

APPLICATION FORM

NOTIFICATION FOR INTENT TO DEVELOP (NID)

Section 38(1) and Section 38(8)

Completion of this form is required by Heritage Western Cape for the initiation of all impact assessment processes under Section 38 (1) & (8) of the National Heritage Resources Act (NHRA).

As per Section 38(1)(e) of the NHRA, submission of the NID must be initiated at the earliest stage of development. Should the development trigger any other legislation, practitioners may submit the NID without formal submission to other statutory bodies in order to comply with the NHRA.

This form is to be read in conjunction with the HWC Notification of Intent to Develop, Heritage Impact Assessment, (Pre-Application), Basic Assessment Reports, Scoping Reports and Environmental Impact Assessments.

All sections of the form must be completed in order to deem the application to be complete.

Making an incorrect statement or providing incorrect information may result in all or part of the application having to be reconsidered by HWC in the future, or submission of a new application.

HERITAGE WESTERN CAPE REFERENCE NO., AS PROVIDED DURING SCRUTINY:		
	SECTION A	
APPLIC	CATION MADE IN TERMS OF:	
	Section 38(1) of the NHRA (This development will not require a NEMA application)	
Х	Section 38(8) of the NHRA (This development requires an application with another authority)	
	Amendment of approved Site Development Plan (SDP) for endorsement. Endorsements are only reviewed upon submission of an assessment by the heritage practitioner confirming heritage design indicators as approved are not compromised by the revision	
	Advice in terms of Section 38(1)	
APPLIC	CABILITY OF OTHER LEGISLATION:	
i.e. De Cape	fy the authorised department that makes the final decision in terms of NEMA (National Environmental Act.), epartment of Mineral Resources, Department of Environmental Affairs and Development Planning Western, Department of Forestry, Fisheries and Environment etc.: Department of Environmental Affairs and Environmental Environmental Affairs and Environmental Environment	
Refere	ence number of authority / government department: <u>Current DEA&DP Ref <mark>No. ?</mark></u>	
Preser	nt phase at which the process with that authority stands: <u>Pre-Application Phase</u>	

PREVIOUS HWC APPLICATIONS APPLICABLE TO THE SITE AND OR DEVELOPMENT



<u>Provide details of any previous applications submitted to HWC on the site.</u>

HWC Reference No.	NHRA Section	Summary of Proposal	Application Status (Approved, Not Approved, Pending)	Permit / Record of Decision Date
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) `
			XIO	

SECTION B			
DETAILS OF SITE, PROPERTY OR PLACE			
Physical address or Location (e.g., of the R44): North of Sandhoogte Road and the existing Great Brak River WWTW, Great Brak River, Mossel Bay, Western Cape			
Erf or Farm Name and No. (including the name of the site): <u>Portion 23 of the Farm Wolwedans 129, Mossel Bay</u>			
Coordinates for logical center point (WGS84): 34° 03'27.13"S 22° 11'12.03"E Town: District / Municipality: Mossel Bay Municipality			
Property Extent: <u>4.7 ha</u> Current land Use: <u>vacant</u>			
Current zoning: Agriculture 1			
Predominant land uses of surrounding properties: <u>Great Brak River Waste Water Treatment Works, roads, agricultural.</u>			
SECTION C			
APPLICANT / AUTHORISED AGENT – Details of person to receive Record of Decision			
Name: Mr. S Naidoo			
Company: Mossel Bay Municipality			
Address and postal code: 101 Marsh Street, Mossel Bay – Private Bag X29 Mossel Bay 6500			
Cellular phone number: 044 606 5085			
E-mail: dnaidoo@mosselbay.gov.za			
Sianature: Date:			

REGISTERED OWNER OF PROPERTY



Name: Mossel Bay local Municipality - Co	ntact Person: Mr. S. Naidoo
Identity number of applicant: 62102452520	084
Address and postal code: 101 Marsh St	reet, Mossel Bay – Private Bag X29 Mossel Bay 6
Cellular phone number: 044 606 5085	
E-mail: <u>dnaidoo@mosselbay.gov.za</u>	
Declaration: I,	
Signature:	Date:

SECTION D

DETAIL OF PROPOSED DEVELOPMENT



Figure 1. The site location for the proposed PV Solar Plant, BESS and associated infrastructure.

