

TRANSNET GROUP CAPITAL

Enquiry Number: 3426002-Y009

Description of the Services: The provision of Environmental Professional services for a Basic Assessment and Water use Licence application for the construction of Boshhoek Loop, North West

C3 Scope of Services

1. Scope

The services is for the completion of an environmental authorisation process, in accordance with the National Environmental Management Act 107 of 1998 and, as amended and all relevant regulations promulgated in terms thereof for the proposed construction of a new Loop, North West province– see Figure 1 below.



Figure 1: Location of a new Boshhoek Loop, North West Province.

The proposed environmental authorisation process is a Basic Assessment as outlined in Section 19 - 20 of the Environmental Impact Assessment Regulations GNR 982 of 2014, of the National Environmental Management Act 107 of 1998 (as amended by GNR 326 of 2017). The appointed *Consultant* will be required to conduct a comprehensive screening exercise to ensure that all triggered listed activities under the 2014 EIA regulations and listing notices (GNR 983, as amended by GNR 327 of 2017; GNR 984 as amended by GNR 325 of 2017 and GNR 985 as amended by

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GNR 324 of 2017) have been identified and as confirmation that the process to follow is indeed a basic assessment. Following the withdrawal of the previously used Department of Environmental Affairs Basic Assessment Report (BAR) template (see Annexure A), the appointed *Consultant* is required to develop a BAR compliant with regulation 19 and Appendix 1 of the EIA regulations 2014 as amended.

It is anticipated that the proposed project will also trigger water uses in terms of Section 21 of the National Water Act (NWA), 36 of 1998. The appointed *Consultant* will also be required to identify other water uses if applicable and subsequently submit a Water Use License Application (WULA) to the Department of Water and Sanitation (DWS). The following water uses is triggered:

- 21 (c): Impeding or diverting the flow of water in a watercourse; and
- 21 (i): Altering the bed, banks, course or characteristics of a watercourse.

The proposed project will require a Heritage Permit in terms of Section 34(1) of the National Heritage Resource Act, 25 of 1999. The structures (culverts and bridges) are presumed to be older than 60 years were identified at the proposed project location, therefore it is required that the appointed *Consultant* verify these structures and obtain a Heritage permit from the competent authority (provincial heritage authority / South African Heritage Resource Authority (SAHRA)).

The appointed *Consultant* is further expected to scope all other environmental approvals applicable to the proposed project and ensure that these are obtained as part of the EIA process, these include but not limited – environmental authorisations, water use licences, and waste licences.

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2. Project Description

The project forms part of the Transnet Waterberg rail corridor expansion programme between Ermelo, located in Mpumalanga Province, and Lephalale, located in the Limpopo Province. The railway line is a key corridor to Transnet for the transportation of various commodities, including coal, chrome, ferrochrome, cement, lime, granite, iron ore, containers and general freight. The construction activities focus specifically on the upgrades required for the coal expansion of the line.

Unlocking the Waterberg area is a key priority in Government's National Development Plan and has been identified as part of Strategic Infrastructure Projects (SIP 1) by the Presidential Infrastructure Coordinating Commission (PICC). Specifically for coal, expansion in rail capacity was identified as a strategic initiative and received much attention from Government as a key driver for the South African economy. The latest rail capacity demand from coal miners in the Waterberg is informed by mine expansion projects and proposed new mine developments. In line with these strategic priorities for the country, Transnet has developed a programme for expansion of railway infrastructure between Lephalale in the Limpopo province and Pyramid South in Gauteng. The expansions will ultimately feed the heavy haul Coal Line for increased coal exports through the Port of Richards Bay and also deliver coal to several power stations along the existing rail route.

This scope of services will only focus on the expansion of railway lines at Boshhoek Loop located in North West province, South Africa.

