PHS CONSULTING
environmental, land-use, eco-tourism planning and management.

SCREENING TOOL - SITE SENSITIVITY VERIFICATION REPORT:

THE PROPOSED CONSTRUCTION OF A NEW INDUSTRIAL PARK (WAREHOUSING AND OFFICES) SITUATED ON ERF 10301, WELLS ESTATE, GQEBERHA, EASTERN CAPE PROVINCE.

NOVEMBER 2025

EAP DETAILS:

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EXPERTISE: PAUL SLABBERT (Managing Member) graduated from the Potchefstroom University in 1995 with an honours degree B Art Et Scien. His passion for environmental, heritage & land-use planning with knowledge of associated management strategies enables him to facilitate all role players and to implement workable policies. His experience in rural and urban conservation with the emphasis on environmental impact and management, focusing on sustainable development, enabled him to have various publications. He has hands-on expertise in heritage, conservation and recreation discipline with the emphasis on creating economic and employment opportunities. With sufficient practical experience in terms of the criteria of the Interim Certificate Board for Environmental Assessment Practitioners of South Africa (EAPASA) for registration, Paul was registered as an Environmental Assessment Practitioner. He is also a member of the International Association for Impact Assessment (IAIA), Corporate Member of the South African Planning Institute (SAPI) and accredited with the Association of Professional Heritage Practitioners (APHP).

EXPERTISE: JENNA THERON (Senior EAP) graduated from Stellenbosch University with a Bachelor's Degree in International Studies (2005) and a Master's Degree in Cultural Tourism and Heritage Studies (2007). Jenna has experience in the field of environmental and heritage planning since interning for the CoCT's Environmental and Heritage Department in 2008 and thereafter working as an Environmental Assessment Practitioner since 2009 to the present. With sufficient practical experience in terms of the criteria of the Interim Certificate Board for Environmental Assessment Practitioners of South Africa (EAPASA) for registration, Jenna was registered as an Environmental Assessment Practitioner. She is also a member of the International Association for Impact Assessment (IAIA) and an accredited Associate member with the Association of Professional Heritage Practitioners – Western Cape (APHP).

PAUL SLABBERT
EAPASA Reg 2019-1036 (Registered EAP)

JENNA THERON
EAPASA Reg 2022-5926 (Registered EAP)

1. INTRODUCTION AND BACKGROUND

PHS Consulting has been appointed by Retail Logistics Fund (Pty) Ltd to undertake the application for Environmental Authorisation (Basic Assessment) for the proposed construction of a new Industrial Park (warehousing and offices) situated on Erf 10301, Wells Estate, Gqeberha, Eastern Cape Province. The property is bounded by the R102 (the Old Grahamstown Road) to the east and M Kaulela Street to the north with the R367 located to the west and Tynira Street to the south [**Figure 1: Locality Map**]. Erf 10301 is owned by Retail Logistics Fund (Pty) Ltd and is ±16.65 ha in extent. The site is zoned Industrial Zone 1.

The primary land-use of the proposed development will be warehousing with ancillary offices. Six zones within the property will be established made up of a combination of warehousing/ offices and these will be surrounded by roads, parking, service infrastructure, and open spaces. The total development footprint to be cleared is ± 161 101 m^2.

Access to the site will be from M Kaulela Street. The internal distribution road will be 11m wide from kerb to kerb consisting of two 4m wide lanes and two 1.5m wide yellow shoulders, with paved walkways on both sides. The main entrance off M Kaulela Street will be four lanes through a security checkpoint. The guardhouse will be set back from the street to allow for stacking of trucks.

Stormwater run-off will be concentrated to low points in the parking areas and marshalling yards, from where the minor portion of runoff will be conveyed via a conventional underground system. The internal roads, marshalling yards, parking areas and channels will act as overland flow routes for major storm events. A new stormwater connection from the existing stormwater canal to the south of the property (crossing the R102 to the site) will be constructed. The pipe route is across municipal land, and it is recommended that the culvert be laid within an 8m wide servitude. Please refer to **Figure 3: Proposed Stormwater Channel**.

Two stormwater attenuation facilities/dams will be constructed on the southwestern and south-eastern boundaries, respectively. The attenuation dams will act as dry detention basins, with a combined extended storage available to effectively attenuate up to a 1: 50-year post development flood, to 1:5-year pre-development flood levels. These facilities will effectively manage and convey stormwater run-off of up to 1:100-year rainfall events to minimize the risk of flooding of internal and downstream properties. A minimum combined storage volume of 2038m^3 is required. The attenuation dam outlets will be connected to the existing stormwater channel to the south-east of the site, via the new proposed culvert.

Due to the flatness of the area, each of the six zones will have its own sewer collection sump and pump station lifting the sewer and discharging into the existing main sewer pump station. The internal sewer network for the individual sites will consist of a 160mm diameter uPVC Class 34 pipe network and round precast fibre cement manholes. The proposed internal water reticulation network will consist of a 160mm diameter metered connection splitting into two separate lines: a 160mm diameter uPVC Class 16 for fire and a 110mm diameter uPVC Class 12 for potable water.

A 25kVA supply has been allocated to the site by the Nelson Mandela Bay Municipality (NMBM). The proposed Industrial Park is anticipated to have a load requirement of approximately 2.5 MVA. Incorporating a solar PV system is a key step toward advancing renewable energy and long-term sustainability for this development. With substantial roof space available, the initiative aims to deliver

up to 1 MVA of clean energy, reducing reliance on traditional power sources and improving energy resilience. Please refer to **Figure 2: Site Development Plan**.

The Department of Environmental Affairs' web-based National Environmental Screening Tool allows for the generation of a Screening Tool Report which is required, in terms of Regulation 16(1)(v) of the Environmental Impact Assessment Regulations 2014, as amended, to accompany any application for Environmental Authorisation. The Screening Tool identifies potential environmental sensitivities on the site in terms of 'Environmental Themes' (categorized as low, medium, high and very high) and makes Specialist Impact Assessment recommendations. The outcome of the Screening Tool is to be verified by the EAP in the form of a Site Sensitivity Report.

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, when applying for Environmental Authorisation [EA]" as published in Government Notice (GN) No. 320 of 20 March 2020 should be applied when considering various specialist input as part of the EA application for a proposed development. GN No. 320, sets out the requirements for a Site Sensitivity Verification Report particularly where a specific specialist assessment has not been prescribed an individual protocol. The current use of the land and the environmental sensitivity of the site identified by the Screening Tool must be confirmed by undertaking a site sensitivity verification, to be carried out by an environmental assessment practitioner or specialist. Furthermore, Government Notice No. 1150 was published on the 30 October 2020 which added two additional themes to the environmental themes list in Government Notice 320.

Figure 1: Locality Map: Showing the site (red outline).