Sharples Environmental Services CC (SES) has been appointed by Element consulting Engineers on behalf of Mossel Bay Local Municipality to undertake the environmental site sensitivity assessment in preparation for the potential environmental impact assessment in accordance with the National Environmental Management Act, 1998, as amended (Act 107 of 1998) (NEMA), in terms of the Environmental Impact Assessment (EIA) Regulations of 2014, as amended (Government Notice Regulation (GNR) No. 326 of 2017); GNR 517 of 2021), for the proposed PV Solar Plant and Battery Energy Storage Systems for Grootbrak Waste Water Treatment Works and Kleinbrak Water Treatment Works. The solar array site is located on portion 23 of the farm Wolvedans 129, Grootbrak Rivier, Mossel Bay



local municipality, Garden Route, Western Cape. The proposed site is located along the Sandhoogte Road, north from the N2, see Figure 1 for the locality of the proposed site and associated infrastructure.

The site development plan, indicating the proposed positions for the new equipment, associated with the hybrid energy solution. The main reason for the chosen positions is its central location between all of the different network components that need to be integrated. This ensures optimal cable lengths as well as easy access to all equipment for operation and maintenance purposes.

The proposed project is expected to consist of two PV solar array sites (Great Brak 1.34 ha and Klein Brak 1.26 ha Installation of 2028 x 565Wp Mono-crystalline Solar Panels, which convert the solar radiation into direct current). Each of the PV Solar array sites will have a solar MV station. The proposed site development has development area of 1.55 ha for future sustainable projects that is in the northern direction of the proposed site. See image below of the proposed Solar Array Site development as well as the associated distribution infrastructure located on the Grootbrak WWTW site. The proposed site has the following co-ordinates 34° 3'29.30"S; 22°11'12.30"E.



Figure 2. Proposed site location and associated infrastructure located on the proposed solar array site and opposite the proposed infrastructure.

Grootbrak WWTW & Sandhoogte WTW:





Figure 3. The site locality of Grootbrak WWTW & Sandhoogte WTW localities and plot of land (Indicated in red) where the solar array site will be located on.

It is important to note that the 11kV feeder, supplying the Grootbrak WWTW minisub, also feeds the Sandhoogte Booster Pump Station, via an 11kV ring-main unit, located in the same mini-substation. The Sandhoogte WTW plant is supplied via a 200kVA ground-mounted transformer (confirmed on site). The 11kV supply to this transformer is also from the Midbrak Substation, via an 11kV overhead line and two ring-main units. The Sandhoogte WTW is located within the following co-ordinates 34° 3'12.02"S; 22°11'0.67"E.



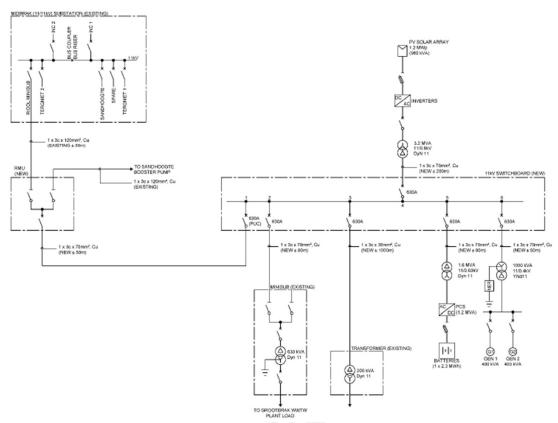


Figure 4. Proposed Network Configuration (Grootbrak WWTW & Sandhoogte WTW)

In summary, it can be concluded that the proposed re-configuration of the 11kV network at the **Sandhoogte WTW** will consist of the following:

