

**PROPOSED CONSTRUCTION OF OUDRIFT FARM
DAM ON REMAINDER PORTION 3 AND REMAINDER
PORTION 13 OF FARM 143, KLIPHEUVEL IN KLEIN
BRAK RIVER, WESTERN CAPE.**

FINAL SCOPING REPORT

DEA&DP REF: 16/3/3/2/D6/25/0001/24

Submitted to:

Department of Environmental Affairs and Development Planning

Department of Environmental Affairs and
Development Planning
A 3rd Floor, Rentzburghof,
42 Courtenay Street, George
Email: Shireen.Pullen@westerncape.gov.za

Prepared for:

Klipheuwel Trust
P.O. Box 96
Little Brak River
6503

Prepared by:

Kapp Environmental Consultants (Pty) Ltd
P.O. Box 121
Mossel Bay
6500
Cell: 082 675 5233
E-Mail: renier@kappec.co.za



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DETAILS OF THIS REPORT

Status of this Report	Final Scoping Report
Date Submitted	2 July 2024
Report Title	PROPOSED DEVELOPMENT OF OUDRIFT FARM DAM ON REMAINDER PORTION 3 AND REMAINDER PORTION 13 OF FARM 143, KLIPHEUVEL IN KLEINBRAK, WESTERN CAPE.
Applicant	Klipheuwel Trust Trust no. 2641/2001 Mr. John Ernest Robertson Email: robfarm@mweb.co.za
Prepared by	Renier Kapp Kapp Environmental Consultants (Pty) Ltd 09 Wassung Street Mossel Bay 6506 Email: renier@kappec.co.za Cell: 082 675 5233
	

PROJECT TEAM

The Oudrift Farm Dam Development Project Team consists of several professionals. The project team consists of design and engineering team and an independent assessment team. The design team comprises of the engineering team represented by Mr Retief Kleynhans of Gorra Water in consultation with applicant. The design team is directly concerned with the motivation of the project, the design of the dam and ancillary infrastructure as well as assisting in responding to technical questions and concerns during the EIA process.

The Independent Assessment team operates independently from the design and engineering team and is responsible for the independent environmental impact assessment. This team will follow the prescriptions of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended (NEMA) and will evaluate the proposal. Although this report focuses on the possible impacts of the proposed development, it will include input from both groups and will be derived from information supplied during the scoping process and subsequent technical documents. The appointed professional team is outlined below:

PROJECT PROFESSIONAL TEAM

Roles and Responsibilities	Responsible Person	Company
Design Engineer	Mr Retief Kleynhans	Gorra Water Consulting Civil & Agricultural Engineers
Dam Safety and Water Use License Application	Mr Retief Kleynhans	Gorra Water Consulting Civil & Agricultural Engineers
Environmental Consultant	Renier Kapp	Kapp Environmental Consultants
Freshwater Impact Assessment and Ecological Reserve Determination	Toni Belcher	BlueScience (Pty) Ltd
Biodiversity Impact Assessment	Dr Mark Berry	MB Botanical Surveys
Archaeological Assessment	David Halkett	Archaeology Contracts Office ACO
Palaeontology Desktop Survey	Dr John E. Almond (Cantab.)	Natura Viva cc

Terrestrial Animal Species Compliance Statement	Prof. Jan A. Venter	Nelson Mandela University George Campus
Agricultural Compliance Statement	Dr. Rowena Harrison	Land Matters Consulting
Civil Aviation Compliance Statement	Tobie	Tappas Consulting

Responsible Parties for Compiling this Report

Compiled By	Renier Kapp	Kapp Environmental Consultants (KAPPEC)
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Background to KAPPEC

Kapp Environmental Consultants (KAPPEC) information.

1	Company Registration Number	2019/035915/07
2	Physical Address	9 Wassung Street, Mossel Bay, 6506
3	Postal Address	P.O. Box 121, Mossel Bay, 6500
4	VAT Registration Number	4920287242
5	Cell Phone Number	082 675 5233
6	E-mail	renier@kappec.co.za
7	BEE Status	Level 4 Contributor
8	Professional Registration	Member of IAIASA
	Tertiary Qualifications	B. Environmental Management, US (2007)
	Courses and Certificates	Completed training courses in terms of the National Environmental Management Act (NEMA), (Act No.107 of 1998), as amended and the National Environmental Management: Waste Act No. 59 of 2008.
	Experience as an EAP	Renier Kapp has seventeen years relevant experience as an Environmental Assessment Practitioner.

SECTION A: EXECUTIVE SUMMARY

INTRODUCTION

Kapp Environmental Consultants (KAPPEC), as independent environmental consultants and impact assessors, has been appointed by Klipheuwel Trust, to facilitate the Integrated Environmental Management (IEM) process for the proposed development of Oudrift Farm Dam on Remainder Portion 13 and Remainder Portion 3 of Farm 143 Klipheuwel in Klein Brak River.

The proposed Oudrift farm dam will encompass two cadastral entities Remainder Portion 13 and Remainder Portion 3 of Farm 143 Klipheuwel. Remainder Portion 3 of Farm 143 Klipheuwel comprises 28.15ha in extent and is registered to the applicant Klipheuwel Trust. Remainder Portion 13 of Farm 143 Klipheuwel comprises 21.17ha in extent and was previously registered to Walter Robertson. The dam wall will be constructed and a section of this property and consent has been obtained from the landowner. Both these properties are currently zoned Agriculture I.

Remainder Portion 3 of Farm 143 Klipheuwel is currently lying dormant and contains indigenous vegetation, fallow agricultural fields and 3 seasonal watercourses. The farm is fenced with game fencing and forms part of a larger camp which is utilized for grazing of several antelope species. The applicant undertook significant alien clearing on the farm to eradicate Blue Gum and Port Jackson infestations during 2011 and 2012. Ongoing alien management is undertaken which was evidenced during the site visit conducted in August 2020. Remainder Portion 13 of Farm 143 Klipheuwel is covered mostly in grass species and utilized as grazing for dairy cattle.

The site is located adjacent and directly north of the existing Klipheuwel Dam which covers an area of approximately 37Ha. The proposed dam is furthermore located approximately 300 metres (at nearest point) east of the Moordkuil River.

Surrounding land uses comprise mostly dairy farming, as dairy farms have transformed much of the surrounding landscape north of the N2, with only the hilly areas and steeper slopes remaining untransformed. Botlierskop Private Game Reserve is located to the immediate north and east of the site. Dairy farms are located further east and southeast of the site. Toward the west is the Moordkuil River and opposite the river are fallow agricultural land with varying levels of alien infestation. Southwest and opposite the Moordkuil River is one smallholding with several structures present. Further south and downstream are more irrigated grazing areas for dairy cattle as well as significant guava orchards.

The topography of the site can be described as a small, naturally vegetated valley forming a basin which slopes from the north, east and south towards the west. As per the 2012 South African Vegetation Map, the site is mapped as Groot Brak Dune Strandveld, while on the

2018 SA Vegetation Map it is mapped as Garden Route Granite Fynbos and a small portion as South Outeniqua Sandstone Fynbos. Both Groot Brak Dune Strandveld and Garden Route Granite Fynbos are listed as endangered. It also forms part of the local biodiversity network and has been mapped as a critical biodiversity area (CBA).

The site contains 3 seasonal watercourses which meanders west toward the Moordkuil River. The drainage lines have confluence at the location where the dam wall will be constructed and encompasses a small catchment. It is proposed that the minor runoff into the Oudrift Dam from this small upstream catchment will be determined and accordingly released with the proposed "Compensation Water Releases" back to the Moordkuil River to ensure that the impacts on the Ecological Water Requirements are negligible. One wetland is mapped toward the southeast of the dam extent.

The proposed Oudrift Dam site is located adjacent to the lower reaches of the Moordkuil River. According to the Cape Farm Mapper GIS mapping, this section of the Moordkuil River forms part of the Estuarine functional zone. A Freshwater Impact Assessment and the Ecological Reserve Determination be undertaken to inform the Ecological Reserve and the possible impacts the construction might have on achieving the Ecological Water Requirement for the Klein Brak River Estuary.

It is proposed that the dam area will comprise 72 960m² and the total development footprint will comprise 10.5Ha. The Full Supply Level (FSL) volume for the dam is 472 109m³. The dam wall will have a total height of 19 metres resulting in a maximum dam depth of 18 metres. The development of the dam will further include the construction of a dam wall with a crest of approximately 121m in length.

The applicant is in need of storage capacity as changing precipitation patterns not only dictate the need for an increase in assurance of yield but also as protection to the increased taking of water for irrigation in the upper reaches of the Moorkuil River (K10E and K10F quaternary catchments).

It is proposed that the dam will be filled by pumping from the Moordkuil River where the applicant has an existing lawful installation (34° 3'11.31"S 22° 8'6.68"E) in place on the eastern bank of the river. The pump installation was verified and lawful in terms of sec 35(4) of the NWA, Act 36 of 1998. In this regard, please refer to the relevant letters detailing the determination and issued by Breede Gouritz Catchment Management Association, herewith attached as Annexure C. The applicant furthermore has existing water rights in place in terms of section 21 (a) - taking water from a water resource. Thus, no new water uses are being applied for in terms of section 21 (a).

A water use license application will be submitted in terms of, section 21 (b) - storing water, section 21 (c) - impeding or diverting the flow of water in a watercourse, and section 21 (i) - altering the bed, banks, course or characteristics of a watercourse. The proposed dam has already been submitted to be registered and classified with the Department of Water and Sanitation Dam Safety Office. A probable risk category of "Category 2, Medium in Size and High Risk" will be awarded.

The applicant has an existing irrigation water distribution network along the stretches of the Moordkuil Sint Road and the Gonnakraal gravel road. Two pipeline route alternatives are available to connect the Oudrift Dam to the existing irrigation network. These are outlined in Section H-7 of the report.

ENVIRONMENTAL IMPACT ASSESSMENT REQUIREMENTS

The proposed development involves 'listed activities', as defined by the National Environmental Management Act, 1998 (Act No. 107 of 1998) as amended and the Environmental Impact Assessment (EIA) Regulations (2014, as amended). Listed activities are activities, which may have potentially detrimental impacts on the environment and therefore require environmental authorisation from the relevant authorising body. The proposed development occurs in the Western Cape and thus the Department of Environmental Affairs and Development Planning (DEA&DP) is the responsible regulatory and competent authority.

The proposed development triggers activities listed in the National Environmental Management Act (NEMA) Environmental Impact Assessment (EIA) Regulations (2014, as amended) including an activity listed in GN No. R984 (Activity 16). As such the proposed development requires prior environmental authorisation and a Full Scoping and EIA process must be undertaken. EIA Regulations were promulgated under Section 24 of NEMA and came into effect on 8 December 2014 and were subsequently amended in April 2017. Also, an independent Environmental Assessment Practitioner (EAP) must undertake the process on behalf of the applicant. Kapp Environmental Consultants (KAPPEC) has been appointed by the applicant as the EAP responsible for the EIA.

An Application for Environmental Authorization (EA) to be issued by the Department of Environmental Affairs and Development Planning (DEA&DP) is currently being undertaken in order to authorize the following "Listed Activities" in terms of the National Environmental Management Act, 1998 ("NEMA") (Act No. 107 of 1998).

GN No. R983: Listing Notice 1

- Activity 12, 17, 19, 19A and 27

GN No. R984 Listing Notice 2

- Activity No: 16

GN No. R985 Listing Notice 3

- Activity No: 12

Application is therefore made to the Department of Environmental Affairs and Development Planning (DEA&DP) under the 2014 NEMA EIA Regulations. The EAP and the applicant must ensure that the required Full Scoping and EIA process complies with the requirements of the 2014 NEMA EIA Regulations (as amended).

APPROACH TO THE PROJECT

Under the National Environmental Management Act (NEMA), 1998 (Act No. 107 of 1998) as amended and the Environmental Impact Assessment (EIA) Regulations (2014, as amended), the project will go through a Scoping and EIA Process. The listed activities pertinent to the project will be discussed in more detail in Section B-1.

This Scoping Report represents the initial identification of key issues or concerns as highlighted by the relevant authorities, interested and/or affected parties (I&AP) and professional judgement by the Environmental Assessment Practitioner. Scoping allows for the identification of the anticipated impacts, particularly those, which require specialist investigations. A full assessment of the impacts and proposed alternatives will form part of the Draft EIA Scoping Report.

The purpose of the Scoping Report includes *inter alia* to:

- Fulfil the requirements for Public Participation Process outlined in Chapter 6 of the EIA Regulations, 2014 (as amended), and take into account any applicable guidelines published in terms of Section 24J of the National Environmental Management Act, 1998 (Act No. 107 of 1998), the Departmental Circular EADP 0028/2014 on the “One Environmental Management System” and the EIA Regulations, 2014 (as amended);
- Provide a description and motivation of the proposal including the local context and the affected environment;
- Provide background to the EIA process and the legal frameworks within which the EIA is conducted;
- To compile the Site Sensitivity Verification in terms of the “Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), when applying for the Environmental Authorisation (“the Protocols”) (GN No. 320 dated 20 March 2020) came into effect on 9 May 2020.
- Provide a description of the alternatives being considered as part of the EIA;
- Describe and detail the potential environmental impacts identified which will require further investigation and specialist consideration as part of the EIA phase;
- Present a Plan of Study for EIA, which sets out the approach to the EIA in accordance with Appendix 2 of GN No. R. 982 of 4 December 2014;

PUBLIC PARTICIPATION

The ***initial*** required public participation processes were conducted from **Friday the 4th of December 2020** until **Monday the 1st of February 2021**. This process consisted of the following:

- Publication of a newspaper advertisement in the Mossel Bay Advertiser Newspaper on Friday the 4th of December 2020;
- Erection of 6 site notices around the site at strategic locations including:
 - Two notices were placed at the intersection of Moordkuil Sint Road and the Gonnakraal gravel road leading towards Botlierskop Private Game Reserve;
 - One notice was placed off the Gonnakraal gravel road at the nearest location to pipeline route alternative 1;
 - One notice was placed at the existing access to the site off Moordkuil Sint Road;
 - One notice was placed on the existing game fence on site near the proposed location of the dam wall;
 - One notice was placed at the intersection of Moordkuil Sint Road and the gravel road extension of Sandhoogte Road leading past Rooiheuvel Farm;
- Direct notification via email to identified I&AP's and surrounding landowners;
- Direct notification via email to the following entities:
 - Cape Nature
 - Eden District Municipality
 - Mossel Bay Municipality: Environmentalist
 - Mossel Bay Municipality:
 - Breede Gouritz Catchment Management Department
 - Department of Agriculture Forestry and Fisheries
 - Western Cape Department of Agriculture
 - DEA&DP: Biodiversity and Coastal Management
 - WESSA
 - Department of Transport and Public Works
 - Midbrak Ratepayers Organization
 - Local Ward Councillor – Ward 4

All I&APs have been notified via email containing a link to download electronic copies of the documentation via weTransfer and Dropbox as well as a link to the EAP's website.

Draft Scoping Report Review (30 Day Review)

The Draft Scoping Report was again circulated to all interested and affected parties from Tuesday the 28th of May until Monday the 1st of July 2024. All comments and registrations obtained have been captured in the final comments and response report.

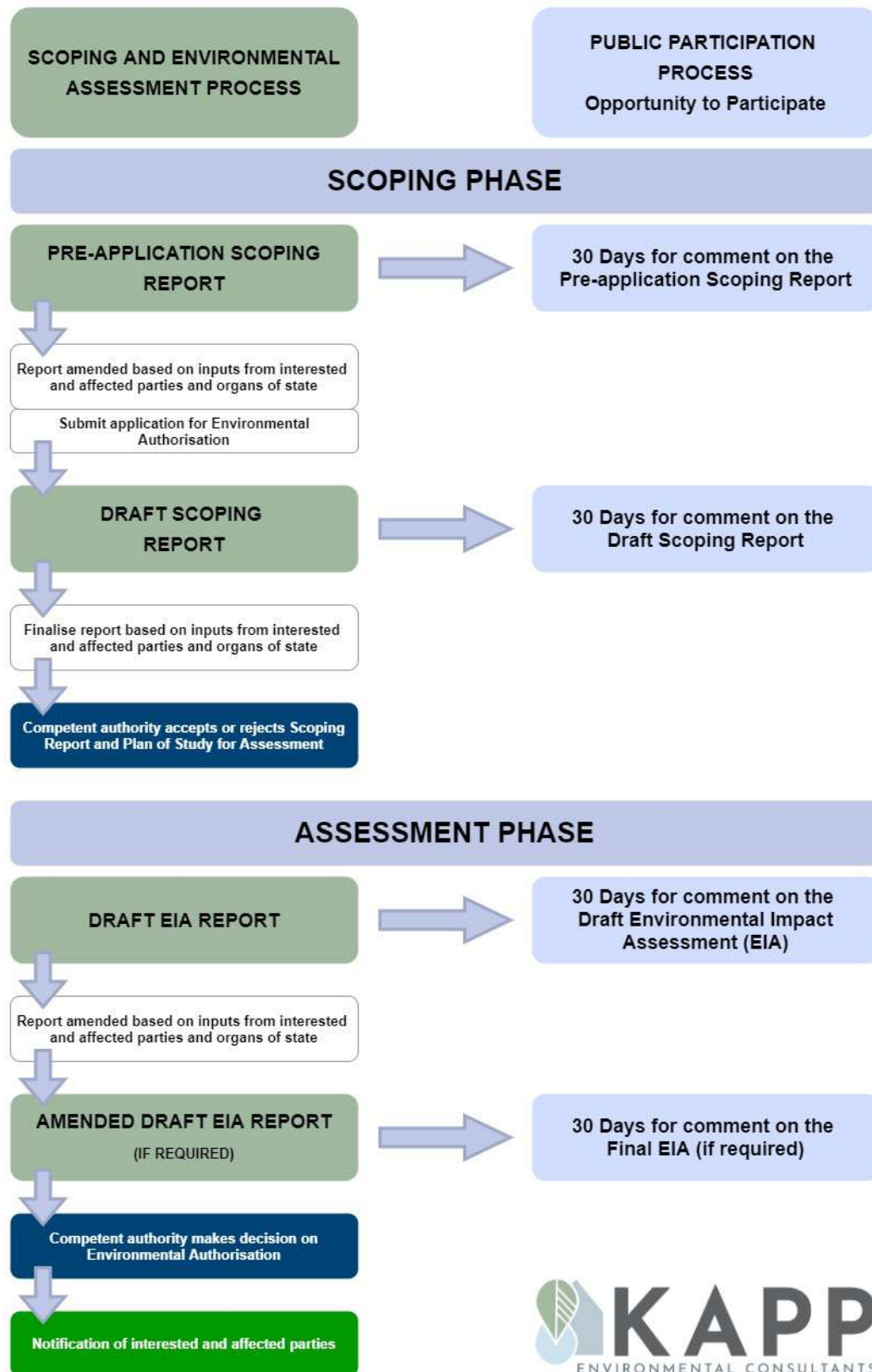


Figure 1: Public Participation Process

IDENTIFICATION OF KEY ENVIRONMENTAL ISSUES

A baseline description of the environment was gathered through historical information and available reports, visual inspections of the site and its surroundings, desktop studies as well as preliminary specialist recommendations. The “Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), when applying for the Environmental Authorisation (“the Protocols”) (GN No. 320 dated 20 March 2020) came into effect on 9 May 2020.

A Site Verification Report was compiled in accordance with Section 1, Site Sensitivity Verification and Minimum Report Content Requirements. Prior to the undertaking of an environmental assessment, the current use of the site and potential environmental sensitivities of the site as identified by the national web-based screening tool was confirmed by undertaking a site sensitivity verification. The site sensitivity verification must be undertaken through:

- a) A desktop analysis, using satellite imagery,
- b) A preliminary on-site inspection, and
- c) Any other available relevant information.

The outcome of the site sensitivity verification must recorded in a report that:

- a) Confirms or disputes the current use of the land and environmental sensitivities as identified in the Screening Tool Report;
- b) Contains a motivation and evidence of either the verified or different use of the land and environmental sensitivities; and
- c) Is submitted together with the relevant report prepared in accordance with the requirement of the Environmental Impact Assessment Regulations.

This information was used to assess the potential areas of study, because of the proposed development.

The possible key issues identified include:

1. Terrestrial Vegetation Impacts;
2. Freshwater Resources Impacts;
3. Impacts to the Ecological Reserve;
4. Impact on Archaeological resources;
5. Impact on Palaeontological resources;
6. Impacts on Faunal Species;
7. Potential Visual Impacts;
8. Impacts on Agricultural resources;

As a result of the above-mentioned anticipated impacts, it is recommended that the specialist studies as listed below, be undertaken during the EIA phase of the process or alternatively that the existing reports be updated. The specialist studies assist with the development of an understanding of the system processes and the potential positive and negative impacts of the proposed development on both the social and biophysical environments:

- 1) Botanical Impact Assessment – *MB Botanical Surveys* Dr Mark Berry
- 2) Aquatic Biodiversity Impact Assessment – *BlueScience* Toni Belcher
- 3) Heritage Impact Assessment – *ACO* David Halkett
- 4) Agricultural Compliance Statement – *Land Matters Consulting* Dr. Rowena Harrison
- 5) Paleontological Impact Assessment - *Natura Viva cc* Dr John E. Almond (Cantab.)
- 6) Geotechnical Assessment – To be confirmed
- 7) Terrestrial Animal Species Compliance Statement – *Nelson Mandela University George Campus* Prof. Jan A. Venter
- 8) Civil Aviation Compliance Statement – *Tappas Consulting* Tobie du Toit

CONCLUSION

The EIA report will assess the impacts of each of the individual activities as well as ascertain the cumulative impacts of the development in its entirety. The EIA report will outline the necessary mitigation measures and delineate sensitive areas and facets worthy of conservation. Lastly, potential alternatives (including the No-Development / existing rights Alternative) and mitigation measures will be devised to minimise negative impacts and optimise positive impacts.

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LIST OF ACRONYMS

C.A.P.E.		Cape Action for People and the Environment
CBA		Critical Biodiversity Area
DEA&DP	-	Department of Environmental Affairs and Development Planning
DEA	-	Department of Environmental Affairs
DWAFF		Department of Water Affairs and Forestry
DWS		Department of Water and Sanitation
EAP		Environmental Assessment Practitioner
EIA	-	Environmental Impact Assessment
HIA	-	Heritage Impact Assessment
I&AP's	-	Interested and Affected Parties
IDP		Integrated Development Plan
IEM	-	Integrated Environmental Management
NEMA	-	National Environmental Management Act, 1998 (Act No. 107 of 1998)
PPP		Public Participation Process
SAHRA	-	South African Heritage Resources Agency
SANBI	-	South African National Biodiversity Institute
SDF	-	Spatial Development Framework
SEA	-	Strategic Environmental Assessment
KAPPEC		Kapp Environmental Consultants

GLOSSARY OF TERMS

Applicant: Any person who applies for an authorisation to undertake an activity or to cause such activity to be undertaken as contemplated in Section 22(1) of the Environment Conservation Act, 1989 (Act No. 73 of 1989).

Arable potential: Land with soil, slope and climate components where the production of cultivated crops is economical and practical.

Critically endangered: A taxon is Critically Endangered when it is facing an extremely high risk of extinction in the wild, in the immediate future.

Ecology: The study of the inter relationships between organisms and their environments.

Environment: All physical, chemical and biological factors and conditions that influence an object and/or organism.

Environmental Impact Assessment: Assessment of the effects of a development on the environment.

Environmental Management Plan: A legally binding working document, which stipulates environmental and socio-economic mitigation measures that must be implemented by several responsible parties throughout the duration of the proposed project.

Eutrophication: Aquatic systems are severely perturbed by unnaturally high nutrient loads of anthropogenic origin that biological communities become unbalanced.

Local relief: The difference between the highest and lowest points in a landscape. For the purposes of this study, the local relief is based on a scale of 1:50 000.

Soil compaction: Mechanically increasing the density of the soil, vehicle passage or any other type of loading. Wet soils compact easier than moist or dry soils.

Study area: Refers to the entire study area encompassing the total area of the eight (8) contiguous farms as indicated on the study area map.

Succession: The natural restoration process of an ecosystem.

Vulnerable: A taxon is 'Vulnerable' when it is not 'Critically Endangered' or 'Endangered' but is facing a high risk of extinction in the wild in the medium-term future.

SECTION B: INTRODUCTION

Kapp Environmental Consultants (KAPPEC), as independent environmental consultants and impact assessors, have been appointed by Klipheuwel Trust to facilitate the Integrated Environmental Management (IEM) procedure for the establishment of the proposed Oudrift Farm Dam on Remainder Portion 13 and Remainder Portion 3 of Farm Klipheuwel 143, Klein Brak River. As per the requirements of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the NEMA EIA Regulations (2014, as amended), the Scoping phase needs to meet the following objectives:

Table 1: Actions and activities as per the Scoping Report

Activity	Objectives	Reference
Submission of Notice of Intent Form	To initiate the pre-application phase of the EIA process and to have a reference number appointed to the project. To provide the relevant authority (DEA&DP) with information concerning the applicant and the scope of the project. To confirm the procedural requirements of the relevant authority (DEA&DP).	Completed prior to Pre-Application Scoping.
Submission of Notice of Intent to Develop	To provide the relevant authority (HWC) with baseline information concerning the application and the scope of the project. To confirm the procedural requirements of the relevant authority (HWC).	Completed prior to Pre-Application Scoping. The additional requirements from the HWC have been taken into consideration as part of this Report.
Baseline Information Review	To review applicable legislation and other available information on the proposed project and the potentially affected environment.	Section B and Section C.
Alternatives	To describe the alternatives that are being considered in the EIA process.	Section E.
Public Consultation	To identify IAPs, including individuals, interest groups and authorities who may be interested in or affected by the proposed project. To consult with IAPs to identify their issues and concerns regarding the proposed project.	Section D.

Scoping Report	To record the issues and concerns raised by IAPs. To present the Plan of Study for the EIA phase including Terms of Reference for specialist studies. To present the findings of the Scoping phase for I&AP scrutiny.	Section H and Section I.
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Figure 2: Locality Map



Figure 3: Google (Aerial Photo) Image of the site and its surroundings.



Figure 4: Aerial Image of the site.

B-1 LEGAL REQUIREMENTS

The aim of this component of the report is to provide a brief overview of the pertinent policies as well as legal and administrative requirements applicable to the proposed development.

B-1.1 Constitution of South Africa Act, 1996 (Act No.108 of 1996)

The Constitution of South Africa is the supreme law of the republic and supersedes and conflicts in terms thereof. Environmental Rights are enshrined in terms of Section 24 which provides the basis for all environmental policy and legislation, and states that

“Everyone has the right –

- a) to an environment that is not harmful to their health or well-being; and
- b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that
 - i. prevent pollution and ecological degradation;
 - ii. promote conservation; and
 - iii. secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.”

B-1.2 NEMA, 1998 (Act No. 107 of 1998), as amended and the EIA Regulations

The National Environmental Management Act (NEMA, Act 107 of 1998) is the overarching framework for environmental law within the republic. The Act includes regulations to identified activities which have been identified as potentially detrimental to the environment and which require authorisation from the relevant authorities based on the findings of an environmental assessment process. These provisions are intended to give effect to the objectives of integrated management and to integrate and facilitate environmental impact assessments in line with sustainable development objectives.

The NEMA (Act No., 107 of 1998), as amended and the Environmental Impact Assessment Regulations (2014) as amended, govern the process of applying for environmental authorisation. EIA Regulations were promulgated under Section 24 of NEMA and came into effect on 8 December 2014 and were subsequently amended in April 2017. The proposed development occurs in the Western Cape and thus the Department of Environmental Affairs and Development Planning (DEA&DP) is the responsible regulatory and competent authority.

The proposed development triggers activities listed in the NEMA EIA regulations (2014), as amended, including an activity listed in GN No. R984 (Activity 16). As such the proposed development requires prior environmental authorisation and a Full Scoping and EIA process

Compiled by Kapp Environmental Consultants

must be undertaken. Also, an independent Environmental Assessment Practitioner (EAP) must undertake the process on behalf of the applicant. Kapp Environmental Consultants (KAPPEC) has been appointed by the applicant as the EAP responsible for the EIA.

An Application for Environmental Authorization (EA) to be issued by the Department of Environmental Affairs and Development Planning (DEA&DP) is currently being undertaken in order to authorize the following “Listed Activities” in terms of the National Environmental Management Act, 1998 (“NEMA”) (Act No. 107 of 1998).

It should be noted that at this stage of the development proposal and the current information at hand, that the relevant listed activities might require updating throughout the Scoping and EIA process. This is due to the possibility that additional information becomes available and possibly amendments will be required to the existing scope of works which might see additional activities applied for. The activities to be triggered will be more specifically detailed in the EIA phase of the application.

It has been determined that this section of the Moordkuil River in vicinity of the Oudrift Dam site forms part of the eastern edge of the Klein Brak River Estuary, as a result additional Listed Activities in terms of Listing Notice 1 (Activity 17 and 19A) may require authorization. The preferred pipeline route activity entails the construction of a water distribution pipeline through the Moordkuil River. This will depend upon final design alternatives and their proximity to the river/estuary.

Table 2: Possible Listed activities according to GN R. R983: (Listing Notice 1)

Act	Description	Relevance to this development	Possibility of Trigger
12	The development of – (i) dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs- (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; Excluding (aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour; (bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies; (cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies; (dd) where such development occurs within an urban area; or (ee) where such development occurs within existing roads, road reserves or railway line reserves; or (ff) the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared.	There are three non-perennial watercourses on site leading to the proposed dam. The dam will be located within 32 of metres of these watercourses and the total development footprint will comprise 10.5Ha. Furthermore, the development of the dam will include the crossing of the Moordkuil River via 225mm dia pipelines.	Trigger
17	Development - i. in the sea; ii. in an estuary; iii. within the littoral active zone; iv. in front of a development setback; or v. if no development setback exists, within a distance of 100 metres inland of the high-water mark of the sea or an	This section of the Moordkuil River in vicinity of the Oudrift Dam site forms part of the Klein Brak River Estuary. As a result, this activity may require authorization. The	Possible Trigger.

Act	Description	Relevance to this development	Possibility of Trigger
	estuary, whichever is the greater; in respect of— (a) fixed or floating jetties and slipways; (b) tidal pools; (c) embankments; (d) rock revetments or stabilising structures including stabilising walls; or (e) infrastructure or structures with a development footprint of 50 square metres or more — but excluding— (aa) the development of infrastructure and structures within existing ports or harbours that will not increase the development footprint of the port or harbour; (bb) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies; (cc) the development of temporary infrastructure or structures where such structures will be removed within 6 weeks of the commencement of development and where coral or indigenous vegetation will not be cleared; or (dd) where such development occurs within an urban area.	preferred pipeline route activity entails the construction of a water distribution pipeline through the Moordkuil River. This will depend upon final design alternatives and their proximity to the river/estuary.	
19	The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from (i) a watercourse; (ii) the seashore; or (iii) the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater; but excluding where such infilling, depositing, dredging, excavation, removal or moving- (a) will occur behind a development setback; (b) is for maintenance purposes undertaken in accordance with a maintenance management plan; (c) falls within the ambit of activity 21 in this Notice, in which case that activity applies; or (d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or (e) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of	There are three non-perennial watercourses on site leading to the proposed dam. The dam will be located within 32 of metres of these watercourses and the total development footprint will comprise 10.5Ha. Furthermore, the development of the dam will include the crossing of the Moordkuil River via 225mm dia pipelines.	Trigger

Act	Description	Relevance to this development	Possibility of Trigger
	2014 applies.		
19A	The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from - (i) the seashore; (ii) the littoral active zone, an estuary or a distance of 100 metres inland of the highwater mark of the sea or an estuary, whichever distance is the greater; or (iii) the sea; — but excluding where such infilling, depositing , dredging, excavation, removal or moving— (f) will occur behind a development setback; (g) is for maintenance purposes undertaken in accordance with a maintenance management plan; (h) falls within the ambit of activity 21 in this Notice, in which case that activity applies; (i) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.	This section of the Moordkuil River in vicinity of the Oudrift Dam site forms part of the Klein Brak River Estuary. As a result, this activity may require authorization. The preferred pipeline route activity entails the construction of a water distribution pipeline through the Moordkuil River. This will depend upon final design alternatives and their proximity to the river/estuary.	Potential Trigger
27	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.	The site contains a mixture of South Outeniqua Sandstone Fynbos and Mossel Bay Shale Renosterveld. Approximately 6ha of indigenous vegetation would be lost due to the development of the dam.	Trigger

Table 3: Possible Listed activities according to GN R. No 984 (Listing Notice 2)

Act	Description	Relevance to this development	Possibility of Trigger
16	The development of a dam where the highest part of the dam wall, as measured from the outside toe of the wall to the highest part of the wall, is 5 metres or higher or where the highwater mark of the dam covers an area of 10 hectares or more.	The height of the dam wall as measured from the outside toe to the highest part of the wall is 19m.	Trigger

Table 4: Possible Listed activities according to GN R. No 985 (Listing Notice 3)

Act	Description	Relevance to this development	Possibility of Trigger
12	The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. (i) Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004; (ii) Within critical biodiversity areas identified in bioregional plans;	The site contains a mixture of South Outeniqua Sandstone Fynbos and Mossel Bay Shale Renosterveld. Approximately 6ha of indigenous vegetation would be lost due to the development of the dam.	

B-1.2 Other Legal Requirements

The following list of legislation applicable to biodiversity may or may not be applicable to the proposed development. Its relevance may become clear when the biodiversity is assessed and the impacts are determined during the EIA phase.

National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)

The purpose of the Biodiversity Act is to provide for the management and conservation of South Africa's biodiversity within the framework of the National Environmental Management Act (1998) as amended, and the protection of species and ecosystems that warrant national protection. As part of its implementation strategy, the National Spatial Biodiversity Assessment was developed.

The Objectives of the Act include:

- a. Within the framework of the National Environmental Management Act, to provide for
 - i. The management and conservation of biological diversity within the Republic and of the components of such biological diversity;
 - ii. The use of indigenous biological resources in a sustainable manner; and
 - iii. The fair and equitable sharing among stakeholders of benefits arising from bioprospecting involving indigenous biological resources;
- b. To give effect to the ratified international agreements relating to biodiversity which are binding on the Republic;
- c. To provide for co-operative governance in biodiversity management and conservation; and
- d. To provide for a South African National Biodiversity Institute to assist in achieving the objectives of this Act.

Furthermore, in terms of Chapter 4 and Part 1 of the Act, a list of threatened or protected ecosystems is provided at the hand of four categories:

- a. Critically Endangered (CR)
critically endangered ecosystems, being ecosystems that have undergone severe degradation of ecological structure, function or composition as a result of human intervention and are subject to an extremely high risk of irreversible transformation;
- b. Endangered (EN)
endangered ecosystems, being ecosystems that have undergone degradation of ecological structure, function or composition as a result of human intervention, although they are not critically endangered ecosystems;

c. Vulnerable (VU)

vulnerable ecosystems, being ecosystems that have a high risk of undergoing significant degradation of ecological structure, function or composition as a result of human intervention, although they are not critically endangered ecosystems or endangered ecosystems; and

d. Least Threatened (LT)

protected ecosystems, being ecosystems that are of high conservation value or of high national or provincial importance, although they are not listed in terms of paragraphs (a), (b) or (c).

The purpose of listing threatened ecosystems is primarily to reduce the rate of ecosystem and species extinction. This includes preventing further degradation and loss of structure, function and composition of threatened ecosystems. The purpose of listing protected ecosystems is primarily to preserve sites of exceptionally high conservation value.

The national list of threatened terrestrial ecosystems has been gazetted (GN No. R1002, 9 December 2011), together with supporting information on the listing process. This includes the purpose and rationale for listing ecosystems, the criteria used to identify listed ecosystems, the implications of listing ecosystems, and summary statistics and national maps of listed ecosystems (National Environmental Management: Biodiversity Act: National list of ecosystems that are threatened and in need of protection, (GN No R1002, 9 December 2011).

The Act furthermore states that the loss of biodiversity through habitat loss, degradation or fragmentation must be avoided, minimised or remedied. The loss of biodiversity includes inter alia the loss of threatened or protected species. Biodiversity offsets are a means of compensating for the loss of biodiversity, after the mitigation hierarchy has been implemented, yet the predicted residual impacts still remain medium to high.

Relevance to the proposal:

As per the 2012 South African Vegetation Map, the site is mapped as Groot Brak Dune Strandveld, while on the 2018 SA Vegetation Map it is mapped as Garden Route Granite Fynbos and a small portion as South Outeniqua Sandstone Fynbos. Both Groot Brak Dune Strandveld and Garden Route Granite Fynbos are listed as **endangered** in terms of the National list of ecosystems that are threatened and in need of protection (GN No. R1002, 9 December 2011). The site also forms part of the local biodiversity network and has been mapped as a critical biodiversity area (CBA).