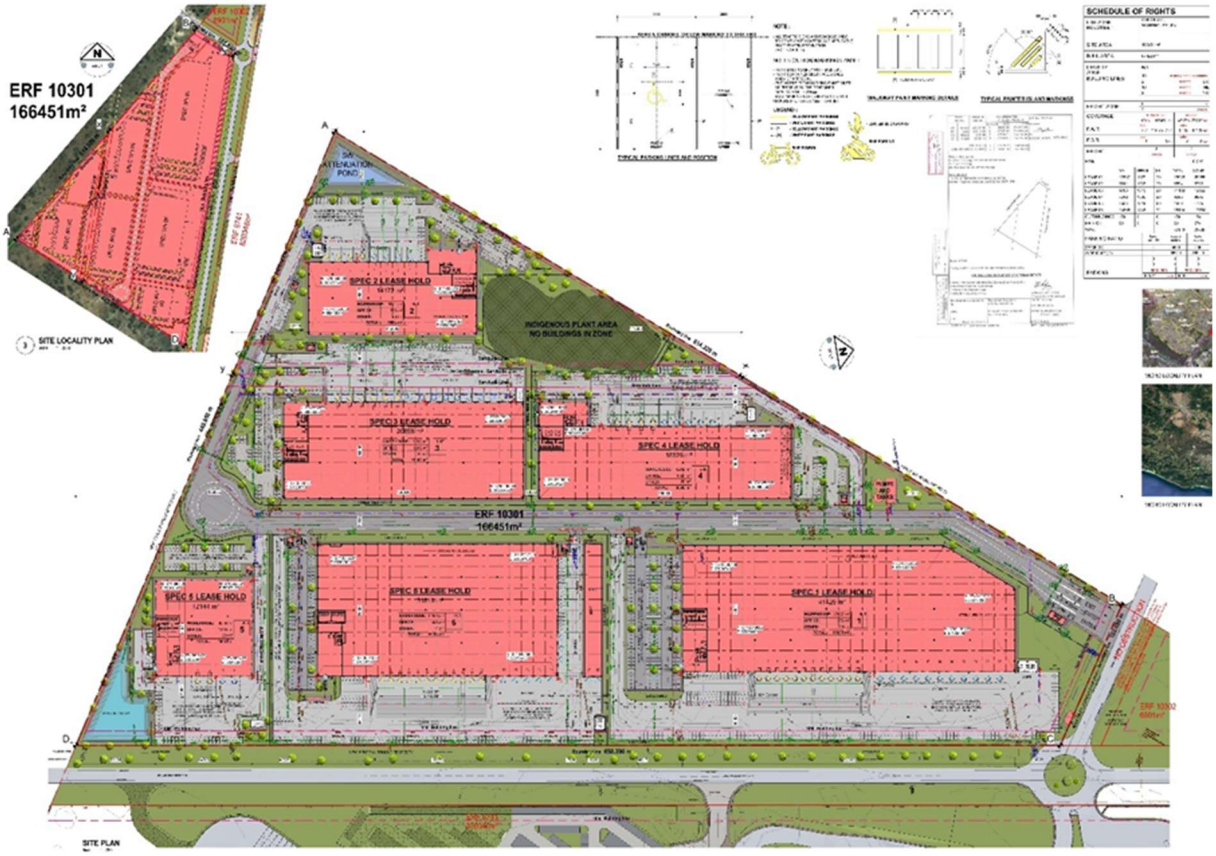

Figure 2: Site Development Plan (Preferred).

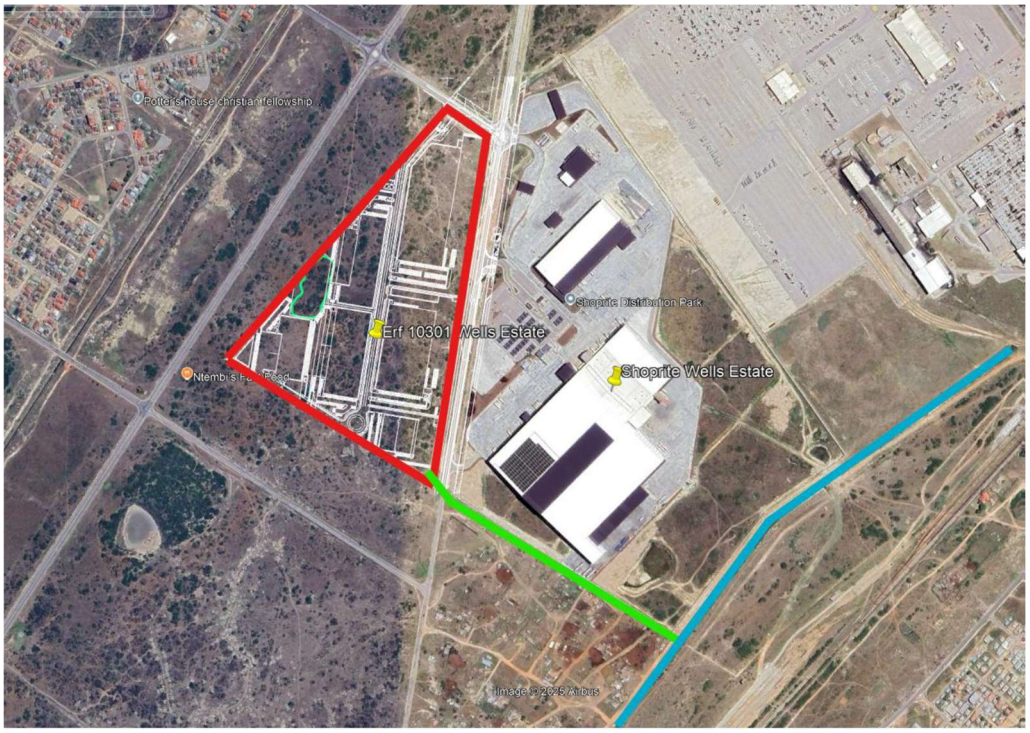

Figure 3: Proposed Stormwater connection in green (red = site; blue = existing SW channel).

3. CONTENTS & METHODOLOGY:

The applicable protocols or minimum information requirements, which were published in Government Notice No. 320 of 20 March 2020 (Government Gazette No. 43110 of 20 March 2020 refers), which came into effect on 9 May 2020, must be applied to the impact assessment process that must be followed. *"The site sensitivity verification must be undertaken through the use of:*

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

Furthermore, *"the outcome of the site sensitivity verification must be recorded in the form of a report that –*

a) Confirms or disputes the current use of land and the environmental sensitivity as identified by the screening tool, such as new developments or infrastructure, the change in vegetation cover or status etc.
b) Contains motivation and evidence (e.g. photographs) of either verified or different use of either the verified or different use of the land and environmental sensitivity; and
c) Is submitted together with the relevant assessment report prepared in accordance with the requirements of the EIA Regulations."

The information contained in this report was ground-truthed by means of a site visit that was conducted on the 10th of October 2025 by Paul Slabbert (EAPASA: 2019/1036). The EAP has consulted various spatial planning documents (regional and local) as well as available GIS information (i.e. Cape Farm Mapper etc.). Furthermore, Dr Brian Colloty from EnviroSci was appointed to undertake an Aquatic and Terrestrial Ecology Impact Assessment addressing plant and animal species as well as the aquatic environment. The impact assessment reports on results obtained in a survey of the regional literature and observations made during a site visit conducted on the 4 August 2025. However, it is also supported by information and observation collected from various other surveys conducted by Dr Brian Colloty from 1996 to 2025 for various EIAs and or search and rescue related projects within the surrounding area, including the adjacent Shoprite Checkers Distribution Centre.

4. EIA TOOLKIT REPORT RESULTS

The Screening Tool Report (**Appendix A**) identified the following for consideration:

1. Possible incentive, restriction, or prohibition
    - Strategic Transmission Corridor-Eastern Corridor
    - Strategic Gas Pipeline Corridors-Phase 2: Mossel Bay to Coega

2. Environmental attributes/features on the site which will be sensitive to development:
    - Agriculture Theme (Medium Sensitivity)
    - Animal Species Theme (High Sensitivity)
    - Aquatic Biodiversity Theme (Very High Sensitivity)
    - Archaeological and Cultural Heritage Theme (Low Sensitivity)
    - Civil Aviation Theme (Medium Sensitivity)
    - Defence Theme (Medium Sensitivity)

- Palaeontology Theme (Medium Sensitivity)
- Plant Species Theme (Medium Sensitivity)
- Terrestrial Biodiversity Theme (Low Sensitivity)

3. Possible specialist studies identified:
    - Landscape/Visual Impact Assessment
    - Archaeological and Cultural Heritage Impact Assessment
    - Palaeontology Impact Assessment
    - Terrestrial Biodiversity Impact Assessment
    - Aquatic Biodiversity Impact Assessment
    - Socio-Economic Assessment
    - Plant Species Assessment
    - Animal Species Assessment

4.1 INCENTIVE, RESTRICTION OR PROHIBITION

The site is located in the 'Strategic Transmission Corridor-Eastern Corridor' however this does not apply as it is for applications for Electricity and Transmission Infrastructure. The site is also located within the 'Strategic Gas Pipeline Corridors-Phase 2: Mossel Bay to Coega' (**Figure 4**). However, the site entails the development of an Industrial Park within an Industrial area within the Urban Edge of Gqeberha. The proposed activities will not impact on these corridors.

