

SITE SENSITIVITY VERIFICATION REPORT

PROPOSED LINDLEY WASTEWATER TREATMENT WORKS, NKETOANA LOCAL MUNICIPALITY

DESTEA REF. NO.: EMB/19,25,27,12(b)(iv)/23/14

NEAS Ref. No.: FSP/EIA/0000520/2023



Prepared by:

NSVT Consultants

Lorato Tigatedi Reg. EAP (EAPASA) Pr. Sci. Nat.

(t): 061 500 8461

(f): 086 239 9133

(e): lorato@nsvt.co.za



JUNE 2023

TABLE OF CONTENTS

1. INTRODUCTION	1
2. METHODOLOGY	1
3. AIM OF THE SSV REPORT	1
4. PROJECT DESCRIPTION	1
5. SITE DESCRIPTION	3

LIST OF FIGURES

Figure 1: Satellite Imagery depicting the proposed development footprint on the proposed site	2
---	---

LIST OF TABLES

Table 1: Themes and associated sensitivity of the Proposed Site	5
Table 2: Specialist assessments listed in the Screening Tool Report	6

LIST OF PHOTOGRAPHS

Photo 1: Proposed location for Dam 1-Northerly view towards Mopeli Spruit	3
Photo 2: North-easterly view towards Mopeli Spruit	3
Photo 3: Road S722 to access road to the proposed site	3
Photo 4: Existing access road to be paved-South-western view	4

1. INTRODUCTION

This Site Sensitivity Verification Report (“SSV”) was undertaken in terms of the *Protocols for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes* (hereinafter referred to as “the Protocols”) as per Government Notice No. 320 (published in Government Gazette No. 43110 on 20 March 2020). These Protocols must be complied with for every new application submitted on the effective date and thereafter with effect from 09 May 2020. According to the Protocols, the Environmental Assessment Practitioner (“EAP”) must verify the current use of the proposed site for the proposed development as well as its environmental sensitivity in terms of the Screening Tool to determine the need for specialist inputs in relation to the Themes (and proposed specialist assessments) included in the Protocols. This report will be appended to the Basic Assessment Report to meet the stipulated requirements.

2. METHODOLOGY

The SSV Report was compiled using:

- ✚ Desktop Analysis, whereby the Department of Environmental Affairs Screening Tool and Google Earth Pro were used;
- ✚ A site visit was conducted on 2023-04-12 to investigate, identify, and evaluate the potential impacts of the proposed development on the receiving environment;
- ✚ Specialist Input; and
- ✚ Professional Judgement.

3. AIM OF THE SITE SENSITIVITY VERIFICATION REPORT

The aim of the SSV Report is to:

- ✚ Verify land use and Theme sensitivities as identified by the Screening Tool;
- ✚ Confirm whether or not the need exists for the specialist assessment(s) indicated in the Screening Tool Report; and
- ✚ Should the need for a specialist assessment be disputed, motivation as to why the proposed specialist assessment is unwarranted for the proposed development must be provided.

4. PROJECT DESCRIPTION

The proponent, Nketoana Local Municipality, intends to construct new oxidation ponds for the treatment of wastewater with a daily throughput capacity of 6MI per day and a new 4000m x 300mm Ø bulk outfall sewer line on the Farm Brandhoek No. 19 within Nketoana Local Municipality. The proposed site is bordered by Vals River on the northern Side. To accommodate the proposed development, clearance of indigenous vegetation in an area of approximately 17 hectares, would be required and within 100m of the watercourse and a discharge point onto the Vals River, which would require excavation in, removal from, and infilling of material in the watercourse. The outfall sewer and the access road to be upgraded cross a watercourse. The development footprint is shown in *Figure 1* below.

The location of the proposed development is shown in *Figure 1* below.

