



Transnet Freight Rail

an Operating Division TRANSNET SOC LTD

[Registration Number 1990/000900/30]

REQUEST FOR QUOTATION (RFQ)

JACKING 900MM CL100D PRECAST CONCRETE JACKING PIPE UNDER RAILWAY LINE AT DUTCH LINE AREA FROM SMH08 TO SMH09, IN THE PORT OF RICHARDS BAY.

RFQ NUMBER : SIM22022CIDB / ERAC-RCB-39788

ISSUE DATE : 02 March 2023
CLOSING DATE : 24 March 2023

CLOSING TIME : 10h00 am

TENDER VALIDITY PERIOD : 12 weeks from closing date

(19 June 2023)

BIDDERS WHO WISH TO GO ON SITE AND VIEW CAN CONTACT SBU LUVUNO ON 035 905 4607 OR 0730433265 FOR ARRANGEMENTS

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay.



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Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay.



T1.1 TENDER NOTICE AND INVITATION TO TENDER

SECTION 1: NOTICE TO TENDERERS

1. INVITATION TO TENDER

Responses to this Tender [hereinafter referred to as a **Tender**] are requested from persons, companies, close corporations or enterprises [hereinafter referred to as a Tenderer].

DESCRIPTION	Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay.			
TENDER DOWNLOADING	This Tender may be downloaded directly from the National Treasury eTender Publication Portal at www.etenders.gov.za and the Transnet website at https://transnetetenders.azurewebsites.net (please use Google Chrome to access Transnet link) FREE OF CHARGE.			
	10:00am on 24 March 2023			
CLOSING DATE	Tenderers must ensure that tenders are uploaded timeously onto the system. If a tender is late, it will not be accepted for consideration.			
	Twelve (12) weeks Business Days from Closing Date: 19 June 2023			
VALIDITY PERIOD	Tenderers are to note that they may be requested to extend the validity period of their tender, at the same terms and conditions, if the internal evaluation process has not been finalised within the validity period. However, once the adjudication body has approved the process and award of the business to the successful Tenderer(s), the validity of the successful Tenderer(s)' bid will be deemed to remain valid until a final contract has been concluded.			

2. TENDER SUBMISSION

Transnet has implemented a new electronic tender submission system, the e-Tender Submission Portal, in line with the overall Transnet digitalization strategy where suppliers can view advertised tenders, register their information, log their intent to respond to bids and upload their bid proposals/responses on to the system.

- a) The Transnet e-Tender Submission Portal can be accessed as follows:
 - Loa Transnet eTenders management platform website (https://transnetetenders.azurewebsites.net);
 - Click on "ADVERTISED TENDERS" to view advertised tenders;
 - Click on "SIGN IN/REGISTER for bidder to register their information (must fill in all mandatory information);
 - Click on "SIGN IN/REGISTER" to sign in if already registered;
 - Toggle (click to switch) the "Log an Intent" button to submit a bid;
 - Submit bid documents by uploading them into the system against each tender selected.
 - Tenderers are required to ensure that electronic bid submissions are done at least a day before the closing date to prevent issues which they may encounter due to their

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TRANSNET FREIGHT RAIL

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Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch

line area from SMH08 to SMH09, in the port of Richards Bay.



internet speed, bandwidth or the size of the number of uploads they are submitting. Transnet will not be held liable for any challenges experienced by bidders as a result of the technical challenges. Please do not wait for the last hour to submit. A Tenderer can upload 30mb per upload and multiple uploads are permitted.

- b) The tender offers to this tender will be opened as soon as possible after the closing date and time. Transnet shall not, at the opening of tenders, disclose to any other company any confidential details pertaining to the Tender Offers / information received, i.e. pricing, delivery, etc. The names and locations of the Tenderers will be divulged to other Tenderers upon request.
- c) Submissions must not contain documents relating to any Tender other than that shown on the submission.

3. **CONFIDENTIALITY**

All information related to this RFP is to be treated with strict confidentiality. In this regard Tenderers are required to certify that they have acquainted themselves with the Non-Disclosure Agreement. All information related to a subsequent contract, both during and after completion thereof, will be treated with strict confidence. Should the need however arise to divulge any information gleaned from provision of the Works, which is either directly or indirectly related to Transnet's business, written approval to divulge such information must be obtained from Transnet.

4. **DISCLAIMERS**

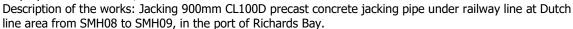
Tenderers are hereby advised that Transnet is not committed to any course of action as a result of its issuance of this Tender and/or its receipt of a tender offer. In particular, please note that Transnet reserves the right to:

- 4.1. Award the business to the highest scoring Tenderer/s unless objective criteria justify the award to another tenderer.
- 4.2. Not necessarily accept the lowest priced tender or an alternative Tender;
- 4.3. Go to the open market if the quoted rates (for award of work) are deemed unreasonable;
- 4.4. Should the Tenderers be awarded business on strength of information furnished by the Tenderer, which after conclusion of the contract is proved to have been incorrect, Transnet reserves the right to terminate the contract;
- 4.5. Request audited financial statements or other documentation for the purposes of a due diligence exercise;
- 4.6. Not accept any changes or purported changes by the Tenderer to the tender rates after the closing date;

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TRANSNET FREIGHT RAIL

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- 4.7. Verify any information supplied by a Tenderer by submitting a tender, the Tenderer/s hereby irrevocably grant the necessary consent to the Transnet to do so;
- 4.8. Conduct the evaluation process in parallel. The evaluation of Tenderers at any given stage must therefore not be interpreted to mean that Tenderers have necessarily passed any previous stage(s);
- 4.9. Unless otherwise expressly stated, each tender lodged in response to the invitation to tender shall be deemed to be an offer by the Tenderer. The Employer has the right in its sole and unfettered discretion not to accept any offer.
- 4.10. Not be held liable if tenderers do not provide the correct contact details during the clarification session and do not receive the latest information regarding this RFP with the possible consequence of being disadvantaged or disqualified as a result thereof.
- 4.11. Transnet reserves the right to exclude any Tenderers from the tender process who has been convicted of a serious breach of law during the preceding 5 [five] years including but not limited to breaches of the Competition Act 89 of 1998, as amended. Tenderers are required to indicate in tender returnable [clause 12 on T2.2-23], [Breach of Law] whether or not they have been found guilty of a serious breach of law during the past 5 [five] years.
- 4.12. Transnet reserves the right to perform a risk analysis on the preferred tenderer to ascertain if any of the following might present an unacceptable commercial risk to the employer:
 - unduly high or unduly low tendered rates or amounts in the tender offer;
 - contract data of contract provided by the tenderer; or
 - the contents of the tender returnables which are to be included in the contract.
- 5. Transnet will not reimburse any Tenderer for any preparatory costs or other work performed in connection with this Tender, whether or not the Tenderer is awarded a contract.

6. NATIONAL TREASURY'S CENTRAL SUPPLIER DATABASE

Tenderer are required to self-register on National Treasury's Central Supplier Database (CSD) which has been established to centrally administer supplier information for all organs of state and facilitate the verification of certain key supplier information. The CSD can be accessed at https://secure.csd.gov.za/. Tenderer are required to provide the following to Transnet in order to enable it to verify information on the CSD:

Supplier Number	a	and Unique	registration	reference
number((Tender Data)			

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay.



RFQ CLARIFICATION REQUEST FORM

RFQ No: SIM22022CIDB / ERAC-RCB-39788

RFQ deadline for	questions / RFQ Cla	arifications: 12:00	pm 17 Ma	rch 2023	
TO: ATTENTION: EMAIL Cc DATE: FROM: Indicate whether	Transnet SOC Ltd Governance, Trans Prudence.Nkabinde Tshegofatso.Moha	e@transnet.net mbi@transnet.net		e all service categories	s Yes No
	· -		_	and time, direct the	communication
_	Administrator at Ts cation guestions aft	_		snet.net d time, direct the cor	mmunication to:
TO: ATTENTION: EMAIL Cc DATE: FROM:	Transnet SOC Ltd Governance, Trans Prudence.Nkabind Tshegofatso.Moha	e@transnet.net		e 	
	REQ	JEST FOR RFQ C	LARIFICA	TION	
SIGNED at		on this	day of		20
SIGNATURE OF TENDERER				SIGNATURE OF WI	TNESS
NAME OF 1	ENDERER			NAME OF WITH	IESS

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TO:

CPM 2020 Rev01

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RETURN Transnet Freight Rail

Attention:

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay.



SIM22022CIDB / ERAC-RCB-39788

ACKNOWLEDGMENT OF RECEIPT OF DOCUMENTS AND INTENTION TO TENDER

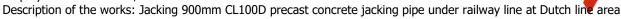
(To be returned: By 20 March 2023)

Tender

No.:

	Lerato Morailane and			
	Tshegofatso Mohambi			
	Email: <u>Lerato.Morailane@transnet.net</u> <u>Tshegofatso.Mohambi@transnet.net</u>	Tender Closing Date:	24 March	n 2023
	ING 900MM CL100D PRECAST CONCRETE JACI AREA FROM SMH08 TO SMH09, IN THE PORT (AILWAY LINE AT DUTCH
				Check
We:	Do wish to tender for the work and shall return of date above	our tender b	y the due	Yes □
	Do not wish to tender on this occasion and he documents receive	rewith retur	n all your	No 🗆
Compa	any Name			
Compa Repre	any sentative			
Desigı	nation			
Addre	SS			
Conta	ct Number			
Email	Address			
Signat	ture:			
the	idders are required to return this document a National Treasury eTender Publication ://transnetetenders.azurewebsites.net	Portal	at <u>ww</u>	w.etenders.gov.za Ol

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from SMH08 to SMH09, in the port of Richards Bay

T1.2 TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in Annex C of the CIDB Standard for Uniformity in Engineering and Construction Works Contracts. The Standard for Uniformity in Construction Procurement was first published in Board Notice 62 of 2004 in Government Gazette No 26427 of 9 June 2004. It was subsequently amended in Board Notice 67 of 2005 in Government Gazette No 28127 of 14 October 2005, Board Notice 93 of 2006 in Government Gazette No 29138 of 18 August 2006, Board Notice No 9 of 2008 in Government Gazette No 31823 of 30 January 2009, Board Notice 86 of 2010 in Government Gazette No 33239 of 28 May 2010, Board Notice 136 of 2015 in Government Gazette 38960 of 10 July 2015 and Board Notice 423 of 2019 in Government Gazette No 42622 of 8 August 2019.

This edition incorporates the amendments made in Board Notice 423 of 2019 in Government Gazette 42622 of 8 August 2019. (see www.cidb.org.za).

The Standard Conditions of Tender make several references to Tender data for detail that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.

Each item of data given below is cross-referenced in the left-hand column to the clause in the Standard Conditions of Tender to which it mainly applies.

Clause		Data
C.1.1	The <i>Employer</i> is	Transnet SOC Ltd (Reg No. 1990/000900/30)
C.1.2	The tender documents issued by the Employ	rer comprise:
	Part T: The Tender	
	Part T1: Tendering procedures	T1.1 Tender notice and invitation to tender T1.2 Tender data
	Part T2 : Returnable documents	T2.1 List of returnable documents T2.2 Returnable schedules
	Part C: The contract	
	Part C1: Agreements and contract data	C1.1 Form of offer and acceptance C1.2 Contract data (Part 1 & 2) C1.3 Form of Securities
	Part C2: Pricing data	C2.1 Pricing instructions C2.2 Bill of Quantities
	Part C3: Scope of work	C3.1 Works Information
	Part C4: Site information	C4.1 Site information
C.1.4	The Employer's agent is:	Procurement Officer

T1.2: Tender Data

TRANSNET

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area

from SMH08 to SMH09, in the port of Richards Bay

Name: Tsheqofatso Mohambi

Address: 15 Girton Road, Inyanda House 2, Parktown

Tel No. 0115841175

E - mail Tshegofatso.mohambi@transnet.net

C.2.1 Only those tenderers who satisfy the following eligibility criteria are eligible to submit tenders:

1. Stage One- Eligibility in terms of the Construction Industry Development Board:

- a) Only those tenderers who are registered with the CIDB or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, designation of 1CE or higher class of construction work, are eligible to have their tenders evaluated.
- b) Joint Venture (JV)

Joint ventures are eligible to submit tenders subject to the following:

- 1. every member of the joint venture is registered with the CIDB;
- 2. the combined Contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a Contractor grading designation determined in accordance with the sum tendered for a 1CE or higher class of construction work or a value determined in accordance with Regulation 25(1B) or 25(7A) of the Construction Industry Development Regulations The tenderer shall provide a certified copy of its signed joint venture agreement

Any tenderer that fails to meet the stipulated eligibility criteria will be regarded as an unacceptable tender.

2. Stage Two - Functionality: Only those tenderers who obtain the minimum qualifying score for functionality will be evaluated further in terms of price and the applicable preference point system. The minimum qualifying for score for functionality is 60 points.

The evaluation criteria for measuring functionality and the points for each criteria and, if any, each sub-criterion are as stated in C.3.11.3 below.

Any tenderer that fails to meet the stipulated functionality criteria will be regarded as an unacceptable tender.

- C.2.12 No alternative tender offers will be considered.
- C.2.13.3 Each tender offer shall be in the **English Language**.
- C.2.13.5 The Employer's details and identification details that are to be shown on each tender offer are C2.15.1 as follows:

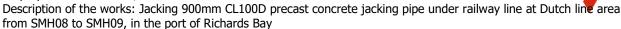
Identification details: The tender documents must be uploaded with:

- Name of Tenderer:
- Contact person and details:

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T1.2: Tender Data

TRANSNET



The Tender Number: SIM22022CIDB / ERAC-RCB-39788

TRANSNET

 The Tender Description: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay

Documents must be marked for the attention of: *Employer's* **Agent: Tshegofatso Mohambi**

C.2.13.9 Telephonic, telegraphic, facsimile or e-mailed tender offers will not be accepted.

C.2.15 The closing time for submission of tender offers is:

Time: 10:00am on the 24 March 2023

Location: The Transnet e-Tender Submission Portal:

(https://transnetetenders.azurewebsites.net);

NO LATE TENDERS WILL BE ACCEPTED

- C.2.16 The tender offer validity period is **12 weeks** after the closing date. Tenderers are to note that they may be requested to extend the validity period of their tender, on the same terms and conditions, if Transnet's internal evaluation and governance approval processes has not been finalised within the validity period.
- C.2.23 The tenderer is required to submit with his tender:
 - A valid Tax Clearance Certificate issued by the South African Revenue Services.
 <u>Tenderers also to provide Transnet with a TCS PIN to verify Tenderers compliance status</u>.
 - A valid B-BBEE Certificate from a Verification Agency accredited by the South African Accreditation System [SANAS], or a sworn affidavit confirming annual turnover and level of black ownership in case of all EMEs and QSEs with 51% black ownership or more together with the tender;
 - 3. A valid CIDB certificate in the correct designated grading;
 - 4. Proof of registration on the Central Supplier Database;
 - 5. Letter of Good Standing with the Workmen's compensation fund by the tendering entity or separate Letters of Good Standing from all members of a newly constituted JV.

Note: Refer to Section T2.1 for List of Returnable Documents

C3.11 The minimum number of evaluation points for functionality is: **60**

The procedure for the evaluation of responsive tenders is Functionality, Price and Preference:

Only those tenderers who attain the minimum number of evaluation points for Functionality will be eligible for further evaluation, failure to meet the minimum threshold will result in the tender being disqualified and removed from any further consideration.

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Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area

from SMH08 to SMH09, in the port of Richards Bay

Functionality Criteria

The functionality criteria and maximum score in respect of each of the criteria are as follows:

Quality Criteria	Sub-Criteria	Sub- Criteria Point Allocation	Maximum number of points
T2.2-02: Programme	The following information is required as on a programme submitted for evaluation. Adequately showing the full Scope of Work including appropriate sequence of works for each work that needs to be done, e.g., for Pipe Jacking of 900mm stormwater pipe. Clearly indicate the turnaround time for the mobilisation, establishment, and installation of Pipe Jacking, of 900mm stormwater pipe. Ability to execute the works in terms of the Employer's requirements, indicating the order and timing of the construction activities, e.g., setting out, pipe jacking and removal of the equipment to provide the works. Schedule showing Starting and Completion of each work, e.g., establishment, setting out, and installation of pipe jacking and removal, as listed in contract data Part One "Data provided by the Employer" and are logically linked to activities in the schedule and to be driven by activities. All activities to be logically tied using a clearly defined critical path method (CPM). All activity durations to be realistic and based on quantities and activities that can be measured in days. The calendar on the schedule should represent the actual work week/month used. E.g., weekends as non-		40
	working periods. Provisions for quality requirements & Health & Safety requirements, clearly outlining how the tenderer plans to provide the Works.	5	
T2.2-03: Previous Company Experience Tenderers are required to demonstrate their experience in the delivery of similar works, and to this end shall supply a sufficiently detailed reference list with contact details of existing customers and indicate their previous experience of relevant work			20

Part 1: Tendering Procedures T1.2: Tender Data

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Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area

from SMH08 to SMH09, in the port of Richards Bay

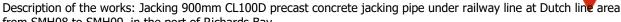
	Previous work on Pipe Jacking of precast concrete stormwater pipes.	10	
	Sufficient references to substantiate experience indicated (Client name and contact details, project description, duration, and contract value)	10	
T2.2-04: Management & CV's of Key Personnel	The tender must be able to demonstrate project personnel have sufficient knowle experience and qualifications to provide required services and submit the following documents as a minimum with the tender As a minimum each CV should address the following in the personal particulars as a minimum with the tender as a minimum each CV should address the following in the personal particulars as as a minimum with the tender as a minimum with the tender and the personal particulars as a minimum with the tender and the personal particulars as a minimum with the tender and particulars as a minimum with the tender and particulars as a minimum with the tender and particulars as a minimum with the tender as a minimum with the tender and particulars as a minimum with the tender and particulars as a minimum with the tender as a minimum with the tender as a minimum with the tender and particulars as a minimum with the tender as a minimum with the tender and the tender	dge, the ng er. owing, but ssociated of essional enterprise ar,	40
TOTAL			100

Functionality shall be scored independently by not less than 3 (three) evaluators and averaged in accordance

- T2.2-02 Programme
- T2.2-03 Previous Experience
- T2.2-04 Management & CV's of Key Personnel

Part 1: Tendering Procedures T1.2: Tender Data

TRANSNET



from SMH08 to SMH09, in the port of Richards Bay

Each evaluation criteria will be assessed in terms of scores of 0, 20, 40, 60, 80 or 100. The scores of each of the evaluators will be averaged, weighted and then totalled to obtain the final score for functionality, unless scored collectively. (See CIDB Inform Practice Note #9).

Note: Any tender not complying with the above-mentioned requirements, will be regarded as must be read in conjunction with Clause C.2.1.

TRANSNET

C.3.11. Only tenders that achieve the minimum qualifying score for functionality will be evaluated further in accordance with the 80/20 preference points systems as described in Preferential Procurement Regulations.

80 where the financial value of one or more responsive tenders received have a value equal to or below R50 million, inclusive of all applicable taxes,

Up to 100 minus W_1 tender evaluation points will be awarded to tenderers who complete the preferencing schedule and who are found to be eligible for the preference claimed. Should the BBBEE rating not be provided, tenderers with no verification will score zero points for preferencing.

Note: Transnet reserves the right to carry out an independent audit of the tenderer's scorecard components at any stage from the date of close of the tenders until completion of the contract.

C.3.13 Tender offers will only be accepted if:

- The tenderer or any of its directors/shareholders is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector;
- 2. the tenderer does not appear on Transnet's list for restricted tenderers and National Treasury's list of Tender Defaulters;
- the tenderer has fully and properly completed the Compulsory Enterprise
 Questionnaire and there are no conflicts of interest which may impact on the
 tenderer's ability to perform the contract in the best interests of the Employer or
 potentially compromise the tender process and persons in the employ of the state.
- 4. Transnet reserves the right to award the tender to the tenderer who scores the highest number of points overall, unless there are **objective criteria** which will justify the award of the tender to another tenderer. Objective criteria include but are not limited to the outcome of a due diligence exercise to be conducted. The due diligence exercise may take the following factors into account inter alia.

the tenderer:

Tender Data CPM 2020 Rev 09

a) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement,

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Po

from SMH08 to SMH09, in the port of Richards Bay



b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract,

- c) has the legal capacity to enter into the contract,
- d) is not insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act, 2008, bankrupt or being wound up, has his affairs administered by a court or a judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of any of the foregoing,
- e) complies with the legal requirements, if any, stated in the tender data and
- f) is able, in the option of the employer to perform the contract free of conflicts of interest.

C.3.17 The number of paper copies of the signed contract to be provided by the Employer is 1 (one).

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TRANSNET

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe unc





TRANSNER

STAATSKOERANT, 8 AUGUSTUS 2019

DEPARTMENT OF PUBLIC WORKS NOTICE 423 OF 2019

STANDARD FOR UNIFORMITY IN ENGINEERING AND CONSTRUCTION WORKS CONTRACTS AUGUST 2019

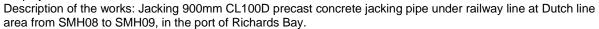
Annex C

Standard Conditions of Tender

C.1 General

C.1.1 Actions

- C.1.1.1 The employer and each tenderer submitting a tender offer shall comply with these conditions of tender. In their dealings with each other, they shall discharge their duties and obligations as set out in C.2 and C.3, timeously and with integrity, and behave equitably, honestly and transparently, comply with all legal obligations and not engage in anticompetitive practices.
- C.1.1.2 The employer and the tenderer and all their agents and employees involved in the tender Process shall avoid conflicts of interest and where a conflict of interest is perceived or known, declare any such conflict of interest, indicating the nature of such conflict. Tenderers shall declare any potential conflict of interest in their tender submissions. Employees, agents and advisors of the employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.
- Note: 1) A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result.
 - 2) Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decisions taken.
- C.1.1.3 The employer shall not seek and a tenderer shall not submit a tender without having a firm



intention and the capacity to proceed with the contract.

C.1.2 Tender Documents

The documents issued by the employer for the purpose of a tender offer are listed in the tender data.