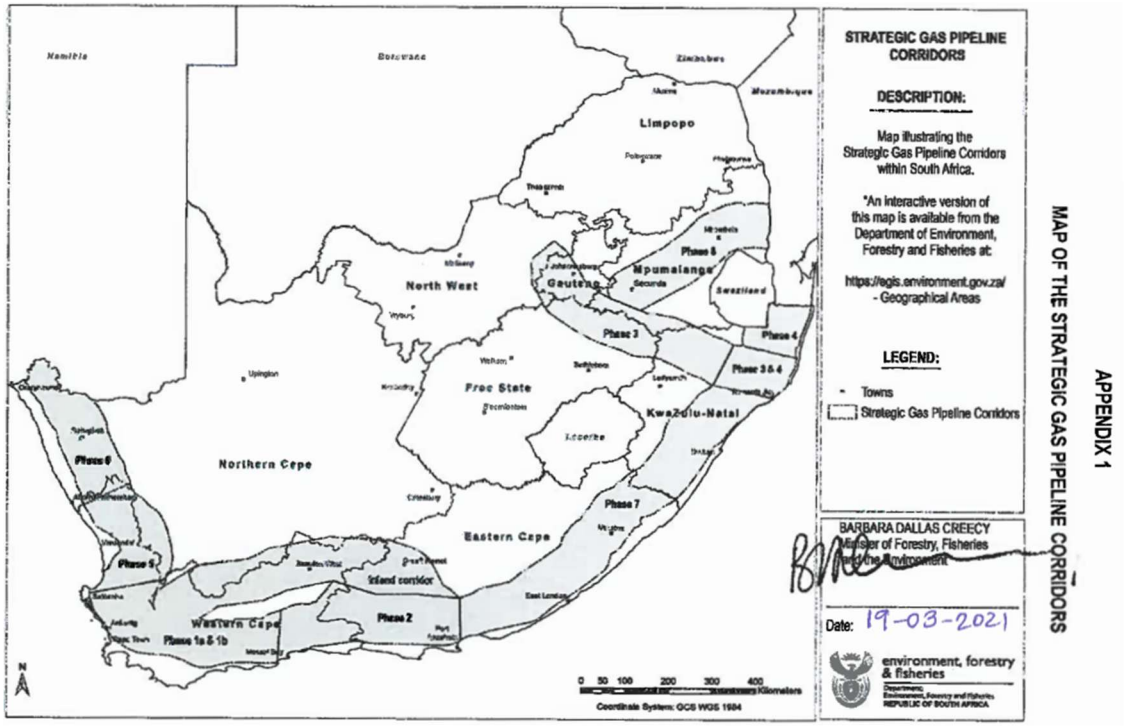

Figure 4: Strategic Gas Pipeline Corridors within South Africa. The site falls within Phase 2.

4.2 ENVIRONMENTAL THEMES

4.2.1 Agriculture Theme (MEDIUM Sensitivity)

The report generated for the proposed development area identified the site as having a 'Medium' agricultural sensitivity for the entire property. However, the proposed Industrial Park development is proposed on land zoned as Industrial Zone 1 inside the Urban Edge of the city of Gqeberha. The proposed activity is therefore in line with the current permissible land use, and the development will complement the surrounding land uses. The site is currently vacant and in a derelict state.

Furthermore, as part of the Public Participation Process, I&APs will have the opportunity to comment, and the Department of Agriculture will be included as a commenting authority. It is our opinion that the Department of Agriculture (DoA) would be the Competent Authority to comment regarding the agricultural sensitivity of the site and the need for any additional specialist involvement.

The overall MEDIUM sensitivity rating in terms of this project is therefore refuted. A LOW sensitivity rating would be more appropriate given the zoning and location of the property within the Urban Edge of the City of Gqeberha within which densification is encouraged.

4.2.2 Animal Species Theme (High Sensitivity)

The proposed development site was assigned a 'High' sensitivity rating for the 'Animal Species Theme'. Dr Brian Colloty from EnviroSci was appointed to therefore undertake a Terrestrial Ecology Impact Assessment.

The faunal assessment was firstly based on known distribution records, past assessments, and expertise, then supported by field observations. **Table 1** below lists the relevant faunal groups, their likelihood of occurring within the study area, together with their associated habitat and conservation status. The majority of species listed as well as observed with a conservation status were found in association with the rocky outcrops or the Bontveld areas. Most of the species that are likely to occur were observed during the Search and Rescue programme during the construction of the adjacent Checkers Distribution Centre (DC) site. Although the DC site was less degraded than the study area, with more available habitat, species may still occur.

The majority of these species were listed by the PNCO, while the species listed by the DFFE Screening Tool were all rated as of Medium Sensitivity (**Table 2** below). DFFE also listed several bird species however these are all birds of prey and will move from the site should they occur.

The overall HIGH sensitivity rating in terms of this project was not refuted. Dr Brian Colloty from EnviroSci was appointed to undertake a Terrestrial Ecology Impact Assessment addressing Animal Species. This will be included in the Basic Assessment Report.

Table 1: List of species recorded or likely to occur in the general study area, together with the conservation status. [*Key: Y = Observed; U = Unconfirmed, but within the distribution range; 2022 = observed.]*

Taxon	Common Name	RDB/SSC	Presence
Amphibians			
Amietophrynus pardalis	Eastern Leopard Toad	PNCO, IUCN LC	U
Amietophrynus rangeri	Raucous Toad	PNCO, IUCN LC	U
Breviceps adspersus pentheri	Penther's Rain Frog	PNCO, IUCN LC	U
Cacosternum boettgeri	Common caco	PNCO, IUCN LC	U
Cacosternum nanum	Bronze Caco	PNCO, IUCN LC	U
Hyperolius marmoratus	Painted Reed Frog	PNCO, IUCN LC	U
Kassina senegalensis	Bubbling Kassina	PNCO, IUCN LC	U
Semnodactylus wealii	Rattling Frog	PNCO, IUCN LC	U
Strongylopus fasciatus	Striped Stream Frog	PNCO, IUCN LC	U
Strongylopus grayii	Clicking Stream Frog	PNCO, IUCN LC	U
Tomopterna delalandii	Cape Sand Frog	PNCO, IUCN LC	U
Vandijkophrynus angusticeps	Cape sand Toad	PNCO, IUCN LC	U
Xenopus laevis	Common Platanna	PNCO, IUCN LC	U
Reptiles			
Acontias gracilicauda	Thin tailed legless skink	PNCO, IUCN LC	U
Acontias lineicauda	Algoa legless skink	PNCO, IUCN NT	Y
Acontias meleagris orientalis	Eastern legless skink	PNCO, IUCNLC	U
Acontias percivali tasmani	Tasman's legless skink	PNCO, IUCN LC	U
Agama atra	Southern rock agama	PNCO, IUCN LC	Y
Aspidelapse lubricus	Cape coral snake	PNCO, IUCN LC	U
Bitis arietans	Puff adder	PNCO, IUCN LC	Y
Bradypodion ventrale	Southern Dwarf Chameleon	PNCO, IUCN LC, CITIES 2	U
Causus rhombeatus	Night adder	PNCO, IUCN LC	U
Chersina angulata	Angulate tortoise	PNCO, IUCN LC, CITIES 2	Y
Cordylus cordylus	Cape girdled lizard	PNCO, IUCN LC, CITIES 2	U
Cordylus tasmani	Tasman's girdled lizard	CITES 2 ,PNCO, IUCN VU	U
Crotaphopeltis hotamboeia	Herald snake	PNCO, IUCN LC	Y
Dasypeltis scabra	Rhombic egg eater	PNCO, IUCN LC	U
Hemachatus haemachatus	Rinkhals	PNCO, IUCN LC	Y
Hemidactylus mabouia	Tropical house gecko	PNCO, IUCN LC	U
Lamprophis aurora	Aurora house snake	PNCO, IUCN LC	U
Lamprophis capensis	Brown house snake	PNCO, IUCN LC	U
Lamprophis fuscus	Yellow bellied house snake	PNCO, IUCN NT	U
Lamprophis inornatus	Olive house snake	PNCO, IUCN LC	U
Lycodonomorphus rufulus	Brown water snake	PNCO, IUCN LC	U
Naja nivea	Cape cobra	PNCO, IUCN LC	Y
Nucras intertexta	Spotted Sandveld Lizard	PNCO	U
Pelomedusa subrufa	Marsh terrapin	PNCO, IUCN LC	U
Philothamnus natalensis occidentalus	Natal green snake	PNCO, IUCN LC	U
Psammophis notostictus	Karroo whip snake	PNCO, IUCN LC	U
Psammophylax rhombeatus	Rhombic skaapsteker	PNCO, IUCN LC	U
Pseudaspis cana	Mole snake	PNCO, IUCN LC	U
Stigmochelys pardalis	Leopard Tortoise	PNCO, IUCN LC CITIES 2	Y
Trachylepis capensis	Cape skink	PNCO, IUCN LC	Y
Trachylepis homalcephala	Red sided skink	PNCO, IUCN LC	U
Trachylepis varia varie	Variable skink	PNCO, IUCN LC	U
Varanus albigularis	Rock Monitor	PNCO, IUCN LC CITIES 2	U
Varanus niloticus	Water Monitor	PNCO, IUCN LC CITIES 2	U
Mammals			
Amblysomus corriae	Fynbos golden mole	PNCO, IUCN NT	U
Amblysomus hittentotus	Hottentot Golden Mole	PNCO, IUCN DD	U