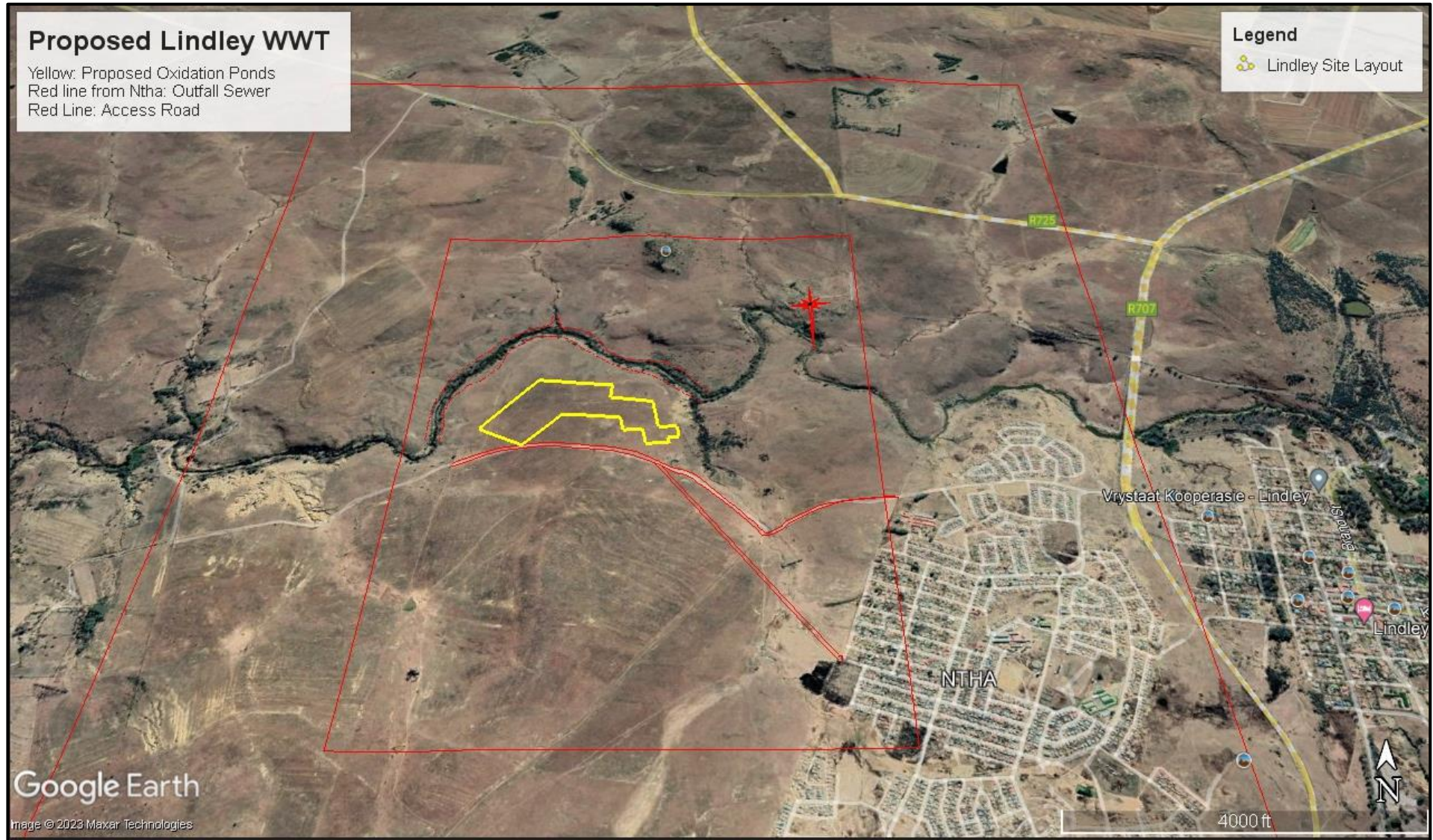


Figure 1: Satellite Imagery depicting the development footprint on the proposed site

5. SITE DESCRIPTION

The proposed development is located on the farm Brandhoek No. 19 in Lindley, \pm 2km west of Lindley and \pm 1km west of Ntha, although located outside the urban edge. The proposed site is accessible via municipal road, which then joins a dirt road with an unblockable gate. The site is undeveloped and vacant. Phukalla Secondary School is located at the beginning of the access road on the southern side. The surrounding area is an agricultural setting, with the Vals River bordering the western and northern side, and a tributary on the eastern side. Typical environment of the proposed site is shown in Photo 1 to 5 below.



Photo 1: View of the start of the existing access road to be upgraded



Photo 2: Watercourse crossing of the access road



Photo 3: North-easterly view toward Vals River indicating typical vegetation on-site



Photo 4: South eastern view towards Ntha from the proposed site



Photo 5: View of the outfall sewer route towards Ntha Pump station 3

The themes and Site sensitivity according to the Screening Tool is outlined in *Table 1* below.

