EIMS | ENVIRONMENTAL IMPACT MANAGEMENT SERVICES

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# SITE SENSITIVITY AND VERIFICATION REPORT

## SAVUKA 7A & 7B TSFs HEIGHT EXTENSION

## DOCUMENT DETAILS

**EIMS REFERENCE:** 1657

**DOCUMENT TITLE:** SITE SENSITIVITY AND VERIFICATION REPORT

## DOCUMENT CONTROL

| | NAME | SIGNATURE | DATE |
|---|---|---|---|
| **COMPILED:** | Monica Niehof | Sent Electronically | 2025/03/31 |
| **CHECKED:** | John von Mayer | Sent Electronically | 2025/04/02 |
| **AUTHORIZED:** | Liam Whitlow | Sent Electronically | 2025/04/02 |

## REVISION AND AMENDMENTS

| REVISION DATE: | REV # | DESCRIPTION |
|---|---|---|
| **2025/04/02** | ORIGINAL DOCUMENT | SITE SENSITIVITY AND VERIFICATION REPORT |

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# 1 SCOPE AND PURPOSE

*Regulation 16(1)(b)(v) of the Environmental Impact Assessment Regulations (GNR 982 promulgated under the National Environmental Management Act (Act 107 of 1998-NEMA)), requires that a Screening Report generated by the national web-based environmental screening tool for the specific site and activity must accompany any application for Environmental Authorization.*

*The Screening Report identifies preliminary development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmentally sensitive features on the site based on the site sensitivity screening. On the basis of the sensitivities identified in the site sensitivity screening, a list of preliminary specialist studies required to be considered in the Impact Assessment process are provided.*

*Prior to commencing with a specialist assessment identified in the Screening Report, the current use of the land and the environmental sensitivity of the site, must be confirmed by undertaking a site sensitivity verification. The site sensitivity verification must be undertaken by an environmental assessment practitioner or a specialist. 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.*

*This Site Sensitivity and Verification Report (SSVR) is a record of the outcome of the site sensitivity verification in compliance with the requirements 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 NEMA. The SSVR aims to:*

*a) confirm or disputes the current use of the 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) contain motivation and evidence (e.g. photographs) of either the verified or different use of the land and environmental sensitivity; and*

*c) be submitted together with the relevant assessment report prepared in accordance with the requirements of the Environmental Impact Assessment Regulations (EIA Regulations).*

# 2 PROJECT BACKGROUND

## 2.1 PROJECT ASPECTS

Golden Core Trade and Invest (Pty) Ltd. - Mponeng Operations (Harmony) also referred to as the 'Applicant', own and operate a number of Gold Mines and Plants in the West Wits region in the Gauteng Province. The Savuka Plant currently deposits tailings onto the Savuka 7a & 7b Tailings Storage Facilities (TSFs). However, these facilities are approaching their final and approved height i.e. 60 metres, and the current planned Life of Mine (LOM) for the West Wits region exceed the available deposition capacity of these TSFs. Accordingly, the applicant is undertaking a feasibility assessment to increase the height of the Savuka 7a & 7b TSFs. Slurry deposition is currently taking place on the Savuka 7a & 7b TSFs and the Applicant is proposing to extend the approved height of these TSFs by 5 to 10 metres, to a total approved height of not more than 70 metres.

Table 1: Project description

| | | **Location (DD MM SS)** | |
|---|---|---|---|
| **Project Aspect** | **Details** | **Latitude** | **Longitude** |
| **1. Savuka 7a&7b TSFs** | Extension of the approved height of the Savuka 7a and 7b Tailings Storage Facilities. | 26°26'08.41"S | 27°21'10.42"E |

## 2.2 SITE LOCALITY AND LAYOUT

The proposed project is located on Portion 25 of the Farm Doornfontein 118 IQ and Portion 93 of the Farm Blyvooruitzicht 116 IQ within the Merafong City Local Municipality and the West Rand District Municipality, Gauteng Province. The site is ~5km south-west of Carletonville. The centre point of the site is -28.785582°S, 24.074790°E. (Refer to Figure 1 for the site locality and layout).

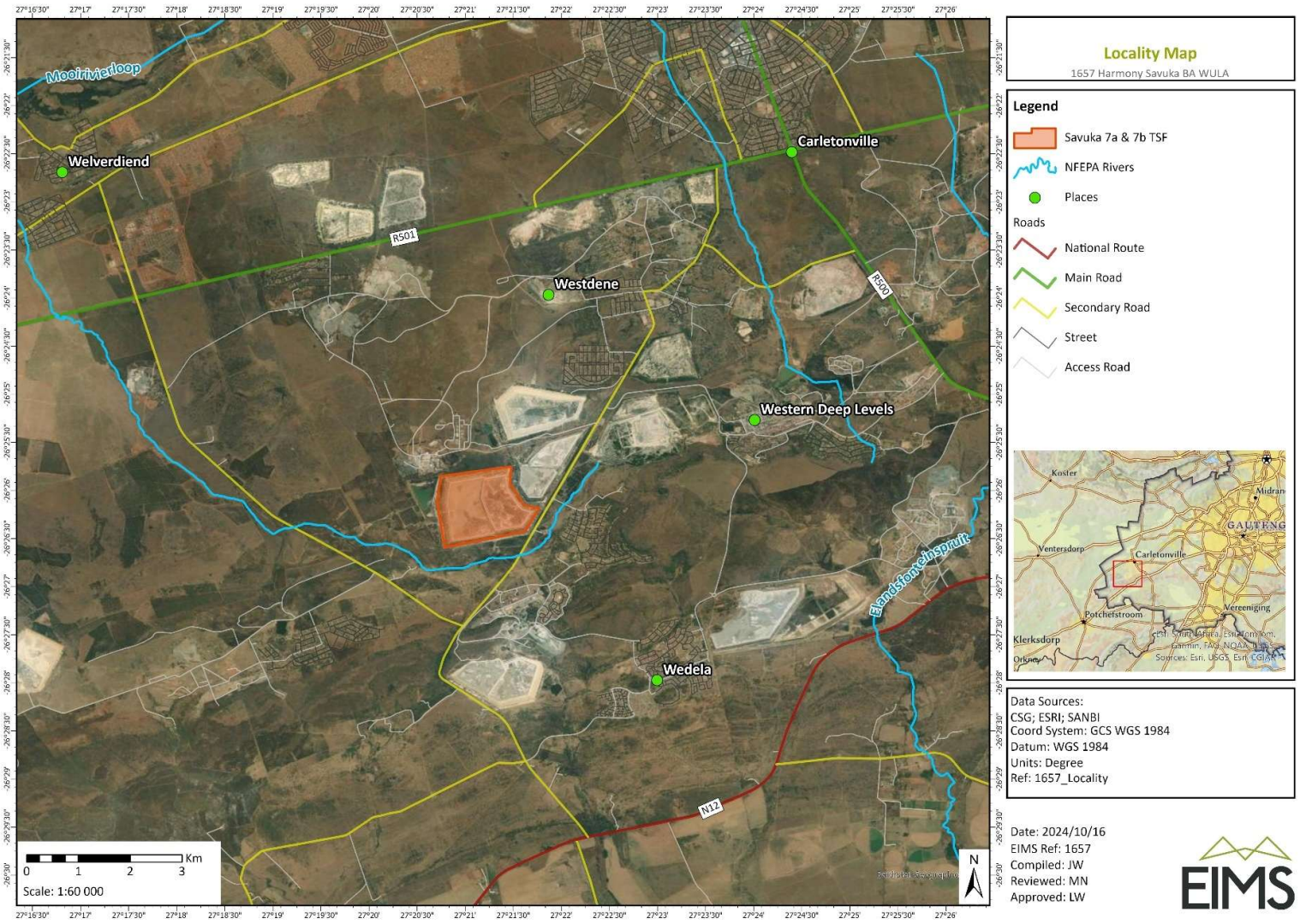



Figure 1: Site locality map.

## 2.3 NATIONAL SCREENING TOOL ASSESSMENT

Regulation 16(1)(b)(v) of the Environmental Impact Assessment Regulations (GNR 982 promulgated under the National Environmental Management Act (Act 107 of 1998-NEMA)), requires that a Screening Report generated by the national web-based environmental screening tool for the specific site and activity must accompany any application for Environmental Authorization.

The Screening Report identifies preliminary development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmentally sensitive features on the site based on the site sensitivity screening. On the basis of the sensitivities identified in the site sensitivity screening, a list of preliminary specialist studies required to be considered in the Impact Assessment process are provided. Table 2 provides the proposed development area environmental sensitivity as provided by the national web-based environmental screening tool.