- 1. The existing 200kVA ground-mounted transformer, supplying the total Sandhoogte WTW load, is supplied from the Midbrak Substation via an 11kV overhead line and the Sandhoogte Water RMU. This same supply also T's off before the transformer to supply the JJ Holiday transformer (100kVA).
- 2. It is recommended that the 200kVA transformer, supplying the Sandhoogte WTW, be disconnected from the current 11kV OHL and RMU supply and be supplied directly via a dedicated circuit breaker from the Renewable Energy Plant's 11kV switchboard.
- 3. A new section of 11kV (1x 3c x 35mm2 Cu) cable will have to be installed from the 200kVA transformer to the Circuit Breaker Feeder on the Renewable Energy Plant's 11kV switchboard. It is recommended that this section of cable be installed directly underneath the existing 11kV overhead line between Midbrak Substation and the Sandhoogte Water RMU, utilising the same servitude.
- 4. It is important to note that all alternative supplies to the Sandhoogte WTW transformer will have to be disconnected, in order to ensure that another point-of-utility connection is not accidentally created, which will link back to the hybrid solution's switchboard and create out-of-sync connection between sub-systems within the overall distribution network.

There are currently no back-up generators installed at the Grootbrak WWTW or Sandhoogte WTW, which means that the plants cannot be operated during power outages or interruptions and therefore purely relies on the retention capacity of the plant. This is not an ideal situation and could lead to environmental disasters or water shortages and hence the urgency for the implementation of this project.

Kleinbrak WTW:

Kleinbrak Water Treatment is located directly south of the N2 highway and approximately 1.0km north-west of the village of Kleinbrak in the Mossel Bay municipal area. The coordinates of the centre of the works are approximately 34°5′ 0.96"S and 22°8′ 31.25"E. Access to the facility is obtained from Heyns Street, just off the R102 road on the way to Kleinbrak town.

Form B – Section 38 Notification of Intent to Develop (NID) - April 2023



The Kleinbrak WTW does not have sufficient land available near the plant for the installation of the PV Solar panels, associated with the proposed hybrid energy solution. It is therefore recommended that the PV panels for the Kleinbrak WTW plant, be installed on the same portion of land, which has been identified for the Grootbrak WWTW's PV Solar Array.

The site development plan, indicating the proposed positions for the new equipment, associated with the hybrid energy solution for this plant is indicated in the figure below (Figure 5). The main reason for the chosen positions is its central location between all of the different network components that need to be integrated. This ensures optimal cable lengths as well as easy access to all equipment for operation and maintenance purposes. Furthermore, it should be noted that sufficient free space around the plant is limited, resulting in area being the most ideal location. This "islanded" section of land available has tarred road section all around, which allows for easy access from all directions for installation, maintenance, rigging of heavy equipment and diesel filling.



Figure 5. The proposed development for Kleinbrak WTW distribution infrastructure.





Figure 6. Proposed site location of the energy distribution for Kleinbrak WTW.

The proposed solar array development will need to facilitate approximately 5.65km of 11 kV cable route to connect the to the Kleinbrak WTW, see Figure 7 below.

Page 8 of 18





Figure 7. The proposed 11 kV Cable Route for the Kleinbrak distribution infrastructure.

the planned cable route will cross the N2 highway, along the existing 11kV cables between the Midbrak and Tergniet substations. From the Tergniet substation, it will be installed along the R102 road, all the way to the Kleinbrak WTW, where it will terminate at the new 11kV substation. The proposed cable route will have an additional 2 meter working corridor to facilitate the construction of the proposed cable route.

DEVELOPMENT DETAILS – Indicate which sections of the NHRA, or other legislation which requires a NID

X	Section 38(1)(a) Construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier over 300m in length.
	Section 38(1)(b) Construction of a bridge or similar structure exceeding 50m in length.
	Section 38(1)(c) Any development or activity that will change the character of a site:
X	(i) exceeding 5 000m² in extent.
х	(ii) involving three or more existing erven or subdivisions thereof.
	(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years.



