vegetation type, with the south-western section of the site falling within Canca Limestone Fynbos, and the north-western section falling within Mossel Bay Shale Renosterveld. Hartenbos Dune Thicket is currently classified as Endangered with 79% remaining (Mucina and Rutherford, 2006; SANBI, 2021). With a conservation target of 19%, only 5.7% of this vegetation type is conserved in statutory conservation areas and is therefore regarded as Poorly Protected (SANBI, 2021). Canca Limestone Fynbos is currently classified as Least Concern, while Mossel Bay Shale Renosterveld is currently classified as Critically Endangered with only 38% remaining, none of which is currently protected (SANBI, 2021).

FAUNA AND FLORA

Hartenbos Dune Thicket vegetation occurs on flat to moderately undulating coastal dunes. Structurally, the vegetation is mosaic of low thicket, occurring in small bush clumps dominated by small trees and woody shrubs, in a mosaic of low asteraceous fynbos. Thicket clumps are best developed in fire-protected dune slacks, and the fynbos shrubland occurs on upper dune slopes and crests. Succulent karroid elements (*Aloe ferox*, *A. arborescens*, *Eriocephalus africanus*) occur along bands of mudstone and shale (Grobler et al., 2018). Plant species characteristic of the vegetation type include small trees such as *Pterocelastrus tricuspidatus*, and *Sideroxylon inerme*; succulent shrubs such as *Carpobrotus acinaciformis*, and *Roepera morgsana*; low shrubs such as *Salvia africana-lutea*, and *Agathosma apiculata*; graminoids such as *Restio eleocharis*, *Stenotaphrum secundatum*, *Thamnochortus insignis*, and *Themeda triandra*; and tall shrubs such as *Euclea racemosa*, *Maytenus procumbens*, *Metalasia muricata*, *Olea exasperata*, *Osteospermum moniliferum*, *Passerina rigida*, and

Searsia crenata (Grobler et al., 2018). According to Wessels (2008) and Coetzee (2005) who conducted the original vegetation assessments on the site, the vegetation has been almost totally transformed, has a low level of plant species diversity, and has no SCC. The site has also lost its inherent ecological functioning, have a low conservation value, and the potential for rehabilitation is very low.

From a faunal perspective, species that are likely to inhabit the ecosystem comprise typical coastal fynbos and thicket species. This may include birds such as spurfowl, robins, apalis, flycatchers, bulbuls, boubou, sunbirds, warblers, and raptors such as buzzards and falcons. Mammals may include mongoose, genet, duiker, bushbuck, and many small mammals such as thicket rats and grass mice. Reptiles may include tortoises, chameleons, lizards and skinks, adders, and other snakes. In addition, many invertebrates and insect pollinators inhabit the ecosystem.

THREATENED TERRESTRIAL ECOSYSTEMS

According to the National List of Threatened Terrestrial Ecosystems (DEA, 2011), published in terms of Section 52 of the National Environmental Management Biodiversity Act, 2004 (Act 10 of 2004) (NEMBA), the northern section of the site is located within Groot Brak Dune Strandveld, which is listed as an Endangered Ecosystem in terms of Section 52 of NEMBA (DEA, 2011) under criterion A1: Irreversible loss of natural habitat. Six Red Data plant species falling in the categories Extinct (EX), Extinct in the Wild (EW), Critically Endangered (CR), Endangered (EN) and Vulnerable (VU) occur in the ecosystem.

According to the newly updated list of threatened ecosystems based on the 2018 National Biodiversity Assessment (NBA; Skowno et al., 2019), the majority of the site falls within the Hartenbos Dune Thicket and Canca Limestone Fynbos ecosystems. Both were assessed to be Least concern. The north-western section of the site falls within Mossel Bay Shale Renosterveld, which has been assessed to be Critically Endangered under criterion B1(i) due to the vegetation type being narrowly distributed with high rates of habitat loss in the past 28 years (from 1990 to 2018) placing the ecosystem at risk of collapse (remaining extent > 38%) (SANBI, 2021).

While the NEMBA list currently remains the official legislated National List of Ecosystems that are Threatened and in Need of Protection, gazetted in 2011 (DEA, 2011), the new list updated with the IUCN Red List of Ecosystems (RLE) assessment approach, will be gazetted soon (SANBI, 2021). The vegetation assessments conducted by Wessels (2008) and Coetzee (2005) concluded that none of the original vegetation exists on the site and the potential for rehabilitation is very low.

WESTERN CAPE BIODIVERSITY SECTOR PLAN

According to the Western Cape Biodiversity Sector Plan (WCBSP), the majority of the site is not assigned to a biodiversity category due to the transformed nature of the site. The edges of the extreme eastern corner of the site that border the indigenous dune vegetation are classified as Critical Biodiversity Area (CBA) 1 Terrestrial, with a small portion classified as CBA1: Wetland. No indigenous vegetation will however be affected by the proposed development. A few patches of the site are classified as Other Natural Area (ONA) and Ecological Support Area (ESA) 1: Terrestrial (Pool-Stanvliet et al., 2017). Such areas appear to be represented by small patches and strips of remnant indigenous vegetation present on the site (Figure 16).

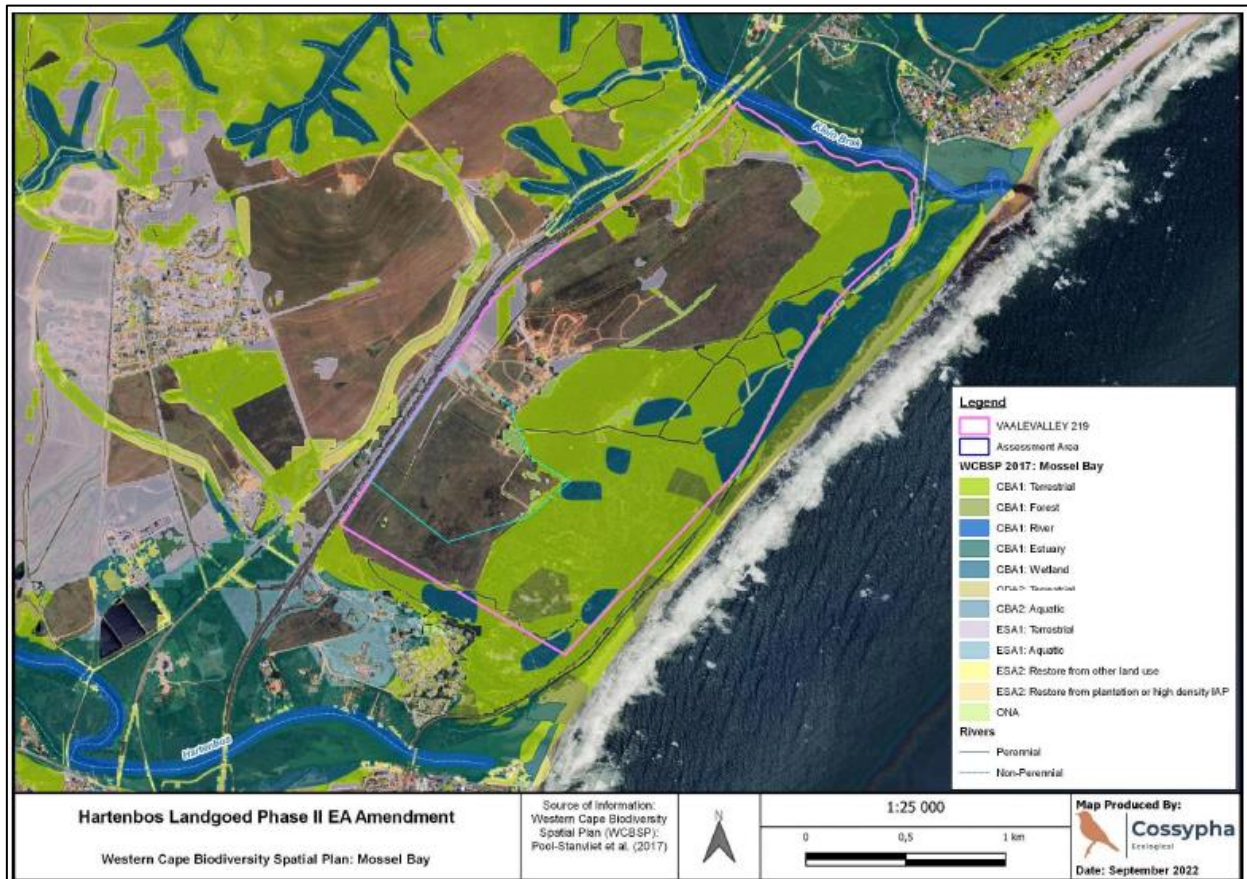


Figure 15: The study site in relation to the WCBSP

PROTECTED AREAS

In terms of Protected Areas (PA), the site falls within the Gouritz Cluster Biosphere Reserve and falls within the Transition Zone of the reserve. The Transition Zone is usually the largest part of the biosphere reserve and is where the greatest development activity is allowed, promoting economic and human development that is socio-culturally and ecologically sustainable. The Core Zone comprises a strictly protected zone that contributes to the conservation of landscapes, ecosystems, species, and genetic diversity, while the Buffer Zone (usually surrounding the Core Zone) is managed to support the conservation objectives of the Core Zone (UNESCO, 2022).