Table 1: Themes and associated sensitivity of the Proposed Site

No	THEME	SENSITIVITY AS PER THE SCREENING TOOL	IN AGREEMENT		VERIFICATION OF SITE SENSITIVITY
			YES	NO	
1	Agriculture	High		X	The EAP is not in agreement with the rating as it is evident that no agricultural activities have been undertaken recently on the development footprint of the WWTW, of which its rating is actually medium, and the high rating is given a portion of the outfall sewer that crosses previously cultivated lands. As it may, a specialist has been appointed to determine the Soil and Land capability of the proposed site, and the rating was reduced to moderate.
2	Animal Species	High	X		The EAP is in agreement with the High rating given by the Screening Tool and a Specialist was appointed to undertake the Animal Species Assessment. The Animal Species Biodiversity Theme of the assessment area is rated as being of 'medium and high sensitivity' for the potential presence of the Globally Endangered Red Listed bird species <i>Sagittarius serpentarius</i> (Secretary bird) as well as the Globally Vulnerable Red Listed reptilian Species 15.. No individuals, nests or burrows of these species were however observed throughout the assessment area, during the site assessment of the former and the latter species almost exclusively inhabits flat or sloping Highveld grasslands. However, the reasonably natural grassland landscape of the proposed WWTW footprint area provides suitable/favourable foraging habitat and prey availability for the potential/likely presence of the former species. The proposed WWTW footprint area does however not provide any suitable nesting sites for this bird species. The latter species usually lives in self-excavated burrows, although it can be opportunistic by inhabiting existing empty burrows. Although the reasonably natural grassland landscape of the proposed WWTW footprint area provides potentially suitable habitat for this species, the shallow soils underlain by near-surface bedrock result in less favourable conditions for the digging of adequate burrows. This reduces the likelihood of any significant populations of this species being present throughout the proposed WWTW footprint area. The Specialist is of the view that DESTEA must confirm whether the presence/absence of this species must be specifically investigated by a specialist who is suitably registered with SACNASP in the field practise relevant to this species. This is required in accordance with the Animal Species Biodiversity Theme Protocol. Given the observation of the Specialist, DESTEA will advise as to whether further assessment must be undertaken,
3	Aquatic Biodiversity	Low	X		The EAP is in agreement with the rating given for the Aquatic Biodiversity for the wwtw footprint. However, a specialist is appointed to undertake the assessment for the discharge point and the watercourse crossings by the access road and the outfall sewer. The specialist is in agreement for the Aquatic

					Biodiversity rated as low for the proposed WWTW and as high for the Vals River.
4	Archaeological and Cultural Heritage	Low	X		The EAP is in agreement with the Low rating given by the Screening Tool Report. All the same, the EAP appointed a specialist to undertake the assessment because the development footprint is more than 5000m ² and 300m in length for linear developments and the specialist is in agreement with the rating.
5	Civil Aviation	Low		X	The EAP is in agreement with the given rating as there are no civil aviation activities in vicinity of the proposed site.
6	Defence	Low	X		There are no activities or land uses of any significance to the Defence theme within the vicinity of the proposed site, thus the EAP is in agreement with the low rating generated by the Screening Tool Report.
7	Palaeontology	Very High		X	The EAP is in agreement with the rating and a Specialist appointed to conduct the Palaeontological assessment is in agreement with the rating.
8	Plant Species	Low	X		The EAP is in agreement with the rating, however, given the size of the development footprint, a specialist appointed to conduct a Plant Species Assessment is in agreement with the rating.
9	Terrestrial Biodiversity	Low	X		The EAP is in agreement with the rating, however, given the size of the development footprint, a specialist appointed to conduct a Terrestrial Biodiversity Assessment is in agreement with the rating.

From the Screening Tool Report, Table 2 below provides motivation for undertaking or excluding listed specialists' studies in the Basic Assessment Process.

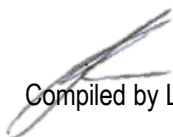
Table 2: Specialist assessments listed in the Screening Tool Report

No	SPECIALIST ASSESSMENT SPECIFIED IN SCREENING TOOL REPORT	STUDY UNDERTAKEN		MOTIVATION IF SPECIALIST ASSESSMENT IS NOT GOING TO BE CONDUCTED
		YES	NO	
1.	Landscape/ Visual Impact Assessment		X	There are no sensitive visual receptors identified in the vicinity of the proposed site. Therefore, the EAP is of the view that a Landscape/ Visual Impact Assessment is unwarranted.
2.	Archaeological and Cultural Heritage Impact Assessment	X		A specialist has been appointed to compile the required specialist report.
3.	Palaeontological Impact Assessment	X		A specialist has been appointed to compile the required specialist report.
4.	Terrestrial Biodiversity Assessment	X		A specialist has been appointed to undertake the required specialist assessment.
5.	Aquatic Biodiversity Impact Assessment	X		The discharge point is located in the Vals River and so a specialist has been appointed to undertake the required specialist assessment.
6.	Hydrology	X		A specialist has been appointed to undertake a hydrological assessment.
7.	Socio-economic		X	The proposed development is unlikely to result in any negative socio-economic impact. In fact, the proposed development is squarely aimed at ensuring that the municipality has a facility to treat wastewater optimally without causing any environmental degradation or contamination. Therefore, the EAP is therefore of the opinion that a Socio-economic Impact Assessment is not warranted.

8.	Plant Species	X		The specialist appointed to compile a Terrestrial Biodiversity Assessment and the Plant Species Theme is included in the specialist report.
9.	Animal Species	X		A specialist has been appointed to undertake the assessment.

The specialist study reports compiled in compliance with the requirements of Appendix 6 of the EIA Regulations, 2014 (as amended) including the Compliance Statement will be appended to the Final Basic Assessment Report as **Appendix D**.

Please do not hesitate to contact NSVT Consultants for any further information or clarity regarding the above.



Compiled by Lorato Tigedi Reg. EAP (EAPSA) *Pr. Sci. Nat.*