LABORE & WITHOEK INDUSTRIAL PARK

BRAKPAN

CITY OF EKURHULENI

DRAFT SCOPING REPORT

AUGUST 2021

Prepared by:

Yonanda Martin (*Pri. Sci. Nat*)

Environmental Assessment Practitioner

GENERAL INFORMATION

Report name:	Draft Scoping Report for the Labore & Withoek Industrial Park, Brakpan, City of Ekurhuleni. **Draft Scoping Report – Rev 02**
Client:	City of Ekurhuleni – Economic Development Department
Project Manager/ Engineer:	Pro Plan Consulting Engineers (Pty) Ltd
Report Compiled by:	Yonanda Martin CV attached as Appendix I
Date of Report:	August 2021
Ref No:	To be confirmed once the application is submitted to GDARD

DECLARATION OF INDEPENDENCE

I, Yonanda Martin, appointed environmental assessment practitioner responsible for compiling the Draft Scoping Report for the Labore & Withoek Industrial Park, declare that I: -

- act as an independent environmental consultant, my conclusions are formed independently and without influence from external parties;
- I will perform the work relating to this scoping report in an objective manner, even if the results and findings are not favourable to the applicant;
- have no financial interest in City of Ekurhuleni, ProPlan Consulting Engineers (Pty) Ltd or any of its subsidiaries;
- do not have any financial interest in the undertaking of the activity, other than remuneration for the work performed;
- undertake to disclose, to the competent authority, any material information that has or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document;
- based on information provided to me by the project proponent, and in addition to information obtained during the course of this study and the site visit, will present the results and conclusion within the associated document to the best of my professional judgment;
- will include all comments and inputs from stakeholders and interested and affected parties as part of the Scoping Report; and
- will address the comments and inputs received from stakeholders and interested and affected parties to the best of my abilities.

Signed:

Date: 2021/07/31

ABBREVIATIONS AND ACCORNYMS

CBA	Critical Biodiversity Area
DWS	Department of Water and Sanitation
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EMI	Environmental Management Inspectorate
EMPr	Environmental Management Programme
ESA	Ecological Support Area
GA	General Authorisation
GDARD	Gauteng Department of Agriculture and Rural Development
GDARD C- Plan	Gauteng Department of Agriculture and Rural Development Conservation Plan (Version 3.3)
GIS	Geographical Information System
GPEMF	Gauteng Province Environmental Management Framework
GSDF	Gauteng Spatial Development Framework
IDP	Integrated Development Plan
I&AP	Interested and Affected Party
LC	Least Concern
LT	Least Threatened
NEMA	National Environmental Management Act, Act No. 107 of 1998
NEMAQA	National Environmental Management: Air Quality Act 39 of 2004
NEMBA	National Environmental Management Biodiversity Act 10 of 2004
NEMPA	National Environmental Management Protected Areas Act 57 of 2003
NEMWA	National Environmental Management: Waste Act 59 of 2008
NFEPA	National Freshwater Ecosystem Priority Areas
OH&S	Occupational Health & Safety
SANBI	South African National Biodiversity Institute
SAHRA	South African Heritage Resources Agency
SDF	Spatial Development Framework
SLP	Strategic Land Parcels
SR	Scoping Report
VU	Vulnerable
WULA	Water Use License Application

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1. INTRODUCTION

Green Tree Environmental Consulting was appointed by Pro Plan Consulting Engineers (Pty) Ltd to conduct the Environmental Impact Assessment (EIA) Process for the new Labore & Withoek Industrial Park, located near Brakpan, City of Ekurhuleni, refer to Figure 1: Locality.

The Labore Industrial Area was identified by City of Ekurhuleni as one of several Strategic Land Parcels (SLP's) located within Ekurhuleni. The City of Ekurhuleni's Economic Development Department identified this industrial area as a potential economic hub that could provide upliftment of the local business and economic endeavours of the Geluksdal, Tsakane and Langaville community. It was therefore decided to expand the existing industrial area by developing the Labore & Withoek Industrial Park.

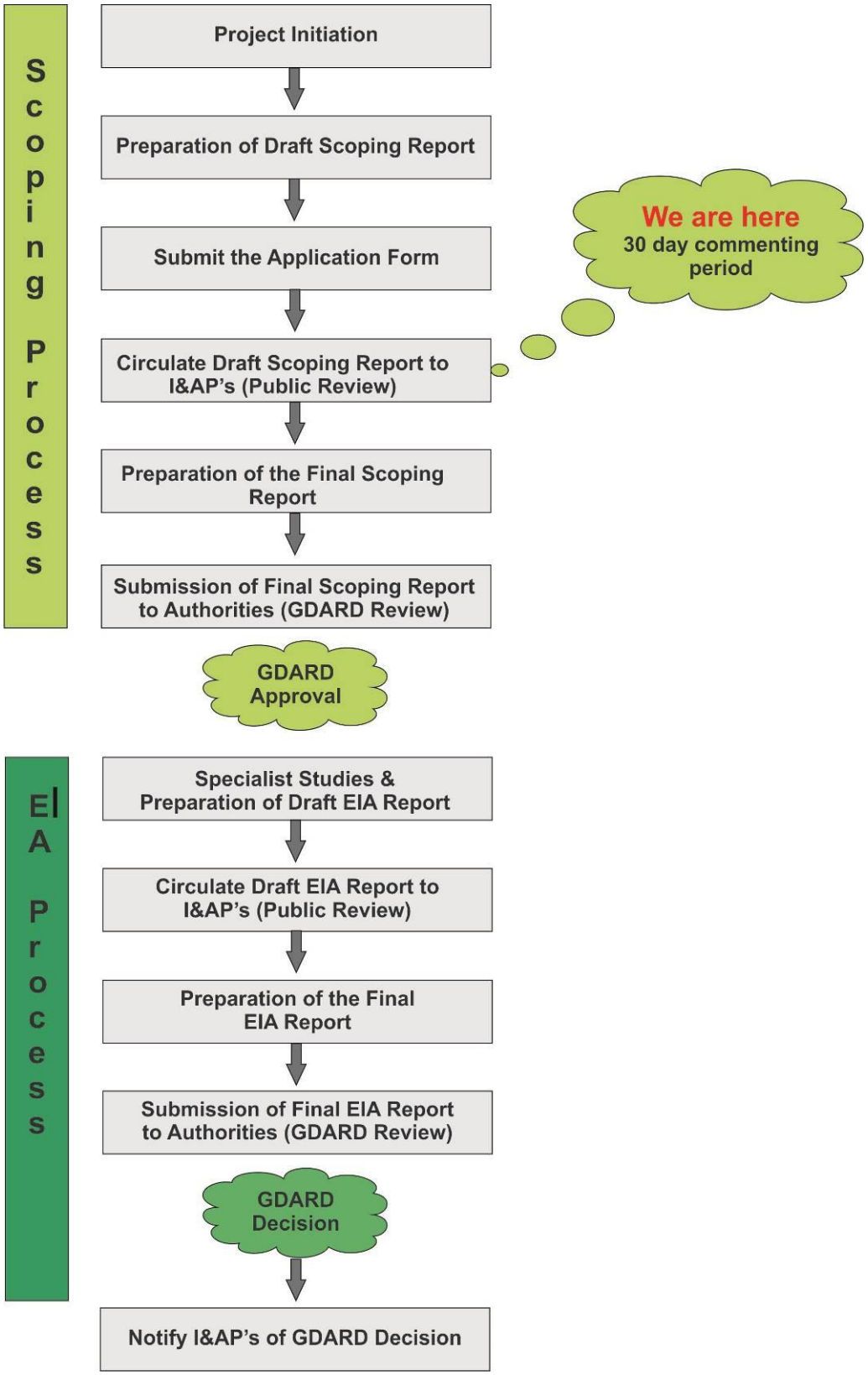
This report is the Draft Scoping Report and forms the first phase of the Environmental Impact Assessment (EIA) Process, as per the National Environmental Management Act 107 of 1998 (NEMA). The second phase of the EIA Process is the Environmental Assessment Report, refer to the schematic below that illustrates the process. The Scoping Process (Draft Scoping Report) is an initial identification/assessment of the possible impacts the proposed project, as well as the alternatives, could have and to suggest which specialist studies should be undertaken in order to assess the identified impacts. The section below identifies the objective of the Scoping Process.

1.1 Objective of the Scoping Process

The objective of the scoping process, as per the National Environmental Management Act 107 of 1998 (NEMA), Environmental Impact Assessment Regulations 2014, as amended on 7 April 2017, is to:

a) identify the relevant policies and legislation relevant to the activity;
b) motivate the need and desirability of the proposed activity, including the need and desirability of the activity in the context of the preferred location;
c) identify and confirm the preferred activity and technology alternative through an identification of impacts and risks and ranking process of such impacts and risks;
d) identify and confirm the preferred site, through a detailed site selection process, which includes an identification of impacts and risks; inclusive of identification of cumulative impacts and a ranking process of all the identified alternatives focusing on the geographical, physical, biological, social, economic, and cultural aspects of the environment;
e) identify the key issues to be addressed in the assessment phase;
f) agree on the level of assessment to be undertaken, including the methodology to be applied, the expertise required as well as the extent of further consultation to be undertaken to determine the impacts and risks the activity will impose on the preferred site through the life of the activity, including the nature, significance, consequence, extent, duration and probability of the impacts to inform the location of the development footprint within the preferred site; and

g) identify suitable measures to avoid, manage or mitigate identified impacts and to determine the extent of the residual risks that need to be managed and monitored.



Schematic 1: Illustration of the Environmental Impact Assessment Process

1.2 Content of the Scoping Report

The table below summarises the requirements for a Scoping Report, as per the National Environmental Management Act 107 of 1998 (NEMA), Environmental Impact Assessment Regulations 2014, as amended on 7 April 2017:

Table 1 Content of the Scoping Report

Requirement		Section in Report
A. Details and expertise of the EAP, including a CV		Section 1.3 Appendix F
B. Location of the activity:		
i.	Surveyor General code	Section 2.1
ii.	Physical address and farm	Section 2.1
iii.	Co-ordinates	Section 2.1
iv.	Locality Map	Section 2 Figures 1 – 3 Photographs 1 - 4
C. Description of the Scope of the proposed activity:		
i.	Listed Activities triggered	Section 4
ii.	Description of the activities to be undertaken as well associated infrastructure	Section 3
iii.	Description of the legislative context	Section 4
iv.	Motivation for the need and desirability of the development	Section 1.5
D. Description of the process followed to reach the proposed activity, site and location of the development footprint within the site:		
i.	Details of alternatives considered	Section 5
ii.	Details of the public participation process	Section 7
iii.	Summary of the issues raised by Interested and Affected Parties	Section 7.2
iv.	Environmental attributes associated with the alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects	Section 2
v.	The impacts and risks of the activity and alternatives	Section 6 Detailed assessment as part of EA Process
vi.	Methodology used in identifying and ranking the environmental impacts and risks for the activity and	Section 6

	alternatives	
vii.	Positive and negative impacts the activity and alternatives will have on the environment	Section 6 Detailed assessment as part of EA Process
viii.	Identify possible mitigation measures	Section 6 The Mitigation Measures will be discussed as part of the EA Process - EMPr
ix.	Concluding statement indicating the preferred alternatives	Section 9
E.	A plan of study for undertaking the environmental impact assessment process:	
i.	Description of the alternatives to be considered and assessed	Section 5
ii.	Description of the aspects to be assessed as part of the EIA process	Section 6
iii.	Aspects to be assessed by the specialist	Section 8
iv.	Description of the preferred method of assessing the environmental aspects	Section 8
v.	Description of proposed method of assessing duration and significance	Section 8
vi.	An indication of the stages at which the competent authority will be consulted	Section 8
vii.	Particulars of the public participation process that will be conducted as part of the EIA process	Section 8
viii.	Description of the tasks that will be undertaken as part of the EIA Process	Section 8
ix.	Identify suitable measures for mitigation	Section 8
F.	Undertaking an oath or affirmation by the EAP in relation to:	
i.	The correctness of the information provided in the report	Page iii
ii.	The inclusion of comments and inputs from stakeholders and interested and affected parties	Page iii
iii.	Any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties	Page iii
G.	Undertaking an oath of affirmation by the EAP in relation to the level of agreement between he EAP and interested and	Section 8 This will be included as part

	affected parties on the plan of study undertaking the EIA	of the Final Scoping Report
H.	Where applicable, any specific information required by the competent authority	At this stage there are no comments from the Competent Authority.
I.	Any other matter required in terms of Section 24(4)(a) and (b) of the Act	Not applicable at this stage of the project.

1.3 Details of the EAP

Table 2 Details of the EAP

Environmental Assessment Practitioner:	Yonanda Martin CV attached as Appendix I
Company Information:	Green Tree Environmental Consulting 7 Dublin Street Rangeview Ext 2 Krugersdorp Gauteng 082 409 0405 yonanda@gtec.net.za
Qualifications:	MSc. Ecological Remediation
Professional Registration:	South African Council for Natural Scientific Professions (SACNASP): 400204/09 EAPASA – 2019/1307

1.4 Detail of the Applicant

Table 3 Details of the Applicant

Applicant:	City of Ekurhuleni – Economic Development Department
Project Manager/ Engineer:	Pro Plan Consulting Engineers (Pty) Ltd

1.5 Need and Desirability of the Project

The Labore and Withoek Industrial Park will be located across several erven in Labore and Labore Extension 1, Brakpan, which is currently an existing and underdeveloped industrial area. The City of Ekurhuleni's Economic Development Department has proposed different acupuncture projects as part of the revitalisation of the Industrial Park. These are namely the Automotive Hub, the Incubation and Training Hub and a Materials Recovery Facility. Through master planning and construction of these projects, the City of Ekurhuleni aims to transform the Labore and Withoek Industrial Park into a leading and lucrative industrial hub.

Labore Industrial Park has been identified by City of Ekurhuleni as one of several Strategic Land Parcels (SLP's). The continuous upgrading of infrastructure will attract investments to the industrial park and will fast track development and advance City of Ekurhuleni's Economic Development Department's agenda.

This Labore and Withoek Industrial Park is proposed as an industry based economic development and will be aimed at endorsing and uplifting the local business and economic endeavours of the Geluksdal, Tsakane and Langaville community.

2. PROJECT LOCATION

2.1 Location

The proposed project will entail the construction of an Industrial Park on the remainder of Portions 60 and 62 of the Farm Withok 131-IR and Holding 386 of Withok Agricultural Holdings, Brakpan, City of Ekurhuleni, refer to Figure 2: Locality and Aerial View 1: Locality.