Another PA occurring in the vicinity includes the Mossel Bay Seal Island Provincial Nature Reserve situated ~5 km to the south of the site. No other PAs occur near the site.

NATIONAL FRESHWATER ECOSYSTEM PRIORITY AREAS

From a National Freshwater Ecosystem Priority Areas (NFEPA) perspective, the site falls within the Gouritz National Water Management Area (WMA) and within the Coastal Gouritz Sub-WMA. Major rivers that flow in the vicinity include the Hartenbos River and Estuary immediately to the south of the site and the Klein Brak River and Estuary ~2 km to the north of the site. Other NFEPA features that occur in the vicinity of the site include a few natural wetlands that occur within the indigenous dune vegetation to the south of the site (Nel et al., 2011). No wetlands or drainage lines fall within the boundaries of the site and the site does not fall with a Strategic Water Source Area (SWSA) (Nel et al., 2011).

SITE DESCRIPTION

The assessment area is mostly comprised of secondary grassland vegetation, scattered with common indigenous and alien shrubs and trees. Indigenous species observed included common grasses and restios such as *Restio eleocharis*, and common shrubs such as *Carpobrotus acinaciformis*, *Aloe* sp., *Roepera morgsana*, *Osteospermum moniliferum*, and *Searsia crenata*. Alien species included *Opuntia ficus-indica*, *Acacia* sp., and *Eucalyptus* sp. One individual *Mimusops caffra*, a protected tree species in SA, was also recorded on the site.

Faunal activity on the site was generally low with only common or generalist birds, small mammals, and butterflies recorded. Some of the bird species recorded on the site included Cape Spurfowl *Pternistis capensis*, Spotted Thick-knee *Burhinus capensis*, Barn Swallow *Hirundo rustica*, Karoo Prinia *Prinia maculosa*, Bokmakierie *Telophorus zeylonus*, Common Starling *Sturnus vulgaris*, and a pair of Jackal Buzzard *Buteo rufofuscus* that are known to nest in an alien tree on the southern border of the site (on the fringe of the indigenous dune thicket). Mammal diversity on the site was low with only small mammals such as Four-striped Grass Mouse *Rhabdomys pumilio* and Cape Gerbil *Gerbilliscus afra* recorded, with a high concentration of burrows observed throughout the site. Spoor of Small-spotted Genet *Genetta genetta* was observed on the edge of the dune thicket in the southern portion of the site. Only one common butterfly species was recorded during the field survey, Silverbottom Brown *Pseudonympha magus*. No faunal SCC were recorded during the site surveys. The habitat on the site is largely homogenous and generally of poor quality and is unlikely that the available habitat would support any significant populations of faunal SCC.

SUMMARY

Overall, the assessment area displays a low sensitivity from a terrestrial biodiversity and faunal perspective. The site is largely in a modified state due to previous land use practices (historical clearing for cultivation / pasture) and subsequent disturbances to the site. The habitat is comprised of secondary grassland with scattered indigenous and alien shrubs and the occasional alien tree (mostly *Eucalyptus* sp.). The habitat for fauna is generally of poor quality and likely only supports generalist species. The site has limited use by fauna and species diversity is low. No animal SCC were found during the field survey or are expected to occur on the site. A pair of Jackal Buzzard *Buteo rufofuscus*, which is endemic to southern Africa but a common species currently of Least Concern from a conservation perspective, was recorded on site with a nest in a *Eucalyptus* tree on the eastern boundary of the site.

In terms of regional biodiversity, it is evident both from the historical satellite imagery and the site visit that the site is in a modified state comprised of secondary vegetation. The site is therefore not considered a representative portion of the vegetation type or ecosystem and is not considered important for reaching biodiversity targets. The site is therefore considered to be of low importance from a terrestrial biodiversity perspective. One indigenous tree *Mimusops caffra*, which is Protected at a national level, was recorded in the southern portion of the assessment area.

IMPACT MANAGEMENT

The perceived impacts from the proposed changes to the layout from a terrestrial biodiversity and faunal perspective will be very low to negligible. The following recommendations are important for ensuring the impacts are kept to a minimum, and must be included in the Environmental Management Programme (EMPr):

1. An experienced, independent Environmental Control Officer (ECO) must be appointed to oversee the construction activities and compliance with the EMPr.

2. The indigenous dune thicket vegetation on the east side of the site must be a no-go area for construction workers.
3. The site must be cleared of all alien plants and trees during the construction phase, except for the Eucalyptus tree at 34°06'20.87"S 22°07'26.36"E in which the Jackal Buzzard pair has a nest, in the eastern portion of the assessment area adjacent to the natural dune vegetation. Jackal Buzzard use the same nest for up to five years or alternative between nest sites (Allan, 2005).
4. During construction, no wild animal may under any circumstance be handled, removed, or be interfered with by construction workers. No wild animal may under any circumstance be hunted, snared, captured, injured, or killed. This includes animals perceived to be vermin.
5. The indigenous and protected tree *Mimusops caffra* recorded at 34°06'25.13"S 22°07'07.25"E in the southern portion of the assessment area must be retained if possible. If this is not possible then a permit for its removal must be obtained from the relevant authority, in this case the DFFE.

CONCLUSION

It is the opinion of the specialist that the impacts on terrestrial biodiversity and fauna will be very low to negligible considering the modified and currently disturbed state of the site, and that the project may be authorised subject to the recommendations in the EMPr being adhered to.

- This compliance statement is applicable to the study area as described in the EIA documentation and shown in Figure 5 (of the Terrestrial Compliance Statement);
- Due to the disturbed habitat, the study area is of low sensitivity for terrestrial biodiversity and terrestrial animal species;
- It is likely that the proposed development will not have any impact on terrestrial animal SCC; and
- There are no conditions to which this compliance statement is subjected.

6.1.4. Archaeology

A Notice of Intent to Develop was submitted to Heritage Western Cape for their requirements in terms Section 38 of the National Heritage Resources Act (Act 25 of 1999). The HWC response dated 23 September 2022 and received 26 September 2022 indicates that no further action under Section 38 of the National Heritage Resources Act (Act 25 of 1999) is required. The HWC NID and RoD are attached to This Impact Report as Appendix K

6.1.5. Socio-Economic Compliance Statement

Grant Hancock of Ramp Economics (Pty) Ltd was appointed to compile a compliance Statement (Appendix H3) for the proposed amendments to the existing layout and the consequences in terms of socio-economic aspects in this regard. The findings of the report are included below.

ECONOMIC IMPACT ASSESSMENT

According to the report: It must be noted that the nature of the changes is predominately related to site layout and the areas to be developed, not the size / scale of the development, the number of, size, or cost of the units to be developed or the supporting roads and other infrastructure to be constructed.

The most significant deviation from an economic impact perspective is the removal of the 150 social housing units, community hall, and split zoned business. This is occurring following consultation with the

Power Town community. The community were originally to be relocated to the development but have since indicated that they do not wish to relocate. As a result, the development plan now calls for the development of a sports field and school.