Taxon	Common Name	RDB/SSC	Presence
Aonyx capensis	African clawless otter	PNCO, IUCN LC	U
Atilax paludinosus	Marsh mongoose	PNCO, IUCN LC	U
Caracal caracal	Caracal	PNCO, IUCN LC	U
Cercopithecus pygerythrus	Vervet monkey	PNCO, IUCN LC	Y
Chlorotalpa duthieae	Duthie's golden mole	PNCO, IUCN LC	U
Crocidura cyanea	Reddish-Grey Musk Shrew	PNCO, IUCN DD	U
Crocidura flavescens	Greater red musk shrew	PNCO, IUCN LC	U
Cryptomys hottentotus	African mole rat	PNCO, IUCN LC	Y
Cynictis penicillata	Yellow mongoose	PNCO, IUCN LC	Y
Dendromus melanotis	Grey climbing mouse	PNCO, IUCN LC	U
Dendromus mesomelas	Brant's climbing mouse	PNCO, IUCN LC	U
Felis cattus	Domestic cat	Alien	Y
Felis silvestris	African wild cat	PNCO, IUCN LC	U
Galerella pulverulenta	Cape grey mongoose	PNCO, IUCN LC	U
Genetta genetta	Small spotted genet	PNCO, IUCN LC	U
Genetta tigrina	Large spotted genet	PNCO, IUCN LC	U
Georychus capensis	Cape mole rat	PNCO, IUCN LC	U
Graphiurus murinus	Woodland dormouse	PNCO, IUCN LC	U
Graphiurus ocularis	Spectacled dormouse	PNCO, IUCN LC	U
Herpestes ichneumon	Large grey mongoose	PNCO, IUCN LC	U
Hystrix africaeaustralis	Cape porcupine	PNCO, IUCN LC	U
Ictonyx striatus	Striped pole cat	PNCO, IUCN LC	U
Lepus saxatilis	Scrub hare	PNCO, IUCN LC	Y
Macroscelides proboscideus	Round eared elephant shrew	PNCO, IUCN LC	U
Mastomys natalensis	Natal multimammate mouse	PNCO, IUCN LC	U
Mellivora capensis	Honey badger	PNCO, IUCN CITES 3 NT	U
Micaelamys namaquensis	Namaqua rock mouse	LC	U
Mus minutoides	Pygmy mouse	LC	U
Mus musculus	House mouse	Alien	U
Myosorex varius	Forest Shrew	PNCO, IUCN DD	U
Neoromicia capensis	Cape serotine bat	PNCO, IUCN LC	U
Nycteris thebaica	Egyptian slit faced bat	PNCO, IUCN LC	U
Orycteropus afer	Aardvark	PNCO, IUCN LC	U
Otocyon megalotis	Bat eared fox	PNCO, IUCN LC	U
Otomys irroratus	Vlei rat	PNCO, IUCN LC	Y
Otomys unisulcatus	Bush vlei rat	PNCO, IUCN LC	U
Panthera pardus	Leopard	PNCO, IUCN LC	U
Papio cynocephalus ursinus	Chacma baboon	PNCO, IUCN LC	U
Philantomba monticola	Blue duiker	PNCO, IUCN CITES2 VU	U
Poecilogale albinucha	African striped weasel	PNCO, IUCN VU	U
Potamochoerus larvatus	Bush pig	PNCO, IUCN LC	U
Raphicerus campestris	Steenbok	PNCO, IUCNLC	U
Raphicerus melanotis	Grysbok	PNCO, IUCNLC	U
Rattus rattus	House rat	PNCO, IUCN LC	U
Rhabdomys pumilio	Four striped grass mouse	PNCO, IUCN LC	Y
Saccostomus campestris	Pouched mouse	PNCO, IUCNLC	U
Suncus infinitesimus	Least dwarf shrew	PNCO, IUCN E	U
Sylvicapra grimmia	Common duiker	PNCO, IUCN LC	U
Tragelaphus scriptus	Bush buck	PNCO, IUCN LC	U
Vulpes chama	Cape Fox	PNCO, IUCN LC	U

Table 2: DFFE Screening Tool listed species

Sensitivity	Feature(s)
High	Aves-Circus ranivorus
High	Aves-Circus maurus
High	Aves-Afrotis afra
Medium	Aves-Neotis denhami
Medium	Sensitive species 5
Medium	Mammalia-Chlorotalpa duthieae
Medium	Sensitive species 8
Medium	Invertebrate-Aneuryphymus montanus

4.2.3 Aquatic Biodiversity Theme (Very High Sensitivity)

This theme is identified and mapped as 'Very High'. Dr Brian Colloty from EnviroSci was appointed to therefore undertake an Aquatic & Terrestrial Ecology Impact Assessment.

No rivers or connected watercourses are anticipated within the study area, i.e. no concentrated surface flows are linked directly to any mainstem rivers within the greater region. Thus, the site is dominated by a coastal bench / plateaus which is underlain by calcrete formations of the Algoa Group (Alexandria Formation), within the M30B quaternary catchment of the Coega River. Two canals are located between 200 and 500m from the site, and these drain the Motherwell area of stormwater into the Swartkops Estuary (**Figure 5**).