Table 4 Property Information

Property	Remainder of Portions 60 of the farm Withok 131-IR
SG Code	T0IR00000000013100060
Physical Address	Corner Joe Arnison & Boland Street Labore Brakpan
Current Zoning	Industrial
Co-ordinates	26° 19’ 39.81” S & 28° 21’ 37.19” E

Property	Remainder of Portions 62 of the farm Withok 131-IR
SG Code	T0IR00000000013100062
Physical Address	Boland Street Labore Brakpan
Current Zoning	Industrial
Co-ordinates	26° 19’ 42.31” S & 28° 21’ 24.14” E

Property	Holding 386 of Withok Estate Agricultural Holdings
SG Code	T0IR07370000038600000
Physical Address	Geluksdal Road & Boland Street Labore Brakpan
Current Zoning	Industrial
Co-ordinates	26° 19’ 56.92” S & 28° 21’ 13.16” E

2.2 Receiving Environment

The proposed project is located on the outskirts of Brakpan and borders the Geluksdal residential area, north of Geluksdal Road. The study area is a combination of residential neighbourhoods, agricultural small holdings, mining and industrial activities. The Labore industrial area borders the study site to the east of the site and to the north is mostly agricultural small holdings. The agricultural small holdings are mostly used as grazing fields for cattle and some of these small holdings has been transformed to small businesses. The land use to the west of the study site is mostly old mining property with the Brakpan/Withok Tailings Storage Facility dominating the scene.

Other residential areas within the vicinity of the study site includes the Tsakane neighbourhood located to the south of the site, the Langaville neighbourhood located to the east of the site and Duduza to the south-east of the site.

Refer to the locality maps (Figure 1 – 2) for the spatial orientation of the study site and to the site photographs (Photograph 1 – 4) for an illustration of the landscape character of the study area.

2.3 Fauna and Flora

The vegetation type (veld type) of the study area and the study site is described by Mucina and Rutherford (2006) as Tsakane Clay Grassland (Gm 9). This vegetation type is characterised by flat to slightly undulating plains and low hills. The vegetation is mainly grassland that is dominated by the common highveld grasses, *Themeda triandra*, *Heteropogon contortus*, *Elionurus muticus* and a number of *Eragrostis* species. This specific vegetation type is regarded as ‘Endangered’ with approximately 60% of this vegetation type that has been transformed due to urbanisation.

The vegetation type, as described above, is evident when viewing the study site. The study site is mainly grassland, which is currently used for grazing purposes, at the time of the site visit the grass were cut and baled. Other vegetation on site includes the group of blue gums associated with the farmstead as well as a few indigenous tree species plated within the boundaries of the farmstead. The study site has also been exposed to illegal dumping and fires, which resulted in the infestation of weeds and alien invasive species.

During the site visit no significant fauna and avifauna were noted, there were however some domestic animals, such as dogs and cattle and some guineafowls were noted. Although no significant fauna and avifauna were noted on site a biodiversity assessment will be included as part of the Environmental Impact Assessment phase in order to establish whether there are any significant species or habitats on site and the surrounding area.

2.4 Watercourse

There are no watercourses on the study site but there is a stream located on the property to the west of the study site. This stream is a branch/ tributary of the Withokspruit which is located approximately 0.3km north of the study site. The extent and the buffer of the Withokspruit and its associated branch/ tributary will be established as part of the aquatic assessment which will be included as part of the Environmental Impact Assessment phase. The Gauteng Department of Agriculture and Rural Development's Conservation Plan (GDARD C-Plan ver 3) was used as an indication of the possible extent of the Withokspruit and its associated branch/ tributary. Refer to Figure 2 for the information from the GDARD C-plan.

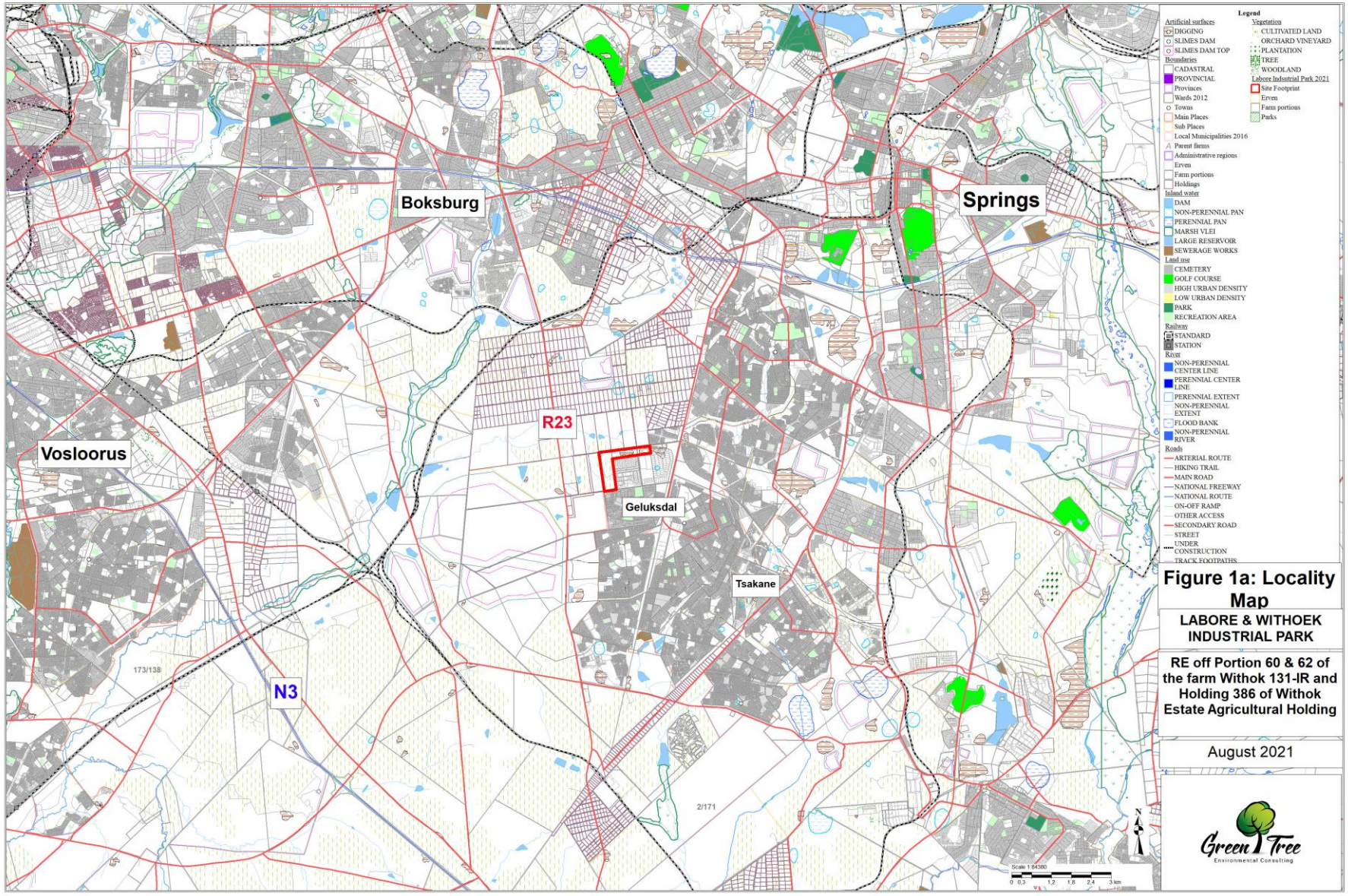
2.5 Heritage

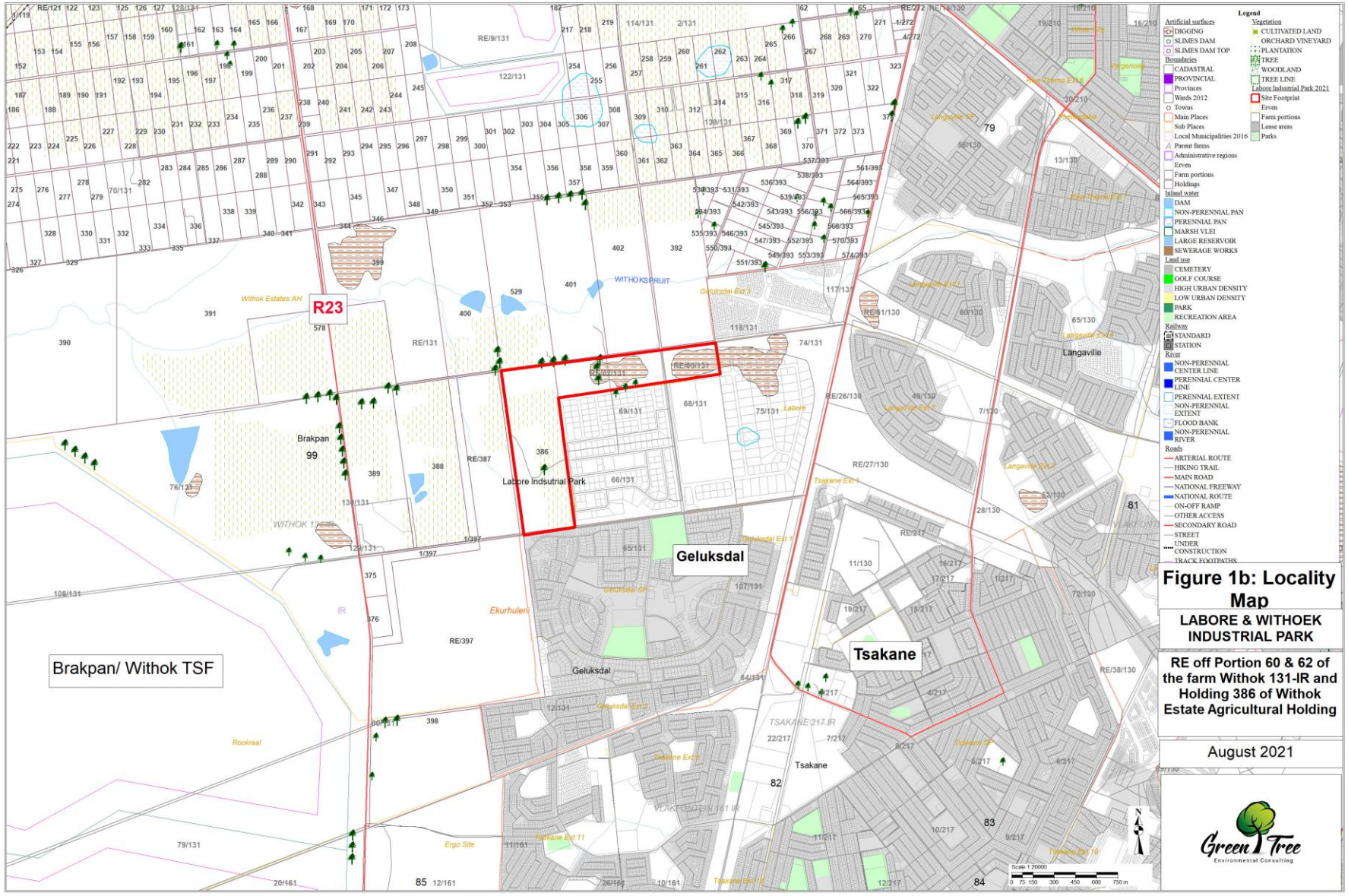
The Heritage Impact Assessment (Phase 1) was undertaken by Leonie Marais Heritage Practitioner (August 2021) and according to her findings there are no archaeological significance of the study site and no artifacts were found on site.