C.1.3 Interpretation

- C.1.3.1 The tender data and additional requirements contained in the tender schedules that are Included in the returnable documents are deemed to be part of these conditions of tender.
- C.1.3.2 These conditions of tender, the tender data and tender schedules which are required for Tender evaluation purposes, shall form part of any contract arising from the invitation to tender.
- C.1.3.3 For the purposes of these conditions of tender, the following definitions apply:
 - a) **conflict of interest** means any situation in which:
 - i) someone in a position of trust has competing professional or personal interests which make it difficult to fulfill his or her duties impartially;
 - ii) an individual or tenderer is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or
 - iii) incompatibility or contradictory interests exist between an employee and the tenderer who employs that employee.
 - b) **comparative offer** means the price after the factors of a non-firm price and all unconditional discounts it can be utilised to have been taken into consideration;
 - c) **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process;
 - d) **fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels;

C.1.4 Communication and employer's agent

Each communication between the employer and a tenderer shall be to or from the employer's agent only, and in a form that can be readily read, copied and recorded. Communications shall be in the English language. The employer shall not take any responsibility for non-receipt of communications from or by a tenderer. The name and contact details of the employer's agent are stated in the tender data.

C.1.5 Cancellation and Re-Invitation of Tenders

C.1.5.1 An employer may, prior to the award of the tender, cancel a tender if

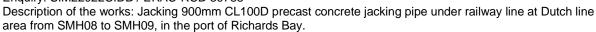
a) due to changed circumstances, there is no longer a need for the engineering and

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construction works specified in the invitation;

- b) funds are no longer available to cover the total envisaged expenditure; or
- c) no acceptable tenders are received.
- d) there is a material irregularity in the tender process.
- C.1.5.2 The decision to cancel a tender invitation must be published in the same manner in which the original tender invitation was advertised
- C.1.5.3 An employer may only with the prior approval of the relevant treasury cancel a tender Invitation for the second time.

C.1.6 Procurement procedures

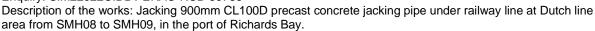
C.1.6.1 General

Unless otherwise stated in the tender data, a contract will, subject to C.3.13, be concluded with the tenderer who in terms of C.3.11 is the highest ranked or the tenderer scoring the highest number of tender evaluation points, as relevant, based on the tender submissions that are received at the closing time for tenders.

C.1.6.2 Competitive negotiation procedure

- C.1.6.2.1 Where the tender data require that the competitive negotiation procedure is to be followed, tenderers shall submit tender offers in response to the proposed contract in the first round of submissions. Notwithstanding the requirements of C.3.4, the employer shall announce only the names of the tenderers who make a submission. The requirements of C.8 relating to the material deviations or qualifications which affect the competitive position of tenderers shall not apply.
- C.1.6.2.2 All responsive tenderers or at least a minimum of not less than three responsive tenderers that are highest ranked in terms of the evaluation criteria stated in the tender data shall be invited to enter into competitive negotiations based on the principle of equal treatment, keeping confidential the proposed solutions and associated information.
 Notwithstanding the provisions of C.2.17, the employer may request that tenders be clarified, Specified and fine-tuned in order to improve a tenderer's competitive position provided that such clarification, specification, fine-tuning or additional information does not alter any fundamental aspects of the offers or impose substantial new requirements which restrict or distort competition or have a discriminatory effect.
- C.1.6.2.3 At the conclusion of each round of negotiations, tenderers shall be invited by the employer to revise their tender offer based on the same evaluation criteria, with or without adjusted weightings. Tenderers shall be advised when they are to submit their best and final offer.





C.1.6.2.4 The contract shall be awarded in accordance with the provisions of C.3.11 and C.3.13 after tenderers have been requested to submit their best and final offer.

C.1.6.3 Proposal procedure using the two stage-system

C.1.6.3.1 Option 1

Tenderers shall in the first stage submit technical proposals and, if required, cost parameters around which a contract may be negotiated. The employer shall evaluate each responsive submission in terms of the method of evaluation stated in the tender data, and in the second stage negotiate a contract with the tenderer scoring the highest number of evaluation points and award the contract in terms of these conditions of tender.

C.1.6.3.2 Option 2

- C.1.6.3.2.1 Tenderers shall submit in the first stage only technical proposals. The employer shall invite all responsive tenderers to submit tender offers in the second stage, following the issuing of procurement documents.
- C.1.6.3.2.2 The employer shall evaluate tenders received during the second stage in terms of the method of evaluation stated in the tender data, and award the contract in terms of these conditions of tender.

C.2 Tenderer's obligations

C.2.1 Eligibility

- C.2.1.1 Submit a tender offer only if the tenderer satisfies the criteria stated in the tender data and the tenderer, or any of his principals, is not under any restriction to do business with employer.
- C.2.1.2 Notify the employer of any proposed material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used by the employer as the basis in a prior process to invite the tenderer to submit a tender offer and obtain the employer's written approval to do so prior to the closing time for tenders.

C.2.2 Cost of tendering

C.2.2.1 Accept that, unless otherwise stated in the tender data, the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer complies with requirements.

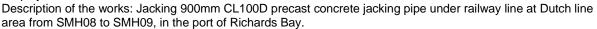
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C.2.2.2 The cost of the tender documents charged by the employer shall be limited to the actual cost incurred by the employer for printing the documents. Employers must attempt to make available the tender documents on its website so as not to incur any costs pertaining to the printing of the tender documents.

C.2.3 Check documents

Check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission.

C.2.4 Confidentiality and copyright of documents

Treat as confidential all matters arising in connection with the tender. Use and copy the documents issued by the employer only for the purpose of preparing and submitting a tender offer in response to the invitation.

C.2.5 Reference documents

Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are not attached but which are incorporated into the tender documents by reference.

C.2.6 Acknowledge addenda

Acknowledge receipt of addenda to the tender documents, which the employer may issue, and if necessary apply for an extension to the closing time stated in the tender data, in order to take the addenda into account.

C.2.7 Clarification meeting

Attend, where required, a clarification meeting at which tenderers may familiarize themselves with aspects of the proposed work, services or supply and raise questions. Details of the meeting(s) are stated in the tender data.

C.2.8 Seek clarification

Request clarification of the tender documents, if necessary, by notifying the employer at least five (5) working days before the closing time stated in the tender data.

C.2.9 Insurance

Be aware that the extent of insurance to be provided by the employer (if any) might not be for the full cover required in terms of the conditions of contract identified in the contract data. The tenderer is advised to seek qualified advice regarding insurance.

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay.



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C.2.10 Pricing the tender offer

- C.2.10.1 Include in the rates, prices, and the tendered total of the prices (if any) all duties, taxes Except Value Added Tax (VAT), and other levies payable by the successful tenderer, such duties, taxes and levies being those applicable fourteen (14) days before the closing time stated in the tender data.
- C.2.10.2 Show VAT payable by the employer separately as an addition to the tendered total of the prices.
- C.2.10.3 Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in the contract data.
- C.2.10.4 State the rates and prices in Rand unless instructed otherwise in the tender data. The conditions of contract identified in the contract data may provide for part payment in other currencies.

C.2.11 Alterations to documents

Do not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the tenderer. All signatories to the tender offer shall initial all such alterations.

C.2.12 Alternative tender offers

- C.2.12.1 Unless otherwise stated in the tender data, submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted as well as a schedule that compares the requirements of the tender documents with the alternative requirements that are proposed.
- C.2.12.2 Accept that an alternative tender offer must be based only on the criteria stated in the tender data or criteria otherwise acceptable to the employer.
- C.2.12.3 An alternative tender offer must only be considered if the main tender offer is the winning tender.

C.2.13 Submitting a tender offer

- C.2.13.1 Submit one tender offer only, either as a single tendering entity or as a member in a joint venture to provide the whole of the works identified in the contract data and described in the scope of works, unless stated otherwise in the tender data.
- C.2.13.2 Return all returnable documents to the employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing legibly in non-erasable ink.
- C.2.13.3 Submit the parts of the tender offer communicated on paper as an original plus the number Of copies stated in the tender data, with an English translation of any documentation in a



Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay.

- language other than English, and the parts communicated electronically in the same format as they were issued by the employer.
- C.2.13.4 Sign the original and all copies of the tender offer where required in terms of the tender data. The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the tender offer.
- C.2.13.5 Seal the original and each copy of the tender offer as separate packages marking the Packages as "ORIGINAL" and "COPY". Each package shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.
- C.2.13.6 Where a two-envelope system is required in terms of the tender data, place and seal the returnable documents listed in the tender data in an envelope marked "financial proposal" and place the remaining returnable documents in an envelope marked "technical proposal". Each envelope shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.
- C.2.13.7 Seal the original tender offer and copy packages together in an outer package that states on the outside only the employer's address and identification details as stated in the tender data.
- C.2.13.8 Accept that the employer will not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.
- C.2.13.9 Accept that tender offers submitted by facsimile or e-mail will be rejected by the employer, unless stated otherwise in the tender data.

C.2.14 Information and data to be completed in all respects

Accept that tender offers, which do not provide all the data or information requested completely and in the form required, may be regarded by the employer as non-responsive.

C.2.15 Closing time

- C.2.15.1 Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Accept that proof of posting shall not be accepted as proof of delivery.
- C.2.15.2 Accept that, if the employer extends the closing time stated in the tender data for any reason, the requirements of these conditions of tender apply equally to the extended deadline.

Enquiry: SIM22022CIDB / ERAC-RCB-39788

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay.

C.2.16 Tender offer validity

- C.2.16.1 Hold the tender offer(s) valid for acceptance by the employer at any time during the validity period stated in the tender data after the closing time stated in the tender data.
- C.2.16.2 If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period with or without any conditions attached to such extension.
- C.2.16.3 Accept that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer's agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted. If the validity period stated in C.2.16 lapses before the employer evaluating tender, the contractor reserves the right to review the price based on Consumer Price Index (CPI).
- C.2.16.4 Where a tender submission is to be substituted, a tenderer must submit a substitute tender in accordance with the requirements of C.2.13 with the packages clearly marked as "SUBSTITUTE".

C.2.17 Clarification of tender offer after submission

Provide clarification of a tender offer in response to a request to do so from the employer during the evaluation of tender offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). No change in the competitive position of tenderers or substance of the tender offer is sought, offered, or permitted.

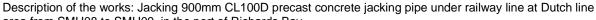
Note: Sub-clause C.2.17 does not preclude the negotiation of the final terms of the contract with a preferred tenderer following a competitive selection process, should the Employer elect to do so.

C.2.18 Provide other material

- C.2.18.1 Provide, on request by the employer, any other material that has a bearing on the tender offer, the tenderer's commercial position (including notarized joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the employer for the purpose of a full and fair risk assessment. Should the tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the employer's request, the employer may regard the tender offer as non-responsive.
- C.2.18.2 Dispose of samples of materials provided for evaluation by the employer, where required.

C.2.19 Inspections, tests and analysis

Provide access during working hours to premises for inspections, tests and analysis as provided for in



area from SMH08 to SMH09, in the port of Richards Bay.

the tender data.

C.2.20 Submit securities, bonds and policies

If requested, submit for the employer's acceptance before formation of the contract, all securities, bonds, guarantees, policies and certificates of insurance required in terms of the conditions of contract identified in the contract data.

C.2.21 Check final draft

Check the final draft of the contract provided by the employer within the time available for the employer to issue the contract.

C.2.22 Return of other tender documents

If so instructed by the employer, return all retained tender documents within twenty-eight (28) days after the expiry of the validity period stated in the tender data.

C.2.23 Certificates

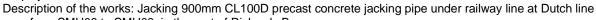
Include in the tender submission or provide the employer with any certificates as stated in the tender data.

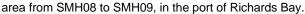
C.3 The employer's undertakings

C.3.1 Respond to requests from the tenderer

- C.3.1.1 Unless otherwise stated in the tender Data, respond to a request for clarification received up

 To five (5) working days before the tender closing time stated in the Tender Data and notify
 all tenderers who collected tender documents.
- C.3.1.2 Consider any request to make a material change in the capabilities or formation of the Tendering entity (or both) or any other criteria which formed part of the qualifying requirements used to prequalify a tenderer to submit a tender offer in terms of a previous procurement process and deny any such request if as a consequence:
 - a) an individual firm, or a joint venture as a whole, or any individual member of the joint venture fails to meet any of the collective or individual qualifying requirements;
 - b) the new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or
 - c) in the opinion of the Employer, acceptance of the material change would compromise the outcome of the prequalification process.





C.3.2 Issue Addenda

If necessary, issue addenda that may amend or amplify the tender documents to each tenderer during the period from the date that tender documents are available until three (3) working days before the tender closing time stated in the Tender Data. If, as a result a tenderer applies for an extension to the closing time stated in the Tender Data, the Employer may grant such extension and, shall then notify all tenderers who collected tender documents.

C.3.3 Return late tender offers

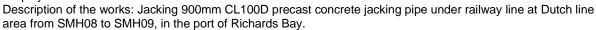
Return tender offers received after the closing time stated in the Tender Data, unopened, (unless it is necessary to open a tender submission to obtain a forwarding address), to the tenderer concerned.

C.3.4 Opening of tender submissions

- C.3.4.1 Unless the two-envelope system is to be followed, open valid tender submissions in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data. Tender submissions for which acceptable reasons for withdrawal have been submitted will not be opened.
- C.3.4.2 Announce at the meeting held immediately after the opening of tender submissions, at a venue indicated in the tender data, the name of each tenderer whose tender offer is opened and, where applicable, the total of his prices, number of points claimed for its BBBEE status level and time for completion for the main tender offer only.
- C.3.4.3 Make available the record outlined in C.3.4.2 to all interested persons upon request.

C.3.5 Two-envelope system

- C.3.5.1 Where stated in the tender data that a two-envelope system is to be followed, open only the technical proposal of valid tenders in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data and announce the name of each tenderer whose technical proposal is opened.
- C.3.5.2 Evaluate functionality of the technical proposals offered by tenderers, then advise tenderers who remain in contention for the award of the contract of the time and place when the financial proposals will be opened. Open only the financial proposals of tenderers, who score in the functionality evaluation more than the minimum number of points for functionality stated in the tender data, and announce the score obtained for the technical proposals and the total price and any points claimed on BBBEE status level. Return unopened financial proposals to tenderers whose technical proposals failed to achieve the minimum number of points for functionality.





Not disclose to tenderers, or to any other person not officially concerned with such processes, information relating to the evaluation and comparison of tender offers, the final evaluation price and recommendations for the award of a contract, until after the award of the contract to the successful tenderer.

C.3.7 Grounds for rejection and disqualification

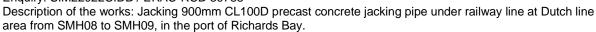
Determine whether there has been any effort by a tenderer to influence the processing of tender offers and instantly disqualify a tenderer (and his tender offer) if it is established that he engaged in corrupt or fraudulent practices.

C.3.8 Test for responsiveness

- C.3.8.1 Determine, after opening and before detailed evaluation, whether each tender offer properly received:
 - a) complies with the requirements of these Conditions of Tender,
 - b) has been properly and fully completed and signed, and
 - c) is responsive to the other requirements of the tender documents.
- C.3.8.2 A responsive tender is one that conforms to all the terms, conditions, and specifications of the tender documents without material deviation or qualification. A material deviation or qualification is one which, in the Employer's opinion, would:
 - a) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
 - b) significantly change the Employer's or the tenderer's risks and responsibilities under the contract, or
 - c) affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified. Reject a non-responsive tender offer, and not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.

C.3.9 Arithmetical errors, omissions and discrepancies

- C.3.9.1 Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount in words shall govern.
- C.3.9.2 Check the highest ranked tender or tenderer with the highest number of tender evaluation points after the evaluation of tender offers in accordance with C.3.11 for:
 - a) the gross misplacement of the decimal point in any unit rate;
 - b) omissions made in completing the pricing schedule or bills of quantities; or



- c) arithmetic errors in:
 - (i) line item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices; or
 - (ii) the summation of the prices.
- C.3.9.3 Notify the tenderer of all errors or omissions that are identified in the tender offer and either confirm the tender offer as tendered or accept the corrected total of prices.
- C.3.9.4 Where the tenderer elects to confirm the tender offer as tendered, correct the errors as follows:
 - a) If bills of quantities or pricing schedules apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate shall be corrected.
 - b) Where there is an error in the total of the prices either as a result of other corrections Required by this checking process or in the tenderer's addition of prices, the total of the prices shall govern and the tenderer will be asked to revise selected item prices (and their rates if bills of quantities apply) to achieve the tendered total of the prices.

C.3.10 Clarification of a tender offer

Obtain clarification from a tenderer on any matter that could give rise to ambiguity in a contract arising from the tender offer.

C.3.11 Evaluation of tender offers

The Standard Conditions of Tender standardize the procurement processes, methods and procedures from the time that tenders are invited to the time that a contract is awarded. They are generic in nature and are made project specific through choices that are made in developing the Tender Data associated with a specific project. Conditions of tender are by definition the document that establishes a tenderer's obligations in submitting a tender and the employer's undertakings in soliciting and evaluating tender offers. Such conditions establish the rules from the time a tender is advertised to the time that a contract is awarded and require employers to conduct the process of offer and acceptance in terms of a set of standard procedures.

The CIDB Standard Conditions of Tender are based on a procurement system that satisfies the following system requirements:

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line

area from SMH08 to SMH09, in the port of Richards Bay.

Requirement Qualitative interpretation of goal

Fair The process of offer and acceptance is conducted impartially without bias, providing simultaneous

and timely access to participating parties to the same information.

Equitable Terms and conditions for performing the work do not unfairly prejudice the interests of the

parties.

Transparent The only grounds for not awarding a contract to a tenderer who satisfies all requirements

are restrictions from doing business with the employer, lack of capability or capacity, legal impediments

and conflicts of interest.

Competitive The system provides for appropriate levels of competition to ensure cost effective and best

value outcomes.

Cost effective The processes, procedures and methods are standardized with sufficient flexibility to

attain best value outcomes in respect of quality, timing and price, and least resources to effectively

manage and control procurement processes.

The activities associated with evaluating tender offers are as follows:

a) Open and record tender offers received

b) Determine whether or not tender offers are complete

c) Determine whether or not tender offers are responsive

d) Evaluate tender offers

e) Determine if there are any grounds for disqualification

f) Determine acceptability of preferred tenderer

g) Prepare a tender evaluation report

h) Confirm the recommendation contained in the tender evaluation report

C.3.11.1 General

The employer must appoint an evaluation panel of not less than three persons conversant with the

proposed scope of works to evaluate each responsive tender offer using the tender evaluation methods

and associated evaluation criteria and weightings that are specified in the tender data.

C.3.12 Insurance provided by the employer

If requested by the proposed successful tenderer, submit for the tenderer 's information the policies and

/ or certificates of insurance which the conditions of contract identified in the contract data, require the

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employer to provide.

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line

area from SMH08 to SMH09, in the port of Richards Bay.

C.3.13 Acceptance of tender offer

Accept the tender offer; if in the opinion of the employer, it does not present any risk and only if the tenderer:

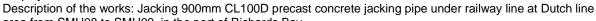
- a) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement;
- b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract;
- c) has the legal capacity to enter into the contract;
- d) is not; insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act No. 2008, bankrupt or being wound up, has his/her affairs administered by a court or a judicial officer, has suspended his/her business activities or is subject to legal proceedings in respect of any of the foregoing;
- e) complies with the legal requirements, if any, stated in the tender data; and
- f) is able, in the opinion of the employer, to perform the contract free of conflicts of interest.

C.3.14 Prepare contract documents

- C.3.14.1 If necessary, revise documents that shall form part of the contract and that were issued by The employer as part of the tender documents to take account of:
 - a) addenda issued during the tender period,
 - b) inclusion of some of the returnable documents and
 - c) other revisions agreed between the employer and the successful tenderer.
- C.3.14.2 Complete the schedule of deviations attached to the form of offer and acceptance, if any.

C.3.15 Complete adjudicator's contract

Unless alternative arrangements have been agreed or otherwise provided for in the contract, arrange for both parties to complete formalities for appointing the selected adjudicator at the same time as the main contract is signed.



area from SMH08 to SMH09, in the port of Richards Bay.

C.3.16 Registration of the award

An employer must, within twenty-one (21) working days from the date on which a contractor's offer to perform a construction works contract is accepted in writing by the employer, register and publish the award on the cidb Register of Projects.

C.3.17 Provide copies of the contracts

Provide to the successful tenderer the number of copies stated in the Tender Data of the signed copy of the contract as soon as possible after completion and signing of the form of offer and acceptance.

C.3.18 Provide written reasons for actions taken

Provide upon request written reasons to tenderers for any action that is taken in applying these conditions of tender but withhold information which is not in the public interest to be divulged, which is considered to prejudice the legitimate commercial interests of tenderers or might prejudice fair competition between tenderers.

Annex D

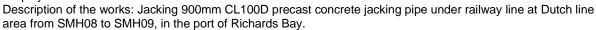
Standard Conditions for the calling for Expressions of Interest

D.1 General

D.1.1 Actions

- D.1.1.1 The employer and each respondent submitting an expression of interest shall comply with these conditions for calling for expressions of interest. In their dealings with each other, they shall discharge their duties and obligations as set out in D.2 and D.3, timeously and with integrity, and behave equitably, honestly and transparently, comply with all legal obligations and not engage in anti-competitive practices.
- D.1.1.2 The employer and the respondent and all their agents and employees involved in the Submission process shall avoid conflicts of interest and where a conflict of interest is perceived or known, declare any such conflict of interest, indicating the nature of such conflict. Respondents shall declare any potential conflict of interest in their submissions. Employees, agents and advisors of the employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.
- Note: 1) A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result.





- 2) Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decisions taken.
- D.1.1.3 The respondent shall not make a submission without having a firm intention and the capacity to proceed with the next stage of the procurement process.

D.1.2 Supporting documents

The documents issued by the employer for the purpose of obtaining expressions of interest are listed in the submission data.