National Environmental Management: Integrated Coastal Management Act (No. 24 of 2008, as amended by Act 36 of 2014) (ICM Act)

In general, integrated coastal management (ICM) promotes the use of defensible scientific information in conjunction with the principles of cooperative governance in order to achieve sustainable coastal development.

In accordance with Section 34 of the Integrated Coastal Management Act (Act 24 of 2008) as amended in 2014 (ICM Act) as well as the National Estuarine Management Protocol (the Protocol), SSI Engineers and Environmental Consultants (Pty) Ltd were commissioned by CapeNature, with funding from the Eden District Municipality, to develop an estuarine management plan (EMP) for the Klein Brak Estuary. The EMP comprises two essential documents. The first document, the situation assessment report prepared by SSI (2010), provides an account of the current state of the system and related issues, and served as the platform for the draft of the second document, this EMP.

The co-ordination of the implementation of the EMP vests with the responsible management authority (RMA), in this instance the Mossel Bay Local Municipality, as per the Protocol. The institutional arrangements outlined above must however be considered together with disclaimer below:

“Readers of this EMP must note that delegation of local authorities as the Responsible Management Authority (RMA) was done as per the National Estuarine Management Protocol (NEMP). Circular DEA&DP 011/2017 confirms that the NEMP is flawed and that the Department of Environmental Affairs will be considering amendments to the NEMP. The aforementioned Circular also confirms that Department of Environmental Affairs and Development Planning (DEA&DP) intends to undertake a rapid appraisal of all coastal Municipalities in the Western Cape. The purpose of this appraisal is to determine the appetite and capacity of the Municipalities to take up all, or elements of, the functions of RMAs as described in the NEMP. The interim institutional arrangements outlined in Circular DEA&DP 011/2017 states that until the review of NEMP and the appraisal of coastal municipality’s has been completed, DEA&DP, together with CapeNature, will continue to take the lead in ensuring coordinated planning, implementation and management of estuaries in the Western Cape. Mossel Bay Municipality’s acceptance of the delegation as Responsible Management Authority will this be subject to the completion of the DEA’s review of NEMP and if DEA&DP’s appraisal of coastal municipalities confirms that Mossel Bay Municipality is suitably capacitated to perform the RMA function.”

As per the prescriptions of the South African National Estuarine Management Protocol (the Protocol) it is required that Estuary Management Plans (EMPs) be prepared for estuaries in order to create informed platforms for efficient and coordinated estuarine management.

Relevance to the proposal:

SSI Engineers and Environmental Consultants (Pty) Ltd were commissioned by CapeNature, with funding from the Eden District Municipality, to develop an Estuary Management Plan for the Klein Brak River estuary. The EMP comprises two essential documents. The first document, the situation assessment report prepared by SSI (2010), provides an account of the current state of the system and related issues, and serves as the platform for the second document, *Royal HaskoningDHV (2017) EMP*.

This revision of the Draft Klein Brak River EMP, including the Situation Assessment and the Management Plan itself, was conducted in response to a review conducted by the National Department of Environmental Affairs: Oceans and Coasts (DEA:O&C) in 2014, to ensure compliance with the minimum requirements for estuary management plans as per the Protocol. (*Klein Brak River Estuarine Management Plan, 2017*)

Two major tributaries, the Brandwag River and the Moordkuil River join approximately 3 km from the coast to form a flood-tidal delta. Land use within the catchment is comprised of dry land crop production, irrigated crop farming, forestry and livestock grazing. Klein-Brakrivier is the only relatively large town with other urban areas in the catchment being Brandwag and Ruitersbos (Forestry Station). Water is abstracted from the lower reaches of the Moordkuil River and transferred to the Klipheuwel Dam to supply Mossel Bay. The Klein Brak River estuary was classified as a temporarily open/closed estuary with the mouth closed for about 10% of the time but has remained permanently open since 1991. (*Klein Brak River Estuarine Management Plan, 2017*)

Consequently, Harrison et al. (2000) classified the Klein Brak River estuary as a warm temperate, permanently open, medium-large, Type F barred system (supratidal barrier). An analysis of the tidal variation in the Klein Brak from May 2009 to May 2010 year indicated that even under the current extreme drought conditions the tidal variation is approximately 1.0 m, which is comparable with most permanently open South African estuaries. (*Klein Brak River Estuarine Management Plan, 2017*).

Flow related impacts specifically relate to changes caused by a modification in river (volume) inflow (i.e. either base flows, seasonal distribution of flows or flood characteristics) brought about through construction of dams in the catchment. In addition to flow modification, non-flow related factors also contributed significantly to ecological modification in the Klein Brak Estuary, specifically related change and degradation of estuarine habitat through development in the estuarine functional zone, weir construction in the Brandwag and Moordkuil arms, nutrient inputs from agricultural activities, fishing pressures and human disturbance of birds (*DWS, 2014*).

As an estuary of average importance, the Klein Brak should at least be managed in a Category C (maintain PES with Category C as minimum). In addition, it is highly unlikely that the flow reduction, nutrient loading from agriculture and habitat loss in the system can be

alleviated in its entirety. It is therefore recommended that the Best Attainable State is a moderately modified system (i.e. Category C).

To account for some of the loss in base flows, Scenario 1, i.e. **Present inflow, including the Ecological Water Requirement (EWR) for an Ecological Category C river just upstream of the estuary (MAR of 38.97 million m³)**, was selected as the recommended ecological water requirement. (*Klein Brak River Estuarine Management Plan, 2017*)

It is thus important that the Freshwater Impact Assessment and the Ecological Reserve Determination be undertaken by BlueScience in order to inform the Ecological Reserve and the possible impacts the construction might have on achieving the Ecological Water Requirement for the Klein Brak River Estuary. The proposed Oudrift Dam site is located in lower reaches of the Moordkuil River. The proposed Oudrift Dam site is located adjacent to the lower reaches of the Moordkuil River. According to the Cape Farm Mapper GIS mapping, this section of the Moordkuil River forms part of the Estuarine functional zone. It should also be taken into consideration that no application will be lodged in terms of Section 21(a) – for the taking of water from the Moordkuil River and thus the impacts to the Estuary are anticipated to be negligible.

Please note: Should the section of the Moordkuil River in vicinity of the Oudrift Dam site form part of the Klein Brak River Estuary, additional Listed Activities in terms of Listing Notice 1 may require authorization. This will depend upon final design alternatives and their proximity to the river/estuary.

National Water Act, 1998 (Act No. 36 of 1998), as amended

The National Water Act (NWA) guides the management of water in South Africa as a common resource. The Act aims to regulate the use of water and activities, which may impact on water resources through the categorisation of 'listed water uses' encompassing water extraction, flow attenuation within catchments as well as the potential contamination of water resources, where the Department of Water and Sanitation (DWS) is the administering body in this regard. The Act is to ensure that the nation's water resources are protected, used, developed, conserved, managed and controlled in ways which take into account amongst other factors:

- (a) Meeting the basic needs of present and future generations
- (b) Promoting equitable access to water
- (c) Facilitating social and economic development
- (f) Providing for the growing demand of water use;
- (g) Protecting aquatic and associated ecosystems and their biological diversity
- (h) Reducing and preventing the pollution and degradation of water resources
- (j) Promoting dam safety; and
- (k) Managing floods and droughts.

Relevance to the proposal:

Gorra Water has been appointed as the independent water use facilitator and Approved Professional Person (APP) for Dam Safety to submit the compulsory Water Use License Application (WULA) in terms of the National Water Act, Act 36 of 1998 (as amended) and to provide inputs for the legally required authorization processes in terms of the NEMA.

In terms of Section 40 (onwards) of the NWA, an application will need to be submitted for the for the following water uses in terms of Section 21 of the Act:

- The Storing of Water – Section 21(b)
- Impeding and Diverting of a Water Course – Section 21 (c)
- Altering of the bed or banks of a Water Course – Section 21 (i)

The competent authority for administering water uses in this area is the Breede-Gouritz Catchment Management Agency (BGCMA).

The site is located within the K10F quaternary catchment and thus any construction of storage in terms of Section 39 for General Authorisations is only allowed up to 2 000m³. Any increase in storage may therefore only be executed subject to authorisation from the National Department of Water and Sanitation through Section 40 onwards.

Section 27 of the National Water Act obligations:

- a. The Reserve of Section 18 has not been determined, neither imposed and will be considered as part of the WULA. A Freshwater Impact Assessment and inputs into the Ecological Reserve Determination will furthermore be undertaken by BlueScience in order to inform the WULA process.
- b. This is also true for Section 27(b) of the NWA where sufficient proof must be given that the “..historic, gender and racial..” issues are addressed and rectified in terms of the National Water Act.

Section 35 Verification of ELU's have readily been executed for this quaternary catchment K10F and completed. The final Section 35(4) determination for the applicant Klipheuwel Trust is available.

Section 126 onwards, Servitudes are in place and no further actions are planned or required.

Section 41(5) The compulsory coordination between the WULA and NEMA process is being complied with as required in terms of the NEMA.

National Heritage Resources Act, 1999 (Act No. 25 of 1999)

The National Heritage Resources Act legislates the necessity for cultural and heritage impact assessment in areas earmarked for development, which exceed 0.5 ha. The Act makes provision for the potential destruction to existing sites, pending the archaeologist's recommendations through permitting procedures. Permits are administered by the South African Heritage Resources Agency (SAHRA).

An approval/authorization from Heritage Western Cape (HWC) will be required for the proposed development as Section 38 of the NHRA is triggered by the proposed development.

Table 5: Triggers in terms of the NHRA

CATEGORY OF DEVELOPMENT (Section 38 (1))	Triggered
1. Construction of a road, wall, power line, <u>pipeline</u> , canal or other similar form of linear development or barrier over 300m in length	Yes
2. Construction of a bridge or similar structure exceeding 50 m in length	No
3. Any development or activity that will change the character of a site–	
a) exceeding 5 000 m ² in extent	Yes
b) involving three or more existing erven or subdivisions thereof	No
c) involving three or more erven or divisions thereof which have been consolidated within the past five years	No
4. Rezoning of a site exceeding 10 000 m ²	No

Relevance to the proposal:

An NID was submitted to the Heritage Western Cape dated **29 July 2020** and was discussed at the Heritage Officers Meeting on the 3rd of August 2020. A response to the NID was issued dated **7 August 2020** with Case Number 20031905SB0728E. The Heritage Western Cape resolved that;

“since there is reason to believe that the proposed dam on portion 13 and portion 3 of Farm 143 Farm Klipheuvel, Kleinbrak, Mossel Bay will impact on heritage resources, HWC requires that a Heritage Impact Assessment (HIA) that satisfies the provisions of section 38(3) of the NHRA be submitted. This HIA must have specific reference to the following:

- palaeontological desktop study and archaeological foot survey

The required HIA must have an integrated set of recommendations.

Please note, should you require the HIA to be submitted as a Phased HIA, a written request must be submitted to HWC prior to submission. HWC reserves the right to determine whether a phased HIA is acceptable on a case-by-case Basis.

The comments of relevant registered conservation bodies; all Interested and Affected parties; and the relevant Municipality must be requested and included in the HIA where provided. Proof of these requests must be supplied.”

A suitably qualified Archaeologist have been approached by the EAP to undertake the required Heritage Impact Assessment in line with the requirements from the Heritage Western Cape as outlined above.

The Gouritz Cluster Biosphere Reserve

The Gouritz Cluster Biosphere Reserve is located in the southern part of South Africa. The Gouritz Cluster Biosphere Reserve is administered by the National Department of Environmental Affairs, Department of Environmental Affairs and Development Planning, Eden District Municipality.

Because of its relatively large size, the biosphere reserve is subdivided into four sectors or clusters: Towerkop, Kammanassie, Langeberg and St. Blaize. The landscape is characterized by remarkable variety and transition. Along the shore fine-grained sandy beaches and dunes alternate with wave-cut platforms and exposed headlands. Deeply incised river valleys cut into the coastal platform, terminating in estuaries and forming coastal lagoons in places. The Outeniqua and Langeberg Mountains separate the coastal region from the Little Karoo, forming a natural barrier between the southern cape and the interior. Further inland the Kammanassi, Kouga and Swartberg mountain ranges form the northern and eastern boundaries of the reserve.

The Gouritz Cluster Biosphere Reserve is the only area in the world where three recognized biodiversity hotspots converge (Fynbos, Succulent Karoo and Maputoland-Tongoland-Albany). The entire domain falls within the Cape Floristic Region, the smallest but one of the richest of the six floral kingdoms of the world. The reserve is rich in endemic plant species with more than 670 plant species. Even the arid inland portion of the reserve is rich in endemic species with at least 400 plant species.

In terms of fauna, the reserve plays an important role in conserving two unique and threatened populations of Cape mountain zebra (*Equus zebra zebra*) and Bontebok (*Damaliscus pyrgargus pyrgargus*). Populations of leopard (*Panthera pardus*) are also present in most of the mountainous areas. Threatened invertebrates include seven endemic species of the enigmatic beetle genus *Colophon* and 14 endemic butterfly species.

The reserve includes three recognized UNESCO World Heritage Sites: the Swartsberg Complex, Boosmansbos Nature Reserve and Baviaanskloof. UNESCO approved the Gouritz Cluster Biosphere Reserve in 2015. (UNESCO, 2015)

Biosphere Reserves provide a useful model for bioregional planning and management, and can be defined as, “areas of terrestrial and coastal / marine ecosystems or a combination thereof, which are internationally recognised within the framework of UNESCO’s programme on Man and the Biosphere”. The concept aims to link conservation and development, with emphasis placed on the protection of natural and genetic resources while improving the welfare of local communities through appropriate development activities. In order for Biosphere Reserves to fulfil their three complementary functions, namely conservation, development (economic) and logistic support, they typically comprise three zones. These three zones are the core area, the buffer zone, and flexible transition zones. Essentially, biosphere reserves facilitate a balanced integration of conservation and development interests as one radiates out from the core area to the transition zones, i.e. as environmental sensitivity decrease outwards.

Protected species – Provincial Ordinances

Provincial ordinances were developed to protect particular plant species within specific provinces. The protection of these species is enforced through permitting requirements associated with provincial lists of protected species. Permits are administered by the Provincial Departments of Environmental Affairs.

Relevance to the proposal:

Should any protected tree species be found within the development footprint of the proposed Oudrift Dam, an application for a sensitive coastal area permit for the Outeniquq Sensitive Coastal Areas (OSCAE) will need to be obtained in terms of Government Notice No. R1526 of September 1997 read with the Environment Conservation Act, No 73 of 1989.

B-1.3 Development Strategy / Guidelines

The proposed Oudrift Farm Dam development is mostly in line with the visions and objectives of the existing planning policies and guidelines. The alignment of the proposal against the stated policies and frameworks can only be outlined in detail during the EIA phase, and once the specialist reports have been obtained. This includes engagement with the relevant stakeholders and departments who oversee these. The most significant stakeholders include the DEA&DP, CapeNature, Mossel Bay Municipality, Eden District Municipality, Breede Gouritz Catchment Management Agency and Heritage Western Cape.

B-1.3.1 National Spatial Development Framework (NSDF, 2018)

This National Spatial Development Framework (NSDF) seeks to make a bold and decisive contribution to bringing about the peaceful, prosperous and truly transformed South Africa, as articulated in the Freedom Charter, the Reconstruction and Development Programme and the National Development Plan. In accordance with this transformative agenda and guided by the Spatial Planning and Land Use Management Act, Act 16 of 2013 (SPLUMA). In addition to the policy directives provided by the NDP, SPLUMA provides five guiding principles that have to be used and observed in spatial planning at all scales, including the national scale. These principles are the following:

Spatial Justice

A need to:

- Ensure redress in terms of access to the economic opportunities and locational benefits that the country and its cities, towns and rural areas offer, including well-located, productive land;
- Include inclusion of previously excluded areas in the national space economy; and
- Pursue intergenerational justice in (1) the location and pattern of settlement development, and (2) the use of natural resources.

Spatial Sustainability

A need to:

- Ensure national spatial development within the limits of the natural resource base of the country – now and in the future;
- Pursue the development of viable settlements and sustainable economies; and
- Pursue a more concentrated, well-connected and more compact national footprint, to increase access to opportunities for all, and reduce use and wastage of natural resources and state finances and the need for motorised transport.

Spatial Resilience

A need to:

- Proactively minimise risks to settlements through the considered selection of the location and pattern of settlement development; and
- Develop settlements in ways that reduce their dependency on carbon-based fuels and grid-based energy-distribution systems, as and where possible, to mitigate and reduce their climatic impact.

Efficiency

A need to:

- Optimise the use of all state and non-state resources and the minimisation of wastage and negative impacts in settlement location and spatial forms; and
- Diversify and densify settlements to reduce transactional costs and the need for motorised transport;

Good Administration

A need to:

- Pursue coordination, integration and spatial alignment in all forms of government spatial planning, budgeting and investment;
- Ensure maximum participation and active engagement in spatial planning and settlement building, to grow the local economy and tax base, and build social cohesion; and
- Ensure adherence to the law, notably SDFs and municipal Land
- Use Schemes (LUSs), to ensure that the social, spatial and economic benefits of good spatial planning materialise.

B-1.3.2 Western Cape Provincial Spatial Development Framework (PSDF, 2020)

The Western Cape Provincial Spatial Development Framework, as amended 2020 (PSDF) is the common spatial reference framework for delivering on the Province's strategic development priorities, individually and collectively. It guides the location and form of public investment of national and provincial departments as well as municipalities in the natural and built environment, ensuring that the returns on these investments are consistent with the Province's development objectives.

The PSDF endorses bio-regional planning as a land-use planning method which promotes sustainable development through five subcomponents. These are 'sense of place', 'sense of history', 'sense of craft', 'sense of nature' and 'sense of limits'. The bio-regional planning method involves four main spatial planning categories, which are 'core', 'buffer', 'intensive', 'agriculture' and 'urban'.

Eden is an area of outstanding natural beauty, made up of wilderness and agricultural landscapes, estuaries and lagoons, mountain backdrops and coastal settings, including the well-watered and verdant landscapes of the garden route. The Southern Cape coastal belt has been identified as a significant leisure, lifestyle, holiday, and retirement economic centre – which stretches from Plettenberg Bay and Nature's Valley in the east, to Mossel Bay in the West, with the George / Mossel Bay settlement complex being a significant emerging regional economic node of the Province.

The diagram below depicts the three spatial themes underlying the PSDF and their associated elements, supported by spatial governance. Although many of the policy statements are interrelated, statements reflected on this poster is deemed the most relevant to the Eden District.



Figure 5: PSDF Spatial Themes for Eden

The PSDF consists of three overarching objectives which include:

1. Sustainable Use of Provincial Assets
2. Opening Up Opportunities in the Space Economy
3. Developing Integrated and Sustainable Settlements

The Western Cape economy is founded on the Province's unique asset base. These include farming resources that make the Western Cape the country's leading exporter of agricultural commodities and whose value chains (e.g. agri-processing) underpin the Province's industrial sector; and its natural capital and its varied scenic and cultural resources which are the attraction that makes the Western Cape the country's premier tourism destination. Collectively these assets provide a unique lifestyle offering which contribute to the relative

strength of the Province's tertiary sector and its comparative advantage as a so-called knowledge economy.

Relevance to the proposal:

Due to the nature of the development, only objective 1 of the PSDF can be attributed and aligned with the proposed Oudrift Dam Development. The objective for Sustainable Use of Provincial Assets furthermore details 5 policy statements Policy R1 – Policy R5 as outlined in Section 3.1 of the PSDF.

Policy R1: Protect Biodiversity and Ecosystem Services:

Using the latest available CBA mapping as a primary informant, regional, district and municipal SDFs need to delineate Spatial Planning Categories (SPCs) that reflect suitable land use activities in the different CBA classifications. To inform the delineation of SPCs and the interpretation of the nature, scale and form of land uses that are suitable in each SPC, the 2009 PSDF's draft Western Cape Rural Land Use Planning and Management Guidelines to be updated to incorporate new CBA and climate change corridor information. (PSDF, 2014).

The site falls inside the Mossel Bay Biodiversity Network, with almost the entire site and surrounding area mapped as a critical biodiversity area (CBA). Reasons for this are multifold, including the importance of the area as a climate adaption corridor, the presence of threatened vegetation types and water resource protection. It was previously noted that most of the intact vegetation in the Mossel Bay interior is found on the steeper hill slopes. These areas are thus considered of value in the biodiversity network.

Policy R2: Safeguard Inland and Coastal Water Resources and Manage the Sustainable Use of Water.

Development along the coast, lakes, rivers and dams must not compromise ecological integrity, tourism potential and landscape character. Development should be contained within a limited footprint, preferably within or adjacent to existing settlements, and the required ecological buffers and setbacks must be adhered to. Ensure public access to aquatic assets, and acknowledge the importance of coastlines in contributing to the sense of place.

A NFEPA wetland is mapped on the south-eastern side of the site. However, no evidence of a wetland was found during the site visit. The mapped wetland area lies on a low saddle and watershed separating the proposed dam site from the Klipheuwel Dam. The National Freshwater Ecosystem Priority Areas (NFEPA) project provides strategic spatial priorities for conserving South Africa's freshwater ecosystems and supports sustainable use of water resources. These priority areas are commonly referred to as NFEPA's.

The applicant is in need of storage capacity as changing precipitation patterns not only dictate the need for an increase in assurance of yield but also as protection to the increased taking of water for irrigation in the upper reaches of the Moordkuil River (K10E and K10F quaternary catchments). It is proposed that the dam will be filled by pumping from the Moordkuil River where the applicant has an existing lawful installation. The applicant furthermore has existing rights in place in terms of section 21 (a) - taking water from a water resource and thus no new water uses are being applied for in terms of section 21 (a).

The proposed Oudrift Dam site is located adjacent to the lower reaches of the Moordkuil River. According to the Cape Farm Mapper GIS mapping, this section of the Moordkuil River forms part of the Estuarine functional zone. A Freshwater Impact Assessment and the Ecological Reserve Determination be undertaken to inform the Ecological Reserve and the possible impacts the construction might have on achieving the Ecological Water Requirement for the Klein Brak River Estuary.

Policy R3: Safeguard the Western Cape's Agricultural and Mineral Resources, and Manage their Sustainable Use.

Record unique and high potential agricultural land (as currently being mapped by the Provincial Department of Agriculture) in municipal SDFs, demarcate urban edges to protect these assets, and adopt and apply policies to protect this resource (especially in areas where raw water is available).

Reconcile ecosystem requirements with conflicting land development pressures through proactive spatial planning, and application of a land use management system that safeguards biodiversity, protects resources and opens up opportunities for improved livelihoods and jobs.

Use transformed areas first for new farming and mining ventures.

The applicant is in need of storage capacity as changing precipitation patterns not only dictate the need for an increase in assurance of yield but also as protection to the increased taking of water for irrigation in the upper reaches of the Moordkuil River (K10E and K10F quaternary catchments). It is proposed that the dam will be filled by pumping from the Moordkuil River where the applicant has an existing lawful installation. The applicant furthermore has existing rights in place in terms of section 21 (a) - taking water from a water resource and thus no new water uses are being applied for in terms of section 21 (a).

The proposed Oudrift Dam site is located adjacent to the lower reaches of the Moordkuil River. According to the Cape Farm Mapper GIS mapping, this section of the Moordkuil River forms part of the Estuarine functional zone. A Freshwater Impact Assessment and the Ecological Reserve Determination be undertaken to inform the Ecological Reserve and the possible impacts the construction might have on achieving the Ecological Water Requirement for the Klein Brak River Estuary.

Policy R4: Recycle and Recover Waste, Deliver Clean Sources of Energy to Urban Consumers, Shift from Private to Public Transport, and adapt to and Mitigate Against Climate Change.

Not applicable to the proposal.

Policy R5: Safeguard Cultural and Scenic Assets.

It is a landscape with diversity but its rural character and similar agricultural practices create uniformity over the entire area. The region consists of a reasonable percentage of cultivation, but due to the varied topography, natural ecosystems are more readily found.

This landscape tends to be less accessible, hilly and rugged, with limited agriculture along the higher-lying plateaus towards the north and lower-lying river corridors closer to the coastline. Much of this landscape has been incorporated into private game reserves during the last decade or so and is therefore likely to once again revert to a natural landscape over the long term. From this perspective therefore, the entire area is considered of low local historic, aesthetic and social cultural significance (Grade IIIC). (Webley, 2016)

An Archaeological Impact Assessment have been requested by the HWC. The specialist would need to compile the information into an archaeological study within the context and to be integrated as part of a Heritage Impact Assessment, which will touch on all Heritage related aspects.

B-1.3.3 The Mossel Bay Spatial Development Framework (2018)

The Mossel Bay Spatial Development Framework (2018) essentially comprises two main components:

- A rural hinterland providing wilderness and agricultural tourism opportunities and ecosystem services in the form of pristine catchment areas providing water quality and biodiversity conservation; and
- An urban coastal settlement strip.

Sub-components of the MBSDF include:

- **Critical biodiversity and aquatic biodiversity conservation areas:** These comprise mainly the foothills and high mountains of the Outeniqua range. In addition to containing the most important ecosystem services of the municipality, they provide an important scenic, adventure and agricultural tourism resource. It should be noted that through analysis of SANBI data, CBA's were identified around and within existing settlements, hence a complete EMF is needed to verify the status of these CBA's.

- **Intensive agriculture:** the municipality has an important agricultural component in its local economy providing approximately 4000 jobs; which should be promoted and enhanced. It comprises mainly mixed farming on the dryer coastal plain to the south-west with patches of intensive crop farming, mainly wheat and dairy, on pastures found in the valleys in the north west (this farm included). Agricultural land close to the urban settlements requires particular protection due to the advantages it offers regarding minimal travelling distances and transport costs with regards to urban food security.
- **Aquatic biodiversity areas/intensive agricultural valleys:** some of the municipality's river valleys contain a complex mosaic of intensive agriculture and aquatic biodiversity areas. If this land use pattern is not carefully managed it will have negative implications for both water quality and quantity and protection of agricultural land. Fine scale planning is this required within these valleys.
- **River and wetland corridors:** protection of these corridors is key to the water resources of the municipality and no urban development or ploughing should be permitted within 32m of each bank or other setback lines determined by freshwater ecologists or hydrological engineers.

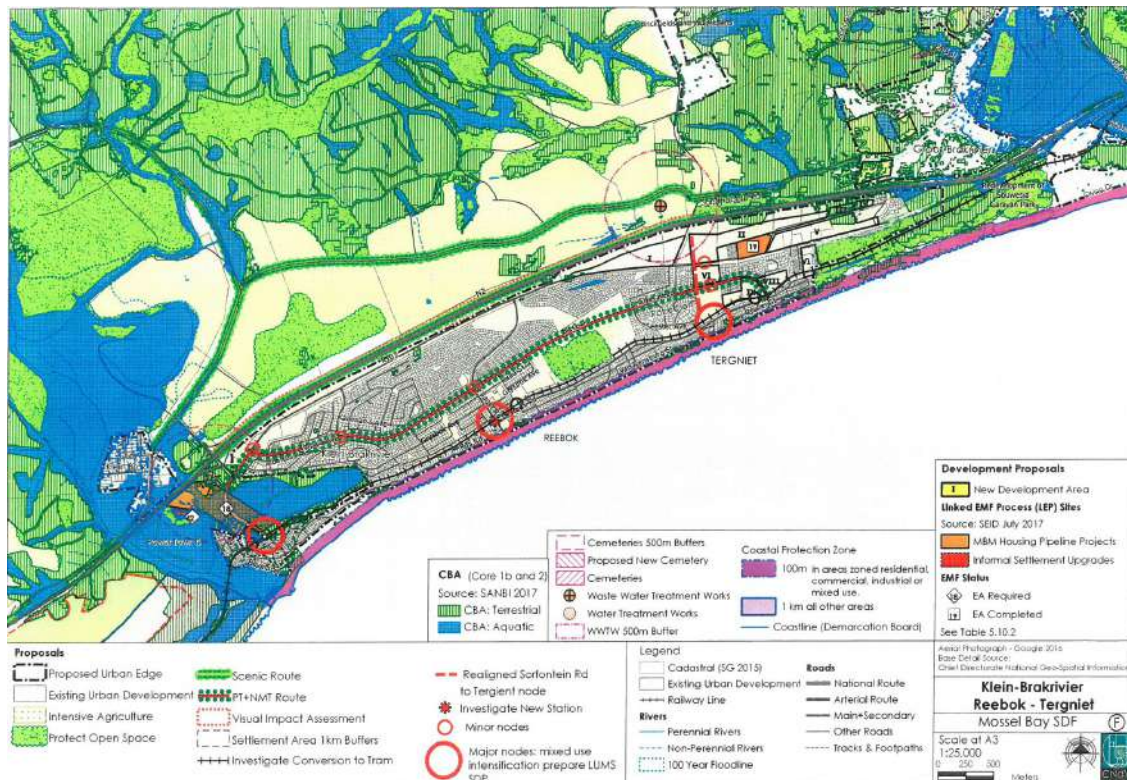


Figure 6: MBSDF (2018) Kleinbrak, Rheeboek and Tergniet

Relevance to the proposal:

The MBSDF identifies Intensive Agricultural Areas as a separate bio-regional planning zone due to the important role that intensive agriculture plays in ensuring food security, providing low skilled employment and its scarcity in SA.

The Mossel Bay Spatial Development Framework (2018) designates the location where the Oudrift Dam is to be constructed as Critical Biodiversity Area Core 1b. The desired state includes that no urban development including rural settlements should be considered. However, restricted holiday accommodation, rural housing and tourist facilities can be considered.

The remainder of the agricultural activities on the farm is indicated as Intensive Agriculture area. The desired state includes that Intensive Agriculture areas be protected and expanded. Furthermore, that no urban development including rural settlements should be considered. However, restricted holiday accommodation, rural housing and tourist facilities can be considered.

B-1.3.4 The Mossel Bay Spatial Development Framework / Environmental Management Framework (2022) Section B.

Section B of the Mossel Bay SDF / EMF was issued in May 2022 and is read together with Section A which comprises the Status Quo of the municipal area, referred to as MB SQ 2021 in the document. Section A and B will serve as base documents for Section C which will contain the detail information needed to conform to the relevant environmental legislation for EMF's. Section C will be developed after adoption of Section A and B and aims to establish a defined "Urban Area" which is used to determine listed activities in development applications. The SDF / EMF 2022 must also be read against the background of the 2018 SDF which contains further information that informed the proposals and conclusions of the SDF / EMF 2022.

The site falls inside the Mossel Bay Biodiversity Network, with almost the entire site and surrounding area mapped as a critical biodiversity area (CBA) (see Figure 7). Reasons for this include the importance of the area as a climate adaption corridor, the presence of threatened vegetation types and water resource protection. It was previously noted that most of the intact vegetation in the Mossel Bay interior is found on the steeper hill slopes.

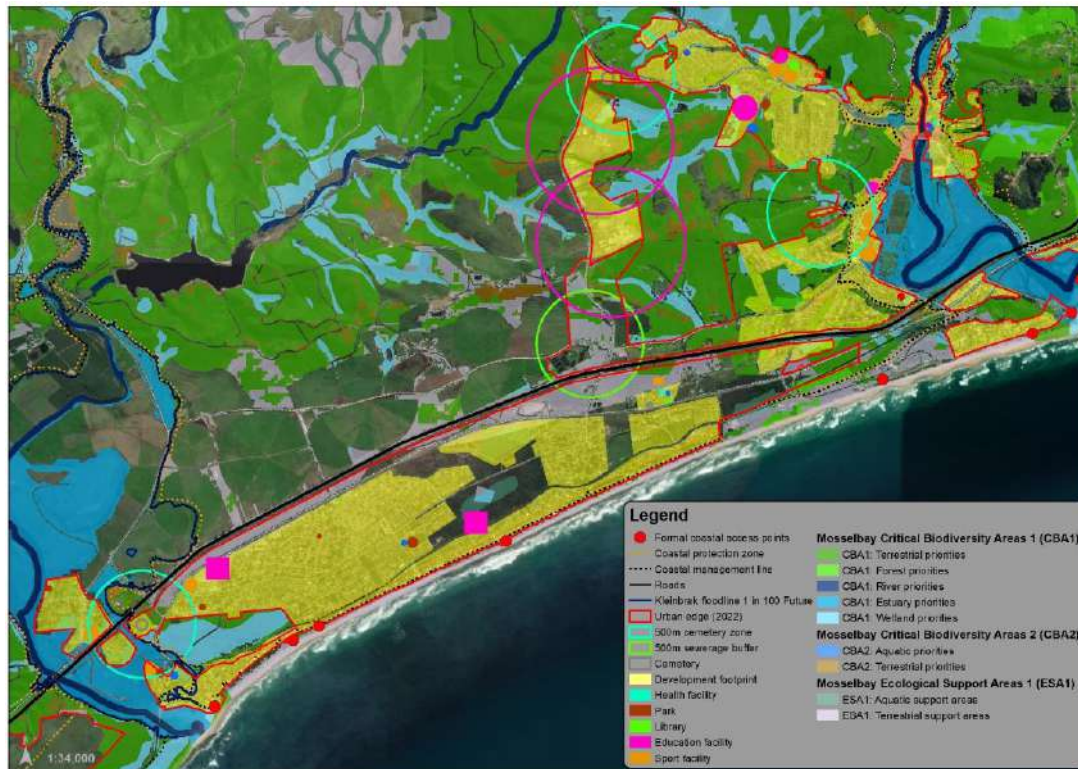


Figure 7: Midbrak Status Quo map as per the 2022 Revised SDF and EMF.

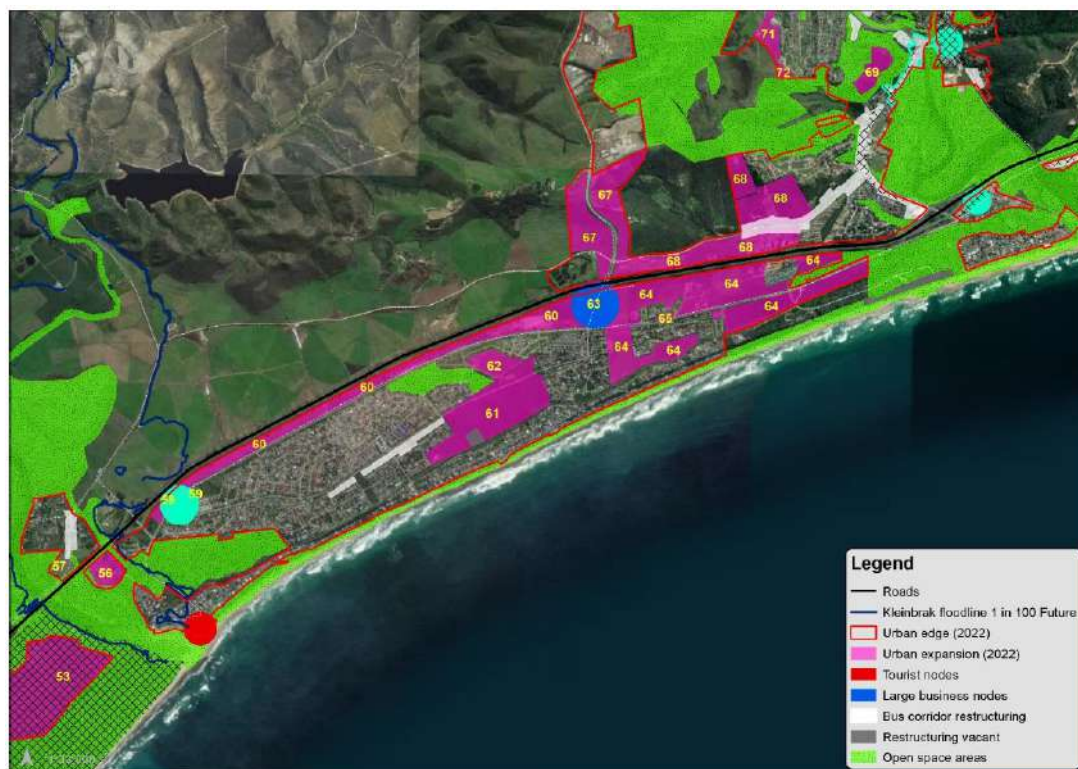


Figure 8: Mibrak Spatial Proposals per the Revised 2022 SDF and EMF

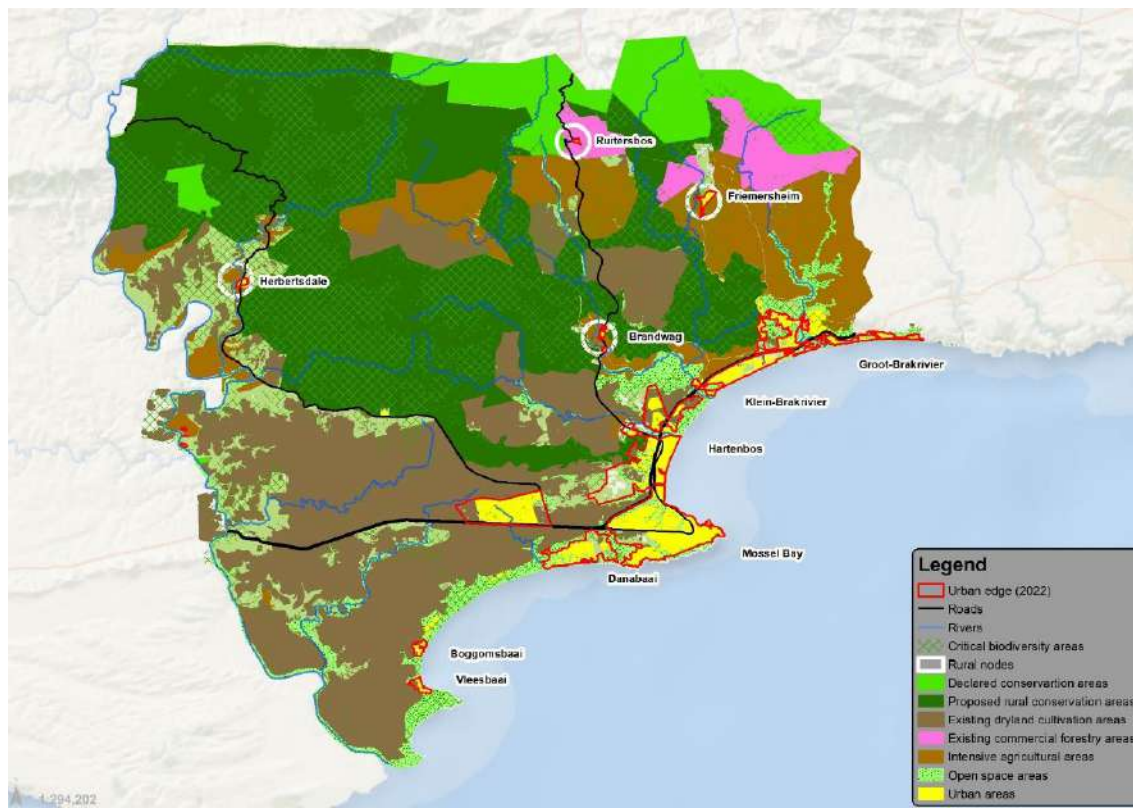


Figure 9: Rural spatial pattern as per the 2022 Revised SDF and Environmental Management Framework.