*If (i), (ii) and/or (iii) are marked above, describe how the development will change the character of the site

The site is already transformed and degraded through agricultural activities, construction of an earth dam, and earthmoving activities. The surrounding landscape is already transformed by the Great Brak River WWTW as well as transport and bulk services infrastructure. Consequently, while the proposed activity will change the site from undeveloped to developed with a solar facility, the change in overall character is in keeping with the current surrounding land use, being a mix of agricultural and infrastructural.

Section 38(1)(d) Rezoning of a site exceeding 10 000m² in extent.

Other triggers e.g., in terms of other legislation (NEMA, etc.) – Describe the details:

A		
Activity No(s):	Provide the relevant Basic Assessment Activity(ies) as set out in Listing Notice 1	Describe the portion of the proposed development to which
140(5).	The development of facilities or infrastructure for the generation of	the applicable listed activity relates.
	electricity from a renewable resource where—	
	(i) the electricity output is more than 10 megawatts but less than 20	
	''	
	megawatts;	The proposed output is 10 MM/ and the total output of the
1	or	The proposed output is 10 MW, and the total extent of the
1	(ii) the output is 10 megawatts or less but the total extent of the facility	facility will be more than 1 ha – it will be approx. 18 ha. The
	covers an area in excess of 1 hectare;	size of the facility, both output and area triggers this activity
	excluding where such development of facilities or infrastructure is for photovoltaic installations and occurs—	
	(a) within an urban area; or	
	(b) on existing infrastructure. The development of a road— (i) for which an environmental authorisation	
	was obtained for the route determination in terms of activity 5 in	
	Government Notice 387 of 2006 or activity 18 in Government Notice 545 of	
	2010; or (ii) with a reserve wider than 13,5 meters, or where no reserve	The internal roads will be up to 8m wide and the total lengtl
24	exists where the road is wider than 8 metres; but excluding a road— (a)	will be approximately 2.5km. This activity is therefore
24	[roads] which [are] is identified and included in activity 27 in Listing Notice	triggered by the proposal.
	2 of 2014;	triggered by the proposal.
	(b) [roads] where the entire road falls within an urban area; or	
	(c) which is 1 kilometre or shorter	
	The clearance of an area of 1 hectares or more, but less than 20 hectares	
	of indigenous vegetation, except where such clearance of indigenous	The proposal is not expected to clear much vegetation apar
	vegetation is required for—	from, the roads, BESS and substation, for the PV solar panel
27	(i) the undertaking of a linear activity; or	the current pasture grasses will remain as only the PV pane
	(ii) maintenance purposes undertaken in accordance with a maintenance	stands legs will displace vegetation. This activity will howeve
	management plan.	be triggered by the proposal.
Activity	Provide the relevant Basic Assessment Activity(ies) as set out in Listing	Describe the portion of the proposed development to which
No(s):	Notice 3	the applicable listed activity relates.
	The development of a road wider than 4 metres with a reserve less than	
	13,5 metres Western Cape i. Areas zoned for use as public open space or	
	equivalent zoning; ii. Areas outside urban areas; (aa) Areas containing	
4	indigenous vegetation; (bb) Areas on the estuary side of the development	Internal roads will have a width of up to 8m including
()	setback line or in an estuarine functional zone where no such setback line	drainage on both sides of the road.
	has been determined; or iii. Inside urban areas: (aa) Areas zoned for	
	conservation use; or (bb) Areas designated for conservation use in Spatial	
	Development Frameworks adopted by the competent authority.	
	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.	The proposed site is located on fallow lands that have no
	i. Western Cape	been cultivated for more than 10 years, as such the
12	i. Within any critically endangered or endangered ecosystem listed in	vegetation is considered indigenous. This activity is therefore
	terms of section 52 of the NEMBA or prior to the publication of such a list,	triggered by the proposal.
	within an area that has been identified as critically endangered in the	triggered by the proposal.
	National Spatial Biodiversity Assessment 2004;	
	ii. Within critical biodiversity areas identified in bioregional plans;	
	ii. Within critical bloowersity areas identified in bloregional plans,	