2.1. Boshhoek Loop

The scope of the project includes the construction of a new Boshhoek Loop of 1.6km along the railway line (Please see Figure 2 below).. The scope covers the construction of track work, required for doubling of the existing line and the expansion of the bridge. The construction of Boshhoek loop is divided into two phases, Phase 1 (Annexure A) which includes the construction of 1,671 km line and phase 2 will be the remaining 500 meters (which will include the expansion of the Bridge). The construction of the new loop will be undertaken within the Transnet servitude, however Transnet will acquire land (lease agreement) for the purpose of stockpiling and site camp establishment. The project scope will entail the following:

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Table 1: Boshhoek Loop coordinates

Description	Km points	DMS Coordinates
Start of loop	132.82	Lat -25°30'43.4839" Lon 27°07'11.7180"
End of loop	134.82	Lat -25°29'51.4338" Lon 27°06'12.0742"

Civils

To construct a 1,671 km long loop of 20t axle loading formation layers according to the S410 Specification for Railway Earthworks (March 2006). The new loop is located between Km 132.82 and Km 135.00. The railway line traverse through a fairly flat terrain from Km 132.820 to Km 134.823 and it also passes through an embankment approaching the river bridge at Km 134.970.

Perway

- 1,671 km of track comprising of 60kg UIC60 rails on PY sleepers
- To construct 1:20 RH set at Km 159.55.
- To construct a 1:20 LH set at Km 160.95.

Signalling

Install a localized remote control system to enable the Train Driver to remotely operate the 1:20 tangential point sets on both sides of the loop; The system uses a radio control to operate the both will be self-normalise and ML Track circuits to detect the train presence.

Structures

There are five (5) box culverts which require extension to accommodate the new loop. The culvert openings will be kept unchanged and the length of the culverts will be extended to suit the new loop line.

Bridge

The river bridge will be constructed at approximately Km 135.130. The size and shape of the bridge will be similar to the existing one on the main line.

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Table 2: Coordinates and Km points of the culverts

Description	Km point	DMS Coordinates
Culvert 1: 1.80m x4.90m box culvert	133.100	Lat-25°30'37.3942" Lon 27.07'06.0789
Culvert 2: 1.90m x 4.90 box culvert	133.960	Lat-25°30'16.0228" Lon 27°06'46.2882"
Culvert 3: 1.90m x 4.90m box culvert	134.410	Lat-25°30'05.4372" Lon 27°06'35.4205"
Culvert 4: 0.50m pipe culvert	134.820	Lat -25°29'58.0180" Lon 27°06'23.0570"
Culvert 5 2.4/5m x 6.70m arched culvert	135.130	Lat -25°29'52.3852" Lon 27°06'13.6585"

3. Environmental Approval Processes

An internal review of environmental legislation, and more specifically the NEMA EIA Regulations, has identified the following activities that will be triggered. However, the responsibility to ensure that all triggered activities are identified remains with the appointed *Consultant*.

Table 3: NEMA listed activities that are possibly triggered by construction activities of Boshhoek Loop

Regulation & activity number	Description of listed activity
Listing Notice 1 (GN R327), Activity 64	The expansion of railway lines, stations or shunting yards where there will be an increased development footprint, excluding- (i) railway lines, shunting yards and railway stations in industrial complexes or zones; (ii) underground railway lines in mines; or

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Regulation & activity number	Description of listed activity
Listing Notice 1 (GNR R327), Activity 27	The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except 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.
Listing Notice 1(GNR R327), Activity 48	The expansion of (i) infrastructure or structures where the physical footprint is expanded by 100 square metres or more; where such expansion occurs- (a)within a watercourse
Listing Notice 1 (GNR R327), Activity 19	The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from (i) a watercourse
Listing Notice 3 (GNR R324), Activity 12(h)(iv)	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. h. North West iv. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority.

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An internal review of the National Water Act (NWA) 36 of 1998 has identified that the following water uses, impeding or diverting and altering the banks of a watercourse, are triggered by the construction of a new loop close to a watercourse (Figure 3). The appointed *Consultant* remain responsible to identify and confirm triggered water uses.