From an economic impact perspective, the only consideration is the change in planned expenditure and the nature of the construction (labour intensity, development timeline etc.) and the expected expenditure during the commercialisation / operational phase of the development.

IMPACT ON EMPLOYMENT

The nature of the proposed changes to the development plan are not expected to result in any fundamental changes to the determination of economic impacts made in the original study.

The total expenditure of the project (inflation adjusted) is likely to be close to that of the original plan will likely result in the same impacts on employment both directly on-site during construction, indirectly to suppliers, and through induced impacts on the local economy.

IMPACT ON GVA

The nature of the proposed changes to the development plan are not expected to result in any fundamental changes to the determination of economic impacts made in the original study.

The total expenditure of the project (inflation adjusted) is likely to be close to that of the original plan. There is no evidence to suggest that the structure of the local economy and any linkages between firms will result in significantly different modelling results as part of the economic impact modelling process.

It is highly likely that the same impacts on the Gross Value Added (GVA) of the local economy will occur, albeit at inflation adjusted values.

IMPACT ON HOUSEHOLD INCOME

Impact on household income is related to the extent and duration of labour demanded during construction and also operational phase of the development. Based on the changes to the proposed site development plan there appears no reason why the impacts on household income determined by the 2009 study should be invalidated. The changes proposed are such that there will be no significant difference in the level of construction activity on site or significant change in the labour demanded during the operational phase of the development.

Naturally through inflationary effects the values proposed in the original report are no longer accurate. Adjusting for inflation produces the following summary results.

IMPACT ON BUSINESS OUTPUT

Business output relates to the value of transactions between businesses (business level / business output) in the local economy as a result of direct and indirect interactions between suppliers and through induced effects into the economy.

As the proposed changes to the development plan will not result in any significant changes in expenditure (accounting for inflation), and as the basic structure of the local economy and industry linkages are fundamentally unchanged, there is expected to be no significant difference in the estimated impact on business output.

IMPACT ON THE POOR

The initial development plan called for the development of 150 social housing units to accommodate the low-income community of Power Town, who were to be relocated to the development. This community has since chosen not to be relocated and a new agreement between the community and the Mossel Bay Municipality has been reached in line with the municipal densification policy. The net result is that the net negative impact on the poor is deemed to be marginal as alternative arrangements have been agreed upon to mitigate for the removal of the social housing units from the development plan.

EMPLOYMENT CREATED BY THE DEVELOPMENT

See above section on impact on employment.

The changes to the development plan are not expected to create any significant change to the number of employment opportunities created at the development.

IMPACT ON SKILLS DEMANDED BY THE DEVELOPMENT

The general development concept, style, size, and type of units to be developed remain unchanged in the amended development plan. As such, the type of skills required by the development remain unchanged. As such, all findings of the original report with regard to skills demanded and recommendations for the development of these required skills are upheld.

REVIEW OF IMPACT TABLES

Section 6 of the original Economic Impact Assessment report provided a wholistic assessment of the economic and social impacts that may follow from the development and operation of the Hartland development. As with much of the report, this was conducted for each development alternative.

As discussed previously, Alternative 1 called for no social housing while Alternatives 2 – 4 all included social housing. Alternative 5 was kept as a no-go option.

Although Alternative 1 called for no housing, it also called for significantly fewer residential units than the newly proposed development plan. The economic impact would therefore be expected to be greater if calculated for the newly proposed plan, more in line with that considered for the original studies Alternative 4.

The impact areas considered in this section included:

- Impact on in-migration
- Impact on Economy (GDP)
- Impact on Employment
- Impact on Tourism
- Impact on Poverty
- Impact on Investment
- Impact on Human Resource Development
- Impact of Influx of Job Seekers
- Impact of change in social composition/character of area

The potential impacts of Alternatives 1 – 4 were largely the same, as these alternatives differed only slightly. The report notes that all four alternatives will cause some negative impacts along with positive impacts but that all produce overwhelmingly positive overall contributions to the local economy.

Upon reviewing the methodology used in the 2009 report, considering changes that have occurred over the period 2009 – 2022, and assessing the potential impacts of the newly proposed development

plan, this report finds that there will be no significant deviation from the impacts determined in the original Economic Impact Assessment.

RECOMMENDATION

Based on the findings of this report, no additional recommendations are made and there is no apparent reason for any further research / investigations regarding the determination of economic impacts resulting from the amendments to the development plan.

REASONED OPINION

It is the reasoned opinion of the Ramp Economics team that the proposed amendments to the development plan for the Hartland Estate (as was originally provided development approval) will not result in any significant changes in the scale or nature of economic and social impacts experienced by the local economy as were determined by the Urban-Econ report of 2009.

It is further found that due to the increase in the number of units to be developed, and the expected increase in construction costs, that the net positive economic impacts may well be higher than originally calculated, even accounting for the removal of the social housing units from the development.

It is the view of this report that the removal of the 150 social housing units will not produce an adverse social / economic impact as alternative provisions have been made for the community in question.

6.1.6. Visual Impact Compliance Statement

Paul Buchholz was appointed to compile the Visual Impact Report, according to the Statement (Appendix H6):

Visual impact assessments should not be an obstacle in the approval process of a proposed development. Visual input, especially at the early concept stage of the project, can play an important role in helping to formulate design alternatives, as well as minimising impacts, and possibly even costs, of the project.

It is in the nature of visual and scenic resources to include abstract qualities and connotations that are by their nature difficult to assess or quantify as they often have cultural or symbolic meaning. An implication of this is that impact ratings cannot simply be added together. Instead, the assessment relies on the evaluation of a wide range of considerations, both objective and subjective, including the context of the proposed project within the surrounding area.

The analysis of the interaction between the existing visual environment and the planned infrastructure provides the basis for determining visual impacts and mitigation strategies. This visual impact assessment provides an overview of the landscape character of the locality and assesses the degree to which the proposed development would be visually appropriate.

POTENTIAL VISUAL IMPACTS OF THE PROPOSED DEVELOPMENT

The assessment of visual impacts is based on a synthesis of criteria including nature of impact, extent, duration of the impact, intensity, probability of occurrence, reversibility, irreplaceable loss of resources, cumulative effect and level of significance.

NATURE OF THE IMPACT

The nature of the visual impacts will be the visual effect the activity would have on the receiving environment. These visual impacts will be:

Pre-construction phase:

- Removal of some vegetation will be required for earthworks. Some vegetation would also be cleared for building thereby increasing the visibility of the site and resulting in a loss of the vegetation visual resource.

Construction phase:

- During construction, earthworks would create cut and fill with slopes and would result in visual scarring of the landscape.

Operational phase:

- A portion of the development site is currently undeveloped and covered in vegetation. The development would result in a change in visual character from a landscape covered in vegetation and without buildings to a built landscape.

IMPACT ASSESSMENT CRITERIA

The following impact assessment significance ratings indicate the impacts on the criteria to follow, in terms of the development visual impact (approved layout) and additionally the impact significance of the proposed amendments to the layout (proposal) when compared to what is currently approved. In other words, the impact significance of the development has already been assessed and approved and the only the impact significance of the proposed amendments to the current layout need to be taken into consideration for decision making purposes.

THE EXTENT OF THE IMPACT

The spatial or geographic area of influence of the visual impact:

Approved Development: the extent of the impact of the development is local (limited to the immediate surroundings).

Proposed Amendments: the extent of the impact of the proposed amendment is local / does not differ from that which is currently approved (limited to the immediate surroundings)

DURATION OF THE PROJECT

The predicted lifespan of the visual impact:

Approved Development: the duration of impacts for the development ranges from short-term (duration of the construction phase) to permanent (time will not mitigate the visual impact).

Proposed Amendments: the duration of impacts for the Proposed amendments ranges from short-term (duration of the construction phase) to permanent (time will not mitigate the visual impact). The only difference for these criteria is that the construction phase may extend longer than the approved layout due to the increase in units, this, however, may not completely be the case as this increase could be easily mitigated by increasing the number and machinery of the development teams physically constructing the houses.