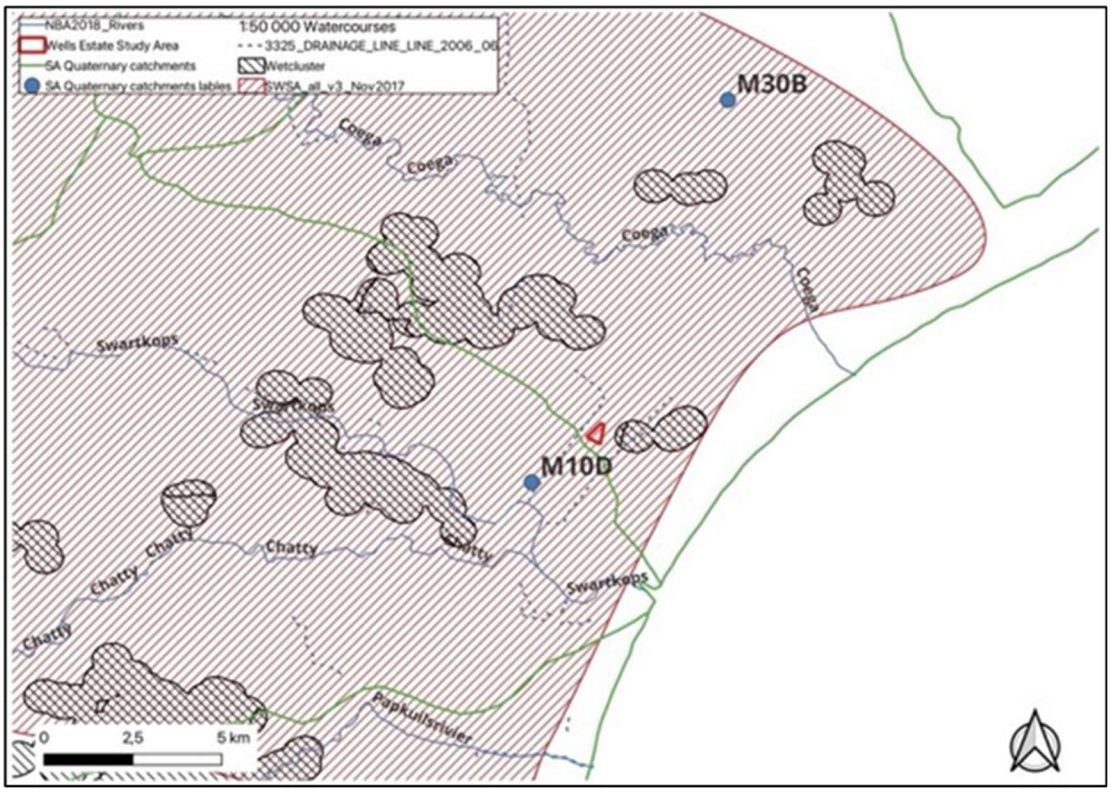

Figure 5: Project locality map indicating the various quaternary catchments, watercourses and mainstem rivers (Source DWS and NGI) within the study area boundary

At a finer scale, the National Freshwater Ecosystem Priority Areas atlas (NFEPA) (Nel et al., 2011) indicated that the regional setting is mostly described in the form of wetland associated vegetation within the study region and dominated by aquatic ecosystems linked with the Albany Thicket Bontveld and Albany Thicket Valley vegetation units (noting vegetation terminology in the NFEPA is generic and not specific to actual vegetation types). The proposed site (**Figure 5**) is not located within any Wetland Cluster as shown in the NSBA (2018) spatial information. These are areas with a high density of wetlands such as Valley Bottom systems. **Figure 5** however indicates that the proposed site is located within the Coega Table Mountain Sandstone Groundwater Strategic Water Resource Area.

The South African Inventory of Inland Aquatic Ecosystems (SAIIAE) geodatabase offers a collection of data layers pertaining to ecosystem types and pressures for both rivers and inland wetlands. This includes the South African National Wetland Map 5 (NWM5) for inland wetlands and estuaries, associated with river line data and many other data sets within the 2018 SAIIAE. The NWM5 also indicates the estuarine functional zone and wetland ecosystems identified within the broader study area. One wetland was indicated within 500m of the proposed site, namely an Endorheic Pan / Depression.

A depression is a wetland ecosystem with closed or near-closed elevation contours, increasing in depth from the perimeter to a central area within which water typically accumulates. Depressions may be round-bottomed or flat-bottomed (referred to as pans) (Ford and Williams, 1989). Most depressions occur either where the water table intercepts the land surface (such as on coastal plains along the South African coastline), or in semi-arid settings where a lack of sufficient water inputs prevents areas where water accumulates from forming a connection with the open drainage network (Ollis et al., 2013). The soils are, however, typical of ephemeral systems and show signs of gleying, and or iron nodules indicating periods of inundation when soils are saturated and anaerobic conditions occur.

Surfaces that are predisposed to pan formation are typically low-angled, which encourages ponding and limits drainage development. Pans form either by dissolution of the surface of underlying bedrock, called solution pans, or by the collapse of underlying caves within bedrock, called collapse pans (Marker, 1988).

Vegetation associated with the pans observed within the study area was dominated by three key habitats, the central floor of the pan, if not inundated is typically covered by grasses, sedges, and or a variety of perennial forbs (**Figure 6**). The open area is then either encircled with either thicket elements, mostly Grassridge Bontveld, typically dominated by *Searsia, Sideroxylon, Euclea* and *Pterocelastrus* species (**Figure 6**).

The overall VERY HIGH Sensitivity rating was not refuted, and Dr Brian Colloty from EnviroSci was appointed to undertake an Aquatic Impact Assessment. This will be included in the Basic Assessment Report.

Figure 6: The pan / depression surrounded by thicket elements (Grassiridge Bontveld) observed within 500m of the site (Photo: Dr. Brian Colloty).

4.2.4. Archaeological and Cultural Heritage Theme (Low Sensitivity)

This theme is identified and mapped as 'Low' across the property. Jenna Lavin undertook a Heritage NID and Screener which was submitted to ECPHRA. Jenna Lavin stated that:

"*Based on the extensively disturbed nature of the area proposed for development, it is very unlikely that the proposed development will impact on significant, in situ archaeological resources. In addition, there are clearly no structures of any kind located within the proposed development area which may have heritage significance. As such, it is recommended that no further archaeological assessments are required. However, should any archaeological resources or human remains be uncovered during the course of construction, work must cease and ECPHRA must be notified.*

It is also very unlikely that significant palaeontological resources will be impacted by the proposed development. However, it is recommended that Chance Finds Procedure be adopted and implemented throughout the construction phase of the development."

ECPHRA agreed with the findings in their 'Final Comment' dated 27 November 2025. The LOW Sensitivity rating is therefore not refuted, and no further studies are required. The Heritage NID & Screener and ECPHRA's final comment is included in the Basic Assessment Report.

4.2.5. Civil Aviation Theme (Medium Sensitivity)

The Civil Aviation theme is identified as 'MEDIUM' across the property. According to the Screening Tool this is as a result of civil aviation radar and a major civil aviation aerodrome located within 15km – 35km away from the site. This is in fact the *Chief Dawid Stuurman International Airport* and the Military Naval Airforce base which is located approximately 19km away. An applicant intending to undertake an activity for which a specialist assessment has been identified on the screening tool as being of **'MEDIUM' sensitivity** for civil aviation has a "*low potential for negative impacts on the civil aviation installation, and if there are impacts there is a high likelihood of mitigation. Further assessment of the potential impacts may not be required*." The proposed activities involve the construction of an Industrial Park (offices and warehousing), on property zoned Industrial Zone 1 within the Urban Edge of the city of Gqeberha and is surrounded by similar land uses. The proposed development will therefore have no impact on the *Chief Dawid Stuurman International Airport* or the Naval Airforce over 19km away. standard Civil Aviation laws apply to aircrafts flying over built up areas.

The Civil Aviation Sensitivity in terms of the site is therefore refuted and is considered LOW.

4.2.6. Defence Theme (Medium Sensitivity)

A 'MEDIUM' sensitivity has been assigned across the property. Gqeberha hosts several South African National Defence Force (SANDF) sites, including an Air Force Station, a Naval Station providing support to visiting ships, and an Army Support Base. In accordance with the "Protocol for the specialist assessment and minimum report content requirements for environmental impacts on defence installations" an applicant intending to undertake an activity for which a specialist assessment has been identified on the screening tool, on a site identified as being of **'MEDIUM' sensitivity** for defence has a "*low potential for negative impacts on the defence installation, and if there are impacts there is a high likelihood of mitigation. Further assessment of the potential impacts may not be required*." The proposed activities involve the construction of an Industrial Park (offices and warehousing), on property zoned Industrial Zone 1 within the Urban Edge of the city of Gqeberha and is surrounded by similar land uses. The Air Force Station and Army Support Base is located adjacent to the International Airport approximately 19km from the site and the Naval Station is located in the same area at the Harbour approximately 18km from the site. No military or defence sites would therefore be impacted by the proposed activities.

The Defence Sensitivity in terms of the site and in relation to the proposed activity is refuted and is considered LOW.

4.2.7. Palaeontology Theme (Medium Sensitivity)

This theme is identified and mapped as 'MEDIUM' across the property. Jenna Lavin undertook a Heritage NID and Screener which was submitted to ECPHRA. Jenna Lavin stated that:

"*Based on the extensively disturbed nature of the area proposed for development, it is very unlikely that the proposed development will impact on significant, in situ archaeological resources. In addition, there are clearly no structures of any kind located within the proposed development area which may have heritage significance. As such, it is recommended that no further archaeological assessments are required. However, should any archaeological resources or human remains be uncovered during the course of construction, work must cease and ECPHRA must be notified.*

It is also very unlikely that significant palaeontological resources will be impacted by the proposed development. However, it is recommended that Chance Finds Procedure be adopted and implemented throughout the construction phase of the development."