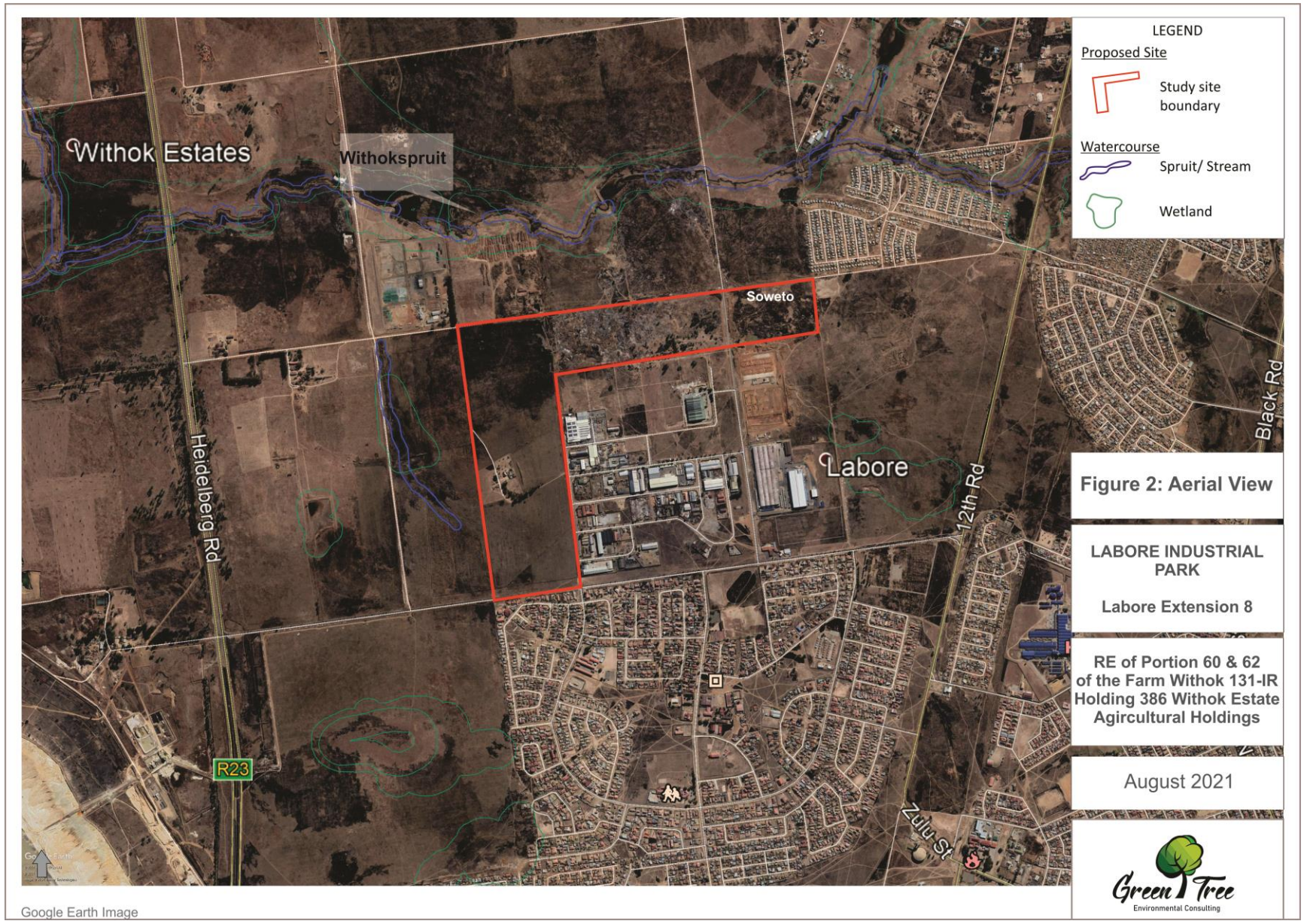
2.6 Geology

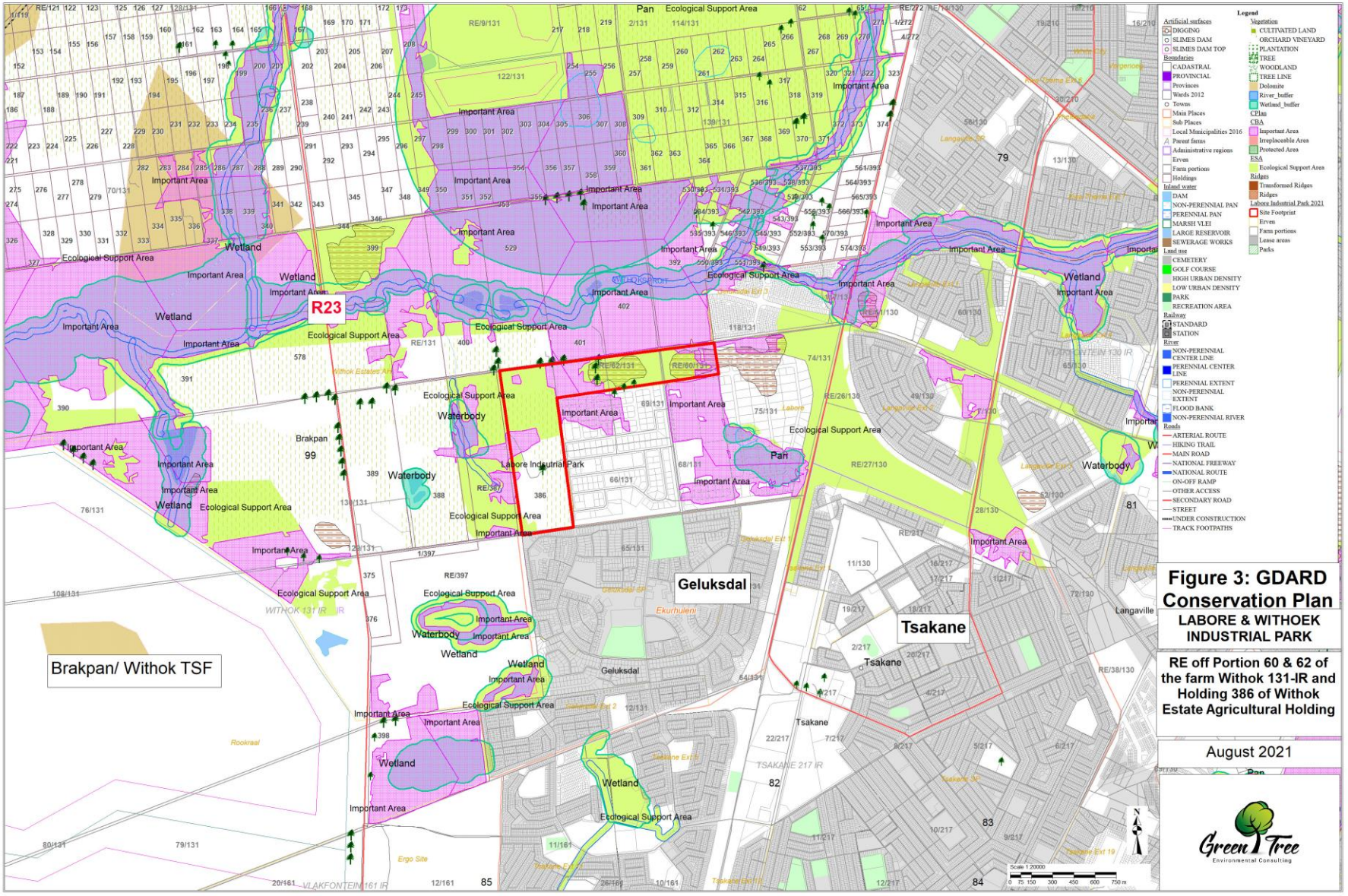
According to the report compiled by Black Jills JV (2019), the site is overlain by transported soils (generally colluvium) of thickness varying from approximately 0.3 m to greater than 1.0 m. This horizon comprised mainly grey and brown silty clay and sandy silt. Pedogenic soils were found to underlie the transported soil in most of the test pits. Pedogenic soils are derived from the transported and sandstone and shale, comprising of brown, dark brown and reddish-brown sandy silt, sandy gravelly silt and clayey silt. The layer varies in depth from approximately 0.3 m deep and greater than 2.0 m. Various forms of ferruginisation (friable, scattered and nodules and signs of ferruginisation/calcification) occur across the site. This layer was considered a competent founding layer with a bearing capacity of 150kPa. The transported horizon overlies a horizon of reworked and residual soils (tuff, agglomerate, andesites) from approximately 1.0 m to greater than 2.1 m deep. The reworked soil horizon was characterised by slickensiding, which indicates that the site is expected to exhibit highly active characteristics.

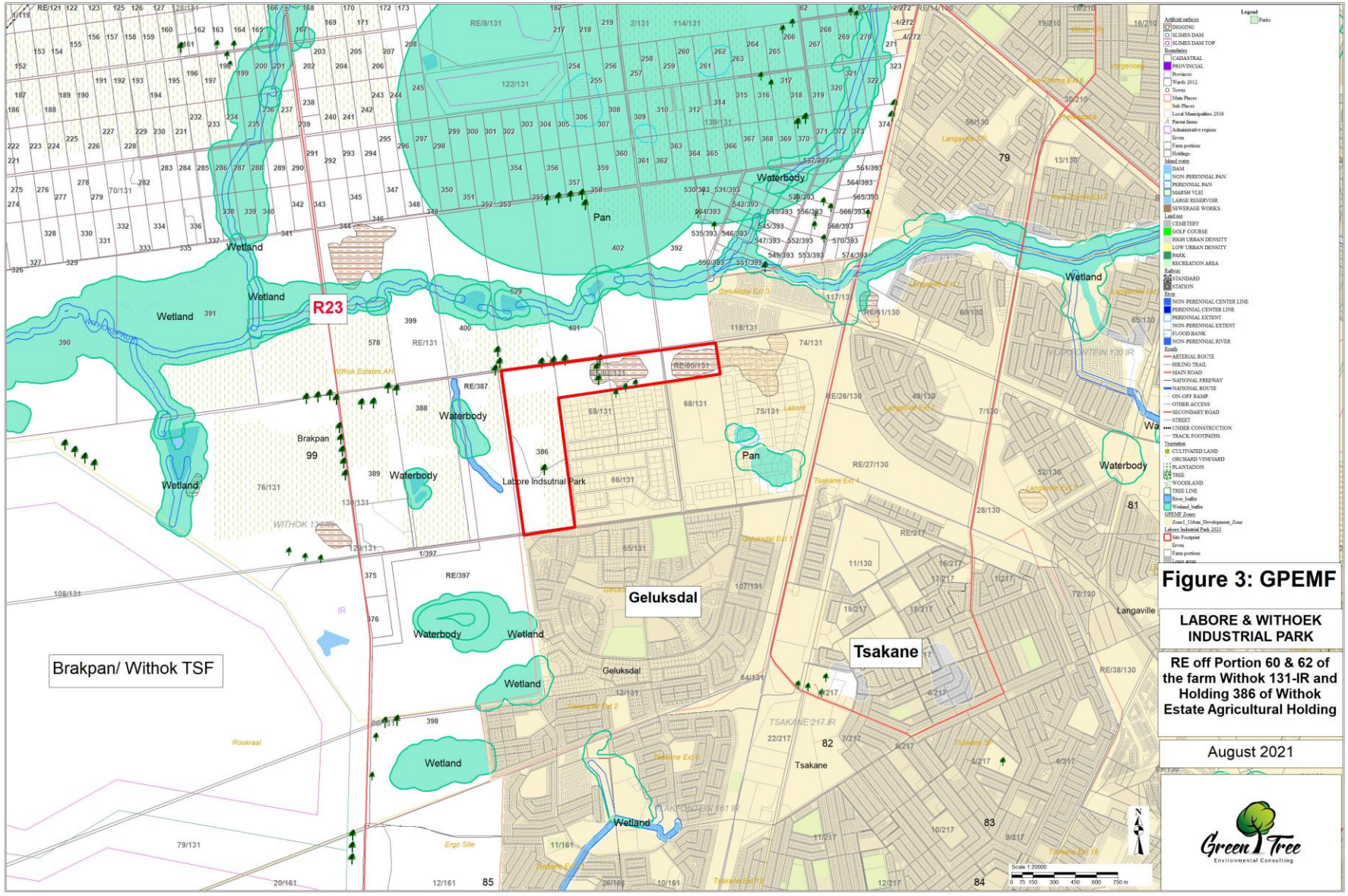
According to the City of Ekurhuleni's Environmental online GIS data, the study site is not underlain with dolomite but borders the dolomitic area to the west of the site.
Black Jill JV (2019) indicated that the only risk at this stage is the high moisture content that was experienced at some of the test pits. This indicates that there is risk of possible fluctuation of moisture content, which will lead to the heaving of clayey material on site. This can mainly be due to the existing watercourse located to the west of the site. Mitigation measures and recommendations will be discussed as part of the geotechnical investigation.


Boksburg
Springs
Vosloorus
R23
Geluksdal
Tsakane
N3
173/138
2/171
Legend
Artificial surfaces
DIGGING
SLIMES DAM
SLIMES DAM TOP
Boundaries
CADASTRAL
PROVINCIAL
Provinces
Wards 2012
Towns
Main Places
Sub Places
Local Municipalities 2016
Parent farms
Administrative regions
Erven
Farm portions
Holdings
Inland water
DAM
NON-PERENNIAL PAN
PERENNIAL PAN
MARSH VLEI
LARGE RESERVOIR
SEWERAGE WORKS
Land use
CEMETERY
GOLF COURSE
HIGH URBAN DENSITY
LOW URBAN DENSITY
PARK
RECREATION AREA
Railway
STANDARD
STATION
River
NON-PERENNIAL CENTER LINE
PERENNIAL CENTER LINE
PERENNIAL EXTENT
NON-PERENNIAL EXTENT
FLOOD BANK
NON-PERENNIAL RIVER
Roads
ARTERIAL ROUTE
HIKING TRAIL
MAIN ROAD
NATIONAL FREEWAY
NATIONAL ROUTE
ON-OFF RAMP
OTHER ACCESS
SECONDARY ROAD
STREET
UNDER CONSTRUCTION
TRACK FOOTPATHS
Vegetation
CULTIVATED LAND
ORCHARD VINEYARD
PLANTATION
TREE
WOODLAND
Labore Indsutrial Park 2021
Site Footprint
Erven
Farm portions
Parks
Figure 1a: Locality Map
LABORE & WITHOEK INDUSTRIAL PARK
RE off Portion 60 & 62 of the farm Withok 131-IR and Holding 386 of Withok Estate Agricultural Holding
August 2021
Green Tree
Environmental Consulting
Scale 1:84380
0 0,3 1,2 1,8 2,4 3 km


R23
Brakpan
Labore Indsutrial Park
Geluksdal
Tsakane
Langaville
Brakpan/ Withok TSF
Withok Estates AH
WITHOKSPRUIT
Ekurhuleni
Rookraal
Ergo Site
Legend
Figure 1b: Locality Map
LABORE & WITHOEK INDUSTRIAL PARK
RE off Portion 60 & 62 of the farm Withok 131-IR and Holding 386 of Withok Estate Agricultural Holding
August 2021
Green Tree
Environmental Consulting


LEGEND
Proposed Site
Study site boundary
Watercourse
Spruit/ Stream
Wetland
Withok Estates
Withokspruit
Soweto
Labore
Heidelberg Rd
12th Rd
Black Rd
R23
Zulu St
Google Earth Image
Figure 2: Aerial View
LABORE INDUSTRIAL PARK
Labore Extension 8
RE of Portion 60 & 62 of the Farm Withok 131-IR Holding 386 Withok Estate Agircultural Holdings
August 2021
Green Tree
Environmental Consulting


R23
Brakpan/ Withok TSF
Geluksdal
Tsakane
Labore Industrial Park
Ecological Support Area
Important Area
Wetland
Waterbody
Pan
Brakpan
Langaville
Figure 3: GDARD Conservation Plan
LABORE & WITHOEK INDUSTRIAL PARK
RE off Portion 60 & 62 of the farm Withok 131-IR and Holding 386 of Withok Estate Agricultural Holding
August 2021
Green Tree
Environmental Consulting


R23
Brakpan/ Withok TSF
Labore Indsutrial Park
Geluksdal
Tsakane
Brakpan
Withok Estates AH
Wetland
Waterbody
Pan
Figure 3: GPEMF
LABORE & WITHOEK INDUSTRIAL PARK
RE off Portion 60 & 62 of the farm Withok 131-IR and Holding 386 of Withok Estate Agricultural Holding
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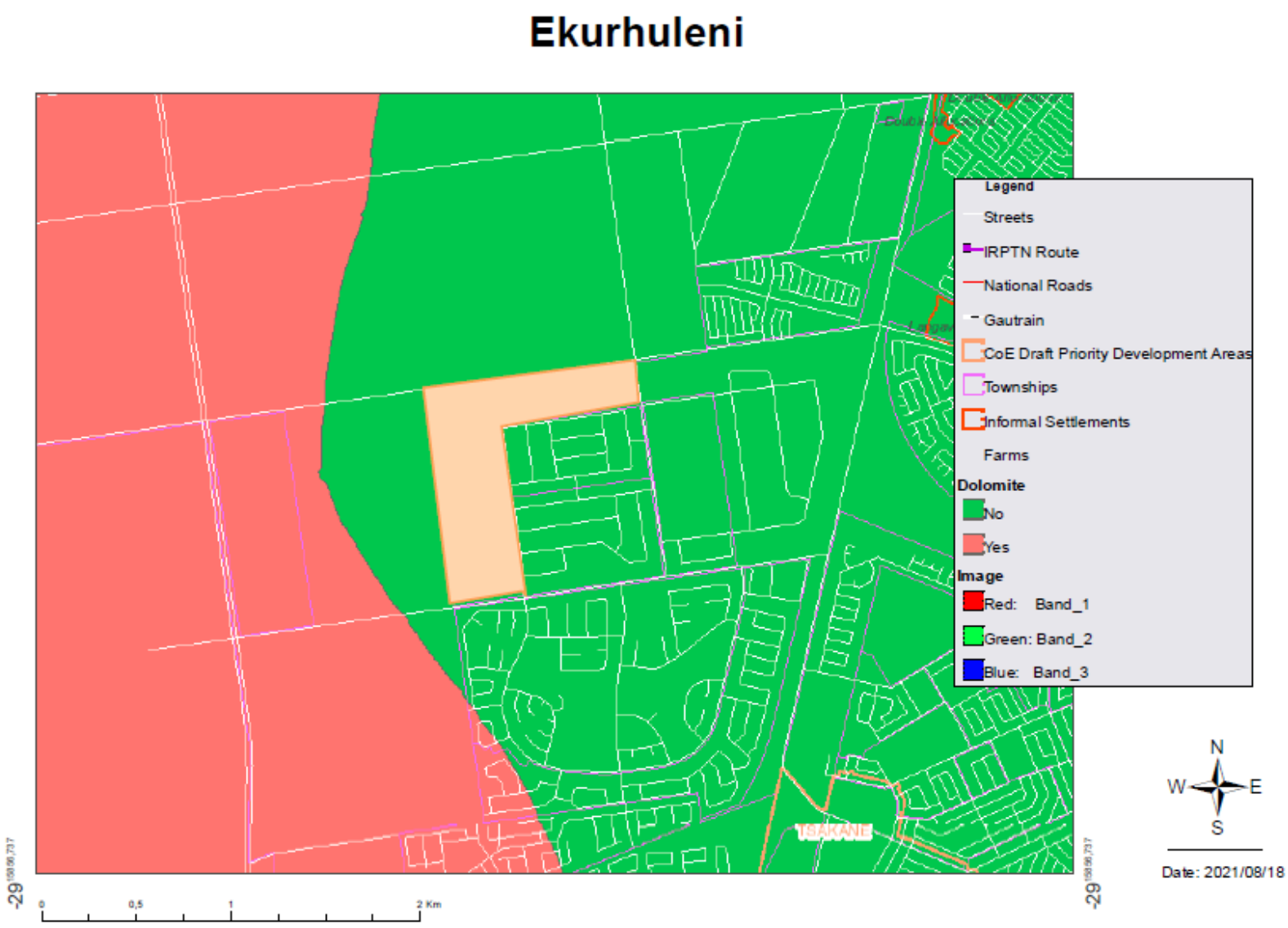
Green Tree
Environmental Consulting



Ekurhuleni GIS Information Map 1: Dolomite

View 1: View of the north-western corner of the study site

View 2: View of the eastern boundary of the study site, bordering the existing industrial area.