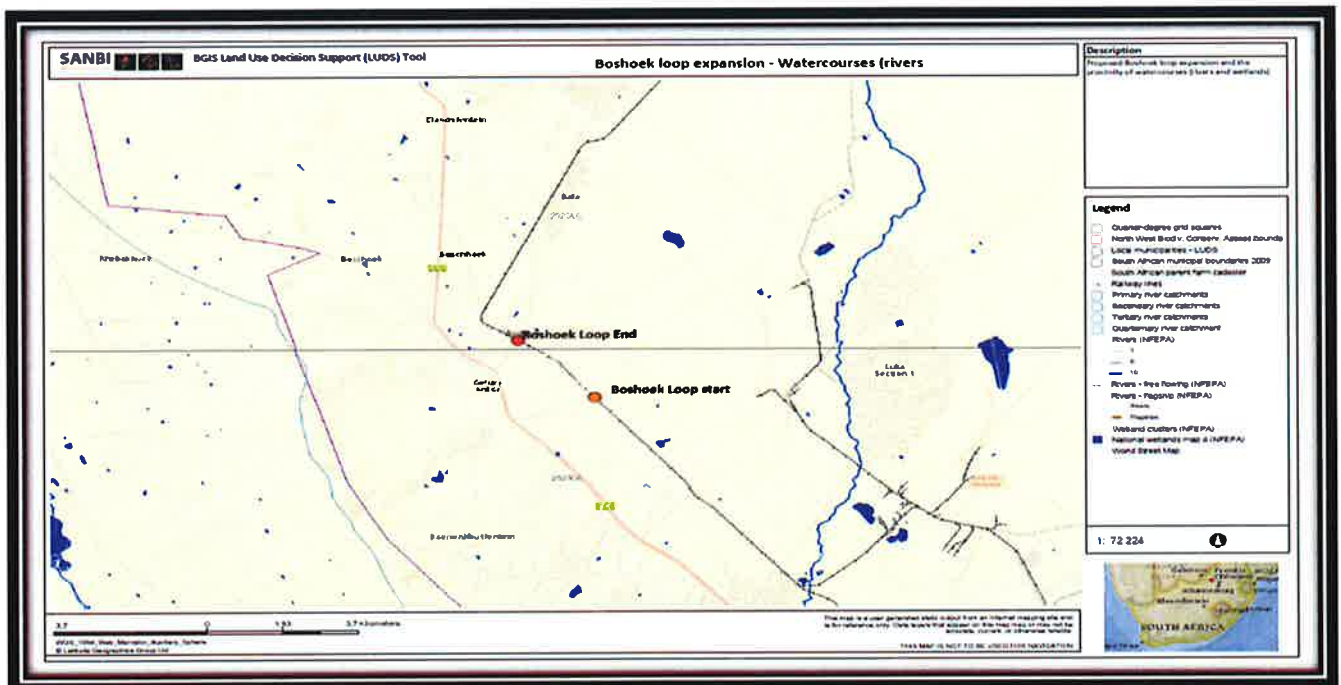


Figure 3: Map showing watercourses (wetland & rivers) within close proximity of the Boshhoek Loop

Table 5 shows the different water uses as per Section 21 of the NWA 36 of 1998 that are possibly triggered.

Table 4: Section 21 water uses of NWA that are possibly triggered by the construction of a new Boshhoek Loop and associated works

Section	Description
21 (c)	Impeding or diverting the flow of water in a watercourse
21 (i)	Altering the bed, banks, course or characteristics of a watercourse

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4. Specialist studies

The appointed *Consultant* will be required to undertake the supporting specialist studies that will be required for the application of the environmental authorisation (through a Basic Assessment) and a Water Use License. As a minimum, the following specialist studies have been identified:

- Hydrological study (including the PES and EIS of water resources and risk assessment as required by the WUL regulations);
- Biodiversity impact assessment (Fauna and Flora);
- Heritage impact assessment.

All spatial information generated as part of the specialist studies and authorisation will be provided to Transnet once the studies have been completed and finalised.

5. Consulting Team Requirements

The team must have personnel who have the following minimum key competencies:

- Environmental impact assessment (EIA);
- Water Use Licence application process;
- Public participation process (PPP); and
- Project management.

6. The Activities

The services that are listed below are generic to the Basic Assessment process. The services have been categorised according to certain project phases. The *Consultant* shall carry out all the services as listed plus any others which are required, to fulfil all the functions necessary to ensure Transnet receives a decision (whether positive or negative) from the relevant Competent Authorities.