The site is indicated as per the Rural spatial pattern as Intensive agriculture. The light brown areas indicated in Figure 8 above indicate the existing intensive agricultural areas. These areas are very important for food security.

Timeous amendment to agricultural practices to mitigate climate change must be implemented. The use of the water resource must be managed to ensure it does not enlarge the impact of water security for the urban nodes and the negative impact on the river systems and critical biodiversity areas. Low water use agriculture on smaller footprints is encouraged. The carbon footprint of these enterprises must be reduced to mitigate climate change. Farm worker accommodation must be provided on the land unit where the workers are employed or in existing rural nodes. The carbon footprint of agriculture in these areas should be reduced to mitigate the mentioned impacts.

B-1.4 Other Applicable Guidelines

B-1.4.1 NEMA EIA Guideline Series: Guideline on Alternatives (2007)

This guideline provides an overview of how to consider alternatives in the EIA process. It is aimed at Government authorities, non-governmental organizations, environmental impact practitioners, project applicants and interested and affected parties. The guideline strives to create a common understanding amongst the different stakeholders of what is required in the identification and assessment of alternatives.

In terms of the NEMA EIA Regulations all Basic Assessment Reports²⁹, Scoping Reports³⁰ and Environmental Impact Reports³¹ must contain a description of any feasible and reasonable alternatives that have been identified, including a description and comparative assessment of the advantages and disadvantages that the proposed activity and alternatives will have on the environment and on the community that may be affected by the activity. Every EIA process must therefore identify and investigate alternatives, with feasible and reasonable alternatives to be comparatively assessed.

If, however, after having identified and investigated alternatives, no feasible and reasonable alternatives were found, no comparative assessment of alternatives, beyond the comparative assessment of the preferred alternative and the option of not proceeding, is required during the assessment phase.

B-1.4.2 NEMA EIA Guideline Series: Guideline for the Review of Specialist Input in the EIA process (June 2005).

The guideline deals with the ecological specialist's input to the EIA process. These guidelines will be incorporated during the use of numerous specialists in the EIA Phase of the development. As mentioned above, a list of specialists has been appointed to conduct specialist assessments to assist the developer in making an informed decision.

B-1.4.3 NEMA EIA Guideline Series: Guideline on Need and Desirability (March 2013)

When “need and desirability” must be considered as part of an EIA process, the content of the IDPs, SDFs, EMFs and other relevant plans, frameworks and strategies must be taken into account when considering the merits of each application. Whether a proposed activity will be in line with or deviation from the plan, framework or strategy per se is not the issue, but rather the ecological, social and economic impacts that will result because of the alignment or deviation. As such, the EIA must specifically provide information on these impacts in order to be able to consider the merits of the specific application. Where a proposed activity deviates from a plan, framework or strategy, the burden of proof falls on the applicant (and the Environmental Assessment Practitioner) to show why the impacts associated with the deviation might be justifiable.

The need and desirability of development must be measured against the abovementioned contents of the IDP, SDF and EMF for the area, and the sustainable development vision, goals, objectives, strategies and plans formulated in, and the desired spatial form and pattern of land use reflected in, the area's IDP and SDF. While project-level EIA decision-making therefore must help us stay on course by finding the alternative that will take us closer to the desired aim/goal, it is through Integrated Development Planning (and the SDF process) that the desired destination is firstly to be considered and the map drawn of how to get there.

B-1.4.4 Circular EADP 0028/2014: One Environmental Management System

Where an Environmental Authorisation is required in terms of the 2014 EIA Regulations and an authorisation, permit or licence is also required in terms of a specific environmental management Act ("SEMA"), a combined public participation process must be followed as agreed to by the relevant authorities⁶⁷.

With respect to every application for Environmental Authorisation in terms of NEMA and every application for an authorisation, permit or licence in terms of a SEMA, there must be coordination and cooperation between the Competent Authority/Licensing Authority in terms of NEMA/SEMA and any other organs of state from which an authorisation, permit or licence in terms of any other legislation is required⁶⁸. As such, the EAP must prior to undertaking public participation, engage with the authorities to determine the need for a combined process to be followed.

Where the authorities have entered into an agreement in terms of Section 24K and/or 24L of NEMA, and the authorities have indicated that such an agreement is applicable to an application, the application must be dealt with in accordance with the combined process, including any combined public participation, agreed to between the authorities.

B-2 DETAILS OF THE APPLICANT

The details of the project applicant are indicated below.

Name of Applicant	Relevant Numbers
Klipheuwel Trust (2641/2001) Represented by Mr John Ernest Robertson.	Cell: 082 453 8462 Email: robfarm@mweb.co.za

B-3 BRIEF PROJECT NEED AND DESIRABILITY

In terms of the NEMA EIA Regulations (2014, as amended), when considering an application for environmental authorisation, the delegated authority must give consideration to “the need for and desirability of the activity”. The EIA Regulations specifies that the Scoping Report and Environmental Impact Assessment (EIA) Report must provide a description of the need and desirability of the proposed activity and identified potential alternatives to the proposed activity.

According to the DEA&DP Guideline on Need and Desirability (March 2013), when “need and desirability” is to be considered as part of an EIA process, the content of the IDPs , SDFs, EMFs and other relevant plans, frameworks and strategies must be taken into account when considering the merits of each application. Whether a proposed activity will be in line with or deviation from the plan, framework or strategy per se is not the issue, but rather the ecological, social and economic impacts that will result because of the alignment or deviation. As such, the EIA must specifically provide information on these impacts in order to be able to consider the merits of the specific application. Where a proposed activity deviates from a plan, framework or strategy, the burden of proof falls on the applicant (and the Environmental Assessment Practitioner) to show why the impacts associated with the deviation might be justifiable.

The need and desirability of development must be measured against the abovementioned contents of the IDP, SDF and EMF for the area, and the sustainable development vision, goals, objectives, strategies and plans formulated in, and the desired spatial form and pattern of land use reflected in, the area’s IDP and SDF. While project-level EIA decision-making therefore must help us stay on course by finding the alternative that will take us closer to the desired aim/goal, it is through Integrated Development Planning (and the SDF process) that the desired destination is firstly to be considered and the map drawn of how to get there.

The relevant considerations can be best described in terms of the general meaning of its two components in which need refers to time and desirability to place – i.e. is this the right time and is it the right place for locating the type of land-use/activity being proposed? Need and Desirability can be equated to wise use of land – i.e. the question of what is the most sustainable use of land.

The questions presented in DEA&DP's Draft Need & Desirability Guideline (DEA&DP 2013) that require evaluation, particularly those relating to the potential biophysical impacts of the proposed Oudrift Dam development, in a Need and Desirability assessment will be included and addressed as part of the Draft EIA Report as these determinations can only be made based on the specific findings and outcomes of the specialist assessments.

For the purposes of the *Draft* Scoping Report, the focus is largely on the consistency of the development proposal with applicable spatial planning, economic and biodiversity management policies as detailed above. Also highlighted in the Need & Desirability appraisal is the opportunity for the enhancement of socio-economic benefits associated with job creation and income generation.

Financial viability must be considered within the context of justifiable economic development, measured against the broader societal short-term and long-term needs. While the financial viability considerations of the private developer might indicate if a development is "do-able", the "need and desirability" will be determined by considering the broader community's needs and interests as reflected in an IDP, SDF and EMF for the area, and as determined by the EIA.

While the importance of job creation and economic growth for South Africa cannot be denied, the Constitution calls for justifiable economic development. The specific needs of the broader community must therefore be considered together with the opportunity costs and distributional consequences in order to determine whether or not the development will result in the securing of ecological sustainable development and the promotion of justifiable social and economic development – in other words to ensure that the development will be socially, economically and environmentally sustainable.

A short analysis as to the need and desirability considerations is provided in Table 6. As noted, the questions presented in DEA&DP's Draft Need & Desirability Guideline (DEA&DP 2013) that require evaluation, particularly those relating to the potential biophysical impacts of the proposed Oudrift Dam development, in a Need and Desirability assessment will be included and addressed as part of the Draft EIA Report as these determinations can only be made based on the specific findings and outcomes of the specialist assessments.

Table 6: Need and Desirability Considerations

Question	Answer
How will this development (and its separate elements/aspects) impact on the ecological integrity of the area;	The site falls inside the Mossel Bay Biodiversity Network, with almost the entire site and surrounding area mapped as a critical biodiversity area (CBA) (see Map 8). Reasons for this include the importance of the area as a climate adaption corridor, the presence of threatened vegetation types and water resource protection. It was previously noted that most of the intact vegetation in the Mossel Bay interior is found on the steeper hill slopes. The proposed dam will result in the following losses in biodiversity: ➤ Renosterveld & thicket = 5.6 ha (6.38 ha) ➤ Fynbos = 1.16 ha (1.35 ha) ➤ Fallow land = 0.57 ha (0.86 ha)
How were the following ecological integrity considerations taken into account; • Threatened Ecosystems • Sensitive, vulnerable, highly dynamic or stressed ecosystems, such as coastal shores, estuaries, • wetlands, and similar systems require specific attention in management and planning procedures, especially where they are subject to significant human resource usage and	No threatened ecosystems have been identified. It is important that the Freshwater Impact Assessment and the Ecological Reserve Determination be undertaken by BlueScience in order to inform the Ecological Reserve and the possible impacts the construction might have on achieving the Ecological Water Requirement for the Klein Brak River Estuary. The proposed Oudrift Dam site is located in lower reaches of the Moordkuil River. The proposed Oudrift Dam site is located adjacent to the lower reaches of the Moordkuil River. According to the Cape Farm Mapper GIS mapping, this section of the Moordkuil River forms the eastern most section of the Estuarine functional zone. It should also be taken into consideration that no application will be lodged in terms of Section 21(a) – for the taking of water from the Moordkuil River and thus the impacts to the Estuary are anticipated to be negligible. An area on the south-eastern side, which corresponds with a mapped NFEPA wetland, has been mapped as an aquatic CBA. This will be assessed as part of the Freshwater Impact Assessment.

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development pressure, • Critical Biodiversity Areas (“CBAs”) and Ecological Support Areas (“ESAs”), • Ecological drivers of the ecosystem, • Environmental attributes and management proposals contained in relevant Environmental Management Frameworks, • Environmental attributes and management proposals contained in relevant Spatial Development Framework, and • Global and international responsibilities relating to the environment (e.g. RAMSAR sites, Climate Change, etc.).	The site falls inside the Mossel Bay Biodiversity Network, with almost the entire site and surrounding area mapped as a critical biodiversity area (CBA) (see Map 8). Reasons for this include the importance of the area as a climate adaption corridor, the presence of threatened vegetation types and water resource protection. It was previously noted that most of the intact vegetation in the Mossel Bay interior is found on the steeper hill slopes. These areas are thus considered of great value in the biodiversity network. A few narrow strips of ecological support areas (ESA's) correspond with farm tracks passing through watercourses and the mapped NFEPA wetland. The nearby Moordkuil River has been mapped as an aquatic CBA. This includes the terrestrial vegetation areas and the Moordkuil River which will be assessed by the specialists. In terms of the 2022 EMF for the area, the site is indicated as Critical Biodiversity Area and is located within an intense agricultural corridor. The environmental attributes contained in the Mossel Bay Spatial Development Framework has been outlined in the report. The light brown areas indicated in Figure 8 above indicate the existing intensive agricultural areas. These areas are very important for food security. has yet to be completed. The environmental attributes contained in the Mossel Bay Spatial Development Framework has been outlined in the report. No RAMSAR sites are located on the property. Buffers of 32m will be allocated next to the rivers.
Question	Answer
How will this development disturb or enhance ecosystems and/or result in the loss or protection of biological diversity? What	To be determined as part of the Biodiversity Impact Assessment to be undertaken as part of the EIA process.

measures were explored to firstly avoid these negative impacts, and where these negative impacts could not be avoided altogether, what measures were explored to minimise and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts?	
What waste will be generated by this development? What measures were explored to firstly avoid waste, and where waste could not be avoided altogether, what measures were explored to minimise, reuse and/or recycle the waste? What measures have been explored to safely treat and/or dispose of unavoidable waste?	The required material for the construction of the proposed embankment will be sourced from within the dam basin on site. Suitable graded sands intended for the curtain and blanket filters will be sourced from approved commercial suppliers and concrete will be sourced from approved commercial ready-mix suppliers.
How will this development use and/or impact on non-renewable natural resources? What measures were explored to ensure responsible and equitable use of the resources? How have the consequences of the depletion of the non-renewable natural resources been considered? What measures were explored to firstly avoid these impacts, and where impacts could not be avoided altogether, what measures were explored to minimise and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts?	The proposed Oudrift Dam site is located in lower reaches of the Moordkuil River. The proposed Oudrift Dam site is located adjacent to the lower reaches of the Moordkuil River. According to the Cape Farm Mapper GIS mapping, this section of the Moordkuil River forms part of the Estuarine functional zone. It should be taken into consideration that no application will be lodged in terms of Section 21(a) – for the taking of water from the Moordkuil River as the applicant has existing water use rights in place. It is proposed that the minor runoff into the Oudrift Dam from this small upstream catchment will be determined and accordingly released with the proposed "Compensation Water Releases" back to the Moordkuil River in order to ensure that the impacts on the Ecological Water Requirements are negligible. It is important that the Freshwater Impact Assessment and the Ecological Reserve Determination be undertaken by BlueScience in order to inform the Ecological Reserve and the possible impacts the construction might have on achieving the Ecological Water Requirement for the Klein Brak River Estuary. As an estuary of average importance, the Klein Brak should at least be managed in a Category C (maintain PES with Category C as minimum). In addition, it is highly unlikely that the flow reduction, nutrient loading

	from agriculture and habitat loss in the system can be alleviated in its entirety. It is therefore recommended that the Best Attainable State is a moderately modified system (i.e. Category C). To account for some of the loss in base flows, Scenario 1, i.e. Present inflow, including the Ecological Water Requirement (EWR) for an Ecological Category C river just upstream of the estuary (MAR of 38.97 million m³), was selected as the recommended ecological water requirement. (Klein Brak River Estuarine Management Plan, 2017).
How will this development use and/or impact on renewable natural resources and the ecosystem of which they are part? Will the use of the resources and/or impact on the ecosystem jeopardise the integrity of the resource and/or system taking into account carrying capacity restrictions, limits of acceptable change, and thresholds? What measures were explored to firstly avoid the use of resources, or if avoidance is not possible, to minimise the use of resources? What measures were taken to ensure responsible and equitable use of the resources? What measures were explored to enhance positive impacts?	No renewable resources will form part of the proposal.
Question	Answer
Does the proposed development exacerbate the increased dependency on increased use of resources to maintain economic growth or does it reduce resource dependency (i.e. de-materialised growth)? (note: sustainability requires that settlements reduce their ecological footprint by using less material and energy demands and reduce the amount of waste they generate, without compromising their quest to improve their quality of life)	Not applicable to the proposed Oudrift Dam development.
Does the proposed use of natural resources constitute the best use thereof? Is the use justifiable when considering intra- and intergenerational equity, and are there more important priorities for which the resources should be used (i.e. what are the opportunity costs of using these resources for the	Yes. It should be taken into consideration that no application will be lodged in terms of Section 21(a) – for the taking of water from the Moordkuil River as the applicant has existing water use rights in place. It is proposed that the minor runoff into the Oudrift Dam from this small upstream catchment will be determined

Compiled by Kapp Environmental Consultants

proposed development alternative	and accordingly released with the proposed "Compensation Water Releases" back to the Moordkuil River in order to ensure that the impacts on the Ecological Water Requirements are negligible. The proposed Oudrift Dam site is located in lower reaches of the Moordkuil River. The proposed Oudrift Dam site is located adjacent to the lower reaches of the Moordkuil River. According to the Cape Farm Mapper GIS mapping, this section of the Moordkuil River forms part of the Estuarine functional zone.
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NEMA and the EIA Regulations call for a hierarchical approach to impact management.

- Firstly, alternatives must be investigated to avoid negative impacts altogether.
- Secondly, after it has been found that the negative impacts cannot be avoided, alternatives must be investigated to reduce (mitigate and manage) unavoidable negative impact.
- Thirdly, alternatives must be investigated to remediate (rehabilitate and restore).
- Fourthly, unavoidable impact that remain after mitigation and remediation must be compensated for through investigating options to offset the negative impacts.
- While throughout, alternatives must be investigated to optimise positive impact.

In this regard, the EIA regulations states that the purpose of the EIA regulation is "... to regulate the procedure and criteria as contemplated in Chapter 5 of the Act relating to the submission, processing and consideration of, and decision on, applications for environmental authorisations for the commencement of activities in order to avoid detrimental impacts on the environment, or where it cannot be avoided, ensure mitigation and management of impacts to acceptable levels, and to optimise positive environmental impacts, and for matters pertaining thereto."

The effectiveness of the EIA depends on the implementation of the impact mitigation hierarchy. For example, it is not acceptable to simply motivate for the mitigation of impacts without first considering alternatives that could avoid these impacts.

B-4 THE SITE

B-4.1 Regional setting

The site is located approximately 13km north of Mossel Bay and located within a rural area best known for dairy farming and tourism establishments. The site is furthermore located approximately 5km north of the Klein Brak River residential area and 3km east of the N2.

The area is located within ward 4 of the Mossel Bay Local Municipality. The Mossel Bay Municipality is an amalgamation of several smaller towns consisting of: Mossel Bay, Boggom's Bay, Brandwag, Buisplaas, D'Almeida, Dana Bay, Glentana, Fraaiuitsig, Friemersheim, Great Brak River, Hartenbos, Herbertsdale, Hersham, KwaNonqaba, Little Brak River, Outeniqua Beach, Reebok, Ruitersbos, Southern Cross, Tergniet and Vleesbaai.

The Mossel Bay municipal district is 2007 square kilometres in size and is situated along the Southern Coast of South Africa. The Gourits River, the Outeniqua Mountains and the Maalgate River serve as the western, northern and eastern boundaries of the municipal district. The Mossel Bay municipal district lies within two of the three biodiversity hotspots that have been identified in South Africa. These are the Cape Floristic region (CFR) and the Succulent Karoo (SK) region. The Fynbos Biome is probably the most important element of the Cape Floristic Region, and it exhibits high levels of biodiversity and species endemism.

Klein Brak, Rheeboek and Tergniet are located adjacent to each other on a mostly coastal strip of approximately 5.5km in extent. The area is collectively known as Midbrak and has a population size of 4411 as per the 2011 Census. (*Mossel Bay SDF, 2018*) The Midbrak area is located on a 'mass tourism route' which receives between 120 000 and 150 000 visitors per annum.

The endemic character of the vegetation/thicket types which occur in the area, in combination with the high potential for tourism, make conservation and protection of the Klein Brak Estuary an extremely high priority.

The Klein Brak Estuary is situated within the southern coastal belt. Two major tributaries, the Brandwag River and the Moordkuil River join approximately 3 km from the coast to form a flood-tidal delta. Land use within the catchment is comprised of dry land crop production, irrigated crop farming, forestry and livestock grazing. Klein-Brakrivier is the only relatively large town with other urban areas in the catchment being Brandwag and Ruitersbos (Forestry Station). Water is abstracted from the lower reaches of the Moordkuil River and transferred to the Klipheuwel Dam to supply Mossel Bay.

B-4.2 Site Locality

The site is located adjacent and directly north of the existing Klipheuwel Dam which covers an area of approximately 37Ha. The proposed dam is furthermore located approximately 300 metres (at nearest point) east of the Moordkuil River.

Surrounding land uses comprise mostly dairy farming, as dairy farms have transformed much of the surrounding landscape north of the N2, with only the hilly areas and steeper slopes remaining untransformed. Botlierskop Private Game Reserve is located to the immediate north and east of the site. Dairy farms are located further east and south east of the site. Toward the west is the Moordkuil River and opposite the River are fallow agricultural land with varying levels of alien infestation. South west and opposite the Moordkuil River is one smallholding with several structures present. Further south and downstream are more irrigated grazing areas for dairy cattle as well as significant guava orchards.

Dairy farms have transformed much of the surrounding landscape north of the N2, with only the hilly areas and steeper slopes remaining untransformed. The coastal strip south of the N2 has been transformed by coastal residential developments.

B-4.3 Site Description

The proposed Oudrift farm dam will encompass two cadastral entities Remainder Portion 13 and Remainder Portion 3 of Farm 143 Klipheuwel. Remainder Portion 3 of Farm 143 Klipheuwel comprises 28.15ha in extent and is registered to the applicant Klipheuwel Trust. Remainder Portion 13 of Farm 143 Klipheuwel comprises 21.17ha in extent and is registered to Walter Robertson. The dam wall will be constructed and a section of this property and consent has been obtained from the landowner. Both these properties are currently zoned Agriculture I.

Remainder Portion 3 of Farm 143 Klipheuwel is currently lying dormant and contains indigenous vegetation, fallow agricultural fields and 3 seasonal watercourses. The farm is fenced with game fencing and forms part of a larger camp which is utilized for grazing of several antelope species. The applicant undertook significant alien clearing on the farm to eradicate Blue Gum and Port Jackson infestations during 2011 and 2012. Ongoing alien management is undertaken which was evidenced during the site visit conducted in August 2020. Remainder Portion 13 of Farm 143 Klipheuwel is covered mostly in grass species and utilized as grazing for dairy cattle.

The topography of the site can be described as a small, naturally vegetated valley forming a basin which slopes from the north, east and south towards the west. As per the 2012 South African Vegetation Map, the site is mapped as Groot Brak Dune Strandveld, while on the 2018 SA Vegetation Map it is mapped as Garden Route Granite Fynbos and a small portion

as South Outeniqua Sandstone Fynbos. Both Groot Brak Dune Strandveld and Garden Route Granite Fynbos are listed as endangered. It also forms part of the local biodiversity network and has been mapped as a critical biodiversity area (CBA).

The hillslopes above the site rise to 168 m above sea level, while the landscape flattens out downstream towards the south and the confluence with the Brandwag River. The site is covered by significant tracts of renosterveld, fynbos and thicket, but also fallow land and previously alien (black wattle and gum) infested areas. Two small steep koppies are present on the western section of the site which will be utilized for the construction of the dam wall.

The site furthermore contains 3 seasonal watercourses which meanders west toward the Moordkuil River. One wetland is mapped toward the south east of the dam extent. The drainage lines have confluence at the location where the dam wall will be constructed and encompasses a small catchment.

An existing deep drainage channel leads along the west of the southern koppie on site whereby the water flows into the Moordkuil River. This drainage channel will be retained as part of the dam overflow.

An Eskom servitude and distribution line leads toward the immediate north west of the proposed dam footprint. One pilon is located immediately north of the proposed overflow of the dam.

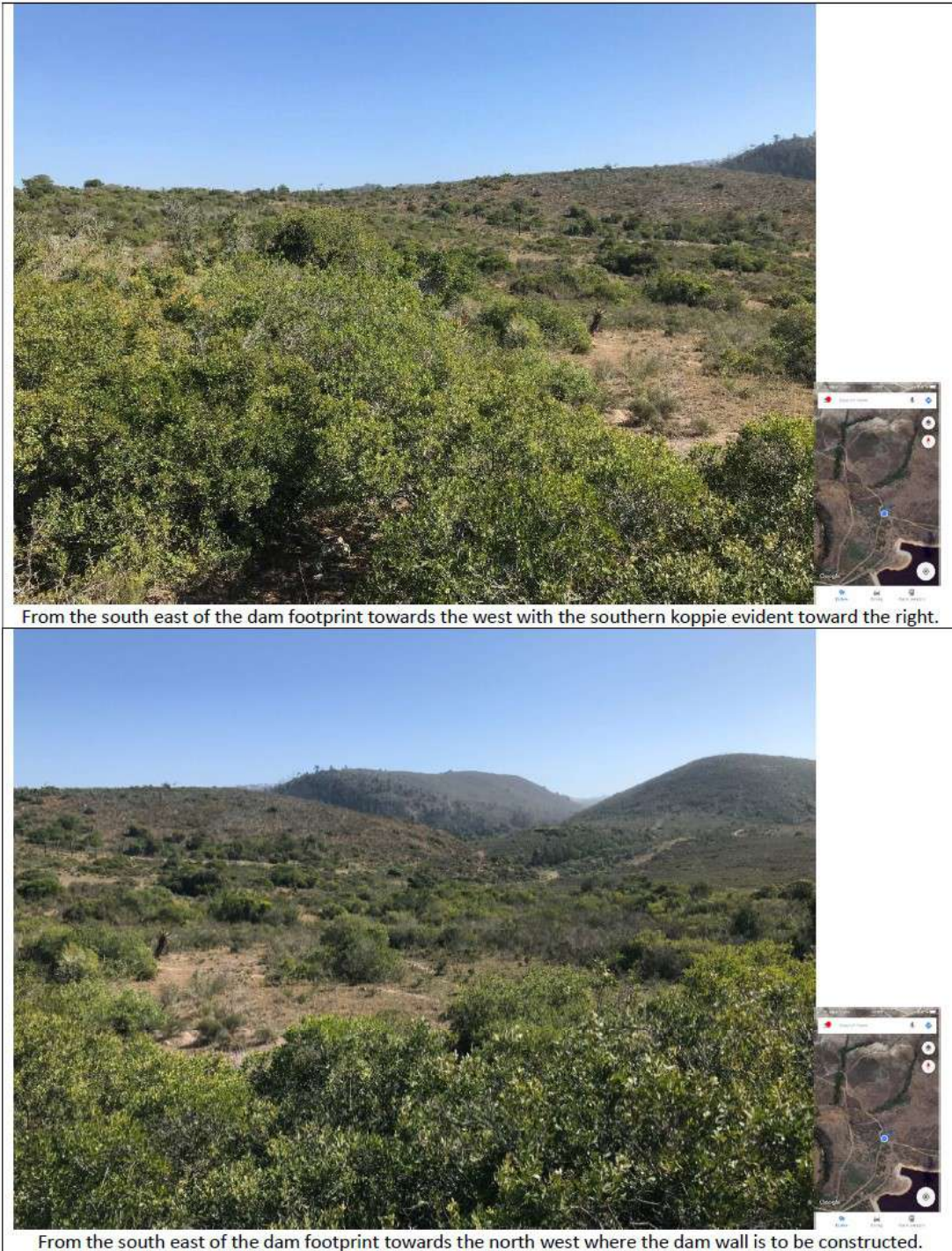


Figure 10: Photo Page of the site (1)

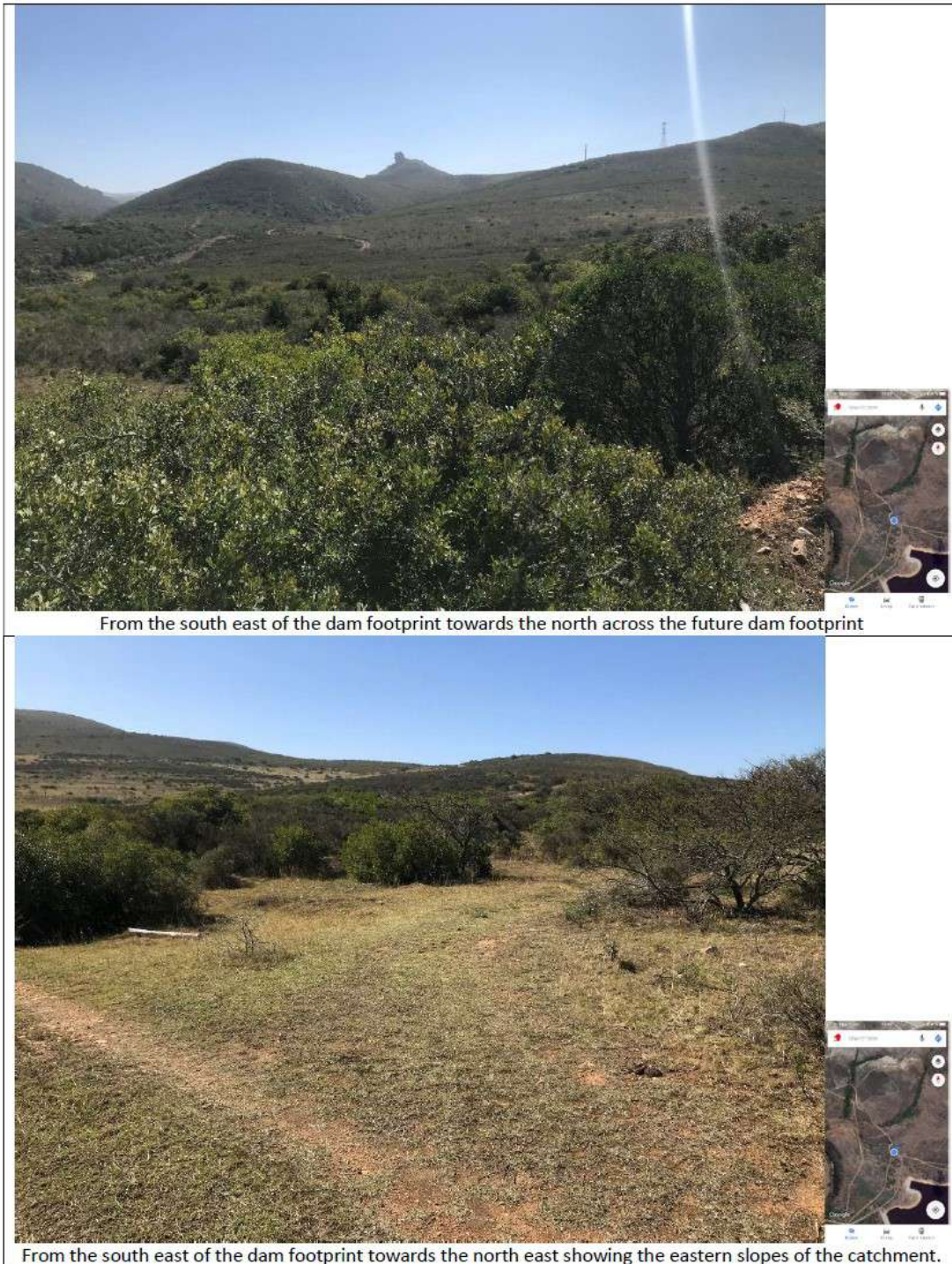


Figure 11: Photos Page of the site (2)

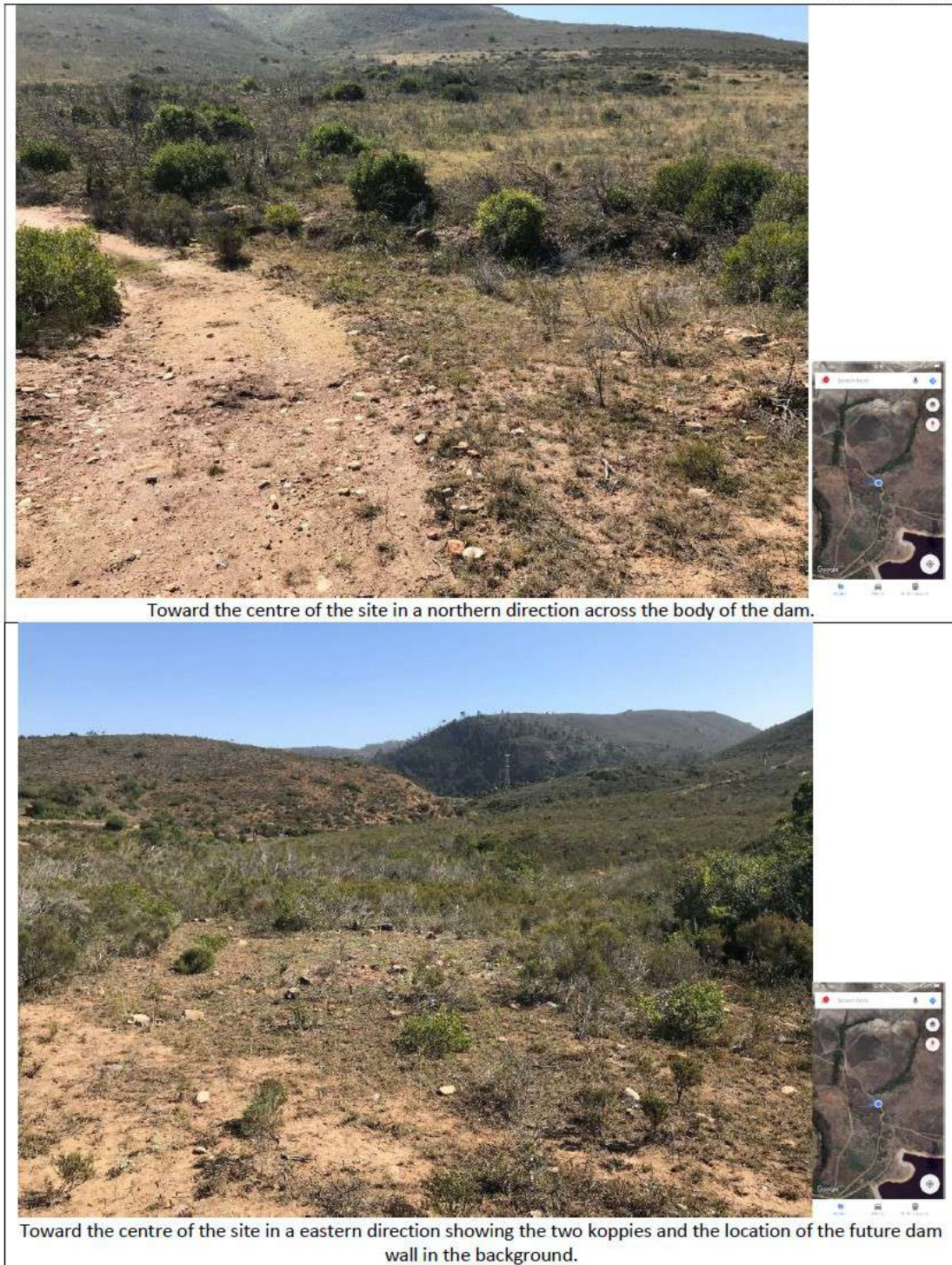


Figure 12: Photo Page of the site (3)



Along the northern boundary of the dam footprint as seen in a south eastern direction across the dam footprint.



Along the northern boundary of the dam footprint as seen in a south eastern direction across the dam footprint.