D.1.3 Interpretation

- D.1.3.1 The submission data and additional requirements contained in the submission schedules that are included in the returnable documents are deemed to be part of these conditions for the calling for expressions of interest.
- D.1.3.2 For the purposes of these conditions for the calling for expressions of interest, the following definitions apply:
 - a) **conflict of interest** means any situation in which:
 - i. someone in a position of trust has competing professional or personal interests which make it difficult to fulfill his or her duties impartially.
 - ii. an individual or tenderer is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit.
 - iii. incompatibility or contradictory interests exist between an employee and the tenderer who employs that employee.
 - c) **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process; and
 - d) **fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels

D.1.4 Communication and employer's agent

Each communication between the employer and a respondent shall be to or from the employer's agent only, and in a form that can be readily read, copied and recorded. Communications shall be in the English language. The employer shall not take any responsibility for non-receipt of communications from or by a respondent. The name and contact details of the employer's agent are stated in the submission data.

TENDER FORM: PRO-FAT-0166 Rev02

Part T1: Tendering Procedures T1.3: Standard Conditions of Tender

TRANSNER

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Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line

area from SMH08 to SMH09, in the port of Richards Bay.

D.2 Respondent's obligations

D.2.1 Eligibility

Submit an expression of interest only if the respondent complies with the criteria stated in the submission data and the respondent, or any of his/her principals, is not under any restriction to do

business with the employer.

D.2.2 Cost of submissions

Accept that the employer will not compensate the respondent for any costs incurred in the preparation

and delivery of a submission.

D.2.3 Check documents

Check the submission documents on receipt, including pages within them, and notify the employer of

any discrepancy or omission.

D.2.4 Acknowledge addenda

Acknowledge receipt of addenda to the submission documents, which the employer may issue, and if

necessary apply for an extension to the closing time stated in the submission data, in order to take the

addenda into account.

D.2.5 Clarification meeting

Attend the clarification meeting(s) at which respondents may familiarize themselves with the proposed

work, services or supply (and location, etc.) and raise questions. Details of the meeting(s) are stated in

the submission data.

D.2.6 Seek clarification

Request clarification of the submission documents, if necessary, by notifying the employer at least five

(5) working days before the closing time stated in the submission data.

D.2.7 Making a submission

D.2.7.1 Return all returnable documents to the employer after completing them in their entirety,

either electronically (if they were issued in electronic format) or by writing legibly in non-

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erasable ink.

D.2.7.2 Seal the original and each copy of the submission as separate packages marking the

Packages as "ORIGINAL" and "COPY". Each package shall state on the outside the employer's

address and identification details stated in the submission data, as well as the respondent's

TENDER FORM: PRO-FAT-0166 Rev02 Part T1: Tendering Procedures

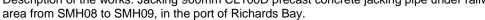
TRANSNER

T1.3

T1.3: Standard Conditions of Tender







name and contact address.

D.2.7.3 Accept that the employer shall not assume any responsibility for the misplacement or premature opening of the submission if the outer package is not sealed and marked as

stated.

D.2.8 Information and data to be completed in all respects

Accept that submissions, which do not provide all the data or information requested completely and in

the form required, may be regarded by the employer as non-responsive.

D.2.9 Closing time

Ensure that the employer receives the submissions at the address specified in the submission data not

later than the closing time stated in the submission data. Proof of posting shall not be accepted as

proof of delivery. The employer shall not accept submissions submitted by telegraph, telex, facsimile or

e-mail, unless stated otherwise in the submission data. Accept that, if the employer extends the closing

time stated in the submission data for any reason, the requirements of these conditions for expressions

of interest apply equally to the extended deadline.

D.2.10 Clarification of submission

Provide clarification of a submission in response to a request to do so from the employer during the

evaluation of submissions.

D.3 Employer's undertakings

D.3.1 Respond to clarification

Respond to a request for clarification received up to five (5) working days before the submission closing

time stated in the submission data and notify all respondents who attended the clarification meetings, if

any, of those responses.

D.3.2 Issue Addenda

If necessary, issue addenda that may amend or amplify the submission documents to each respondent

during the period from the date of the calling for expressions of interest until seven (7) working days

before the closing time for submissions stated in the submission data. If, as a result, a respondent

applies for an extension to the closing time stated in the submission data, the employer may grant such

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extension and shall then notify it to all respondents.

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line

area from SMH08 to SMH09, in the port of Richards Bay.

D.3.3 Late submissions

Unless otherwise stated in the submission data, return submissions received after the closing time stated in the submission data, unopened, (unless it is necessary to open a submission to obtain a forwarding address), to the respondent concerned.

D.3.4 Opening of submissions

D.3.4.1 Record the name of each respondent whose submission is opened and acknowledge receipt Of each submission.

D.3.4.2 Make available the names of the respondents that made submissions prior to the closing time for submissions to all interested persons upon request.

D.3.5 Non-disclosure

Not disclose to respondents, or to any other person not officially concerned with such processes, information relating to the evaluation and comparison of submissions until after the evaluation process is complete.

D.3.6 Grounds for rejection and disqualification

Determine whether there has been any effort by a respondent to influence the processing of submissions and instantly disqualify a respondent if it is established that he/she engaged in corrupt or fraudulent practices.

D.3.7 Test for responsiveness

Determine, on opening and before detailed evaluation, whether each submission received:

- a) meets the requirements of these conditions for the calling for expressions of interest;
- b) has all the substantive provisions properly and fully completed and signed, and
- c) is responsive to the other requirements of the call for expressions of interest.

D.3.8 Non-responsive submissions

Reject all non-responsive submissions.

D.3.9 Evaluation of responsive submissions

D.3.9.1 Appoint an evaluation panel of not less than three persons. Evaluate submissions using the evaluation criteria established in the submission data.

D.3.9.2 Notify the respondents of the outcome of the evaluation process within two (2) weeks of the evaluation report being accepted by the employer.

D.3.10 Provide written reasons for actions taken

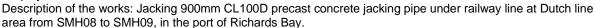
TRANSNET FREIGHT RAIL





Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay.

Provide upon request written reasons to respondents for any action that is taken in applying these conditions, but withhold information which is not in the public interest to be divulged, which is considered to prejudice the legitimate commercial interests of respondents or might prejudice fair competition between respondents.





T2.1List of Returnable Documents

- 1. These schedules are required for eligibility purposes:
 - **T2.2-01** Eligibility in terms of the Construction Industry Development Board: 1CE
- 2. These schedules will be utilised for evaluation purposes:
 - T2.2-02 Programme
 - T2.2-03 **Previous Experience**
 - T2.2-04 Management & CV's of Key Personnel
- 3. **Returnable Schedules:**

Assessment schedules:

- **T2.2-05a** Risk Management
- **T2.2-05b** Environmental Management
- T2.2-06 Health and Safety Management

General:

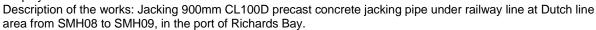
- T2.2-07 Changes to tender document
- T2.2-08 Site Establishment requirements
- T2.2-09 Breakdown of Preliminary and General Items
- T2.2-10 Authority to submit tender
- T2.2-11 Record of addenda to tender documents
- T2.2-12 Broad-Based Black Economic Empowerment (B-BBEE)
- T2.2-13 Letter of Good Standing
- T2.2-15 Availability of equipment and other resources

4. **Agreement and Commitment by Tenderer:**

- T2.2-16: Compulsory Enterprise Questionnaire
- T2.2-17 Supplier Code of Conduct
- T2.2-18 Unilateral Non-Disclosure Agreement
- T2.2-19 Supplier declaration form
- T2.2-20 **RFO Declaration Form**
- T2.2-21 Certificate of Acquaintance with Tender Document
- T2.2-22 Service Provider Integrity Pact
- T2.2-23 Request for quotation - Breach of law

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5. Bonds/Guarantees/Financial/Insurance:

- **T2.2-24** Insurance provided by the Contractor
- 6. C1.1 Offer portion of Form of Offer & Acceptance
- 7. C1.2 Contract Data
- 8. C2.2 Bill of Quantities

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Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

Dutch line area from SMH08 to SMH09, in the port of Richards Bay

Part T2.2: Returnable Schedules

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

Dutch line area from SMH08 to SMH09, in the port of Richards Bay



T2.2-01: Eligibility Criteria Schedule - CIDB Grading Designation

Note to tenderers:

Tenderers are to indicate their CIDB Grading by filling in the table below. **Attach a copy of the CIDB Grading Designation or evidence of being capable of being so registered.**

CRS Number	Status	Grading	Expiry Date

- Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, for a 1CE class of construction work, are eligible to have their tenders evaluated.
 - a) Joint Venture (JV)

Joint ventures are eligible to submit tenders subject to the following:

- 1. every member of the joint venture is registered with the CIDB;
- 2. the combined Contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a Contractor grading designation determined in accordance with the sum tendered for a 1CE or higher class of construction work or a value determined in accordance with Regulation 25(1B) or 25(7A) of the Construction Industry Development Regulations The tenderer shall provide a certified copy of its signed joint venture agreement

CPM 2020 Rev 01 Part T2: Returnable Schedules
Page 2 of 70 T2.2-02: Work program and delivery period

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

Dutch line area from SMH08 to SMH09, in the port of Richards Bay



T2.2-02: Evaluation Schedule: Programme

Note to tenderers:

Programme

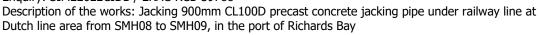
The Tenderer details the programme for evaluation and attaches it to this schedule. In addition, the Tenderer is to provide an electronic copy of the programme in Primavera, Ms Project or any other compatible software.

The Tenderer's attention is drawn to core clause 31 of the NEC3 Engineering and Construction contract regarding the items to be shown on a programme.

The tenderer shall provide the proposed programme showing but not limited to the following:

- Ability to execute the works in terms of the Employer's requirements and within the required timeframe
 indicating, in a logical sequence, the order and timing of the construction that will take place in order
 to Provide the Works clearly indicating the capacity & capability to achieve the dates stated in the
 Contract Data.
- Dates when the *Contractor* will need access to any part of the Site; submission & approval process & timing for Health & Safety Files, Environmental Files and Quality Files. In addition the Programme must clearly demonstrate the procurement process for all long lead items if applicable.
- The Contractor indicates how he plans in achieving the following dates and clearly demonstrates them on the schedule Start Date, Access Date, Planned Completion, & Completion Date. In addition, the Programme clearly demonstrates adequate provisions for Time Risk Allowance (TRA). Time Risk Allowances are not float, are owned by the Tenderer, can be included in the activity duration and illustrated in the schedule in a code field or as an attachment.
- The Programme must clearly support and demonstrate alignment to the Method Statement as contained in T2.1 List of Returnables.

CPM 2020 Rev 01 Part T2: Returnable Schedules
Page 3 of 70 T2.2-02: Work program and delivery period

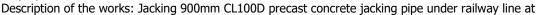


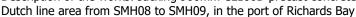


The scoring of the Programme will be as follows:

Programme			
Score 0	The tenderer has submitted no information.		
	The programme is not acceptable as it will not satisfy project objectives or requirements.		
	The programme does not meet all the required timeframes.		
	The programme does not follow a logical sequence or has critical logic errors.		
Score 20	Critical components of the scope is excluded and not to the level required in the scope.		
Score 20	The tenderer has misunderstood the scope of services and does not deal with the critical aspects of the project		
	The tenderer has not addressed all date requirements and submission is missing critical activities and dates which render it unrealistic / unachievable.		
	The programme is generic, not practical and realistic, therefore is unlikely to satisfy project objectives or <i>Employer's</i> requirements.		
	The programme does not meet all the required timeframes.		
	The programme is missing some logic but is does not influence the tendered timeframe.		
Score 40	Some components of the scope is excluded and not to the level required in the scope.		
	The tenderer has misunderstood certain aspects of the scope of services and does not deal with the critical aspects of the project.		
	The tenderer has addressed some but not all date requirements and submission is missing critical activities and dates which render it unrealistic / unachievable.		
	Tenderers has demonstrated reasonable knowledge the development of: • Ability to execute the works in terms of the Employer's requirements, indicating the order and timing of the construction activities that will take place in order to provide the works.		
Score 60	 Schedule showing durations of activities, Major Milestone, Planned Start Date & Planned Completion Date 		
	All activities are logically tied using critical path method (CPM).		
	The tenderer has addressed the date requirements and submission but it was missing critical activities and dates which render it unrealistic / unachievable.		

Enquiry: SIM22022CIDB / ERAC-RCB-39788







Tenderers has demonstrated good knowledge in scheduling: Ability to execute the works in terms of the Employer's requirements, indicating the order and timing of the construction activities that will take place in order to provide the works. Schedule showing durations of activities, Major Milestone, Planned Start Date & Score 80 Planned Completion Date Logical sequencing and interrelationship of activities, taking cognisance of planned construction execution, as defined in Works Information. Critical path clearly defined The tenderer has addressed most date requirements correctly and submission contains logic and sequencing which is accurate, and renders the submission realistic and achievable Tenderers has demonstrated good knowledge in scheduling: Ability to execute the works in terms of the Employer's requirements, indicating the order and timing of the construction activities that will take place in order to provide the works. Schedule showing durations of activities, Major Milestone, Planned Start Date & Planned Completion Date Score Logical sequencing and interrelationship of activities, taking cognisance of planned 100 construction execution, as defined in Works Information. Critical path clearly defined Project phases clearly defined. The tenderer has addressed all date requirements correctly and submission contains logic and sequencing which is accurate, and renders the submission realistic and achievable. Provisions for quality requirements & Health & Safety requirements, clearly outlining how the tenderer plans to provide the Works.

Attachment A: Hard Copy of Programme

Reference to attached submissions to this schedule:		

CPM 2020 Rev 01

Enquiry: SIM22022CIDB / ERAC-RCB-39788

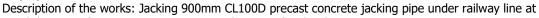


Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

Dutch line area from SMH08 to SMH09, in the port of Richards Bay

He/she undersigned, who warrants that he/she is duly authorised to do so on behalf of the Tenderer, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Signed	Date
Name	
	Position
Tenderer	



Dutch line area from SMH08 to SMH09, in the port of Richards Bay



T2.2-03: Evaluation Schedule: Previous Experience

Note to tenderers:

Tenderers are required to demonstrate performance in comparable projects of similar size and nature by supplying the following:

A list of past / current comparable projects.

Construction of similar works as detailed in the Works Information with reference to:

• Pipe Jacking of precast concrete stormwater pipes.

Sufficient references to substantiate experience indicated (Client name and contact details, project description, duration and contract value)

Index of documentation attached to this schedule

	DOCUMENT NAME
1	
2	
3	
4	
5	
6	
7	

Score	Previous Experience
0	The Tenderer failed to address the question / issue. Has not submitted the required information.
20	The Tenderer's previous experience presented has no relevance to the scope of this project and did not address any of the required categories. Tenderers generally have experience in one (1) project relating to the scope of works. The tenderer has limited or poor evidence of previous experience.
40	The Tenderer's previous experience presented has some relevance to the project but lacks detail i.e. Description of previous projects, value and references. Tenderers generally have experience in two (2) projects relating to scope of <i>works</i> . The tenderer lacks convincing evidence of knowledge of previous experience, specific to the <i>works</i> .
	The Tenderer's previous experience presented demonstrates sufficient knowledge and experience to successfully execute this project scope. Tenderers generally have

CPM 2020 Rev 01 Part T2: Returnable Schedules
Page 7 of 70 T2.2-10: Previous Experience

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Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay

60	experience in Three (3) projects relating to the scope of works. The tenderer has reasonable and relevant previous experience to the particular requirements of the <i>works</i> .
80	The Tenderer's previous experience presented demonstrates a real understanding and substantial evidence of the ability meet the stated project requirements. Tenderers generally have experience in four (4) projects relating to the scope of works. The tenderer has extensive previous experience in relation to the <i>works</i> .
100	The Tenderer's previous experience presented demonstrates real confidence extensive understanding in all of the categories as required. Tenderers generally have experience in more than five (5) projects relating to the scope of works. The tenderer has comprehensive previous experience in projects of a similar nature.

Attached submissions to this schedule:	
Signed	Date
Name	Position
Tenderer	

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

Dutch line area from SMH08 to SMH09, in the port of Richards Bay



T2.2-04: Evaluation Schedule - Management & CV's of Key Personnel

The tender must be able to demonstrate that the project personnel have sufficient knowledge, experience and qualifications to provide the required services and submit the following documents as a minimum with the tender:

- 1. The experience of assigned key persons in relation to the scope of work will be evaluated from three different points of view, namely:
 - i. Relevant experience Previous Electrical experience (Pipe Jacking of precast concrete stormwater pipes) 5 years or more
 - ii. The education, training and skills of the assigned staff in the specific sector, field (Civil Engineering), subject (Pipe Jacking of precast concrete stormwater pipes), etc. which is directly linked to the Scope of Works. Proof of education and training must be attached to the C.V.
- 2. Comprehensive CV's should be attached to this schedule:

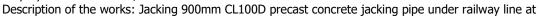
As a minimum each CV should address the following, but not limited to;

- i. Personal particulars
 - a. Name
 - b. Place (s) of tertiary education and dates associated therewith
 - c. Professional awards
- ii. Qualifications (degrees, diplomas, certificates grades of membership of professional societies and professional registrations)
- iii. Name of current employer and position in enterprise
- iv. Overview of post graduate experience (year, organization and position)
- v. Outline of recent assignments / experience that has a bearing on the Scope of Works

List of Key Persons assigned to the above disciplines

No.	Key Persons	Name and Surname	CV attached (Yes/No)
1	Safety Officer		
2	Site Supervisor/Foreman		
3	Operator		
4	Pipe Fitter		

Enquiry: SIM22022CIDB / ERAC-RCB-39788





Dutch line area from SMH08 to SMH09, in the port of Richards Bay

The scoring of the Management & CV's of Key Persons will be as follows:

Score 0 Failed to provide information			
	No response.		
Score 20 Key staffs do not have suitable levels of relevant experience and qualific			
	equivalent specialised training. Inadequate organisation chart. No clear indication of		
	roles and responsibilities and specific function of each team member		
Score 40 Key staff has limited recommended levels of relevant experience and qu			
	Key staff has 1 to 2 years' experience. Inadequate indication of roles and		
	responsibilities and specific function of each team member on the organogram.		
Score 60	Key staff have acceptable levels of relevant experience and qualifications. Key staff has		
	more than 2 years but up to 3 years' experience. Organisation chart showing		
	reasonable indication of roles and responsibilities and specific function of each team		
	member.		
Score 80	Key staff have acceptable levels of relevant experience and qualifications. Keys staff		
	has more than 3 years but up to 5 years' experience. Organisation chart showing		
	adequate indication of roles and responsibilities and specific function of each team		
	member.		
Score 100	All Key staff have acceptable levels of relevant experience and qualifications with more		
	than 5 years' experience. Organisation chart showing more than adequate indication of		
	roles and responsibilities and specific function of each team member.		

Index of documentation attached to this schedule:			

Enquiry: SIM22022CIDB / ERAC-RCB-39788

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at



Dutch line area from SMH08 to SMH09, in the port of Richards Bay

T2.2-05a: Assessment Schedule: Risk Management

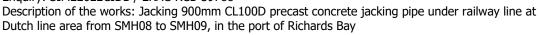
Tenderers to identify and evaluate the potential risk elements associated with the Works and possible mitigation thereof. The risk elements and the mitigation as identified thereof by the Tenderer are to be submitted.

If No Risks are identified "No Risks" must be stated on this schedule.

Tenderers are also to evaluate any risk/s stated by the Employer in Contract Data Part C1, and provide possible mitigation thereof.

Signed	Date
Name	Position
Tenderer	

Enquiry: SIM22022CIDB / ERAC-RCB-39788







Assessment of Tender: Risk Management plans						
Company Name :						
Tender Description: 1. Business continuity plan						
Business Continuity Management: The objective is to ensure continuity of the service provision to TFR in case on any interruptions which may arise from the tenderer's site aligned to applicable standards	Assessment Criteria					
The following criteria to be included: - Emergency operating procedures - Business Continuity invocation action - Project recovery resources - Business / Supplier Contact list - Emergency Contact	Business Continuity plan contains Emergency Operating Procedures, Business continuity invocation action, Project recovery resources, Business / Supplier contact list Emergency contacts Business Continuity plan contains 5 of the 5 required criteria Business Continuity plan contains 4 of the 5 required criteria Business Continuity plan contains 3 of the 5 required criteria Business Continuity plan contains 2 of the 5 required criteria Business Continuity plan contains 2 of the 5 required criteria Business Continuity plan contains 1 of the 5 required criteria No business continuity plan submitted					
2. Business Impact Analysis	Assessment Criteria					
 Identification of critical processes within the project Recovery Time Objective in case of any interruption that may arise Recovery Strategy: how will the supplier recover Operational dependencies eg: Operational equipments, telephones etc. needed to ensure continuity Alternative supply of equipment and/ or supply of extra staff Battle box (It comprises of all necessary documentation, equipments required for continuity) 	Business Impact Analysis contains identification of critical processes within the project, Recovery Time Objective, Recovery Strategy, Operational dependencies, Alternative supply of equipment and/or supply of extra staff, Battle box. Business Impact Analysis contains 5 of the 5required criteria Business Impact Analysis contains 4 of the 5required criteria Business Impact Analysis contains 3 of the 5					

Enquiry: SIM22022CIDB / ERAC-RCB-39788



Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

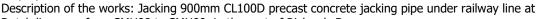
Dutch line area from SMH08 to SMH09, in the port of Richards Bay

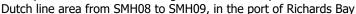
	required criteria
	Business Impact Analysis contains 2 of the 5 required criteria
	Business Impact Analysis contains 1 of the 5 required criteria
	No business plan submitted
3. Risk Assessment for the project / Operational Risks: The identified Risks should be based on the scope of works	Assessment Criteria
- Identification of risks of service interruption during the project	Risk Register contains Identification of risks of service interruption during the project ,Risk Analysis methodology, Ranking of the Risks, Mitigation of the identified risks and Responsible person
 Risk Analysis methodology Ranking of the Risks 	Risk Register contains 5 to 5 required criteria
Mitigation of the identified risksResponsible person	Risk Register contains 4 to 5 required criteria
	Risk Register contains 3 of the 5 required criteria
	Risk Register contains 2 of the 5 required criteria
	Risk Register contains 1 of the 5 required criteria
	No Risk Register submitted \ Risks identified are not relevant to the project
Assessment quideline	

Assessment guideline

- 1) Be fair and objective in your assessment.
- 2) Complete the assessment document in full and use comments row to motivate your marks where necessary.
- 3) The document should be completed in a neat and tidy manner due to the fact that it will become an official document.
- 4) Be transparent and share your observations with the company representative (applicable where site visit was conducted to verify information supplied) and assessment team.
- 5) No copies of the completed assessment document must be provided to the company representative.
- 6) On completion of the assessment the marks obtained and end result of the assessment needs to be discussed with the contractor.
- 7) After the tender award the tenderers representative may be advised of their shortcomings in terms of their SHE submission.