Note:	Not applicable.	
No(s):	2	the applicable listed activity relates.
Activity	Provide the relevant Scoping and EIR Activity(ies) as set out in Listing Notice	Describe the portion of the proposed development to which
	v. On land designated for protection or conservation purposes in an Environmental Management Framework adopted in the prescribed manner, or a Spatial Development Framework adopted by the MEC or Minister.	
	equivalent zoning; or	
	line on erven in urban areas; iv. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an	
	iii. Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback	

- Only those activities listed above shall be considered for authorisation. The onus is on the Applicant to ensure that all applicable listed activities are included in the application. Environmental Authorisation must be obtained prior to commencement with each applicable listed activity. If a specific listed activity is not included in an Environmental Authorisation, a new application for Environmental Authorisation will have to be submitted.
- The Minister responsible for mineral resources is the Competent Authority to deal with all applications where the listed or specified activity is directly related to-
 - (a) prospecting or exploration of a mineral or petroleum resource; or
 - (b) extraction and primary processing of a mineral or petroleum resource.

ESTIMATED CONSTRUCTION COST AND/ OR VALUE OF DEVELOPMENT UPON COMPLETION: R 135 992 367.97

SECTION E

PROVIDE A SHORT HISTORY OF THE SITE, PROPERTY OR PLACE - Include sources where applicable

The site was cultivated during colonial and historic times. Agricultural activities likely began in the mid 1700s when farms were originally granted in the area. While a structure is visible in early aerial photographs (1939 to 1963), it appears to have been demolished by 1974. No structures are present on the property. The property has been registered to and managed by the Mossel Bay Municipality since the 1990s. The Great Brak River WWTW was constructed to the site in the mid 1990s. An earthen dam was built in the northern part of the property in around the year 2000 and some earthworks in the south have resulted in a small artificial wetland. No significant heritage resources or themes are associated with the property.

ANTICIPATED IMPACTS ON HERITAGE RESOURCES

Section 3 of the NHRA sets out the following categories of heritage resource as forming part of the national estate. Please indicate the known presence of any of these by checking the box alongside and then providing a description of each occurrence, including nature, location, size, type

Failure to provide sufficient detail or to anticipate the likely presence of heritage resources on the site may lead to a request for more detailed specialist information.

IDENTIFICATION OF ALL HERITAGE RESOURCES ON THE SITE, PROPERTY OR PLACE AND ITS ENVIRONMENTS

Please indicate where applicable:

Places, buildings, structures, and equipment of cultural significance: Description of Heritage Resource:
Descriptions of Heritage Impact:



	Places to which oral traditions are attached or which are associated with living heritage:
	Description of Heritage Resource:
	Descriptions of Heritage Impact:
	Places to which oral traditions are attached or which are associated with living heritage:
	Description of Heritage Resource:
	Descriptions of Heritage Impact:
	Uistoria al sattlemente and tourseanse.
	Historical settlements and townscapes:
	Description of Heritage Resource:
	Descriptions of Heritage Impact:
	Descriptions of Heritage Impact.
	Landscapes and natural features of cultural significance:
	Description of Heritage Resource:
	Beschpherrer Hernage Reserves.
	Descriptions of Heritage Impact:
	Geological resources of scientific or cultural significance:
	Description of Heritage Resource:
	Descriptions of Heritage Impact:
<u>X</u>	Archaeological resources – Incl. archaeological sites and material, rock art, battlefields, and wrecks etc.:
	Description of Heritage Resource: Stone Age implements of Early Stone Age and Middle Stone Age
	origin are known to occur in the surrounding landscape, but these are rated Grade IIIC or Not
	Conservation Worthy due to low densities, temporal mixing and the absence of associated organic
	and cultural remains. See further details in the accompanying "Heritage Statement".
	Descriptions of Heritage Impact: Although not anticipated, some coring/drilling excavations may
	disturb or damage Not Conservation Worthy Stone Age implements. These excavations are of limited spatial extent. The impact is expected to be of low to zero significance and will not have a negative
	impact on the archaeological or heritage value of the area.
	intpact of the dichaeological of hemage value of the died.
<u>X</u>	Palaeontological resources – i.e., fossils, geological formations etc.:
<u>~</u>	Description of Heritage Resource: " <u>The Kirkwood Fm. beneath the site is covered by colluvium and</u>
	previously-ploughed windblown sands. The construction of the SEF and associated infrastructure will
	mainly affect these surficial deposits which are of LOW fossil potential. A lateritic soil is developed in the
	underlying Kirkwood Fm. which is unfavourable for the preservation of unpetrified fossil material."
	(Pether 2024, Pg. 4 – see accompanying "Heritage Statement")
	Descriptions of Heritage Impact: "A significant impact on the palaeontological resources of the
	Kirkwood Formation and surficial coversands, due to construction of the SEF and BESS, is not anticipated
and additional palaeontological investigation is not required. Just in case petrified fossil we	
	unearthed in the shallow trenches made for the SEF cabling, an alert for the uncovering of fossil wood
	must be included in the Environmental Management Plan (EMP)" (Pether 2024, Pg. 4). See further
	details and recommendation in the accompanying report and Heritage Statement.
	Graves and burial grounds – e.g.: ancestral graves, graves of victims of conflict, historical graves, cemeteries etc.:
	Description of Heritage Resource:
L	Section 20 Notification of Intent to Develop (NID) April 2002