Figure 13: Site Photo Page (4)

**Figure 14: Site Photo Page (5)**



Along the overflow route toward the west of the dam as seen in a southern direction along the



Figure 15: Site Photo Page (6)



Figure 16: Site Photo Page (7)

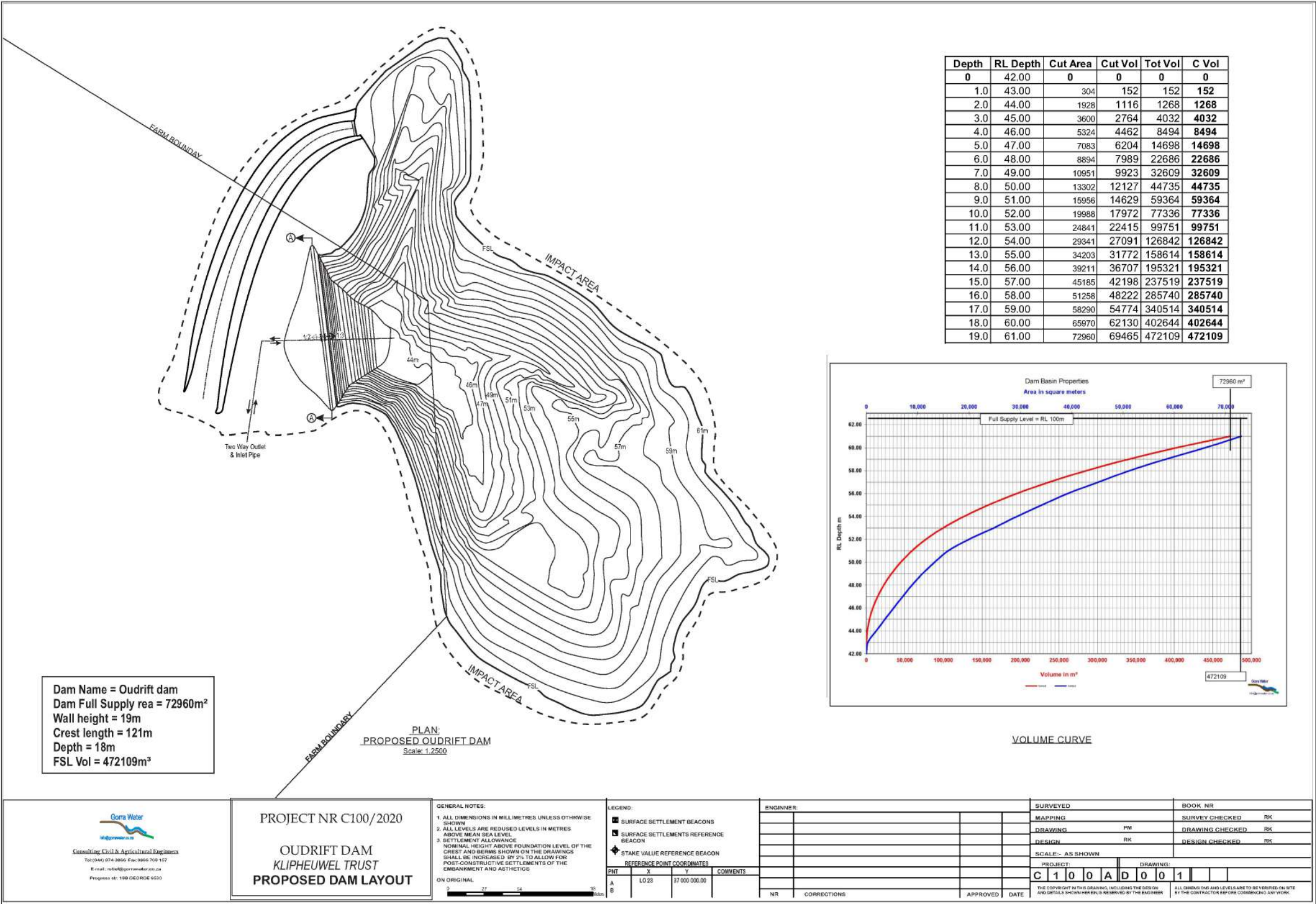


Figure 17: Dam Design Preferred Alternative

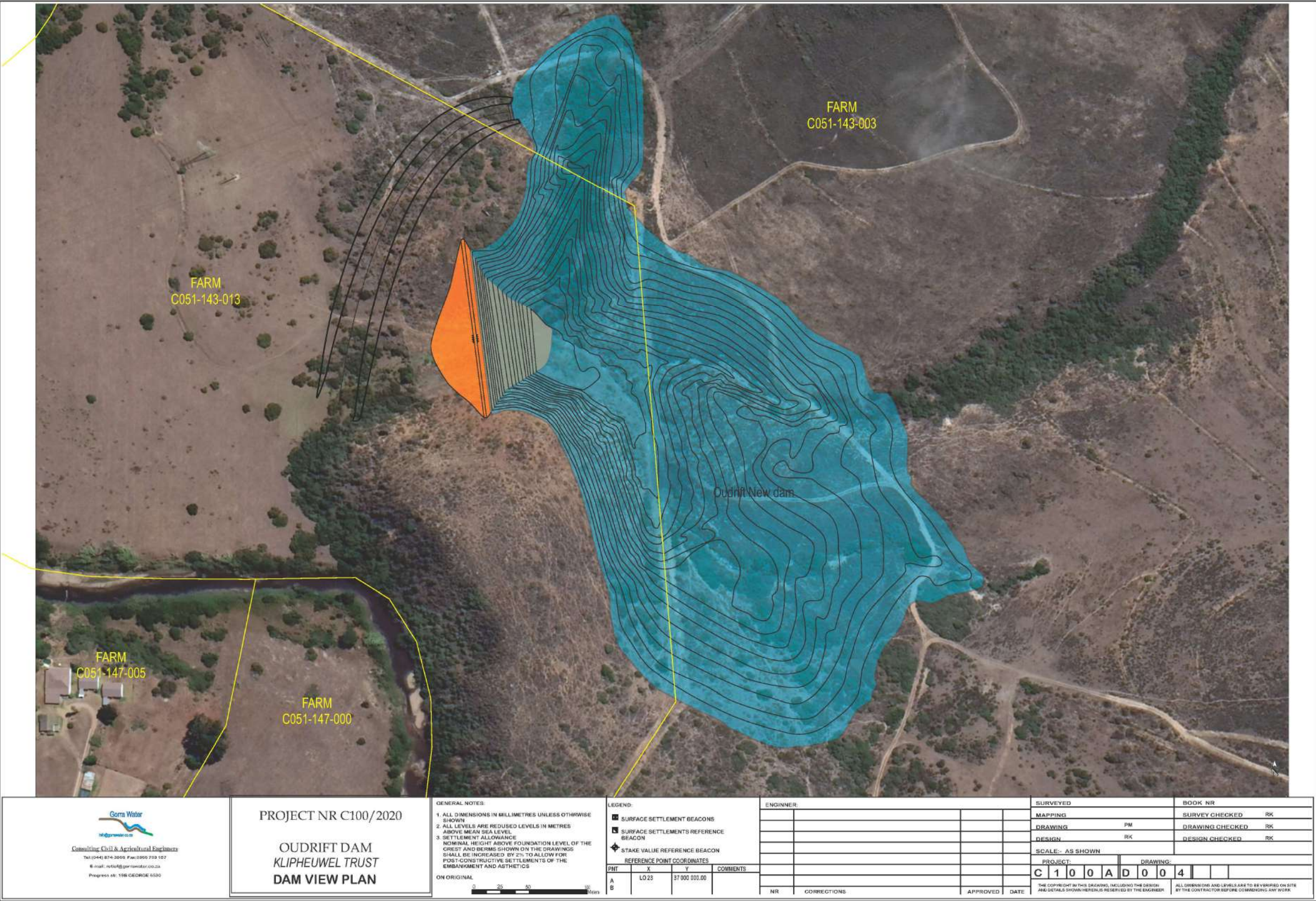


Figure 18: Preferred Dam Design Aerial Overlay

B-5 PROJECT DESCRIPTION

The applicant is in need of storage capacity as changing precipitation patterns not only dictate the need for an increase in assurance of yield but also as protection to the increased taking of water for irrigation in the upper reaches of the Moorkuil River (K10E and K10F quaternary catchments). The applicant wishes to construct a dam on his property to manage his water allocations throughout the year as required.

It is proposed that the dam area will comprise 72 960m² and the total development footprint will comprise 10.5Ha. The Full Supply Level (FSL) volume for the dam is 472 109m³. The dam wall will have a total height of 19 metres resulting in a maximum dam depth of 18 metres. The development of the dam will further include the construction of a dam wall with a crest of approximately 121m in length.

It is proposed that the dam will be filled by pumping from the Moordkuil River where the applicant has an existing lawful installation (34° 3'11.31"S 22° 8'6.68"E) in place on the eastern (left) bank of the river. The pump installation was verified and lawful in terms of section 35(4) of the NWA, Act 36 of 1998. In this regard, please refer to the relevant letters detailing the determination and issued by Breede Gouritz Catchment Management Association, herewith attached as Annexure C. Apart from this verification, the abstraction was furthermore recorded lawful in terms of Act 54/56 in section 9B(1C) by the then Department of Water Affairs.

The site contains 3 seasonal watercourses which meanders west toward the Moordkuil River. The drainage lines have confluence at the location where the dam wall will be constructed and encompasses a small catchment. It is proposed that the minor runoff into the Oudrift Dam from this small upstream catchment will be determined and accordingly released with the proposed "Compensation Water Releases" back to the Moordkuil River in order to ensure that the impacts on the Ecological Water Requirements are negligible.

The applicant has an existing irrigation water distribution network along the stretches of the Moordkuil Sint Road and the Gonnakraal gravel road. Two pipeline route alternatives are available to connect the Oudrift Dam to the existing irrigation network. These two pipeline alternatives are shown in Figure 19: Schematic Layout of Pipeline Alternatives. The existing irrigation network comprises 225mmØ uPVC pipelines and the proposed new pipelines will be similar pipelines to convey the Section 32 water entitlement.

The preferred connection point to the network will require an additional crossing of the Moordkuil River near the location of the existing drainage channel discharge. This connection point is the applicants preferred alternative due to operational considerations.

Furthermore, two river crossing alternatives have been identified in line with the preferred connection point as described above. The first alternative would entail the open trench construction of the pipeline through the Moordkuil River and reinforcement of the submerged

pipe below the riverbed. The alternative river crossing would entail a suspension bridge to be constructed across the river in order to fix the pipeline to. This stretch of the Moordkuil River is approximately 30m wide and dry bed installation is possible during summer months by utilizing the existing DWAF pumps located downstream.

The open trench construction of the pipeline below the riverbed is the applicants preferred alternative since it will not cause any obstruction during flood events. Due to the narrow stretch of the river in this location the suspension bridge could cause obstruction to debris and require regular replacement.

Access to the proposed Oudrift Dam will be taken via an existing gravel road off Moordkuil Sint Road which leads in an eastern direction past the adjacent Klipheuwel Dam and to the site.



Figure 19: Schematic Layout of Pipeline Alternatives

A water use license application will be submitted in terms of, section 21 (b) - storing water, section 21 (c) - impeding or diverting the flow of water in a watercourse, and section 21 (i) - altering the bed, banks, course or characteristics of a watercourse. The proposed dam has already been submitted to be registered and classified with the Department of Water and Sanitation Dam Safety Office. A probable risk category of "Category 2, Medium in Size and High Risk" will be awarded.

At this stage it is anticipated that the required material for the construction of the proposed embankment will be sourced from within the dam basin on site. Suitable graded sands intended for the curtain and blanket filters will be sourced from approved commercial suppliers and concrete will be sourced from approved commercial ready-mix suppliers.

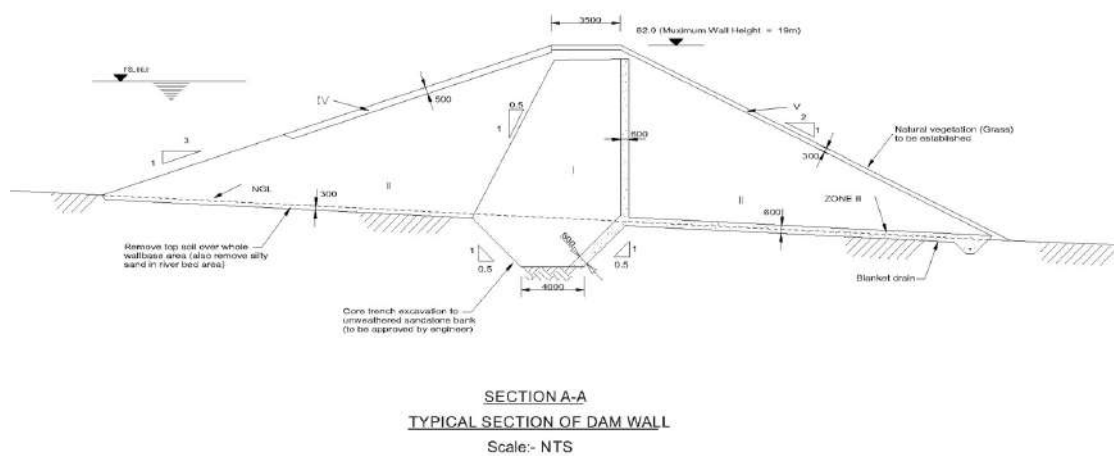


Figure 20: Typical Section of Dam Wall

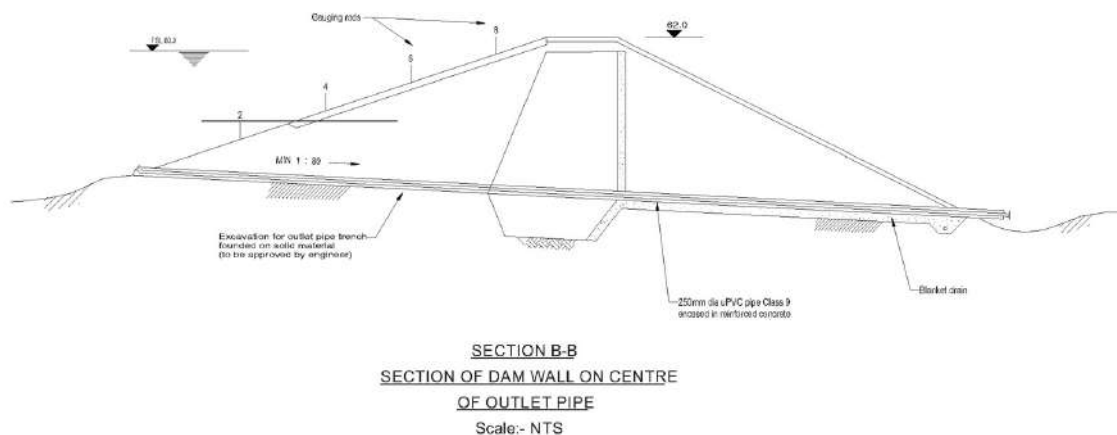


Figure 21: Section of Dam Wall on Centre of Outlet Pipe

B-6 APPROACH TO THE PROJECT

B-6.1 Authority Consultation

Authority consultation plays an integral role in any EIA process. The authorities guide the process through highlighting the necessary legislative requirements and key areas of concerns which might require further investigation by the project team.

B-6.2 Registration of the Project with DEA&DP

A Notification of Intent was submitted to the DEA&DP on the 22nd of July 2020 in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) as amended and the Environmental Impact Assessment (EIA) Regulations. DEA&DP acknowledged receipt of the above documentation on the 21st of August 2020 and DEA&DP Ref: 16/3/3/6/7/1/D6/25/0115/20 (Scoping and EIA Process) was assigned to the project. DEA&DP provided the authorisation that the project may proceed with the Scoping Process in terms of the Environmental Impact Assessment Regulations as outlined above.

B-6.3 Pre-Application Scoping Report Review

A Pre-Application Scoping Report was compiled and circulated along with fulfilling the requirements in terms of

The initial required public participation processes were conducted from Friday the 4th of December 2020 until Monday the 1st of February 2021. Comment from a number of organs of state and interested parties were obtained.

B-6.4 Application Form Submitted to the DEA&DP

A formal Application Form was submitted to the Department on 15th of May 2024 and an acknowledgement with DEA&DP Ref: 16/3/3/2/D6/25/0001/24 was obtained on the 24th of May 2024.

SECTION C: DESCRIPTION OF THE ENVIRONMENT

C-1 BIOPHYSICAL ENVIRONMENT

C-1.1 Geology, Land Types and Soils

According to the 3422 AA Mossel Bay 1:50 000 geological map, the main geological formations underlying the site are the Enon Formation (reddish conglomerate) in the western part and Kirkwood Formation (mudstone, sandstone with subordinate conglomerate lenses) in the eastern part. Both belong to the Uitenhage Group (Jurassic to Cretaceous age) of sediments. Also present on the higher south-facing slope on the northern side is quartzitic sandstone of the Peninsula Formation. The latter belong to Table Mountain Group. The cobblestones found in the local Enon conglomerate originate from the Table Mountain Group (Viljoen & Malan 1993). Enon conglomerate is an important source of stone aggregate, which is mined at several quarries found in the area (Viljoen & Malan 1993).

The geology of the site is described by Cape Farm Mapper as Peninsula Pakhuis and Cedarberg Formation consisting of Pebbly quartz arenite, diamictite, minor conglomerate, mudrock, siltstone and shale.



Figure 22: Geology Map

The greater Mossel Bay area consists of eight types of geological formations. The greater portion of the area comprises of Arenite and Conglomerate formations. Sedimentary soils are found along the Klein River Estuary area. The area contains soil depths ranging between 450mm and 750mm and the area surrounding the site is expected to be in the higher order of this range.

C-1.2 Topography

The topography of the site can be described as a small, naturally vegetated valley forming a basin which slopes from the north, east and south towards the west. As per the 2012 South African Vegetation Map, the site is mapped as Groot Brak Dune Strandveld, while on the 2018 SA Vegetation Map it is mapped as Garden Route Granite Fynbos and a small portion as South Outeniqua Sandstone Fynbos. Both Groot Brak Dune Strandveld and Garden Route Granite Fynbos are listed as endangered. It also forms part of the local biodiversity network and has been mapped as a critical biodiversity area (CBA).

The hillslopes above the site rise to 168 m above sea level, while the landscape flattens out downstream towards the south and the confluence with the Brandwag River. The site is covered by significant tracts of renosterveld, fynbos and thicket, but also fallow land and previously alien (black wattle and gum) infested areas. Two small steep koppies are present on the western section of the site which will be utilized for the construction of the dam wall.

The site furthermore contains 3 seasonal watercourses which meanders west toward the Moordkuil River. One wetland is mapped toward the south east of the dam extent. The drainage lines have confluence at the location where the dam wall will be constructed and encompasses a small catchment.

An existing deep drainage channel leads along the west of the southern koppie on site whereby the water flows into the Moordkuil River. This drainage channel will be retained as part of the dam overflow.

C-1.3 Freshwater and Hydrology

The site is drained by three seasonal watercourses, all of which were dry at the time of site visit conducted. A NFEPA wetland (channelled valley-bottom wetland) is mapped on the south-eastern side of the site. However, no evidence of a wetland was found during the site visit. The mapped wetland area lies on a low saddle and watershed separating the proposed dam site from the Klipheuwel Dam. The National Freshwater Ecosystem Priority Areas (NFEPA) project provides strategic spatial priorities for conserving South Africa's freshwater ecosystems and supports sustainable use of water resources. These priority areas are commonly referred to as NFEPA's.

The Klipheuwel Dam is located directly south of the proposed Oudrift Dam site. The dam is administered by the Department of Water and Sanitation and the dam provides potable water to the Klein Brak Water Treatment Works, for reticulation to adjacent urban areas. The dam is filled by existing pump installation on the eastern (left) bank of the Moordkuil River in close proximity to the existing lawful pump installation of the applicant.



Figure 23: Water Resources Map

The proposed Oudrift Dam site is located adjacent to the lower reaches of the Moordkuil River. According to the Cape Farm Mapper GIS mapping, this section of the Moordkuil River forms part of the Estuarine functional zone.

It is thus important that the Freshwater Impact Assessment and the Ecological Reserve Determination be undertaken by BlueScience in order to inform the Ecological Reserve and the possible impacts the construction might have on achieving the Ecological Water Requirement for the Klein Brak River Estuary.

It should also be taken into consideration that no application will be lodged in terms of Section 21(a) – for the taking of water from the Moordkuil River and thus the impacts to the Estuary are anticipated to be negligible. Furthermore, the engineering design proposals will allow for water compensation releases whereby the minor runoff from the catchment will be determined and released via a dedicated pipeline to the Moordkuil River.

C-1.4 Climate

The greater Mossel Bay area is known for its moderate climate throughout the year as the area is located where the winter rainfall and all-year rainfall regions of the Western Cape Province meet. The climate is influenced by the Agulhas Current of the Indian Ocean to the south, and by the presence of the Outeniqua Mountains to the north.

The area has an ocean-moderated semi-arid climate. The summers are comfortable, and dry; the winters are cool and windy; and it is mostly clear year-round.

Mossel Bay Climate Data													
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Yearly
Avg high (°C)	23	23	22	21	19	19	18	17	17	18	20	22	20
Avg low (°C)	19	19	18	17	15	13	13	12	13	14	16	18	16
Avg prec (mm)	30	33	41	38	38	33	33	36	41	38	36	30	420

Table 7: Mossel Bay Climate Data Weatherbase. 2011.

The mean annual rainfall for the property(s), which is located on the Garden Route coastal plain, is 444 mm (as per Cape Farm Mapper climatic data for 1950 to 2000). The peak rainfall periods are the months of March and October-November (i.e. bimodal rainfall regime), while the driest periods are December to January and June to July. The study area lies in a transitional area between the winter and summer rainfall regions. Mean daily maximum and minimum temperatures are 23.4°C and 10.3°C for January/February and July/August, respectively (as per Cape Farm Mapper climatic data). The Köppen-Geiger climate classification for Mossel Bay is BSk.

Over the course of the year, the temperature typically varies from 11°C to 24°C and is rarely below 8°C or above 27°C. Mossel Bay does not experience significant seasonal variation in the frequency of wet days. Frost is rare or almost absent while snow may be visible, occasionally on the distant mountain peaks.

The climate is characterized by frequent southerly and south easterly winds in summer and northwesterly winds in winter, yet rarely reach storm or gale force strength.

C-1.4 Flora

The study site is located in a coastal fynbos-renosterveld-thicket environment on the Southern Cape coastal plain. The indigenous species recorded on site are typical fynbos, renosterveld and coastal thicket species, such as *Erica peltata*, *Leucadendron salignum*, *Elytropappus rhinocerotis*, *Eriocephalus africanus*, *Pterocelastrus tricuspidatus*, *Mystroxydon aethiopicum* and *Cussonia thyrsoiflora*. The 2012 Vegetation Map of South Africa classifies the main vegetation types found on site as Groot Brak Dune Strandveld and South Outeniqua Sandstone Fynbos (see Map 5). The mapped area of Groot Brak Dune Strandveld is, however, incorrect for the area north of the N2. In the latest (2018) beta version Vegetation Map, the area on site previously mapped as Groot Brak Dune Strandveld has been (still incorrectly) remapped as Garden Route Granite Fynbos. Vlok has mapped it more correctly as Brandwag Fynbos-Renoster-Thicket¹. Groot Brak Dune Strandveld, described as a dense and tall, spiny, sclerophyllous scrub, occurs on stabilised dunes much closer to the coastline south of the N2.

In reality, the site lies on the boundary between South Outeniqua Sandstone Fynbos and Mossel Bay Shale Renosterveld. A strong thicket component is present in the latter, mainly along the watercourses and smaller patches inside the renosterveld. South Outeniqua Sandstone Fynbos, which is found on the south-facing sandstone slopes above the site, occurs on the southern slopes of the Outeniquas from Cloetesberg northeast of Albertinia in the west to the upper reaches of the Keurbooms River in the east (Mucina & Rutherford 2006). It is described as a tall, open to medium dense shrubland with medium dense, medium tall shrub understorey, mainly proteoid and restioid fynbos (Mucina & Rutherford 2006). Mossel Bay Shale Renosterveld 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 & Rutherford 2006). The renosterveld is mainly a medium dense, medium tall cupressoid-leaved shrubland dominated by renosterbos. Thicket patches are common.

The study site and the area earmarked for the dam in particular, has been disturbed by past farming activities. Fallow land was recorded on the site, notably on the south-facing slope on northern side. Historical Google Earth photographs also show significant alien infestation in the lower parts of the site. Most of the latter was subsequently cleared by the applicant. Despite the above past disturbances, significant tracts of renosterveld (albeit degraded) and fynbos remain. The fallow land portions also show different stages of succession with the return of fynbos and renosterveld species. The site is located on the boundary between renosterveld and fynbos. (Berry, 2020)

The site falls inside the Mossel Bay Biodiversity Network, with almost the entire site and surrounding area mapped as a critical biodiversity area (CBA). Reasons for this are multifold, including the importance of the area as a climate adaption corridor, the presence of threatened vegetation types and water resource protection. It was previously noted that

most of the intact vegetation in the Mossel Bay interior is found on the steeper hill slopes. These areas are thus considered of great value in the biodiversity network.



Figure 24: 2012 SA Vegetation Map

C-1.5 Fauna

Although the greater Mossel Bay landscape is highly transformed, with up to 43% of land cover being highly transformed, a significant number of endemic vertebrate and invertebrate fauna species are supported throughout the area. The invertebrate fauna includes several rare butterflies: including the Langeberg Skolly, Claasens Skolly, Southey's Copper, Coastal Blue and Teare's Opal; as well as the Critically endangered Dickson's Opal.

The threatened honey badger and Cape Greater Gerbil were also recorded in the past along with smaller mammals that inhabit the fynbos vegetation such as Hottentot Golden Moles, Long-Tailed Forest Shrew, Cape Hare, Namaqua Rock Mouse, Water Rat and the White-Tailed Mouse are also found in the greater Mossel Bay area.

Animals usually associated with riverine vegetation and found along the rivers in Mossel Bay include Vervet Monkeys, Southern Cape Bushbuck, Cape Clawless Otter, Water Mongoose, Bush Gig and Blue Duiker.

The area is furthermore known to support many reptile species of special concern including the parrot-beaked, angulate and leopard tortoises, the Knox's Desert and Blue-Spotted Girdled Lizard as well as the Cape and Little Karoo Dwarf Chameleons. The Blue Crane, Denham's Bustard and the Agulhas Long-Billed lark are the most significant endangered

and endemic species of birds amongst the estimated 300 species of birds that visit or reside within the Mossel Bay municipal area. (*3rd IDP Review 2020/2021*)

The Klipheuwel Dam adjacent to the site is known for attracting a vast array of avifauna to the area. The farm is included as part of a larger game fenced area which is utilized for grazing of several antelope species.

C-2 SOCIAL ENVIRONMENT

C-2.1 Visual and Cultural Landscape

While the NHRA does not clearly define the term “cultural landscape”, it is briefly referred to in the schedule of definitions. Based on local and international best-practice and within the context of definitions assigned to the terms heritage resource, place and cultural significance, cultural landscape can be defined as “A place of cultural significance, which engenders qualities relating to its aesthetic, architectural, historical, scientific, social, spiritual, linguistic, technological, archaeological or palaeontological value” (Winter & Oberholzer 2014).

This landscape tends to be less accessible, hilly and rugged, with limited agriculture along the higher-lying plateaus towards the north and lower-lying river corridors closer to the coastline. Much of this landscape has been incorporated into private game reserves during the last decade or so and is therefore likely to once again revert to a natural landscape over the long term. Areas closer to the coastline have mostly been transformed through low density urban development, which has significantly eroded the quality of the cultural landscape. Whilst retaining natural beauty within the northern half of this area, few if any historic elements, which could provide a sense of historic continuity, seem to have survived until present day. From this perspective therefore, the entire area is considered of low local historic, aesthetic and social cultural significance (Grade IIIC). (Webley, 2016)

It is a landscape with diversity but its rural character and similar agricultural practices create uniformity over the entire area. The region consists of a reasonable percentage of cultivation, but due to the varied topography, natural ecosystems are more readily found.

From a visual perspective the site is most hidden from surrounding viewpoints as the site is located within a small basin. The site is only visible from the adjacent landowners toward the east as well as the Gonnakraal gravel road leading towards Botlierskop Private Game Reserve. Botlierskop Game Reserve conserves approximately 3500ha of natural and semi-natural ecosystems. These areas are considered natural, although fragmented cultivation occurs between the reserves.

It is anticipated that the introduction of a 19m dam wall will result in some visual impacts from this area. The dam wall is however to be constructed in between two koppies, thus a level of visual absorption capacity is anticipated. Furthermore, it will be required that the dam wall be rehabilitated with indigenous vegetation species which will furthermore reduce the possible visual impacts which may occur.

C-2.2 Archaeological and Palaeontological Resources

The greater Klein Brak River area is known to include numerous areas of archaeological importance. A large portion of the site has previously been ploughed and cultivated.

A few caves and rock shelters have been recorded in rocky outcrops and in incised valleys and gorges inland from the coast. Some contain LSA archaeological material and have the potential to be significant. At Botlierskop a koppie was previously identified by Webley (2016) which may contain archaeological sites and it was noted that others may exist. Ruined farmhouses, including barns, kraals and stone walling are considered colonial archaeology.

Sections in the greater area have conservatively been regarded as moderate to high sensitivity in palaeontological heritage terms. In practice, however, the likelihood of significant negative impacts on fossil heritage on the ground is low because the bedrocks here are often highly weathered, tectonically-deformed or covered by a substantial thickness of fossil-poor superficial deposits (scree, alluvium, soils etc) Webley (2016).

A NID was submitted to the Heritage Western Cape dated **29 July 2020** and was discussed at the Heritage Officers Meeting on the 3rd of August 2020. A response to the NID was issued dated **7 August 2020** with Case Number 20031905SB0728E. The Heritage Western Cape resolved that;

“since there is reason to believe that the proposed dam on portion 13 and portion 3 of Farm 143 Farm Klipheuvel, Kleinbrak, Mossel Bay will impact on heritage resources, HWC requires that a Heritage Impact Assessment (HIA) that satisfies the provisions of section 38(3) of the NHRA be submitted. This HIA must have specific reference to the following:

- palaeontological desktop study and archaeological foot survey

The required HIA must have an integrated set of recommendations.

Please note, should you require the HIA to be submitted as a Phased HIA, a written request must be submitted to HWC prior to submission. HWC reserves the right to determine whether a phased HIA is acceptable on a case by case Basis.

The comments of relevant registered conservation bodies; all Interested and Affected parties; and the relevant Municipality must be requested and included in the HIA where provided. Proof of these requests must be supplied.”

A suitably qualified Archaeologist have been approached by the EAP to undertake the required Heritage Impact Assessment in line with the requirements from the Heritage Western Cape as outlined above.

SECTION D: PUBLIC PARTICIPATION

D-1 PUBLIC PARTICIPATION PROCESS

Public participation is the involvement of all parties who potentially have an interest in a development or project or be affected by it. The principal objective of public participation is to inform and enrich decision-making. This is also its key role in the Scoping Report.

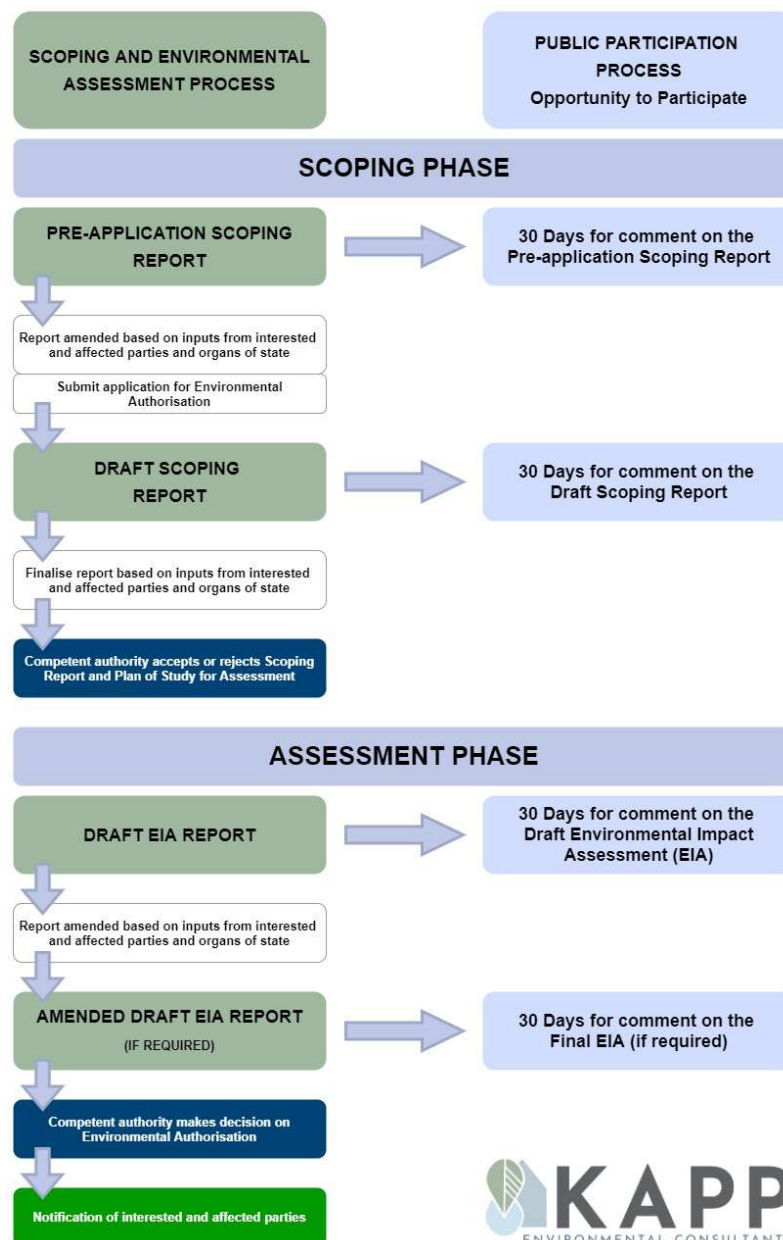


Figure 25: The Public Participation Process

Compiled by Kapp Environmental Consultants

D-2 PROCESS FOLLOWED TO DATE

The **initial** required public participation processes during the circulation of the Pre-Application Scoping Report commenced on Friday the 4th of December 2020. Time for registration and comment as per the Newspaper Advertisement and the Site Notice boards was given until Thursday 28th of January 2021 (33 days). The Pre-Application Scoping Report was circulated to all commenting authorities and identified Interested and Affected Parties on Monday the 7th of December 2020 and time for registration and comment was given until the 1st of February 2021 (33 days). The Initial PP process included following:

D-2.1 Published Newspaper Advertisement

An advertisement, notifying the public of the Environmental Impact Assessment process and requesting Interested and Affected Parties (I&APs) to register with and submit their comments to Kapp Environmental Consultants (KAPPEC), was placed in the Mossel Bay Advertiser Newspaper on **Friday 4th of December 2020**. I&AP's were given until **Thursday 28th of January 2021** (33 days) to register or provide comment on the *Pre-Application Draft Scoping Report* (*Please refer to the proof of Newspaper Advertisement in Section J as Appendix 1(a)*).

D-2.2 Proof of Site notice

To inform surrounding communities and immediately adjacent landowners of the proposed development, 6 site notices were erected on and around the site at strategic locations on **Monday the 7th of December 2020** (*Please refer to the proof of Site Notices in Section J as Appendix 1(b)*).

- Two notices were placed at the intersection of Moordkuil Sint Road and the Gonnakraal gravel road leading towards Botlierskop Private Game Reserve;
- One notice was placed off the Gonnakraal gravel road at the nearest location to pipeline route alternative 1;
- One notice was placed at the existing access to the site off Moordkuil Sint Road;
- One notice was placed on the existing game fence on site near the proposed location of the dam wall;
- One notice was placed at the intersection of Moordkuil Sint Road and the gravel road extension of Sandhoogte Road leading past Rooiheuvel Farm;

D-2.3 Proof of Notification of Identified I&AP

Key stakeholders comprising of the following sectors, were directly informed of the proposed development by mail on the **Monday the 7th of December 2020** (*Please refer to the proof of notification in Section J as Appendix (c)*).

Direct notification via email to the following entities:

- Cape Nature
- Eden District Municipality
- Mossel Bay Municipality: Environmentalist
- Mossel Bay Municipality:
- Breede Gouritz Catchment Management Department
- Department of Agriculture Forestry and Fisheries
- Western Cape Department of Agriculture
- DEA&DP: Biodiversity and Coastal Management
- WESSA
- Department of Transport and Public Works
- Midbrak Ratepayers Organization
- Local Ward Councillor – Ward 4

All I&APs have been notified via email containing a link to download electronic copies of the documentation via weTransfer and Dropbox as well as a link to the EAP's website. Should I&APs not be able to download the documents, electronic copies will be provided on CD or flash (as per I&AP requirement).