Name of Assessor	
Signature	
Date	







T2.2-05b: Assessment Schedule: Environmental Management

The tenderer must provide an environmental management plan describing: -

- Key environmental impacts and aspects associated with the proposed project.
- Possible mitigation measures associated with identified impacts and aspects.
- Key roles and responsibilities for both the Tender's project team and Transnet with regards to the project.
- Monitoring techniques and reporting of both accidents and incidents.
- Details of induction and other forms of training (if any).

The following documents are key -

- 1.0 Transnet SOC Limited Integrated Management Systems (IMS) Policy,
- 1.1 By signing this Tender Schedule, the tenderer confirms that they will comply with the above policy statement and environmental commitments therein.
- 1.2 Tender to provide a signed declaration of understanding as part of the returnable acknowledging understanding thereof and the budget provision for the implementation of environmental management requirements.

By signing this Tender Schedule, the tenderer confirms that they will comply with the above requirements and in particular Transnet Freight Rail IMS policy statement and environmental commitments therein.

The scoring of the Tenderer's Environmental Management Plan will be as follows:

Key Env	ironmental Impacts and Possible Mitigation Measures (60%)	Assessment Comments
(Score 0)	The EMP is not submitted by the bidder.	
(Score 20)	EMP with zero/no key impacts and mitigation measures specific to the project	
(Score 40)	EMP contains 1-3 key impacts and mitigation measures specific to the project.	
(Score 60)	EMP contains 4-6 key impacts and mitigation measures specific to the project.	
(Score 80)	EMP contains 7-9 key reasonable and relevant impacts and mitigation measures specific to the project.	

Enquiry: SIM22022CIDB / ERAC-RCB-39788



Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay

(Score	EMP contains 10 and more key reasonable and relevant impacts and	
10	00)	mitigation measures specific to the project, which meet and exceed	
		tender requirements.	

	Key Roles and Responsibilities (20%)
(Score 0)	The EMP is not submitted by the bidder.
(Score 20)	EMP with zero/no key roles and responsibilities specific to the project.
(Score 40)	EMP contains 1-3 key reasonable and relevant roles and responsibilities specific to the project.
(Score 60)	EMP contains 4-6 key reasonable and relevant roles and responsibilities specific to the project.
(Score 80)	EMP contains 7-9 key reasonable and relevant roles and responsibilities specific to the project.
(Score 100)	EMP contains 10 and more key reasonable and relevant roles and responsibilities specific to the project, which meet and exceed tender expectations.

Env	rironmental Monitoring, Training and Reporting (20%)
(Score 0)	The EMP is not submitted by the bidder.
(Score 20)	EMP with zero/no monitoring techniques, no training and no form of reporting.
(Score 40)	Tenderer did not demonstrate understanding of the project scope and provided irrelevant information on monitoring techniques, training methods and types of reports.
(Score 60)	Tenderer understood the project scope but provided relevant but less detailed information on monitoring techniques, training methods and types of reports.
(Score 80)	Tenderer understood the project scope and identified relevant monitoring techniques, relevant training methods and relevant reports.
(Score 100)	Tenderer understood the project scope and addresses critical aspects with regards to monitoring, training and reporting which meets and exceeds tender requirements .

Enquiry: SIM22022CIDB / ERAC-RCB-39788



Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay

Attached su	bmissions to this schedule:
Signed	Date
Name	Position ————————————————————————————————————
Tondous:	
Tenderer	

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at



TRANSNER

Dutch line area from SMH08 to SMH09, in the port of Richards Bay

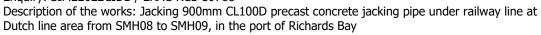
T2.2-06: Assessment Schedule - Health and Safety Requirements

Submit the following documents as a minimum with your tender:

- 1. The Tenderers must provide their own project specific health and safety Plan.
- 2. Health and safety cost breakdown (Bill of Quantities)
- 3. Safety, Policy signed by the Chief Executive Officer, must include or cover the following five elements
 - Commitment to Safety, prevention of pollution,
 - · Continual improvement,
 - Compliance to legal requirements, appropriate to the nature of contractor's activities,
 - Hold management accountable for development of the safety systems
 - Include objectives and targets.
- 4. Table or outline the Roles & Responsibilities, such as S16.2 CEO, CR8.1 Construction manager, CR8.2 Assistant Construction manager, CR8.5 Safety officer, CR8.7 Construction Supervisor, CR8.8 Construction assistant supervisor, CR9.1 Risk Assessor, 17.1 SHE Reps, etc. as per the Occupational health and safety Act 85 of 1993
- 5. List of job categories for project and competencies required per category and develop a training Matrix for all employees who will be working on the project. This matrix must include Management and highlight training planned dates.
- 6. Overview of the project specific Baseline Risk Assessment (RA), indicating major activities of the project
- 7. **Three years** synopsis of SHE incidents, description, type and action taken to prevent re-occurrence.
- 8. Complete and return with tender documentation the Contractor Safety Questionnaire included as an Annexure B.

Attached submissions to this schedule:

Enquiry: SIM22022CIDB / ERAC-RCB-39788





T2.2-06a – Health and Safety Questionnaire

1.	SAFE WORK PER	FORMANCE			
1A.	Injury Experience / Historical Performance - Alberta				
Use the	e previous three years in	njury and illness record	s to complete the	following:	
Year					
Numbe	er of medical treatment of	cases			
Numbe	er of restricted work day	cases			
Numbe	er of lost time injury case	es			
Numbe	er of fatal injuries				
Total r	ecordable frequency				
Lost tir	ne injury frequency				
Numbe	er of worker man hours				
				•	
	cal Treatment Case	Any occupational injury or provided under the direction	on of a physician		
	ricted Work Day Case	Any occupational injury or jurisdiction duties	•		
	Time injury Cases	Any occupational injury the day	·	, , ,	
	l Recordable Frequency	Total number of Medical Tr 200,000 then divided by to	tal man hours		
5- Lost T	Time Injury Frequency	Total number of Lost Time	Injury cases multiplied	by 200,000 then dividen	e by total man hours
-	1B. Workers' Com	pensation Experience			
Use the	e previous three years ir	njury and illness record	s to complete the	following (if applic	able):
]	Industry Code:	Indu	ustry Classification	:	
			1		1
Year					
Indust					
	ctor Rate count or Surcharge				
	· Workers' Compensation	n account in good	☐ Yes		
standir		ii account iii good	☐ No		
	orovide letter of confirmation)				
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \					
-	2. CITATION	S			
I	Has your company beer Legislation in the last 5 y Yes No If yes, provide details:		secuted under He	ealth, Safety and/c	or Environmental
	Has your company bee Country, Region or State		prosecuted under	the above Legisla	ation in another

Enquiry: SIM22022CIDB / ERAC-RCB-39788



Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay

	☐ Yes ☐ No If yes, provide details:					
-						
-						
3.	CERTIFICATE OF REC			:::2		
	Does your company have a Ce				e Date	
4.	SAFETY PROGRAM					
	Do you have a written safety p If Yes, provide a copy for review	orogram ı	manual	?	Yes	☐ No
	Do you have a pocket safety b	ooklet fo	r field d	listribution?	Yes	☐ No
	If Yes, provide a copy for review Does your safety program con	tain the f	ollowin	a elements:		
		YES	No	<i>y</i>	YES	No
CORPO	DRATE SAFETY POLICY			EQUIPMENT MAINTENANCE		
INCID	ENT NOTIFICATION POLICY			EMERGENCY RESPONSE		
RECOF	RDKEEPING & STATISTICS			HAZARD ASSESSMENT		
REFER	ENCE TO LEGISLATION			SAFE WORK PRACTICES		
GENER	RAL RULES & REGULATIONS			SAFE WORK PROCEDURES		
Progr	RESSIVE DISCIPLINE POLICY			WORKPLACE INSPECTIONS		
RESPO	NSIBILITIES			INVESTIGATION PROCESS		
PPE S	TANDARDS			TRAINING POLICY & PROGRAM		
Envir	ONMENTAL STANDARDS			COMMUNICATION PROCESSES		
Modif	FIED WORK PROGRAM					
5 .	TRAINING PROGRAM	1				
5A.	Do you have an orientation p	_		• •	☐ No)
	If Yes, include a course outline. Doe	s it include a	any of the N O	e following:	YES	No
GENER	AL RULES & REGULATIONS			CONFINED SPACE ENTRY		
EMERG	GENCY REPORTING			TRENCHING & EXCAVATION		
Injur	Y REPORTING			SIGNS & BARRICADES		
LEGISL	ATION			DANGEROUS HOLES & OPENINGS		
RIGHT	TO REFUSE WORK			RIGGING & CRANES		
PERSO	NAL PROTECTIVE EQUIPMENT			MOBILE VEHICLES		
EMERG	SENCY PROCEDURES			PREVENTATIVE MAINTENANCE		
PROJE	CT SAFETY COMMITTEE			HAND & POWER TOOLS		
House	EKEEPING			FIRE PREVENTION & PROTECTION	v	

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Enquiry: SIM22022CIDB / ERAC-RCB-39788



Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay

LADDERS & SCAFFOLDS			ELECTRICAL SAFETY			
FALL ARREST STANDARDS			COMPRESSED GAS CYLINDERS			
AERIAL WORK PLATFORMS			WEATHER EXTREMES			
5B. Do you have a program for to	aining ne	ewly hire	ed or promoted supervisors? Yes	☐ No		
(If Yes, submit an outline for evaluat			nstruction on the following:	V.	N.I.	
	Yes	No		Yes	No	
EMPLOYER RESPONSIBILITIES			SAFETY COMMUNICATION			
EMPLOYEE RESPONSIBILITIES			FIRST AID/MEDICAL PROCEDURES			
DUE DILIGENCE			New Worker Training			
SAFETY LEADERSHIP			ENVIRONMENTAL REQUIREMENTS			
WORK REFUSALS			HAZARD ASSESSMENT			
INSPECTION PROCESSES			PRE-JOB SAFETY INSTRUCTION			
EMERGENCY PROCEDURES			DRUG & ALCOHOL POLICY			
INCIDENT INVESTIGATION			PROGRESSIVE DISCIPLINARY POLICY			
SAFE WORK PROCEDURES			SAFE WORK PRACTICES			
SAFETY MEETINGS			NOTIFICATION REQUIREMENTS			
6. SAFETY ACTIVITIES						
Do you conduct safety inspe	ctions?		Yes No Weekly Mont	thly Q	uarterly	
]		
Describe your safety inspect follow-up, report distribution)		ess (inclu	ude participation, documentation requir	ements,		
Who follows up on inspection						
Do you hold site safety meet	Do you hold site safety meetings for field employees? If Yes, how often? Yes No Daily Weekly Biweekly					
			Yes No Daily Wee			
Do you hold site meetings w	Do you hold site meetings where safety is addressed with management and field supervisors?					
Yes No Weekly Biweekly Monthly					Monthly	
Is pre-job safety instruction provided before to each new task?						
Is the process documented?						
Who leads the discussion?						
Do you have a hazard assessment process?						
 Are hazard assessments documented? If yes, how are hazard assessments communicated and implemented on each project? Who is responsible for leading the hazard assessment process? 						
implemented on each pr	oject: VV	110 13 163	sponsible for leading the hazard assess	arrierit bi	00000:	
1						
_						

Enquiry: SIM22022CIDB / ERAC-RCB-39788



Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay

	Does your company have policies and procedures for environmental protection, spill clean-up, reporting, waste disposal, and recycling as part of the Health & Safety Program?						
	☐ Yes ☐ No						
	How does your company measure its H&S s	success?					
	Attach separate sheet to explain						
7.	SAFETY STEWARDSHIP						
7A	Are incident reports and report summaries s	sent to the	followi	ng and	d how ofter	า?	
			Yes	No	Monthly	Quarterly	Annually
	Project/Site Manager						
	Managing Director						
	Safety Director/Manager						
	/Chief Executive Officer						
7B	How are incident records and summaries ke	ept? How	often a	re they	reported i	nternally?	
			Yes	No	Monthly	Quarterly	Annually
	Incidents totaled for the entire company						
	Incidents totaled by project						
	Subtotaled by superintendent						
70	Subtotaled by foreman How are the costs of individual incidents keep	nt2 How	often er	o thou	roported in	utornolly?	
7C	How are the costs of individual incidents kep	pi? now	Yes	e mey No	Monthly	Quarterly	Annually
	Costs totaled for the entire company						
	Costs totaled by project						
	 Subtotaled by superintendent 						
	 Subtotaled by foreman/general foreman 						
7D	Does your company track non-injury incider	nts?	Yes	No	Monthly	Quarterly	Annually
	Near Miss				IVIOITIIIIY	Quarterly	
	Property Damage						
	Fire						
	Security		П				
	Environmental						
8	PERSONNEL						
	List key health and safety officers planned for	or this pro	ject. A	ttach r	esume.		
	Name	Po	osition/1	itle		Designat	ion
	Supply name, address and phone numl	ber of v	our coi	npanv	's corpora	ite health a	ind safety
	representative. Does this individual have res	sponsibilit	ies othe	er than	health, sa	fety and env	rironment?
	Name		Addres	S		Telephone N	lumber
	Other responsibilities:						
9	REFERENCES						
9	ILLI LILLIOLU						



Enquiry: SIM22022CIDB / ERAC-RCB-39788
Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay

commitment to your occupational	form has worked for that could verify Health & Safety program	y the quality and management
Name and Company	Address	Phone Number
Signed	Date	
Name	Position	
	1 OSICIOIT	
Tenderer		
- Criucici		

Enquiry: SIM22022CIDB / ERAC-RCB-39788

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at





T2.2-06b Health and Safety Cost Breakdown

NB: This Safety Cost breakdown is required to illustrate to Transnet that safety costs have been factored into your tender price, and will not be paid for as a separate expense.

Tenderer (Company)	Responsible Person	Designation	Date
Project/Tender Title	Project/Tender No.	Project Locat Description	ion /
Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay	SIM22022CIDB / ERAC-RCB-39788	Richards Bay	

#	Cost element	Unit Cost (R)	# of Units	Total Cost (R)
1.	Human Resources			
2.	Systems Documentation			
3.	Meetings & Administration			
4.	H&S Training			
5.	PPE & Safety Equipment			
6.	Signage & Barricading			
7.	Workplace Facilities			
8.	Emergency & Rescue Measures			
9.	Hygiene Surveys & Monitoring			
10.	Medical Surveillance			
11.	Safe Transport of Workers			
12.	HazMat Management (e.g. asbestos /silica)			
13.	Substance Abuse Testing (3 kits @R500 pm)			
14.	H&S Reward & Recognition			
15.	Other			

Total Health and Safety Estimate (R)	
Total Estimate Value (R)	
H&S Cost as % of Tender value	

Enquiry: SIM22022CIDB / ERAC-RCB-39788

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

Dutch line area from SMH08 to SMH09, in the port of Richards Bay



T2.2-07: Changes to Tender Document

Changes to the tender documents are only allowed if a main tender complying fully with the tender documents has also been provided.

Do not return this schedule if no alternative tender is submitted.

The Conditions of Tender state that the tenderer may:

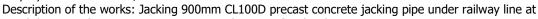
- **C.2.12.1** Submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted. The alternative tender offer is to be submitted with the main tender offer together with a schedule that compares the requirements of the tender documents with the alternative requirements the tenderer proposes.
- **C.2.12.2** Accept that an alternative tender offer may be based only on the criteria stated in the tender data or criteria otherwise acceptable to the employer.

Having examined the criteria stated in the Tender Data for this tender the proposed changes to the tender documents are:

Document No.	Subject of the proposed change	Propose to change to:
Signed	Date	
Name	Positi	on
Tenderer		

Tenderer

Enquiry: SIM22022CIDB / ERAC-RCB-39788



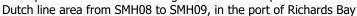


Dutch line area from SMH08 to SMH09, in the port of Richards Bay

T2.2-08: Site Establishment / Laydown Area

Tenderers to indicate their Site establishment area requirements: Signed Date Name Position

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at





T2.2-09: Breakdown of Preliminary and General Items

Tenderers are to submit a detailed breakdown of the fixed and time related Sums in the Preliminary + General Schedule for evaluation purposes.

SANS 1200 A reads "The sum tendered for each fixed-charge and value-related item will be paid in a single payment in terms of the first progress certificate issued after the Contractor's obligations in respect of that item have, in the opinion of the Engineer, been discharged".

The breakdown of the fixed P+G will also be used to help the *Employer* to assess the portion of the fixed amount due in the payment.

Signed	Date	
Name	Position	
Tenderer		
CHACICI		

Enquiry: SIM22022CIDB / ERAC-RCB-39788

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at



Dutch line area from SMH08 to SMH09, in the port of Richards Bay

T2.2-10: Authority to submit a Tender

Indicate the status of the tenderer by ticking the appropriate box hereunder. The tenderer must complete the certificate set out below for his category of organisation or alternatively attach a certified copy of a company / organisation document which provides the same information for the relevant category as requested here.

A - COMPANY	B - PARTNERSHIP	C - JOINT VENTURE	D - SOLE PROPRIETOR

A. Ceruncate	e for Company						
Ι,		chairperson of the board of directors					
		, hereby confirm that b	by resolution of the board taken on				
	(date), Mr/Ms		, acting in the capacity of				
		, was authorised to sig	n all documents in connection with this tender				
offer and any o	contract resulting from it	t on behalf of the compar	ny.				
Signed		Date					
Name		Position	Chairman of the Board of Directors				

Enquiry: SIM22022CIDB / ERAC-RCB-39788

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at





B. Certificate for Partnership

We, the undersigned, being t	he key partners in the	business trading as			_
here	by authorise Mr/Ms		actir	ng in	the
capacity of		, to sign all doo	cuments in connection	with the t	ender
offer for Contract		and any contra	ct resulting from it on	our behal	f.
Name	Address		Signature	Date	

NOTE: This certificate is to be completed and signed by the full number of Partners necessary to commit the Partnership. Attach additional pages if more space is required.

Enquiry: SIM22022CIDB / ERAC-RCB-39788

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay



C. Certificate for Joint Venture

We, the undersigned, are submitting t	this tender offer in Join	t Venture and hereby authorise Mr/Ms
	, an authorised sign	atory of the company
	, acting in the cap	acity of lead partner, to sign all documents in
connection with the tender offer for Co	ontract	and any contract resulting from it on
our behalf.		
This authorisation is evidenced by the the partners to the Joint Venture.	attached power of atto	rney signed by legally authorised signatories of all
that all partners are liable jointly and	severally for the exec	enture agreement which incorporates a statement ution of the contract and that the lead partner is nts and be responsible for the entire execution of
Name of firm	Address	Authorising signature, name (in caps) and capacity

Enquiry: SIM22022CIDB / ERAC-RCB-39788

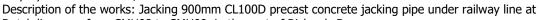


Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay

D. Certificate for Sole Proprietor

I,	 hereby c	onfirm	that :	I am	the	sole	owner	of the	business	į
trading as										
Signed	Date									
Nama	D:ti.:		-I- D.							
Name	Position	50	ole Pro	opriet	or.					

Enquiry: SIM22022CIDB / ERAC-RCB-39788





Dutch line area from SMH08 to SMH09, in the port of Richards Bay

T2.2-11: Record of Addenda to Tender Documents

This schedule as submitted confirms that the following communications received from the *Employer* before the submission of this tender offer, amending the tender documents, have been taken into account in this specific tender offer:

	Date	Title or Details				
1						
2						
3						
4						
5						
6						
7						
8						
9						
Attach additional pages if more space is required.						
Signe		Date				
Name	e	Position				
Tenderer						

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

Dutch line area from SMH08 to SMH09, in the port of Richards Bay



T2.2-12: Broad-Based Black Economic Empowerment (B-BBEE)

As explained in more detail in the B-BBEE Preference Points Claim Form in Section 8 and as prescribed in terms of the Preferential Procurement Policy Framework Act (PPPFA), Act 5 of 2000 and its Regulations, Respondents are to note that Transnet will award preference points to companies who provide valid proof of their B-BBEE status using either the latest version of the generic Codes of Good Practice or Sector Specific Codes (if applicable).

The value of this bid is estimated to be below R50 000 000 (all applicable taxes included); and therefore the 80/20 system shall be applicable. Despite the stipulated preference point system, Transnet shall use the lowest acceptable bid to determine the applicable preference point system in a situation where all received acceptable bids are received outside the stated preference point system.

Respondents are required to complete [the B-BBEE Preference Point Claim Form] and submit it together with valid proof of their B-BBEE Status as stipulated in the Claim Form in order to obtain preference points for their B-BBEE status. Respondents are required at all times to comply with the latest B-BBEE legislation and/or instruction notes as issued from time to time by the DTI.

1. B-BBEE Joint Ventures or Consortiums

Respondents who would wish to respond to this RFP as a Joint Venture [JV] or consortium with B-BBEE entities, must state their intention to do so in their RFP submission. Such Respondents must also submit a signed JV or consortium agreement between the parties clearly stating the percentage [%] split of business and the associated responsibilities of each party. If such a JV or consortium agreement is unavailable, the partners must submit confirmation in writing of their intention to enter into a JV or consortium agreement should they be awarded business by Transnet through this RFP process. This written confirmation must clearly indicate the percentage [%] split of business and the responsibilities of each party. In such cases, award of business will only take place once a signed copy of a JV or consortium agreement is submitted to Transnet.

Respondents are to note the requirements for B-BBEE compliance of JVs or consortiums as required by Section 8 [the B-BBEE Preference Point Claim Form] and submit it together with proof of their B-BBEE Status as stipulated in the Claim Form in order to obtain preference points for their B-BBEE status.