Table 2: Screening Tool Report- Proposed development area environmental sensitivity.

| Aspect | Very High | High | Medium | Low |
|---|---|---|---|---|
| **Agriculture Theme** | ☐ | ☒ | ☐ | ☐ |
| **Animal species Theme** | ☐ | ☐ | ☒ | ☐ |
| **Aquatic Biodiversity Theme** | ☒ | ☐ | ☐ | ☐ |
| **Archaeological and Cultural Heritage** | ☐ | ☐ | ☐ | ☒ |
| **Civil Aviation Theme** | ☐ | ☒ | ☐ | ☐ |
| **Defence Theme** | ☐ | ☐ | ☐ | ☒ |
| **Palaeontology Theme** | ☐ | ☒ | ☐ | ☐ |
| **Plant Species Theme** | ☐ | ☐ | ☒ | ☐ |
| **Terrestrial Biodiversity Theme** | ☒ | ☐ | ☐ | ☐ |

# 3 SITE ASSESSMENT

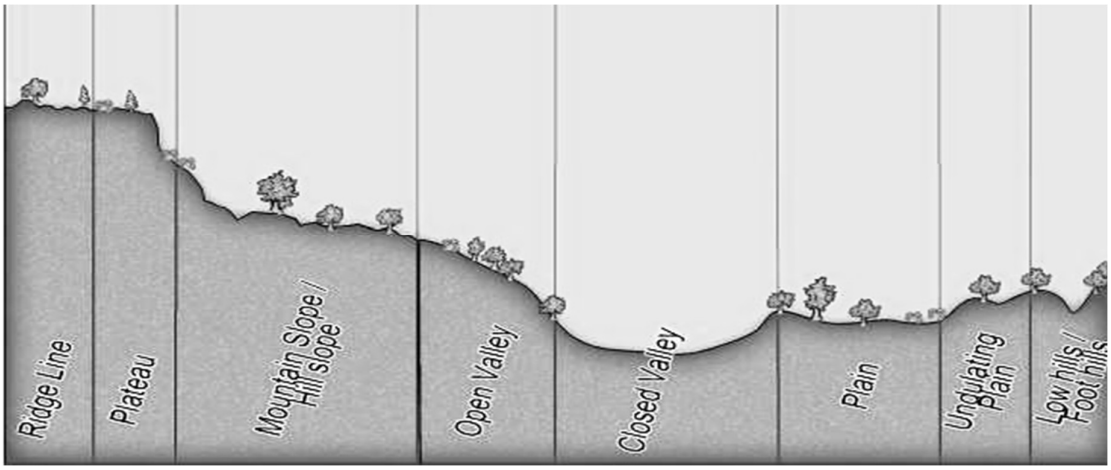
Prior to commencing with a specialist assessment identified in the Screening Report, the current use of the land and the environmental sensitivity of the site, must be confirmed by undertaking a site sensitivity verification. The site sensitivity verification must be undertaken by an environmental assessment practitioner or a specialist. The site sensitivity verification must be undertaken through the use of:

- a desk top analysis, using satellite imagery;
- a preliminary on-site inspection; and
- any other available and relevant information.

The sub-sections below aim to provide context of the existing site conditions to support the site sensitivity and verification.

## 3.1 GRADIENT

The topography of the location of the TSFs is fairly flat, comprising of undulating terrain surrounding the TSFs, due to the several TSFs surrounding the study area. Th study area and surrounding elevation average approximately 1 600 metres above sea level (masl).




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ | ☒ | ☐ | ☐ |

## 3.2 SENSITIVE AREAS

| ***Is the site located in the immediate vicinity of the following:*** | **Yes** | **No** | **Comment** |
|---|---|---|---|
| Erosion Channels or areas of severe erosion/ destabilized soils | ☒ | ☐ | Some areas of the slopes of the TSFs are eroded and some of the area surrounding the site as well. However, no severe erosion or destabilized soils occur on or around the site. Intasol is managing the operation of the TSFs and regular inspections and audits are conducted to ensure the stability of the TSFs are maintained. |
| Wetlands (within 32m) | ☒ | ☐ | Artificial wetlands occur immediately adjacent surrounding the TSFs. An unchanneled valley bottom wetland occurs immediately north and northeast of the TSF, and one to the west of the study area. A channelled valley bottom wetland occurs to the east, southeast and south of the study area. This last wetland does not occur within 32 metres of the TSFs, however, it does occur within 500 metres of the TSFs. |
| Unstable slopes or geological features (rocky outcrops) | ☐ | ☒ | No rocky outcrops on or immediately surrounding the study area. |

| *Is the site located in the immediate vicinity of the following:* | Yes | No | Comment |
|---|---|---|---|
| Bare areas | ☒ | ☐ | Most of the TSF can be described as a bare area, however, dust suppression are being conducted and are monitored and maintained to prevent severe erosion. Some areas immediately adjacent to the study area is also bare, including access roads. |
| Other Sensitive or risk areas? | ☐ | ☒ | No other sensitive areas on or surrounding the site were noted during the desktop study or site verification. |
| Are any existing servitudes and structures directly or indirectly affected by the proposed sites and routes (e.g. Eskom, public road servitudes and restrictions- 60m from National Road, farmer's water/irrigation supplies, etc.)? | ☒ | ☐ | |

## 3.3 VEGETATION

| *Which of the listed descriptions best describes the general groundcover on and around the site?* | | | | |
|---|---|---|---|---|
| ☐ Natural veld - good condition | ☐ Natural veld with scattered aliens | ☒ Natural veld with heavy alien infestation | ☐ Veld dominated by alien species | ☐ Gardens |
| ☐ Sport field | ☐ Cultivated land | ☐ Paved surface | ☒ Building or other structure | ☒ Bare soil |
| **Comments on vegetation composition:** | | Most of the vegetation are alien species. | | |
| **Comments on weed species/type** | | The alien species will be identified during the impact assessment of the activity. The applicant noted that they have permits for the alien vegetation occurring on site, as it provides stability to the TSFs. Mitigation measures to prevent the further spread of the alien invasive vegetation are included in the existing Alien Invasive Management Plan of the Mine. | | |

## 3.4 LAND COVER/ USE DESCRIPTION

The SSVR aims to:

- confirm or dispute the current use of the 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.; and
- contain motivation and evidence (e.g. photographs) of either the verified or different use of the land and environmental sensitivity.

The current land use of the study area is mining, specifically Tailings Storage Facilities that has been established decades prior, but is still operational. The surrounding land uses include other mining activities including TSFs and associated return water dams, underground mining (Harmony and Blyvoor Mine and others), public roads, plantations, natural veld, grazing, some retail (a shopping centre), and further away residential areas, schools, hospital, a hiking trail and the town of Carletonville.

Table 3: Site photographs.


Figure 2: View of the access road from the northeast to the entrance of the Savuka 5a & 5b and Savuka 7a & 7b TSFs.


Figure 3: View of the access road to the Savuka 7a & 7b TSFs from the Savuka 5a&5b TSFs towards the south-west (road northeast of the 7a & 7b TSFs).


Figure 4: View of the northeastern corner of the Savuka 7a & 7b TSFs.


Figure 5: View of the road on the Savuka 7a&7b TSFs to the north.


Figure 6:View of the side slope of the top of the Savuka 7a & 7b TSFs to the north


Figure 7: View of the adjacent land uses to the northwest of the study area.


Figure 8: View of the northern part of the stormwater dam and return dam overflow from the top of the TSFs.


Figure 9: View of the return water dam and the southern part of the stormwater dam and return dam overflow from the top of the TSFs.


Figure 10: View of the road on the TSF to the west of the study area.


Figure 11: View of the road on top of the TSF between the Savuka 7a & 7b TSFs, looking east.


Figure 12: View of the road and the top of the TSFs between the Savuka 7a & 7b TSFs, looking east.


Figure 13: View from the road on the TSFs to the south of the study area towards the west. The netting for dust mitigation is visible in the foreground on the side slopes and the existing plantation for phytoremediation in the background.

Figure 14: View from the road on the TSFs to the south of the study area towards the south. The netting for dust mitigation is visible in the foreground on the side slopes of the TSFs.


Figure 15: View from the road on the TSFs to the south of the study area towards the east. The netting for dust mitigation is visible in the foreground on the side slopes of the TSFs.


Figure 16: Vegetation on the side slopes of the TSFs.


Figure 17: Vegetation on the side slopes of the TSFs. Photograph taken from the upper road of the TSFs to the south-east of the TSFs.


Figure 18: View of the valley between the Savuka 7a & 7b and the Savuka 5a& 5b TSFs towards the east.