D-2.4 Concerns Raised by I&AP's

Interested and affected parties are to register and forward any comments by email, fax or telephone. A compiled I&AP database is attached as Appendix 1(d). The I&AP's comments will be captured on a database, acknowledged, and forwarded to the relevant specialists for their consideration if required.

D-2.5 Draft Scoping Report for Public Review

Comments on the Pre-Application Scoping Report were incorporated into the *Draft* Scoping report and circulated for an additional 30-day Public Review **from Tuesday the 28th of May until Monday the 1st of July 2024**. All comments and one additional registration have been incorporated into the comments and response report as part of the Final Scoping Report to be submitted to the Department.

D-3 COMMENT AND RESPONSE REPORT

A Comments and Response report have been kept and will be again made available with the Draft EIA Report for Public Review. Attached please find the Comment and Response Report in Section J as Appendix (g).

D-4 PUBLIC PARTICIPATION PROCESS APPENDICES

- (a) Proof of Newspaper Advertisement;
- (b) Proof of Site Notices;
- (c) Proof of Notification with Executive Summary to I&APs and landowners;
- (d) Proof of Executive Summary Delivery to surrounding landowners;
- (e) Proof of Draft Scoping Report Review;
- (f) Database of Contacted and Registered I&AP's;
- (g) Comments and Response Report.

SECTION E: ALTERNATIVES

The identification of alternatives is an important component of the EIA process. Where possible, alternatives will be identified and investigated. The various alternatives will be assessed in terms of both environmental acceptability as well as economically feasibility. The preferred option will be highlighted and presented to the authorities in the EIR Report.

The following alternatives have been identified:

- Dam Design Preferred Alternative.
- Dam Design Alternative 1.
- Water Supply Pipeline Route Preferred Alternative.
- Water Supply Pipeline Route Alternative 1.
- River Crossing Preferred Alternative.
- River Crossing Alternative 1.
- The no-development alternative.

SECTION F: KEY ENVIRONMENTAL ISSUES

F-1 IDENTIFICATION OF KEY ENVIRONMENTAL ISSUES

The key issues listed in the following section have been determined through an internal process based on experience with similar applications, environmental scoping and public participation process as well as site visits. A baseline description of the environment was gathered through historical information and available reports, visual inspections of the site and its surroundings, desktop studies as well as preliminary specialist recommendations. This information was used to assess the potential areas of study, as a result of the proposed Oudrift dam development.

The identified key issues identified include:

1. Terrestrial Vegetation Impacts;
2. Freshwater Resources Impacts;
3. Impacts to the Ecological Reserve;
4. Impact on Archaeological resources;
5. Impact on Palaeontological resources;
6. Impacts on Faunal Species;
7. Potential Visual Impacts;
8. Impacts on Agricultural resources;

As a result of the above-mentioned anticipated impacts, it is recommended that the specialist studies as listed below, be undertaken during the EIA phase of the process or alternatively that the existing reports be updated. The specialist studies assist with the development of an understanding of the system processes and the potential positive and negative impacts of the proposed development on both the social and biophysical environments:

- 1) Botanical Impact Assessment – *MB Botanical Surveys* Dr Mark Berry
- 2) Aquatic Biodiversity Impact Assessment – *BlueScience* Toni Belcher
- 3) Heritage Impact Assessment – *ACO* David Halkett

- 4) Agricultural Compliance Statement – *Land Matters Consulting* Dr. Rowena Harrison
- 5) Paleontological Impact Assessment - *Natura Viva cc* Dr John E. Almond (Cantab.)
- 6) Geotechnical Assessment – To be confirmed
- 7) Terrestrial Animal Species Compliance Statement – *Nelson Mandela University*
George Campus Prof. Jan A. Venter
- 8) Civil Aviation Compliance Statement – *Tappas Consulting* Tobie du Toit

Further details associated with the construction and operation of the various activities as listed in the Project Description will be discussed in more detail in the EIA Report. The EIA Report will assess the impacts of each of the activities and the cumulative impacts of the development. The EIA Report will outline the necessary mitigation measures and delineate sensitive areas possibly containing species of conservation importance and habitats integral to maintenance of ecosystem function.

F-2 SUMMARY OF ANTICIPATED IMPACTS

Table 8: Summary of anticipated impacts as identified during the Scoping phase.

Environmental Aspect	Relevant Area	Environmental Objective	Potential Impacts	Additional Investigations	Potential Mitigation
ENVIRONMENTAL					
Ecological and Ecosystems Impacts	Site and Surrounds	To ensure that no ecological processes be undermined or interfered with as a result of the development.	The site falls inside the Mossel Bay Biodiversity Network, with almost the entire site and surrounding area mapped as a critical biodiversity area (CBA). Reasons for this are multifold, including the importance of the area as a climate adaption corridor, the presence of threatened vegetation types and water resource protection. It was previously noted that most of the intact vegetation in the Mossel Bay interior is found on the steeper hill slopes. These areas are thus considered of great value in the biodiversity network.	Biodiversity Assessment	To be determined during the EIA phase.
Terrestrial Botanical Resources	Site and Region	To ensure that no significant and valuable flora be destroyed as a result of the proposed development.	A number of rare and endemic plant species and habitats such <i>Tulista kingiana</i> (Endangered), <i>Haworthia pygmaea</i> , <i>H. parksiana</i> (Critically Endangered) and <i>H. retusa</i> , are known to occur in the area and have a high conservation status.	Biodiversity Assessment	To be determined during the EIA phase.

Environmental Aspect	Relevant Area	Environmental Objective	Potential Impacts	Additional Investigations	Potential Mitigation
Impact on Faunal and Avifaunal Species.	Site and Region	To ensure that no significant and valuable faunal or faunal or avifaunal species or habitat are impacted upon as a result of the proposed Oudrift Dam development.	Inundation of the site might have a negative impact on vertebrate and invertebrate fauna as well as habitat destruction of avifaunal species.	Animal Species Compliance Statement	To be determined during the EIA phase.
Impact on Agricultural Resources	Site and Region	To ensure that no significant and valuable agricultural land are lost as a result of the proposed Oudrift Dam development.	Inundation of the site might have a negative impact on the land future agriculture.	Agricultural Compliance Statement	To be determined during the EIA phase.
Impacts on Freshwater Ecosystems including the Klein Brak River Estuary	Site and surrounds	To ensure that the development does not negatively impact on the integrity of the Moordkuil River through siltation and to ensure that the Ecological Reserve is upheld as well as to ensure that the Ecological Water Requirements of the Klein Brak River Estuary is not negatively impacted upon.	Siltation of the Moordkuil River. The loss of ecological function of the Moordkuil River and destruction of downstream freshwater and estuary ecosystems.	Freshwater Impact Assessment and Ecological Reserve Determination and comment on impacts to Ecological Water Requirement for the Klein Brak River Estuary.	Compensation Water Releases back to the Moordkuil River have been incorporated into the Dam Design. Additional mitigation to be determined during the EIA phase.
SOCIAL & SURROUNDINGS					
Archaeology and Palaeontology	Site	To ensure that all artefacts and symbols of cultural significance and heritage significance are identified and preserved.	Loss of heritage and culturally significant artefacts.	An Archaeological impact assessment including foot survey and desktop Palaeontological assessment.	To be determined during the EIA phase.
Impacts of Civil Aviation	Local Region	To ensure that the proposed Oudrift Farm Dam does not interfere with the Obstacle Limited Surfaces of airports in the vicinity of the project area or will not interfere with any other aviation promulgated areas.	Interference with civil aviation safety.	Civil Aviation Compliance Statement	To be determined during the EIA phase.

Environmental Aspect	Relevant Area	Environmental Objective	Potential Impacts	Additional Investigations	Potential Mitigation
Visual	Site and surrounding area	To ensure that the visual impacts of the Oudrift dam development on the surrounding area and scenic roads will be minimized.	There may be concern that the proposed development will have a visual impact on the surrounding rural area from the Gonnakraal gravel road.	None Foreseen.	Rehabilitation of the dam wall with indigenous vegetation to mitigate visual impacts and increase visual absorption capacity.
Socio Economic Impacts	Local Region	To ensure the Oudrift Farm Dam development does not negatively impact upon any groups or economies.	Water is limited natural resource and it should be evident that a Dam Development does not negatively influence the existing socio-economic climate or any downstream water users of the Moordkuil River.	Possible Socio – Economic Baseline Assessment to inform the WULA especially but also the EIA report.	To be determined during the EIA phase.

F-3 METHODOLOGY FOR EIA PHASE

Impact identification and assessment methodology

The identification and assessment of environmental impacts is a multi-faceted process, which combines quantitative and qualitative descriptions and evaluations. It involves the application of scientific measurements and professional judgement to determine the significance of environmental impacts associated with the proposed project. The process involves consideration of *inter alia*: the purpose and need for the project; views and concerns of interested and affected parties, general public interest; and environmental legislation and guidelines.

The generic criteria and systematic approach used to identify, describe and assess impacts are outlined below. The assessment of the impacts has been conducted according to a synthesis of criteria required by the integrated environmental management procedure.

Specialist Studies

The following specialist studies will be undertaken during the EIA phase of the process in order to assist with the development of an understanding of the system processes and the potential impacts of the proposed development on both the social and biophysical environments:

- 1) Botanical Impact Assessment – *MB Botanical Surveys* Dr Mark Berry
- 2) Aquatic Biodiversity Impact Assessment – *BlueScience* Toni Belcher
- 3) Heritage Impact Assessment – *ACO* David Halkett
- 4) Agricultural Compliance Statement – *Land Matters Consulting* Dr. Rowena Harrison
- 5) Paleontological Impact Assessment - *Natura Viva* cc Dr John E. Almond (Cantab.)
- 6) Geotechnical Assessment – To be confirmed
- 7) Terrestrial Animal Species Compliance Statement – *Nelson Mandela University George Campus* Prof. Jan A. Venter
- 8) Civil Aviation Compliance Statement – *Tappas Consulting* Tobie du Toit

The results of the specialist studies will be analysed and interpreted in order to assess the potential impacts of the proposed development on the system, devise potential alternatives to select activities and develop the necessary mitigation measures in order to minimise negative impacts and optimise positive impacts. The specialist recommendations will be incorporated in the Environmental Management Programme (EMPr).

The following time frame is anticipated with regards to the way forward:

Table 9: Anticipated EIA Process Timeframes

Activity	Estimated Timeframe
Submit NEMA Application Form	15 May 2024
Incorporate I&AP comment into Draft Scoping Report 30 Day Public Review of Draft Scoping Report	28 May 2021
Incorporate I&AP comment into Final Scoping Report Submit final Scoping Report, Plan of Study for EIA to decision-making authority for a decision	2 July 2024
DEA&DP Approval of Final Scoping Report and Plan of Study for EIA	15 August 2024
Specialist Studies	December 2020 – May 2024
Finalize Draft EIA Report and make available for Public Review	28 August 2024
Incorporate I&AP comment into 2 nd Draft EIA Report 30 Day Public Review of 2 nd Draft EIA Report	September 2024 11 October 2024
Incorporate I&AP comments into Final EIA Report Submit to decision making Authorities for a decision.	November 2024 29 November 2024
Decision from Authorities	April 2024
KAPPEC informs all registered I&APs of Decision	April 2024

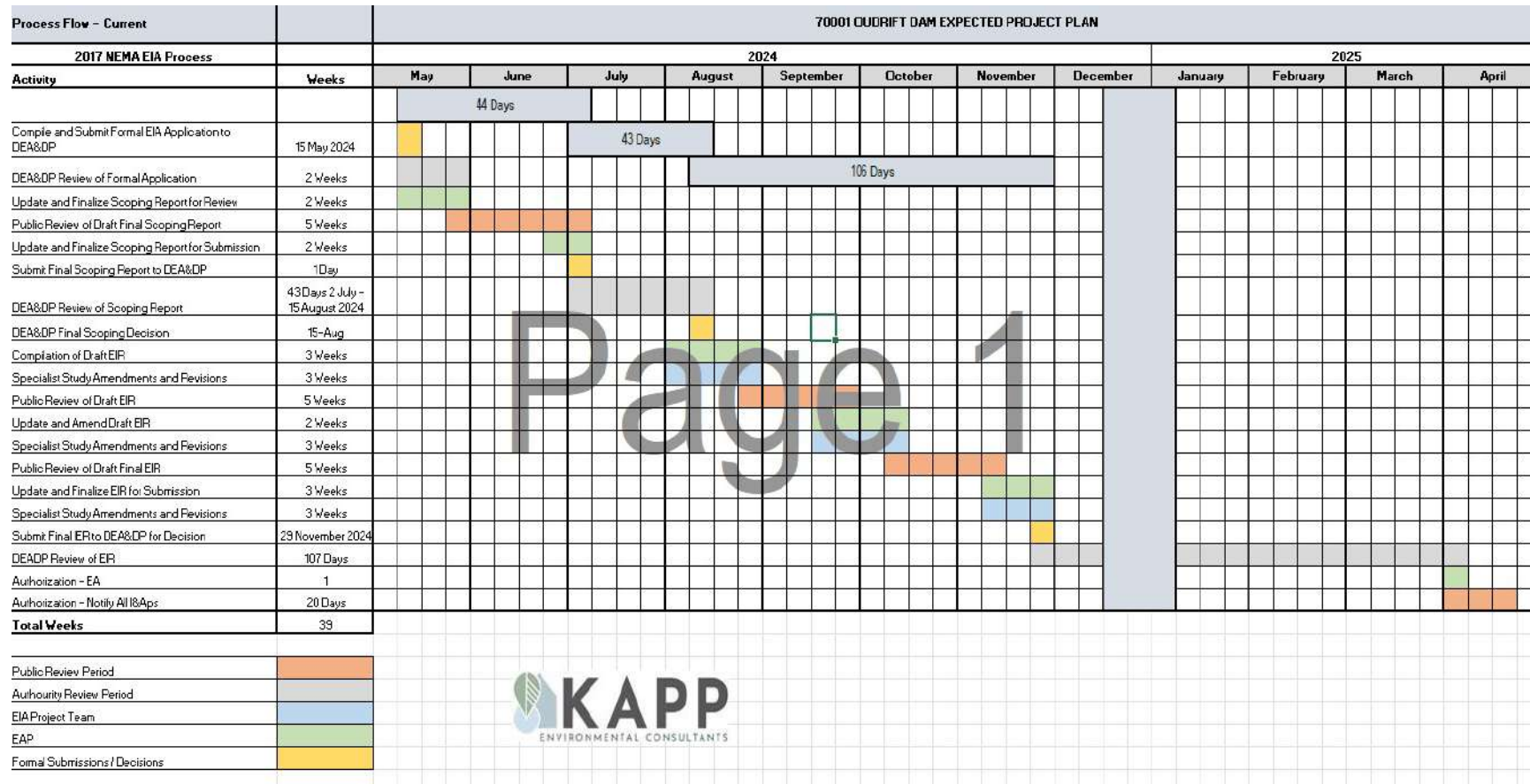


Figure 26: Anticipated Process Timeline

SECTION G: SITE SENSITIVITY REPORT

G-1. TERMS OF REFERENCE

The “Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), when applying for the Environmental Authorisation (“the Protocols”) (GN No. 320 dated 20 March 2020) came into effect on 9 May 2020. This Site Verification Report is compiled in accordance with Section 1 Site Sensitivity Verification and Minimum Report Content Requirements.

Prior to the undertaking of an environmental assessment, the current use of the site and potential environmental sensitivities of the site as identified by the national web-based screening tool must be confirmed by undertaking a site sensitivity verification. The site sensitivity verification must be undertaken by an environmental assessment practitioner or a registered specialist, and must be undertaken through:

- a) A desktop analysis, using satellite imagery,
- b) A preliminary on-site inspection, and
- c) Any other available relevant information.

The outcome of the site sensitivity verification must be recorded in a report that:

- a) Confirms or disputes the current use of the land and environmental sensitivities as identified in the Screening Tool Report;
- b) Contains a motivation and evidence of either the verified or different use of the land and environmental sensitivities; and
- c) Is submitted together with the relevant report prepared in accordance with the requirement of the Environmental Impact Assessment Regulations.

G-2. SITE SENSITIVITY VERIFICATION METHODS USED

The Environmental Assessment Practitioner (EAP) made use of the following verification methods to compile the Site Sensitivity Verification Report (SSVR):

- Desktop analysis using Google Earth, CapeFarmMapper and SANBI BGIS;
- Site inspections conducted;

G-3. FINDINGS OF THE ENVIRONMENTAL SCREENING REPORT

The table below indicates the relevant environmental sensitivities that have been identified by the Screening Tool and associated level of each environmental sensitivity allocated to each theme.

Table 10: Environmental Screening Tool Sensitivities Identified

Theme	Level of Sensitivity
Agriculture Theme	High
Animal Species Theme	High
Aquatic Biodiversity Theme	Very High
Archaeological and Cultural Heritage Theme	Low
Civil Aviation Theme	Medium
Defence Theme	Low
Paleontological Theme	Very High
Plant Species Theme	Medium
Terrestrial Biodiversity Theme	Very High

G-4. SITE SENSITIVITY VERIFICATION FINDINGS AND EVIDENCE

The table below serves to;

- Verify land use and theme sensitivities identified in the screening report; and
- Confirm / contest the need for the various specialist inputs called for in terms of the screening tool report.

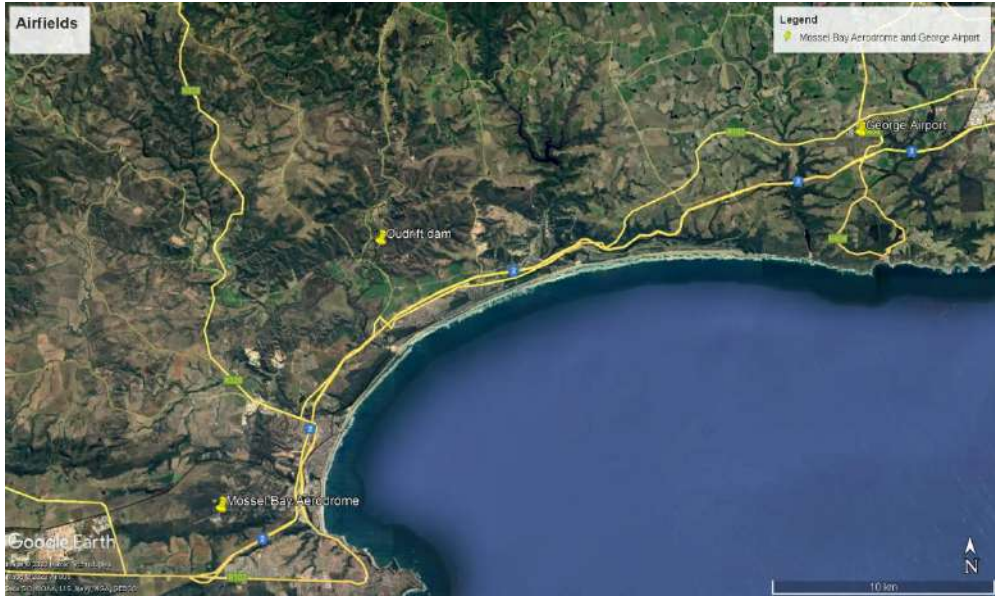
Table 11: Sensitivity Theme Verification

Sensitivity and requirements identified per the Screening Tool Report as generated.	EAP verification and motivation of actual sensitivity including the recommended need for specialist involvement.
Agricultural Theme: High sensitivity Necessitating either an Agricultural Agro-Ecosystem Specialist Assessment or Agricultural Compliance Statement	The DEFF Screening Tool Report considers the proposed development footprint to have a High agricultural sensitivity. Remainder Portion 3 of Farm 143 Klipheuvel comprises 28.15ha in extent and is registered to the applicant Klipheuvel Trust. Remainder Portion 3 of Farm 143 Klipheuvel comprises 21.17ha in extent and was previously registered to Walter Robertson. The dam wall will be constructed and a section of this property and consent has been obtained from the landowner. Both these properties are currently zoned Agriculture I. Surrounding land uses comprise mostly dairy farming, as dairy farms have transformed much of the surrounding landscape north of the N2, with only the hilly areas and steeper slopes remaining untransformed. Botlierskop Private Game Reserve is located to the immediate north and east of the site. Dairy farms are located further east and southeast of the site. Toward the west is the Moordkuil River and opposite the River are fallow agricultural land with varying levels of alien infestation. Southwest and opposite the Moordkuil River is one smallholding with several structures present. Further south and downstream are more irrigated grazing areas for dairy cattle as well as significant guava orchards. The Mossel Bay Spatial Development Framework (2018) designates the

	location where the Oudrift Dam is to be constructed as Critical Biodiversity Area Core 1b and Intensive Agricultural Areas which should be protected and expanded as agricultural facilities. An Agricultural Compliance Statement has been commissioned to ensure that the Intensive Agricultural Areas are retained during the proposed development. Land Matters Environmental Consulting (Pty) Ltd represented by Dr. Rowena Harrison has been appointed to conduct the Agricultural Compliance Statement. Together with the above the Department of Agriculture has issued a comment on the 12th of Feb 2021 which states that there are no objections against the proposed development.
Animal Species Theme: High sensitivity Necessitating either a Terrestrial Animal Species Specialist Assessment Report or a Terrestrial Animal Species Compliance Statement, depending on the outcome of a site inspection.	The DEFF Screening Tool Report considers the proposed development footprint to have a high Animal Species theme sensitivity. Although the greater Mossel Bay landscape is highly transformed, with up to 43% of land cover being highly transformed, a significant number of endemic vertebrate and invertebrate fauna species are supported throughout the area. The invertebrate fauna includes several rare butterflies: including the Langeberg Skolly, Claasens Skolly, Southey's Copper, Coastal Blue and Teare's Opal; as well as the Critically endangered Dickson's Opal. The threatened honey badger and Cape Greater Gerbil have been recorded along with smaller mammals that inhabit the fynbos vegetation such as Hottentot Golden Moles, Long-Tailed Forest Shrew, Cape Hare, Namaqua Rock Mouse, Water Rat and the WhiteTailed Mouse are also found in the greater Mossel Bay area. Animals usually associated with riverine vegetation and found along the rivers in Mossel Bay include Vervet Monkeys, Southern Cape Bushbuck, Cape Clawless Otter, Water Mongoose, Bush Gig and Blue Duiker. The area is furthermore known to support many reptile species of special concern including the parrot-beaked, angulate and leopard tortoises, the Knox's Desert and Blue-Spotted Girdled Lizard as well as the Cape and Little Karoo Dwarf Chameleons. The Blue Crane, Denham's Bustard and the Agulhas Long-Billed lark are the most significant endangered and endemic species of birds amongst the estimated 300 species of birds that visit or reside within the Mossel Bay municipal area. (3rd IDP Review 2020/2021). Consequent to the above, a Terrestrial Animal Species Compliance Statement has been commissioned for the proposed development to ensure that no significant and valuable faunal or faunal or avifaunal species or habitat are impacted upon because of the proposed Oudrift Dam

	development. Prof. Jan A. Venter associated with the Nelson Mandela University George Campus has been approached to conduct the Animal Species Compliance statement.
Aquatic Biodiversity Theme Very High sensitivity Necessitating an Aquatic Biodiversity Specialist Assessment. Proposed Sensitivity: Medium - High	The DEFF Screening Tool Report considers the proposed development footprint to have a very high Aquatic Biodiversity theme sensitivity. The site is drained by three seasonal watercourses, all of which were dry at the time of site visit conducted. A NFEPA wetland (channelled valley-bottom wetland) is mapped on the south-eastern side of the site. However, no evidence of a wetland was found during the site visit. The mapped wetland area lies on a low saddle and watershed separating the proposed dam site from the Klipheuwel Dam. The National Freshwater Ecosystem Priority Areas (NFEPA) project provides strategic spatial priorities for conserving South Africa's freshwater ecosystems and supports sustainable use of water resources. These priority areas are commonly referred to as NFEPA's. The Klipheuwel Dam is located directly south of the proposed Oudrift Dam site. The dam is administered by the Department of Water and Sanitation and the dam provides potable water to the Klein Brak Water Treatment Works, for reticulation to adjacent urban areas. The dam is filled by existing pump installation on the eastern (left) bank of the Moordkuil River near the existing lawful pump installation of the applicant.  Figure 27: Mapped water resources.

	The site is located within the K10F quaternary catchment and thus any construction of storage in terms of Section 39 for General Authorisations is only allowed up to 2 000m³. Any increase in storage may therefore only be executed subject to authorisation from the National Department of Water and Sanitation through Section 40 onwards. It should also be taken into consideration that no application will be lodged in terms of Section 21(a) – for the taking of water from the Moordkuil River and thus the impacts to the Estuary are anticipated to be negligible. Furthermore, the engineering design proposals will allow for water compensation releases whereby the minor runoff from the catchment will be determined and released via a dedicated pipeline to the Moordkuil River. The proposed Oudrift Dam site is located adjacent to the lower reaches of the Moordkuil River. According to the Cape Farm Mapper GIS mapping, this section of the Moordkuil River forms part of the Estuarine functional zone. Accordingly, a Freshwater Impact Assessment and Ecological Reserve Determination has been commissioned to be undertaken by BlueScience represented by Antonia Belcher in order to inform the Ecological Reserve and the possible impacts the construction might have on achieving the Ecological Water Requirement for the Klein Brak River Estuary
Archaeological and Cultural Heritage Theme Low sensitivity No specific protocol necessitating and the HWC will be approached.	The DEFF Screening Tool Report considers the proposed development footprint to have a low Archaeological and Cultural Heritage Theme sensitivity. It is proposed that the dam area will comprise 72 960m² and the total development footprint will comprise 10.5Ha. The Full Supply Level (FSL) volume for the dam is 472 109m³. The dam wall will have a total height of 19 metres resulting in a maximum dam depth of 18 metres. The development of the dam will further include the construction of a dam wall with a crest of approximately 121m in length. The proposed development will change the character of the site from predominantly fallow agricultural area to a dam and will exceed 5000 m². Furthermore, Section 38(1)(a) will also be triggered. A Notice of Intent to Develop (NID) was submitted to Heritage Western Cape (HWC) outlining the proposed development. The HWC requested that an HIA must be submitted with specific reference to the following: - palaeontological desktop study and archaeological foot survey

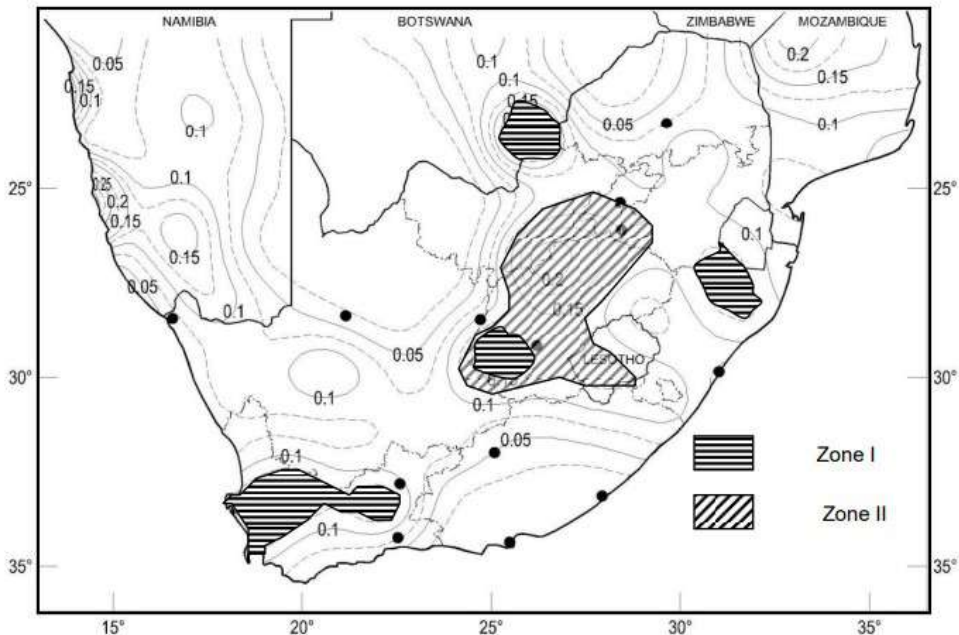
	The required HIA must have an integrated set of recommendations. The Archaeological Contracts Offices Mr David Halkett was commissioned to undertake the Heritage Impact Assessment with specific reference on the Archaeological impacts.
Civil Aviation Theme Medium sensitivity Necessitating a Civil Aviation Compliance Statement.	The DEFF Screening Tool Report notes that the site is located within 8 km of other civil aviation aerodromes, between 15 and 35 km from a civil aviation radar and between 15 and 35 km from a major civil aviation aerodrome. These features have been considered as medium aviation sensitivities. The site is located approximately 12km from the Mossel Bay airfield and 23km from the George Airport.  Figure 28: The site in relation to the Mossel Bay airfield and George Airport A Civil Aviation Compliance Statement has been commissioned to be conducted by Tappas Aviation Consultant to ensure that the proposed construction of the dam does not impact airspace restrictions or any other observed consequences, such as the Obstacle Limited Surfaces and Approach and Take-Off & Climb Flight Paths Surfaces of the George and Mossel Bay Airports. Together with the above no military installations and no promulgated Danger, Restricted and Prohibited areas according to the South African Civil Aviation Authority (SACAA) listed in the vicinity of the proposed development area.

Defence Theme Low sensitivity Necessitating no further assessment. Actual Sensitivity: Low - Negligible	The DEFF Screening Tool Report considers the proposed development footprint to have a low Defence Theme sensitivity. The EAP concurs with this sensitivity rating and as such no further assessment into this theme and associated impacts are required.
Paleontological Theme Very high sensitivity No specific protocol necessitating and the HWC will be approached.	The DEFF Screening Tool Report considers the proposed development footprint to have a very high Paleontological Theme sensitivity. It is proposed that the dam area will comprise 72 960m² and the total development footprint will comprise 10.5Ha. The Full Supply Level (FSL) volume for the dam is 472 109m³. The dam wall will have a total height of 19 metres resulting in a maximum dam depth of 18 metres. The development of the dam will further include the construction of a dam wall with a crest of approximately 121m in length. The proposed development will change the character of the site from predominantly fallow agricultural area to a dam and will exceed 5000 m². Furthermore, Section 38(1)(a) will also be triggered. A Notice of Intent to Develop (NID) was submitted to Heritage Western Cape (HWC) outlining the proposed development. The HWC requested that an HIA must be submitted with specific reference to the following: - palaeontological desktop study and archaeological foot survey The required HIA must have an integrated set of recommendations. The Archaeological Contracts Offices Mr David Halkett was commissioned to undertake a Heritage Impact Assessment and Dr J Almon was subcontracted to conduct a desktop assessment Paleontological Assessment for inclusion in the HIA.
Plant Species Theme Medium	The DEFF Screening Tool Report considers the proposed development footprint to have a medium Plant Species theme sensitivity. The site falls inside the Mossel Bay Biodiversity Network, with almost the entire site and surrounding area mapped as a critical biodiversity area

sensitivity Necessitating either a Terrestrial Plant Species Specialist Assessment Report or a Terrestrial Plant Species Compliance Statement.	(CBA). Reasons for this include the importance of the area as a climate adaption corridor, the presence of threatened vegetation types and water resource protection. It was previously noted that most of the intact vegetation in the Mossel Bay interior is found on the steeper hill slopes. The 2012 Vegetation Map of South Africa classifies the main vegetation types found on site as Groot Brak Dune Strandveld and South Outeniqua Sandstone Fynbos. The mapped area of Groot Brak Dune Strandveld is, however, incorrect for the area north of the N2. In the latest (2018) beta version Vegetation Map, the area on site previously mapped as Groot Brak Dune Strandveld has been (still incorrectly) remapped as Garden Route Granite Fynbos. Vlok has mapped it more correctly as Brandwag Fynbos-Renoster-Thicket1. Groot Brak Dune Strandveld, described as a dense and tall, spiny, sclerophyllous scrub, occurs on stabilised dunes much closer to the coastline south of the N2. A Botanical Impact Assessment has been commissioned confirming the sensitivity of the site and the potential impact of the proposed development on terrestrial biodiversity by Dr Mark Berry to ensure that no significant or valuable, rare and endemic plant species and habitats with a high conservation status are destroyed Species of Conservation Concern and protected tree species (in terms of the National Forests Act 84 of 1998) will also be recorded.
Terrestrial Biodiversity Theme Very High sensitivity Necessitating a Terrestrial Biodiversity Specialist Assessment.	The DEFF Screening Tool Report considers the proposed development footprint to have a very high Terrestrial Biodiversity theme sensitivity. The site is located inside a CBA corridor network that runs along the foothills of the Mossel Bay interior and connects with Outeniquas (Doringrivier Wilderness Area and Ruitersbos Nature Reserve) to the north. Apart from providing a backbone to the local biodiversity network, the corridor(s) serves as an important passage along which fauna can migrate between the mountain and the foothills and along the foothills itself. A Botanical Impact Assessment has been commissioned confirming the sensitivity of the site and the potential impact of the proposed development on terrestrial biodiversity by Mark Berry as briefly discussed above.

Table 12: Additional Specialist Studies Required

Additional specialist studies requested as per the Screening Report	
Noise Impact Assessment	The development will generate additional noise impacts both during the construction and operational phase. However, there are no sensitive noise receptors in the immediate vicinity of the site. Surrounding land uses comprise mostly dairy farming, as dairy farms have transformed much of the surrounding landscape north of the N2, with only the hilly areas and steeper slopes remaining untransformed. Botlierskop Private Game Reserve is located to the immediate north and east of the site. Dairy farms are located further east and south east of the site. Toward the west is the Moordkuil River and opposite the River are fallow agricultural land with varying levels of alien infestation. South west and opposite the Moordkuil River is one smallholding with several structures present. Further south and downstream are more irrigated grazing areas for dairy cattle as well as significant guava orchards. Noise impacts during the construction phase will be mitigated in line with the mitigation measures in the Environmental Management Programme. A specialist noise impact assessment will thus not be included.
Hydrology	An Aquatic Biodiversity Specialist Assessment Report will be conducted according to the 2020 NEMA protocols for any further discrepancies that may arise around this point. The Aquatic Biodiversity Specialist Assessment will be provided to DEA&DP as part of the Draft EIA Report. Should the Aquatic Specialist require any additional Hydrology inputs, these will be commissioned.
Geotechnical Impact Assessment	This information will be required to confirm the geotechnical integrity of the site for development. A Geotechnical Assessment will be submitted as part of the Draft EIA Report.
Socio-Economic Assessment	The applicant is in need of storage capacity as changing precipitation patterns not only dictate the need for an increase in assurance of yield, but also as protection from the increased use of water for irrigation in the upper reaches of the Moordkuil River (the K10E and K10F quaternary catchments). The applicant wishes to construct a dam on his property to manage his water allocations throughout the year as required. Secure water supply will ensure that farming continues with the associated support

	of the local economy and continued employment for local workers. A specialist Socio-Economic Assessment will not be undertaken.
Seismicity Assessment	Seismic impact assessment is carried out on the basis of scientific support, engineering and geophysical works. An assessment of seismic impacts and seismic impacts is carried out during the design, construction and operation of unique industrial and civil facilities. A Seismic Impact Assessment Report addresses the risks posed by earthquakes and associated phenomena such as landslides, liquefaction and tsunamis on the proposed development. The surrounding area of Mossel Bay has experience seismic activity of a magnitude of 2.1 - 3.0 between 1811-2014. Furthermore, according to the South African National Standard Seismic Hazard Map and Hazard Zones (SANS, 2017) the proposed development is not located within either Zone I or II.  Figure 29: South African National Standard Seismic Hazard Map and Hazard Zones (SANS, 2017). According to the Technical Report compiled by Gorra Water there is a one in a million chance of any seismic activity to occur on the proposed site. <i>“with the proximity to the various habituated areas and the risk imposed by the Klipheuwel Dam, the APP considered it prudent to at least consider this eventuality. This first level assessment found that a maximum credible earthquake of magnitude $5,00 \pm 0,50$ could be considered for a radius of</i>

	<i>100 km from the dam site. A deterministic assessment of the median values of the maximum credible horizontal and vertical ground accelerations at the site yields values of 0,21g (178,3 cm.s-2) and 0,19g (186,39 cm.s-2) respectively. This is based on the worst case scenario. A probabilistic assessment of the peak ground acceleration indicated that such an event has one in a million chance of occurrence at the site.</i> <i>For design purposes, horizontal ground acceleration of 0,05g and vertical ground acceleration of also 0,05g for the static stability analyses were accepted. There is therefore no need for a dynamic stability analyses performed for the ground accelerations obtained by a detailed seismic probability study”.</i>
Landscape/Visual Impact Assessment	This landscape tends to be less accessible, hilly and rugged, with limited agriculture along the higher-lying plateaus towards the north and lower-lying river corridors closer to the coastline. Much of this landscape has been incorporated into private game reserves during the last decade or so and is therefore likely to once again revert to a natural landscape over the long term. Areas closer to the coastline have mostly been transformed through low density urban development, which has significantly eroded the quality of the cultural landscape. Whilst retaining natural beauty within the northern half of this area, few if any historic elements, which could provide a sense of historic continuity, seem to have survived until present day. From this perspective therefore, the entire area is considered of low local historic, aesthetic and social cultural significance (Grade IIIC). (Webley, 2016) It is a landscape with diversity but its rural character and similar agricultural practices create uniformity over the entire area. The region consists of a reasonable percentage of cultivation, but due to the varied topography, natural ecosystems are more readily found. From a visual perspective the site is most hidden from surrounding viewpoints as the site is located within a small basin. The site is only visible from the adjacent landowners toward the east as well as the Gonnakraal gravel road leading towards Botlierskop Private Game Reserve. Botlierskop Game Reserve conserves approximately 3500ha of natural and seminatural ecosystems. These areas are considered natural, although fragmented cultivation occurs between the reserves. It is anticipated that the introduction of a 19m dam wall will result in some visual impacts from this area. The dam wall is however to be constructed in

	between two koppies, thus a level of visual absorption capacity is anticipated. Furthermore, it will be required that the dam wall be rehabilitated with indigenous vegetation species which will furthermore reduce the possible visual impacts which may occur.
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G-5. SPECIALIST STUDY SUMMARY

Based on the above detailed sensitivities, the Screening Tool Report identifies and recommends the following twelve specialist assessments to be conducted:

- 1) Agricultural Impact Assessment
- 2) Landscape/Visual Impact Assessment
- 3) Archaeological and Cultural Heritage Impact Assessment
- 4) Palaeontology Impact Assessment
- 5) Terrestrial Biodiversity Impact Assessment
- 6) Aquatic Biodiversity Impact Assessment
- 7) Hydrology Assessment
- 8) Geotechnical Assessment
- 9) Socio-Economic Assessment
- 10) Seismicity Assessment
- 11) Plant Species Assessment
- 12) Animal Species Assessment

The following specialist studies will be conducted and included as part of the Draft EIA Report for comment:

- 1) Botanical Impact Assessment – *MB Botanical Surveys* Dr Mark Berry
- 2) Aquatic Biodiversity Impact Assessment – *BlueScience* Toni Belcher
- 3) Heritage Impact Assessment – *ACO* David Halkett
- 4) Agricultural Compliance Statement – *Land Matters Consulting* Dr. Rowena Harrison
- 5) Paleontological Impact Assessment - *Natura Viva cc* Dr John E. Almond (Cantab.)
- 6) Geotechnical Assessment – To be confirmed
- 7) Terrestrial Animal Species Compliance Statement – *Nelson Mandela University George Campus* Prof. Jan A. Venter
- 8) Civil Aviation Compliance Statement – *Tappas Consulting* Tobie du Toit

SECTION H: PLAN OF STUDY FOR EIA

The Scoping phase of the environmental process determined that further assessment on several identified impacts was required. As a follow up to the Scoping phase, a comprehensive Environmental Impact Assessment (EIA) will be required.