ECPHRA agreed with the findings in their 'Final Comment' dated 27 November 2025. Therefore, the 'MEDIUM' Sensitivity rating is refuted, and a LOW Sensitivity rating is recommended with no further studies required. The Heritage NID & Screener and ECPHRA's final comment is included in the Basic Assessment Report.

4.2.8. Plant Species Theme (Medium Sensitivity)

This theme is identified and mapped as 'Medium' sensitivity. Dr Brian Colloty from EnviroSci was appointed to undertake a Terrestrial Ecology Impact Assessment. Based on the updated Mucina and Rutherford (2006) Vegetation Map (Veg Map) of South Africa released with the 2018 National Spatial Biodiversity Atlas (NSBA), and again revised in 2024, the spatial data indicates the study area is located within Grassridge Bontveld. This is also confirmed in the Nelson Mandela Bay Municipality (NMBM) Bioregional Conservation Plan (SRK Consulting, 2014).

Grassridge Bontveld occurs on shallower, gravelly clayey soil and extends from the Coega Estuary to the Swartkops Estuary where it transitions into Sundays Valley Thicket vegetation. Grassridge Bontveld vegetation, restricted to the karst landscape created in the underlying limestone, consists of scattered, low bushclumps of Thicket species, in a matrix of open grassland which contains species characteristic of Fynbos, Grassland and Succulent Karoo vegetation types. Bushclumps are dominated by *Aloe africana*, *Chrysanthemoides monilifera, Colpoon compressum*, *Euclea undulata*, *Pterocelastrus tricuspidatus* and *Sideroxylon inerme*. The grassy matrix in Grassridge Bontveld is dominated by *Cynodon dactylon*, *Eustachys paspaloides*, *Themeda triandra*, *Ficinia truncata*, *Acmadenia obtusata*, *Disparago ericoides*, *Euryops ericifolius*, *Gazania krebsiana*, *Gibbaria scabra*, *Jamesbrittenia microphylla*, *Lobostemon trigonus*, *Monsonia emarginata*, *Nylandtia spinosa*, *Osteospermum imbricatum* and *Pteronia incana*. These grassy / fynbos areas also included high number of the small Euphorbia species (*E. globosa, & E.* obesa), *Pachypodium bispinosum* and *P. succulentum* and *Fockea gracilis* plants all of which are protected (**Figure 6-8**).

Figure 6: A view of the remaining Grassridge Bontveld area located on the northern boundary of the site (Photo: Dr. Brian Colloty).

Figure 7: Several listed species occur within the Bontveld area and include species such as Euphorbia meloformis (Near Threatened) or local endemics such as Pelargonium reniform (Photo: Dr. Brian Colloty).

Figure 8: Several of these plants (Euphorbia procumbens) remain throughout the study area, even in the disturbed portions and should be relocated to the proposed Bontveld open space area (Photo: Dr. Brian Colloty).

Figure 9: A view of the western portions of the site, covered by alien tree species (Photo: Dr. Brian Colloty).

Figure 10: The eastern portion of the site, with building rubble and cleared bush in the background (Photo: Dr. Brian Colloty).

Figure 11: Central portion of the site, with building rubble with significant amounts of old asbestos (Photo: Dr. Brian Colloty).

The proposed site is located within this vegetation type and thus all of these species listed above were observed with small isolated areas, with only one small clump (thicket / grassland mosaic) remaining (4% of the site). The remainder of the site (96%), is heavily grazed by goats and cattle, used for illegal dumping and covered by alien *Acacia cyclops, Acacia longifolia, Acacia saligna, Lantana camara and Opuntia ficus-indica* (**Figure 9**). At the time of the survey the local community was clearing the site of both indigenous and alien vegetation in an attempt to increase the grazing value of the site (**Figure 10 & 11**).

From a conservation perspective the vegetation type/habitat listed in the NMBM Bioregional Plan (SRK Consulting, 2014) as follow: Vulnerable - Grassridge Bontveld (90% remained), It should be noted that this bioregional plan was promulgated under the National Environmental Management: Biodiversity Act (10/2004): Publishing of the Final Bioregional Plan for the NMBM, March 2014 GN No. 3362.

On 18 November 2022 a revised list of threatened ecosystems in need of protection was published in terms of the National Environmental Management, Biodiversity Act (NEMBA), (Act No 10 of 2004) (based on vegetation types in the Vegmap, 2006, as amended). Should a vegetation type or ecosystem be listed, actions in terms of NEM:BA are triggered. None of those ecosystems observed within the study area are listed in terms of this Act, i.e. the remaining extent of the observed Grassridge Bontveld is listed as Least Concern.

Several important plant species are known to occur within the region as these are listed by SANBI under the Threatened Species Programme using the International Union for Conservation of Nature or IUCN (Red data list) criteria. These are shown in **Table 3** below and any such plant Species of Special Concern were actively searched for during the survey. The highest density of the listed species are always found within the Grassridge Bontveld areas, and in particular along the edges of the bush clumps (**Figure 6 - 9**).

Several plant species are also listed in the Provincial Nature Conservation Ordinance (PNCO) of 1974, the National Forest Act (Act No. 84 of 1998). These species of special concern will require permits from the relevant provincial departments if any individuals are to be removed, translocated or trimmed according to the relevant legislation including the National Forestry Act (No. 84 of 1998) (Department of Forestry, Fisheries and the Environment) and the Provincial Nature Conservation Ordinance (Eastern Cape Department of Economic Development, Environmental Affairs and Tourism – Permit Administration) (**Table 3**).

The survey also included searching for any species listed in the DFFE Screening Tool (**Table 4** below) with this listed as having a Medium Sensitivity, however this is superseded by any threat status for species listed in **Table 3**.

The overall 'Medium' sensitivity rating in terms of this project was not refuted. Dr Brian Colloty from EnviroSci was appointed to undertake an Aquatic & Terrestrial Ecology Impact Assessment. This Impact Assessment report will address the plant species theme and will be included in the Basic Assessment Report.

Table 3: Protected plant species observed in the study area under the SANBI Threatened Species Programme and Provincial Nature Conservation Ordinance

Family	Species	Threat status (SANBI IUCN)	Protected status (PNCO 1974, NFA 1998)	Life form
AMARYLLIDACEAE	*Boophone disticha* (L.f.) Herb.	Declining	Protected	Geophyte
AMARYLLIDACEAE	*Haemanthus coccineus* L.	LC	Protected	Geophyte
APOCYNACEAE	*Pachypodium bispinosum* (L.f.) A.DC.	LC	Protected	Succulent
ASPHODELACEAE	*Aloe africana* Mill.	LC	Protected	Succulent
ASTERACEAE	*Euryops ericifolius* (Bél.) B.Nord.	EN		Dwarf shrub
CRASSULACEAE	*Crassula perfoliata* L. var. *coccinea* (Sweet) G.D.Rowley	LC	Protected	Succulent
CRASSULACEAE	*Crassula perfoliata* L. var. *minor* (Haw.) G.D.Rowley	LC	Protected	Succulent
EUPHORBIACEAE	*Euphorbia procumbens* Mill.	LC	Protected	Succulent
EUPHORBIACEAE	*Euphorbia globosa*.	LC	Protected	Succulent
EUPHORBIACEAE	*Euphorbia ledienii* A.Berger var. *ledienii*	LC	Protected	Succulent
EUPHORBIACEAE	*Euphorbia meloformis* Aiton subsp. *meloformis*	NT	Protected	Succulent
FABACEAE	*Indigofera tomentosa* Eckl. & Zeyh.	NT		Herb
GERANIACEAE	*Pelargonium reniforme* Curtis subsp. *reniforme*	DDD		Dwarf shrub, geophyte
IRIDACEAE	*Babiana sambucina* (Jacq.) Ker Gawl. subsp. *sambucina*	LC	Protected	Geophyte
IRIDACEAE	*Freesia corymbosa* (Burm.f.) N.E.Br.	LC	Protected	Geophyte
IRIDACEAE	*Tritonia gladiolaris* (Lam.) Goldblatt & J.C.Manning	LC	Protected	Geophyte
AIZOACEAE	*Aptenia haeckeliana* (A.Berger) Bittrich ex Gerbaulet	LC	Protected	Succulent
AIZOACEAE	*Delosperma echinatum* (Lam.) Schwantes	LC	Protected	Succulent
AIZOACEAE	*Glottiphyllum longum* (Haw.) N.E.Br.	LC	Protected	Succulent
AIZOACEAE	*Rhombophyllum rhomboideum* (Salm-Dyck) Schwantes	EN	Protected	Succulent
AIZOACEAE	*Ruschia cymbifolia* (Haw.) L.Bolus	LC	Protected	Succulent
ORCHIDACEAE	*Acrolophia capensis* (P.J.Bergius) Fourc.	LC	Protected	Geophyte
RUTACEAE	*Agathosma stenopetala* (Steud.) Steud.	VU		Dwarf shrub
SAPOTACEAE	*Sideroxylon inerme* L. subsp. *inerme*	LC	Protected (NFA)	Tree