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Enquiry: SIM22022CIDB / ERAC-RCB-39788

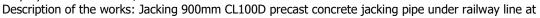


Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

Dutch line area from SMH08 to SMH09, in the port of Richards Bay

Note: Failure to submit a valid and original B-BBEE certificate for the JV or a certified copy thereof at the Closing Date of this RFP will result in a score of zero being allocated for B-BBEE.

Signed	Date
Name	Position
Tenderer	



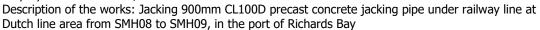


Dutch line area from SMH08 to SMH09, in the port of Richards Bay

Attached to this schedule is the Letter/s of Good Standing.

T2.2-13 Letter/s of Good Standing with the Workmen's compensation Fund

1.
2.
3.
4.
Name of Common (March and of Jaint Vantaura
Name of Company/Members of Joint Venture:





T2.2-15: Availability of Equipment and Other Resources

The Tenderer to submit a list of all Equipment and other resources that will be used to execute the *works* as described in the Works Information.

Equipment Type and Availability – Description	Hourly Rate	Number of Equipment	Details of Ownership
Signed	Date		
Name	Position		
Tenderer	•		

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Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

Dutch line area from SMH08 to SMH09, in the port of Richards Bay



T2.2-16: ANNEX G Compulsory Enterprise Questionnaire

The following particulars hereunder must be furnished.

In the case of a Joint Venture, separate enterprise questionnaires in respect of each partner/member must be completed and submitted.

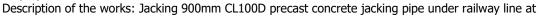
Section 1: Section 2: Section 3:	Section 2: VAT registration number, if any: Section 3: CIDB registration number, if any:					
Section 4: CSD number: Section 5: Particulars of sole proprietors and partners in partnerships						
Name		Identity number	Personal income tax number			
* Complete	only if sole proprie	etor or partnership and attach s	eparate page if more than 3 partners			
Section 6: Particulars of companies and close corporations						
Company registration number						
Close corporation number						
Tax reference number:						
Section 7: tender requ		BD4 must be completed for	each tender and be attached as a			
Section 8: The attached SBD 6 must be completed for each tender and be attached as a						

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise:

- i) authorizes the Employer to obtain a tax clearance certificate from the South African Revenue Services that my / our tax matters are in order;
- ii) confirms that the neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise

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Enquiry: SIM22022CIDB / ERAC-RCB-39788





Dutch line area from SMH08 to SMH09, in the port of Richards Bay

- appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004;
- iii) confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;
- iv) confirms that I / we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest; and
- v) confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

Signed	Date	
Name	Position	
Enterprise name		

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

Dutch line area from SMH08 to SMH09, in the port of Richards Bay



SBD 6.1

PREFERENCE POINTS CLAIM FORM

This preference form must form part of all bids invited. It contains general information and serves as a claim for preference points for Broad-Based Black Economic Empowerment [**B-BBEE**] Status Level of Contribution.

Transnet will award preference points to companies who provide valid proof of their B-BBEE status using either the latest version of the generic Codes of Good Practice or Sector Specific Codes (if applicable).

1. GENERAL CONDITIONS

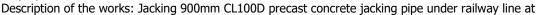
- 1.1 The following preference point systems are applicable to all bids:
 - the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included);
- 1.2 The value of this bid is estimated to not exceed R50 000 000 (all applicable taxes included) and therefore the 80/20 preference point system shall be applicable. Despite the stipulated preference point system, Transnet shall use the lowest acceptable bid to determine the applicable preference point system in a situation where all received acceptable bids are received outside the stated preference point system.
- 1.3 Preference points for this bid shall be awarded for:
 - (a) Price; and
 - (b) B-BBEE Status Level of Contribution.
- 1.4 The maximum points for this bid are allocated as follows:

	POINTS
PRICE	80
B-BBEE STATUS LEVEL OF CONTRIBUTION	20
Total points for Price and B-BBEE must not exceed	100

- 1.5 Failure on the part of a bidder to submit proof of B-BBEE status level of contributor together with the bid will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.
- 1.6 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

2. **DEFINITIONS**

(a) "all applicable taxes" includes value-added tax, pay as you earn, income tax,







unemployment insurance fund contributions and skills development levies;

- (b) **"B-BBEE"** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- (c) "B-BBEE status level of contributor" means the B-BBEE status received by a measured entity based on its overall performance using the relevant scorecard contained in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- (d) "bid" means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the supply/provision of services, works or goods, through price quotations, advertised competitive bidding processes or proposals;
- (e) **"Broad-Based Black Economic Empowerment Act"** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (f) **"EME"** means an Exempted Micro Enterprise as defines by Codes of Good Practice under section 9 (1) of the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (g) **"functionality"** means the ability of a bidder to provide goods or services in accordance with specification as set out in the bid documents
- (h) "Price" includes all applicable taxes less all unconditional discounts.
- (i) "Proof of B-BBEE Status Level of Contributor"
 - i) the B-BBBEE status level certificate issued by an authorised body or person;
 - ii) a sworn affidavit as prescribed by the B-BBEE Codes of Good Practice; or
 - iii) any other requirement prescribed in terms of the B-BBEE Act.
- (j) "QSE" means a Qualifying Small Enterprise as defines by Codes of Good Practice under section 9 (1) of the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (k) **"rand value"** means the total estimated value of a contract in South African currency, calculated at the time of bid invitations, and includes all applicable taxes and excise duties.

3. POINTS AWARDED FOR PRICE

3.1 THE 80/20 PREFERENCE POINT SYSTEMS

A maximum of 80 points is allocated for price on the following basis: 80/20

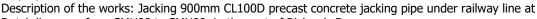
$$Ps = 80 \left(1 - \frac{Pt - P\min}{P\min} \right)$$

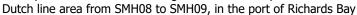
Where

Ps = Points scored for comparative price of bid under consideration

Pt = Comparative price of bid under consideration

Pmin = Comparative price of lowest acceptable bid







4. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTION

4.1 preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

B-BBEE Status Level of Contributor	Number of points (80/20 system)
1	20
2	18
3	14
4	12
5	8
6	6
7	4
8	2
Non-compliant contributor	0

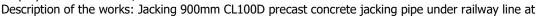
4.2 The table below indicates the required proof of B-BBEE status depending on the category of enterprises:

Enterprise	B-BBEE Certificate & Sworn Affidavit
Large	Certificate issued by SANAS accredited verification agency
QSE	Certificate issued by SANAS accredited verification agency Sworn Affidavit signed by the authorised QSE representative and attested by a Commissioner of Oaths confirming annual turnover and black ownership (only black-owned QSEs - 51% to 100% Black owned) [Sworn affidavits must substantially comply with the format that can be obtained on the DTI's website at www.dti.gov.za/economic empowerment/bee codes.jsp.]
EME ¹	Sworn Affidavit signed by the authorised EME representative and attested by a Commissioner of Oaths confirming annual turnover and black ownership Certificate issued by CIPC (formerly CIPRO) confirming annual turnover and black ownership Certificate issued by SANAS accredited verification agency only if the EME is being measured on the QSE scorecard

4.3 A trust, consortium or joint venture (including unincorporated consortia and joint ventures) must submit a consolidated B-BBEE Status Level verification certificate for every separate bid.

¹ In terms of the Implementation Guide: Preferential Procurement Regulations, 2017, Version 2, paragraph 11.11 provides that in the Transport Sector, EMEs can provide a letter from accounting officer or get verified and be issued with a B-BBEE certificate by SANAS accredited professional or agency as the Transport Sector Code has not been aligned to the generic Codes. EMEs in the Transport Sector are not allowed to provide a sworn affidavit as the generic codes are not applicable to them.

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Dutch line area from SMH08 to SMH09, in the port of Richards Bay



- 4.4 Tertiary Institutions and Public Entities will be required to submit their B-BBEE status level certificates in terms of the specialized scorecard contained in the B-BBEE Codes of Good Practice.
- 4.5 A person will not be awarded points for B-BBEE status level if it is indicated in the bid documents that such a bidder intends sub-contracting more than 25% of the value of the contract to any other enterprise that does not qualify for at least the points that such a bidder qualifies for, unless the intended sub-contractor is an EME that has the capability and ability to execute the sub-contract.
- 4.6 A person awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.
- 4.7 Bidders are to note that the rules pertaining to B-BBEE verification and other B-BBEE requirements may be changed from time to time by regulatory bodies such as National Treasury or the DTI. It is the Bidder's responsibility to ensure that his/her bid complies fully with all B-BBEE requirements at the time of the submission of the bid.

5. BID DECLARATION

5.1 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

6. B-BBEE STATUS LEVEL OF CONTRIBUTION CLAIMED IN TERMS OF PARAGRAPHS 1.4 AND 6.1

6.1 B-BBEE Status Level of Contribution: . =(maximum of 20 points)

(Points claimed in respect of paragraph 6.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of contributor.

7. SUB-CONTRACTING

7.1 Will any portion of the contract be sub-contracted?

(Tick applicable box)

Υ	NO	
Е		
S		

7.1.1 If yes, indicate:

i١	What percentage of the contract will be subcontracted	0/	۲
1)	What belieflage of the contract will be subcontracted	. 7/	u

ii) The name of the sub-contractor......

iii) The B-BBEE status level of the sub-contractor.....

iv) Whether the sub-contractor is an EME or QSE.

(Tick applicable box)

	,	
YES	NO	

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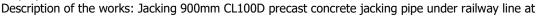
Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

Dutch line area from SMH08 to SMH09, in the port of Richards Bay

		-	1
8.	DECLARATION WITH REGARD TO COMPANY/FIRM		
8.1	Name of company/firm:		
8.2	VAT registration number:		
8.3	Company registration number:		
8.4	TYPE OF COMPANY/ FIRM		
	 □ Partnership/Joint Venture / Consortium □ One person business/sole propriety □ Close corporation □ Company □ (Pty) Limited [TICK APPLICABLE BOX] 		
8.5	DESCRIBE PRINCIPAL BUSINESS ACTIVITIES		
8.6	COMPANY CLASSIFICATION		
	 Manufacturer Supplier Professional Supplier/Service provider Other Suppliers/Service providers, e.g. transporter, etc. [TICK APPLICABLE BOX] 		
8 7	Total number of years the company/firm has been in husiness:		

- 8.7 Total number of years the company/firm has been in business:.....
- 8.8 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contribution indicated in paragraphs 1.4 and 6.1 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:
 - i) The information furnished is true and correct;

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Dutch line area from SMH08 to SMH09, in the port of Richards Bay



- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraph 1.4 and 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- iv) If a bidder submitted false information regarding its B-BBEE status level of contributor,, which will affect or has affected the evaluation of a bid, or where a bidder has failed to declare any subcontracting arrangements or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have
 - (a) disqualify the person from the bidding process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) if the successful bidder subcontracted a portion of the bid to another person without disclosing it, Transnet reserves the right to penalise the bidder up to 10 percent of the value of the contract;
 - (e) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the audi alteram partem (hear the other side) rule has been applied; and
 - (f) forward the matter for criminal prosecution.

WITNESSES 1	SIGNATURE(S) OF BIDDERS(S) DATE:
2	ADDRESS

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at



YES/NO

TRANSNET

Dutch line area from SMH08 to SMH09, in the port of Richards Bay

BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

2. Bidder's declaration

2.2

- 2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest2 in the enterprise, employed by the state? YES/NO
- If so, furnish particulars of the names, individual identity numbers, and, if applicable, state 2.1.1 employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

2.2.1	employed by the procuring institution? YES/NO If so, furnish particulars:
2.3	Does the bidder or any of its directors / trustees / shareholders / members / partners or any person
	having a controlling interest in the enterprise have any interest in any other related enterprise

Do you, or any person connected with the bidder, have a relationship with any person who is

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whether or not they are bidding for this contract?

² the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

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Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

Dutch line area from SMH08 to SMH09, in the port of Richards Bay



2.3.1	If so, furnish particulars:

3 DECLARATION

I, the undersigned, (name)...... in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

- 3.1 I have read and I understand the contents of this disclosure:
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium3 will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT. I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

-

³ Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

Enquiry: SIM22022CIDB / ERAC-RCB-39788



Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay

Signature	Date
Position	Name of bidder

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

Dutch line area from SMH08 to SMH09, in the port of Richards Bay

T2.2-17: Supplier Code of Conduct

Transnet SOC Limited aims to achieve the best value for money when buying or selling goods and obtaining services. This however must be done in an open and fair manner that supports and drives a competitive economy. Underpinning our process are several acts and policies that any supplier dealing with Transnet must understand and support. These are:

TRANSNET

- The Transnet Procurement Policy A guide for Tenderers.
- Section 217 of the Constitution the five pillars of Public PSCM (Procurement and Supply Chain Management): fair, equitable, transparent, competitive and cost effective;
- The Public Finance Management Act (PFMA);
- The Broad Based Black Economic Empowerment Act (BBBEE)
- The Prevention and Combating of Corrupt Activities Act (PRECCA); and
- The Construction Industry Development Board Act (CIDB Act).

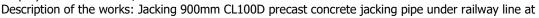
This code of conduct has been included in this contract to formally appraise Transnet Suppliers of Transnet's expectations regarding behaviour and conduct of its Suppliers.

Prohibition of Bribes, Kickbacks, Unlawful Payments, and Other Corrupt Practices

Transnet is in the process of transforming itself into a self-sustaining State Owned Enterprise, actively competing in the logistics industry. Our aim is to become a world class, profitable, logistics organisation. As such, our transformation is focused on adopting a performance culture and to adopt behaviours that will enable this transformation.

1. Transnet SOC Limited will not participate in corrupt practices. Therefore, it expects its suppliers to act in a similar manner.

- Transnet and its employees will follow the laws of this country and keep accurate business records that reflect actual transactions with, and payments to, our suppliers.
- Employees must not accept or request money or anything of value, directly or indirectly, from suppliers.
- Employees may not receive anything that is calculated to:
 - Illegally influence their judgement or conduct or to ensure the desired outcome of a sourcing activity;



Dutch line area from SMH08 to SMH09, in the port of Richards Bay



- Win or retain business or to influence any act or decision of any person involved in sourcing decisions; or
- Gain an improper advantage.
- There may be times when a supplier is confronted with fraudulent or corrupt behaviour of Transnet employees. We expect our Suppliers to use our "Tip-offs Anonymous" Hot line to report these acts. (0800 003 056).

2. Transnet SOC Limited is firmly committed to the ideas of free and competitive enterprise.

- Suppliers are expected to comply with all applicable laws and regulations regarding fair competition and antitrust practices.
- Transnet does not engage with non-value adding agents or representatives solely for the purpose of increasing BBBEE spend (fronting).

3. Transnet's relationship with suppliers requires us to clearly define requirements, to exchange information and share mutual benefits.

- Generally, suppliers have their own business standards and regulations. Although Transnet cannot control the actions of our suppliers, we will not tolerate any illegal activities. These include, but are not limited to:
 - Misrepresentation of their product (origin of manufacture, specifications, intellectual property rights, etc);
 - Collusion;
 - Failure to disclose accurate information required during the sourcing activity (ownership, financial situation, BBBEE status, etc.);
 - Corrupt activities listed above; and
 - Harassment, intimidation or other aggressive actions towards Transnet employees.
- Suppliers must be evaluated and approved before any materials, components, products or services
 are purchased from them. Rigorous due diligence is conducted and the supplier is expected to
 participate in an honest and straight forward manner.
- Suppliers must record and report facts accurately, honestly and objectively. Financial records must be accurate in all material respects.

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Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

Dutch line area from SMH08 to SMH09, in the port of Richards Bay



Conflicts of Interest

A conflict of interest arises when personal interests or activities influence (or appear to influence) the ability to act in the best interests of Transnet SOC Limited.

- Doing business with family members.
- Having a financial interest in another company in our industry

Where possible, contracts will be negotiated to include the above in the terms of such contracts. To the extent such terms are not included in contractual obligations and any of the above code is breached, then Transnet reserves its right to review doing business with these suppliers.

I,	of
(insert name of Director or as per Authority Resolution from Board of Directors)	(insert name of Company)
hereby acknowledge having read, understood and agree Supplier Code of Conduct."	e to the terms and conditions set out in the "Transnet
Signed this on day at	
Signature	

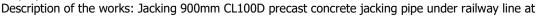
Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

Dutch line area from SMH08 to SMH09, in the port of Richards Bay



T2.2-18: Unilateral Non-Disclosure Agreement

Note to tenderers: This Non-Disclosure Agreement is to be completed and signed by an authorised
signatory:
THIS AGREEMENT is made effective as of day of
TRANSNET SOC LTD
(Registration No. 1990/000900/30), a company incorporated and existing under the laws of South Africa, having its principal place of business at 2nd Floor, Waterfall Business Estate, 9 Country Estate Drive, Midrand, 1662 South Africa
and
(Registration No),a private company incorporated and existing under the laws of South Africa having its principal place of business at
WHEREAS
Transnet and the Company wish to exchange Information [as defined below] and it is envisaged that each party may from time to time receive Information relating to the other in respect thereof. In consideration of each party making available to the other such Information, the parties jointly agree that any dealings between then shall be subject to the terms and conditions of this Agreement which themselves will be subject to the parameters of the Tender Document.
IT IS HEREBY AGREED
1. INTERPRETATION In this Agreement:
1.1 Agents mean directors, officers, employees, agents, professional advisers, contractors or sub contractors, or any Group member;
Bid or Bid Document (hereinafter Tender) means Transnet's Request for Information [RFI] Request for Proposal [RFP] or Request for Quotation [RFQ], as the case may be;



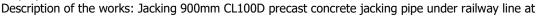
Dutch line area from SMH08 to SMH09, in the port of Richards Bay



- Confidential Information means any information or other data relating to one party [the Disclosing Party] and/or the business carried on or proposed or intended to be carried on by that party and which is made available for the purposes of the Bid to the other party [the Receiving Party] or its Agents by the Disclosing Party or its Agents or recorded in agreed minutes following oral disclosure and any other information otherwise made available by the Disclosing Party or its Agents to the Receiving Party or its Agents, whether before, on or after the date of this Agreement, and whether in writing or otherwise, including any information, analysis or specifications derived from, containing or reflecting such information but excluding information which:
- 1.3.1 is publicly available at the time of its disclosure or becomes publicly available [other than as a result of disclosure by the Receiving Party or any of its Agents contrary to the terms of this Agreement]; or
- 1.3.2 was lawfully in the possession of the Receiving Party or its Agents [as can be demonstrated by its written records or other reasonable evidence] free of any restriction as to its use or disclosure prior to its being so disclosed; or
- 1.3.3 following such disclosure, becomes available to the Receiving Party or its Agents [as can be demonstrated by its written records or other reasonable evidence] from a source other than the Disclosing Party or its Agents, which source is not bound by any duty of confidentiality owed, directly or indirectly, to the Disclosing Party in relation to such information;
- 1.4 **Group** means any subsidiary, any holding company and any subsidiary of any holding company of either party; and
- **Information** means all information in whatever form including, without limitation, any information relating to systems, operations, plans, intentions, market opportunities, know-how, trade secrets and business affairs whether in writing, conveyed orally or by machine-readable medium.

2. **CONFIDENTIAL INFORMATION**

- 2.1 All Confidential Information given by one party to this Agreement [the **Disclosing Party**] to the other party [the **Receiving Party**] will be treated by the Receiving Party as secret and confidential and will not, without the Disclosing Party's written consent, directly or indirectly communicate or disclose [whether in writing or orally or in any other manner] Confidential Information to any other person other than in accordance with the terms of this Agreement.
- 2.2 The Receiving Party will only use the Confidential Information for the sole purpose of technical and commercial discussions between the parties in relation to the Tender or for the subsequent performance of any contract between the parties in relation to the Tender.
- 2.3 Notwithstanding clause 2.1 above, the Receiving Party may disclose Confidential Information:



Dutch line area from SMH08 to SMH09, in the port of Richards Bay

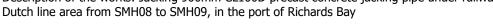


- 2.3.1 to those of its Agents who strictly need to know the Confidential Information for the sole purpose set out in clause 2.2 above, provided that the Receiving Party shall ensure that such Agents are made aware prior to the disclosure of any part of the Confidential Information that the same is confidential and that they owe a duty of confidence to the Disclosing Party. The Receiving Party shall at all times remain liable for any actions of such Agents that would constitute a breach of this Agreement; or
- 2.3.2 to the extent required by law or the rules of any applicable regulatory authority, subject to clause 2.4 below.
- 2.4 In the event that the Receiving Party is required to disclose any Confidential Information in accordance with clause 2.3.2 above, it shall promptly notify the Disclosing Party and cooperate with the Disclosing Party regarding the form, nature, content and purpose of such disclosure or any action which the Disclosing Party may reasonably take to challenge the validity of such requirement.
- In the event that any Confidential Information shall be copied, disclosed or used otherwise than as permitted under this Agreement then, upon becoming aware of the same, without prejudice to any rights or remedies of the Disclosing Party, the Receiving Party shall as soon as practicable notify the Disclosing Party of such event and if requested take such steps [including the institution of legal proceedings] as shall be necessary to remedy [if capable of remedy] the default and/or to prevent further unauthorised copying, disclosure or use.
- 2.6 All Confidential Information shall remain the property of the Disclosing Party and its disclosure shall not confer on the Receiving Party any rights, including intellectual property rights over the Confidential Information whatsoever, beyond those contained in this Agreement.

3. RECORDS AND RETURN OF INFORMATION

- 3.1 The Receiving Party agrees to ensure proper and secure storage of all Information and any copies thereof.
- 3.2 The Receiving Party shall keep a written record, to be supplied to the Disclosing Party upon request, of the Confidential Information provided and any copies made thereof and, so far as is reasonably practicable, of the location of such Confidential Information and any copies thereof.
- 3.3 The Company shall, within 7 [seven] days of receipt of a written demand from Transnet:
- 3.3.1 return all written Confidential Information [including all copies]; and
- 3.3.2 expunge or destroy any Confidential Information from any computer, word processor or other device whatsoever into which it was copied, read or programmed by the Company or on its behalf.
- 3.4 The Company shall on request supply a certificate signed by a director as to its full compliance with the requirements of clause 3.3.2 above.