This Plan of Study (PoS) for the Environmental Impact Assessment (EIA) outlines the procedure to be followed and methods to be employed in investigating and assessing all the issues identified in the Scoping phase. KAPPEC has compiled this Plan of Study for EIA, which outlines the sequence of actions to be taken in order to complete the EIA process.

The Plan of Study for EIA is based on the findings and recommendations of the Scoping Report and the related process.

H-1 SCOPE OF THE EIA

The scope of the EIA includes the two properties on which the Oudrift Dam is to be constructed namely Remainder Portion 3 and Remainder Portion 13 of the Farm Kipheuvél. The scope will furthermore include the immediate surrounds and especially downstream of the Moordkuil River in terms of impacts to be assessed and ecological processes and functioning. The proposed dam development will be re-examined and possible further alternatives might be investigated, in light of the findings of the specialist studies that were mentioned in this Scoping Report.

H-1.1 Purpose of the Plan of Study for EIA

Issues and concerns raised by the I&APs and key stakeholders during the Public Participation Process, will be collected and processed in the Final Comments and Response document, which forms a part of the Final Scoping Report.

The next step of the EIA process is the development of guidelines for execution of the impact assessment and the compilation of an Environmental Impact Report (EIR). The Plan of Study for the EIR outlines these guidelines.

H-2 ENVIRONMENTAL ISSUES IDENTIFIED DURING SCOPING

The key environmental issues identified by the Scoping phase were determined through an internal process based on similar applications, desktop analysis, revision of existing information, historical data, consultation with Interested and Affected Parties and the relevant authorities such as the Department of Environmental Affairs and Development Planning (DEA&DP). Potential risk sources / impacts were identified by the KAPPEC EIA team who has been on site to appraise the environment and identify the potential impacts of the development.

This Scoping Report evaluates and highlights the most significant issues that require further investigation during the EIA. The Independent EIA assessment team of specialists will thus focus on discipline-specific problems, seeking to examine each significant issue in further detail through the relevant specialist studies. Other issues that were identified by consultation with I&APs and key stakeholders during the Scoping phase will be incorporated in the specialists' terms of reference.

The EIR will examine each issue and based on the findings of the specialist studies, assess the significance of the impacts of the development. Suitable mitigation measures for all identified impacts will be provided by all specialist studies.

The issues will be grouped into broad categories as follows:

- Key issue 1: The physical and biological environment; and
- Key issue 2: The man-made environment.

H-2.1 The physical and biological environment

In the EIA phase, the specialist studies to be conducted in the study area will need to further examine the following key impacts:

- Terrestrial Vegetation Impacts;
- Biodiversity and Ecosystems Impacts;
- Freshwater Resources Impacts;
- Impacts to Ecological Reserve;
- Impacts on Faunal and Avifaunal Species;
- Impacts on Agricultural Resources;

H-2.2 The man-made environment

The issues identified here are based on specifics such as:

- Archaeological and Palaeontological Impacts;
- Socio-Economic Impacts;
- Impacts of Civil Aviation; and
- Visual Impacts (possible).

H-3 PUBLIC PARTICIPATION PROCESS

The database of the stakeholders to be developed during the scoping process will be used as a basis to ensure that these stakeholders are involved and participate in the EIA process. The public notification process includes i.e. newspaper advertisements, notices at entrances to the site as well as on-site, distributed Executive Summary documents to relevant authorities and commenting authorities, and adjacent landowners.

Should it be necessary for a focus group meeting during the EIA phase, the necessary arrangements will be made to facilitate a meeting with the appropriate parties.

H-4 APPROACH TO THE STUDY

The specialist is to provide Terms of Reference for the approach to be used in the study. Assumptions and sources of information must also be clearly identified. The knowledge of local people should be incorporated in the study. The description of the study approach shall include a short discussion of the appropriateness of the methods used in the specialist study in terms of local and international trends and specific practice.

H-4.1 Description of the affected environment

A description of the affected environment must be provided. The focus of this description must be relevant to the specialist's field of expertise. The specialist must provide an indication of the sensitivity of the affected environment. Sensitivity, in this context, refers to the "ability" of an affected environment to tolerate disturbance, for example, if disturbance of the natural habitat results in the permanent loss of its biodiversity. If the affected environment is categorised as having a "low tolerance" to disturbance it is, therefore, termed a highly sensitive habitat. If, on the other hand, a habitat is able to withstand significant disturbance without a marked impact on its biodiversity, the affected environment could be categorised as having a high tolerance to disturbance (i. e. "low sensitivity" habitat).

H-4.2 Impact identification and assessment

The specialist must make a clear statement, identifying the environmental impacts of the construction, operation and management of the proposed Oudrift Dam development. As far as possible, the specialist must quantify the suite of potential environmental impacts identified in the study and assess the significance of the impacts according to the criteria set out below. Each impact will be assessed and rated. The assessment of the data must, where possible, be based on accepted scientific techniques, failing which the specialist is to make judgements based on his/her professional expertise and experience.

H-5 ASSESSMENT PROCEDURE

The criteria for the description and assessment of environmental impacts were drawn from the EIA Regulations, published by the Department of Environmental Affairs and Tourism (April 1998) in terms of the National Environmental Management Act, 1998 (Act No.107 of 1998) as amended.

The level of detail was somewhat fine-tuned by assigning specific values to each impact. In order to establish a coherent framework within which all impacts could be objectively assessed it is necessary to establish a rating system, which is consistent throughout all criteria. For such purposes each aspect was assigned a value, ranging from 1-5, depending on its definition.

H-5.1 Potential Impact

This is an appraisal of the type of effect the proposed activity would have on the affected environmental component. Its description should include what is being affected and how it is being affected.

H-5.2 Extent

The physical and spatial scale of the impact is classified as:

H-5.2.1 Footprint (1)

The impacted area extends only as far as the activity.

H-5.2.2 Site (2)

The impact could affect the whole, or a measurable portion of the site.

H-5.2.3 Regional (3)

The impact could affect the area including the neighbouring farms, the transport routes and the adjoining towns.

H-5.2.4 National (4)

The impact could have a national affect.

H-5.2.5 International (5)

The impact could have an affect outside the boundaries of South Africa

H-5.3 Duration

The lifetime of the impact, which is measured in relation to the lifetime of the proposed base.

H-5.3.1 Short term (1)

The impact will either disappear with mitigation or will be mitigated through a natural process in a period shorter than any of the phases.

H-5.3.2 Short to medium term (2)

The impact will last up to the end of the phases, where after it will be entirely negated.

H-5.3.3 Medium term (3)

The impact will last up to the end of the phases, where after it will be entirely negated.

H-5.3.4 Long term (4)

The impact will continue or last for the entire operational lifetime of the Development, but will be mitigated by direct human action or by natural processes thereafter.

H-5.3.5 Permanent (5)

This is the only class of impact, which will be non-transitory. Mitigation either by man or natural process will not occur in such a way or in such a time span that the impact can be considered transient.

H-5.4 Intensity

The intensity of the impact is considered here by examining whether the impact is destructive or benign, whether it destroys the impacted environment, alters its functioning, or slightly alters the environment itself. These are rated as:

H-5.4.1 Low (1)

The impact alters the affected environment in such a way that the natural processes or functions are not affected.

H-5.4.2 Medium (3)

The affected environment is altered, but functions and processes continue, albeit in a modified way.

H-5.4.3 High (5)

Function or process of the affected environment is disturbed to the extent where it temporarily or permanently ceases.

This will be a relative evaluation within the context of all the activities and the other impacts within the framework of the project.

H-5.5 Probability

This describes the likelihood of the impacts actually occurring. The impact may occur for any length of time during the life cycle of the activity, and not at any given time. The classes are rated as follows:

H-5.5.1 Improbable (1)

The possibility of the impact occurring is none, due either to the circumstances, design or experience.

H-5.5.2 Possible (2)

The possibility of the impact occurring is very low, due either to the circumstances, design or experience.

H-5.5.3 Likely (3)

There is a possibility that the impact will occur to the extent that provisions must therefore be made.

H-5.5.4 Highly Likely (4)

It is most likely that the impacts will occur at some stage of the Development. Plans must be drawn up before carrying out the activity.

H-5.5.5 Definite (5)

The impact will take place regardless of any prevention plans, and only mitigation actions or contingency plans to contain the effect can be relied on.

H-5.6 Determination of Significance – Without Mitigation

Significance is determined through a synthesis of impact characteristics, and is an indication of the importance of the impact in terms of both physical extent and time scale. The significance of the impact “without mitigation” is the prime determinant of the nature and degree of mitigation required. Where the impact is positive, significance is noted as “positive”. Significance is rated on the following scale:

H-5.6.1 Low (1)

The impact will be mitigated to the point where it is of limited importance.

H-5.6.2 Low to medium (2)

The impact is of importance, however, through the implementation of the correct mitigation measures such potential impacts can be reduced to acceptable levels.

H-5.6.3 Medium (3)

Notwithstanding the successful implementation of the mitigation measures, to reduce the negative impacts to acceptable levels, the negative impact will remain of significance. However, taken within the overall context of the project, the persistent impact does not constitute a fatal flaw.

H-5.6.4 Medium to high (4)

The impact is of great importance. Through implementing the correct mitigation measures the negative impacts will be reduced to acceptable levels

H-5.6.5 High (5)

The impact is of great importance. Mitigation of the impact is not possible on a cost-effective basis. The impact continues to be of great importance, and, taken within the overall context of the project, is considered to be a fatal flaw in the project proposal. This could render the entire development option or entire project proposal unacceptable.

H-5.7 Determination of Significance – With Mitigation

Significance is determined through a synthesis of impact characteristics. It is an indication of the importance of the impact in terms of both physical extent and time scale, and therefore indicates the level of mitigation required. In this case the prediction refers to the foreseeable significance of the impact after the successful implementation of the suggested mitigation measures. Significance with mitigation is rated on the following scale:

H-5.7.1 Low (1)

The impact will be mitigated to the point where it is of limited importance.

H-5.7.2 Low to medium (2)

The impact is of importance, however, through the implementation of the correct mitigation measures such potential impacts can be reduced to acceptable levels.

H-5.7.3 Medium (3)

Notwithstanding the successful implementation of the mitigation measures, to reduce the negative impacts to acceptable levels, the negative impact will remain of significance. However, taken within the overall context of the project, the persistent impact does not constitute a fatal flaw.

H-5.7.4 Medium to high (4)

The impact is of great importance. Through implementing the correct mitigation measures the negative impacts will be reduced to acceptable levels

H-5.7.5 High (5)

The impact is of great importance. Mitigation of the impact is not possible on a cost-effective basis. The impact continues to be of great importance, and, taken within the overall context of the project, is considered to be a fatal flaw in the project proposal. This could render the entire development option or entire project proposal unacceptable.

H-6 METHODOLOGY

Each aspect within an impact description is assigned a series of quantitative criteria. Such criteria are likely to differ during the different stages of the mining life cycle. Subsequently in order to establish a defined base upon which it becomes feasible to undertake a value-based decision process it is necessary to sum all the criteria.

H-6.1 Ranking Weighting and Scaling

For each impact assessed a scaled weighting factor, or also referred to as the severity which is the sum of the frequency of activity and impact occurring, (refer to the table above) is attached to each respective impact. The purpose of including such a weighting is to ensure that each member of the working group is given the opportunity to introduce their value bias for each individual aspect.

The process of assigning such weights serves to highlight those aspects that are considered the most critical to the various stakeholders as well as providing a means whereby the impact assessor can successfully deal with the complexities that exist between the different impacts and associated aspect criteria.

Simply, such a weighting factor is indicative of the importance of impact in terms of the potential effect that the aspect could have on the surrounding environment. Therefore the aspect, which is considered to have a greater importance, will be given a higher weighting than that which is of lower importance.

H-6.2 Identifying the Potential Impacts Without Mitigation Measures (WOM)

Following the assigning of the necessary weights to the respective aspects through the sum of all criteria pertaining to any particular impact multiplied by its assigned weighting will result in a value of each impact before the implementation of the necessary mitigation measures.

Equation 1

Significance Rating = Consequence x Severity/Weighting factor

where

Consequence = Extent + Duration + Intensity

Severity/Weighting factor = Frequency of activity + Frequency of impact

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10
Determine the consequence of the impact by summation (1+2+3)				Determine the severity of the Impact by summation (5+6)			Product of consequence and severity determines significance Without Mitigation (4x7)	Sufficiency of the proposed mitigation	Product of Column 8 and Column 9 determines significance With Mitigation (8x9)
Extent of impact	Duration of impact	Intensity of impact	Sum	Probability		Sum	Significance rating (WOM)	Mitigation efficiency (ME)	Mitigated aspects (WM)
				Frequency of impact	Weighting Factor				
Footprint = 1	Short = 1	Low = 1	Sum of Column 1-3	Almost never = 0.1	Low = 0.1	Sum of Column 5-6	Low = 0-2.9	High = 0.2	Low = 0-2.9
Site = 2	Short to Medium = 2	Low to Medium = 2	Sum of Column 1-3	Improbable = 0.2	Low to Medium = 0.2	Sum of Column 5-6	Low to Medium = 3-5.9	Medium to High = 0.4	Low to Medium = 3-5.9
Regional = 3	Medium = 3	Medium = 3	Sum of Column 1-3	Probable = 3	Medium = 0.3	Sum of Column 5-6	Medium = 6-8.9	Medium = 0.6	Medium = 6-8.9
National = 4	Medium to Long = 4	Medium to High = 4	Sum of Column 1-3	Highly Probable = 0.4	Medium to High = 0.4	Sum of Column 5-6	Medium to High = 9-11.9	Low to Medium = 0.8	Medium to High = 9-11.9
International = 5	Long = 5	High = 5	Sum of Column 1-3	Definite = 0.5	High = 0.5	Sum of Column 5-6	High = 12-15	Low = 1	High = 12-15

Figure 29: Ranking Weighting and Scaling Matrix

H-6.3 Identifying the Potential Impacts Mitigation Measures (WM)

In order to gain a better understanding of the significance of an impact, 'mitigation efficiency' (ME) factors can be applied.

The most effective means of deriving a quantitative value of mitigated impacts is to assign each 'without mitigation measures' (WOM) value is assigning a 'mitigation efficiency' (ME) rating (refer to the table above). The allocation of such a rating is indicative of the efficiency and effectiveness, as identified through professional experience and empirical evidence that the proposed mitigation measures will result in managing the impact.

As a result of the 'with mitigation' (WM) value being derived from the multiplication of the WOM value with its respective ME rating it stands to reason that the lower assigned value the greater the proposed mitigation measures effectiveness and subsequently the lower the WM impact will be.

Equation 2

$$WM = WOM * ME$$

H-6.4 Mitigation measures

Mitigation measures should be recommended in order to enhance benefits and minimise negative impacts and they should address the following:

H-6.4.1 Mitigation objectives: what level of mitigation must be aimed at?

For each identified impact, the specialist must provide mitigation objectives (tolerance limits) which would result in a measurable reduction in impact. Where limited knowledge or expertise exists on such tolerance limits, the specialist must make an "educated guess" based on his/her professional experience.

H-6.4.2 Recommended mitigation measures

For each impact the specialist must recommend practical mitigation actions that can measurably affect the significance rating. The specialist must also identify management actions, which could enhance the condition of the environment. Where no mitigation is considered feasible, this must be stated and reasons provided.

H-6.4.3 Effectiveness of mitigation measures

The specialist must provide quantifiable standards (performance criteria) for reviewing or tracking the effectiveness of the proposed mitigation actions, where possible.

H-6.4.4 Recommended monitoring and evaluation programme

The specialist is required to recommend an appropriate monitoring and review programme, which can track the efficacy of the mitigation objectives. Each environmental impact is to be assessed before and after mitigation measures have been implemented. The management objectives, design standards etc, which, if achieved, can eliminate,

minimise or enhance potential impacts or benefits must, wherever possible, be expressed as measurable targets. National standards or criteria are examples, which can be stated as mitigation objectives.

Once the above objectives have been stated, feasible management actions, which can be applied as mitigation, must be provided.

The tables described above should indicate how the application of the opposite column on the impact, after mitigation or management actions has reduced the impact. If the proposed mitigation is to be of any consequence, it should result in a measurable reduction in impacts (or, where relevant, a measurable benefit).

PROJECT PHASING

The impact assessment and the Environmental Management Programme (EMPr) will provide an evaluation of the significance of each of the three phases of the project i.e. design construction and operational phases.

H-7 PROCESS TO ASSESS ALTERNATIVES

During the EIA phase, feasible alternatives for the proposed development will be considered and subsequently assessed. Therefore, several possible proposals or alternatives for accomplishing the same objectives will be considered. For the purposes of this project, the following alternatives have been identified and will be assessed in more detail in the EIA Report:

- 1) Dam Design Alternatives**
- 2) Water Supply Pipeline Route Alternatives**
- 3) River Crossing Alternatives**
- 4) No-Development Alternative**

The final dam development framework will be determined based on:

- the public consultation process;
- specialists' recommendations;
- comments and recommendations from statutory authorities; and
- environmental characteristics and constraints.

The impact assessment phase will specifically assess the impacts of the identified alternatives as outlined above. Additional alternatives could become available as part of the Scoping or EIA phase of the EIA process.

H-7.1) Dam Design Preferred Alternative.

The applicant, Klipheuwel Trust, proposes to develop a farm dam on Portion 13 and Portion 3 of Farm 143 Klipheuwel in Kleinbrak. The site is located adjacent and directly north of the existing Klipheuwel Dam which covers an area of approximately 37Ha. The proposed dam is furthermore located approximately 300 metres (at nearest point) east of the Moordkuil River.

It is proposed that the dam area will comprise 72 960m² and the total development footprint will comprise 10.5Ha. The Full Supply Level (FSL) volume for the dam is 472 109m³. The dam wall will have a total height of 19 metres resulting in a maximum dam depth of 18 metres. The development of the dam will further include the construction of a dam wall with a crest of approximately 121m in length.

The applicant is in need of storage capacity as changing precipitation patterns not only dictate the need for an increase in assurance of yield but also as protection to the increased taking of water for irrigation in the upper reaches of the Moorkuil River (K10E and K10F quaternary catchments). The applicant wishes to construct a dam on his property to manage his water allocations throughout the year as required. The dam water will be supplied by pumping water from the Moordkuil River where the applicant has existing water use rights and lawful installations in place.

The site contains 3 seasonal watercourses which meanders west toward the Moordkuil River. The drainage lines have confluence at the location where the dam wall will be constructed and encompasses a small catchment. It is proposed that the minor runoff into the Oudrift Dam from this small upstream catchment will be determined and accordingly released with the proposed Compensation Water Releases back to the Moordkuil River to ensure that the impacts on the Ecological Water Requirements are negligible.

The Preferred Dam Design Alternative will result in a reduced development footprint. This in turn will minimize the impacts on terrestrial vegetation and ecosystems, as well as a reduced impact on faunal and avifaunal habitat.

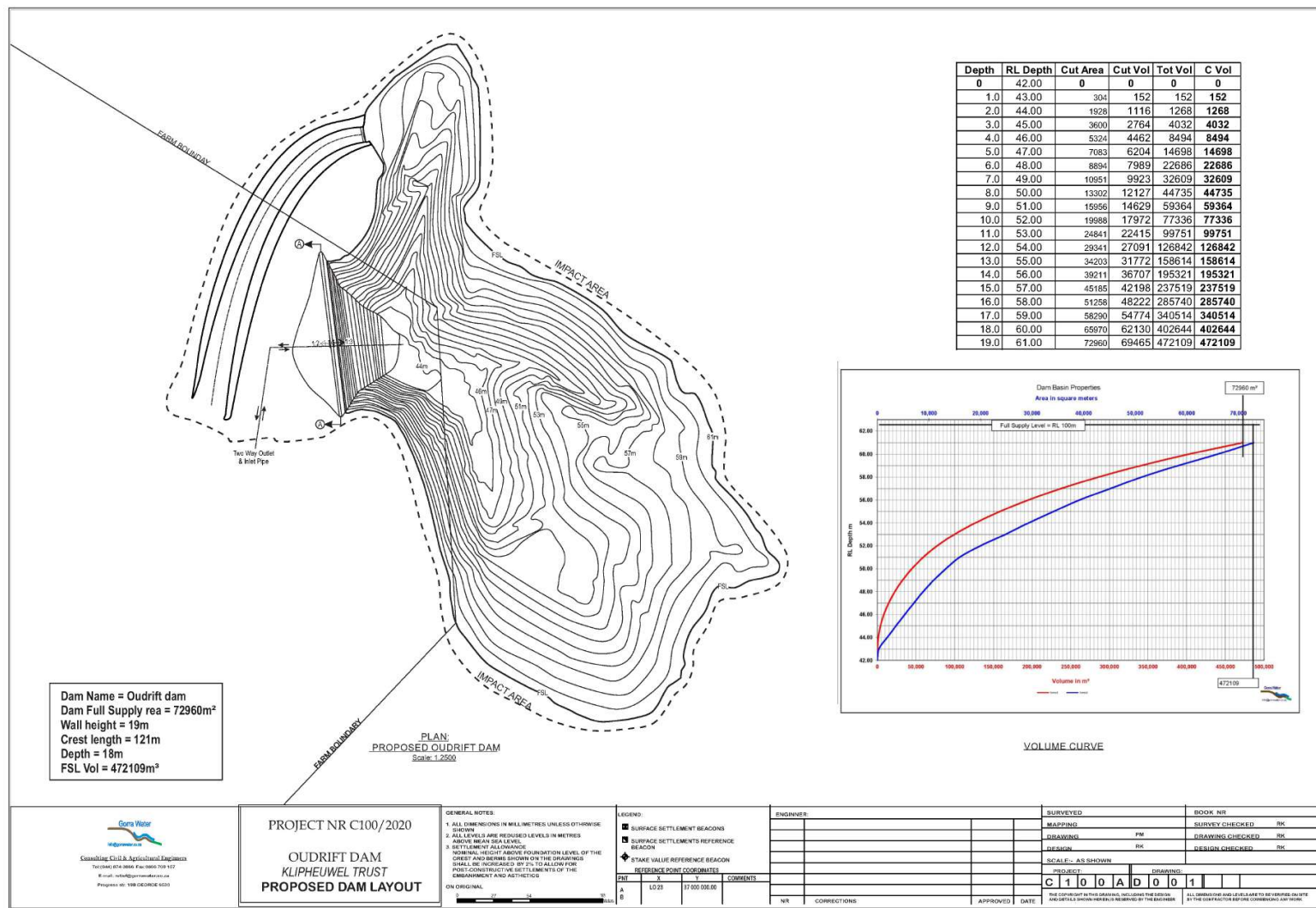


Figure 30: Dam Design Preferred Alternative



H-7.2 Dam Design Alternative 1.

The applicant, Klipheuwel Trust, proposes to develop a farm dam on Portion 13 and Portion 3 of Farm 143 Klipheuwel in Kleinbrak. The site is located adjacent and directly north of the existing Klipheuwel Dam which covers an area of approximately 37Ha. The proposed dam is furthermore located approximately 300 metres (at nearest point) east of the Moordkuil River.

It is proposed that the dam area will comprise 92 389m² and the total development footprint will comprise 12.6Ha. The Full Supply Level (FSL) volume for the dam is 480 725m³. The height and depth have incorrectly been attributed as 15m and 13m per the table, the exact design parameters will be included and assessed as part of the EIA phase. The development of the dam will further include the construction of a dam wall with a crest of approximately 215m in length.

The dam water will be supplied by pumping water from the Moordkuil River where the applicant has existing water use rights and lawful installations in place. It is proposed that the minor runoff into the Oudrift Dam from this small upstream catchment will be determined and accordingly released with the proposed Compensation Water Releases back to the Moordkuil River in order to ensure that the impacts on the Ecological Water Requirements are negligible.

The Dam Design Alternative 1 will result in an increased development footprint as depicted in the figures presented above and below. This in turn will have an increased impact on terrestrial vegetation and ecosystems, as well as an increased impact on faunal and avifaunal habitat.

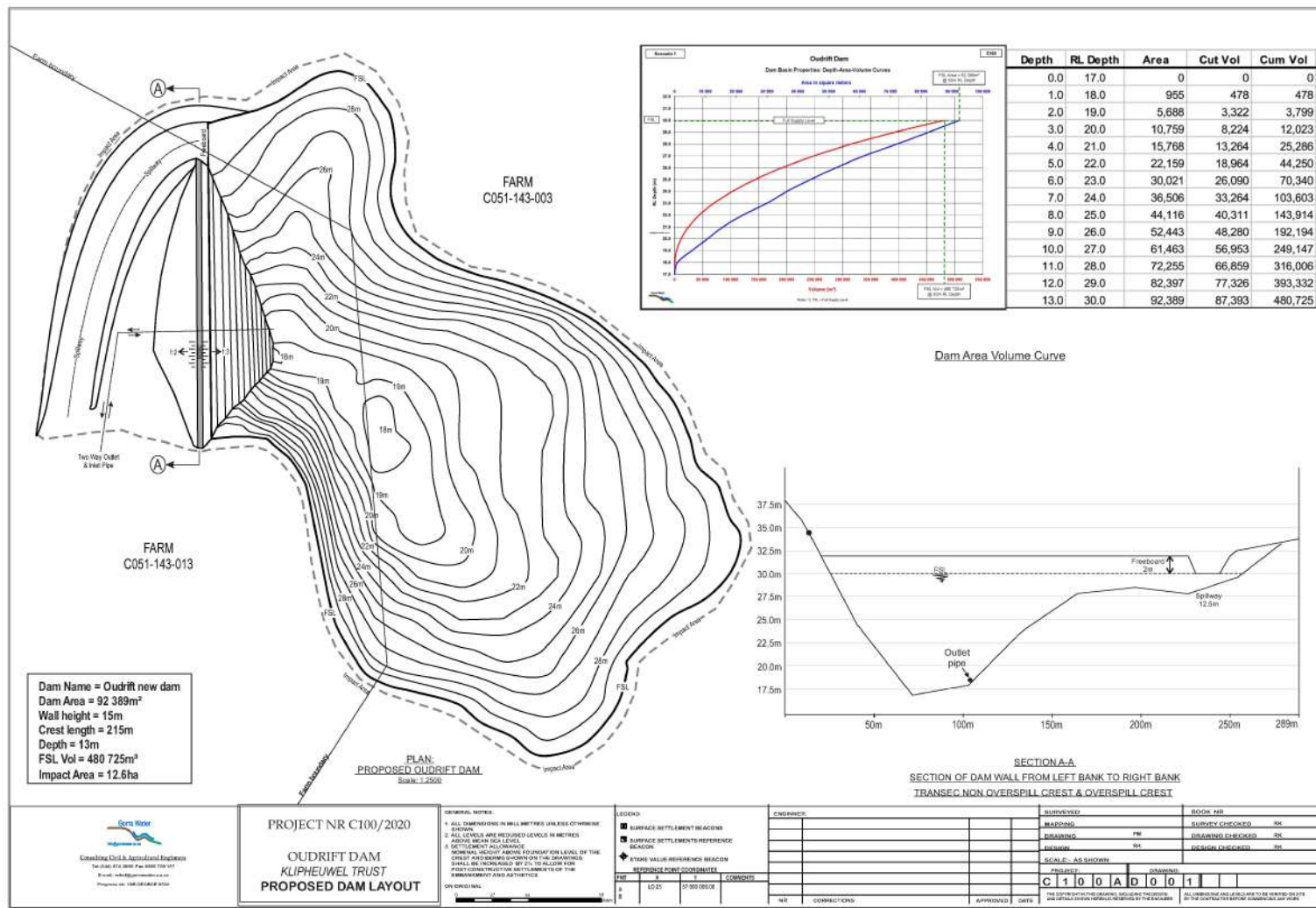


Figure 32: Dam Design Alternative 1

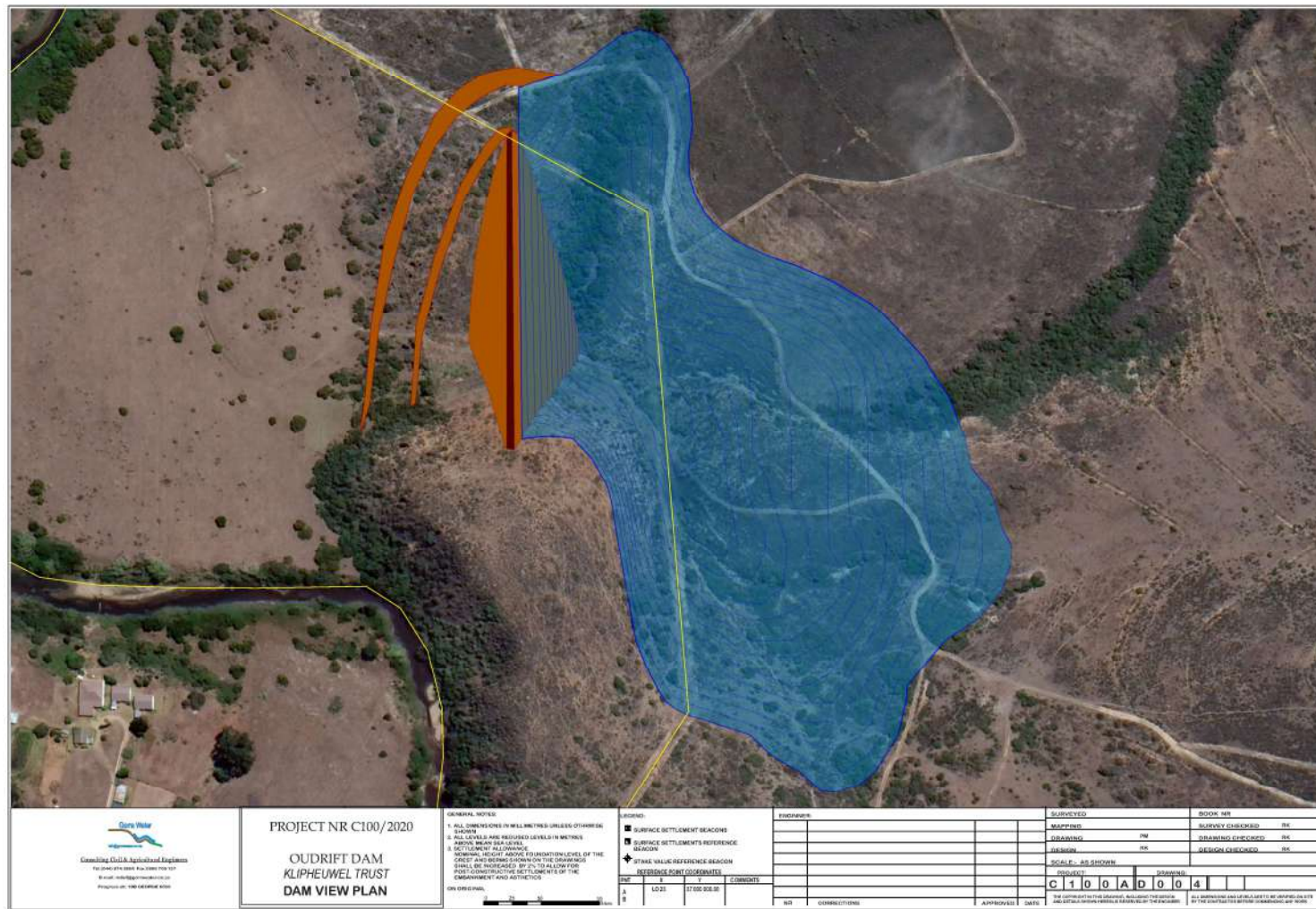


Figure 33: Dam Design Alternative 1 Aerial Overlay

H-7.3 2) Water Supply Pipeline Preferred Route Alternative

It is proposed that the dam will be filled by pumping from the Moordkuil River where the applicant has an existing lawful installation (34° 3'11.31"S 22° 8'6.68"E) in place on the eastern (left) bank of the river. The pump installation was verified and lawful in terms of section 35(4) of the NWA, Act 36 of 1998.

The applicant has an existing irrigation water distribution network along the stretches of the Moordkuil Sint Road and the Gonnakraal gravel road. Two pipeline route alternatives are available to connect the Oudrift Dam to the existing irrigation network. The existing irrigation network comprises 225mmØ uPVC pipelines and the proposed new pipelines will be similar.

The Preferred Water Supply Pipeline Route Alternative (*indicated as Connection Point 1 in the figure*) to the network will require an additional crossing of the Moordkuil River near the location of the existing drainage channel discharge. This connection point is the applicants preferred alternative due to operational considerations. The Preferred Water Supply Pipeline Route is indicated in the figure below.



Figure 34: Preferred Water Supply Pipeline Route

H-7.4 Water Supply Pipeline Route Alternative 1

It is proposed that the dam will be filled by pumping from the Moordkuil River where the applicant has an existing lawful installation (34° 3'11.31"S 22° 8'6.68"E) in place on the eastern (left) bank of the river. The pump installation was verified and lawful in terms of section 35(4) of the NWA, Act 36 of 1998.

The applicant has an existing irrigation water distribution network along the stretches of the Moordkuil Sint Road and the Gonnakraal gravel road. Two pipeline route alternatives are available to connect the Oudrift Dam to the existing irrigation network. The existing irrigation network comprises 225mmØ uPVC pipelines and the proposed new pipelines will be similar.

The Water Supply Pipeline Route Alternative 1 (*indicated as Connection Point 2 in the figure*) to the network will require a much shorter pipeline route and will not require an additional crossing of the Moordkuil River. This connection point is not the applicants preferred alternative due to operational considerations. The Water Supply Pipeline Route Alternative 1 is indicated in the figure below.