THE INTENSITY OF THE IMPACT

The magnitude of the impact on views, scenic or cultural resources (intensity of the impacts):

Approved Development: the intensity of the impacts for the development will be medium (visual and scenic resources are affected to a limited extent).

Proposed Amendments: the intensity of the impacts of the Proposed Amendments will remain medium (visual and scenic resources are affected to a limited extent).

THE PROBABILITY OF THE IMPACT

The degree of possibility of the visual impact occurring (probability of the impact occurring):

Approved Development: the probability of the impact occurring for the development will be highly probable (most likely that the impact will occur).

Proposed Amendments: the probability of the impact occurring for the Proposed Amendment will be highly probable (most likely that the impact will occur).

REVERSIBILITY

Approved Development: The reversibility of the approved development is barely reversible (the impact is unlikely to be reversed even with intense mitigation measures).

Proposed Amendments: The reversibility of the Proposed Amendments is barely reversible (the impact is unlikely to be reversed even with intense mitigation measures).

IRREPLACEABLE LOSS OF RESOURCES

Approved Development: The degree to which resources will be irreplaceably lost due to the approved development is significant.

Proposed Amendments: The degree to which resources will be irreplaceably lost due to the proposed amendment will remain significant.

CUMULATIVE EFFECT

An effect that in itself may not be significant but may become significant if added to other existing or potential impacts that may result from activities associated with the proposed development.

Approved Development: The cumulative impacts of the approved development before mitigation are high and after mitigation medium

Proposed Amendments: The cumulative impacts of the Proposed Amendments before mitigation are high and after mitigation medium.

SIGNIFICANCE

The significance of impacts is determined through a synthesis of the assessment criteria. The significance of the impacts of the proposed development is medium that will require considerable mitigation measures to achieve an acceptable level of impact.

CONCLUSION

Although the visual impact of the development as a whole is significant and the intensity of the visual impact medium after mitigation, these impacts and their significance have already been approved. The proposed amendments themselves, however, when compared to what is currently approved, are not significant in terms of the visual impact. This is largely because the footprint will remain relatively unchanged (except for some increases in the open spaces) and the height restrictions of certain units on the edges of the development, remain in force with the proposed amendment.

The Retirement Resort, Business Zone III and the General Residential Zone III located directly next to the Retirement Resort will not be very visible due to the lower topography that screens views into this portion of the development. The remainder of the development will be very visible due to its location on the elevated topographical sections of the property

6.1.7. Traffic Impact Assessment

A separate Basic Assessment Report has been undertaken by HilLand for the proposed western road. An Impact Assessment was therefore not undertaken for the western access road as part of this amendment application impact report as the road is listed in terms of the NEMA EIA Regulations and has been assessed in the "DRAFT BASIC ASSESSMENT REPORT (BAR) FOR THE REALIGNMENT AND CONSTRUCTION OF THE APPROVED SECONDARY ACCESS TO HARTLAND – BY WIDENING THE EXISTING APPROVED ROAD ON NEW VINTAGE DEVELOPMENT AND EXTENDING IT TO THE HARTLAND BOUNDARY" Compiled by HilLand Environmental. Please refer to Appendix L for the Traffic Impact Assessment compiled by Element Consulting Engineers, Revision 4, dated February 2023.

The report concludes as follows:

The following conclusions can be made from the Traffic Impact Assessment (TIA) report for the proposed revision of access arrangements to the Hartland Residential Estate development:

1. The purpose of this TIA is to assess the traffic impact of the proposed revised density of the estate as well as the addition of a primary school;
2. Notwithstanding the original approved 2009 TIA for this development, a number of later revisions have also been conducted and approved, the most recent in 2021;
3. A number of other approved development rights in close proximity to this development were considered in this TIA;
4. Existing developed access to the estate is formally obtained from the MR344 (R102) at approximately chainage km2.763 via an existing culvert underneath the N2 freeway. This access will be the future secondary access;
5. A second (undeveloped) access is from the traffic circle on the SANRAL interchange with the DR6804 via a servitude over the adjacent properties. The access onto the DR6804 will become the main access to the estate;
6. An origin-destination matrix was compiled in order to assess and estimate the peak hour trip distribution percentages on the immediate road network considering the two estate accesses and the regional trip distribution;
7. A capacity analysis was performed for the weekday AM and PM peak hours for the existing background (2023), future background (2028) and total future traffic (2028) conditions. The capacity analysis was performed using the Sidra Intersection 8.0 software to compare the traffic impact of the development against the background traffic. Mitigation measures were designed and analysed where the current intersection configuration could not accommodate the total future traffic conditions. The analysis concluded the following:
 - a. Intersection 1 (MR344 and secondary development access): The development does not have a significant impact on the Level of Service during either the morning or afternoon horizon year peak hours and the intersection will continue to operate at a Level of Service A for both the morning and afternoon peak hours. The intersection does however trigger a warrant for a right turn lane and a right turn lane shall hence be provided on the western approach on the MR344 (R102);
 - b. Intersection 2 (MR344 and Monte Cristo access road): To accommodate the total horizon year traffic demand through the intersection, traffic signals are required in conjunction with a slight lane reconfiguration. The analysis conducted with traffic signals and the revised lane configuration indicate that the intersection will operate at an acceptable LOS C and LOS D for the morning peak hour and afternoon peak hour respectively;
 - c. Intersection 3 (N2 Western offramp and MR344): To accommodate the total horizon year traffic demand through the intersection, traffic signals are required in conjunction

with a new right turn lane from the west and a new through and left lane from the east. Double downstream lanes are also required on the eastern approach (western departure). The right turn lane from the west will allow for a right turn phase to accommodate this significant movement. The results of the analysis conducted with traffic signals and the revised lane configuration indicate that the intersection will operate at an acceptable LOS C and LOS D for the morning peak hour and afternoon peak hour respectively;

- d. Intersection 4 (N2 Eastern offramp and DR6804): This intersection has been upgraded to a large diameter traffic circle in 2021 to provide the primary access to Hartland Estate as well as the filling station and other proposed developments. The geometry has single approach and departure lanes in all directions except for the western approach and the northern departure which has a dedicated left turn lane for the large movement of traffic from the freeway. The results of the analysis conducted indicate that the intersection will operate at a LOS A for both the morning and afternoon horizon year peak hours;
8. Public- and non-motorised transport facilities to be provided as per the original estate approvals.
9. School access and traffic patterns:
 - a. Detailed attention shall be provided to the circulation surrounding the school.
 - b. The school shall be situated external to the estate entrance to cater for external learners.
 - c. External access to the school shall be provided from a point on the access road (Kasuur Street), halfway between the culvert underneath the N2 and the access gate.
 - d. External traffic streams from the R102 (MR344) to the school and internal traffic streams from residents in the estate shall not be mixed. This is in order to attain the highest possible level of service in the surrounds of the school from a traffic engineering perspective.
 - e. Drop off zones shall be provided for the school, both for the external traffic stream, which shall be provided inside the school terrain, and also for the internal traffic (estate residents), which shall be provided inside the boundary of the estate, adjacent to the school.
10. Access for municipal refuse removal vehicles shall be from the secondary/service access.
11. Access for contractors shall be from the secondary/service access.
12. It is proposed that the developers of Hartland Estate, Hartenbos Lifestyle Village (Incl New Vintage), Outeniquasbosch, Hartenbos Landgoed 1, Monte Cristo and Ptn 33 of Farm 217 jointly appoint an economic impact assessment specialist to arrive at a cost apportionment model for the various intersection upgrades required as contained in the approved TIA's of the respective approved developments

RECOMMENDATIONS

In line with the conclusions above, the following is recommended:

1. That the revised density application of the estate as well as the addition of a primary school to the estate, be approved from a traffic engineering perspective.
2. That all recommendations contained in the report be implemented in accordance with the relevant design standards and legislation and all designs be performed by a competent traffic and transportation engineer;
3. That all recommendations contained in the report be implemented in accordance with a phased programme, in line with the growth of the estate, to be negotiated with the relevant authorities.