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at





4. **ANNOUNCEMENTS**

4.1 Neither party will make or permit to be made any announcement or disclosure of its prospective interest in the Tender without the prior written consent of the other party.

4.2 Neither party shall make use of the other party's name or any information acquired through its dealings with the other party for publicity or marketing purposes without the prior written consent of the other party.

5. **DURATION**

The obligations of each party and its Agents under this Agreement shall survive the termination of any discussions or negotiations between the parties regarding the Tender and continue thereafter for a period of 5 [five] years.

6. **PRINCIPAL**

Each party confirms that it is acting as principal and not as nominee, agent or broker for any other person and that it will be responsible for any costs incurred by it or its advisers in considering or pursuing the Tender and in complying with the terms of this Agreement.

7. **ADEQUACY OF DAMAGES**

Nothing contained in this Agreement shall be construed as prohibiting the Disclosing Party from pursuing any other remedies available to it, either at law or in equity, for any such threatened or actual breach of this Agreement, including specific performance, recovery of damages or otherwise.

8. PRIVACY AND DATA PROTECTION

The Receiving Party undertakes to comply with South Africa's general privacy protection in terms 8.1 Section 14 of the Bill of Rights in connection with this Tender and shall procure that its personnel shall observe the provisions of such Act [as applicable] or any amendments and re-enactments thereof and any regulations made pursuant thereto.

8.2 The Receiving Party warrants that it and its Agents have the appropriate technical and organisational measures in place against unauthorised or unlawful processing of data relating to the Tender and against accidental loss or destruction of, or damage to such data held or processed by them.

9. **GENERAL**

9.1 Neither party may assign the benefit of this Agreement, or any interest hereunder, except with the prior written consent of the other, save that Transnet may assign this Agreement at any time to any member of the Transnet Group.

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Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

Dutch line area from SMH08 to SMH09, in the port of Richards Bay

- 9.2 No failure or delay in exercising any right, power or privilege under this Agreement will operate as a waiver of it, nor will any single or partial exercise of it preclude any further exercise or the exercise of any right, power or privilege under this Agreement or otherwise.
- 9.3 The provisions of this Agreement shall be severable in the event that any of its provisions are held by a court of competent jurisdiction or other applicable authority to be invalid, void or otherwise unenforceable, and the remaining provisions shall remain enforceable to the fullest extent permitted by law.
- 9.4 This Agreement may only be modified by a written agreement duly signed by persons authorised on behalf of each party.
- 9.5 Nothing in this Agreement shall constitute the creation of a partnership, joint venture or agency between the parties.
- 9.6 This Agreement will be governed by and construed in accordance with South African law and the parties irrevocably submit to the exclusive jurisdiction of the South African courts.

Signed	Date
Name	Position
Tenderer	

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

Dutch line area from SMH08 to SMH09, in the port of Richards Bay



T2.2-19: Supplier declaration form

Respondents are to furnish the following documentation and complete the Supplier Declaration Form below:

- 1. **Original or certified** cancelled cheque **OR** letter from the Respondent's bank verifying banking details [with bank stamp]
- 2. **Certified copy** of Identity Document(s) of Shareholders/Directors/Members [where applicable]
- 3. **Certified copy** of Certificate of Incorporation, CM29 / CM9 [name change]
- 4. **Certified copy** of Share Certificates [CK1/CK2 if CC]
- 5. Original or certified letterhead confirm physical and postal addresses
- 6. **Original or certified** valid SARS Tax Clearance Certificate [RSA entities only]
- **7. Certified copy** of VAT Registration Certificate [RSA entities only]
- 8. A signed letter from your entity's auditor or accountant confirming most recent annual turnover figures or certified BBBEE certificate
- 9. **Certified copy** of valid Company Registration Certificate *[if applicable]*

Note: No contract shall be awarded to any South African Respondent whose tax matters have not been declared by SARS to be in order.

Note: No agreement shall be awarded to any Respondent whose tax matters have not been declared by SARS to be in order.

Company Tradin	g Name							
Company Registe	ered Name							
Company Registr	ration Number	Or ID Number	f A Sc	le Prop	rietor			
Form of entity	CC	Trust	Pty L	_td	Limited	Partnershi	p So	e Proprietor
VAT number (if r	registered)							
Company Teleph	one Number							
Company Fax Nu	ımber							
Company E-Mail	Address							
Company Websit	e Address							
Bank Name				Bank A	Account			
				Numb	er			
5								
Postal Address							Code	
Physical							Code	
Address							Code	
Contact Person								
Designation								
Telephone								

Enquiry: SIM22022CIDB / ERAC-RCB-39788



Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay

Email								
Annual Turnover Range (Last Financial Year)		< R5 Millio	on	R5-35 million		> R35 million		
Does Your Compar	ny Provide		Products		Services		Both	
Area Of Delivery			National		Provincial		Local	
Is Your Company A	A Public Or	Private Entity	•		Public		Private	
Does Your Compar	ny Have A	Tax Directive (Or IRP30 Cer	tificate	Yes		No	
Main Product Or Se	ervice Supp	olied (E.G.: Sta	tionery/Cons	sulting)		•		•
BEE Ownership De	tails							
% Black won Ownership ownership			men		% Disabled po		ı/s	
Does your compan	y have a E	BEE certificate		Yes		No		
What is your broad	d based BE	E status (Leve	el 1 to 9 / Un	known)			_	
How many personi	nel does th	ne firm employ	Perr	nanent		Part time	2	
Transnet Contact F	Person							
Contact number								
Transnet operating	g division							
Duly Authorised To	Sign For	And On Behalf	f Of Firm / O	rganisat	ion			
Name					Designation			
Signature					Date			
Stamp And Signatu	ure Of Con	nmissioner Of	Oath					
Name					Date			
Signature			Telephone No.					

Enquiry: SIM22022CIDB / ERAC-RCB-39788

 $\hbox{Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under $\operatorname{railway}$ line at $\operatorname{long}(G_{1})$ and $\operatorname{long}(G_{2})$ are sufficiently concrete jacking pipe under $\operatorname{railway}$ line at $\operatorname{long}(G_{2})$ and $\operatorname{long}(G_{2})$ are sufficiently concrete jacking pipe under $\operatorname{railway}$ line at $\operatorname{long}(G_{2})$ are sufficiently concrete jacking pipe under $\operatorname{long}(G_{2})$ are sufficiently concrete jacking pipe$

Dutch line area from SMH08 to SMH09, in the port of Richards Bay



T2.2-20: RFQ declaration form

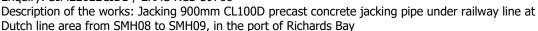
NAN We	ME OF COMPANY: do hereby certify that:	
1.	Transnet has supplied and we have received appropriate tender offers to any/all questions which were submitted by ourselves for tender clarification purposes;	(as applicable)
2.	we have received all information we deemed necessary for the completion of this Tender;	
3.	at no stage have we received additional information relating to the subject matter of the Transnet sources, other than information formally received from the designated Transnet nominated in the tender documents;	
4.	we are satisfied, insofar as our company is concerned, that the processes and procedur Transnet in issuing this tender and the requirements requested from tenderers in resp tender have been conducted in a fair and transparent manner; and	
5.	furthermore, we acknowledge that a direct relationship exists between a family member are / member / director / partner / shareholder (unlisted companies) of our company and a board member of the Transnet Group as indicated below: [Respondent to indicate if this applicable] FULL NAME OF OWNER/MEMBER/DIRECTOR/PARTNER/SHAREHOLDER: ADDRESS:	n employee or
	Indicate nature of relationship with Transnet:	

[Failure to furnish complete and accurate information in this regard may lead to the disqualification of your response and may preclude a Respondent from doing future business with Transnet]

We declare, to the extent that we are aware or become aware of any relationship between ourselves and Transnet (other than any existing and appropriate business relationship with Transnet) which could unfairly advantage our company in the forthcoming adjudication process, we shall notify Transnet immediately in writing of such circumstances.

6. We accept that any dispute pertaining to this tender will be resolved through the Ombudsman process and will be subject to the Terms of Reference of the Ombudsman. The

Enquiry: SIM22022CIDB / ERAC-RCB-39788





Ombudsman process must first be exhausted before judicial review of a decision is sought. (Refer "Important Notice to respondents" below).

- 7. We further accept that Transnet reserves the right to reverse a tender award or decision based on the recommendations of the Ombudsman without having to follow a formal court process to have such award or decision set aside.
- We have acquainted ourselves and agree with the content of T2.2-39 "Service Provider Integrity Pact".

For and on behalf of
duly authorised thereto
Name:
Signature:
Date:

IMPORTANT NOTICE TO TENDERERS

- Transnet has appointed a Procurement Ombudsman to investigate any <u>material complaint</u> in respect of tenders exceeding R5,000,000.00 (five million S.A. Rand) in value. Should a Tenderer have any material concern regarding an tender process which meets this value threshold, a complaint may be lodged with Transnet's Procurement Ombudsman for further investigation.
- It is incumbent on the Tenderer to familiarise himself/herself with the Terms of Reference for the Transnet Procurement Ombudsman, details of which are available for review at Transnet's website www.transnet.net.
- An official complaint form may be downloaded from this website and submitted, together with any
 supporting documentation, within the prescribed period, to procurement.ombud@transnet.net
- For transactions below the R5,000,000.00 (five million S.A. Rand) threshold, a complaint may be lodged with the Chief Procurement Officer of the relevant Transnet Operating Division.
- All Tenderers should note that a complaint must be made in good faith. If a complaint is made in bad faith, Transnet reserves the right to place such a tenderer on its List of Excluded Bidders.

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

Dutch line area from SMH08 to SMH09, in the port of Richards Bay



T2.2-21 Certificate of Acquaintance with Tender Documents

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1. By signing this certificate I/we acknowledge that I/we have made myself/ourselves thoroughly familiar with, and agree with all the conditions governing this RFP. This includes those terms and conditions of the Contract, the Supplier Integrity Pact, Non-Disclosure Agreement etc. contained in any printed form

stated to form part of the documents thereof, but not limited to those listed in this clause.

2. I/we furthermore agree that Transnet SOC Ltd shall recognise no claim from me/us for relief based on an allegation that I/we overlooked any tender/contract condition or failed to take it into account for the

purpose of calculating my/our offered prices or otherwise.

3. I/we understand that the accompanying Tender will be disqualified if this Certificate is found not to be

true and complete in every respect.

4. For the purposes of this Certificate and the accompanying Tender, I/we understand that the word "competitor" shall include any individual or organisation, other than the Tenderer, whether or not

affiliated with the Tenderer, who:

a) has been requested to submit a Tender in response to this Tender invitation;

b) could potentially submit a Tender in response to this Tender invitation, based on their

qualifications, abilities or experience; and

c) provides the same Services as the Tenderer and/or is in the same line of business as the

Tenderer

5. The Tenderer has arrived at the accompanying Tender independently from, and without consultation,

communication, agreement or arrangement with any competitor. However communication between

partners in a joint venture or consortium will not be construed as collusive Tendering.

6. In particular, without limiting the generality of paragraph 5 above, there has been no consultation,

communication, agreement or arrangement with any competitor regarding:

a) prices;

b) geographical area where Services will be rendered [market allocation]

c) methods, factors or formulas used to calculate prices;

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Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

Dutch line area from SMH08 to SMH09, in the port of Richards Bay

- d) the intention or decision to submit or not to submit, a Tender;
- the submission of a tender which does not meet the specifications and conditions of the tender; e) or
- f) Tendering with the intention not winning the tender.
- 7. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the Services to which this tender relates.
- 8. The terms of the accompanying tender have not been, and will not be, disclosed by the Tenderer, directly or indirectly, to any competitor, prior to the date and time of the official tender opening or of the awarding of the contract.
- 9. I/We am/are aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to tenders and contracts, tenders that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and/or may be reported to the National Prosecuting Authority [NPA] for criminal investigation. In addition, Tenderers that submit suspicious tenders may be restricted from conducting business with the public sector for a period not exceeding 10 [ten] years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

Signed on this	(day of _		 _20
			_	
SIGNATURE OF	TENDER	ER		

 $\hbox{Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at }$

Dutch line area from SMH08 to SMH09, in the port of Richards Bay



T2.2-22 Service Provider Integrity Pact

Important Note: All potential tenderers must read this document and certify in the RFP Declaration Form that that have acquainted themselves with, and agree with the content.

The contract with the successful tenderer will automatically incorporate this Integrity Pact and shall be deemed as part of the final concluded contract.

INTEGRITY PACT

Between

TRANSNET SOC LTD

Registration Number: 1990/000900/30

("Transnet")

and

The Contractor (hereinafter referred to as the "Tenderer/Service Providers/Contractor")

Enquiry: SIM22022CIDB / ERAC-RCB-39788

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

Dutch line area from SMH08 to SMH09, in the port of Richards Bay



PREAMBLE

Transnet values full compliance with all relevant laws and regulations, ethical standards and the principles of economical use of resources, fairness and transparency in its relations with its Tenderers / Service Providers/Contractors.

In order to achieve these goals, Transnet and the Tenderer / Service Provider hereby enter into this agreement hereinafter referred to as the "Integrity Pact" which will form part of the Tenderer's / Service Provider's / Contractor's application for registration with Transnet as a vendor.

The general purpose of this Integrity Pact is to agree on avoiding all forms of dishonesty, fraud and corruption by following a system that is fair, transparent and free from any undue influence prior to, during and subsequent to the currency of any procurement and / or reverse logistics event and any further contract to be entered into between the Parties, relating to such event.

All Tenderers / Service Providers / Contractor's will be required to sign and comply with undertakings contained in this Integrity Pact, should they want to be registered as a Transnet vendor.

OBJECTIVES

Transnet and the Tenderer / Service Provider / Contractor agree to enter into this Integrity Pact, to avoid all forms of dishonesty, fraud and corruption including practices that are anti-competitive in nature, negotiations made in bad faith and under-pricing by following a system that is fair, transparent and free from any influence / unprejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:

- a) Enable Transnet to obtain the desired contract at a reasonable and competitive price in conformity to the defined specifications of the works, goods and services; and
- b) Enable Tenderers / Service Providers / Contractors to abstain from bribing or participating in any corrupt practice in order to secure the contract.

COMMITMENTS OF TRANSNET

Transnet commits to take all measures necessary to prevent dishonesty, fraud and corruption and to observe the following principles:

Transnet hereby undertakes that no employee of Transnet connected directly or indirectly with the sourcing event and ensuing contract, will demand, take a promise for or accept directly or through intermediaries any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the Tenderer, either for themselves or for any person, organisation or third party related to the contract in exchange for an advantage in the tendering process, Tender evaluation, contracting or implementation process related to any contract.

Transnet will, during the registration and tendering process treat all Tenderers / Service Providers with equity, transparency and fairness. Transnet will in particular, before and during the registration process, provide to all Tenderers / Service Providers the same information and will not provide to any Tenderers / Service Providers / Contractors confidential / additional information through which the Tenderers / Service Providers / Contractors could obtain an advantage in relation to any tendering process. Transnet further confirms that its employees will not favour any prospective Tenderer in any form that could afford an undue advantage to a particular Tenderer during the tendering stage, and will further treat all Tenderers / Service Providers / Contractors participating in the tendering process.

Transnet will exclude from the tender process such employees who have any personal interest in the

Tenderers / Service Providers / Contractors participating in the tendering process.

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

Dutch line area from SMH08 to SMH09, in the port of Richards Bay



OBLIGATIONS OF THE TENDERER / SERVICE PROVIDER

The Tenderer / Service Provider / Contractor commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its Tender or during any ensuing contract stage in order to secure the contract or in furtherance to secure it and in particular the Tenderer / Service Provider / Contractor commits to the following:

- a) The Tenderer / Service Provider / Contractor will not, directly or through any other person or firm, offer, promise or give to Transnet or to any of Transnet's employees involved in the tendering process or to any third person any material or other benefit or payment, in order to obtain in exchange an advantage during the tendering process; and
- b) The Tenderer / Service Provider / Contractor will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any employee of Transnet, connected directly or indirectly with the tendering process, or to any person, organisation or third party related to the contract in exchange for any advantage in the tendering, evaluation, contracting and implementation of the contract.

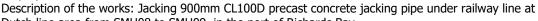
The acceptance and giving of gifts may be permitted provided that:

- a) the gift does not exceed R1 000 (one thousand Rand) in retail value;
- b) many low retail value gifts do not exceed R 1 000 within a 12 month period;
- c) hospitality packages do not exceed R5 000 in value or many low value hospitality packages do not cumulatively exceed R5 000;
- d) a Tenderer / Service Provider does not give a Transnet employee more than 2 (two) gifts within a 12 (twelve) month period, irrespective of value;
- e) a Tenderer / Service Provider does not accept more than 1 (one) gift in excess of R750 (seven hundred and fifty Rand) from a Transnet employee within a 12 (twelve) month period, irrespective of value;
- f) a Tenderer / Service Provider may under no circumstances, accept from or give to, a Transnet employee any gift, business courtesy, including an invitation to a business meal and /or drinks, or hospitality package, irrespective of value, during any Tender evaluation process, including a period of 12 (twelve) months after such tender has been awarded, as it may be perceived as undue and improper influence on the evaluation process or reward for the contract that has been awarded; and
- g) a Tenderer / Service Provider may not offer gifts, goods or services to a Transnet employee at artificially low prices, which are not available to the public at those prices.

The Tenderer / Service Provider / Contractor will not collude with other parties interested in the contract to preclude a competitive Tender price, impair the transparency, fairness and progress of the tendering process, Tender evaluation, contracting and implementation of the contract. The Tenderer / Service Provider further commits itself to delivering against all agreed upon conditions as stipulated within the contract.

The Tenderer / Service Provider / Contractor will not enter into any illegal or dishonest agreement or understanding, whether formal or informal with other Tenderers / Service Providers / Contractors. This applies in particular to certifications, submissions or non-submission of documents or actions that are restrictive or to introduce cartels into the tendering process.

The Tenderer / Service Provider / Contractor will not commit any criminal offence under the relevant anticorruption laws of South Africa or any other country. Furthermore, the Tenderer /Service Provider will not use for illegitimate purposes or for restrictive purposes or personal gain, or pass on to others, any information provided by Transnet as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.





Dutch line area from SMH08 to SMH09, in the port of Richards Bay $\,$

A Tenderer / Service Provider / Contractor of foreign origin shall disclose the name and address of its agents or representatives in South Africa, if any, involved directly or indirectly in the registration or tendering process. Similarly, the Tenderer / Service Provider / Contractor of South African nationality shall furnish the name and address of the foreign principals, if any, involved directly or indirectly in the registration or tendering process.

The Tenderer / Service Provider / Contractor will not misrepresent facts or furnish false or forged documents or information in order to influence the tendering process to the advantage of the Tenderer / Service Provider or detriment of Transnet or other competitors.

The Tenderer / Service Provider / Contractor shall furnish Transnet with a copy of its code of conduct, which code of conduct shall reject the use of bribes and other dishonest and unethical conduct, as well as compliance programme for the implementation of the code of conduct.

The Tenderer / Service Provider / Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

INDEPENDENT TENDERING

For the purposes of that Certificate in relation to any submitted Tender, the Tenderer declares to fully understand that the word "competitor" shall include any individual or organisation, other than the

Tenderer, whether or not affiliated with the Tenderer, who:

- a) has been requested to submit a Tender in response to this Tender invitation;
- b) could potentially submit a Tender in response to this Tender invitation, based on their qualifications, abilities or experience; and
- c) provides the same Goods and Services as the Tenderer and/or is in the same line of business as the Tenderer.

The Tenderer has arrived at his submitted Tender independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium will not be construed as collusive tendering. In particular, without limiting the generality of paragraph 5 above, there has been no consultation,

communication, agreement or arrangement with any competitor regarding:

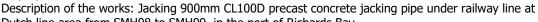
- a) prices;
- b) geographical area where Goods or Services will be rendered [market allocation];
- c) methods, factors or formulas used to calculate prices;
- d) the intention or decision to submit or not to submit, a Tender;
- e) the submission of a Tender which does not meet the specifications and conditions of the RFP; or
- f) tendering with the intention of not winning the Tender.

In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the Goods or Services to which his/her tender relates.

The terms of the Tender as submitted have not been, and will not be, disclosed by the Tenderer, directly or indirectly, to any competitor, prior to the date and time of the official Tender opening or of the awarding of the contract.

Tenderers are aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to Tenders and contracts, Tenders that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and/or may be reported to the National Prosecuting Authority [NPA] for criminal investigation and/or may be restricted from conducting business with the

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Dutch line area from SMH08 to SMH09, in the port of Richards Bay

public sector for a period not exceeding 10 [ten] years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

Should the Tenderer find any terms or conditions stipulated in any of the relevant documents quoted in the Tender unacceptable, it should indicate which conditions are unacceptable and offer alternatives by written submission on its company letterhead, attached to its submitted Tender. Any such submission shall be subject to review by Transnet's Legal Counsel who shall determine whether the proposed alternative(s) are acceptable or otherwise, as the case may be.

Disqualification from Tendering Process

If the Tenderer / Service Provider / Contractor has committed a transgression through a violation of section 3 of this Integrity Pact or in any other form such as to put its reliability or credibility as a Tenderer / Service Provider into question, Transnet may reject the Tenderer's / Service Provider's / Contractor's application from the registration or tendering process and remove the Tenderer / Service Provider from its database, if already registered.

If the Tenderer / Service Provider / Contractor has committed a transgression through a violation of section 3, or any material violation, such as to put its reliability or credibility into question. Transnet may after following due procedures and at its own discretion also exclude the Tenderer / Service Provider / Contractor from future tendering processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, which will include amongst others the number of transgressions, the position of the transgressors within the company hierarchy of the Tenderer / Service Provider /Contractor and the amount of the damage. The exclusion will be imposed for up to a maximum of 10 (ten) years. However, Transnet reserves the right to impose a longer period of exclusion, depending on the gravity of the misconduct.

If the Tenderer / Service Provider / Contractor can prove that it has restored the damage caused by it and has installed a suitable corruption prevention system, or taken other remedial measures as the circumstances of the case may require, Transnet may at its own discretion revoke the exclusion or suspend the imposed penalty.