View 3: View of the southern boundary of the study site with the Geluksdal neighbourhood in background.

Photograph 1: Site Photographs

LABORE & WITHOEK INDUSTRIAL PARK

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View 4: View from Boland Street towards the north-western corner of the study site

View 5: View of the north-eastern portion of the study site (Boland Street).

View 6: View of the north-eastern portion of the study site (Boland Street).

Photograph 2: Site Photographs
LABORE & WITHOEK INDUSTRIAL PARK
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082 409 0405

View 7a & b: View of the agricultural businesses located to the north of the study site along Boland Street.

View 8: View from the R23 towards the study site.

View 9: View from the R23 towards the Brakpan/Withok Tailings Storage Facility (TSF)

Photograph 3: Site Photographs

LABORE & WITHOEK INDUSTRIAL PARK

August 2021

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View 10: View of illegal dumping and fires along Boland Street, northern boundary of the study site

View 11: View of illegal dumping along Boland Street, northern boundary of the study site

Photograph 4: Site Photographs

LABORE & WITHOEK INDUSTRIAL PARK

August 2021

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2.7 Socio-Economic Environment

The proposed Labore & Withoek Industrial Park is located within the vicinity of the Geluksdal, Langaville and Tsakane communities. The information used to generate a picture or provide a description of the current socio-economic status of the area is based on the information provided in the City of Ekurhuleni's Integrated Development Plan (2018-19 Review), the Profile and Analysis Report compiled for the Municipality and available Census data (http://www.statssa.gov.za/).

According to the City of Ekurhuleni's Integrated Development Plan (IDP, 2018-19 review) the City's population has grown exponentially since its establishment in the year 2000. The population has nearly doubled in the last seventeen years from an estimated 2 368 283 in the year 2000 to 3379104 in 2016. The current population represents over 6% of the total population of South Africa (StatsSA: 2017). One of the important factors of growth in the Ekurhuleni population is the net migration into the City, this is similar for the other big metropolitans such as Tshwane and Johannesburg. The city has a median age of 30 and 66% of the population is between the ages of 18-64, 18% is below the age of 18 and 6% is above the age of 65. The city has a relatively young population which is about the same rate as that of Gauteng Province. The African (black) population accounts for 80% of the population followed by the white population at 14%, the Coloured population at 3% and the Indian population at 2%. According to the Profile and Analysis Report for City of Ekurhuleni (2020) the unemployment rate is 31,8%, which is above the Gauteng and Country average for unemployment.

The structure of the City of Ekurhuleni's economy is dominated by four sectors: manufacturing, finance and business services, community services and general government and to a lesser extent the trade and hospitality sector (CoE IDP, 2018-19 review). There has however been a shift in the last 15 years which showed a decline in the manufacturing sector which is one of the biggest contributors to the City's economy. The continuing decline of the manufacturing sector is a big challenge for the municipality and for that reason the revitalization of the manufacturing sector is a key strategic focus area for the municipality and therefore also one of the motivations to develop the Labore & Withoek Industrial Park.

The following information is applicable to service delivery within the City of Ekurhuleni (CoE IDP, 2018-19 review):

- Water

  Currently about 98% of the population receive water from a regional or local service provider. In addition, 60% of the population receive piped water inside a house, 30% receive piped water inside a yard and the remaining 10% receive piped water from a community standpipe and other means.
- Sewer

Ekurhuleni is still dealing with the challenges of ageing sanitation infrastructure and an increasing backlog of infrastructure in new developments. The City recorded commendable progress in the provision of sewer connections to households, which increased by 43 965 connections between 2014/15 and 2017/18 bringing the total to 761 065 connections. This means 91,4% of the households have access to flush or chemical toilets and 89% have access to flush toilets, this is about the same rate as Gauteng and 1,5 times higher than the 59% recorded by South Africa.

- Electricity

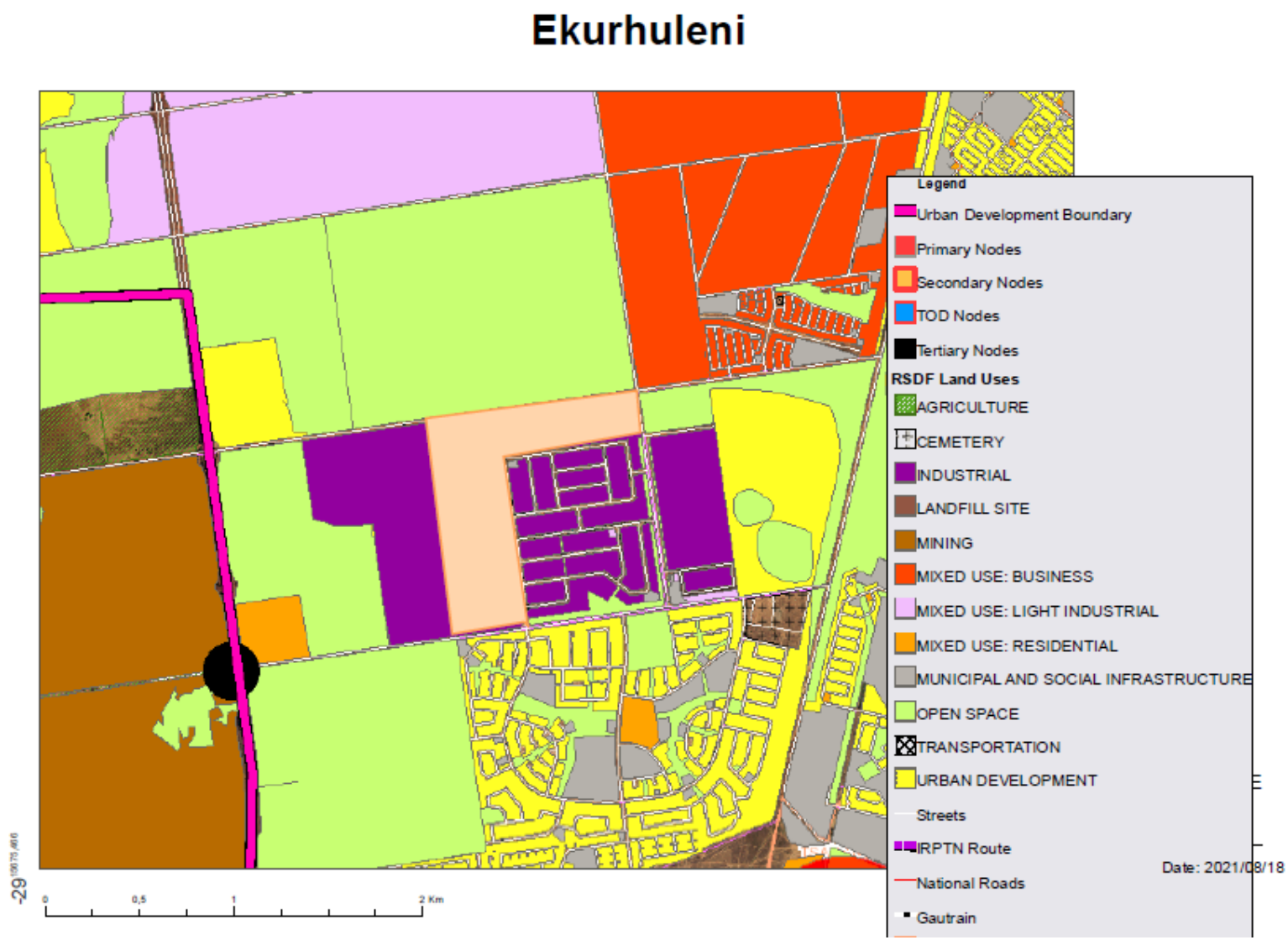
  About 10% of the population does not have access to electricity, 66% have an in-house prepaid meter for electricity, 21% are serviced through an in-house conventional meter and the remaining 2% use other sources.

- Waste

  Collection Over 89% of the households are getting refuse disposal from the council, private companies or community members. 87% receive these services on a regular basis, whereas 3% do not receive any refuse removal service, which is 25% higher than the Gauteng average and three quarters of the South African average of 4%.

2.8 Future Development

The property to the west of the proposed project site is earmarked for industrial use/ development as par the City of Ekurhuleni's draft Spatial Development Framework, 2020, refer to the schematic illustration below. There is however no other future development planned for the study area.



Ekurhuleni GIS Information Map 2: Land use as per the Spatial Development Framework, City of Ekurhuleni, 2020

3 PROJECT DESCRIPTION

3.1 Project

The Labore & Withoek Industrial Park is mainly an industrial area that will provide erven for the development of various light industrial activities. These light industrial activities could include the following types of businesses:

- Distribution Centres;
- Warehousing;
- Cartage and transport services;
- Maintenance and Repair Workshops
- Engineering Works;
- Builder's Yard
- Small scale businesses such as artisan manufacturing.

The proposed activities are similar to the activities that are currently taking place within the industrial area bordering the study site. The preliminary layout was done by Futurescape, refer to the layout below. This is only the preliminary layout and changes will be done once the different specialist studies has been completed.

3.2 Services

The proposed project will be within the development footprint of Ekurhuleni and therefore the services (water and sanitation) required for the proposed Labore & Withoek Industrial Park is currently available. The water provided to the Industrial Park will be supplied by the existing Rand Water network that taps into the Labore area, the sewer for the Industrial Park will be connected to the existing sewer connections. The existing bulk sewer pipeline has capacity and there is no need to upgrade the sewer pipelines. The sewer currently drains to the Vlakplaats Waste Water Treatment Works (WWTW) and the overflow is directed to the Waterval WWTW. There is currently capacity and it should be noted that CoE is planning to upgrade the Waterval WWTW and once it is upgraded the sewer will bypass Vlakplaats WWTW and be directed to Waterval WWTW, refer to the Civil Infrastructure Report (Black Jills JV, 2019) for more detail regarding the services.

There is currently no capacity at the existing Geluksdal substation and it was therefore recommended that one of the substations in the area should be upgraded to accommodate all future electrical loading requirements for the Labore & Withoek Industrial Park. The Electrical Design Report was submitted to the Ekurhuleni Energy Department, and the suggested upgrades were approved. The Ekurhuleni Energy Department is also in the process of applying for a new intake Eskom substation to allow for future capacity on the 33kV line. Although there is currently no capacity the City of

Ekurhuleni, together with Eskom, is working on a plan to ensure that the Labore & Withoek Industrial Park will have sufficient electrical supply.

3.3 Traffic

According to the Traffic Impact Assessment that was done by Ndlovu Engineering Techniks (2020), the proposed Labore & Withoek Industrial Park will have an impact on the alignment of the proposed PWV16. The proposed alignment of the PWV16 crosses the north-eastern section of the Labore & Withoek Industrial Park. The PWV17 is however not affected by the proposed Labore & Withoek Industrial Park. The following recommendations were made regarding the upgrade of the existing traffic network:

- The signal timing plan for the R23 and Geluksdal Road intersection will be changed to cater for the proposed upgrades;
- Intersection at Geluksdal and 12th Road will need an upgrade in the traffic signal;
- Taxi's and bus bays must be provided for along the road network;
- Paved walkways must be provided along Volt Street, Joe Arnison Street and a section of Boland Street;

The upgrade of the road network is discussed in detail in the Traffic Impact Assessment Report, Annexure E.