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Activity 1: Project Initiation

Services will include but not necessarily be limited to the following main activities:

- Conduct a comprehensive screening exercise to identify any applicable listed activities in the 2014 EIA Regulations (as amended) and required specialist studies;
- Arrange and conduct a pre-application meeting with the Competent Authorities;
- Prepare and submit an application for environmental authorisation under NEMA together with all the prescribed documents to the Department of Environmental Affairs (DEA);
- Review and understand existing project data and information which will be provided by Transnet to the EAP on request;
- Identify project information gaps and list information requirements;
- Project initiation meeting and site visit; and
- Pre-application, i.e. compilation of the BID, placing site notices, etc.

The deliverables include, but not limited to -

- Environmental authorisation application forms and other relevant documents;
- Minutes of all project progress and planning meetings;
- Reports (comments response report);
- All written correspondence with authorities; and
- Project plan and schedule.

Activity 2: Public participation

Carry out a public participation process to comply with section 41 – 44 inclusive of GNR 982 of December 2014 (as amended by GNR 326 of 2017). Services will include but not necessarily be limited to the following main activities:

- Plan, implement and manage all aspects of the public participation programme for all the parts of the Project. This includes keeping a detailed record of all public participation activities, comments received and responses to these in terms of the NEMA Regulations;
- Develop and maintain a comprehensive database of stakeholders as required by the NEMA Regulations. The database shall differentiate clearly with respect to key stakeholders as required by the NEMA Regulations;

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- Announce and advertise the Basic Assessment process and application for environmental authorisation appropriately, in terms of the requirements of the NEMA Regulations;
- Such announcements and advertisements shall include but not necessarily be limited to press releases, a background information document, site notice boards, and letters to stakeholders, telephone calls, e-mail correspondence and information placed on the internet;
- Public participation shall be carried out during impact assessment and appeal phases if and when necessary and as required by the NEMA Regulations;
- Liaise and consult with the competent authority and other government departments that are relevant to the Project. This includes but is not necessarily limited to DEA, DWS, heritage authorities and appropriate departments within the relevant Municipality;
- Where appropriate organise, conduct and record the discussions and inputs received from workshops aimed at the Competent Authority and key stakeholders;
- Where appropriate organise and convene appropriate focus group meetings to inform the public of the contents of, the findings and recommendations contained in the Basic Assessment Report (BAR);
- Record comments and inputs from stakeholders and draw up a Comments and Response report based on the feedback obtained from stakeholders;
- Include the Comments and Response Report in the Draft and Final BAR;
- Appropriate distribution of all reports and documentation in compliance with the Regulations and as required by the Competent Authority;
- On-going consultation with authorities and the broader stakeholder base throughout the EIA process;
- Notification to stakeholders of the decision of the competent authority on the application; and
- Handle any appeals in consultation with the Employer, as and when necessary.

The deliverables include, but not limited to -

All requirements of sections 41 to 44 inclusive, of GNR 982 issued in terms of Chapter 6 of the National Environmental Management Act 107 of 1998 (as amended by GNR 327 of 2017):

- Register of I&APs, stakeholders and lead stakeholders;
- Minutes of all relevant project and public meetings, workshops and discussions;

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- All public documents such as advertisements, background information document; letters, press releases and the like; and
- Reports (e.g. comments response report, public participation report, BAR, etc.).

Activity 3: Environmental impact assessment and WUL

Carry out environmental impact assessment in terms of sections 19-20 and relevant Appendixes of GNR R982 of December 2014 (Amended by GNR R326 of 2017) and Water Use License application process (in terms of the National Water Act 36 of 1998 and WUL application and appeal regulations, GNR 267 of 2017). The services involved include but are not necessarily limited to:

- Identify and draw up final terms of reference for specialist studies (where necessary);
- Appoint specialists to carry out studies (where necessary);
- Compilation and submission of permits identified as part of specialist studies (where necessary):
 - Heritage permit & Notification of Intent to Develop (NID)
 - Search and rescue
 - Tree removal permit etc.
- Compile and present specialist findings to the Transnet project team;
- Undertake site visits;
- Arrange and conduct integration meetings with specialists;
- Review specialist reports;
- Compile draft Basic Assessment Report (BAR);
- Compile WUL report and Risk assessments;
- Compile draft Environmental Management Programme (EMPr);
- *Employer*, peer and public review of draft BAR and draft EMPr;
- Arrange and conduct meetings, workshops and interactions with stakeholders;
- Analyse feedback from Stakeholders and compile final BAR and final EMPr; and
- Finalise documentation and submit to authorities for consideration.