Table 2: Plant species listed by the DFFE Screening Tool, noting some may not be listed by name, while those with a red star were observed on site

Sensitivity	Feature(s)
Medium	Rhombophyllum rhomboideum ★
Medium	Selago zeyheri
Medium	Rapanea gilliana ★
Medium	Syncarpha recurvata ★
Medium	Sensitive species 91
Medium	Zygophyllum divaricatum
Medium	Cotyledon adscendens
Medium	Justicia orchioides subsp. orchioides

4.2.9. Terrestrial Biodiversity Theme (LOW Sensitivity)

A LOW sensitivity rating has been assigned to the property for this theme. However, Dr Brian Colloty from EnviroSci was appointed to undertake a Terrestrial Ecology Impact Assessment that would address the plant and animal species themes.

Several spatial conservation planning tools have considered the study area (SRK 2014 & ECBCP 2019). **Figure 12** highlights the Aquatic Critical Biodiversity Areas (CBAs) as defined in the Eastern Cape Biodiversity Conservation Plan or ECBCP (2019), in which the spatial data indicates that none of the project components are located within any type of CBA, however the pans / depressions were shown as Aquatic CBA Type 1. The site is not located within any National Freshwater Ecosystem Priority Atlas areas (NFEPAs).

The NMBM Conservation Plan (SRK 2014) exists as a promulgated Municipal wide fine scale Conservation Assessment and Plan (SRK, 2014) (**Figure 13**). Thus, this plan overrides the Provincial ECBCP (2019) in terms of the terrestrial components only. Due to current and proposed future land uses for the study area, no Terrestrial CBAs indicated within the site.

In summation, the site thus has no direct connection with any of the aquatic resources shown as well as Critical Terrestrial habitats due to the fragmentation and or degradation of the surrounding areas.

The overall 'LOW' sensitivity rating in terms of this project is therefore not refuted, however, Dr Brian Colloty from EnviroSci was appointed to undertake an Aquatic & Terrestrial Ecology Impact Assessment. This will be included in the Basic Assessment Report.

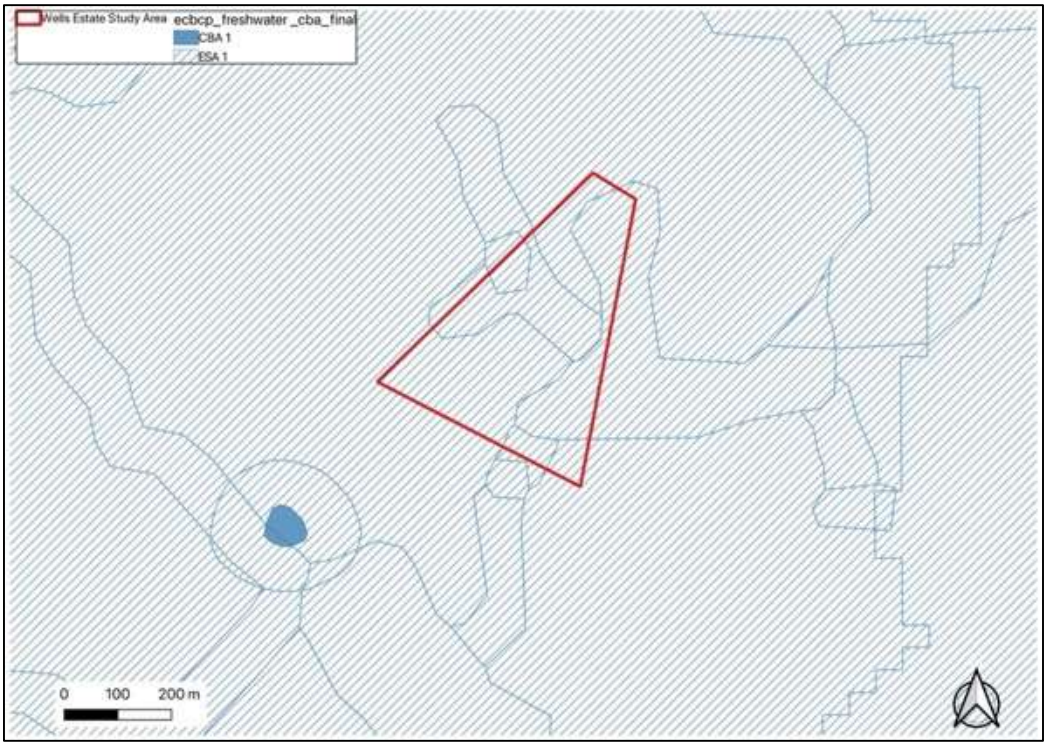

Figure 12: A map illustrating the various Aquatic CBA's described in the ECBCP (2019)

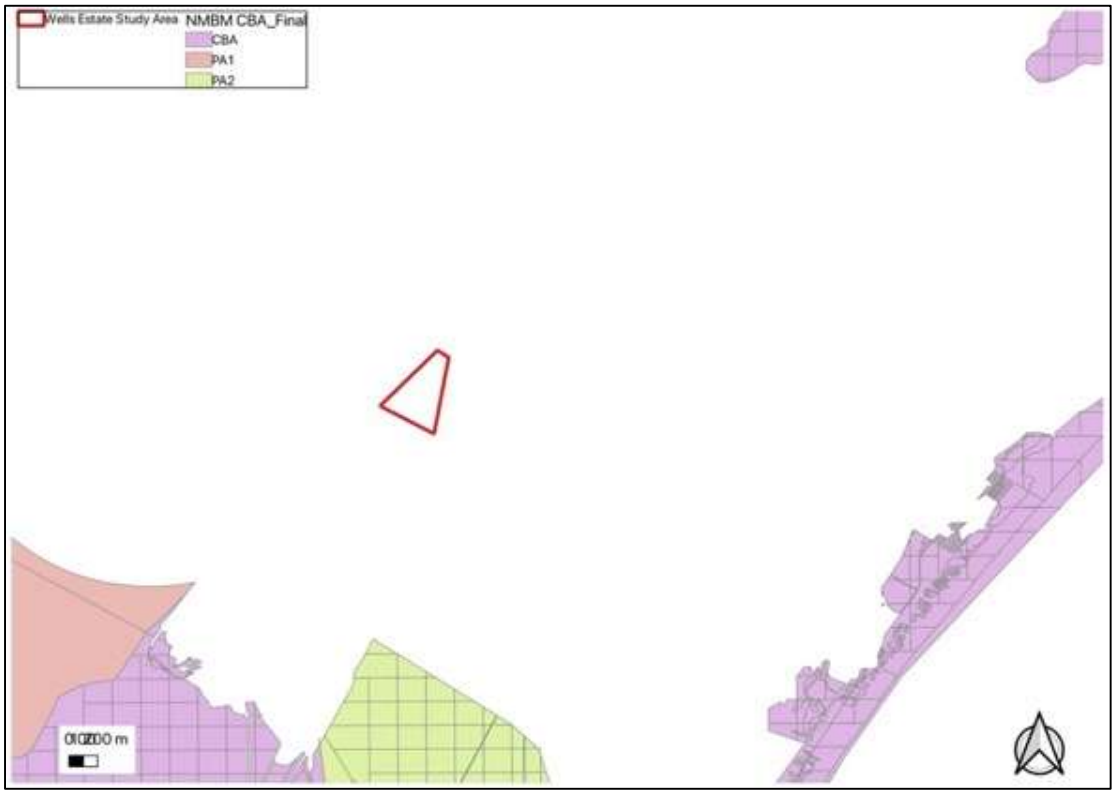

Figure 13: A map illustrating the various NMBM CAP (SRK, 2014) final CBA map

4.3 SPECIALIST STUDIES IDENTIFIED

The following Specialist Studies were identified as part of the Screening Tool Reports. This section also includes a motivation for complying/ not complying with the recommendations. This section is to be read in conjunction with the 'Environmental Themes' section above.