6. ASSESSMENT OF IMPACTS RELATING TO THE PROPOSED CHANGE

The site was assessed as part of the initial Hartenbos Landgoed Phase II project environmental process and the impacts associated with the development were included in the Report submitted for environmental authorization. However, environmental legislation has since changed and the requirements regarding identifying impacts are now more stringent. As such, the potential impacts of the proposed development and recommended mitigations have been included in the sections that follow.

6.1. DESCRIPTION AND ASSESSMENT OF THE SIGNIFICANCE OF IMPACTS PRIOR AND AFTER MITIGATION

As the proposal is not new and only for the amendment of the existing layout, it was indicated by the Competent Authority that only the impacts associated with the proposed changes need to be reported on and assessed. Therefore the impact tables below do not contain an alternative as the No-Go alternative is the existing layout which will still be implemented if the proposed amendment is not authorised.

6.2.1. Construction Phase Impacts

Nature of Impact (neutral): Construction Phase Visual Impact: Although the visual impact of the development as a whole is significant and the intensity of the visual impact medium after mitigation, these impacts and their significance have already been approved. The proposed amendments themselves, however, when compared to what is currently approved, are not significant in terms of the visual impact. This is largely because the footprint will remain relatively unchanged (except for some increases in the open spaces) and the height restrictions of certain units on the edges of the development, remain in force with the proposed amendment.	
Extent and duration of impact:	Local and Permanent
Probability of occurrence:	Highly probable
Degree to which the impact can be reversed:	Barely Reversible
Degree to which the impact may cause irreplaceable loss of resources:	No additional loss of resource
Cumulative impact prior to mitigation:	No significant increase
Significance rating of impact prior to mitigation	No significant increase
Degree to which the impact can be mitigated:	Impacts have been mitigated
Proposed Mitigation:	Please refer to Section 8 of the Visual Report, these mitigation measures were already taken into account during the development of the proposed amendment layout and no new mitigation measures are required
Cumulative Impact post mitigation;	No significant increase
Significance Rating of Impact After Mitigation	No significant increase

Nature of Impact (neutral): Construction Phase Botanical Impact:

Due to the transformed state of the site, the impact posed by the adjustment of the open spaces on biodiversity is not regarded as significant. The adjustment will actually result in a 3572 m² gain in open space, but this will not result in a positive impact, nor be detrimental. In other words, there will not be a gain or loss of natural vegetation.

Extent and duration of impact:	Site Specific; Long Term
Probability of occurrence:	Definite
Degree to which the impact can be reversed:	Not Reversible
Degree to which the impact may cause irreplaceable loss of resources:	No additional loss of resource when compared to existing approval
Cumulative impact prior to mitigation:	No significance
Significance rating of impact prior to mitigation	No significance
Degree to which the impact can be mitigated:	Cannot be mitigated on site
Proposed Mitigation:	<ul style="list-style-type: none"> ▪ efforts should rather be directed to the protection of the remaining dune thicket, especially during the construction phase. With regards to the biodiversity network, only a small loss of mapped terrestrial CBA is anticipated in the eastern corner of the site where the open space is trimmed back. This is a minor concern and will not impact on the functionality of the network. ▪ An effort must be made to keep the dune thicket area clear of invasive aliens, such as rooikrans and Opuntia species. The former adds to the fuel load and may increase the risk of wildfires in the long term. As stated earlier, it is a legal requirement for the landowner(s) to clear/control the invasive aliens on their land. In addition, a firebreak (to be determined by a fire safety specialist) is needed between the development and the dune thicket on eastern side. This will aid in safeguarding the development from wildfires.

	<ul style="list-style-type: none"> ▪ Do not use the proposed open spaces for construction purposes, such as parking, stockpiling, contractor's yard, etc. ▪ The contractor(s) must not be allowed into the dune thicket areas, which must be demarcated as a 'no-go' area. ▪ During the staking out of development footprints or open spaces take cognisance of the presence of milkwood trees. Try and avoid these as far as practically possible. A permit is required for the removal of milkwoods in terms of the National Forests Act. ▪ As a duty of care measure, indigenous bulb species and <i>Carpobrotus</i> species (sour fig) can be searched and rescued to be replanted in the open spaces or where there is a need for rehabilitation. <i>Carpobrotus</i> species are an excellent soil binder. ▪ Implement alien control as a long-term (operational phase) maintenance requirement. Currently, the focus should be to eradicate <i>Acacia cyclops</i> (rooikrans) and <i>Opuntia robusta</i> (blue-leaf cactus) from the site. In terms of the NEMBA (Act 10 of 2004) Alien and Invasive Species List (2016), category 1a and 1b invasive species require compulsory control as part of an invasive species control programme.
Cumulative Impact post mitigation;	No Significance
Significance Rating of Impact After Mitigation	No Significance (neutral)

Nature of Impact (neutral): Construction Phase Freshwater Impact:

No freshwater features were noted during the initial application for EA, additional no freshwater features were identified by the freshwater specialist during his site visit to compile the Freshwater Compliance Statement

Extent and duration of impact:	No Impact
Probability of occurrence:	
Degree to which the impact can be reversed:	
Degree to which the impact may cause irreplaceable loss of resources:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation	
Degree to which the impact can be mitigated:	
Proposed Mitigation:	
Cumulative Impact post mitigation;	
Significance Rating of Impact After Mitigation	No Impact

Nature of Impact (negative): Construction Phase Fauna and Terrestrial Biodiversity Impact:

The habitat for fauna is generally of poor quality and likely only supports generalist species. The site has limited use by fauna and species diversity is low. No animal SCC were found during the field survey or are expected to occur on the site.

In terms of regional biodiversity, it is evident both from the historical satellite imagery and the site visit that the site is in a modified state comprised of secondary vegetation. The site is therefore not considered a representative portion of the vegetation type or ecosystem and is not considered important for reaching biodiversity targets. The site is therefore considered to be of low importance from a terrestrial biodiversity perspective.

Extent and duration of impact:	Site Specific; Long term.
Probability of occurrence:	Definite.
Degree to which the impact can be reversed:	Not Reversible
Degree to which the impact may cause irreplaceable loss of resources:	No loss of resource
Cumulative impact prior to mitigation:	Very Low

Significance rating of impact prior to mitigation	Very Low
Degree to which the impact can be mitigated:	Can be partly mitigated.
Proposed Mitigation:	<ul style="list-style-type: none"> ▪ An experienced, independent Environmental Control Officer (ECO) must be appointed to oversee the construction activities and compliance with the EMPr. ▪ The indigenous dune thicket vegetation on the east side of the site must be a no-go area for construction workers. ▪ The site must be cleared of all alien plants and trees during the construction phase, except for the Eucalyptus tree at 34°06'20.87"S 22°07'26.36"E in which the Jackal Buzzard pair has a nest, in the eastern portion of the assessment area adjacent to the natural dune vegetation. Jackal Buzzard use the same nest for up to five years or alternative between nest sites (Allan, 2005). ▪ During construction, no wild animal may under any circumstance be handled, removed, or be interfered with by construction workers. No wild animal may under any circumstance be hunted, snared, captured, injured, or killed. This includes animals perceived to be vermin. ▪ The indigenous and protected tree <i>Mimusops caffra</i> recorded at 34°06'25.13"S 22°07'07.25"E in the southern portion of the assessment area must be retained if possible. If this is not possible then a permit for its removal must be obtained from the relevant authority, in this case the DFFE.
Cumulative Impact post mitigation;	Very Low to No significance
Significance Rating of Impact After Mitigation	Very Low to No significance

Nature of Impact (negative): Construction Phase Noise Impact:

The noise impacts associated with the proposed amendment will not vary from the current noise impacts from the construction phase of the development with the exception of a slight increased duration of the noise impact due to the additional units in the proposed amended layout.