The deliverables include, but not limited to -

- Specialist Reports (where required);

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- Specialist findings presentation (where required);
- Draft Basic Assessment report (DBAR) and EMPr;
- Final Basic Assessment report (BAR) and EMPr;
- All relevant requirements of sections 19 - 20 inclusive and relevant Appendixes, of GNR 982 of December 2014 (as amended by GNR R326 of 2017);
- WUL documentation; and
- Minutes of all relevant project planning and progress meetings.

Activity 4: Project Management

Services will include but not necessarily be limited to the following main activities;

- Project planning and management of all project services and deliverables;
- Hold project planning and coordination meetings;
- Submit monthly project progress reports (inclusive of % progress, risks and latest project schedule) to the *Employer*;
- Attendance of *Employer's* formal monthly project progress meetings;
- Draw up and revise the project programme when necessary;
- Arrange and hold project meetings with DEA and Department of Water & Sanitation (DWS);
- Manage specialist investigations;
- Manage review processes;
- Liaise with *Employer*; and
- Liaise with authorities.

The deliverables include, but not limited to -

- General project communication;
- Minutes of all project related meetings;
- Project management of basic assessment process, WUL and public participation process;
- Project management of specialists;
- Draft and Final BAR;
- Draft and Final WUL reports; and
- Draft and Final Environmental Management Programme.

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4. Programme

The *Consultant* must provide a programme of services to achieve the objectives of the study.

Services Starting Date:	01 September 2017
Services Completion Date	31 August 2018
:	

The *Consultant* will be required to submit a schedule / programme (in MS Projects format) for the proposed services in order to reflect all services considered as per the EIA Regulations of 2014 (as amended by GNR R326 of 2017) requirements and the NWA, 36 of 1998 during the duration of the contract. All activities to be logically tied using critical path method and time allowance (float) must be included for risks.

It is envisaged that environmental authorisation and WUL is required with the expectation to start construction.

5. Reporting

The *Consultant* will be required to submit a monthly progress report on the 18th of each month that will include the progress of activities for the reporting period, the proposed activities for the next month, support and/or information required from the *Employer* and the risks.

6. Drawings

See Annexure A: Diagrammatic layout of the existing line and the proposed loop (Phase 1 and Phase 2).

7. Health and Safety

The **appointed** *Consultant* must prepare and submit necessary documents for approval by Transnet Health and Safety department:

- Services specific risk assessment;

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- Valid medical certificates of fitness done by an Occupational Health Practitioner for all on site work-force;
- Proof of induction training received;

8. The Contractor's Invoices

When the *Employer's Agent* certifies payment following an assessment date, the *Consultant* complies with the following procedure for invoicing submission. The invoice must correspond to the *Employer's Agent* assessment of the amount due to the *Consultant*. The *Consultant* shall familiarise him/herself with the Payment and invoicing requirements set out below, and comply with it in all respects. Payment is subject to the absolute and complete compliance with the Payment and Invoicing requirements indicated below and elsewhere in this Activity Schedule. The risk of the Contract Specialist not receiving *Consultant's* Invoices as specified below resides with the *Consultant*.

The invoice shall correspond to the *Employer's Agent* assessment of the amount due to the *Consultant* as stated in the payment certificate.

The invoice states the following:

- Invoice addressed to Transnet Limited;
- Transnet Limited's VAT No: 4720103177;
- Invoice sequence number;
- The *Consultant's* VAT Number;
- The amount paid to date; and
- The Activity number.

The invoice contains the supporting detail:

- Description of services completed and claimed for;
- Supporting documentation of the items being invoiced for needs to be submitted;
- Cost breakdown of services previously claimed for, currently claimed, and the balance outstanding for each section of services.