4.3.1. Landscape/Visual Impact Assessment

The proposed Industrial Park development is proposed on land zoned as Industrial Zone 1 inside the Urban Edge of the city of Gqeberha. The proposed activity is therefore in line with the current permissible land use, and the development will complement the surrounding land uses. The site is currently vacant and in a derelict state. Furthermore, landscape/ visual elements are dealt with as part of Heritage Studies and further studies in this regard would have been raised as part of the Heritage process. ECPHRA agreed with the findings of the Heritage Specialist in their 'Final Comment' dated 27 November 2025 and no further studies were required. The Heritage Screener and ECPHRA's final comment is included in the Basic Assessment Report.

Visual aspects will be addressed further in the BAR with no specialist appointment envisaged. Furthermore, it must be noted that we are in the pre-application phase and have not undertaken any PPP at this point. During the initial round of PPP I&APs will have the opportunity to raise any issues in this regard which will at this point be dealt with accordingly.

No Landscape/ Visual Impact Assessment is required.

4.3.2. Archaeological and Cultural Heritage Impact Assessment

Jenna Lavin undertook a Heritage NID and Screener which was submitted to ECPHRA. Jenna Lavin stated that:

"*Based on the extensively disturbed nature of the area proposed for development, it is very unlikely that the proposed development will impact on significant, in situ archaeological resources. In addition, there are clearly no structures of any kind located within the proposed development area which may have heritage significance. As such, it is recommended that no further archaeological assessments are required. However, should any archaeological resources or human remains be uncovered during the course of construction, work must cease and ECPHRA must be notified.*

ECPHRA agreed with the findings in their 'Final Comment' dated 27 November 2025 and no further studies are required. The Heritage NID & Screener and ECPHRA's final comment is included in the Basic Assessment Report.

No Archaeological / Cultural Heritage Impact Assessment is required.

4.3.3. Palaeontology Impact Assessment

Jenna Lavin undertook a Heritage NID and Screener which was submitted to ECPHRA. Jenna Lavin stated that based on the extensively disturbed nature of the area proposed for development, it is very unlikely that the proposed development will impact on significant palaeontological resources will be

impacted by the proposed development. However, it is recommended that Chance Finds Procedure be adopted and implemented throughout the construction phase of the development. ECPHRA agreed with the findings in their 'Final Comment' dated 27 November 2025 and no further studies are required. The Heritage NID & Screener and ECPHRA's final comment is included in the Basic Assessment Report.

No Palaeontology Impact Assessment is required.

4.3.4. Terrestrial Biodiversity Impact Assessment

Dr Brian Colloty from EnviroSci was appointed to undertake an Aquatic and Terrestrial Ecology Impact Assessment addressing plant and animal species as well as the aquatic environment. The Aquatic and Terrestrial Ecology Impact Assessment will be included in the Basic Assessment Report.

An Aquatic & Terrestrial Ecology Impact Assessment will be undertaken.

4.3.5. Aquatic Biodiversity Impact Assessment

Dr Brian Colloty from EnviroSci was appointed to undertake an Aquatic and Terrestrial Ecology Impact Assessment addressing plant and animal species as well as the aquatic environment. The Aquatic and Terrestrial Ecology Impact Assessment will be included in the Basic Assessment Report.

An Aquatic & Terrestrial Ecology Impact Assessment will be undertaken.

4.3.8. Socio-Economic Assessment

The proposed Industrial Park development is proposed on land zoned as Industrial Zone 1 inside the Urban Edge of the city of Gqeberha. The proposed activity is therefore in line with the current permissible land use, and the development will complement the surrounding land uses. The site is currently vacant and in a derelict state.

No potential negative socio-economic impacts are anticipated for the proposed development of the Industrial Park. On the contrary, the Industrial Park provides socio-economic benefits for the region in terms of job creation & economic growth. According to the NMBM IDP (2021), Nelson Mandela Bay Municipality continues to suffer the consequences of the most persistent drought in its history coupled with the impacts of the COVID-19 pandemic which began in early 2020. The impacts are exacerbated by the fact that the City has high levels of poverty, joblessness, homelessness, and a declining fiscus as well as a weakened national and local economy. Job creation and restoring the economy has been identified as a key priority. Emphasis is placed on economic turnaround through inter alia, the creation of an enabling environment for private sector investments to create jobs. The expected capital value of the proposed Industrial Park on completion is estimated at around R1 Billion and a further R7.5 million is estimated to be generated by the proposed development on an annual basis. Furthermore, the expected value of employment opportunities during the development phase is estimated at around R220 million. These figures will assist the municipality and society by stimulating the local economy and providing job opportunities within the Gqeberha.

Spatial targeting and the elimination of spatial inequalities, as envisaged in the National Development Plan, is an underlying principle of the Urban Network approach, hence the focus of the IDP on the catalytic development of under-serviced city areas. The Urban Network Strategy identifies a number of network elements (CBD, hubs, growth areas) and allows for the identification of Integration Zones that link CBDs and hubs in which catalytic development is encouraged. Wells Estate, amongst other areas, has been identified as a growth area (secondary urban hub). The proposed development will have a positive local and regional economic impact, benefiting society in general.

The socio-economic aspects and impacts will be considered further in the EIA process, particularly through public participation, however, no specialist input is envisioned.

No Socio-Economic Impact Assessment is required.

4.3.10. Plant Species Assessment

Dr Brian Colloty from EnviroSci was appointed to undertake an Aquatic and Terrestrial Ecology Impact Assessment addressing plant and animal species as well as the aquatic environment. The Aquatic and Terrestrial Ecology Impact Assessment will be included in the Basic Assessment Report.

An Aquatic & Terrestrial Ecology Impact Assessment will be undertaken which will address Plant Species.

4.3.11. Animal Species Assessment

Dr Brian Colloty from EnviroSci was appointed to undertake an Aquatic and Terrestrial Ecology Impact Assessment addressing plant and animal species as well as the aquatic environment. The Aquatic and Terrestrial Ecology Impact Assessment will be included in the Basic Assessment Report.

An Aquatic & Terrestrial Ecology Impact Assessment will be undertaken which will address Animal Species.

5. CONCLUSION

The environmental attributes/features on the site which will be sensitive to development and discussed above are summarised as follows:

- Agriculture Theme (LOW Sensitivity)
- Animal Species Theme (HIGH Sensitivity)
- Aquatic Biodiversity Theme (VERY HIGH Sensitivity)
- Archaeological and Cultural Heritage Theme (LOW Sensitivity)
- Civil Aviation Theme (LOW Sensitivity)
- Defence Theme (LOW Sensitivity)
- Palaeontology Theme (LOW Sensitivity)
- Plant Species Theme (MEDIUM Sensitivity)
- Terrestrial Biodiversity Theme (LOW Sensitivity)

Jenna Lavin undertook a Heritage NID and Screener which was submitted to ECPHRA. ECPHRA agreed with the findings in their 'Final Comment' dated 27 November 2025 and no further studies are required. The Heritage NID & Screener and ECPHRA's final comment is included in the Basic Assessment Report.

The following specialist studies will be undertaken:

Dr Brian Colloty from EnviroSci was appointed to undertake an Aquatic & Terrestrial Ecology Impact Assessment. This study addresses the Plant and Animal Species Themes as well as the Aquatic and Terrestrial Biodiversity Themes. This will be included in the Basic Assessment Report.