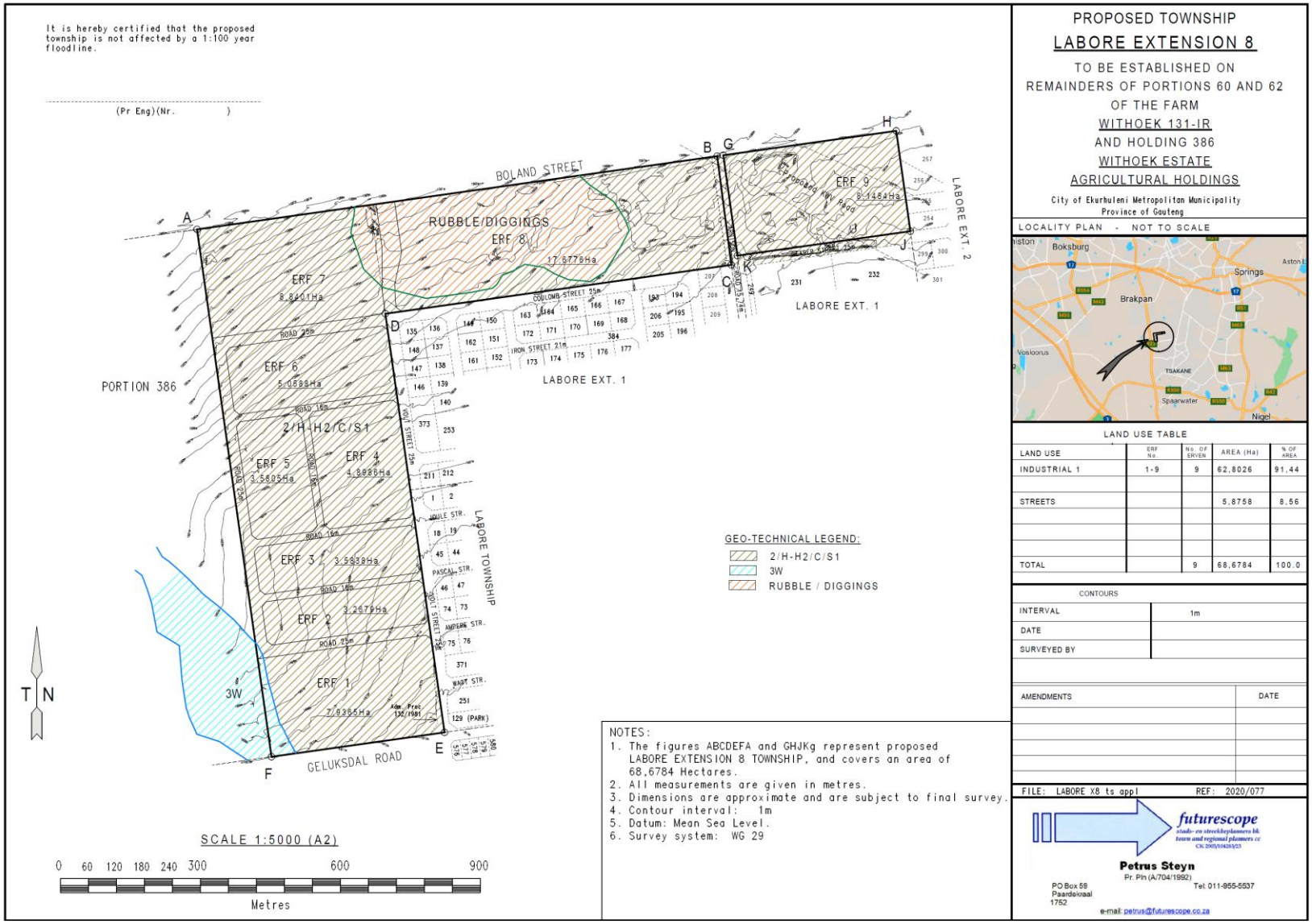


Figure 5: Preliminary Layout Plan (provided by Futurescope, 2021)

4 LEGISLATION

4.1 The Constitution of the Republic of South Africa, 1996 (Act 108 of 1996)

The Constitution of South Africa (No.108 of 1996) is an essential part of legislation that provides a framework for environmental management in South Africa. The Bill of Rights (Section 24) in the Constitution of South Africa (No.108 of 1996) states that everyone has the right to a non-threatening environment and requires reasonable measures to be implemented to protect the environment. Section 24(b) (i) encourages prevention of pollution and ecological degradation and Section 24(b)(iii) promotes ecologically sustainable development. These principles are embraced in NEMA and processes and procedures are identified within NEMA to ensure the protection of the environment.

The Constitutional mandate of all Local Municipalities, is described in Chapter 7, and specifically Section 152(1)(d) of the Constitution which requires of Local Government to promote a safe and healthy environment, this would include:

- Air pollution
- Building regulations
- Electricity and gas reticulation
- Local tourism
- Municipal planning
- Municipal health services
- Municipal public transport
- Pontoons, ferries, jetties, piers and harbours, excluding the regulation of international and national shipping and matters related thereto
- Storm-water management systems in built-up areas
- Water and sanitation services limited to potable water supply systems and domestic waste-water and sewage disposal systems

4.2 The Municipal Systems ACT, 2002 (ACT 32 of 2002)

Municipal Systems Act (Act 32 of 2002) Chapter 2, Section 4, states that a "...municipality, within the municipality's financial and administrative capacity and having regard to practical considerations, has the duty to -

- Exercise the municipality's executive and legislative authority and use the resources of the municipality in the best interests of the local community;
- Provide, without favour or prejudice, democratic and accountable government;
- Encourage the involvement of the local community;
- Strive to ensure that municipal services are provided to the local community in a financially and environmentally sustainable manner;
- Consult the local community about- the level, quality, range and impact of municipal services provided by the municipality, either directly or through another service provider; and the available options for service delivery;

- Give members of the local community equitable access to the municipal services to which they are entitled;
- Promote and undertake development in the municipality;
- Promote gender equity in the exercise of the municipality's executive and legislative authority;
- Promote a safe and healthy environment in the municipality; and
- Contribute, together with other organs of state, to the progressive realisation of the fundamental rights contained in Sections 24, 25, 26, 27 and 29 of the Constitution." (from the Municipal Systems Act, Chapter 4, own emphasis)

4.3 National Environmental Management Act

The National Environmental Management Act (Act 107 of 1998) sets out the principles of Integrated Environmental Management (IEM), which should be applied to ensure sustainable development. The IEM procedure aims to ensure that the environmental consequences of development proposals are understood and adequately considered during all stages of the project cycle, and that negative aspects are resolved or mitigated and positive aspects enhanced. NEMA aims to promote sustainable development, with wide-ranging implications for national, provincial, and local government. Included amongst the key principles is that all development must be environmentally, economically and socially sustainable and that environmental management must place people and their needs at the forefront, and equitably serve their physical, developmental, psychological, cultural and social interest.

As per the National Environmental Management Act 107 of 1998 (NEMA), Environmental Impact Assessment Regulations 2014, as amended on 7 April 2017, the proposed Labore & Withoek Industrial Park will trigger activities listed in Listing Notice 1 (GN R327), Listing Notice 2 (GN R325) and Listing Notice 3 (GN R324). The process that will be followed in order to receive an Environmental Authorisation is a Scoping/ Environmental Impact Assessment Process.

Table 5 Activities triggered according to the Listing Notices (NEMA)

GN. R 327, 7 April 2017 (GN No. 983)	Listing Notice 1 Activity 9	The development and related operation or infrastructure exceeding 1 000metres in length for the bulk transportation of water and storm water – i. With an internal diameter of 0,36 metres or more; or ii. With a peak throughput of 120 litres per second or more; Excluding where – a. Such infrastructure is for the bulk transportation of water or storm water or storm water drainage inside a road reserve or railway line reserve; or b. Where such development will occur within an urban area.
GN. R 327, 7 April 2017 (GN No. 983)	Listing Notice 1 Activity 10	The development and related operation or infrastructure exceeding 1 000metres in length for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes – iii. With an internal diameter of 0,36 meters or more; or iv. With a peak throughput of 120 liters per second or more; Excluding where – c. Such infrastructure is for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes inside a road reserve or railway line reserve; or aa) Where such development will occur within an urban area.
GN. R 327, 7 April 2017 (GN No. 983)	Listing Notice 1 Activity 11	The development of facilities or infrastructure for the transmission and distribution of electricity— i. outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts; or ii. inside urban areas or industrial complexes with a capacity of 275 kilovolts or more; excluding the development of bypass infrastructure for the transmission and distribution of electricity where such bypass infrastructure is — a. temporarily required to allow for maintenance of existing infrastructure;

		b. 2 kilometres or shorter in length; c. within an existing transmission line servitude; and a) will be removed within 18 months of the commencement of development.
GN. R 325, 7 April 2017 (GN No. 984)	Listing Notice 2 Activity 15	The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for— i. the undertaking of a linear activity; or ii. maintenance purposes undertaken in accordance with a maintenance management plan.
GN. R 324, 7 April 2017 (GN No. 985)	Listing Notice 3 Activity 12	The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. <u>Gauteng</u> i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004; **ii. Within Critical Biodiversity Areas or Ecological Support Areas identified in the Gauteng Conservation Plan or bioregional plans; or** iii. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning.

4.4 National Water Act (Act 36 of 1998)

According to the National Water Act (Act 36 of 1998) there are different types of water uses (*Section 21 of the Act*):

a. taking water from a water resource;
b. storing water;
c. impeding or diverting the flow of water in a watercourse;
d. engaging in a stream flow reduction activity contemplated in section 36;
e. engaging in a controlled activity identified as such in section 37(1) or declared under section 38(1); with specific reference to irrigation of any land with waste or water containing waste generated through any industrial activity or by a water work.
f. discharging waste or water containing waste into a water resource through a pipe, canal, sewer, sea outfall or other conduit;
g. disposing of waste in a manner which may detrimentally impact on a water resource;
h. disposing in any manner of water which contains waste from, or which has been heated in, any industrial or power generation process;
i. altering the bed, banks, course or characteristics of a watercourse;
j. removing, discharging or disposing of water found underground if it is necessary for the efficient continuation of an activity or for the safety of people; and
k. using water for recreational purposes.

If any of the above-mentioned water uses are applicable to a project it will require a Water Use License from the Department of Water and Sanitation (DWS). The proposed project will require a Water Use License (WUL) since the project is located within 500m of the closest wetland and will have an impact on the feeding area of that wetland.

4.5 Bylaws/ Policies

The following Bylaws/ Policies and Guidelines were also taken into consideration:

- City of Ekurhuleni Bioregional Plan 2020 (Draft).
- City of Ekurhuleni Growth and Development Strategy 2025.
- City of Ekurhuleni Spatial Development Framework 2015.
- City of Ekurhuleni Integrated Development Plan (2018-19 Review).
- City of Ekurhuleni Profile and Analysis 2020.

4.6 Other Policies/ Guidelines

The following Policies and Guidelines were also taken into consideration:

- Gauteng Pollution Buffer Zones Guideline, March 2017
- Gauteng Conservation Plan (C-Plan), Version 3.3

5 PROJECT ALTERNATIIVES

According to NEMA (Act 107 of 1998), Environmental Impact Assessment Regulations 2014, as amended on 7 April 2017, the proposed project must include or consider alternatives, whether the alternatives are different locations, methodologies used, technology or even a different land use.

During the Scoping Phase the following alternatives were considered:

- Site layout on the proposed properties;
- Alternative land use for the proposed site;

5.1 Site Layout Alternative

There are currently two site layout alternatives that still needs to go through proper design changes in order to accommodate the storm water management on site, the findings from the specialist studies as well as the input from the community. Site alternatives will therefore be presented as part of the impact assessment phase of this project after the recommendations of the specialist are taken into consideration. Refer to Figure 5a and 5b for the two layout alternatives.

5.2 Alternative Land Use

Although there are possibilities of alternative land uses some of the land uses are not necessarily recommended since there is an existing industrial park and therefore there are pollution buffers (Gauteng Pollution Buffer Zones Guideline, March 2017) to which needs to be complied with. The pollution buffer (250m is the minimum requirement) prevents any residential development on these properties but could allow other type of land uses such as commercial, agricultural business or the existing agricultural activities.

These will be assessed and further addresses as part of the impact assessment phase of this project.

5.3 No-Go Alternative

The no-go alternative would mean that there will be no development of the Labore & Withoek Industrial Park, the project will therefore not go ahead. Should this alternative be considered it could lead to the mis-use of the current property by expanding the illegal dumping that is currently taking place, increase in fires and the possibility of settlers using the area for residential accommodation. Although sections of the property are fenced there is still a risk of theft and the invasion of the property.

A section of the property is used by a local resident for the harvesting of grass, this activity will however continue until a change occurs.