Extent and duration of impact:	Local; Temporary
Probability of occurrence:	Definite
Degree to which the impact can be reversed:	Reversible
Degree to which the impact may cause irreplaceable loss of resources:	No loss of resource
Cumulative impact prior to mitigation:	Very Low
Significance rating of impact prior to mitigation	Very low
Degree to which the impact can be mitigated:	Very low degree of mitigation potential
Proposed Mitigation:	<ul style="list-style-type: none"> • Appropriate directional and intensity settings are to be maintained on all hooters and sirens. • No amplified music shall be allowed on the construction site. • Any mechanical plant/machinery is to be mechanically suitable for the purpose for which it is used. In addition, vehicles' exhaust system silencers should be correctly maintained and vehicles should not be used unnecessarily.
Cumulative Impact post mitigation;	Very Low
Significance Rating of Impact After Mitigation	Very Low to No significance

Nature of Impact: Construction Phase Traffic Impact:

Element Consulting Engineers compiled the TIA for the “DRAFT BASIC ASSESSMENT REPORT (BAR) FOR THE REALIGNMENT AND CONSTRUCTION OF THE APPROVED SECONDARY ACCESS TO HARTLAND – BY WIDENING THE EXISTING APPROVED ROAD ON NEW VINTAGE DEVELOPMENT AND EXTENDING IT TO THE HARTLAND BOUNDARY” and as such all traffic related aspects are being addressed and assessed through that EIA process.

Extent and duration of impact:	Separate BAR being undertaken for the new proposed access road on the western of the development
Probability of occurrence:	N/A
Degree to which the impact can be reversed:	N/A
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Cumulative impact prior to mitigation:	N/A
Significance rating of impact prior to mitigation	N/A
Degree to which the impact can be mitigated:	N/A
Proposed Mitigation:	N/A
Cumulative Impact post mitigation;	N/A
Significance Rating of Impact After Mitigation	N/A

Nature of Impact: Construction Phase Socio - economic Impact

It is the reasoned opinion of the Ramp Economics team that the proposed amendments to the development plan for the Hartland Estate (as was originally provided development approval) will not result in any significant changes in the scale or nature of economic and social impacts experienced by the local economy as were determined by the Urban-Econ report of 2009.

It is further found that due to the increase in the number of units to be developed, and the expected increase in construction costs, that the net positive economic impacts may well be higher than originally calculated, even accounting for the removal of the social housing units from the development.

It is the view of this report that the removal of the 150 social housing units will not produce an adverse social / economic impact as alternative provisions have been made for the community in question.

Impact on employment	None to Marginal Positive
Impact on GVA (Gross Value Added)	None to Marginal Positive
Impact on household income	None to Marginal Positive

Impact on business output	None to Marginal Positive
Impact on the poor	None to Marginal Negative
Employment created by the development	None
Impact on skills demanded by the development	None

6.2.2. Operational Phase Impacts

Nature of Impact (neutral): Operational Phase Visual Impact:

Although the visual impact of the development as a whole is significant and the intensity of the visual impact medium after mitigation, these impacts and their significance have already been approved. The proposed amendments themselves, however, when compared to what is currently approved, are not significant in terms of the visual impact. This is largely because the footprint will remain relatively unchanged (except for some increases in the open spaces) and the height restrictions of certain units on the edges of the development, remain in force with the proposed amendment.

Extent and duration of impact:	Local and Permanent
Probability of occurrence:	Highly probable
Degree to which the impact can be reversed:	Barely Reversible
Degree to which the impact may cause irreplaceable loss of resources:	No additional loss of resource
Cumulative impact prior to mitigation:	No significant increase
Significance rating of impact prior to mitigation	No significant increase
Degree to which the impact can be mitigated:	Impacts have been mitigated
Proposed Mitigation:	Please refer to Section 8 of the Visual Report, these mitigation measures were already taken into account during the development of the proposed amendment layout and no new mitigation measures are required
Cumulative Impact post mitigation;	No significant increase
Significance Rating of Impact After Mitigation	No significant increase

Nature of Impact (neutral): Operational Phase Botanical Impact:

Due to the transformed state of the site, the impact posed by the adjustment of the open spaces on biodiversity is not regarded as significant. The adjustment will actually result in a 3572 m² gain in open space, but this will not result in a positive impact, nor be detrimental. In other words, there will not be a gain or loss of natural vegetation.

Extent and duration of impact:	Site Specific; Long Term
Probability of occurrence:	Definite
Degree to which the impact can be reversed:	Not Reversible
Degree to which the impact may cause irreplaceable loss of resources:	No additional loss of resource when compared to existing approval
Cumulative impact prior to mitigation:	NO significance
Significance rating of impact prior to mitigation	NO significance
Degree to which the impact can be mitigated:	Cannot be mitigated on site
Proposed Mitigation:	<ul style="list-style-type: none"> ▪ Efforts should rather be directed to the protection of the remaining dune thicket, especially during the construction phase. With regards to the biodiversity network, only a small loss of mapped terrestrial CBA is anticipated in the eastern corner of the site where the open space is trimmed back. This is a minor concern and will not impact on the functionality of the network. ▪ An effort must be made to keep the dune thicket area clear of invasive aliens, such as rooikrans and Opuntia species. The former adds to the fuel load and may increase the risk of wildfires in the long term. As stated earlier, it is a legal requirement for the landowner(s) to clear/control the invasive aliens on their land. In addition, a firebreak (to be determined by a fire safety specialist) is needed between the development and the dune thicket on eastern side. This will aid in safeguarding the development from wildfires.

	<ul style="list-style-type: none"> ▪ Do not use the proposed open spaces for construction purposes, such as parking, stockpiling, contractor's yard, etc. ▪ The contractor(s) must not be allowed into the dune thicket areas, which must be demarcated as a 'no-go' area. ▪ During the staking out of development footprints or open spaces take cognisance of the presence of milkwood trees. Try and avoid these as far as practically possible. A permit is required for the removal of milkwoods in terms of the National Forests Act. ▪ As a duty of care measure, indigenous bulb species and <i>Carpobrotus</i> species (sour fig) can be searched and rescued to be replanted in the open spaces or where there is a need for rehabilitation. <i>Carpobrotus</i> species are an excellent soil binder. ▪ Implement alien control as a long-term (operational phase) maintenance requirement. Currently, the focus should be to eradicate <i>Acacia cyclops</i> (rooikrans) and <i>Opuntia robusta</i> (blue-leaf cactus) from the site. In terms of the NEMBA (Act 10 of 2004) Alien and Invasive Species List (2016), category 1a and 1b invasive species require compulsory control as part of an invasive species control programme.
Cumulative Impact post mitigation;	No Significance
Significance Rating of Impact After Mitigation	No Significance (neutral)

Nature of Impact (neutral): Operational Phase Freshwater Impact:

No freshwater features were noted during the initial application for EA, additional no freshwater features were identified by the freshwater specialist during his site visit to compile the Freshwater Compliance Statement

Extent and duration of impact:	No Impact
Probability of occurrence:	
Degree to which the impact can be reversed:	
Degree to which the impact may cause irreplaceable loss of resources:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation	
Degree to which the impact can be mitigated:	
Proposed Mitigation:	
Cumulative Impact post mitigation;	
Significance Rating of Impact After Mitigation	No Impact

Nature of Impact (negative): Operational Phase Fauna and Terrestrial Biodiversity Impact:

The habitat for fauna is generally of poor quality and likely only supports generalist species. The site has limited use by fauna and species diversity is low. No animal SCC were found during the field survey or are expected to occur on the site.

In terms of regional biodiversity, it is evident both from the historical satellite imagery and the site visit that the site is in a modified state comprised of secondary vegetation. The site is therefore not considered a representative portion of the vegetation type or ecosystem and is not considered important for reaching biodiversity targets. The site is therefore considered to be of low importance from a terrestrial biodiversity perspective.

Extent and duration of impact:	Site Specific; Long term.
Probability of occurrence:	Definite.
Degree to which the impact can be reversed:	Not Reversible
Degree to which the impact may cause irreplaceable loss of resources:	No loss of resource
Cumulative impact prior to mitigation:	Very Low
Significance rating of impact prior to mitigation	Very Low

Degree to which the impact can be mitigated:	Can be partly mitigated.
Proposed Mitigation:	<ul style="list-style-type: none"> The operational Phase of the Development must be managed in accordance with the Operational Management Plan developed as part of the initial authorisation.
Cumulative Impact post mitigation;	Very Low to No significance
Significance Rating of Impact After Mitigation	Very Low to No significance

Nature of Impact (negative): Operational Phase Noise Impact:

The noise impacts associated with the proposed amendment will likely increase slightly due to the increase units, meaning additional cars and households creating noise, this is however only related to normal residential noise related levels.