TRANSNET'S LIST OF EXCLUDED TENDERERS (BLACKLIST)

All the stipulations around Transnet's blacklisting process as laid down in Transnet's Supply Chain Policy and Procurement Procedures Manual are included herein by way of reference. Below follows a condensed summary of this blacklisting procedure.

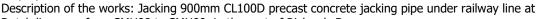
Blacklisting is a mechanism used to exclude a company/person from future business with Transnet for a specified period. The decision to blacklist is based on one of the grounds for blacklisting. The standard of proof to commence the blacklisting process is whether a "prima facie" (i.e. on the face of it) case has been established.

Depending on the seriousness of the misconduct and the strategic importance of the Goods/Services, in addition to blacklisting a company/person from future business, Transnet may decide to terminate some or all existing contracts with the company/person as well.

A Service Provider or Contractor to Transnet may not subcontract any portion of the contract to a blacklisted company.

Grounds for blacklisting include: If any person/Enterprise which has submitted a Tender, concluded a contract, or, in the capacity of agent or subcontractor, has been associated with such Tender or contract:

a) Has, in bad faith, withdrawn such Tender after the advertised closing date and time for the receipt of Tenders;



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- b) has, after being notified of the acceptance of his Tender, failed or refused to sign a contract when called upon to do so in terms of any condition forming part of the Tender documents;
- c) has carried out any contract resulting from such Tender in an unsatisfactory manner or has breached any condition of the contract;
- d) has offered, promised or given a bribe in relation to the obtaining or execution of the contract;
- e) has acted in a fraudulent or improper manner or in bad faith towards Transnet or any Government Department or towards any public body, Enterprise or person;
- f) has made any incorrect statement in a certificate or other communication with regard to the Local Content of his Goods or his B-BBEE status and is unable to prove to the satisfaction of Transnet that:
 - (i) he made the statement in good faith honestly believing it to be correct; and
 - (ii) before making such statement he took all reasonable steps to satisfy himself of its correctness;
- g) caused Transnet damage, or to incur costs in order to meet the contractor's requirements and which could not be recovered from the contractor;
- h) has litigated against Transnet in bad faith.

Grounds for blacklisting include a company/person recorded as being a company or person prohibited from doing business with the public sector on National Treasury's database of Restricted Service Providers or Register of Tender Defaulters.

Companies associated with the person/s guilty of misconduct (i.e. entities owned, controlled or managed by such persons), any companies subsequently formed by the person(s) guilty of the misconduct and/or an existing company where such person(s) acquires a controlling stake may be considered for blacklisting. The decision to extend the blacklist to associated companies will be at the sole discretion of Transnet.

PREVIOUS TRANSGRESSIONS

The Tenderer / Service Provider /Contractor hereby declares that no previous transgressions resulting in a serious breach of any law, including but not limited to, corruption, fraud, theft, extortion and contraventions of the Competition Act 89 of 1998, which occurred in the last 5 (five) years with any other public sector undertaking, government department or private sector company that could justify its exclusion from its registration on the Tenderer's / Service Provider's / Contractor's database or any tendering process.

If it is found to be that the Tenderer / Service Provider / Contractor made an incorrect statement on this subject, the Tenderer / Service Provider / Contractor can be rejected from the registration process or removed from the Tenderer / Service Provider / Contractor database, if already registered, for such reason (refer to the Breach of Law Form contained in the applicable RFX document.)

SANCTIONS FOR VIOLATIONS

Transnet shall also take all or any one of the following actions, wherever required to:

- a) Immediately exclude the Tenderer / Service Provider / Contractor from the tendering process or call off the pre-contract negotiations without giving any compensation the Tenderer / Service Provider / Contractor. However, the proceedings with the other Tenderer / Service Provider / Contractor may continue;
- b) Immediately cancel the contract, if already awarded or signed, without giving any compensation to the Tenderer / Service Provider / Contractor;
- c) Recover all sums already paid by Transnet;
- d) Encash the advance bank guarantee and performance bond or warranty bond, if furnished by the Tenderer / Service Provider / Contractor, in order to recover the payments, already made by Transnet, along with interest;

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay



- e) Cancel all or any other contracts with the Tenderer / Service Provider; and
- f) Exclude the Tenderer / Service Provider / Contractor from entering into any Tender with Transnet in future.

CONFLICTS OF INTEREST

A conflict of interest includes, inter alia, a situation in which:

- a) A Transnet employee has a personal financial interest in a tendering / supplying entity; and
- b) A Transnet employee has private interests or personal considerations or has an affiliation or a relationship which affects, or may affect, or may be perceived to affect his / her judgment in action in the best interest of Transnet, or could affect the employee's motivations for acting in a particular manner, or which could result in, or be perceived as favouritism or nepotism.
- A Transnet employee uses his / her position, or privileges or information obtained while acting in the capacity as an employee for:
 - a) Private gain or advancement; or
 - The expectation of private gain, or advancement, or any other advantage accruing to the employee must be declared in a prescribed form.
 Thus, conflicts of interest of any Tender committee member or any person involved in the sourcing process must be declared in a prescribed form.

If a Tenderer / Service Provider / Contractor has or becomes aware of a conflict of interest i.e. a family, business and / or social relationship between its owner(s) / member(s) / director(s) / partner(s) / shareholder(s) and a Transnet employee / member of Transnet's Board of Directors in respect of a Tender which will be considered for the Tender process, the Tenderer / Service Provider / Contractor:

- a) must disclose the interest and its general nature, in the Request for Proposal ("RFX") declaration form; or
- b) must notify Transnet immediately in writing once the circumstances has arisen.

The Tenderer / Service Provider / Contractor shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any committee member or any person involved in the sourcing process, where this is done, Transnet shall be entitled forthwith to rescind the contract and all other contracts with the Tenderer / Service Provider / Contractor.

MONITORING

Transnet will be responsible for appointing an independent Monitor to:

- a) Conduct random monitoring of compliance to the provisions of this Integrity Pact for contracts entered into between Transnet and the Tenderer / Service Provider / Contractor for less than R100,000.000 (one hundred million Rand) in value;
- Monitor compliance to the provisions of this Integrity Pact for contracts entered into between Transnet and the Tenderer / Service Provider / Contractor for greater than R100,000.000 (one hundred million Rand) in value; and
- c) Investigate any allegation of violation of any provisions of this Integrity Pact for contracts entered into between Transnet and the Tenderer / Service Provider / Contractor, irrespective of value.

The Monitor will be subjected to Transnet's Terms of Conditions of Contract for the Provision of Services to Transnet, as well as to Transnet's Service Provider Code of Conduct.

EXAMINATION OF FINANCIAL RECORDS, DOCUMENTATION AND/OR ELECTRONIC DATA

For the purpose of Monitoring, as stipulated above, the Monitor shall be entitled to:

a) Examine the financial records, documentation and or electronic date of Tenderer / Service Provider / Contractor / Transnet. The Tenderer / Service Provider / Transnet shall provide all requested information / documentation / data to the Monitor and shall extend all help possible for the purpose of such examination.

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at

Dutch line area from SMH08 to SMH09, in the port of Richards Bay



DISPUTE RESOLUTION

Transnet recognises that trust and good faith are pivotal to its relationship with its Tenderer / Service Provider / Contractor. When a dispute arises between Transnet and its Tenderer / Service Provider / Contractor, the parties should use their best endeavours to resolve the dispute in an amicable manner, whenever possible. Litigation in bad faith negates the principles of trust and good faith on which commercial relationships are based. Accordingly, following a blacklisting process as mentioned in paragraph 0 above, Transnet will not do business with a company that litigates against it in bad faith or is involved in any action that reflects bad faith on its part. Litigation in bad faith includes, but is not limited to the following instances:

- a) Vexatious proceedings: these are frivolous proceedings which have been instituted without proper grounds;
- b) **Perjury:** where a Tenderer / Service Provider / Contractor make a false statement either in giving evidence or on an affidavit;
- Scurrilous allegations: where a Tenderer / Service Provider / Contractor makes allegations regarding a senior Transnet employee which are without proper foundation, scandalous, abusive or defamatory; and
- d) **Abuse of court process:** when a Tenderer / Service Provider / Contractor abuses the court process in order to gain a competitive advantage during a Tender process.

GENERAL

This Integrity Pact is governed by and interpreted in accordance with the laws of the Republic of South Africa.

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the law relating to any civil or criminal proceedings.

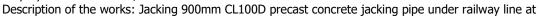
The validity of this Integrity Pact shall cover all the tendering processes and will be valid for an indefinite period unless cancelled by either Party.

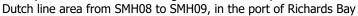
Should one or several provisions of this Integrity Pact turn out to be invalid the remainder of this Integrity Pact remains valid.

Should a Tenderer / Service Provider / Contractor be confronted with dishonest, fraudulent or corruptive behaviour of one or more Transnet employees, Transnet expects its Tenderer / Service Provider / Contractor to report this behaviour directly to a senior Transnet official / employee or alternatively by using Transnet's "Tip-Off Anonymous" hotline number 0800 003 056, whereby your confidentiality is quaranteed.

The Parties hereby declare that each of them has read and understood the clauses of this Integrity Pact and shall a Tenderer by it. To the best of the Parties' knowledge and belief, the information

Enquiry: SIM22022CIDB / ERAC-RCB-39788







T2.2-23: Request for Quotation – Breach of law

NAME OF COMPAN	IY:		
I / We			do hereby certify that <i>I/we</i>
have/have not be but not limited to a administrative body	peen found guilty dual breach of the Com	ring the preceding 5 (five) years petition Act, 89 of 1998, by a co th that the Tenderer is required t	s of a serious breach of law, including
Where found guilty	v of such a serious Ł	preach, please disclose:	
NATURE OF BREAC	CH:		
DATE OF BREACH:			
	should that person		ght to exclude any Tenderer from the uilty of a serious breach of law, tribunal
Signed on this	day of	20	
SIGNATURE OF TE	ENDER		

Enquiry: SIM22022CIDB / ERAC-RCB-39788

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at



Dutch line area from SMH08 to SMH09, in the port of Richards Bay

T2.2-24: Insurance provided by the *Contractor*

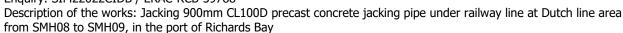
Clause 84.1 in NEC3 Engineering & Construction Contract (June 2005)(amended June 2006 and April 2013) requires that the Contractor provides the insurance stated in the insurance table except any insurance which the Employer is to provide as stated in the Contract Data.

Please provide the following details for insurance which the Contractor is still to provide. Notwithstanding this information all costs related to insurance are deemed included in the tenderer's rates and prices.

Insurance against (See clause 84.2 of the ECC)	Name of Insurance Company	Cover	Premium
Liability for death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract			
Motor Vehicle Liability Insurance comprising (as a minimum) "Balance of Third Party" Risks including Passenger and Unauthorised Passenger Liability indemnity with a minimum indemnity limit of R5 000 000			
Insurance in respect of loss of or damage to own property and equipment. (Other)			

Signed	Γ	Date	
Name	F	Position	
Tenderer			

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Part C1: Agreement and Contract Data

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area

from SMH08 to SMH09, in the port of Richards Bay



Offer

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract for the procurement of:

Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay

The tenderer, identified in the Offer signature block, has examined the documents listed in the Tender Data and addenda thereto as listed in the Returnable Schedules, and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance the tenderer offers to perform all of the obligations and liabilities of the Contractor under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the Contract Data.

The offered total of the Prices exclusive of VAT is	R	
Value Added Tax @ 15% is	R	
The offered total of the Prices inclusive of VAT is	R	
(in words)		
This Offer may be accepted by the Employer by signing Assentance and returning one capy of this desument in	• •	

Acceptance and returning one copy of this document including the Schedule of Deviations (if any) to the tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the tenderer becomes the party named as the Contractor in the conditions of contract identified in the Contract Data.

Signature(s)			
Name(s)			
Capacity			
For the tenderer:			
Name &	(Insert name and address of organisation)	Date	
signature of witness	,		
Tenderer's CII	DB registration number:		

TRANSNER

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area

from SMH08 to SMH09, in the port of Richards Bay



By signing this part of this Form of Offer and Acceptance, the *Employer* identified below accepts the tenderer's Offer. In consideration thereof, the *Employer* shall pay the *Contractor* the amount due in accordance with the *conditions of contract* identified in the Contract Data. Acceptance of the tenderer's Offer shall form an agreement between the *Employer* and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

Part C1	Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
Part C2	Pricing Data
Part C3	Scope of Work: Works Information
Part C4	Site Information

and drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

The tenderer shall within two weeks of receiving a completed copy of this agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the *conditions of contract* identified in the Contract Data at, or just after, the date this agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy of this document, including the Schedule of Deviations (if any).

Unless the tenderer (now *Contractor*) within five working days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the Parties.

Signature(s)			
Name(s)			
Capacity			
for the Employer	Transnet SOC Ltd		
Name & signature of	(Insert name and address of organisation)	Date	
witness			

TRANSNER

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area

from SMH08 to SMH09, in the port of Richards Bay



Schedule of Deviations

Note:

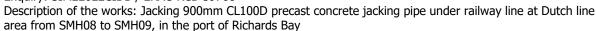
- 1. To be completed by the Employer prior to award of contract. This part of the Offer & Acceptance would not be required if the contract has been developed by negotiation between the Parties and is not the result of a process of competitive tendering.
- 2. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.
- 3. A tenderer's covering letter must not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid be the subject of agreement reached during the process of Offer and Acceptance, the outcome of such agreement shall be recorded here and the final draft of the contract documents shall be revised to incorporate the effect of it.

No.	Subject	Details
1		
2		
3		
4		
5		

By the duly authorised representatives signing this Schedule of Deviations below, the Employer and the tenderer agree to and accept this Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules, as well as any confirmation, clarification or changes to the terms of the Offer agreed by the tenderer and the Employer during this process of Offer and Acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Form shall have any meaning or effect in the contract between the parties arising from this Agreement.

	For the tenderer:	For the Employer
Signature		
Name		
Capacity		
On behalf of	(Insert name and address of organisation)	Transnet SOC Ltd
Name & signature of witness		
Date		





TRANSNET

C1.2 Contract Data

Part one - Data provided by the *Employer*

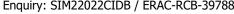
Clause	Statement	Data	
1	General		
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option		
		B:	Priced contract with bill of quantities
	dispute resolution Option	W1:	Dispute resolution procedure
	and secondary Options		
		X2:Ch	anges in the law
		X7: De	elay damages
		X13:	Performance Bond
		X16:	Retention
		X18:	Limitation of liability
		Z:	Additional conditions of contract
	of the NEC3 Engineering and Construction Contract June 2005 (amended June 2006 and April 2013)		
10.1	The <i>Employer</i> is:		net SOC Ltd stration No. 1990/000900/30)
	Address	Trans 138 E Braan	ered address: net Corporate Centre loff Street nfontein nesburg
	Having elected its Contractual Address for the purposes of this contract as:	01 Co	net Freight Rail -RNC mmodore Close aval Base



TRANSNET

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay

10.1	The <i>Project Manager</i> is: (Name)	Sbu Luvuno
	Address	01 Commodore Close Old Naval Base 3900
	Tel	073 043 3265
	e-mail	Sbu.Luvuno@transnet.net
10.1	The <i>Supervisor</i> is: (Name)	Samkeliso Ngwenya
	Address	01 Commodore Close Old Naval Base 3900
	Tel No.	079 801 3625
	e-mail	Samkeliso.Ngwenya@transnet.net
11.2(13)	The works are	Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch Line Area from SMH08 to SMH09, in the Port of Richards Bay.
11.2(14)	The following matters will be included in the Risk Register	a. Supply chain disruptionsb. Inadequate Quality Control Measuresc. Excessive rainfalld. Port operations
11.2(15)	The <i>boundaries of the site</i> are	As stated in Part C4.1." Description of the Site and it surroundings"
11.2(16)	The Site Information is in	Part C4
11.2(19)	The Works Information is in	Part C3
12.2	The law of the contract is the law of	the Republic of South Africa subject to the jurisdiction of the Courts of South Africa.
13.1	The language of this contract is	English
13.3	The <i>period for reply</i> is	2 weeks
2	The <i>Contractor</i> 's main responsibilities	No additional data is required for this section of the <i>conditions of contract</i> .
3	Time	
11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is	31 May 2023
11.2(9)	The <i>key date</i> s and the <i>condition</i> s to be met are:	Condition to be met key date





Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay

		1 Installation of pipe 01 May 2023 jacking
30.1	The access dates are	Part of the Site Date
		1 Pipe jacking area 01 May 2023
31.1	The <i>Contractor</i> is to submit a first programme for acceptance within	2 weeks of the Contract Date.
31.2	The starting date is	01 May 2023
32.2	The <i>Contractor</i> submits revised programmes at intervals no longer than	2 weeks.
35.1	The <i>Employer</i> is not willing to take over the <i>works</i> before the Completion Date.	
4	Testing and Defects	
42.2	The <i>defects date</i> is	26 (twenty six) weeks after Completion of the whole of the works.
43.2	The <i>defect correction period</i> is	2 weeks
5	Payment	
50.1	The <i>assessment interval</i> is monthly on the	25 th (twenty fifth) day of each successive month.
51.1	The <i>currency of this contract</i> is the	South African Rand.
51.2	The period within which payments are made is	Payment will be effected on or before the last day of the month following the month during which a valid Tax Invoice and Statement were received.
51.4	The <i>interest rate</i> is	the prime lending rate of Standard Bank of South Africa.
6	Compensation events	
60.1(13)	The <i>weather measurements</i> to be recorded for each calendar month are,	the cumulative rainfall (mm)
		the number of days with rainfall more than 10 mm
		the number of days with minimum air temperature less than 0 degrees Celsius
		the number of days with snow lying at 08:00 hours South African Time
		and these measurements:



The place where weather is to be



Enquiry: SIM22022CIDB / ERAC-RCB-39788	
Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line	
area from SMH08 to SMH09, in the port of Richards Bay	

		orded (on the Site) is:	The <i>Employer's</i> Site establishment area
	pas	e weather data are the records of st weather measurements for each endar month which were recorded	The nearest weather station of South African Weather Services to site
	and	d which are available from:	South African Weather Service 012 367 6023 or info3@weathersa.co.za .
7	Tit	le	No additional data is required for this section of the <i>conditions of contract</i> .
8	Ris	sks and insurance	
80.1	The	ese are additional <i>Employer</i> 's risks	None
84.1	The	e <i>Employer</i> provides these urances from the Insurance Table	
	1	Insurance against:	Loss of or damage to the <i>works</i> , Plant and Materials is as stated in the Insurance policy for Contract Works/ Public Liability.
		Cover / indemnity:	to the extent as stated in the insurance policy for Contract Works / Public Liability
		The deductibles are:	as stated in the insurance policy for Contract Works / Public Liability
	2	Insurance against:	Loss of or damage to property (except the works, Plant and Materials & Equipment) and liability for bodily injury to or death of a person (not an employee of the Contractor) arising out of or in connection with the performance of the Contract as stated in the insurance policy for Contract Works / Public Liability
		Cover / indemnity	Is to the extent as stated in the insurance policy for Contract Works / Public Liability
		The deductibles are	as stated in the insurance policy for Contract Works / Public Liability
	3	Insurance against:	Loss of or damage to Equipment (Temporary Works only) as stated in the insurance policy for contract Works and Public Liability
		Cover / indemnity	Is to the extent as stated in the insurance policy for Contract Works / Public Liability





area from SMH08 to SMH09, in the port of Richards Bay

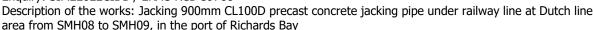
The deductibles are:	As stated in the insurance policy for Contract Works / Public Liability
4 Insurance against:	Contract Works SASRIA insurance subject to the terms, exceptions and conditions of the SASRIA coupon
Cover / indemnity	Cover / indemnity is to the extent provided by the SASRIA coupon
The deductibles are	The deductibles are, in respect of each and every theft claim, 0.1% of the contract value subject to a minimum of R2,500 and a maximum of R25,000.
Note:	The deductibles for the insurance as stated above are listed in the document titled "Certificate of Insurance: Transnet (SOC) Limited Principal Controlled Insurance."

84.1 The minimum limit of indemnity for insurance in respect of death of or connection with this contract for any **1993 as amended.** one event is

bodily injury to employees of the The Contractor must comply at a minimum with Contractor arising out of and in the the provisions of the Compensation course of their employment in Occupational Injuries and Diseases Act No. 130 of

The Contractor provides additional Insurances

- these 1 Where the contract requires that the design of any part of the works shall be provided by the Contractor the Contractor shall satisfy the Employer that professional indemnity insurance cover in connection therewith has been affected
 - 2 Where the contract involves manufacture, and/or fabrication of Plant & Materials, components or other goods to be incorporated into the works at premises other than the site, the Contractor shall satisfy the Employer that such plant & materials, components or other goods for incorporation in the works are adequately insured during manufacture and/or fabrication and transportation to the
 - 3 Should the *Employer* have an insurable interest in such items during manufacture, and/or fabrication, such interest shall be noted by endorsement to the *Contractor's* policies of insurance as well as those of any subcontractor





4 Motor Vehicle Liability Insurance comprising (as a minimum) "Balance of Third Party" Risks including Passenger and Unauthorised Passenger Liability indemnity with a minimum indemnity limit of R 5 000 000.

- 5 The insurance coverage referred to in 1, 2, 3 and 4 above shall be obtained from an insurer(s) in terms of an insurance policy approved by the *Employer*. The *Contractor* shall arrange with the insurer to submit to the *Project Manager* the original and the duplicate original of the policy or policies of insurance and the receipts for payment of current premiums, together with a certificate from the insurer or insurance broker concerned, confirming that the policy or policies provide the full coverage as required. The original policy will be returned to the *Contractor*.
- The minimum limit of indemnity for insurance in respect of loss of or damage to property (except the works, Plant, Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the *Contractor*) caused by activity in connection with this contract for any one event is

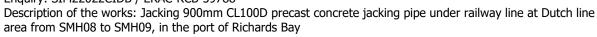
Whatever the *Contractor* requires in addition to the amount of insurance taken out by the *Employer* for the same risk.