Figure 35: Water Supply Pipeline Route Alternative 1

H-7.5 River Crossing Preferred Alternative

Two river crossing alternatives have been identified in line with the Preferred Water Supply Pipeline Route Alternative as described above. The first alternative would entail the open trench construction of the pipeline through the Moordkuil River and reinforcement of the submerged pipe below the riverbed. This stretch of the Moordkuil River is approximately 30m wide and dry bed installation is possible during summer months by utilizing the existing DWAF pumps located downstream.

The open trench construction of the pipeline below the riverbed is the applicants preferred alternative since it will not cause any obstruction during flood events. Due to the narrow stretch of the river in this location the suspension bridge could cause obstruction to debris and require regular replacement.

H-7.6 River Crossing Alternative 1

The alternative river crossing would entail a suspension bridge to be constructed across the river in order to fix the pipeline to.

The applicant have expressed concern that flood events in this stretch of the Moordkuil River are often associated with vegetation debris and the subsequent overhead obstruction from this alternative would require frequent repairs or replacement. For this reason from an operational perspective the open trench river crossing is preferred.

H-7.7 No-Go Alternative

The Department of Environmental Affairs (DEA) stresses that the no-go option should be considered in cases where the proposed development will have a significant negative impact that cannot be effectively or satisfactorily mitigated. This Scoping and EIA approach will consider the no-go option. This alternative provides a baseline against which the other alternatives must be measured.

If the environmental impacts of the proposed development are found to be highly significant (irrespective of mitigation), the “no-go” option could be invoked by the competent authority. If this were the case the various habitats, ecosystems and socio-economic state of the site and surrounding area would remain as is.

H-8 SPECIALIST STUDIES TERMS OF REFERENCE

H-8.1 Botanical Impact Assessment

The terms of reference for the Biodiversity Impact Assessment to Mark Berry Environmental Consultants are:

1. Identify and describe biodiversity patterns at a community and ecosystem level (main vegetation type, plant communities and threatened/vulnerable ecosystems), at species level (Species of Conservation Concern, protected species, presence of alien species) and in terms of significant landscape features;
2. Describe the sensitivity of the site and its immediate surroundings;
3. Map the distribution and infestation levels of invasive alien plants;
4. Identify and describe the impacts imposed by the project on biodiversity and propose mitigation measures to minimise or soften the impact;
5. Review the relevant biodiversity plans compiled in terms of the National Environmental Management Biodiversity Act (Act 10 of 2004); and
6. Adhere to the Department of Environmental Affairs & Development Planning (DEA&DP) and CapeNature guidelines for biodiversity studies in the Western Cape, as well as the NEMA EIA requirements for specialist studies.

H-8.2 Freshwater Impact Assessment and Ecological Reserve Determination

The proposal was discussed with Blue Science (Freshwater Specialists) and the following terms of reference and work programme was agreed upon:

1. To compile a Freshwater impact assessment which includes a DWS Risk Assessment, Ecological Reserve Determination and input to the Section 21 (c) and Section 21 (i) applications being submitted to the Breede Gouritz Catchment Management Agency.

The Freshwater Assessment will comprise of the following work programme:

- 1.1 Initialisation
- 1.2 Site assessment
- 1.3 Freshwater impact assessment report
- 1.4 Ecological Reserve determination

- 1.5 DWS risk assessment for water use authorisation consideration
- 1.6 Section 21 c and i input for the water use license application
- 1.7 Review and liaison

The Freshwater Impact Assessment and the Ecological Reserve Determination should furthermore inform the Ecological Reserve and the possible impacts the construction might have on achieving the Ecological Water Requirement for the Klein Brak River Estuary. The proposed Oudrift Dam site is located in lower reaches of the Moordkuil River. As per the available Cape Farm Mapper GIS mapping, this section of the Moordkuil River forms part of the Klein Brak River Estuarine functional zone.

It is furthermore foreseen that a River Maintenance Management Plan will be compiled to authorize future maintenance and management activities along the pipeline routes and within the dam basin. The Specialist have also been approached to provide input into the required RMMP.

H-8.3 Archaeological and Palaeontological Assessment

An Archaeological Specialist is to examine the site via a foot survey for any Archaeological remains that might be present in all less disturbed areas and prepare a report detailing the findings. The report needs to include a desktop study of Palaeontology on site, which would possibly be subcontracted by the Archaeologist if required.

A NID was submitted to the Heritage Western Cape dated 29 July 2020 and was discussed at the Heritage Officers Meeting on the 3rd of August 2020. A response to the NID was issued dated 7 August 2020 with Case Number 20031905SB0728E. The Heritage Western Cape resolved that;

“since there is reason to believe that the proposed dam on portion 13 and portion 3 of Farm 143 Farm Klipheuvel, Kleinbrak, Mossel Bay will impact on heritage resources, HWC requires that a Heritage Impact Assessment (HIA) that satisfies the provisions of section 38(3) of the NHRA be submitted. This HIA must have specific reference to the following:

- palaeontological desktop study and archaeological foot survey

The required HIA must have an integrated set of recommendations.

Please note, should you require the HIA to be submitted as a Phased HIA, a written request must be submitted to HWC prior to submission. HWC reserves the right to determine whether a phased HIA is acceptable on a case by case Basis.

The comments of relevant registered conservation bodies; all Interested and Affected parties; and the relevant Municipality must be requested and included in the HIA where provided. Proof of these requests must be supplied.”

A suitably qualified Archaeologist have been approached by the EAP to undertake the required Heritage Impact Assessment in line with the requirements from the Heritage Western Cape as outlined above.

The specialist would need to compile the information into an archaeological study within the context and to be integrated as part of a Heritage Impact Assessment. The specialist would engage the relevant registered heritage conservation bodies (as per HWC database) and the municipality for a 30-day heritage consultation. Comments received must be included and responded to in the HIA and submitted to the HWC for consideration by the Impact Assessment Committee (IACOM) or the Archaeology, Palaeontology and Meteorites Committee (APM).

H-8.4 Agricultural Compliance Statement

The DEFF Screening Tool Report considers the proposed development footprint to have a High agricultural sensitivity.

An Agricultural Compliance Statement has been commissioned to ensure that the Intensive Agricultural Areas are retained during the proposed development. Land Matters Environmental Consulting (Pty) Ltd represented by Dr. Rowena Harrison has been appointed to conduct the Agricultural Compliance Statement. Together with the above the Department of Agriculture has issued a comment on the 12th of Feb 2021 which states that there are no objections against the proposed development.

The terms of reference for the study are as follows:

- Conduct a soil survey and mapping exercise of the project site.
- Describe the physical properties of the soils sampled at each sampling location.
- Describe the agricultural potential of the site and the sensitivity of the site to agricultural production.
- Confirm or dispute the project site's current environmental sensitivity classification of high for agricultural production as identified by the screening tool.

H-8.5 Terrestrial Animal Species Compliance Statement

The DEFF Screening Tool Report considers the proposed development footprint to have a high Animal Species theme sensitivity.

Consequent to the above, a Terrestrial Animal Species Compliance Statement has been commissioned for the proposed development to ensure that no significant and valuable faunal or faunal or avifaunal species or habitat are impacted upon because of the proposed Oudrift Dam development. Prof. Jan A. Venter associated with the Nelson Mandela University George Campus has been approached to conduct the Animal Species Compliance statement.

The terms of reference for the study are as follows:

- compilation of a desktop study to determine the potential presence of the SCC identified by the screening tool (and any SCC not identified by the screening tool) at the study site;
- conduct a site visit, to determine the presence of (and habitat suitability for) the SCC highlighted by the screening tool, or SCC not flagged by the screening tool.
- determine whether any of the 14 SCC flagged by the screening tool occur at the study site;
- determine whether the site for the proposed dam acts as a corridor for any of the SCC highlighted by the screening tool;
- determine whether the vegetation that will be flooded by the proposed dam likely supports undetected individuals or populations of the SCC highlighted by the screening tool (that were not picked up during the desktop study); and
- determine whether there are any SCC present at the site that were not picked up by the screening tool.

H-8.7 Civil Aviation Compliance Statement

The DEFF Screening Tool Report notes that the site is located within 8 km of other civil aviation aerodromes, between 15 and 35 km from a civil aviation radar and between 15 and 35 km from a major civil aviation aerodrome. These features have been considered as medium aviation sensitivities. The site is located approximately 12km from the Mossel Bay airfield and 23km from the George Airport.

A Civil Aviation Compliance Statement has been commissioned to be conducted by Tappas Aviation Consultant to ensure that the proposed construction of the dam does not impact airspace restrictions or any other observed consequences, such as the Obstacle Limited Surfaces and Approach and Take-Off & Climb Flight Paths Surfaces of the George and Mossel Bay Airports.

Together with the above no military installations and no promulgated Danger, Restricted and Prohibited areas according to the South African Civil Aviation Authority (SACAA) listed in the vicinity of the proposed development area.

The compliance statement should adhere to the minimum requirements included in the regulations.

H-9 STAGES AT WHICH THE COMPETENT AUTHORITY WILL BE CONSULTED

Authority consultation completed

No meetings were held at this stage by the EIA team, mostly due to the limitations placed on gatherings in terms of the Disaster Management Act (Act No 57 of 30 December 2002) as a result of the Covid19 pandemic.

Further Authority Consultation

Subsequent to the submission of the Draft and Final Scoping Report and Plan of Study (PoS) for the EIA process, KAPPEC would engage and require consultation with DEA&DP regarding possible impacts to be considered included the way forward.

SECTION I: CONCLUSION

Based on the outcomes of the Scoping phase, the following specialist studies are currently anticipated to be undertaken during the EIA phase of the process. The specialist studies will assist with the development of an understanding of the system processes and the potential impacts of the proposed development on both the social and biophysical environments:

- a) Botanical Impact Assessment – *MB Botanical Surveys* Dr Mark Berry
- b) Aquatic Biodiversity Impact Assessment – *BlueScience* Toni Belcher
- c) Heritage Impact Assessment – *ACO* David Halkett
- d) Agricultural Compliance Statement – *Land Matters Consulting* Dr. Rowena Harrison
- e) Paleontological Impact Assessment - *Natura Viva cc* Dr John E. Almond (Cantab.)
- f) Geotechnical Assessment – To be confirmed
- g) Terrestrial Animal Species Compliance Statement – *Nelson Mandela University George Campus* Prof. Jan A. Venter
- h) Civil Aviation Compliance Statement – *Tappas Consulting* Tobie du Toit

The EIA report will assess the impacts of each of the individual activities as well as ascertain the cumulative impacts of the development in its entirety. The EIA report will outline the necessary mitigation measures and delineate sensitive areas and facets worthy of conservation. Potential alternatives and mitigation measures will be devised to minimise negative impacts and optimise positive impacts.

SECTION J: APPENDICES

APPENDIX 1: PUBLIC PARTICIPATION PROCESS

- (a) Proof of Newspaper Advertisement;
- (b) Proof of Site Notices;
- (c) Proof of Notification with Executive Summary to I&APs and landowners;
- (d) Proof of Executive Summary Delivery to surrounding landowners;
- (e) Proof of Draft Scoping Review
- (f) Database of Contacted and Registered I&AP's;
- (g) Comments and Response Report.

a) Published Newspaper Advertisements

Vrydag, 4 Desember 2020

Point hockey players excel

Congratulations to the following Point hockey players, who have been included in various Southern Cape Sables teams:
 U14A boys: Henro Kuhn
 U16A girls: Jolite Botha
 U16B girls: Izette Harteveld
 U18A girls: Elri Venter, Christel de Delpont

and Carlene Muller
 They will represent the Southern Cape at the PSI Nationals in Cape Town from 16 to 22 December.



Tian Heyns en Jonathan Abrahams skud blaas op hul onderskeie oorwinnings.

Abrahams en Heyns tops

Jonathan Abrahams en Tian Heyns is onderskeidelik die senior en junior wewers van die ope muurbaltoernooi wat deur Riversdal-muurbalclub gehou is.

Die kompetisie het op 21 en 28 November plaasgevind met 30 spelers wat deelgeneem het.

Die organiseerders bedank al die borge wat die dag moontlik gemaak het, asook die spelers wat ingeskryf het.

Enige belangstellende voormennende spelers is welkom om by die klub aan te sluit. Vir enige navrae, skakel die voorsitter, Jonathan Abrahams (084 738 6357) of Cheslin Malgas (082 483 6582).



AANSOEKE VIR HUURSPASIE BY DIE DIEPKLOOF BESIGHEIDSHUB, HEIDELBERG

Aansoeke word hiermee ingewag vanaf klein sakeondernemings vir die huur van winkelmunte in die nuutgevestigde Diepkloof Besigheidshub. Daar is tans 8 x winkelmunte beskikbaar en voormennende huurders moet aan die volgende voldoen:

1. Voltooiende aansoekform indien
2. Beskik oor 'n maatskappy registrasiesertifikaat (Company and Intellectual Property Commission)
3. Belastingaansoek van bywys dat aansoek ingedien is by SARS
4. Bewys van bankrekening van die besigheid
5. Bewys van woonadres
6. Afskrif van Suid-Afrikaanse identiteitsdokument
7. Besigheidsplan

Aansoekform is beskikbaar op die Hessequa munisipale webwerf www.hessequa.gov.za en hande kopieel is beskikbaar by die Heidelberg munisipale kantoor.

Navrae kan gerig word aan Lerato Tshetu by lerato@hessequa.gov.za tel. 028 713 7629

Voltooiende aansoek moet in 'n koewerf, gemerk Diepkloof Hub, by die Heidelberg Kantoor ingedien word.

Die sluitingsdatum vir aansoeke is 04 Februarie 2021.



APPLICATIONS FOR RENTAL SPACE AT THE DIEPKLOOF BUSINESS HUB, HEIDELBERG

Applications are hereby awaited from Small businesses for renting space in the newly established Diepkloof Business Hub. There are currently 8 spaces available and prospective tenants must comply with the following:

1. Completed application form
2. Company registration Certificate with CIPC (Company and Intellectual Property Commission)
3. Tax certificate or proof that application has been submitted to SARS
4. Proof of bank account of the business
5. Proof of residential address
6. Copy of South African Identity Document
7. Business Plan

Application forms are available on the Hessequa municipal website www.hessequa.gov.za and hand copies are available at the Heidelberg municipal office.

Enquiries may be directed to Lerato Tshetu by lerato@hessequa.gov.za tel. 028 713 7629

Complete applications must be submitted to the Heidelberg Office in an envelope marked Diepkloof Hub.

The closing date for applications is 04 February 2021.

Bemerkings Benodig

Werk onmiddellik beskikbaar van Knyana af tot by Viesbaai (ongepiek op 'n roete)

- Een persoon per oop word benodig
- Persone moet ondervinding in verkoop hê
- 3 maande proof en indien suksesvol vaste werksaamstelling oortre
- Produkte
- Boeke, CD's ens.

Stuur CV en eersien van ID na infososnorman@denfordandjagmail.com
 WhatsApp / Skakel: 081 311 2334

HESSEQUA
 Plaaslike Munisipaliteit

Klerk: Vlootbestuur – Riversdal
 (New 1908) 78-1937/191/2019/19178/191100/191000/191000/191000

Besiek asseblief ons webtuiste vir die volledige advertensie en om vir hierdie geleentheid aansoek te doen. Die vakature kan ook op die kennisgewingsbord by die betrokke munisipale kantore besigtig word. U kan me. Lemona Kleinbans by 028 713 7808 kontak vir meer besonderhede of u kan u aansoek aan applications@hessequa.gov.za versend.

Webtuiste: www.hessequa.gov.za
 Sluitingsdatum: 11 Desember 2020

MOSSEL BAY MUNICIPALITY
 NOTICE: TEMPORARY INTERRUPTION OF WATER SUPPLY

Weather permitting, the water supply to consumers situated in the undermentioned areas will be interrupted either partially or completely on:

MONDAY, 7 DECEMBER 2020 - BETWEEN 08:00 AND 17:00

AREA: MOSSEL BAY: CHURCH STREET AND WHOLE AREA TOWARDS THE POINT, MONTAGU STREET AND WHOLE AREA TOWARDS HARBOUR

If the weather is not suitable on this day, the interruption will take place the following day.

We regret any inconvenience.

ADV THYS OLIVIER
 MUNICIPAL MANAGER

MOSSELBAAI MUNISIPALITEIT
 KENNISGEWING: TYDELIKE ONDERBREKING VAN WATERVOORSIENING

Indien die weer gunstig is, sal versiening van water aan verbruikers in die onderstaande gebied of gedeeltes daarvan gedeeltes van die gebied onderbrek word:

MAANDAG, 7 DESEMBER 2020 - TUSSEN 08:00 EN 17:00

GEBIED: MOSSELBAAI: KERKSTRAAT EN HELE GEBIED NA DIE PUNT, MONTAGUSTRAAT EN HELE GEBIED NA DIE HAWE

Indien die weer op Woensdag nie gunstig is nie, sal die onderbreking die volgende dag plaasvind.

Enige ongemak word betreur.

ADV. THYS OLIVIER
 MUNISIPALE BESTUURDER

Hessequa Municipality CANCELLATION OF TENDERS	Hessequa Munisipaliteit KANSSELASIE VAN TENDERS
Notice is hereby given that the following tenders are cancelled in accordance with Hessequa Municipality's Supply Chain Policy of 2018/19: 2019/08 & 2020/01 section 5.1.27 and sub-section 13 of the Procurement Regulations of 2017: ■ HES-TECH 2019/08: SUPPLY AND DELIVERY OF ELECTRICAL ITEMS FOR THE PERIOD OF THREE (3) YEARS ■ HES-CORP 09/2021: PROVISION OF ELECTRICAL TRAINING FOR A THREE-YEAR PERIOD ■ HES-CORP 09/2021: PROVISION OF ABUJING SERVICES AT KARAVAN PARKS AND SPORTSGROUNDS WITHIN HESSEQUA MUNICIPALITY FOR A PERIOD OF THREE (3) YEARS ■ HES-CORP 09/2021: SERVICE AND MAINTENANCE OF ROLLER HEATING SYSTEMS AT PREKSTOEL, ELLENBURST AND JOHANNESBURG KARAVAN PARK FOR A PERIOD OF THREE (3) YEARS ■ HES-CORP 07/2021: SERVICE AND MAINTENANCE OF HEAT EXCHANGER SYSTEMS AT GOUTS MOND, WITLAND, JOHANNESBURG, ELLENBURST AND PREKSTOEL KARAVAN PARK FOR A PERIOD OF THREE (3) YEARS ■ HES-COM 09/2020: SUPPLY AND DELIVERY OF VERTICAL WATER TANKS FOR THE HARVESTING OF RAINWATER FOR A PERIOD OF THREE (3) YEARS ■ HES-COM 02/2020: THE SUPPLY, DELIVERY AND INSTALLATION OF FIRE HYDRANTS FOR A PERIOD OF THREE (3) YEARS Leanne Whitridge on becontact (028) 713 8087 of e-mail: leanne@hessequa.gov.za or if any further enquiries. J JACOBS MUNICIPAL MANAGER	Kennis gegee dat die volgende tenders kanselleer is in ooreenstemming met die Hessequa Munisipaliteit se Nominasiesbeleid van 2018/19: 2019/08 & 2020/01 afdeling 5.1.2.7 en subafdeling 13 van die Verkoopregulasies van 2017: ■ HES-TECH 2019/08: VERSKAFING EN AFLEWERING VAN ELEKTRIESE VOORRAAD VIR DIE TIJDPERK VAN DRIE (3) JAAR ■ HES-CORP 09/2021: VOORSIENING VAN ELEKTRIESE OORLESING VIR DRIE JAAR PERIODE ■ HES-CORP 09/2021: VOORSIENING VAN BELOUING DIENSTE BY KARAVANPARK EN SPORTER ONDE VIR HESSEQUA MUNISIPALITEIT VIR 'N PERIODE VAN DRIE (3) JAAR ■ HES-CORP 09/2021: DIENS EN ONDERHOUD VAN KETEL VERWITINGSTELSELS BY PREKSTOEL, ELLENBURST EN JOHANNESBURG KARAVANPARK VIR 'N PERIODE VAN DRIE (3) JAAR ■ HES-CORP 07/2021: DIENS EN ONDERHOUD VAN WARMTE-UITWISSELERSSTELLELS BY GOUTS MOND, WITLAND, JOHANNESBURG, ELLENBURST EN PREKSTOEL KARAVANPARK VIR 'N PERIODE VAN DRIE (3) JAAR ■ HES-COM 09/2020: VOORSIENING EN AFLEWERING VAN VERTIKALE WATERENKE VIR DIE OES VAN REÛNWER VIR 'N PERIODE VAN DRIE (3) JAAR ■ HES-COM 02/2020: DIE VOORSIENING, AFLEWERING EN INSTALLASIE VAN BRANDERS VIR 'N PERIODE VAN DRIE (3) JAAR Leanne Whitridge kan geraak word by (028) 713 8087 of per e-pos: leanne@hessequa.gov.za of enige verdere navrae. J JACOBS MUNISIPALE BESTUURDER

KAPP
 ENVIRONMENTAL CONSULTANTS

NOTIFICATION OF A SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT PROCESS
 30 DAY PUBLIC PARTICIPATION PERIOD
 DEAKOP REF NR: 16/336/7/10/6250/115/20

PROPOSED DEVELOPMENT OF OUDRIFT FARM DAM ON REMAINDER PORTION 3 AND REMAINDER PORTION 13 OF FARM 143 IN KLEIN BRAK, WESTERN CAPE.

PROJECT PROPOSAL: The applicant, Kipheueval Trust, proposes to develop an irrigation dam on Remainder Portion 13 and Remainder Portion 3 of Farm 143 Kipheueval in Klein Brak. It is proposed that the dam area will comprise 72 950m² and the total development footprint will comprise 10.5ha. The Full Supply Level (FSL) volume for the dam is 472 100m³. This dam will have a total height of 19 metres resulting in a maximum dam depth of 18 metres. The development of the dam will require the construction of a dam wall with a crest of approximately 121m in length. A water use license application in terms of the National Water Act (Act 36 of 1999) will also be submitted for section 21 (b), 21 (c), and 21 (f).

LOCATION: The site is located adjacent and directly north of the existing Kipheueval Dam and approximately 300 metres (at nearest point) east of the Moordkult River. Access to the proposed Oudrift Dam will be taken via an existing gravel road off Moordkult Road which leads in an eastern direction past the adjacent Kipheueval Dam and to the site.

An Application for Environmental Authorization (EA) to be issued by the Department of Environmental Affairs and Development Planning (DEADP) is currently being undertaken in order to authorize the following "listed Activities" in terms of the National Environmental Management Act, 1998 ("NEMA") (Act No. 107 of 1998). Government Notice No. R. 963 of 04 December 2014, as amended –

- Listing Notice 1 – Activity No: 12, 16, and 27
- Listing Notice 2 – Activity No: 18
- Listing Notice 3 – Activity No: 12

OPPORTUNITY TO PARTICIPATE: Individuals Interested and/or affected by the proposed activity are invited to register with Kapp Environmental Consultants (KAPPEC) as an Interested and Affected Party (I&AP). I&APs must provide their details including: Name, contact details, preferred method of correspondence (e.g. e-mail address or fax number) and an indication of any direct business, financial, personal or other interest which they have in the application to the contact person indicated below by late Thursday the 28th of January 2021. A copy of the Draft Scoping Report will be made available on the KAPPEC website at www.kappec.co.za

For more information regarding the proposal please contact: Mr. Renier Kapp, Kapp Environmental Consultants, (Cell) 082 675 5233 (Fax) 086 572 4150, or E-mail: renier@kappec.co.za

b) Proof of Site notices text



Notice placed off the Gonnakraal gravel road at the nearest location to pipeline route alternative 1.



Notice placed off the Gonnakraal gravel road at the nearest location to pipeline route alternative 1.



Notice placed off the Gonnakraal gravel road at the nearest location to pipeline route alternative 1.



Notice placed off the Gonnakraal gravel road at the nearest location to pipeline route alternative 1.



Two notices placed at the intersection of Moordkuil Sint Road and the Gonnakraal gravel road.



Two notices placed at the intersection of Moordkuil Sint Road and the Gonnakraal gravel road.



Two notices placed at the intersection of Moordkuil Sint Road and the Gonnakraal gravel road.



Two notices placed at the intersection of Moordkuil Sint Road and the Gonnakraal gravel road.



Two notices placed at the intersection of Moordkuil Sint Road and the Gonnakraal gravel road.



One notice placed at the existing access to the site off Moordkuil Sint Road;



One notice was placed at the existing access to the site off Moordkuil Sint Road;





One notice placed at the intersection of Moordkuil Sint Road and the gravel road extension of Sandhoogte Road leading past Rooiheuvel Farm;



One notice placed at the intersection of Moordkuil Sint Road and the gravel road extension of Sandhoogte Road leading past Rooiheuvel Farm;

c) Proof of Notification with Executive Summary to I&APs and adjacent landowners

3/15/23, 1:02 PM FW: Notification of EIA Public Participation_Proposed Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuveld...

From: renier@kappec.co.za <renier@kappec.co.za>
Sent: Monday, December 7, 2020 11:40 PM
To: 'Shireen Pullen' <Shireen.Pullen@westerncape.gov.za>
Cc: 'Renier Kapp (Kapp Environmental Consultants (KAP001(C)))' <admin@kappec.co.za>
Subject: Notification of EIA Public Participation_Proposed Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuveld_DEA&DP REF: 16/3/3/6/7/1/D6/25/0115/20)

Dear Interested and Affected Party,

Please find herewith attached an Executive Summary of the Pre-Application Scoping Report for the Proposed Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuveld, in Klein Brak, Western Cape. Please note that the full Pre-Application Scoping Report and Annexures are available for perusal or download via the following links:

<http://kappec.co.za/projects/projects-on-review/>

WeTransfer: <https://we.tl/t-CYQBO4EX3Y>

Dropbox: <https://www.dropbox.com/sh/9ledwv721rug0ky/AAAPNYihoz24csthMd6X5UBWa?dl=0>

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Feel free to contact me should you require any further information.

Yours Sincerely,

RENIER KAPP

TEL: +27 (0) 44 693 0478

FAX: + 27 (0) 86 572 4159

CELL: +27 82 675 5233

renier@kappec.co.za

www.kappec.co.za

<https://azapi.mymailsrvr.com/versions/webmail/19.0.22-RC/popup.php?wsid=9ba3d58393ee4d498769b1455600499a-a450c40620814c79a7cbe651f4...> 2/2

3/15/23, 1:09 PM

FW: Notification of EIA Public Participation_Proposed Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuveld...

From: renier@kappec.co.za <renier@kappec.co.za>**Sent:** Wednesday, December 9, 2020 3:32 PM**To:** 'homesteadfarm@mdwireless.co.za' <homesteadfarm@mdwireless.co.za>**Subject:** FW: Notification of EIA Public Participation_Proposed Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuveld_DEA&DP REF: 16/3/3/6/7/1/D6/25/0115/20)

Dear Interested and Affected Party,

Please find herewith attached an Executive Summary of the Pre-Application Scoping Report for the Proposed Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuveld, in Klein Brak, Western Cape.

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<http://kappec.co.za/projects/projects-on-review/>

WeTransfer: <https://we.tl/t-CYQBO4EX3Y>

Dropbox: <https://www.dropbox.com/sh/9ledwv721rug0ky/AAAPNYihoz24csthMd6X5UBWa?dl=0>

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<https://azapi.mymailsrvr.com/versions/webmail/19.0.22-RC/popup.php?wsid=9ba3d58393ee4d498769b1455600499a-a450c40620814c79a7cbe651f4...> 2/2

3/15/23, 1:09 PM

FW: Notification of EIA Public Participation_Proposed Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuveld...

From: renier@kappec.co.za <renier@kappec.co.za>**Sent:** Wednesday, December 9, 2020 3:36 PM**To:** 'helenmalan@yahoo.com' <helenmalan@yahoo.com>**Subject:** Notification of EIA Public Participation_Proposed Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuveld DEA&DP REF: 16/3/3/6/7/1/D6/25/0115/20)

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WeTransfer: <https://we.tl/t-CYQBO4EX3Y>

Dropbox: <https://www.dropbox.com/sh/9ledwv721rug0ky/AAAPNYihoz24csthMd6X5UBWa?dl=0>

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<https://azapi.mymailsrvr.com/versions/webmail/19.0.22-RC/popup.php?wsid=9ba3d58393ee4d498769b1455600499a-a450c40620814c79a7cbe651f4...> 2/2

3/15/23, 1:08 PM

FW: Notification of EIA Public Participation_Proposed Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuveld...

From: renier@kappec.co.za <renier@kappec.co.za>**Sent:** Wednesday, December 9, 2020 3:31 PM**To:** 'GillespieP@dws.gov.za' <GillespieP@dws.gov.za>**Subject:** Notification of EIA Public Participation_Proposed Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuveld DEA&DP REF: 16/3/3/6/7/1/D6/25/0115/20)

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<http://kappec.co.za/projects/projects-on-review/>

WeTransfer: <https://we.tl/t-CYQBO4EX3Y>

Dropbox: <https://www.dropbox.com/sh/9ledwv721rug0ky/AAAPNYihoz24csthMd6X5UBWa?dl=0>

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<https://azapi.mymailsrvr.com/versions/webmail/19.0.22-RC/popup.php?wsid=9ba3d58393ee4d498769b1455600499a-a450c40620814c79a7cbe651f4...> 2/2

3/15/23, 1:07 PM

FW: Notification of EIA Public Participation_Proposed Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuveld...

From: renier@kappec.co.za <renier@kappec.co.za>**Sent:** Wednesday, December 9, 2020 3:30 PM**To:** 'fouriemq@dwa.gov.za' <fouriemq@dwa.gov.za>**Subject:** Notification of EIA Public Participation_Proposed Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuveld DEA&DP REF: 16/3/3/6/7/1/D6/25/0115/20)

Dear Interested and Affected Party,

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<http://kappec.co.za/projects/projects-on-review/>WeTransfer: <https://we.tl/t-CYQBO4EX3Y>Dropbox: <https://www.dropbox.com/sh/9ledwv721ruq0ky/AAAPNYihoz24csthMd6X5UBWa?dl=0>

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3/15/23, 1:05 PM FW: Notification of EIA Public Participation_Proposed Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuveld...

FW: Notification of EIA Public Participation_Proposed Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuveld DEA&DP REF: 16/3/3/6/7/1/D6/25/0115/20)

From: renier@kappec.co.za

Sent: Wed, 1 Mar, 2023 at 09:10

To: anuschka@kappec.co.za

-----Original Message-----

From: admin@mosselbay.gov.za <admin@mosselbay.gov.za>

Sent: Tuesday, December 8, 2020 7:10 AM

To: renier@kappec.co.za

Subject: Notification of EIA Public Participation_Proposed Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuveld DEA&DP REF: 16/3/3/6/7/1/D6/25/0115/20)

Importance: High

Correspondence Reference: 7253251

File Reference: Klipheuveld-143/16

ACKNOWLEDGEMENT / ONTVANGSERKENNING

We acknowledge receipt of your letter regarding the abovementioned matter and wish to confirm that the matter is receiving attention.

Ons erken ontvangs van u skrywe in bogemelde verband en bevestig dat die saak aandag geniet.

Yours faithfully / Die uwe

MOSSEL BAY MUNICIPALITY
MOSSELBAAI MUNISIPALITEIT

Mossel Bay Municipality email disclaimer:
<http://www.mosselbay.gov.za/disclaimer.htm>

Mossel Bay Municipality,
101 Marsh Street,
Mossel Bay,
6506,
South Africa

Tel: +27 44 606 5000

www.mosselbay.gov.za

<https://azapi.mymailsrvr.com/versions/webmail/19.0.22-RC/popup.php?wsid=9ba3d58393ee4d498769b1455600499a-a450c40620814c79a7cbe651f4...> 1/1

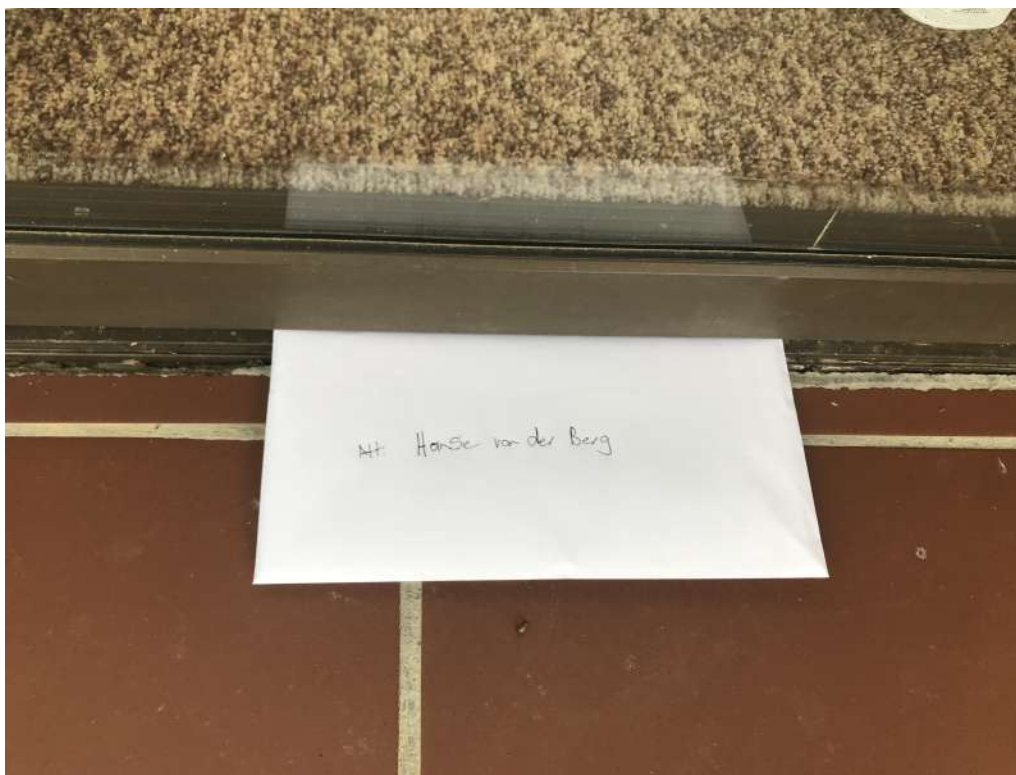
d) Proof of BID Delivery to surrounding landowners

PROOF OF DELIVERY OF EXECUTIVE SUMMARY

DEA&DP REF NO: 16/3/3/6/7/11A/1/5/3077/18

THE PROPOSED OUDRIFT FARM DAM ON PORTION 3 AND PORTION 13 OF FARM KLIPHEUVEL, NEAR KLEIN BRAK RIVER, WESTERN CAPE.

NAME	ORGANISATION	DETAILS			SIGNATURE
A. J. J. J. J.	CATERPILLAR	Tel			
		Cell	0829889381		
		E-mail	helen.malan@ya.co.za		
		Address			
		Tel			
		Cell			
		E-mail			
		Address			
		Tel			
		Cell			
		E-mail			
		Address			
		Tel			
		Cell			
		E-mail			
		Address			





e) Proof of Draft Scoping Report Review

renier@kappec.co.za

From: renier@kappec.co.za
Sent: Tuesday, 28 May 2024 14:12
To: 'admin@kappec.co.za'
Subject: Notification of Public Review_Draft Scoping Report Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuvel_DEA&DP REF: 16/3/3/2/D6/25/0001/24

Attachments: 70001_Oudrift Farm Dam_Executive Summary.pdf

Tracking:	Recipient	Read
	'admin@kappec.co.za'	
	'Stiaan.Carstens@westerncape.gov.za'	
	'coastal.enquiries@westerncape.gov.za'	
	'gibbs@edendm.co.za'	
	'admin@mosselbay.gov.za'	
	'Stephanie Barnardt'	
	'tbushula@bgcma.co.za'	
	'rmakahane@bgcma.co.za'	
	'landuse.elsenburg@elsenburg.com'	
	'HannesM@elsenburg.com'	
	'MelaniKo@daff.gov.za'	
	'kriel@dws.gov.za'	
	'phumzile.simela@drdlr.gov.za'	
	'annatjievren@gmail.com'	
	'wessageorge@isat.co.za'	
	'rm29@mweb.co.za'	
	'PetersOw@eskom.co.za'	
	'wyngaajo@eskom.co.za'	
	'HendriMd@eskom.co.za'	
	'ProfG@Telkomsa.net'	
	'info@midbrakratepayers.co.za'	
	'arnold@botlierskop.co.za'	
	'Robertson.ian42@gmail.com'	
	'henkie@mtnloaded.co.za'	
	'Shireen Pullen'	
	'DEADP-EIAAdmin George'	
	'leptieshaam.Bekko@westerncape.gov.za'	
	'Caren.George@westerncape.gov.za'	
	'Minnie, Rudi'	
	'Megan Simons'	
	Caren George	Read: 2024/05/28 14:39

Dear Interested and Affected Party,

Please find herewith attached an Executive Summary of the Draft Scoping Report for the Proposed Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuveld, in Klein Brak, Western Cape.