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Invoices submitted by hand are addressed to:

Transnet SOC Ltd

Carlton Centre

150 Commissioner Street

Johannesburg

2001

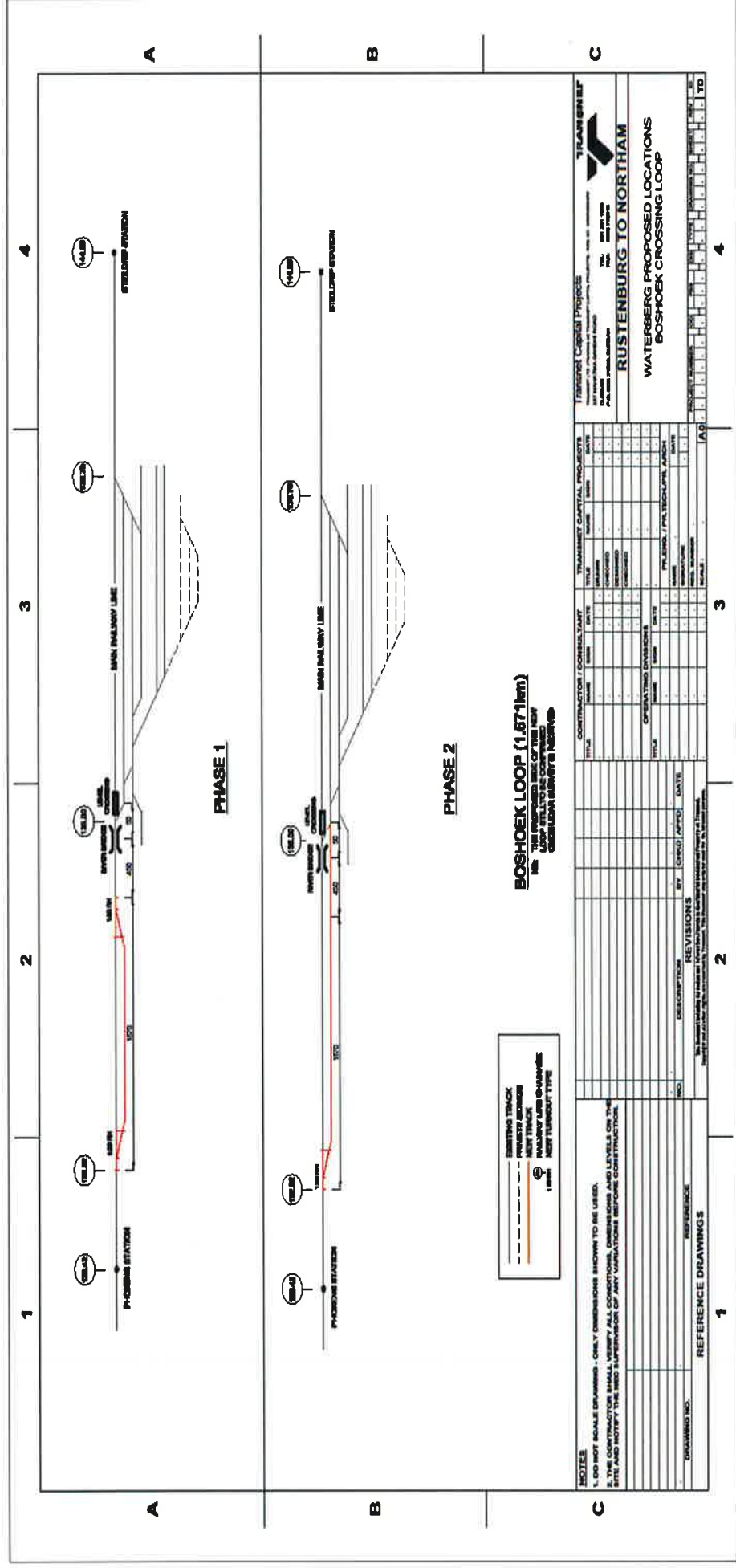
25th Floor

For the attention of: Edzisani Siphugu

The invoice is presented as an original, together with a statement. The *Consultant* will need to submit a cash flow once the project commences. The cash flow will be updated as and when required during the duration of the project.