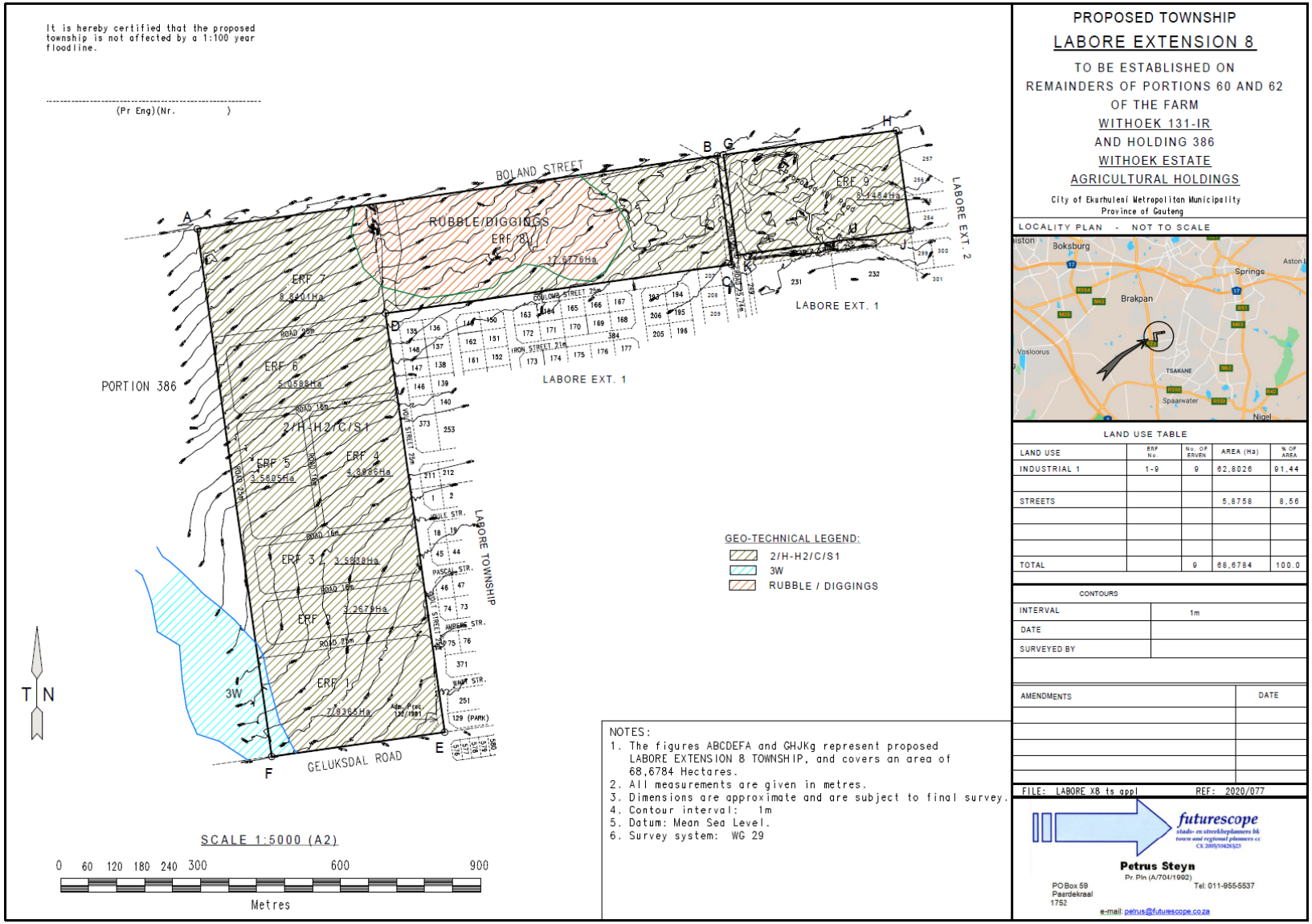


Figure 6a: Layout Alternative 1: Preliminary Layout Plan

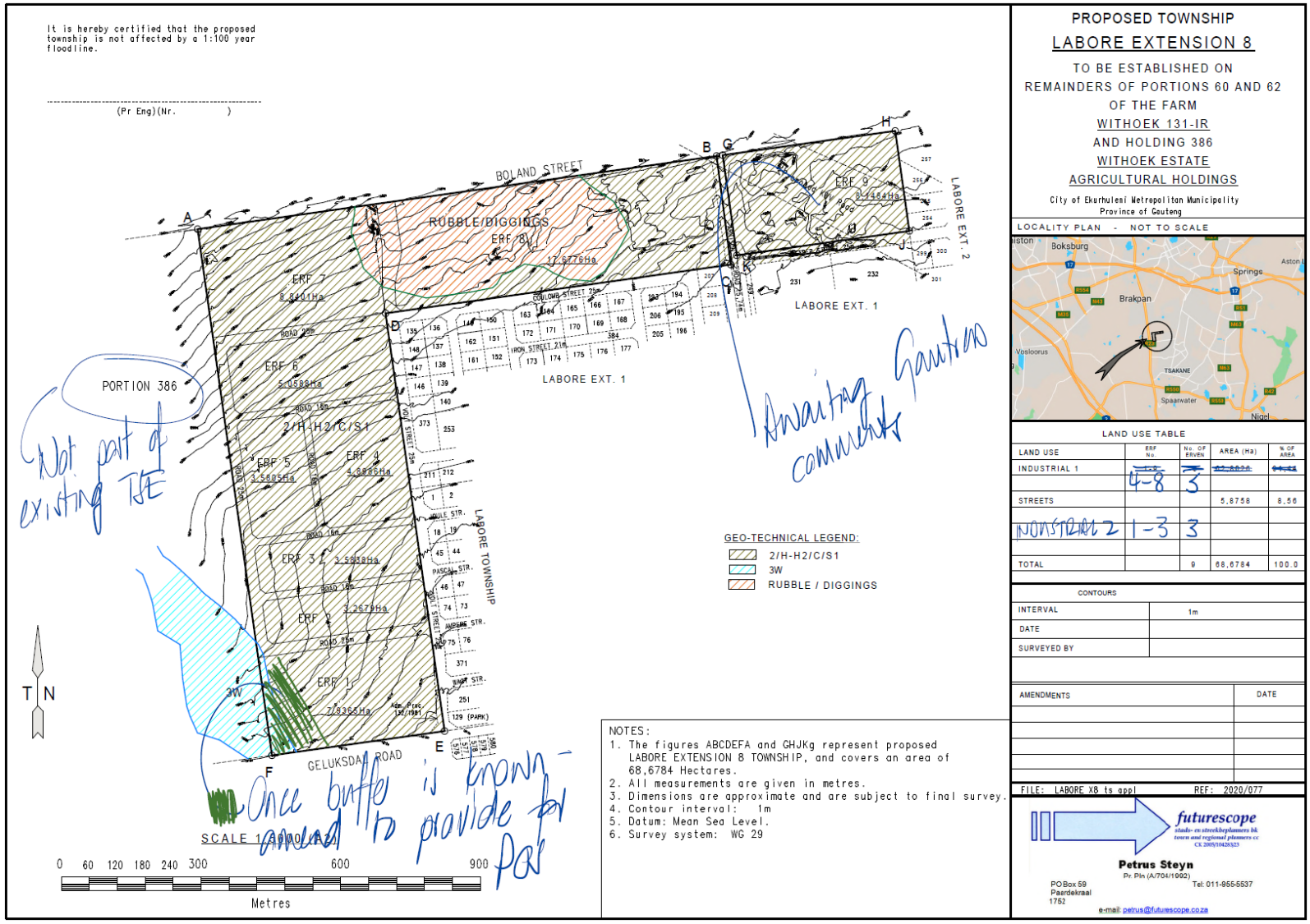


Figure 6b: Layout Alternative 2: Revised Layout Plan with some of the recommendations from specialist and I&APs

6 POSSIBE IMPACTS AND MITIGATION MEASURES

6.1 Activities causing potential impacts

The following activities are activities that could cause potential impacts, during the construction and operational phase, if not managed properly or if no mitigation measure is implemented. The activities listed below will be applicable to all alternatives considered:

- Removal of vegetation (site clearance);
- Establishment of the site camp/ offices;
- Access roads and movement of machinery/heavy vehicles/equipment on site;
- Pathways created by workers/ vehicles/ machinery;
- Creating conditions for alien invasive species to breed or grow;
- Excavating;
- Hydrocarbon spills/ leakages;
- Washing of equipment/ machinery;
- Mixing/ batching area (cement);
- Poor waste management and littering;
- Dumping of material/waste;
- Stockpiling of soil and material;
- Poor management of water (storm water & potable water);
- Poor management of ablution facilities;
- Random events such as fire;
- Poaching or removal of fauna species;
- Poor management of the rehabilitation process;
- Spillages during operational phase from the various light industrial activities
- Poor management of storm water during operation.

6.2 Potential Impacts

The following impacts are potential impacts that could occur during the construction and/or the operational phase of the project. These impacts are applicable to all the alternatives considered for the Project.

Negative Impacts

- Destruction of the vegetation on site including areas classified as CBA and ESA;
- Displacement of faunal community due to habitat loss, direct mortalities and disturbance (noise, dust and vibration);
- Encroachment by humans into the remaining natural grassland areas, with associated impacts such as poaching, litter as well as introduction of pests, diseases and feral species;

- Encroachment by humans into the watercourse areas (wetlands located west of the site and Withokspruit located to the north), with associated impacts such as litter, spills as well as introduction of alien invasive species;
- Erosion due to clearance of vegetation, compaction of soil' poor management of stockpiling areas and poor management of rehabilitation process;
- Pollution/contamination of soil, surface water and groundwater due to leakages or spillages of fuel, oil and hazardous substances;
- Pollution/contamination of soil, surface water and groundwater due to mixing of cement (batching area);
- Pollution/contamination caused by littering or dumping of construction waste;
- Dust due to construction related activities (site clearance and excavation);
- Emissions from construction machinery/ heavy vehicles;
- Noise caused by construction related activities;
- Visual impact of the facility;
- Disruption of traffic due to machinery using the local road network and during operational activities when honey suckers dump sewage;
- Influx of people seeking employment;
- Safety and security of the surrounding community due to an influx of people or risk of the site camp/ office.

Positive Impacts

- Possible job opportunities (short-term and long-term opportunities) for local residents;
- Training opportunities for local residents.

No-Go Option Impacts

With the current situation and degradation of the area the following impacts could occur:

- pollution/contamination of soil, surface water and ground water;
- bad odour due to illegal dumping;
- health risks due to illegal dumping and fires on site and adjacent properties;
- Invasion of weeds and alien invasive species;
- Invasion of settlers.

6.3 Possible Impacts and suggested Mitigation Measures

The table below (Table 6) summarises the potential impacts the proposed project could have on the environment as well as possible mitigation measures. These impacts will be investigated and discussed during the impact assessment phase of the project. The mitigation measures are suggested mitigation that will be refined during the impact assessment phase and will include the recommendations from the specialist.

Table 6 : List of potential impact and suggested mitigation measures

ASPECT AND DESCRIPTION		MITIGATION MEASURES
ASPECT	**DESCRIPTION**	
FLORA - Damage or loss of habitat due to construction activities	Weeds and alien species will be introduced and seeds will spread due to disturbance	Implementation of an Alien Invasive and Weed Eradication Plan
	Vegetation will be removed in order to establish a site camp and to construct the industrial park.	A Rehabilitation Plan, as per the specialists' recommendations must be implemented.
	Dumping of waste outside the designated area.	Staff members/ contractors must be educated. Clear signs must be erected indicating where waste can be disposed. Bins must be provided for waste and a skip must be provided for the construction waste.
	Burning of vegetation on site.	No fires allowed on site. Staff members/ contractors must be educated.
	Storing of construction material and soil stockpiles outside the designated areas	A designated area at the construction camp site must be identified for the stockpiling of material and soil.
FAUNA & AVIFAUNA - Loss of species	Removal of the plant species	A Rehabilitation Plan, as per the specialists' recommendations must be implemented.
	Injury / death to fauna and avifauna due to poaching	No poaching allowed on site. Staff members/ contractors must be educated.
	Dumping of waste and construction material outside the designated area	Staff members/ contractors must be educated. Clear signs must be erected indicating where waste can be disposed. Bins must be provided for waste and a skip must be provided for the construction waste.
	Fires	No fires allowed on site. Staff members/ contractors must be educated.
WATERCOURSE (WETLAND & STREAMS) - Damage or loss of watercourse due to construction activities.	Weeds and alien species will be introduced and seeds will spread due to disturbance.	Implementation of an Alien Invasive and Weed Eradication Plan
	Staff members/ Contractors might create new pathways within the watercourse areas and buffer zones.	Staff members/ Contractors must be informed/ educated regarding environmental issues, pathways created due to construction activities must be rehabilitated.
	Dumping of waste outside the designated area.	Staff members/ contractors must be educated. Clear signs must be erected indicating where waste can be disposed. Bins must be provided for waste and a skip must be provided for the construction waste.
	Burning of vegetation on site.	No fires allowed on site. Staff members/ contractors must be educated.
	Construction vehicles driving through the watercourse and damaging vegetation.	Access roads must be clearly identified and trucks must stick to the designated areas.
	Dumping of construction material within the watercourse or buffer area	Staff members/ contractors must be educated. Clear signs must be erected indicating where waste can be disposed. Bins must be provided for waste and a skip must be provided for the construction waste.

	Erosion and siltation will result in destruction of the remaining vegetation	Erosion measures must be in place, refer to the EMPr for details. The exposed soil must be vegetated as soon as possible.
	Spillage/leak of hydrocarbon or other hazardous material	Trucks and machinery must be checked regularly to avoid any leaks. Hazardous material must be stored in a lockable container and on an impervious surface. Hydrocarbon must be stored within a bunded area.
WATERCOURSE (WETLAND & STREAMS) - Damage or loss of watercourse due to operational activities.	No proper storm water management plan or design	There must be a proper storm water management plan/ design for the overall site as well as each individual erven.
	No proper separation of dirty and clean water, no proper oil traps.	The storm water management plan must address the separation of clean and dirt water and each business must provide proper management of oils traps and similar mechanism to catch the oil/ fuel or other hazardous fluids.
GROUNDWATER - Pollution of the ground water system	Spillage of fuel / oil from construction vehicles or containers	Trucks and machinery must be checked regularly to avoid any leaks. Hazardous material must be stored in a lockable container and on an impervious surface. Hydrocarbon must be stored within a bunded area.
	Spillage of chemicals	Chemicals must be stored in a lockable container and on an impervious surface.
	Spillage of cement	Cement must be mixed on an impervious surface such as a mixing tray, a wheelbarrow or a bunded area. Should cement trucks be used during construction trucks must be checked to avoid any cement spilling.
	Mixing of cement on soil surface	Cement must be mixed on an impervious surface such as a mixing tray, a wheelbarrow or a bunded area. Should cement trucks be used during construction trucks must be checked to avoid any cement spilling.
	Maintenance or fixing of vehicles / machinery on site	No maintenance or fixing of vehicles on site. Should there be an emergency the maintenance and fixing of vehicles must be done on an impervious surface or with a drip tray.
	Washing of vehicles / machinery on site	No washing of vehicles on site.
	Ablution facilities risk leakage	Ablution facilities must be maintained and cleaned. No ablution facility within the watercourse or the buffer.
	Washing up (bathing, hand washing and washing of dishes / containers)	All washing must be done in a designated area.
SOIL - Pollution and Compaction	Removal of vegetation	A Rehabilitation Plan, as per the specialists' recommendations must be implemented.
	Spillage of fuel / oil from construction vehicles or containers	Trucks and machinery must be checked regularly to avoid any leaks. Hazardous material must be stored in a lockable container and on an impervious surface. Hydrocarbon must be stored within a bunded area.
	Spillage of chemicals	Chemicals must be stored in a lockable container

		and on an impervious surface.
	Spillage of cement	Cement must be mixed on an impervious surface such as a mixing tray, a wheelbarrow or a bunded area. Should cement trucks be used during construction trucks must be checked to avoid any cement spilling.
	Mixing of cement on soil surface	Cement must be mixed on an impervious surface such as a mixing tray, a wheelbarrow or a bunded area. Should cement trucks be used during construction trucks must be checked to avoid any cement spilling.
	Maintenance or fixing of vehicles / machinery on site	No maintenance or fixing of vehicles on site. Should there be an emergency the maintenance and fixing of vehicles must be done on an impervious surface or with a drip tray.
	Washing of vehicles / machinery on site	No washing of vehicles on site.
	Erosion of soil	Erosion measures must be in place. The exposed soil must be vegetated as soon as possible.
	Unnecessary loss of soils due to site preparation	Soil must be stockpiled correctly and measured implemented to prevent soil from washing away during rainy seasons.
	Compaction of the soil due to construction activities and movement of vehicles / machinery	Construction areas must be rehabilitated according to the recommendations made by the specialist
	Washing away of soil from stockpiles	Soil must be stockpiled correctly and measured implemented to prevent soil from washing away during rainy seasons.
AIR QUALITY - Polluting or decreasing the quality of the air during the construction phase	Fires on site	No fires allowed on site. Staff members/ contractors must be educated. A fire extinguisher must be available on site in order to extinguish a fire.
	Emissions from construction vehicles	Construction vehicles must be maintained.
	Waste flying through the air.	Waste must be contained in a bin that can close. During very windy conditions the skips must be covered to avoid waste from flying through the air.
	Cement bags / particles flying through the air	A designated bin or container, that can close properly, must be provided for the cement bags.
	Particulate matter and dust flying off moving vehicles	Construction vehicles must be covered when transporting soil or alternatively the top layer of soil must be watered.
	Particulate matter may be lifted from the site and pose a health threat	Dust suppression must take place during very windy conditions or as required.
AIR QUALITY - Polluting or decreasing the quality of the air during operational	Fires on the individual erven	No fires allowed on site/erven, as per the bylaws of Ekurhuleni. No burning of waste.
	Emissions from vehicles	Vehicles must be maintained.
	Emissions from the individual businesses	Air quality assessments and licenses must be in place for each of the different businesses, if

phase		required by the Act.
VISUAL IMPACT - Change in the sense of place or decreasing the aesthetic value	Site clearance / removal of vegetation	The site must be rehabilitated according to the recommendations by the specialist.
	Dust created during the construction activities	Dust suppression must take place during very windy conditions or as required.
	Waste on site	Bins must be provided for the waste on site. The bins must be able to close properly and enough bins must be provided.
	Visibility of the reservoirs, water towers and pump stations	The area around the reservoirs must be rehabilitated. If possible, plant a vegetation screen around the reservoir fence/boundary in order to screen views towards the reservoirs.
HEALTH - Spreading of deceases/ degradation in health	Using the veld for ablution instead of toilets	Enough toilets must be provided. The toilets must be located in close proximity to the working area and at least two toilets must be provided at the site camp. Staff members/ contractors must be educated.
	Dust created during construction	Dust suppression must take place during very windy conditions or as required.
	Dumping of waste on site	Bins must be provided for the waste on site. The bins must be able to close properly and enough bins must be provided.
	Workers not using / wearing PPE	Staff members/ contractors must be educated regarding PPE. Daily checks must be done by the OHS Officer.
	Burning of material / hazardous waste on site	No fires or burning of material on site. A fire extinguisher must be provided on site.
	Spreading of diseases such as COVID-19	Staff members/ contractors must be educated regarding the spreading of diseases and the correct PPE and measures must be implemented to prevent spreading.
	Inappropriate hygiene (not covering when coughing and sneezing, not washing hands)	Staff members/ contractors must be educated regarding the spreading of diseases.
	Dehydration due to a lack of drinking water	Drinking water must be provided for workers. Staff members/ Contractor must also be informed/ educated regarding this issue.
NOISE	Noise from construction related activities	Noise must be kept to a minimum and construction activities must be kept to the normal working hours.
	Noise from operational activities	Noise must be kept to a minimum and where possible the management measures that will be suggested by the specialist must be implemented.
TRAFFIC - disturbance to the flow of traffic	Increase in construction vehicles	Daily traffic hours must be taken into consideration when construction vehicles move from and to the site.
	Traffic congestions due to the construction activities	Traffic must be regulated to avoid congestions, especially during the peak traffic hours.
SAFETY & SECURITY	Theft of construction material and equipment	Security guards must be appointed to control or guard the construction camp site at night.