Extent and duration of impact:	Local; Temporary
Probability of occurrence:	Definite
Degree to which the impact can be reversed:	Reversible
Degree to which the impact may cause irreplaceable loss of resources:	No loss of resource
Cumulative impact prior to mitigation:	Very Low
Significance rating of impact prior to mitigation	Very low
Degree to which the impact can be mitigated:	Very low degree of mitigation potential
Proposed Mitigation:	No mitigation proposed
Cumulative Impact post mitigation;	Very Low
Significance Rating of Impact After Mitigation	Very Low to No significance (-)

Nature of Impact: Operational Phase Traffic Impact:

Element Consulting Engineers compiled the TIA for the "DRAFT BASIC ASSESSMENT REPORT (BAR) FOR THE REALIGNMENT AND CONSTRUCTION OF THE APPROVED SECONDARY ACCESS TO HARTLAND – BY WIDENING THE EXISTING APPROVED ROAD ON NEW VINTAGE DEVELOPMENT AND EXTENDING IT TO THE HARTLAND BOUNDARY" and as such all traffic related aspects are being addressed and assessed through that EIA process.

Extent and duration of impact:	Separate BAR being undertaken for the new proposed access road on the western of the development
Probability of occurrence:	N/A
Degree to which the impact can be reversed:	N/A
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Cumulative impact prior to mitigation:	N/A
Significance rating of impact prior to mitigation	N/A
Degree to which the impact can be mitigated:	N/A
Proposed Mitigation:	N/A
Cumulative Impact post mitigation;	N/A
Significance Rating of Impact After Mitigation	N/A

Nature of Impact: Operational Phase Socio - economic Impact

It is the reasoned opinion of the Ramp Economics team that the proposed amendments to the development plan for the Hartland Estate (as was originally provided development approval) will not result in any significant changes in the scale or nature of economic and social impacts experienced by the local economy as were determined by the Urban-Econ report of 2009.

It is further found that due to the increase in the number of units to be developed, and the expected increase in construction costs, that the net positive economic impacts may well be higher than originally calculated, even accounting for the removal of the social housing units from the development.

It is the view of this report that the removal of the 150 social housing units will not produce an adverse social / economic impact as alternative provisions have been made for the community in question.

Impact on employment	None to Marginal Positive
Impact on GVA (Gross Value Added)	None to Marginal Positive
Impact on household income	None to Marginal Positive
Impact on business output	None to Marginal Positive
Impact on the poor	None to Marginal Negative
Employment created by the development	None
Impact on skills demanded by the development	None

6.2. SUMMARY OF KEY FINDINGS OF IMPACT ASSESSMENT

6.3.1. Summary of Construction Phase Impacts after Mitigation

The table below is a summary of the anticipated impact significance that could take place during the construction phase and operational phase as a result of the proposed amendments to the current layout. These results have been informed by the specialist impact compliance statements / assessment reports undertaken to assess the potential impacts associated with the proposed amendments when compared to what has already been authorised.

Table 7: Summary Table of Construction Phase and Operational Phase Impacts after mitigation

IMPACT	Construction Phase	Operational Phase
Visual	No Significant increase	No Significant increase
Botanical	No Significance	No Significance
Freshwater	No Impact	No Impact
Fauna and terrestrial biodiversity	Very Low to No significance (-)	Very Low to No significance (-)
Noise	Very Low to No significance (-)	Very Low to No significance (-)
Traffic	Being assessed in a Separate BAR process	Being assessed in a Separate BAR process
Socio-Economic (employment)	None to Marginal Positive (+)	None to Marginal Positive (+)
Socio-Economic (GVA)	None to Marginal Positive (+)	None to Marginal Positive (+)
Socio-Economic (household income)	None to Marginal Positive (+)	None to Marginal Positive (+)
Socio-Economic (business output)	None to Marginal Positive (+)	None to Marginal Positive (+)
Socio-Economic (poor)	None to Marginal Negative (-)	None to Marginal Negative (-)
Socio-Economic (Employment created by the development)	None	None
Socio-Economic (Impact on skills demanded by the development)	None	None

7. ADVANTAGES AND DISADVANTAGES OF THE PROPOSED CHANGE

The table below lists the advantages and disadvantages associated with the proposed layout amendment.

Table 8: Advantages and Disadvantages associated with the Proposed Layout Amendment

ADVANTAGES	DISADVANTAGES
<ul style="list-style-type: none"> • Socio-Economic impacts (construction related employment, development of housing, marginal increase in GVA, marginal increase on household income, marginal increase on business output) associated with the proposed development are highly significant positive impacts on the surrounding community. 	<ul style="list-style-type: none"> • None to marginal negative impact on the poor
<ul style="list-style-type: none"> • Marginal increase in open spaces 	<ul style="list-style-type: none"> • Very Low to No significance impact on fauna and terrestrial biodiversity
<ul style="list-style-type: none"> • Alignment with municipal density goals. 	<ul style="list-style-type: none"> • Slight noise increases (increased construction phase duration)
<ul style="list-style-type: none"> • More efficient use of developable land 	<ul style="list-style-type: none"> • Slight increase in operational noise impacts for increased number of units
<ul style="list-style-type: none"> • The proposed development is consistent with the various policy guidelines available with this area 	
<ul style="list-style-type: none"> • Creation of school and sports field 	

8. STAKEHOLDER ENGAGEMENT

8.1. PHASE 1: CONSULTATION WITH COMPETENT AUTHORITY

MS Teams meetings were held with the Western Cape Government: Department of Environmental Affairs and Development Planning (DEADP) on 25 May 2022 and 22 July 2022 during which the proposed amendment was discussed. As an outcome of the meeting, it was determined that the amendment process would be that of a Part 2 (Substantive Amendment) and that the specialists studies should comment on the proposed changes relative to what has already been authorised.

8.2. PHASE 2: IDENTIFICATION AND NOTIFICATION OF KEY STAKEHOLDERS AND I&APS

A list of Registered Interested and Affected Parties (I&APs) for the Proposed Amendment was compiled, adjacent landowners have been automatically registered. Key Authorities and other stakeholders were also identified that were placed on the **Register of Interested & Affected Parties**.

9.2.1. Notification of Key Authorities and Identified I&APs

The following authorities were informed of the proposed amendment:

- Department of Forestry, Fisheries and Environment: Biodiversity and conservation
- Garden Route District Municipality
- WCG: Department of Environmental Affairs and Development Planning
- WCG: Department of Transport and Public Works
- WCG: Department of Agriculture
- WCG: Department of Forestry
- Breede-Gouritz Catchment Management Agency
- Heritage Western Cape
- Cape Nature
- Mossel Bay Municipality
- South African Civil Aviation Authority
- WCG: Department of Education
- South African National Roads Agency (SANRAL)

Each of the above authorities were sent a hard copy and / or electronic copy of the document and was requested to submit comment within the prescribed timeframe. Copies of the notification letters will be included in **the Final IA Report**.

Registered and Potential I&APs were notified of the availability of the Draft Impact Assessment Report via their preferred method of contact.

8.3. PHASE 3: COMMENT ON THE POST-APPLICATION IMPACT REPORT

The post-application Impact Report was made available for a period of 30 days from **28 October 2022**. Comment on the document is due by **28 November 2022**. Comments received during this period will be included in the Final IA Report.

An electronic copy of the document was made available on the SES website at **<http://www.sescc.net/>**. Commenting authorities as well as I&APs were informed of the availability on the website in the notification letters.

All comments received will be responded to in the Comments and Responses Table.

9. CONCLUSION

Based on the findings of the impact assessment summarised above in **Section 6** as well as the advantages and disadvantages table included in **Section 7**, the majority of the impact significances have been rated as having no significance, with some very low to no significance and some marginal positive impacts in the socio-economic category. This was to be expected as the proposed amendment are contained within the existing and approved footprint.