The Draft Scoping Report and Annexures are available for perusal or download via the following links:

Kaptec Website: <http://kaptec.co.za/projects/projects-on-review/>

WeTransfer: <https://we.tl/t-tJpxDJ0vy0>

The document is available for public review and comment up until the **1st of July 2024**. Should you have any difficulty accessing the Draft Scoping Report, please contact me immediately at the details provided below. Please note, no late comments can unfortunately be accepted on this Draft Scoping Report and your timely submission is much appreciated.

Feel free to contact me should you require any further information.

Yours Sincerely,



RENIER KAPP

TEL: +27 (0) 44 693 0478

FAX: +27 (0) 86 572 4159

CELL: +27 82 675 5233

renier@kaptec.co.za

www.kaptec.co.za

renier@kappec.co.za

From: renier@kappec.co.za
Sent: Tuesday, 28 May 2024 14:32
To: 'thysvanstaden@vox.co.za'
Subject: Notification of Public Review_Draft Scoping Report Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuveld DEA&DP REF: 16/3/3/2/D6/25/0001/24
Attachments: 70001_Oudrift Farm Dam_Executive Summary.pdf

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renier@kappec.co.za
www.kappec.co.za

renier@kappec.co.za

From: renier@kappec.co.za
Sent: Tuesday, 28 May 2024 14:34
To: 'admin@kappec.co.za'
Subject: Notification of Public Review_Draft Scoping Report Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuveld DEA&DP REF: 16/3/3/2/D6/25/0001/24
Attachments: 70001_Oudrift Farm Dam_Executive Summary.pdf

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renier@kappec.co.za
www.kappec.co.za

renier@kappec.co.za

From: renier@kappec.co.za
Sent: Tuesday, 28 May 2024 14:37
To: 'Van der Walt, Cor'; 'Layman, Brandon'
Subject: Notification of Public Review_Draft Scoping Report Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuveld DEA&DP REF: 16/3/3/2/D6/25/0001/24
Attachments: 70001_Oudrift Farm Dam_Executive Summary.pdf

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www.kappec.co.za

renier@kappec.co.za

From: renier@kappec.co.za
Sent: Tuesday, 28 May 2024 14:45
To: 'admin@kappec.co.za'
Subject: Notification of Public Review_Draft Scoping Report Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuvel_DEA&DP REF: 16/3/3/2/D6/25/0001/24
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CELL: +27 82 675 5233

renier@kappec.co.za
www.kappec.co.za

renier@kappec.co.za

From: renier@kappec.co.za
Sent: Tuesday, 28 May 2024 14:47
To: 'admin@kappec.co.za'
Subject: Notification of Public Review_Draft Scoping Report Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuvel_DEA&DP REF: 16/3/3/2/D6/25/0001/24
Attachments: 70001_Oudrift Farm Dam_Executive Summary.pdf

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renier@kappec.co.za
www.kappec.co.za

f) Database of Registered and Contacted I&AP's



**INTERESTED AND AFFECTED PARTIES DATABASE
PROPOSED OUDRIFT FARM DAM ON REMAINDER PORTION 13 AND REMAINDER
PORTION 3 OF FARM 143 KLIPHEUVEL, IN KLEIN BRAK RIVER, WESTERN CAPE**

STAKEHOLDER	CONTACT	ADDRESS	TEL	FAX	MOBILE	EMAIL	NOTIFIED	REGISTE RED
Department of Environmental Affairs and Development Planning - Land Management	Ms Shireen Pullen	Private Bag x6509 George 6503	044 805 8600	021 483 4372		Shireen.Pullen@westerncape.gov.za	✓	✓
Department of Environmental Affairs and Development Planning - Planning	Stiaan Carstens	Private Bag x6509 George 6503	044 805 8603	044 805 8650		Stiaan.Carstens@westerncape.gov.za	✓	✓
Department of Environmental Affairs and Development Planning Directorate: Biodiversity and Coastal Management	leptshaam Bhekko					leptshaam.Bhekko@westerncape.gov.za	✓	✓
Department of Environmental Affairs and Development Planning Directorate: Biodiversity and Coastal Management	Caren George	Private Bag x6509 George 6503	021 483 2724			Caren.George@westerncape.gov.za	✓	✓
Eden District Municipality Biodiversity and Coastal Management Environmental Management	Mr Vernon Gibbs	P.O. Box 12 George 6530	044 803 1529	086 587 7145		gibbs@edendm.co.za	✓	✓
Mossel Bay Municipality Environmental Manager	Mr Rudi Minnie	Mossel Bay Municipality 101 Marsh Street Mossel Bay 6506	044 606 5163		071 345 1720	minnie@mosselbay.gov.za	✓	✓
Mossel Bay Municipality Municipal Manager	Municipal Manager	Private Bag x29 Mossel Bay 6500	044 606 5000	044 606 5062		admin@mosselbay.gov.za	✓	✓
Heritage Western Cape	Ms Stephanie-Anne Barnardt	P.O. Box 1685 Cape Town 8000	021 483 5959		076 481 8392	stephanie.barnardt@westerncape.gov.za	✓	✓
Cape Nature Scientific Services: Land Use Advice	Ms Megan Simons	Private Bag x6546 George 6530	087 087 3058	044 802 5313		msimons@capenature.co.za	✓	✓
Breede Gouritz Catchment Management Agency (Also on behalf of Department of Water and Sanitation)	Ms. Thembela Bushula	P.O. Box 1205 George 6503	023 346 8000			tbushula@bgoma.co.za	✓	✓
Breede Gouritz Catchment Management Agency (Also on behalf of Department of Water and Sanitation)	Mr. Rudzani Makahane	P.O. Box 1205 George 6503	023 346 8000	044 8732199	078 467 4260	makahane@bgoma.co.za	✓	✓

Western Cape Department of Agriculture	Mr Cor van der Walt	Private Bag x1 Elsenburg 7606	021 808 5099	021 808 5092		landuse.elsenburg@elsenburg.com	✓	✓
Department of Agriculture Eden District	Mr Hannes Muller					HannesM@elsenburg.com	✓	✓
Department of Agriculture Forestry and Fisheries	Ms Melanie Koen	Private Bag X12 Knysna 6570	044 302 6900	044 382 5461		MelaniKo@daff.gov.za		✓
Department of Water Affairs and Forestry - George	Mr Jacques Kriel		044 802 2700			kriel@dws.gov.za	✓	✓
Department of Transport and Public Works	Mr Malcolm Watters	9 Dorp Street Cape Town 8001	021 483 4669			Grace.Swanepoel@westerncape.gov.za	✓	✓
Department: Rural Development & Land Reform PSSC: Western Cape Property Management	Phumzile Simela	Private Bag x9159 Cape Nature 8000	021 409 0434	021 409 0534		phumzile.simela@drdlr.gov.za	✓	✓
Mossel Bay Municipality Ward Councillor - Ward 4	Annatjie Janse van Rensburg				082 871 0927	annatjiejvren@gmail.com	✓	✓
Wildlife and Environment Society of South Africa (WESSA)	Ms C. Ridge-Schnauffer	P.O. Box 9772 George 6530	044 873 4203			wessageorge@isat.co.za	✓	✓
Eskom Distribution and Land Development	Mr Owen Peters	P.O. Box 222 Brackenfell 7561	021 980 3817			PetersOw@eskom.co.za Owen.Peters@eskom.co.za	✓	✓
Eskom Distribution and Land Development	Ms Justine Wyngaardt	P.O. Box 222 Brackenfell 7561	021 980 3675		074 580 9127	wynqaajo@eskom.co.za HendriMd@eskom.co.za	✓	✓
Klein Brak River Estuary Advisory Forum	Caren George		021 483 2724			Caren.George@westerncape.gov.za	✓	✓
MidBrak Conservancy	Robin Fick				082 453 5167	ProfG@Telkomsa.net	✓	✓
Midbrak Ratepayers Association	Mr George Nezar Chairman					info@midbrakratepayers.co.za	✓	✓
Surrounding Landowner Botlierskop Private Game Reserve Farm 382 and Farm 341	Mr Arnold Neethling				083 379 9949	arnold@botlierskop.co.za	✓	✓
Surrounding Landowner Remainder Portion 1 of Farm 147, Georgeheim	Mr Ian Robertson				072 460 3862	Robertson.ian42@gmail.com	✓	✓
Surrounding Landowner Remainder Farm 331	Mr Louis de Jager				083 708 919	henkie@mntloaded.co.za	✓	✓
Surrounding Landowner Homestead Farm	Mr Steven Robertson				0765114895	serobertson81@gmail.com	✓	✓

g) Comments and Response Report.

Details	Comment	Response
Stephanie Barnardt Heritage Western Cape 07 August 2020	RESPONSE TO NOTIFICATION OF INTENT TO DEVELOP: HIA REQUIRED In terms of Section 38(8) of the National Heritage Resources Act (Act 25 of 1999) and the Western Cape Provincial Gazette 6061, Notice 298 of 2003. Case No: 20031905SB0728E The matter above has reference. Heritage Western Cape is in receipt of your application for the above matter received on 29 July 2020 This matter was discussed at the Heritage Officers meeting held on 3 August 2020. You are hereby notified that, since there is reason to believe that the proposed dam on portion 13 portion 3 of Farm 143 Farm Klipheuvel, Kleinbrak, Mossel Bay will impact on heritage resources, HWC requires that a Heritage Impact Assessment (HIA) that satisfies the provisions of section 38(3) of the NHRA be submitted. This HIA must have specific reference to the following: - palaeontological desktop study and archaeological foot survey The required HIA must have an integrated set of recommendations.	The comment is noted. A PIA and AIA as well as a HIA has been commissioned and results will be submitted to the Heritage Western Cape in terms of Section 38(8).

	Please note, should you require the HIA to be submitted as a Phased HIA, a written request must be submitted to HWC prior to submission. HWC reserves the right to determine whether a phased HIA is acceptable on a case by case Basis. The comments of relevant registered conservation bodies; all interested and Affected parties and the relevant Municipality must be requested and included in the HIA where provided. Proof of these requests must be supplied. HWC reserves the right to request additional information as required. Applicants are strongly advised to review and adhere to the time limits contained the Standard Operational Procedure (SOP) between DEADP and HWC. The SOP can be found using the following link. http://www.hwc.org.za/node/293 Should you have any further queries, please contact the official above and quote the case number.	
Mr Thys van Staden Local Resident 14 December 2020	From: Thys van Staden <thysvanstaden@vox.co.za> Sent: Monday, December 14, 2020 6:26 PM To: renier@kappec.co.za Subject: Notification of EIA Public Participation_Proposed Oudrift Farm Dam on Portion 3 and Portion 13 of Farm 143 Klipheuvel_DEA&DP REF: 16/3/3/6/7/1/D6/25/0115/20 Hallo Renier, I am Matthys Johannes van Staden (Thys van Staden) Jonkersbergweg 37	

	Fraai Uitsig Kleinbrakrivier Mosselbaai. Kindly register me as an Interested and Affected party in respect of the Proposed Construction of the Oudrift Farm Dam On Remainder Portion 3 and Remainder portion 13 Of Farm 143, Klipheuveld In Klein Brak River, Western Cape. I prefer to receive all documentation by e-mail addressed to thysvanstaden@vox.co.za As a member of the Kleinbrak Community, I am primarily interested to obtain information (and subsequently possibly comment to the Competent Authorities) on the impact of the dam on the Kleinbrak River Estuary. Please confirm my registration as an Interested and Affected party. Kind Regards Thys van Staden 083 609 1117	Dear Thys, Thank you for your correspondence. We confirm you have been registered as an Interested and Affected Party and will be notified via email thysvanstaden@vox.co.za of subsequent reports and review periods throughout the process. Best Regards
Shireen Pullen DEA&DP Development Management (Region 3) 18 February 2021	1. The abovementioned document received by the Directorate: Development Management (Region 3), hereinafter referred to as “this Directorate” via electronic mail on 7 December 2020, refers. 2. This letter serves as an acknowledgment of receipt of the above-mentioned document by this Directorate.	

	3. From the information provided, it is understood that the proposal entails the development of a farm dam on Portion 13 and Portion 3 of Farm 143 Klipheuvel, Klein Brak River. The dam area will comprise 72 960m² and the total development footprint will be 10.5Ha. The Full Supply Level (FSL) volume for the dam is 472 109m³. The dam wall will have a total height of 19 metres resulting in a maximum dam depth of 18 metres. The development of the dam will require the construction of one dam wall with a crest of approximately 215m in length. It is proposed that the dam will be filled by pumping from the Moordkuil River where the applicant has an existing lawful installation in place on the eastern bank of the river. 4. Site Verification Report On 20 March 2020 the Minister of Forestry, Fisheries and the Environmental published the general requirements for undertaking site sensitivity verification for environmental themes for activities requiring environmental authorisation (Government Gazette No. 43110). In terms of these requirements, prior to commencing with a specialist assessment, the current land use and environmental sensitivity of the site under consideration by the screening tool must be confirmed by undertaking a site sensitivity verification. In light of the above it is advised that a Site Sensitivity Verification Report, which confirms or disputes the current land use and environmental sensitivity as identified by the screening tool is submitted to this Directorate, prior to the submission of the application for environmental authorisation and/or commencing with a specialist assessment. 5. Screening Tool Report It is noted from the screening tool report (STR) that the	This is noted and agreed. This comment is noted. A Site Sensitivity Verification Report as pertaining to Government Gazette No. 43110. has been included in the Draft Scoping Report as Section G. This comment is noted. A Site Sensitivity Verification Report as pertaining to Government Gazette No. 43110. was included as part of the Application Form and is also included in the Draft Scoping Report as Section G.
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	involvement 6 specialists are being identified according to the sensitivity themes. <u>Agricultural Theme</u> The sensitivity of the agricultural theme is rated as “medium”. According to the protocol, an agricultural theme that represents a rating of medium sensitivity requires as a minimum a compliance statement to be done by an agricultural soil scientist that is registered with the South African Council for Natural Scientific Professions (“SACNASP”). Alternatively, the Department of Agriculture must be consulted to determine whether an agricultural specialist assessment needs to be conducted or not. Such input must be obtained prior to the submission of the application form. <u>Animal species sensitivity theme</u> The sensitivity of the animal species theme was rated as “medium”. According to the protocol the presence or likely presence of the species of conservation concern (SCC) identified by the screening tool must be investigated through a site inspection by a specialist registered with the SACNASP with a field of practice relevant to the taxonomic groups (“taxa”) for which the assessment is being undertaken. Also note that according to the protocols, where no species of conservation concern are found on site during the investigation or if the presence is confirmed to be unlikely, a Terrestrial Animal Species Compliance Statement must be submitted. It is however noted that a terrestrial biodiversity study will be undertaken, however, cognisance must be taken to ensure that the protocol is complied with. <u>Aquatic sensitivity theme</u> The sensitivity of the aquatic theme is rated “very high” and the	This is noted and agreed. An Agricultural Compliance Statement will be commissioned by a Registered SACNASP soil scientist in line with the minimum requirements. Please also note that the Department of Agriculture has issued a comment on the 12th of Feb 2021 which indicates that there are no objections against the proposed development. This is noted and agreed. An Animal Species Compliance Statement will be commissioned by a specialist registered with SACNASP in line with the findings of the Screening Tool Report. The specialist report will be compliant with the protocols. Agreed. A Freshwater Impact Assessment and Ecological
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	pre-application SR indicated that a Freshwater Impact Assessment and Risk Matrix (Toni Belcher - BlueScience) will be conducted. According to the protocol, the site is rated very high in terms of aquatic sensitivity, which will require a specialist assessment by a specialist that is registered with SACNASP and who has the relevant expertise in aquatics. Please ensure that this protocol is complied with. <u>Archaeological sensitivity theme</u> The sensitivity of the archaeological theme is rated high and the SR states that an Archaeological Impact Assessment, including a desktop Palaeontological assessment will be done for the proposed development. This Directorate is in agreement with this approach. <u>Civil Aviation sensitivity theme</u> The sensitivity of the civil aviation theme is rated as “medium”. According to the protocol, a compliance statement must be submitted as a minimum by the EAP. Input from the Civil Aviation Authority must also be obtained as soon as possible. It is advised that such input must be obtained prior to the submission of the application form. <u>Plant species medium</u> The sensitivity of the Plant Species Theme is rated as “medium”. Please note that according to the protocols, where no species of conservation concern are found on site during the investigation or if the presence is confirmed to be unlikely, a Terrestrial Plant Species Compliance Statement must be submitted. Please ensure that this protocol is complied with.	Reserve Determination has been commissioned to be undertaken by BlueScience in order to inform the Ecological Reserve and the possible impacts the construction might have on achieving the Ecological Water Requirement for the Klein Brak River Estuary. It is noted that the Department is in agreement with this approach. No input from the Civil Aviation Authority has been obtained thus far. For this reason, the EAP will comply to the recommendation from the Screening Tool Report. A Civil Aviation Compliance Statement has been commissioned to ensure that the proposed construction of the dam does not impact airspace restrictions or any other observed consequences, such as the Obstacle Limited Surfaces and Approach and Take-Off & Climb Flight Paths Surfaces of the George and Mossel Bay Airports. A Botanical Impact Assessment has been commissioned confirming the sensitivity of the site and the potential impact of the proposed development on terrestrial biodiversity by Dr Mark Berry to ensure that no significant or valuable, rare and endemic plant species and habitats with a high conservation status are destroyed Species of Conservation Concern and protected tree species (in terms of the National Forests Act 84 of 1998) will also
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	<u>Terrestrial Biodiversity sensitivity theme</u> The sensitivity of the Terrestrial Biodiversity theme is rated “low”. Notwithstanding this, the protocol states that a minimum requirement is a compliance statement that must be prepared by a specialist registered with the SACNASP and who has the relevant expertise in the field of ecological sciences. Please ensure that this protocol is complied with going forward. 6. Pre-application Scoping Report 6.1 Alternatives It is noted that design alternatives, river crossing alternatives, pipeline route alternatives, as well as no-development alternatives will be considered in the Environmental Impact Assessment (EIA) phase. Please ensure that the impacts (including all cumulative impacts) of all identified alternatives is comparatively assessed in the EIA phase in order to derive at the best practicable environmental option. 6.2 Estuary According to the pre-app SR, the proposed development site is located adjacent to the lower reaches of the Moordkuil River. According to the Cape Farm Mapper GIS mapping, this section of the Moordkuil River forms part of the Estuarine functional zone. Please ensure that the Directorate: Biodiversity and Coastal Management of this Department, as well as the Kleinbrak Estuary Management Forum are included in the list of Interested and Affected Parties going forward. The contact person from the Sub Directorate: Coastal Management is Ms. leptieshaam Bekko email: leptieshaam.Bekko@westerncape.gov.za. Their input in the	be recorded. A Botanical Impact Assessment has been commissioned confirming the sensitivity of the site and the potential impact of the proposed development on terrestrial biodiversity by Dr Mark Berry to ensure that no significant or valuable, rare and endemic plant species and habitats with a high conservation status are destroyed Species of Conservation Concern and protected tree species (in terms of the National Forests Act 84 of 1998) will also be recorded. This is noted and will be included and assessed as part of the EIA phase. The Directorate: Biodiversity and Coastal Management of this Department, as well as the Kleinbrak Estuary Management Forum has been included.
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	application process would be crucial. 6.3 One Environmental System The pre-app SR states that a water use license application (“WULA”) will be submitted for sections 21 (e) and (i) of the National Water Act, 1998 (Act No 36 of 1998) (“NWA”). It is reiterated that the EIA process and the WULA process timeframes must be synchronised in order to inform one another for decision-making purposes. It remains the responsibility of the EAP to ensure that the timeframes are synchronised. Failure to give effect to the one environmental system may prejudice the success of the application. 6.4 It is agreed that due to the location of the proposed dam the Ecological Reserve and the possible impacts the construction might have on achieving the Ecological Water Requirement for the Klein Brak River Estuary is of utmost importance and needs to be considered. Input into the Ecological Reserve Determination (Toni Belcher - BlueScience) was identified amongst the specialist input that will be required in the process to inform the Ecological Reserve, but also to provide guidance and make recommendations in this regard. 6.5 Biodiversity According to the information provided, the site is mapped as Groot Brak Dune Strandveld Garden Route Granite Fynbos and a small portion as South Outeniqua Sandstone Fynbos in terms of the 2012 and 2018 SA Vegetation Map, respectively. Both Groot Brak Dune Strandveld and Garden Route Granite Fynbos are listed as endangered. It also forms part of the local biodiversity network, and has been mapped as a critical biodiversity area (CBA). Please ensure that the objectives of the CBA are included in the terms of reference for the Terrestrial	This is noted and has been conveyed to Gorra Water conducting the WULA application. The Draft Scoping Report and public participation documents included the requirements for the WULA application to be conducted. This is noted and the specialist is aware of this requirement. This is noted and the specialist is aware of this requirement.
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	Biodiversity Impact Assessment to consider and assess how the impacts of the proposal may compromise/influence the said objectives. 6.6 Plan of study for EIA The plan of study for EIA should be amended in light of the information requirements stipulated in points 4 and 5 above, should more specialist involvement be required. 7. In accordance with the Directions regarding measures to address, prevent and combat the spread of COVID-19 (Government Notice No. 650 of 5 June 2020) during Alert Level 3, all applications, reports and documents, which include all signatures and Annexures which are included as part of the application and subsequent reports, must be submitted via e-mail to the relevant official, with attached PDF versions of letters and reports. If the documents are too large to attach to an e-mail, the competent authority must be notified per e-mail and provided with an electronic link to such documents that is accessible by the relevant authority. The Directorate: Development Management (Region 3), has created a generic e-mail address to centralise its administration within the component (i.e. notifying clients of decisions and receiving EIA applications, Notice of Intent form; request for fee reference numbers, etc.) Please make use of the new e-mail address too when submitting documents: DEADPEIAAdmin.George@westerncape.gov.za Please copy the respective case officer in the correspondence sent. 8. Please note that the activity may not commence prior to an environmental authorisation being granted by this Directorate.	The plan of Study has been updated and amended as part of the Draft Scoping Report in line with this requirement. This comment is noted. This comment is noted and all correspondence will be submitted via the generic email address. This comment is acknowledged.
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	9. This Department reserves the right to revise or withdraw initial comments or request further information from you based on any new or revised information received.	
Cor van der Walt Department of Agriculture and Land Use Management 12 February 2021	Your Application of 07 December 2020 had reference. The Western Cape Department of Agriculture: Land Use Management has no objection against the proposed application. Please note: - Kindly quote the above-mentioned reference number in any future correspondence in respect of the application. - The Department reserves the right to revise initial comments and request further information based on the information received.	This comment has been acknowledged accordingly.
Megan Simons Cape Nature 22 April 2021	DEA&DP Reference: 16/3/3/6/7/1/D6/25/0115/20 CapeNature would like to thank you for the opportunity to review the pre-application scoping report for portions 3 and 13 of the farm 143 Klipheuvel in Klein Brak. The applicant proposes the following as extracted from the pre-application scoping report: <i>“The applicant is in need of storage capacity as changing precipitation patterns not only dictate the need for an increase in assurance of yield but also as protection to the increased taking of water for irrigation in the upper reaches of the Moorkuil River (K10E and K10F quaternary catchments). The applicant wishes to construct a dam on his property to manage his water allocations throughout the year as required.</i> <i>It is proposed that the dam area will comprise 72 960m² and the total development footprint will comprise 10.5Ha. The Full Supply Level (FSL) volume for the dam is 472 109m³. The dam</i>	This is noted and agreed.

	<i>wall will have a total height of 19 metres resulting in a maximum dam depth of 18 metres. The development of the dam will further include the construction of a dam wall with a crest of approximately 121m in length. It is proposed that the dam will be filled by pumping from the Moordkuil River where the applicant has an existing lawful installation (34° 3'11.31"S 22° 8'6.68"E) in place on the eastern (left) bank of the river. The pump installation was verified and lawful in terms of section 35(4) of the NWA, Act 36 of 1998. In this regard please refer to the relevant letters detailing the determination and issued by Breede Gouritz Catchment Management Association, herewith attached as Annexure C. Apart from this verification, the abstraction was furthermore recorded lawful in terms of Act 54/56 in section 9B(1C) by the then Department of Water Affairs."</i> Please note that our comments only pertain to the biodiversity related impacts and not to the overall desirability of the application. CapeNature wishes to make the following comments: According to the Western Cape Biodiversity Spatial Plan (WCBSP 2017)¹ the entire farm has Critical Biodiversity Areas (CBA 1: Terrestrial, Aquatic, River, Wetlands, Estuary; CBA 2: Terrestrial, Aquatic), Ecological Support Areas (ESA 1: Terrestrial, Aquatic; ESA 2: Restore River and wetland) and is within a climate adaptation corridor. The Klein Brak Estuary and Klipheuwel dam is to the south of the farm, while the Moordkuil River flows along the western boundary. The farms have numerous non-perennial rivers, and all the watercourses are mapped as National Freshwater Ecosystem Priority Areas (FEPAs)².	Noted. This is noted and agreed.
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	The vegetation units are Endangered Groot Brak Dune Strandveld as listed in the 2011 NEM:BA threatened ecosystems gazette³ and Least Concerned South Outeniqua Sandstone Fynbos as listed in the updated National Biodiversity Assessment (2018)⁴. The report has considered all aspects for the BSP mapping categories in the Need and Desirability section as explained in Table 6. Thus, given that the entire site is mapped as CBA CapeNature reminds the applicant that mitigation must be proposed if this activity will result in the destruction of Endangered and CBA (Terrestrial and Aquatic). Minimal habitat loss is acceptable (in line with the Western Cape Land Use Guideline Handbook 2017) provided the underlying biodiversity objectives and ecological functioning are not compromised by the proposed dam. Once the specialist undertakes their assessment, they must avoid the loss of sensitive habitat and if this cannot be avoided, then mitigation should be proposed for the loss of sensitive vegetation and CBA. The impact of this on the ecological processes should also be determined. The watercourses on the farm forms part of the FEPA river corridor and should not be negatively impacted. Thus, the Specialist will have to mitigate, to reduce the impact for any potential loss to biodiversity in terms of the Mitigation Hierarchy of the Department of Environmental Affairs and Development Planning guidelines. The climate corridor is an element of ecological infrastructure and these areas should remain in a functional structure and composition for biodiversity. These areas play an important role in landscape connectivity, as well as supporting the functioning of PAs or CBAs. These corridors represent the best option for	It is noted that minimal habitat loss is acceptable provided the underlying biodiversity objectives and ecological functioning are not compromised by the proposed dam. It is noted that mitigation should be proposed for the loss of sensitive vegetation and CBA. The specialist will have to mitigate, to reduce the impact for any potential loss to biodiversity in terms of the Mitigation Hierarchy of the Department of Environmental Affairs and Development Planning guidelines. The importance of the area as a climate change corridor and landscape connectivity is noted.
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	promoting resilience to climate change and the persistence of biodiversity as they provide pathways for the movement of plants and animals in response to environmental change. They also support the natural movement of species between populations to ensure population viability. The conservation of the Klein Brak Estuary is of high priority and the proposed development of a dam should adhere to the requirement as set in the Klein Brak River Estuarine Management Plan. CapeNature will not support the development if it is not in line with the EMP. The dam spillway design is important to keep flows diffuse and monitoring of downstream erosion. Downstream erosion should be monitored as dams result in settling effects. Verification and validation of the water use must be determined and alternatively and we agree that an ecological reserve for the abstraction assessment should be done. CapeNature is satisfied that alien vegetation is monitored and removed. The removal of alien and invasive species must be continuous, and removal of invasive alien plant species should be compliant with the National Environmental Management: Biodiversity Act (Act No.10 of 2004)⁶. We remind the applicant that it is a legal requirement to remove alien and invasive species. In terms of the Alien and Invasive Species regulations, specific alien plant species are either prohibited or listed as requiring a permit; aside from restricted activities concerning, inter alia, their spread, and should be removed. Furthermore, the applicant must be conscious of the NEM:BA Alien and Invasive Species List⁷ and should not use listed alien plants during the rehabilitation.	This is noted. Compliance to the Klein Brak River Estuarine Management Plan will be included as part of the EIA phase. This has been conveyed to the Freshwater Specialist. The management of Invasive Alien Species is continuously undertaken by the applicant within these natural sections of the farm. This is noted.
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	Areas cleared should be rehabilitated using appropriate indigenous vegetation. To prevent the dispersal of alien seeds, we advise that construction vehicles and machinery be washed regularly and away from any watercourse. The alien vegetation that will be removed and any other moribund materials must be removed from site as they have a fire risk. A suitable rehabilitation plan must be compiled, and inputs should be obtained from the specialist (botanical and freshwater) for the biodiversity that will be impacted by the construction. A qualified Environmental Control Officer (ECO) should be appointed to oversee the process and to identify any harmful activities. In conclusion, CapeNature will provide further comments once we have received the basic assessment report and specialist assessment report. CapeNature reserves the right to revise initial comments and request further information based on any additional information that may be received.	This is noted. This is noted and the requirement will be included as part of the EMPr.
DRAFT SCOPING REPORT REVIEW COMMENTS: 28 MAY – 01 JULY 2024		
Steven Robertson Homestead Farm 04 June 2024	Dear Renier I would like to be included as an I&AP regarding the proposed Oudrift farm dam. My details are as follows: Steven Robertson 0765114895 serobertson81@gmail.com	Hi Steven, Thank you for the underneath correspondence. Your registration as Interested and Affected Party and comment is herewith acknowledged. Best Regards

	My preferred method of correspondence is via email. I am the farm manager of the Homestead Farm that borders the Moordkuil tributary of the Klein Brak River. We share an interest in access to fresh water for irrigation of our guava orchards which we obtain directly from the Moordkuil river opposite the existing pumping station. Regards, Steven	
Melanie Koen DFFE 28 June 2024	Dear Sir- Hope this email finds you well. May you kindly assist in providing documents in compact pdf format please. Kind regards	Dear Melanie, Hope this finds you well. Please confirm if the attached will suffice? Best Regards
Shireen Pullen DEA&DP 01 July 2024	1. The above-mentioned document received by the Directorate: Development Management (Region 3), hereinafter referred to as “this Directorate” on 31 May 2024 refers. 2.This letter serves as an acknowledgment of receipt of the aforementioned document by this Directorate. 3.This Directorate has reviewed the document and comment as follows: 3.1. The proposed dam is located in a section of the Moordkuil River that forms part of the Estuarine Functional Zone. Kindly ensure that the Klein Brak River Estuary Advisory Forum is included in the list of Interested and Affected Parties (I&APs).	The Klein Brak River Estuary Advisory Forum is chaired by Mrs Caren George who has been included as an Interested and Affected Party and notified of the Draft Scoping Report review accordingly.

	3.2. It is understood that the proposal will not require an application to take water from the Moordkuil River as the proposal can be accommodated in the existing lawful use for the applicant, which was confirmed by the Breede Olifants Catchment Management Agency (BOCMA). Kindly include proof that the proposed development will not require more than the allowed 202 500m³ of water per annum, in which case an amendment is required for the existing lawful use. 3.3. Notwithstanding the above, the proposal does require a water use licence for the other water uses. It is therefore reiterated that, in accordance with the one environmental system, it is now a requirement to synchronise the EIA and WULA processes in order to ensure that both processes are duly informed by one another. It is therefore the duty of the Environmental Assessment Practitioner ("EAP") to take note of the timeframes and synchronise the two processes. Failure to give effect to the one environmental system may prejudice the success of the application. 3.4. The proposal includes that the minor runoff into the Oudrift Dam from the small upstream catchment will be determined and accordingly released with the proposed "Compensation Water Releases" back to the Moordkuil River in order to ensure that the impacts on the Ecological Water Requirements are insignificant. Kindly ensure that BOCMA and Water and Sanitation provides inputs in this determination. 3.5. Also explain how the findings of the screening tool report and the site verification report relates to and informed the Plan of Study for EIA. In addition hereto, it is reiterated that any specialist performing work related to any of the fields of practice	Please note that the allowed 202 500m³ of water per annum only refers to Property: C05100000000012200012. The water use confirmations included as Annexure E, confirms that a total of 1 425 427m³ per annum is in place as the existing lawful use. No additional runoff will be captured and stored, and no amendment of the existing lawful use is required at this stage. Agreed. The proposal requires a water use license for the storage of water. Noted. Comment from the BOCMA and Water and Sanitation on this determination will be obtained and included as part of the EIA phase. The specialist studies identified as part of the screening tool report were utilized as a point of departure in the compilation of the site verification report. A number of the specialist reports identified were approached and the findings were shared with
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	listed in Schedule I of the Natural Scientific Professions Act, 2003 (Act 27 of 2003) must be registered with the South African Council for Natural Scientific Professions (“SACNASP”) in any of the prescribed categories [Section 18] and further to this, only a person registered with the SACNASP may practise in a consulting capacity [Section 20]. It will therefore be prudent for such specialists performing specialist studies or preparing specialist reports to provide proof of compliance with this Act. 3.6. Also ensure that the terms of reference for the Terrestrial Biodiversity Impact Assessment includes the objectives of the CBA and consider and assess how the impacts of the proposal may compromise/influence the said objectives. 3.7. Please ensure that the proposed dam complies with the dam safety requirements that might be applicable to the proposal. Comment should also be obtained from the Department of Water and Sanitation Dam Safety Office. 4. Need and Desirability 4.1. The need for the additional dam is to increase storage capacity as changing precipitation patterns not only dictate the need for an increase in assurance of yield, but also as protection to the increased taking of water for irrigation in the upper reaches of the Moorkuil River. 4.2. Please ensure that the aspect of need is adequately	the applicable specialists on approach. The specialists have also included their professional opinions on the level of assessment required for the site and the proposal. Some of these assessments could be combined, and some of the impact assessments could be lowered to where a compliance statement (including site visit verification from specialists) were deemed sufficient. This is outlined in the site verification report and all minimum requirements in terms of the screening tool report have been complied with. The agreed upon specialist studies and terms of reference have subsequently been outlined in the Plan of Study. All specialists approached are SACNASP registered and known specialists in their perspective fields. This is noted and agreed. The objectives of the CBA which includes the area be retained as a climate change corridor will be considered, and their objectives assessed against the proposal. This is noted and the dam safety requirements will be confirmed by BOCMA. Comment will also be sought from the Department of Water and Sanitation Dam Safety Office, per the request. Agreed. This is noted. The Need and Desirability considerations will be
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	addressed in accordance with the Need and Desirability Guideline (March 2013) of this Department. It must be clear how the proposal will benefit the broader societal needs in terms of promoting water use or access to the resource. The Environmental Impact Assessment Report should clearly demonstrate how this aspect has been addressed. 5. Content of the final Scoping Report (SR) 5.1. The final Scoping Report must contain all the information outlined in Appendix 2 of GN No. R. 982 of 4 December 2014 and must also include the information requested in this letter. 5.2. Failure to submit any information prescribed in Appendix 2 of GN No. R. 982 may result in Environmental Authorisation being refused. 5.3. The final SR must also contain a Plan of Study for EIA, which sets out the approach to the EIA in accordance with Appendix 2 of GN No. R. 982 of 4 December 2014, must be compiled and submitted together with the SR. 6. Alternatives Numerous alternatives have been identified in the draft SR. Please note that the Environmental Impact Assessment must include a comparative assessment of all reasonable and feasible alternatives, including the no-go alternative. 7. Kindly quote the abovementioned reference number in any future correspondence in respect of the application. 8. Please note that the activity may not commence prior to an Environmental Authorisation being granted by the Department.	detailed in line with the DEA&DP Guideline (2013) as part of the EIA Report. Please note that the dam safety requirement from BOCMA and the comment from the Department of Water and Sanitation Dam Safety Office, will only be available as part of the EIA phase. This is noted. This is noted. This is noted and agreed. The comparative assessment of alternatives will be included in the Draft EIR. Noted. Noted.
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	It is an offence in terms of Section 49A of the NEMA for a person to commence with a listed activity unless the Department has granted an Environmental Authorisation for the undertaking of the activity. Failure to comply with the requirements of Section 24F and 49A of the NEMA will result in the matter being referred to the Environmental Compliance and Enforcement Directorate of this Department for prosecution. A person convicted of an offence in terms of the above is liable to a fine not exceeding R10 million or to imprisonment for a period not exceeding 10 years, or to both such fine and imprisonment. 9. The Department reserves the right to revise initial comments and request further information from you based on any new or revised information received.	
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