	The site is unsafe for locals, especially kids playing on construction site or residents passing through the site	Strict measures must be implemented to demarcate the site, especially the deep excavations. The local community must be educated regarding the safety of the construction sites.
	Home owner security at risk due to influx of workers into area	Contractors must control the influx of workers in the area. No staff members/ contractors are allowed to sleepover at the construction site.
	Construction vehicles at risk of theft or vandalism	Construction vehicles must be locked in the evenings and a security must patrol the area.
	Unfair treatment of staff member can lead to dispute or strikes	The project manager and contractor must ensure that workers are treated fairly, this includes payment of salaries, ablution facilities, lunch times and other privileges.
	Using inappropriate working methods or equipment	Staff members/ Contractors must be educated on how to use specific equipment or material.
	Workers not wearing the correct PPE	Staff members/ contractors must be educated regarding PPE. Daily checks must be done by the OHS Officer.
SOCIO-ECONOMIC	Risk of ground subsidence affecting other public services or landowner activities	Storm water management on site must be done according to the engineers specification. Construction activities that result in ground subsidence must be halted and the area rehabilitated as soon as possible.
	Disruption arising during the construction activities	The project manager and contractor must ensure that workers are treated fairly, this includes payment of salaries, ablution facilities, lunch times and other privileges.

7 PUBLIC PARTICIPATION

7.1 Public Participation Process for the Scoping Phase

The Public Participation Process, as described below, complies with the national Environmental Management Act 107 of 1998, Environmental Impact Assessment Regulations 2014, as amended on 7 April 2017 as well as the Directions as issued in Government Notice R.970(9 September 2020) and Government Notice R.650 (5 June 2020), Disaster Management Act, 2002 (Act No. 57 of 2002), issued by the Minister of Environment, Forestry and Fisheries Regarding Measures to Address, Prevent and Combat the Spread of COVID-19 Relating to National Environmental Management Permits and Licenses.

The purpose of these Directions, as mentioned above, is to limit the threat posed by the COVID-19 pandemic and to alleviate, contain and minimise the effects of the national state of disaster, and in particular it is there to provide directions to ensure fair licensing processes and public participation processes as required by the laws contemplated in the Permitting Directions. The restrictions require that public participation processes should be digital as far as possible and therefore no hard copies will be distributed, unless there is no other means of communication. Due to the pandemic the draft Scoping Report could therefore also not be left in a public place for review. The following public participation measures were implemented:

- A pre-consultation meeting was requested with the Gauteng Department of Agriculture and Rural Development (GDARD) but unfortunately the meeting could not take place before the distribution of this report.
- Placing statutory advertising along the boundary of the property (10 September 2010). In addition to the normal placement of adverts, care has been taken to identify additional local places where the adverts could be viewed, these include shops in the vicinity, places of worship and governmental buildings.
- Advertising in a local newspaper on 10 September 2021, the local newspapers in the area is the Brakpan Herald and the Africa Reporter.
- An attempt has been made to also advertise on the Local Municipality's website.
- Notices were issued to the adjacent landowners via email.
- Electronic Notices were submitted to the Councillors as well as the relevant Home Owner Associations and the NGO's that are active in the area.
- The notice period for I&APs to register and review the draft Scoping Report was for a period of 30 days, 10 September – 10 October 2021.
- The draft Scoping Report was provided to I&APs by sending out emails with a link that they could use to access the information, by providing the information on the EAP's company website (Green Tree Environmental Consulting).

- Circulation of the draft Scoping Report to State Departments such as Ekurhuleni Local Municipality's (CoE) Environmental Department, the Department of Water and Sanitation (DWS), Conservancies and South African Heritage Resource Agency (SAHRA) on 10 September 2021. The draft Scoping Report was submitted to CoE since they requested CDs, the draft Scoping Report was loaded unto the SAHRIS website and a CD was delivered to DWS.
- Submission of the application form and draft Scoping Report to the Gauteng Department of Agricultural and Rural Development (GDARD) will be done once the comments are received from I&APs.
- A site visit will be undertaken with GDARD.
- All public meetings, focus group meetings and meetings with the Municipality must be done virtually. Should there be a request for a 'face-to-face' meeting, these will be limited to the numbers, as per the Disaster Management protocols and will also take the relevant COVID-19 Lockdown Level into consideration.
- All comments received from registered I&APs will be included as part of the Scoping Report before submitting it to GDARD.

The image below is an illustration of the Public Participation Process that will be followed for this Scoping Phase.

Schematic 2: Illustration of the Scoping - Public Participation Process

7.2 Concerns/ comments received from Interested and Affected Parties

This is the first circulation of the Scoping Report and there are currently no comments. The comments received will be listed as part of this section.

8 PLAN OF STUDY FOR UNDERTAKING THE ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

8.1 Environmental Impact Assessment Methodology

The potential impacts of the proposed project will be assessed in terms of the following environmental assessment methodology[1], as specified in the NEMA EIA Regulations 2014, amended 7 April 2017:

Nature of the impact

The nature of an impact refers to a description of the inherent features, characteristics and/or qualities of the impact. Thus, each impact will be comprehensively detailed and contextualised prior to being assessed.

Scale/extent of the impact

Extent refers to the impact footprint or stated differently the spatial area over which the impact would manifest. Note that if a species were to be lost then the extent would be global because that species would be lost to the world.

Table 7: Listing of descriptors for the extent of an impact together with definitions that serve to assist in selecting the appropriate rating.

Extent Description	Definitions	Rating
Site	The impact footprint remains within the cadastral boundary of the site/ project boundary	1
Local	The impact footprint extends beyond the cadastral boundary of the site/ project boundary, to include the immediately adjacent and surrounding areas	2
Regional	The impact footprint includes the greater surrounding area within which the project is located	3
National	The scale/ extent of the impact is applicable to the Republic of South Africa	4
Global	The scale / extent of the impact is global (or world-wide)	5

Duration of the impact

Duration is the period of time for which the impact would be manifest. Importantly the concept of reversibility is reflected in the duration scoring. In other words, the longer the impact endures the less likely is the reversibility of the impact.

[1] as developed by SE Solutions

Table 8: Listing of descriptors for the duration of an impact together with definitions that serve to assist in selecting the appropriate rating.

Duration Description	Definitions	Rating
Construction Period Only	The impact endures for only as long as the Construction period of the proposed activity. This implies the impact is fully reversible. Like noise and dust	1
Short Term	The impact continues to manifest for a period of between 3 – 10 years. The impact is reversible.	2
Medium term	The impact continues to manifest for a period of 10-30 years. The impact is reversible with relevant and applicable mitigation and management actions	3
Long Term	The impact continues for a period in excess of 30 years. However, the impact is still reversible with relevant and applicable mitigation and management actions.	4
Permanent	The impact will continue indefinitely and is irreversible	5

Intensity or severity of the impact

The concept of intensity potential is an important point of departure. This provides the acknowledgement at the outset of the potential significance of the impact. For example, emissions of SO2 have the potential to result in adverse human health effects, which is obviously a significant potential impact, and that potential must be acknowledged in the significance ratings. The importance of this intensity potential cannot be overemphasised. If the impact is adverse health effects then even a limited extent and duration will still be significant. If the impact is loss of vegetation then the impact will only become significant if the extent is regional and the duration irreversible (for example). Thus, in the latter example the degree to which the impact may cause irreplaceable loss of a resource is taken into account.

The second important part of intensity potential is that it provides a measure for comparing significance across different specialist assessments. What this means is that specialists will have to select a potential intensity rating from the tables below that best describes the nature of the impacts identified by the specialist. Note that the EAP has defined the intensity/ severity descriptors together with their appropriate ratings, specialists are required to select the appropriate rating only when ascribing significance to various impacts. This will allow for effective comparison of significance across specialist assessments to allow for an integrated assessment of the project as a whole.

Table 9: Listing of descriptors for the intensity/ severity of an impact together with definitions that serve to assist in selecting the appropriate rating.

Descriptors: potential consequence (negative)	Rating	Score
Human health – morbidity/mortality. Loss of species	High	16
Reduced faunal/floral populations, loss of livelihoods, individual economic loss	Moderate – High	8
Reduction in environmental quality – air, soil, water. Loss of habitat, loss of heritage, amenity	Moderate	4
Nuisance	Moderate - Low	2
Negative change – with no other consequences	Low	1
Descriptors: potential consequence (positive)	**Rating**	**Score**
Net improvement in human welfare	Moderate – High	8
Improved environmental quality – air, soil, water. Improved individual livelihoods	Moderate	4
Economic Development	Moderate - Low	2
Positive change – with no other consequences	Low	1

The probability (or likelihood) of the impact occurring

Likelihood is the likelihood of the impact intensity (consequence) manifesting so the 0.1, 0.2, 0.5, 0.75 and 1 serve to illustrate that if an impact is unlikely to manifest then its intensity/consequence score will be reduced and the resultant significance reduced. Although likelihood and probability may be considered interchangeable, the term likelihood is preferred as probability has a very specific mathematical and/ or statistical connotation. As such the expectation created by the term probability is that there will be an accurate empirically or mathematically defined expression of risk, which is not necessarily required.

Table 10: Listing of descriptors for the likelihood of the impact intensity/ severity manifesting together with definitions that serve to assist in selecting the appropriate rating.

Likelihood/ Probability Descriptors	Definitions	Rating
Improbable	The possibility of the impact occurring is negligible and only under exceptional circumstances.	0.1
Unlikely	The possibility of the impact occurring is low with a less than 20% chance of occurring. The impact has not occurred before.	0.2
Probable	The impact has a 20-50% chance of occurring. Only likely to happen once every three or more years	0.5
Highly Probable	It is most likely that the impact will occur. A 51 – 75% chance	0.75

	of occurring.	
Definite	More than 75% chance of occurrence. The impact occurs regularly.	1

Impact significance before mitigation

Environmental impacts identified will be evaluated according to the above-mentioned criteria. The significance of impacts will be derived through a synthesis of ratings of all criteria in the following calculation:

(Extent + Duration + Potential Intensity) x Probability/Likelihood = Significance before Mitigation

The significance of a potential impact on decision-making is indicated through significance points. Significance points indicate the following:

Table 11: Listing of descriptors for the significance score of an impact.

Descriptors	Definitions	Rating
None	Project can be authorised	<3
Low	Project can be authorised with a low risk of environmental degradation	3 – 4
Moderate	The project can be authorised but with conditions and routine inspections	5 – 8
High	The project can be authorised but with strict conditions and high levels of compliance and enforcement in respect of the impact in question	9 – 15
Fatally Flawed	The project can't be authorised	>15

Impact significance after mitigation

In order to reduce the significance of negative impacts and increase the significance of positive impacts, mitigation measures will be identified and discussed for each impact. The degree to which the impact can be mitigated (if negative) or enhanced (if positive) will be a function of whether the mitigation changes the intensity/ severity and/or the likelihood of the impact. Thus, once the mitigation measure/s have been described, a new significance rating will be determined by following the same steps detailed above, however taking the mitigation and controls into account.

Ascribing significance to cumulative impacts

Impacts cannot be assessed in isolation and an integrated approach requires that cumulative impacts will be included in the assessment of individual impacts. The nature of the impact will be described in such a way as to detail the potential cumulative impact of the activity, if there is indeed a cumulative impact. For example, dust and air emissions cannot be assessed in isolation of the potential cumulative impact of increased emissions into the atmosphere. Similarly, if water quality is improved within the immediate surroundings of the proposed activities, this will most certainly have a broader

effect/ cumulative impact on the greater water quality in the area. Once all the impacts have been assessed and significance ratings allocated, the EAP will assess the project on a holistic basis to determine the overall project impact on the receiving environment. This will be a function of the individual impacts as well as the cumulative nature of combining all those impacts within a single context/ project.

8.2 Specialist Studies

According to the Department of Environmental Affair's (DEA) Screening Tool and the Gauteng Department of Agriculture and Rural Development's (GDARD) Conservation Plan the following sensitivities should be considered for the proposed project, refer to the maps below which was generated by the Screening Tool (DEA):

- Agricultural potential – areas of high sensitivity was identified;
- Biodiversity – animal and plant species had a medium to high sensitivity;
- Aquatic – the project is located within 500m of a watercourse and was identified as a low sensitive area;
- There might be archaeological artifacts on site but both archaeology and paleontology were considered to be low sensitivity.