Descriptions of Heritage Impact:
Sites of significance relating to the history of slavery in South Africa: Description of Heritage Resource:
Descriptions of Heritage Impact:
Other heritage resources:
Description of Heritage Resource:
Descriptions of Heritage Impact:
PROVIDE A SUMMARY OF THE ANTICIPATED IMPACTS ON HERITAGE RESOURCES
The impact to Grade IIIC or Not Conservation Worthy Stone Age archaeological resources is expected to be of low to zero significance and will not have a negative impact on the archaeological or heritage value of the area.
"A significant impact on the palaeontological resources of the Kirkwood Formation and surficial coversands, due to construction of the SEF and BESS, is not anticipated and additional palaeontological investigation is not required." (Pether 2024, Pg. 4 – see accompanying "Heritage Statement").

	SECTION F	
RECOMMENDATION	. 00	

n your opinion, do you believ	e that a Heritage Impac	ct Assessment (HIA) is required?
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Yes X N

Specialist studies to be provided as part of the HIA:

	Architectural (i.e., fabric analysis, historical analysis, material analysis etc.)
	Archaeological Impact Assessment
	Paleontological Impact Assessment
3. 4	Townscape Assessment
9	Cultural Assessment
	Social Historical Study
	Visual Impact Assessment
	Other:



Recommendations made by: Dr. Peter Nilssen

Capacity: Holds a PhD in archaeology, University of Cape Town, 2000 and is a Professional member - in good standing - of the Association of Southern African Professional Archaeologists (ASAPA), including the Cultural Resource Management section of the same association since 1989 (ASAPA professional member # 097). Peter is an accredited Principal Investigator for archaeozoology (specialist analysis), coastal, shell midden and Stone Age archaeology; Field Director for Colonial Period archaeology; and Field Supervisor for Iron Age archaeology and Rock Art. He has worked as a professional archaeologist in Cultural Resource Management since 1989 and has completed more than 310 heritage-related impact assessments and mitigation projects as Principal Investigator.

PLEASE NOTE

Any further studies which HWC requires should be submitted in the form of a single, consolidated report with a single set of recommendations. Specialist studies must be incorporated in full, either as chapters of the report, or as annexures thereto.

Please refer to the Guidelines for Heritage Impact Assessments required in terms of Section 38 of the National Heritage Resources Act (25 of 1999).

Applications are considered to be public documents and are open to public scrutiny. Should you wish for your application to be kept confidential, please motivate your request on a separate sheet attached to your application form.