Figure 19: View of the valley between the Savuka 7a & 7b and the Savuka 5a& 5b TSFs towards the north-east. The Savuka 5a&5b TSFs can be seen in the background across the valley.

Figure 20: View of the valley between the Savuka 7a & 7b and the Savuka 5a& 5b TSFs towards the north. The Savuka 5a&5b TSFs can be seen in the background across the valley.


Figure 21: Vegetation on the side slopes of the TSFs. Photograph taken from the upper road of the TSFs to the east of the TSFs towards the north.

# 4 VERIFICATION FINDINGS AND MOTIVATION

The Screening Report identifies preliminary development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmentally sensitive features on the site based on the site sensitivity screening (Section 2.3). On the basis of the sensitivities identified in the site sensitivity screening, a list of preliminary specialist studies required to be considered in the Impact Assessment process are provided. Table 4 below lists the screening tool identified specialist studies and associated screening tool sensitivity. Based on the findings of the site verification process (Section 3) a verified, or suggested revised sensitivity is provided together with an associated motivation.

Table 4: Assessment for specialist studies and motivation.

| **Screening Tool Specialist Study Required:** | **Level of Sensitivity:** | **Suggested Sensitivity:** | **Required level of Assessment** | **Motivation** |
|---|---|---|---|---|
| Agriculture Impact Assessment | High | None | None | The proposed activity is only to extend the approved height of the TSFs that has been established decades ago. Most of the surrounding land uses are associated with mining. The complete study area and most of the directly adjacent area is already disturbed with mining activities such as the TSFs. Therefore, it is the opinion of the EAP that there are no agricultural potential on the site and therefore, no agricultural impact assessment or Compliance Statement from a specialist is required. |
| Archaeological and Cultural Heritage Impact Assessment | Low | None | None | The proposed activity is only to extend the approved height of the TSFs that has been established decades ago and covers the entire study area. Most of the surrounding land uses are associated with mining. The complete study area and most of the directly adjacent area is already disturbed with mining activities such as the TSFs. Desktop screening and the site visit confirmed that no heritage features occur on the site or immediately adjacent to the site. It is the opinion of the EAP that the proposed activity will not have any impact on any |

| Screening Tool Specialist Study Required: | Level of Sensitivity: | Suggested Sensitivity: | Required level of Assessment | Motivation |
|---|---|---|---|---|
| | | | | discovered or undiscovered heritage features in or around the study area. Therefore, no heritage impact assessment or Compliance Statement from a Specialist is required. |
| Palaeontology Impact Assessment | High | High | None | Due to the location of palaeontological resources normally occurring beneath the surface, a site verification could not be completed for palaeontological resources. However, it is the opinion of the EAP that the extension of approved height of the TSFs will not disturb or impact any palaeontological resources as it is only for height extension of existing TSFs. Therefore, the EAP is of the opinion that no study or compliance statement is required for Palaeontological Resources. |
| Terrestrial Biodiversity Impact Assessment | Very High | Low | None | The proposed activity is only to extend the approved height of the TSFs that has been established decades ago and covers the entire study area. Most of the surrounding land uses are associated with mining. The complete study area and most of the directly adjacent area is already disturbed with mining activities such as the TSFs. During the site visit, the EAP did not encounter any terrestrial biodiversity sensitive features or species on the study area. It is the opinion of the EAP that the proposed activity will not have any additional impact on any discovered or undiscovered sensitive biodiversity features or species in or around the study area. Therefore, no terrestrial biodiversity impact |

| Screening Tool Specialist Study Required: | Level of Sensitivity: | Suggested Sensitivity: | Required level of Assessment | Motivation |
|---|---|---|---|---|
| | | | | assessment or Compliance Statement from a Specialist is required. |
| Aquatic Biodiversity Impact Assessment | Very High | Very High | Full Study | A full aquatic biodiversity impact assessment will be conducted by a suitably qualified specialist and included in the Basic Assessment Report. |
| Plant Species Assessment | Medium | Low | None | The proposed activity is only to extend the approved height of the TSFs that has been established decades ago and covers the entire study area. Most of the surrounding land uses are associated with mining. The complete study area and most of the directly adjacent area is already disturbed with mining activities such as the TSFs. During the site visit, the EAP did not encounter any terrestrial biodiversity sensitive features or species on the study area. It is the opinion of the EAP that the proposed activity will not have any additional impact on any discovered or undiscovered sensitive biodiversity features or species in or around the study area. Therefore, no plant species impact assessment or Compliance Statement from a Specialist is required. |
| Animal Species Assessment | Medium | Low | None | The proposed activity is only to extend the approved height of the TSFs that has been established decades ago and covers the entire study area. Most of the surrounding land uses are associated with mining. The complete study area and most of the directly adjacent area is already disturbed with mining activities such as the TSFs. During the site |

| Screening Tool Specialist Study Required: | Level of Sensitivity: | Suggested Sensitivity: | Required level of Assessment | Motivation |
|---|---|---|---|---|
| | | | | visit, the EAP did not encounter any terrestrial biodiversity sensitive features or species on the study area. It is the opinion of the EAP that the proposed activity will not have any additional impact on any discovered or undiscovered sensitive biodiversity features or species in or around the study area. Therefore, no animal species impact assessment or Compliance Statement from a Specialist is required. |
| Civil Aviation Theme | High | High | Other | The Civil Aviation Authority (CAA) is included in the Interested and Affected Parties Database and comments from the CAA will be obtained as to whether an application is required to be submitted by the Applicant for the proposed activity. |
| Hydrology Assessment | Not specified. | High | Full Study | A full hydrology assessment will be conducted by a suitably qualified specialist and included in the Basic Assessment Report. |
| Noise Impact Assessment | Not specified. | Low | None | The proposed activity will not have any additional noise impacts. Therefore the EAP is of the opinion that no compliance statement for noise impact is required for the proposed activity. |
| Traffic Impact Assessment | Not specified. | Low | None | The proposed activity will not have any additional traffic impacts. Therefore the EAP is of the opinion that no compliance statement for traffic impact is required for the proposed activity. |
| Health Impact Assessment | Not specified. | Very High | Full Study | A full radiology and health impact assessment by a suitably qualified specialist will be |

| Screening Tool Specialist Study Required: | Level of Sensitivity: | Suggested Sensitivity: | Required level of Assessment | Motivation |
|---|---|---|---|---|
| | | | | conducted and included in the Basic Assessment Report |
| Socio-Economic Impact Assessment | Not specified. | Medium | Other | The mine has an existing Social and Labour Plan, which is updated as and when required. The proposed activity will also not have any additional negative impact on the surrounding socio-economic environment. It will extend the current employment opportunities by approximately two to three years. |
| Ambient Air Quality Impact Assessment | Not specified. | Very High | Full Study | A full ambient air quality impact assessment will be conducted by a suitably qualified specialist and included in the Basic Assessment Report. |
| Visual Impact Assessment (Not listed by the screening tool, but added by the EAP). | Not specified. | Not specified. | Medium | A full visual impact assessment will be conducted by a suitably qualified specialist and included in the Basic Assessment Report. |

Appendix 1: DFFE Screening Tool Report

# SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION AS REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED SITE ENVIRONMENTAL SENSITIVITY

**EIA Reference number:** TBC

**Project name:** Harmony Savuka TSF 7a&b

**Project title:** Harmony Savuka TSF 7a&b Extension

**Date screening report generated:** 16/10/2024 11:55:34

**Applicant:** Gold Mining Company Limited

**Compiler:** EIMS - Monica Niehof

**Compiler signature:**

.....