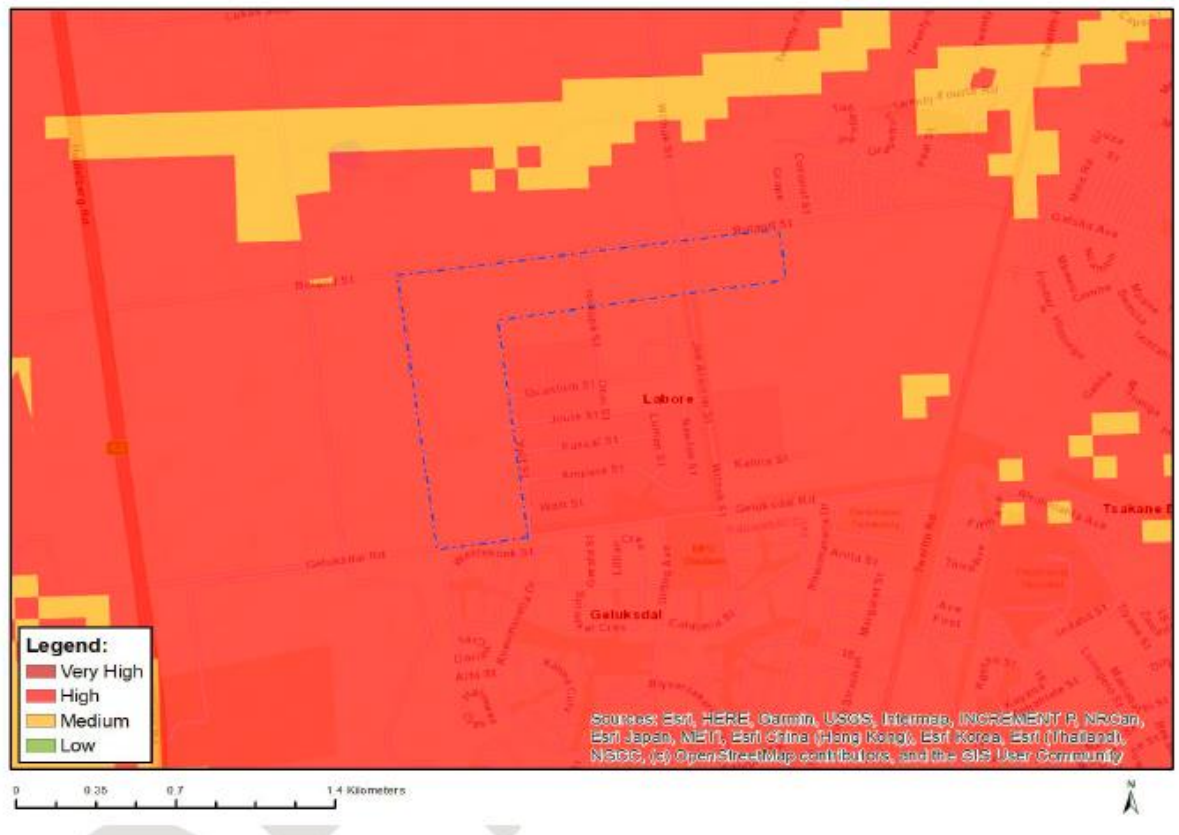


Figure 7: DEA Screening Tool - Agricultural Sensitivity

Figure 8: DEA Screening Tool - Archaeological Sensitivity

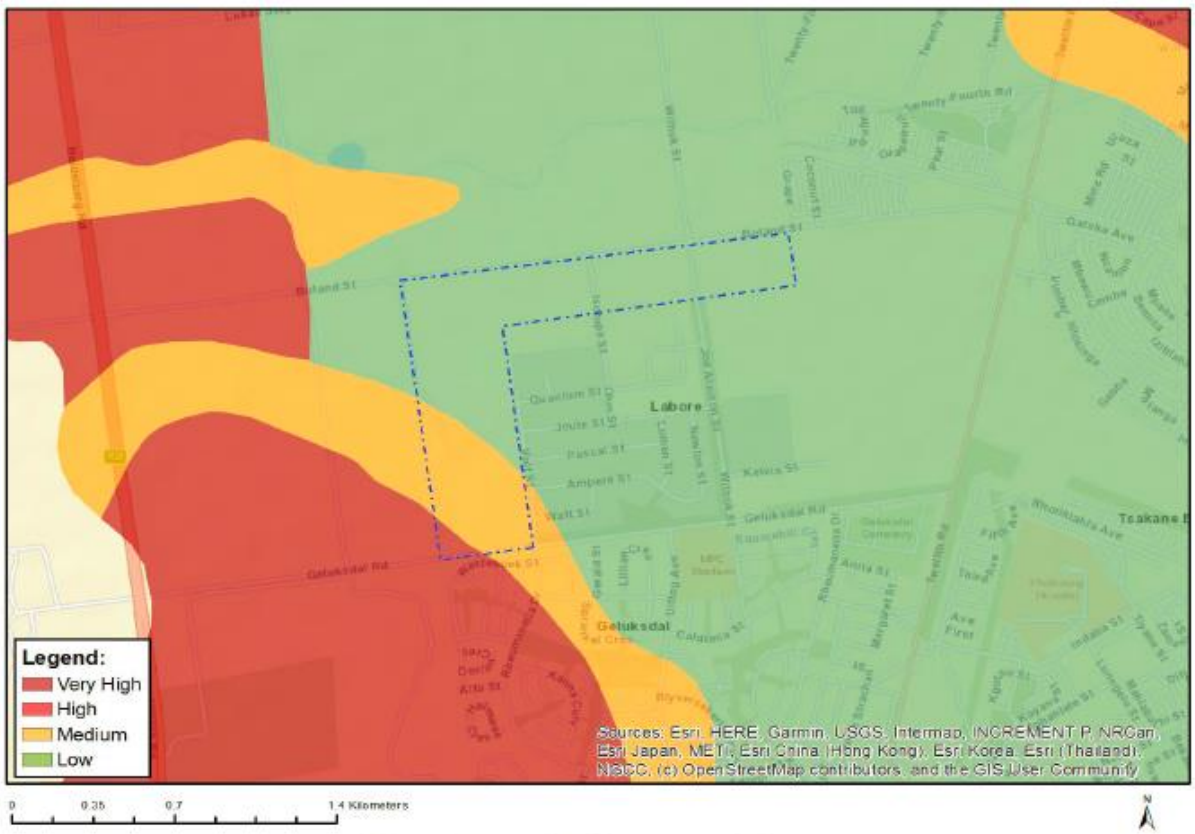


Figure 9: DEA Screening Tool - Paleontological Sensitivity

Figure 10: DEA Screening Tool – Aquatic Biodiversity Sensitivity

Figure 11: DEA Screening Tool – Terrestrial Biodiversity Sensitivity

Based on the above mentioned and the potential impacts discussed under Section 6, the following specialist studies were undertaken or are in process:

- Biodiversity and Aquatic Assessment: specialist will specifically refer to the impact the Labore & Withoek Industrial Park will have on the biodiversity (fauna & flora) of the area during construction when the site is cleared but also during operational procedures. The Aquatic assessment will determine the impact the proposed Labore & Withoek Industrial Park will have on the watercourses during construction but also the impact of storm water during the operational phase.
- Heritage Impact Assessment: specialist will address the possible impact on heritage resources during the construction period and the possibility of finding heritages resources / burial sites during excavation. This study has been completed and will be submitted to SAHRA through the SAHRIS online system.
- Air Quality: a desktop air quality assessment will be undertaken to determine the current situation within the study area and to give possible recommendations for the Labore & Withoek Industrial Park.
- Geo-technical Investigation: specifically, to determine the dolomite hazardous level of the area and to establish what type of design principle should be considered for the proposed development.
- Storm Water Management: will address the flow of the runoff water on site and around the site and especially the discharge of the storm water unto the neighboring property, taking the watercourse into consideration.
- Noise Assessment: the specialist will assess the current situation within the study area but also address the cumulative impact the Labore & Withoek Industrial Park will have on the overall nuisance caused by noise.

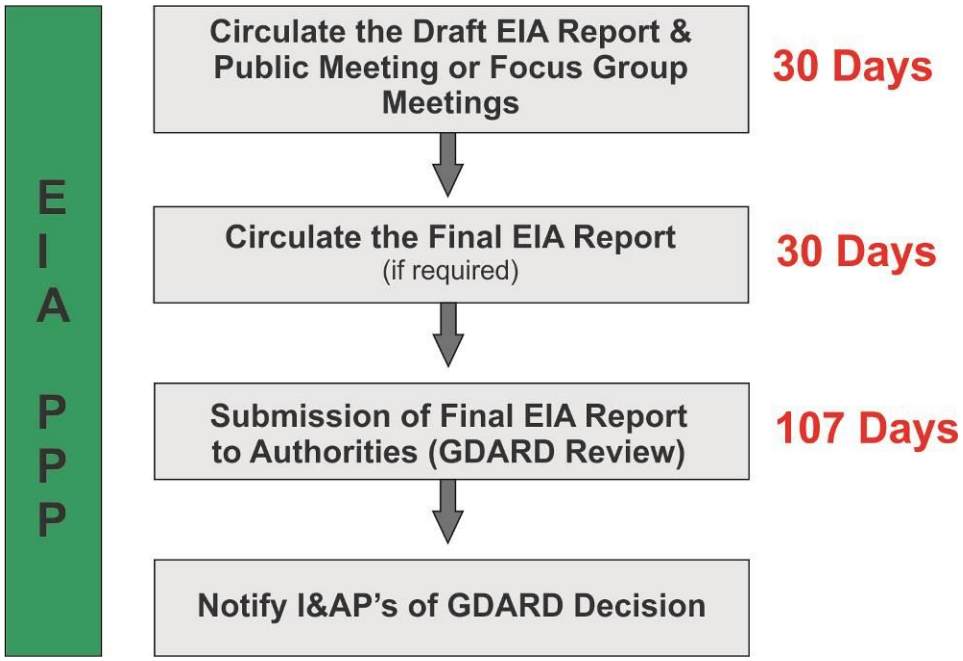
All specialist studies will comply with Appendix 6 of the National Environmental Management Act 107 of 1998 (NEMA), Environmental Impact Assessment Regulations 2014, as amended on 7 April 2017.

8.3 Public Participation Process for the Environmental Impact Assessment Phase

The public participation for the Environmental Impact Assessment Phase will be done following the process, as per the NEMA EIA Regulations 2014, amended 7 April 2017, and the Guidelines provided by the DEA (2017). The following steps will be followed:

- All comments received from the stakeholders, I&APs, local authority and other State Departments (DWS & GDARD) will be addressed as part of the Environmental Impact Assessment Report (EIAR).

- If required a meeting will be held with GDARD and DWS in order to ensure that all the concerns and comments received are addressed as part of the EIAR and the specialist studies.
- The Draft EIAR will be circulated to all registered I&APs, State Departments such as GDARD, WRDM and DWS, Conservancies and SAHRA, the commenting period will be for a period of 30 days.
- During the 30-day period small focus group meetings will be held with the local authority, including the councillors, in order to discuss any concerns or comments.
- If required, a public meeting will be held with I&APs in order to discuss the project and the comments and concerns received on the draft EIAR.
- The Final EIAR will be distributed to registered I&APs, State Departments such as WRDM and DWS, Conservancies and SAHRA, the commenting period will be for a period of 30 days before submitting it to GDARD for the final decision making.



Schematic 3: Illustration of the Environmental Assessment – Public Participation Process

9 CONCLUSION

The proposed Labore & Withoek Industrial Park was considered to be a necessity in order to provide additional job opportunities within the Geluksdal, Tzakane and Langaville areas. The proposed site selected for the Labore & Withoek Industrial Park is based on the availability of Municipal property, the distance from residential areas to the site, the geology (dolomite) of the area, the gradient of the area, the accessibility of the site and the sensitivity of the environment. The layout alternatives will be addressed as art of the Impact Assessment Phase of the project and once input from the various specialist have been received.

The proposed Labore & Withoek Industrial Park will have an impact on the environment during the construction phase and if not properly managed there will also be impacts during the operational phase of the project. These impacts are listed and will be assessed during the Environmental Impact Assessment Phase. The impacts will not only be assessed but mitigation/ management measures will be provided in order to lower the risk of the impact.

This report is the draft Scoping Report and therefore only addressed the potential impacts and made recommendations on which specialist studies will be undertaken as part of the impact assessment phase. Since this is only the draft Scoping Report there are no comments from the public yet. All comments received from the public will be included as part of the Comments and Responses Report.

10 REFERENCE

Black Jill JV. 2019. Labore/Withok Industrial Park Development – Civil Infrastructure Detail Design Report (BJ1901P1_R1_Rev02). Midrand

City of Ekurhuleni, 2018. Integrated Development Plan 2016-2021, 2018/19 Review.

City of Ekurhuleni, 2020. Profile and Analysis – District Development Model.

City of Ekurhuleni, 2020, Draft Bioregional Plan.

Department of Environmental Affairs (DEA), 2017. Integrated Environmental Management Guideline. Guideline on need and desirability. ISBN 978-0-9802694-4-4.

Department of Environmental Affairs (DEA), 2017. Public participation guideline in terms of NEMA, 1998 EIA regulations. ISBN 978-0-9802694-2-0.

Labuschagne, D.C. 2015. Dissertation: A 3D geological model for the East Rand Basin, South Africa. North West University, Potchefstroom.

Marais, L. 2021. Heritage Impact Assessment (Phase 1) for the Labore & Withoek Industrial Park. Pretoria.

Mucina, L. & Rutherford, M. C. 2006.The vegetation of South Africa, Lesotho and Swaziland.*Strelitzia* 19. South African National Biodiversity Institute, Pretoria.

Ndlovu Engineering Techniks. 2020. Labore Industrial Park Development and Internal Road Network Upgrades (0068/TIA/DDR.01). Ennerdale.

Legislation:

- Conservation of Agricultural Resources Act (CARA), 1983 (Act 43 of 1983)
- Constitution of the Republic of South Africa (CRSA), 1996 (Act 108 of 1996)
- National Environmental Management Act (NEMA), 1998 (Act 107 of 1998)
- National Environmental Management: Biodiversity Act (NEM:BA), 2004 (Act 10 of 2004)
- National Environmental Management: Protected Areas Act (NEM:PAA), 2003 (Act 57 of 2003)
- National Environmental Management: Waste Act (NEM:WA), 2008 (Act 59 of 2008)
- National Heritage Resources Act (NHRA), 1999 (Act 25 of 1999)
- National Water Act (NWA), 1998 (Act 36 of 1998)

Websites:

http://www.statssa.gov.za/

https://census2011.adrianfrith.com/place/764

http://www.citypopulation.de/php/southafrica-admin.php?adm2id=GT482

https://gis.ekurhuleni.gov.za/

Appendix A

Locality Map
Site Plan
Environmental Sensitivity Map

Appendix B

Preliminary Layout Plan

Appendix C

Public Participation

- Newspaper Advert
- Site Notices
- Letter to I&APs

Appendix 1

Proof of site notice

Appendix 2

Written notices issued as required in terms of the regulations

Appendix 3

Proof of newspaper advertisements

Appendix 4

Communications to and from interested and affected parties

Appendix 5

Comments and Responses Report

Appendix 6

Copy of the register of I&APs

Appendix D

Water Use License(s) Authorisation, SAHRA information, service letters from municipalities, water supply information

Appendix E

Specialist Report
Heritage Impact Assessment
Traffic Impact Assessment
Civil Infrastructure Report

Appendix F

Other

- CV