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Annexure A: Diagrammatic layout of the existing line and the proposed loop (Phase 1 and Phase 2).





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Annexure B: BAR template removal



environmental affairs

Department
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Private Bag X 447 · PRETORIA · 0001 · Environment House · 473 Steve Biko Road · Arcadia · PRETORIA

DEA Reference: 14/12/16/N1

Enquiries: Ms Azrah Essop / Ms Toinette van der Merwe

Telephone: (012) 399 8529 / 8630 E-mail: AEssop@environment.gov.za / Tvandermerwe@environment.gov.za

Dear Sir / Madam

REMOVAL OF THE TEMPLATE LABELLED AS "BASIC ASSESSMENT REPORT" IN TERMS OF THE EIA REGULATIONS" LOCATED ON THE DEPARTMENTAL WEBSITE

This letter serves to inform all Applicants, Environmental Assessment Practitioners (EAP) and Stakeholders that the Chief Directorate: Integrated Environmental Authorisations, has removed the **Basic Assessment Report (BAR)** template, which was located on the Departmental website under the section "Legal Authorisations and Compliance Inspectorate".

The BAR in the form of the template previously found on the Departmental website will no longer be accepted by the Department as from the date of this letter. However, if you have submitted your draft or final BAR to the Department prior to the date of this letter, your report will be considered by the Department.

If you have only submitted an Application for Environmental Authorisation prior to the date of this letter, and/or have not yet submitted your draft or final BAR as yet, you are hereby informed that the content of the draft or final BAR must comply with the Basic Assessment Process requirements contained in Regulation 19 and Annexure 1 of GN R982 of the EIA Regulations, 2014, as amended, when submitting a BAR to the Department for comment, review and decision making. Please ensure the document is in a logical flowing order.

Be reminded to always quote your Departmental allocated reference number on all correspondence submitted to the Department for ease of processing of documents. Further ensure that all correspondence are clearly marked "For Attention: Chief Directorate: Integrated Environmental Authorisation" to ensure that the correspondence is submitted to the correct Chief Directorate within the Department.

Be reminded that, in terms of Regulation 45 of the EIA Regulations, 2014, as amended, an application lapses if the applicant fails to meet any of the time-frames prescribed in terms of these Regulations, unless an extension has been granted in terms of Regulation 3(7) of the EIA Regulations, 2014, as amended.

Should you have any queries or wish to discuss the points raised above, please do not hesitate to contact our offices.

Yours faithfully

Mr Obopeng Gaoraelwe
Chief Director (Acting): Integrated Environmental Authorisations
Department of Environmental Affairs

Date: 23/06/2017

PART 4: SITE INFORMATION

Description of the Site and its surroundings

1. General description

The work to be undertaken, is located four different sites along the railway line between Rustenburg in the North West province and Lephalele in the Limpopo province.

- a) The third site is Boeshoek loop location in the vicinity of the Glencore's Boshhoek Smelters near Rustenburg in the North West province. It can be accessed via R565 road between Rustenburg and Sun City taking right turn at the Main Road approximately 17 km from Phokeng as Shown in figure 2.c.
- b) The fourth site is Heystekrand loop location in the vicinity of the Mogwase Centre at Mokgwase in the North West province. It can be accessed via R510 road between Rustenburg and Northam taking left turn at the President Street turnoff approximately 54 km from Rustenburg as Shown in figure 2.d.

2. Existing buildings, structures, and plant & machinery on the Site

The areas in which the services are to be provided in are:

- 2.1.1. In close proximity to operational railway lines and safe working distances from the centre line of the track are to be maintained at all times. If this is not possible then the work to be executed must be pre-arranged with the *Employer's Agent* and shall be executed under occupation conditions.
- 2.1.2. In close proximity to 25KvAC electrified OHTE and all work to be executed shall be carried out in accordance with E7/1: Specification for Works on, over, under or Adjacent to Railway Lines and near High Voltage Equipment
- 2.1.3. There are no other *Consultant's* that will be working on site during the execution for the work.