**Application Category:** Services|Waste Management Services|Storage Facilities|Hazardous

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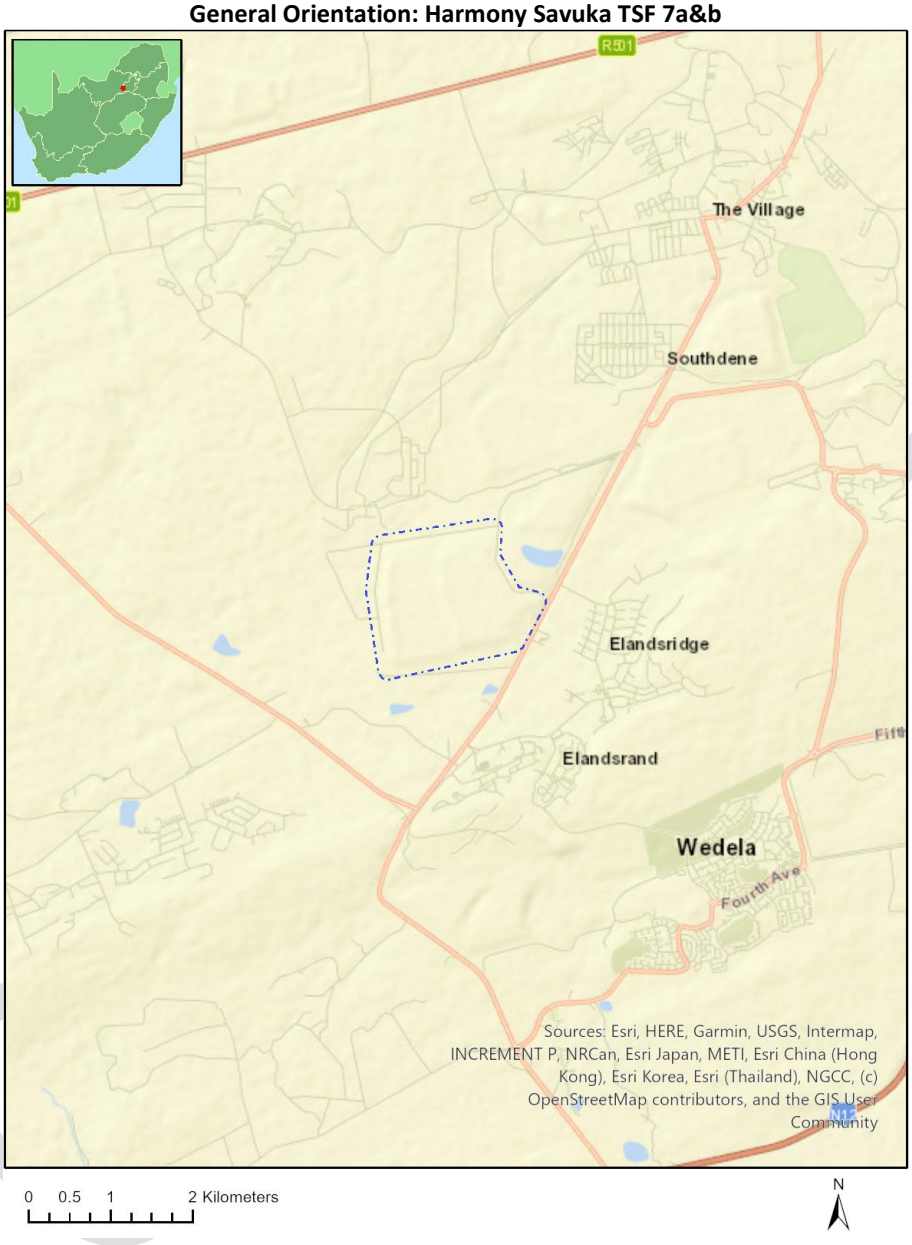
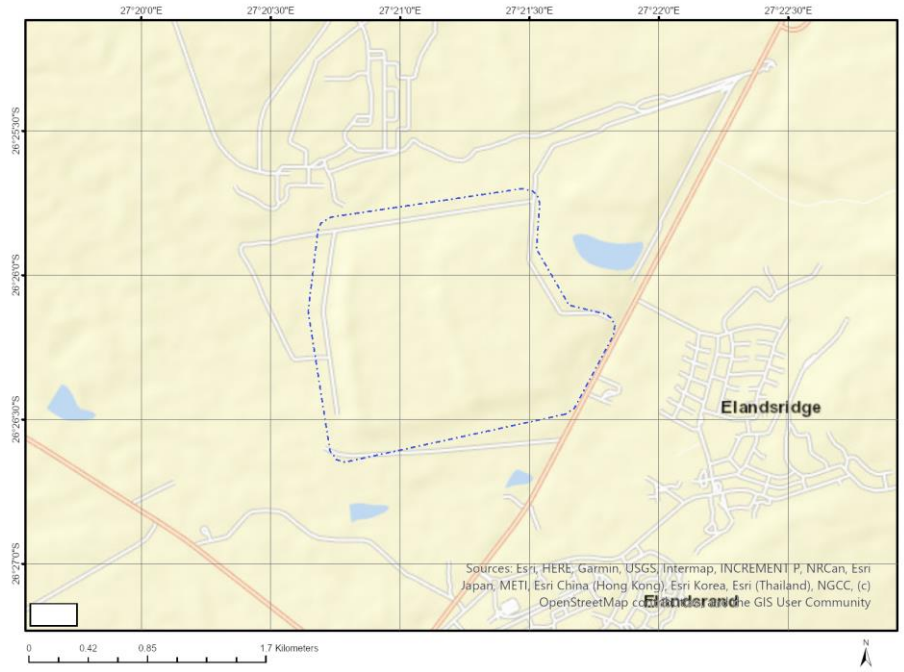
# Proposed Project Location

## Orientation map 1: General location

**General Orientation: Harmony Savuka TSF 7a&b**



# Map of proposed site and relevant area(s)




## Cadastral details of the proposed site

Property details:

| No | Farm Name | Farm/ Erf No | Portion | Latitude | Longitude | Property Type |
|---|---|---|---|---|---|---|
| 1 | BUFFELSDOORN | 143 | 0 | 26°29'6.63S | 27°22'2.75E | Farm |
| 2 | BLYVOORUITZICHT | 116 | 0 | 26°24'12.17S | 27°23'27.22E | Farm |
| 3 | DOORNFONTEIN | 118 | 0 | 26°26'5.46S | 27°19'5.74E | Farm |
| 4 | BLYVOORUITZICHT | 116 | 17 | 26°25'49.55S | 27°21'35.29E | Farm Portion |
| 5 | BLYVOORUITZICHT | 116 | 16 | 26°25'42.45S | 27°21'35.7E | Farm Portion |
| 6 | BLYVOORUITZICHT | 116 | 93 | 26°25'28.41S | 27°22'37.75E | Farm Portion |
| 7 | DOORNFONTEIN | 118 | 13 | 26°26'1.58S | 27°20'18.23E | Farm Portion |
| 8 | DOORNFONTEIN | 118 | 25 | 26°26'12S | 27°21'3.97E | Farm Portion |
| 9 | DOORNFONTEIN | 118 | 24 | 26°25'21.7S | 27°20'36.95E | Farm Portion |
| 10 | BUFFELSDOORN | 143 | 31 | 26°26'45.2S | 27°21'29.75E | Farm Portion |

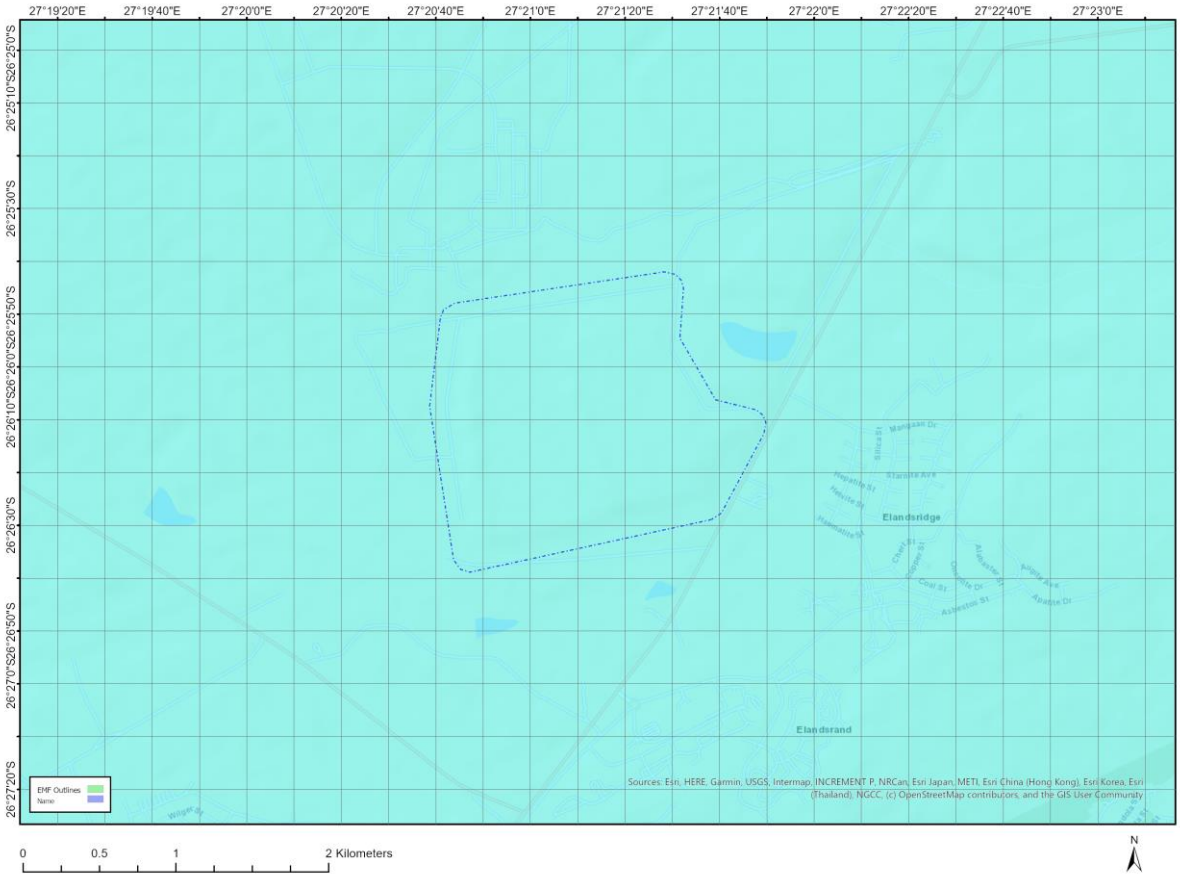
Development footprint[1] vertices:
No development footprint(s) specified.

## Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

[1] "development footprint", means the area within the site on which the development will take place and incudes all ancillary developments for example roads, power lines, boundary walls, paving etc. which require vegetation clearance or which will be disturbed and for which the application has been submitted.

| No | EIA Reference No | Classification | Status of application | Distance from proposed area (km) |
|---|---|---|---|---|
| 1 | 14/12/16/3/3/2/2312 | Solar PV | Approved | 2.2 |
| 2 | 14/12/16/3/3/2/2313 | Solar PV | Approved | 2.2 |
| 3 | 14/12/16/3/3/2/2353 | Solar PV | Approved | 22.9 |
| 4 | 14/12/16/3/3/2/2295 | Solar PV | Approved | 18.6 |
| 5 | 14/12/16/3/3/2/919 | Solar PV | Approved | 21.6 |
| 6 | 14/12/16/3/3/2/2344 | Solar PV | Approved | 17.5 |
| 7 | 14/12/16/3/3/2/2352 | Solar PV | Approved | 22.9 |
| 8 | 14/12/16/3/3/2/2293 | Solar PV | Approved | 12.3 |
| 9 | 14/12/16/3/3/2/2310 | Solar PV | Approved | 2.2 |
| 10 | 14/12/16/3/3/2/2351 | Solar PV | Approved | 22.9 |
| 11 | 14/12/16/3/3/2/2343 | Solar PV | Approved | 16.3 |
| 12 | 14/12/16/3/3/2/2354 | Solar PV | Approved | 22.9 |
| 13 | 14/12/16/3/3/2/2341 | Solar PV | Approved | 16.3 |
| 14 | 14/12/16/3/3/2/2294 | Solar PV | Approved | 12.3 |
| 15 | 14/12/16/3/3/2/2314 | Solar PV | Approved | 2.2 |
| 16 | 14/12/16/3/3/2/2311 | Solar PV | Approved | 2.2 |
| 17 | 14/12/16/3/3/2/2342 | Solar PV | Approved | 16.3 |

## Environmental Management Frameworks relevant to the application




| Environmental Management Framework | LINK |
|---|---|
| Gauteng EMF | https://screening.environment.gov.za/ScreeningDownloads/EMF/GPEMF_2021_Gazette_and_summary.pdf |

# Environmental screening results and assessment outcomes

The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmental sensitive features on the site based on the site sensitivity screening results for the application classification that was selected. The application classification selected for this report is: **Services|Waste Management Services|Storage Facilities|Hazardous**.

## Relevant development incentives, restrictions, exclusions or prohibitions

The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this site are indicated below.

| Incentive, restriction or prohibition | Implication |
|---|---|
| Strategic Transmission Corridor-Central corridor | https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf |
| Strategic Gas Pipeline Corridors-Phase 3: Richards Bay to Gauteng | https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_GAS.pdf |
| Main Electricity Distribution Substation | https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Distribution_Transmission.pdf |

## Proposed Development Area Environmental Sensitivity

The following summary of the development site environmental sensitivities is identified. Only the highest environmental sensitivity is indicated. The footprint environmental sensitivities for the proposed development footprint as identified, are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed.

| Theme | Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|---|---|---|---|---|
| Agriculture Theme | | X | | |
| Animal Species Theme | | | X | |
| Aquatic Biodiversity Theme | X | | | |
| Archaeological and Cultural Heritage Theme | | | | X |
| Civil Aviation Theme | | X | | |
| Defence Theme | | | | X |
| Paleontology Theme | | X | | |
| Plant Species Theme | | | X | |
| Terrestrial Biodiversity Theme | X | | | |

## Specialist assessments identified

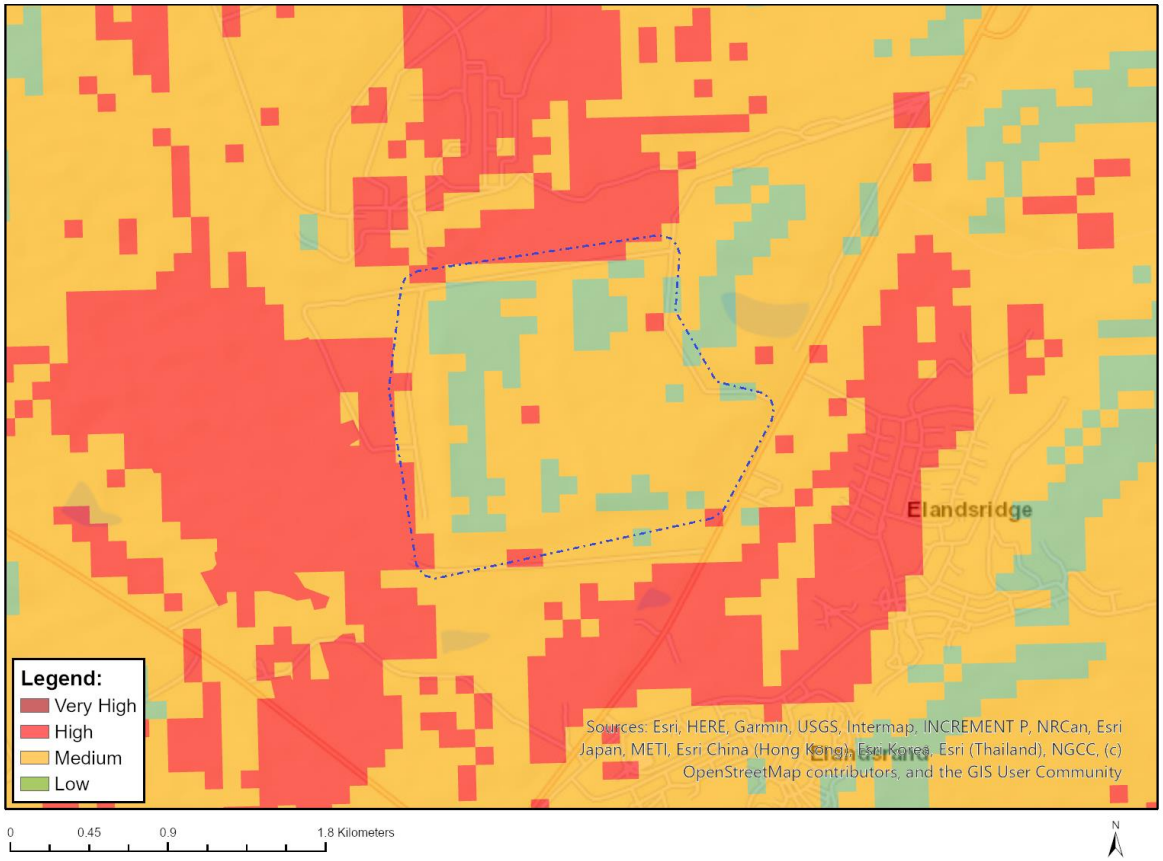
Based on the selected classification, and the known impacts associated with the proposed development, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation.

| No | Specialist assessment | Assessment Protocol |
|---|---|---|
| 1 | Agricultural Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Agriculture_Assessment_Protocols.pdf |
| 2 | Archaeological and Cultural Heritage Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf |
| 3 | Palaeontology Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf |
| 4 | Terrestrial Biodiversity Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf |
| 5 | Aquatic Biodiversity Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf |
| 6 | Hydrology Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf |
| 7 | Noise Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Noise_Impacts_Assessment_Protocol.pdf |
| 8 | Traffic Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf |
| 9 | Health Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf |
| 10 | Socio-Economic Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf |
| 11 | Ambient Air Quality Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf |
| 12 | Plant Species Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf |
| 13 | Animal Species Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Animal_Species_Assessment_Protocols.pdf |

# Results of the environmental sensitivity of the proposed area.

The following section represents the results of the screening for environmental sensitivity of the proposed site for relevant environmental themes associated with the project classification. It is the duty of the EAP to ensure that the environmental themes provided by the screening tool are comprehensive and complete for the project. Refer to the disclaimer.

## MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY

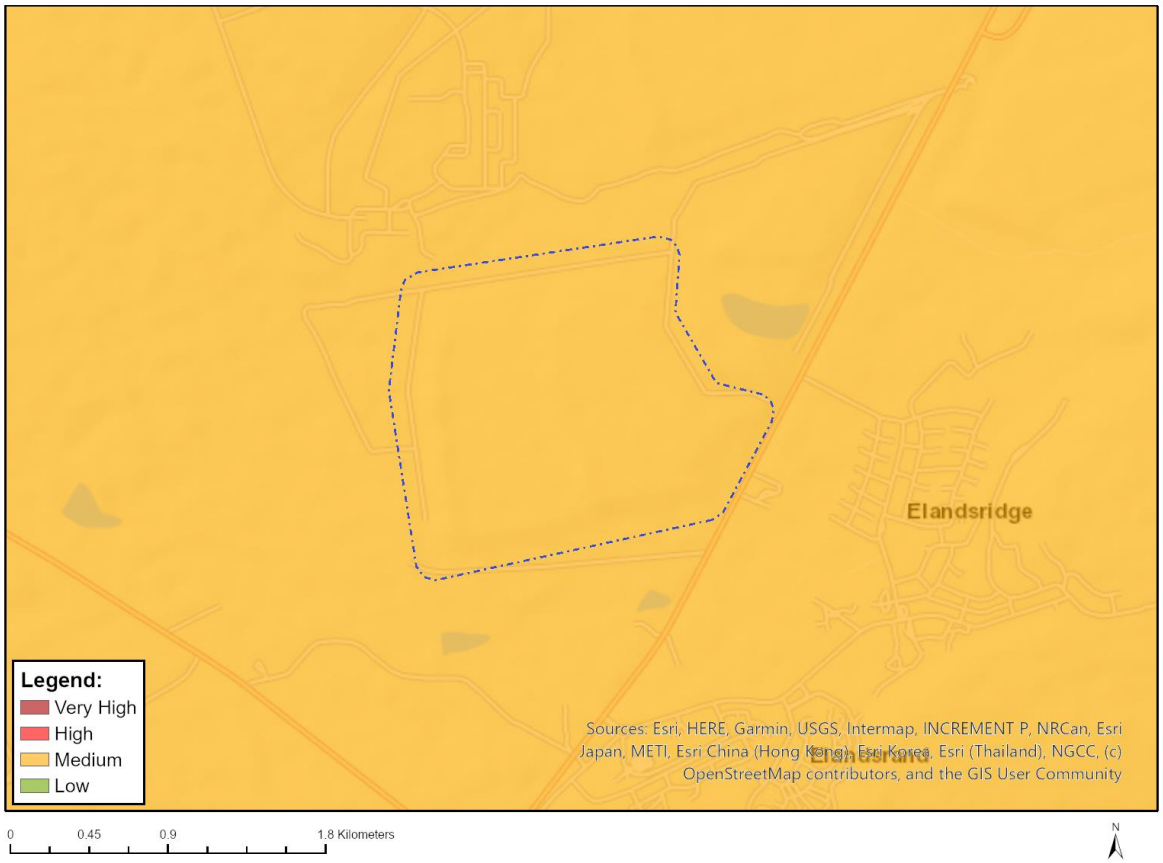



| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|---|---|---|---|
| | X | | |

**Sensitivity Features:**

| Sensitivity | Feature(s) |
|---|---|
| High | Land capability;09. Moderate-High/10. Moderate-High |
| Low | Land capability;01. Very low/02. Very low/03. Low-Very low/04. Low-Very low/05. Low |
| Medium | Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate |

## MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY

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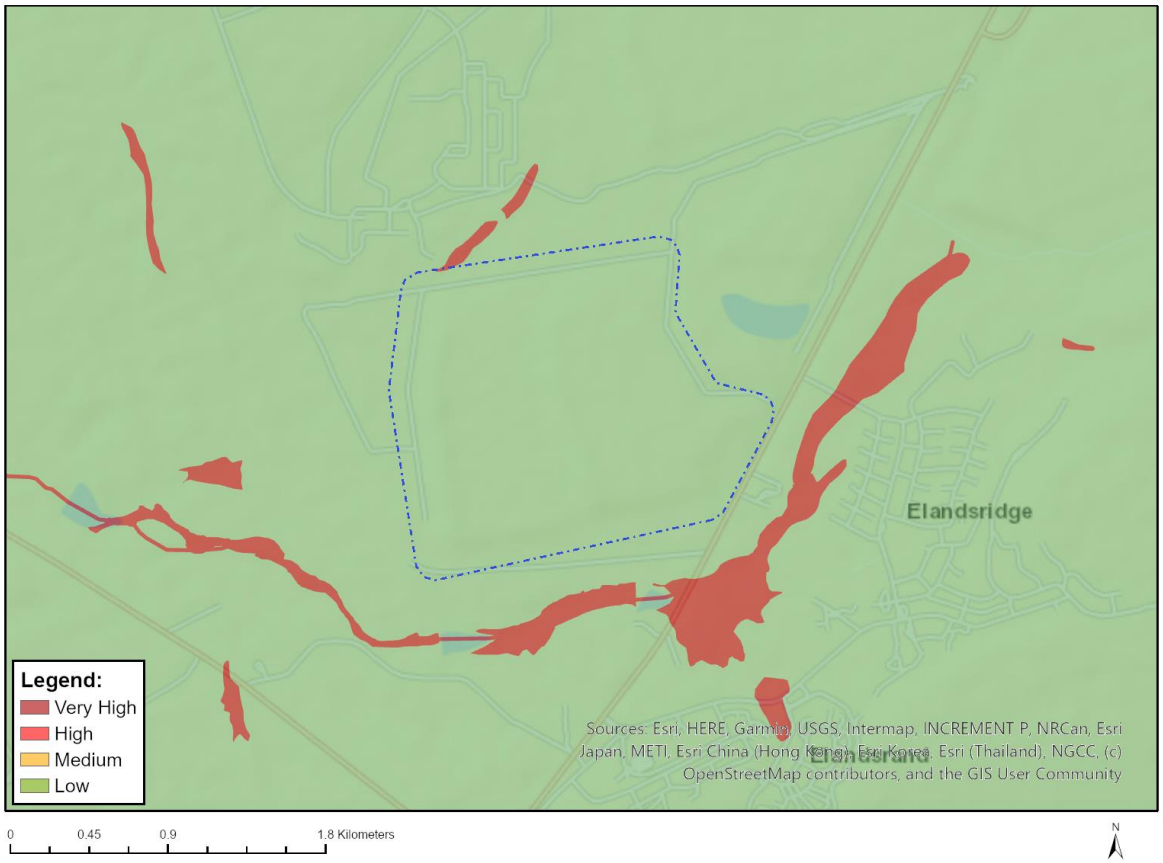
| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|---|---|---|---|
| | | X | |

**Sensitivity Features:**

| Sensitivity | Feature(s) |
|---|---|
| Medium | Aves-Tyto capensis |
| Medium | Aves-Hydroprogne caspia |
| Medium | Aves-Eupodotis senegalensis |
| Medium | Insecta-Lepidochrysops praeterita |
| Medium | Insecta-Lepidochrysops procera |
| Medium | Mammalia-Crocidura maquassiensis |
| Medium | Mammalia-Hydrictis maculicollis |
| Medium | Invertebrate-Clonia uvarovi |

## MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

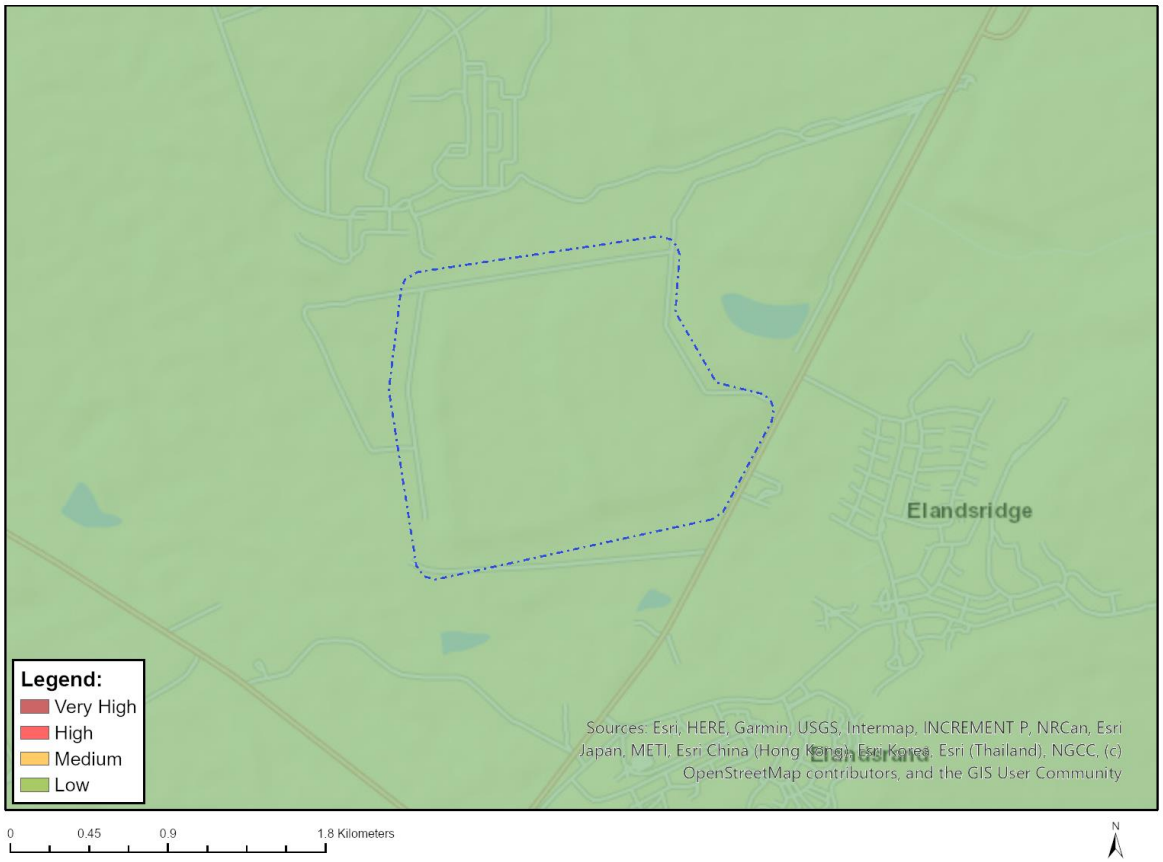



| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|---|---|---|---|
| X | | | |

**Sensitivity Features:**

| Sensitivity | Feature(s) |
|---|---|
| Low | Low sensitivity |
| Very High | Wetlands_Central Bushveld Bioregion (Valley-bottom) |

## MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

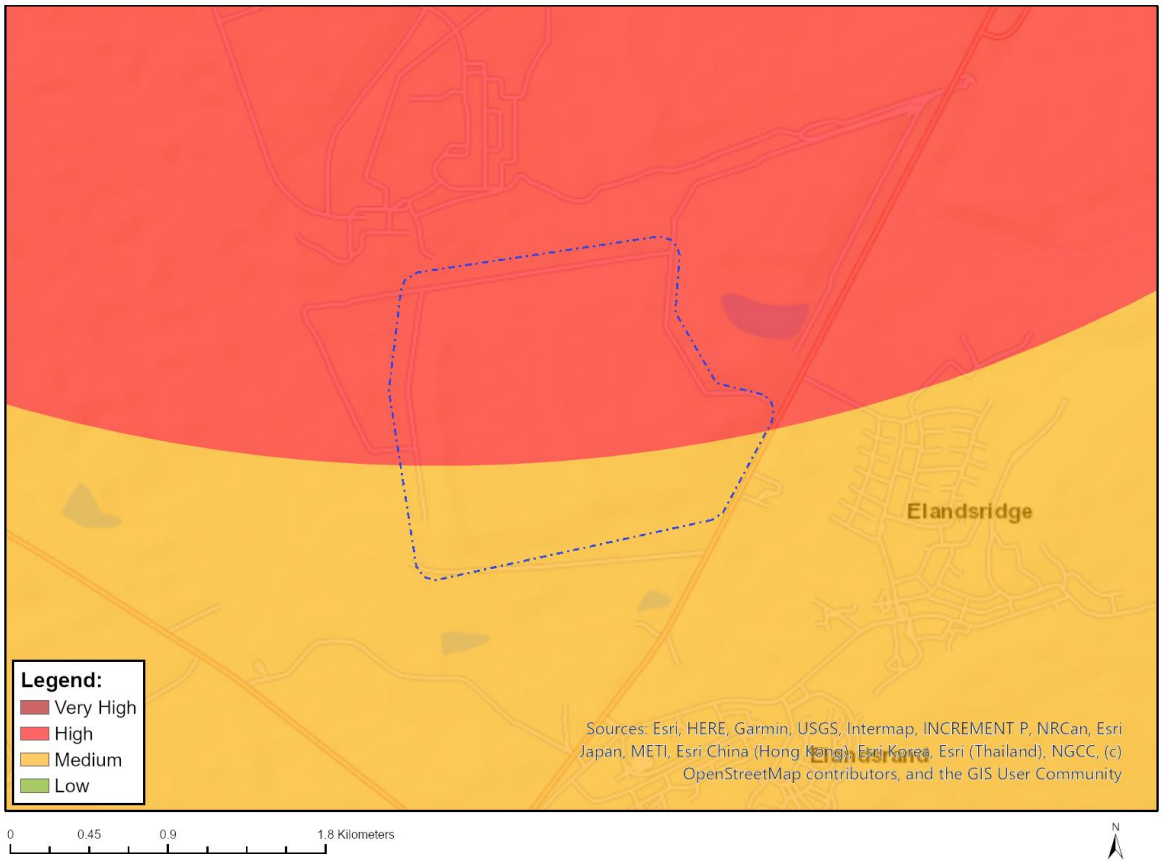



| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|---|---|---|---|
| | | | X |

**Sensitivity Features:**

| Sensitivity | Feature(s) |
|---|---|
| Low | Low sensitivity |

## MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

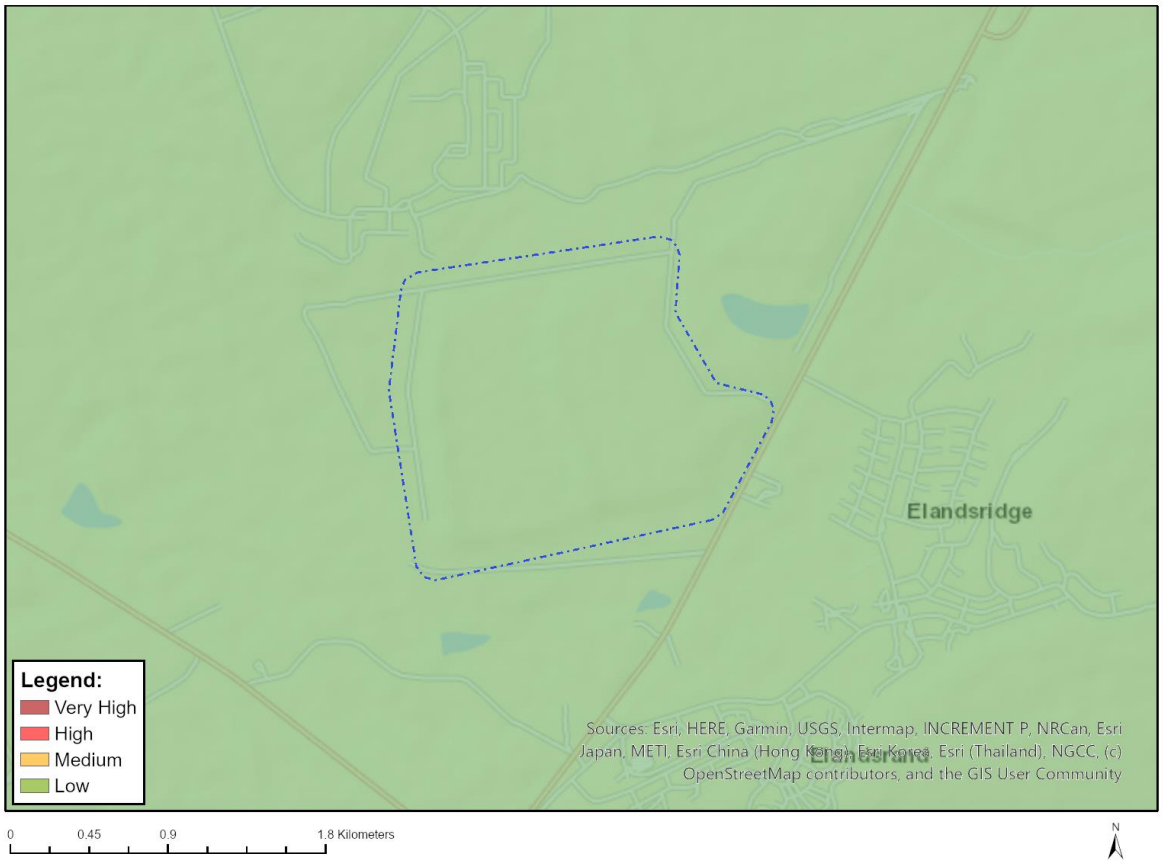



| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|---|---|---|---|
| | X | | |