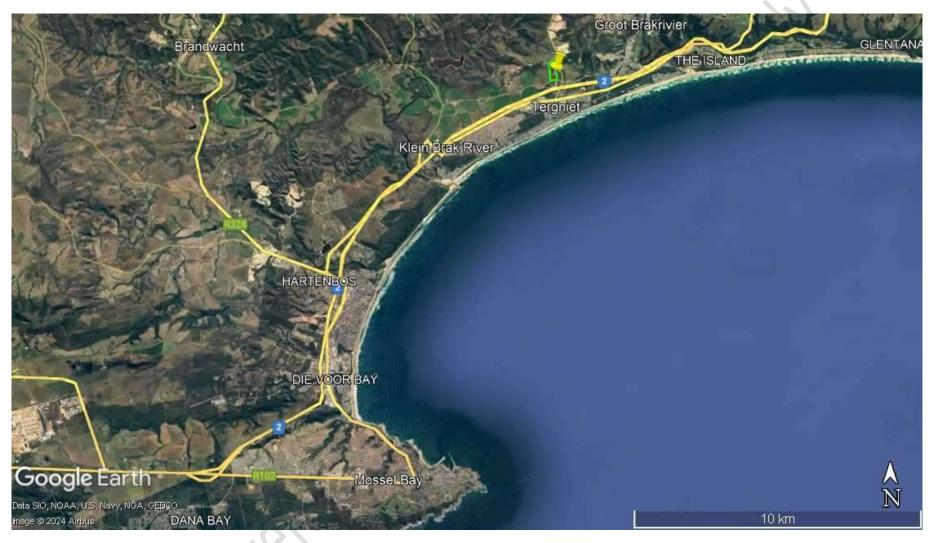
For applications that are granted confidentiality, this confidentiality will be limited to one year (12 months). applications that are granted confidentiality, this confidentiality will be limited to one year (12 months).





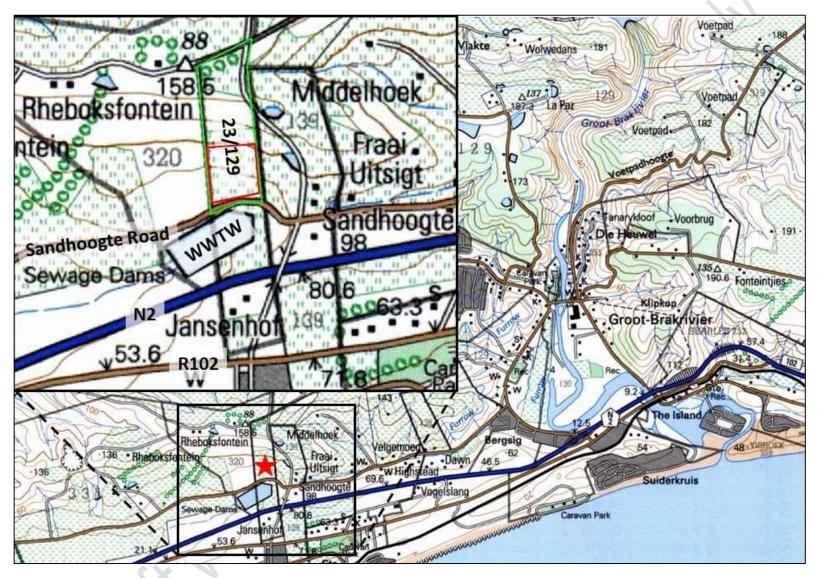
Locality Map. General location of the study area (yellow marker) NNW of Mossel Bay, Western Cape Province. Courtesy of Google Earth 2023.





Enlarged from Locality Map showing 23/129 (yellow marker and green polygon) relative to and Mossel Bay, Tergniet and Grootbrakrivier, Western Cape. Courtesy of Google Earth 2024.





Enlarged portion of 1:50 000 topographic map 3422 AA 1998 Mossel Bay showing 23/129 (red star and green/red polygons in inset) relative to Grootbrak WWTW and Sandhoogte Road. Red polygon represents the proposed development footprint. No structures are indicated in the study area. Courtesy of the Chief Directorate Surveys and Mapping, Mowbray and Google Earth 2024.





Enlargement showing 23/129 (green polygon) with existing developments, surroundings properties, and roads. Courtesy of Cape Farm Mapper.