9.1. RECOMMENDATIONS FOR REVISIONS AND INCLUSIONS INTO THE CONDITIONS OF THE AMENDED ENVIRONMENTAL AUTHORISATION

The applicant is the holder of an appeal EA dated 18 August 2009 (Ref: EG12/2/1-AM18-Farm Vaalevalley 219/B, Mossel Bay), the EA was amended twice to extend the validity period of the EA and for the change of the holder of the EA, the amendments were granted on 18 December 2012 and 12 January 2018.

The following revisions and amendments to the Conditions of the Amended Environmental Authorisation, Ref: E12/2/3/6-A6/115-0006/08 are proposed:

10.1.1. Project Description and Layout

The applicant proposes to amend the current layout HB/C/204/10 (the EA authorizes layout HB/C/204/9 subject to conditions and as such HB/C/204/10 was developed to address the conditions of the EA).

The proposed amendments will not increase the total footprint of the development, only re-align internal roads and the density of the houses. Additionally, as part of the initial authorisation the municipality negotiated with the developer to accommodate 150 social housing units, community hall and split zoned business. It is however understood that the residents of Power Town (the beneficiaries for the social housing) do not wish to relocate and as such the social housing aspect has become redundant. A new agreement with the Mossel Bay Municipality has been reached and is being implemented in line with the municipal densification policy.

A new southwestern road is proposed which has also resulted in the re-alignment of roads in the southwestern section of the site, this realignment forms part of a BAR compiled by another environmental company.

The Title of the of the appeal EA dated 18 August 2009 (Ref:EG12/2/1-AM18-Farm Vaalevalley 219/B, Mossel Bay) should be amended to exclude “(Hartenbos Landgoed Phase 2)”.

The name of the development has since changed to Hartland Lifestyle Estate.

The Description of the activity in the appeal EA dated 18 August 2009 (Ref:EG12/2/1-AM18-Farm Vaalevalley 219/B, Mossel Bay) reads as follows :

The proposed development consists of 1265 residential erven (Zoned Residential I), Five townhouse erven (zoned residential III that includes 150 social housing units, a multi-purpose community centre and a +- 300m2 split zoned Business II site located on Ptn 1302), an open space network and recreation area (zoned Open Space II) and a +- 3500m2 split zoned Business II site (located on Ptn 1306), a road network and associated infrastructure services on the footprint as indicated on the layout plan HB/C/204/9 by Nel & de Kock dated February 2009. The Remainder of the property will be managed as a nature reserve.

Access will be from Main Road 344 through the culvert under the N2 national Road, which will be upgraded to four lanes. A second access will be provided to the south along the existing dirt track to Hartenbos Landgoed Phase 1. This road will be upgraded to two lanes and will have a paved/tarred surface.

Water will be provided from the proposed new 15Ml reservoir that will supply both the proposed Hartenbos Landgoed and possible future developments in the area (see drawing M10607/002A dated 24 June 2008). A 5Ml reservoir and booster pump station is proposed for construction on erf 1313 of Plan No. HB/C/204/9 as part of this application (see drawing M1607/002B dated 24 June 2008).

Sewerage removal will be accommodated by means of a gravity sewer network in combination with sewage pump stations. From pump station PS01 on Erf 1308 next to the N2 national road, the sewage will be pumped to a point near Erf 1 from where it will gravitate and siphon to the Hartenbos Regional Sewage Treatment Works. (See drawing Number M1607/001 dated 24 June for the bulk sewer layout.

The Description of the activity should therefore be amended to read as follows:

The proposed development consists of a total of 2288 Residential units made up of single residential erven and general residential, a 0.88ha Business Zone, 3.24ha Community Zone (consisting of a school and sports field) and an Open Space of 235ha (excluding the internal Open Spaces), which will be managed as a nature reserve, a road network and associated infrastructure services will be accommodated on the footprint, as indicated on the layout plan HB/G/206-4 by Nel & de Kock dated March 2023.

Access will be from Main Road 344 through the culvert under the N2 national Road. This road will become the secondary road and the new primary access will be provided from the southwestern corner of the development.

Water will be provided from the proposed new 15Ml reservoir that will supply both the proposed Hartenbos Landgoed and possible future developments in the area. In addition to a 5Ml reservoir and booster pump station.

Sewerage removal will be accommodated by means of a gravity sewer network in combination with sewage pump stations. The sewage will be pumped to a point near the northwestern edge of the site from where it will gravitate and siphon to the Hartenbos Regional Sewage Treatment Works. See drawing Number 13061/C/BULK/S1 (Element Consulting Engineers).

Condition 8.3 of the EA which read:

The list of plant species that should be encouraged must include all the locally occurring indigenous plant species, as well as kweek grass and buffalo grass for lawns.

Should therefore be amended to read:

The list of plant species that should be encouraged must include all the locally occurring indigenous plant species, as well as kweek grass and buffalo grass for lawns, Kikuyu grass can be allowed.

Condition 25 of the EA which read:

25. An Environmental Liaison Committee ("ELC") must be established at the cost of the Applicant, prior to commencement of site preparation and construction.

25.1. The applicant must draw up the ELC's draft terms of reference ("TOR") or draft constitution and submit it to the Department. This must be approved by the Department prior to any land clearing or construction commencing.

25.2. The TOR must include but is not limited to the following:

25.2.1 the frequency of meetings and reports

25.2.2 chairmanship/membership

25.2.3 auditing requirements

25.2.4 duties and responsibilities during the construction phase

25.2.5 the termination of such ELC

25.2.6 the frequency of providing feedback to the local community.

Should therefore be amended to read:

25. The Holder must, for the period during which the environmental authorisation and EMPr remain valid ensure the compliance with the conditions of the environmental authorisation and the EMPr, is audited;

25.1. The frequency of auditing of compliance with the conditions of the environmental authorisation and of compliance with the EMPr, must adhere to the following programme:

25.1.1. During the period which the activities have been commenced with on site until the construction of the bulk internal service infrastructure (i.e. internal roads; water-, sewer-, electricity reticulation and bulk storm water) has been completed on site, the Holder must undertake annual environmental audit(s) and submit the Environmental Audit Report(s) to the Competent Authority.

A final Environmental Audit Report must be submitted to the Competent Authority within three (3) months of completion of the construction of bulk internal services and the post construction rehabilitation and monitoring requirements thereof.

25.1.2. During the period the development of the residential phases (i.e. construction of top structures) is undertaken, the Holder must ensure that environmental audit(s) are performed

regularly and submit these Environmental Audit Report(s) to the Competent Authority.

During this phase of the development, the frequency of the auditing of compliance with the conditions of the environmental authorisation and of compliance with the EMPr may not exceed intervals of three (3) years.

A final Environmental Audit Report must be submitted to the Competent Authority within three (3) months of completion of the final phase of the residential development and the post construction rehabilitation and monitoring requirements thereof.

25.2. The Environmental Audit Report(s), must –

25.2.1. be prepared and submitted to the Competent Authority, by an independent person with the relevant environmental auditing expertise. Such person may not be the ECO or EAP who conducted the EIA process;

25.2.2. provide verifiable findings, in a structured and systematic manner, on–

25.2.2.1. the level of compliance with the conditions of the environmental authorisation and the EMPr and whether this is sufficient or not; and

25.2.2.2. the ability of the measures contained in the EMPr to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity.

25.2.3. identify and assess any new impacts and risks as a result of undertaking the activity;

25.2.4. evaluate the effectiveness of the EMPr;

25.2.5. identify shortcomings in the EMPr;

25.2.6. identify the need for any changes to the avoidance, management and mitigation measures provided for in the EMPr;

25.2.7. indicate the date on which the construction work was commenced with and completed or in the case where the development is incomplete, the progress of the development and rehabilitation;

25.2.8. indicate the date on which the operational phase was commenced with and the progress of the rehabilitation;

25.2.9. include a photographic record of the site applicable to the audit; and

25.2.10. be informed by the ECO reports.

25.3. The Holder must, within 7 calendar days of the submission of the audit report to the Competent Authority, notify all potential and registered I&APs of the submission and make the report available to anyone on request and on a publicly accessible website (if applicable).

10. REFERENCES

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