**Sensitivity Features:**

| Sensitivity | Feature(s) |
|---|---|
| High | Within 8 km of other civil aviation aerodrome |
| Medium | Between 8 and 15 km of other civil aviation aerodrome |

## MAP OF RELATIVE DEFENCE THEME SENSITIVITY

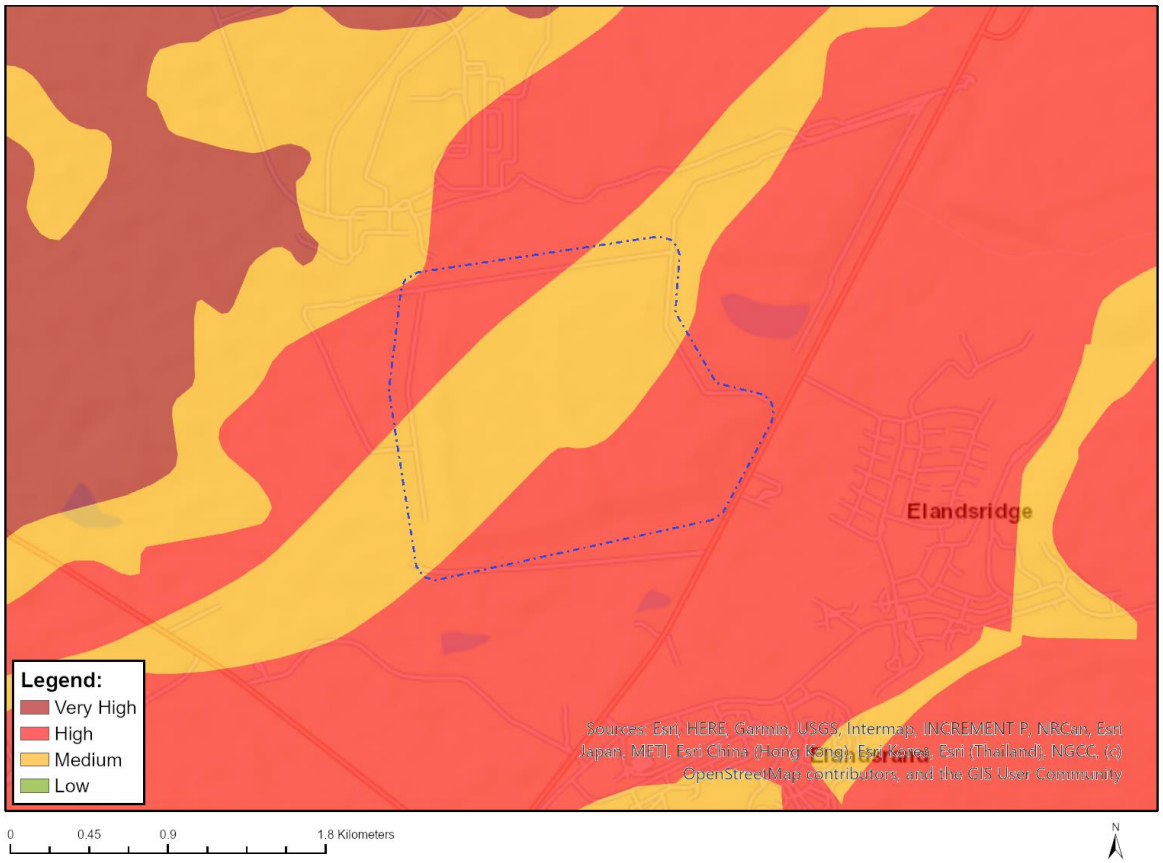



| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|---|---|---|---|
| | | | X |

**Sensitivity Features:**

| Sensitivity | Feature(s) |
|---|---|
| Low | Low Sensitivity |

## MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

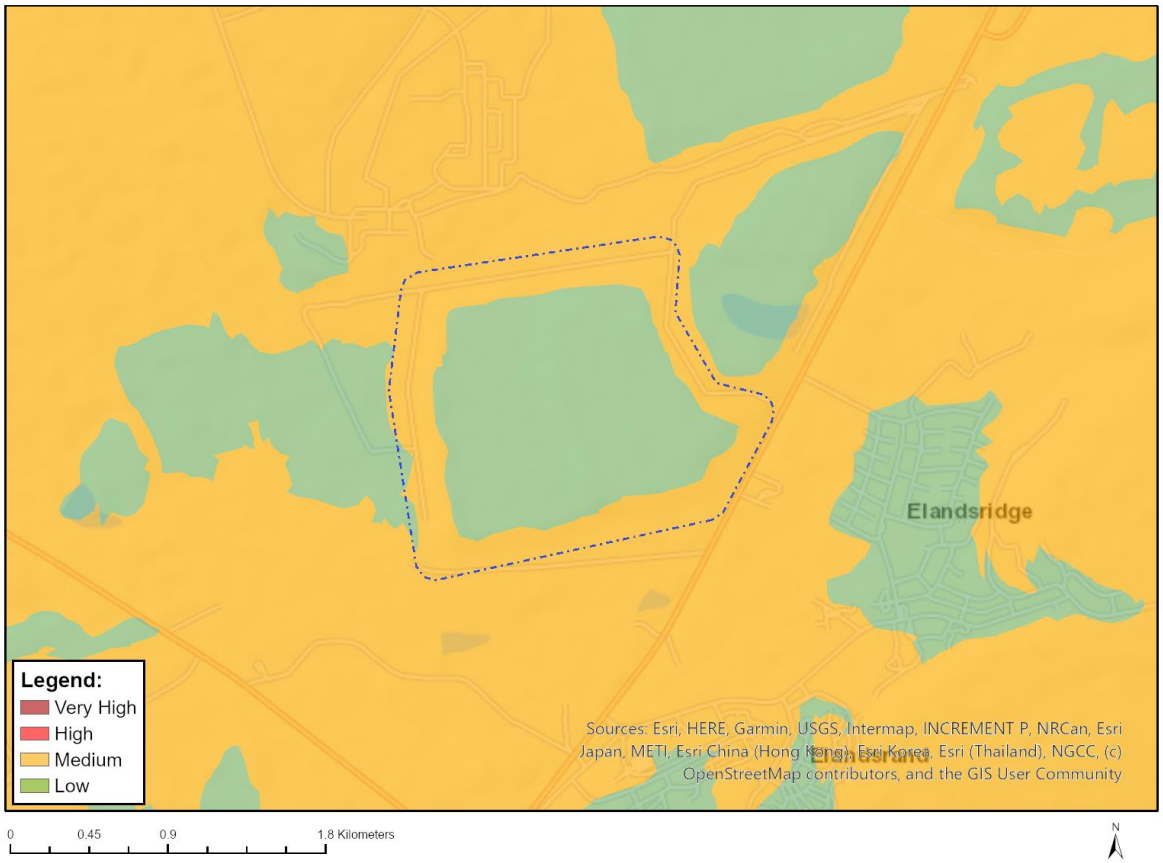



| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|---|---|---|---|
| | X | | |

**Sensitivity Features:**

| Sensitivity | Feature(s) |
|---|---|
| High | Features with a High paleontological sensitivity |
| Low | Features with a Low paleontological sensitivity |
| Medium | Features with a Medium paleontological sensitivity |

## MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY

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| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|---|---|---|---|
| | | X | |

**Sensitivity Features:**

| Sensitivity | Feature(s) |
|---|---|
| Low | Low Sensitivity |
| Medium | Khadia beswickii |
| Medium | Sensitive species 1248 |

## MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY


| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|---|---|---|---|
| X | | | |

**Sensitivity Features:**

| Sensitivity | Feature(s) |
|---|---|
| Low | Low Sensitivity |
| Very High | ESA 1 |
| Very High | ESA 2 |