3. Ground conditions in areas affected by work in this contract

3.1. Geology and Climate of the Area

Not Applicable for this Contract

3.2. Subsoil information

On some sites there are various storm water catch pits that collect the water from the area away to the municipal reservoir. It is contractor's responsible to locate each manholes position and depth and must protect them during the construction period.

Transnet Capital Projects

Contract number: 3426002-Y009

Description of the Works: The provision of environmental professional services for the construction of the new Boshhoek Loop, North West Province, South Africa.

4. Hidden services

The *Consultant's* must establish the location of the various existing services situated within the Site and Working Areas, and records all such information on "marked-up" drawing(s) which remain available for reference at all times.

5. Other reports and publicly available information

No Geotechnical Investigation report is available.

Transnet Capital Projects

Contract number: 3426002-Y009

Description of the Works: The provision of environmental professional services for the construction of the new Boshhoek Loop, North West Province, South Africa.

Figure 2c: Locality Map of Boeshoek Loop

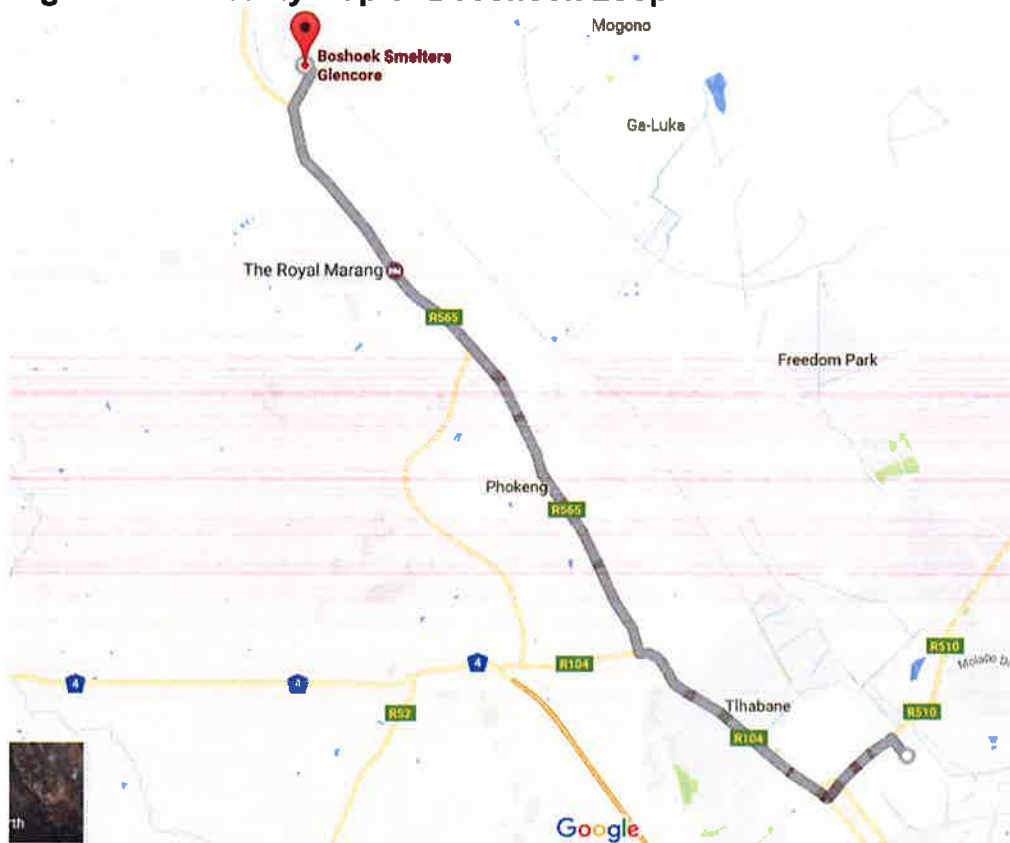


Figure 2d: Locality Map of Hystekrand Loop

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Description of the Works: The provision of environmental professional services for the construction of the new Boshhoek Loop, North West Province, South Africa.



Figure 3c: GPS co-ordinates of Boeshoek Loop



Figure 3d: GPS co-ordinates of Heystekrand Loop

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Description of the Works: The provision of environmental professional services for the construction of the new Boshhoek Loop, North West Province, South Africa.