The insurance against loss of or damage to the works, Plant and Materials as stated in the insurance policy for contract works and public liability selected from:

Principal Controlled Insurance policy for Contract

9	Termination	There is no additional Contract Data required for this section of the <i>conditions of contract</i> .
10	Data for main Option clause	
В	Priced contract with Schedule or Bill of Quantities	No additional data is required for this Option.
60.6	The <i>method of measurement</i> is	The Bill of Quantities have been measured in accordance with SANS 1200 unless indicated otherwise.

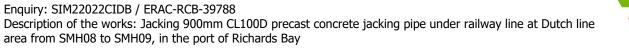
11 Data for Option W1





W1.1	The <i>Adjudicator</i> is	Both parties will agree as and when a dispute arises. If the parties cannot reach an agreement on the <i>Adjudicator</i> , the Chairman of the Association of Arbitrators will appoint an <i>Adjudicator</i> .
W1.2(3)	The Adjudicator nominating body is:	The Chairman of the Association of Arbitrators (Southern Africa)
	If no <i>Adjudicator nominating body</i> is entered, it is:	the Association of Arbitrators (Southern Africa)
W1.4(2)	The <i>tribunal</i> is:	Arbitration
W1.4(5)	The arbitration procedure is	The Rules for the Conduct of Arbitrations of the Association of Arbitrators (Southern Africa)
	The place where arbitration is to be held is	Durban, South Africa
	 The person or organisation who will choose an arbitrator if the Parties cannot agree a choice or if the arbitration procedure does not state who selects an arbitrator, is 	The Chairman of the Association of Arbitrators (Southern Africa)
12	Data for secondary Option clauses	
X2	Changes in the law	No additional data is required for this Option
X7	Delay damages	
X7.1	Delay damages for Completion of the whole of the works are	1% of the total of the Prices for every 7 days delayed capped to the maximum of 10%.
X13.1	The amount of the performance bond is	10% of the total of the Prices.
X16	Retention	
X16.1	The retention free amount is	Nil
	The retention percentage is	5% on all payments certified.
X18	Limitation of liability	

TRANSNET FREIGHT RAIL





X18.1	The <i>Contractor</i> 's liability to the <i>Employer</i> for indirect or consequential loss is limited to:	Nil The deductible of the relevant insurance policy
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to:	The cost of correcting the Defect
X18.3	The <i>Contractor's</i> liability for Defects due to his design which are not listed on the Defects Certificate is limited to:	The Total of the Prices
X18.4	The <i>Contractor's</i> total liability to the <i>Employer</i> for all matters arising under or in connection with this contract, other than excluded matters, is limited to:	6 months after Completion of the whole of the works
X18.5	The end of liability date is	
Z	Additional conditions of contract are:	
Z1	Additional clause relating to Performance Bonds and/o Guarantees	
Z1.1		The Performance Guarantee under X13 above shall be an irrevocable, on-demand performance guarantee, to be issued exactly in the form of the Pro Forma documents provided for this purpose under C1.3 (Forms of Securities), in favour of the <i>Employer</i> by a financial institution reasonably acceptable to the <i>Employer</i> .

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay



Z2 Additional clauses relating to Joint Venture

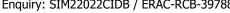
Z2.1

Insert the additional core clause 27.5

27.5. In the instance that the *Contractor* is a joint venture, the *Contractor* shall provide the *Employer* with a certified copy of its signed joint venture agreement, and in the instance that the joint venture is an 'Incorporated Joint Venture,' the Memorandum of Incorporation, within 4 (four) weeks of the Contract Date.

The Joint Venture agreement shall contain but not be limited to the following:

- A brief description of the Contract and the Deliverables;
- The name, physical address, communications addresses and domicilium citandi et executandi of each of the constituents and of the Joint Venture;
- The constituent's interests;
- A schedule of the insurance policies, sureties, indemnities and guarantees which must be taken out by the Joint Venture and by the individual constituents;
- Details of an internal dispute resolution procedure;
- Written confirmation by all of the constituents:
 - i. of their joint and several liabilities to the *Employer* to Provide the Works;
 - ii. identification of the lead partner in the joint venture confirming the authority of the lead partner to bind the joint venture through the *Contractor's* representative;
 - iii. Identification of the roles and responsibilities of the constituents to provide the Works.
- Financial requirements for the Joint Venture:
 - iv. the working capital requirements for the Joint Venture and the





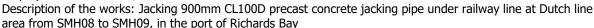
Enquiry: SIM22022CIDB / ERAC-RCB-39788

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line

		p	
area from SMH08 to	o SMH09, in the port o	f Richards Bav	

		extent to which and manner whereby this will be provided and/or guaranteed by the constituents from time to time; v. the names of the auditors and others, if any, who will provide auditing and accounting services to the Joint Venture.
Z2.2		Insert additional core clause 27.6
		27.6. The <i>Contractor</i> shall not alter its composition or legal status of the Joint Venture without the prior approval of the <i>Employer</i> .
Z2.2		Insert additional core clause 27.6
		27.6. The <i>Contractor</i> shall not alter its composition or legal status of the Joint Venture without the prior approval of the <i>Employer</i> .
Z 3	Additional obligations in respect of Termination	
Z3.1		The following will be included under core clause 91.1: In the second main bullet, after the word 'partnership' add 'joint venture whether incorporate or otherwise (including any constituent of the joint venture)' and
		Under the second main bullet, insert the following additional bullets after the last subbullet:
		commenced business rescue proceedings (R22) repudiated this Contract (R23)
Z3.2	Termination Table	The following will be included under core clause 90.2 Termination Table as follows:
		Amend "A reason other than R1 $-$ R21" to "A reason other than R1 $-$ R23"
Z3.3		Amend "R1 – R15 or R18" to "R1 – R15, R18, R22 or R23."
Z4	Right Reserved by the <i>Employer</i>	

to Conduct Vetting through SSA





Z4.1

The *Employer* reserves the right to conduct vetting through State Security Agency (SSA) for security clearances of any *Contractor* who has access to National Key Points for the following without limitations:

Confidential – this clearance is based on any information which may be used by malicious, opposing or hostile elements to harm the objectives and functions of an organ of state.

 Secret – clearance is based on any information which may be used by malicious, opposing or hostile elements to disrupt the objectives and functions of an organ of state.

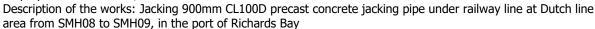
Top Secret – this clearance is based on information which may be used by malicious, opposing or hostile elements to neutralise the objectives and functions of an organ of state.

- Z5 Additional Clause Relating to Collusion in the Construction Industry
- **Z5.1**

- The contract award is made without prejudice to any rights the *Employer* may have to take appropriate action later with regard to any declared tender rigging including blacklisting.
- Z6 Protection of Personal Information Act

Z6.1

The *Employer* and the *Contractor* are required to process information obtained for the duration of the Agreement in a manner that is aligned to the Protection of Personal Information Act.





C1.2 Contract Data

Part two - Data provided by the *Contractor*

The tendering *Contractor* is advised to read both the NEC3 Engineering and Construction Contract - June 2005 (with amendments June 2006 and April 2013) and the relevant parts of its Guidance Notes (ECC3-GN) in order to understand the implications of this Data which the tenderer is required to complete. An example of the completed Data is provided on pages 156 to 158 of the ECC3 Guidance Notes.

Completion of the data in full, according to Options chosen, is essential to create a complete contract.

Clause	Statement	Data
10.1	The <i>Contractor</i> is (Name):	
	Address	
	Tel No.	
	Fax No.	
11.2(8)	The direct fee percentage is	%
	The <i>subcontracted fee percentage</i> is	%
11.2(18)	The working areas are the Site and	
24.1	The <i>Contractor's</i> key persons are:	
	1 Name:	
	Job:	
	Responsibilities:	
	Qualifications:	
	Experience:	
	2 Name:	
	Job	
	Responsibilities:	
	Qualifications:	
	Experience:	
		CV's (and further key persons data including CVs) are appended to Tender Schedule entitled .



Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay

11.2(14)	The following matters will be included in the Risk Register	
31.1	The programme identified in the Contract Data is	
В	Priced contract with bill of quantities	
11.2(21)	The bill of quantities is in	
11.2(31)	The tendered total of the Prices is	(in figures)
		(in words), excluding VAT
	Data for Schedules of Cost Components	Note "SCC" means Schedule of Cost Components starting on page 60 of ECC, and "SSCC" means Shorter Schedule of Cost Components starting on page 63 of ECC.

В	Priced contract with bill of quantities	Data for the Shor	ter Schedu	le of Co	st
41 in SSCC	The percentage for people overheads is:	%			
21 in SSCC	The published list of Equipment is the last edition of the list published by				
	The percentage for adjustment for Equipment in the published list is	% (state pl	us or minus)		
22 in SSCC	The rates of other Equipment are:	Equipment	Size capa	_	Rate
61 in SSCC	The hourly rates for Defined Cost of design outside the Working Areas are	Category of empl	loyee	Houri	y rate



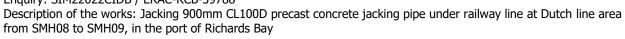
TRANSNET FREIGHT RAIL

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Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay

62 in SSCC	The percentage for design overheads is	%	
63 in SSCC	The categories of design employees whose travelling expenses to and from the Working Areas are included in Defined Cost are:		

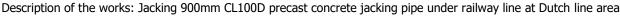




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PART 2: PRICING DATA

Document reference	Title	No of pages
C2.1	Pricing instructions: Option B	4
C2.2	The bill of quantities	2



from SMH08 to SMH09, in the port of Richards Bay



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C2.1 PRICING INSTRUCTIONS: OPTION B

1. The conditions of contract

1.1. How the contract prices work and assesses it for progress payments

Clause 11 in NEC3 Engineering and Construction Contract, June 2005 and 2013 (ECC) Option B states:

Identified and defined terms

11

- 11.2 (21) The Bill of Quantities is the bill of quantities as changed in accordance with this contract to accommodate implemented compensation events and for accepted quotations for acceleration.
 - (22) Defined Cost is the cost of the components in the Shorter Schedule of Cost Components whether work is subcontracted or not excluding the cost of preparing quotations for compensation events.
 - (28) The Price for Work Done to Date is the total of
 - the quantity of the work which the *Contractor* has completed for each item in the Bill of Quantities multiplied by the rate and
 - a proportion of each lump sum which is the proportion of the work covered by the item which the *Contractor* has completed.

Completed work is work without Defects which would either delay or be covered by immediately following work.

(31) The Prices are the lump sums and the amounts obtained by multiplying the rates by the quantities for the items in the Bill of Quantities.

This confirms that Option B is a re-measurement contract and the bill comprises only items measured using quantities and rates or stated as lump sums. Value related items are not used. Time related items are items measured using rates where the rate is a unit of time.

1.2. **Function of the Bill of Quantities**

Clause 55.1 in Option B states, "Information in the Bill of Quantities is not Works Information or Site Information". This confirms that instructions to do work or how it is to be done are not included in the Bill, but in the Works Information. This is further confirmed by Clause 20.1 which states, "The Contractor Provides the Works in accordance with the Works Information". Hence the Contractor does not Provide the Works in accordance with the Bill of Quantities. The Bill of Quantities is only a pricing document.

1.3. Guidance before pricing and measuring

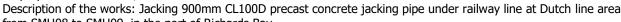
Employers preparing tenders or contract documents, and tendering contractors are advised to consult the sections dealing with the bill of quantities in the NEC3 Engineering and Construction Contract (June 2005)

CPM 2020 Rev 01 PAGE 2 Part C2: Pricing Data

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from SMH08 to SMH09, in the port of Richards Bay

Guidance Notes before preparing the bill of quantities or before entering rates and lump sums into the bill.

Historically bill of quantities-based contracts in South Africa have been influenced by the different approaches of the civil engineering and building sectors of the industry through their respective discipline based standard forms of contract and methods of measurement. This is particularly apparent in the approach to the Preliminary and General bill. On the other hand, because ECC caters for a number of disciplines in the same contract, including electrical works, a different approach not currently found in local methods of measurement to the Preliminary & General bill items may have been used.

The NEC approach to the P & G bill assumes use will be made of method related charges for Equipment applied to Providing the Works based on durations shown in the Accepted Programme, fixed charges for the use of Equipment that is required throughout the construction phase, time related charges for people working in a supervisory capacity for the period required, and lump sum charges for other facilities or services not directly related to performing work items typically included in other parts of the bill.

Part C2.1: Pricing Instructions Option B



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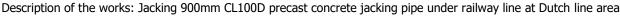


2.1. Symbols

The units of measurement described in the Bill of Quantities are metric units abbreviated as follows:

Abbreviation	Unit
%	percent
h	hour
ha	hectare
kg	kilogram
kl	kilolitre
km	kilometre
km-pass	kilometre-pass
kPa	kilopascal
kW	kilowatt
1	litre
m	metre
mm	millimetre
m^2	square metre
m ² -pass	square metre pass
m^3	cubic metre
m³-km	cubic metre-kilometre
MN	meganewton
MN.m	meganewton-metre
MPa	megapascal
No.	number
Prov sum ¹	provisional sum
PC-sum	prime cost sum
R/only	Rate only
sum	Lump sum
t	ton (1000kg)
W/day	Work day

¹ Provisional Sums should not be used unless absolutely unavoidable. Rather include specifications and associated bill items for the most likely scope of work, and then change later using the compensation event procedure if necessary. This is because tenderers cannot programme effectively for unknown scopes of work



from SMH08 to SMH09, in the port of Richards Bay

2.2. General assumptions

Unless otherwise stated, items are measured net in accordance with the drawings, and no 2.2.1. allowance has been made in the quantities for waste.

- 2.2.2. The Prices and rates stated for each item in the Bill of Quantities shall be treated as being fully inclusive of all work, risks, liabilities, obligations, overheads, profit and everything necessary as incurred or required by the *Contractor* in carrying out or providing that item.
- 2.2.3. Clause 63.13 in Option B provides that these rates and Prices may be used as a basis for assessment of compensation events instead of Defined Cost.
- 2.2.4. Where this contract requires detailed drawings, designs or other information to be provided, and no rates or prices are included in the bill specifically for such matters, then the Contractor is deemed to have allowed for all costs associated with such requirements within the tendered rates and Prices in the Bill of Quantities.
- 2.2.5. An item against which no Price is entered will be treated as covered by other Prices or rates in the bill of quantities. If a number of items are grouped together for pricing purposes, this will be treated as a single lump sum.
- 2.2.6. The quantities contained in the Bill of Quantities may not be final and do not necessarily represent the actual amount of work to be done. The quantities of work assessed and certified for payment by the Project Manager at each assessment date will be used for determining payments due and not the quantities given in the Bill of Quantities.
- 2.2.7. The short descriptions of the items of payment given in the bill of quantities are only for the purposes of identifying the items. More detail regarding the extent of the work entailed under each item is provided in the Works Information.

2.3. Departures from the *method of measurement*

2.4. Amplification of or assumptions about measurement items

For the avoidance of doubt the following is provided to assist in the interpretation of descriptions given in the method of measurement. In the event of any ambiguity or inconsistency between the statements in the *method of measurement* and this section, the interpretation given in this section shall be used.

CPM 2020 Rev 01 PAGE 5 Part C2: Pricing Data

Part C2.1: Pricing Instructions Option B

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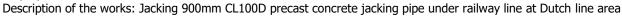
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Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay

C2.2 The *bill of quantities*

ITEM NO	DESCRIPTION	UNIT	QTY.	UNIT PRICE	AMOUNT
		JACKIN	iG		
		Preliminary &	General		
1.	All fixed charges and contractual requirements including full time qualified Safety Officer on site.	sum	1		
2.	Establish all plant and facilities	sum	1		
3.	All time related costs inclusive of site supervision, Environment and Safety requirements.	sum	1		
4.	De-establish and clear site	sum	1		
		Jacking	3		
5.	Thrust and reception pits for Jacking rig entry and exist for machine and reaming tools.	ea.	2		
6.	Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch Line Area from SMH08 to SMH09, as per drawing number: C2119273-1-000-C-LA-0001-01-REV01.	m	12,2		
	TOTAL PRICE (VAT E	XCLUSIVE)			
	VAT (15 %)				
	TOTAL PRICE (VAT INCLUSIVE)				

NB: Bidders should ensure that the unit prices correspond with the total prices



from SMH08 to SMH09, in the port of Richards Bay

Notes to Pricing: Transnet may;

- (i) negotiate a market-related price with the Respondent scoring the highest points or cancel the RFQ;
- (ii) if that Respondent does not agree to a market-related price, negotiate a market-related price with the Respondent scoring the second highest points or cancel the RFP;
- (iii) if the Respondent scoring the second highest points does not agree to a marketrelated price, negotiate a market-related price with the Respondent scoring the third highest points or cancel the RFP.

If a market-related price is not agreed with the Respondent scoring the third highest points, Transnet must cancel the RFP.

- a) Prices must be quoted in South African Rand excluding VAT.
- b) To facilitate like-for-like comparison bidders must submit pricing strictly in accordance with this pricing schedule and not utilise a different format. Deviation from this pricing schedule could result in a bid being declared non responsive.
- c) Quantities given are estimates only. Any orders resulting from this RFP will be on an "as and when required" basis.
- d) Please note that should you have offered a discounted price(s), Transnet will only consider such price discount(s) in the final evaluation stage if offered on an unconditional basis.
- e) Failure to price one or more items will results in disqualification (Per Price list/Group)



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Enquiry: SIM22022CIDB / ERAC-RCB-39788

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area

from SMH08 to SMH09, in the port of Richards Bay

Part C3: Scope of Work

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area

from SMH08 to SMH09, in the port of Richards Bay

C3: Scope of Work

C3.1 Works Information

3.1 Pipe Jacking

The scope of work for Pipe Jacking includes Pipe Jacking (Applicable to SANS 1200 LG) 900mm concrete pipes between manholes as denoted on the drawings and any other work arising out of or incidental to the above or required of the *Contractor* for the proper completion of the works.

3.2 Supporting Specifications

This section, "Pipe Jacking", shall be read in conjunction with the following SANS specifications.

SANS	
SANS 1200 DA	Earthworks (small works)
SANS 1200 DB	Earthworks (Pipe trenches)
SANS 1200 LG	Pipe jacking
SANS 667	Concrete Non-pressure Pipes

3.3 Materials and Workmanship

3.3.1 Pipes for Jacking

- Pipes for jacking shall be SC Type reinforced concrete manufactured in accordance with SANS 677: All pipe joints shall be sealed. The actual diameter of the pipes shall not be less than the nominal diameter given on the drawings or stated in the schedule.
- In addition to withstanding the specified two (or three), edge bearing test-load, the pipes shall be capable of withstanding, without damage during jacking, the maximum longitudinal force to be transmitted by the Contractor's jacks and method of installation.
- The design of the pipes shall be determined by the Contractor to suit the proposed method
 of construction but shall not be less than the class of pipe or type of pipe stated on the
 drawings or determined by the Engineer.
- The pipes shall incorporate extended modified Ogee type joints which shall be seated by means of a rubber ring. On the longer pipe jacks, it may be necessary to use a rebated butt joint to withstand the higher jack forces. However, the decision of type of joint to use is that of the Contractor.
- Irrespective of joint type used the Contractor must adhere to the joint sealing details given below.
- At least one hole shall be formed in the crown of each pipe to allow for the injection of both a lubricant, if required, and a final grout.
- The Contractor must ensure that the pipes shown on the drawings and mentioned in the documents can be jacked the full distance mentioned in the Scope of Work.

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area

from SMH08 to SMH09, in the port of Richards Bay

3.3.2 Intermediate Jacking Pipes

- In circumstances where it is desirable to use jacking pipes intermediate between manholes
 or junctions the number and type of such intermediate jacking pipes is to be determined by
 the Contractor.
- The joint between pairs of intermediate jacking pipes shall be protected externally by a cylindrical mild steel sleeve of wall thickness at least 8mm, which shall overlap the pipes on either side of the joint for a distance of at least 150mm.
- The joint is to allow a substantial and permanent caulked seal within the joint.

3.3.3 Joints and Seals

- It is the Contractor's choice as to type of joint used in the pipes to be jacked. However, applied forces used to jack the pipes must be uniformly distributed around the joint to avoid damaging the joint.
- Pipes that are delivered to site with damaged joints must be rejected by the Contractor.
- A seal is required at each joint to minimise ingress of water. Ingress of water into the jacked pipes stemming from the joints should not exceed 5 litres per minute in total.
- The chipboard packing used to distribute stresses on the joints should be raked out to a
 depth of 25mm on the inside all round and sealed with a durable flexible sealing agent such
 as bituseal, thioflex or similar approved.

3.3.4 Construction

- Authority to Jack Pipelines under Roads and Railway Lines
- The Employer will obtain permission from the relevant authorities for jacking under roads and railway lines. However, the Contractor is to confirm that such permission has been granted before commencing work.

3.3.5 Competence

 Jacking and excavation shall be supervised and undertaken by persons fully conversant with this work.

3.3.6 Contractor Solely Responsible

 No approval of any material or plant and its operation or of any construction procedure to be used will imply any relaxation of the requirements governing the quality of the materials or of the finished work or relieve the Contractor of his responsibilities under the Contract.

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area

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3.3.7 Recording Movements

General

- The Contractor shall take movement measurements correct to 1,0mm of any change in the line and level of roads, rail tracks and rail formation level before the start of the contract and at such intervals as directed by the Engineer for a period up to 12 months after issue of the Completion Certificate. However, no more than 15 sets of reading will be required in this period.
- A copy of these measurement records shall be made available to the Engineer. Appropriately
 constructed and marked benchmarks and measurement-stations as directed by the Engineer
 shall be established.

3.3.8 Working under Railway Lines

- The relevant clauses of the Wayleave agreement and specifically those related to pipe jacking / directional drilling shall be complied with. Wayleave to also have co-signature of approval by local signal personnel
- Before jacking under railway lines, the Contractor shall take elevation readings at the top (Crest) of the fill embankment, or the toe of cuttings, and at the toe of the ballast as well as on top of each railway line along the centre line of the pipe jack and at intervals of 1 500 mm apart up to a distance of 9m from the pipe centre line.
- The profile of the railway embankment must be measured and recorded from toe to toe (of the embankment) before pipe jacking starts.
- The intervals at which movement readings are to be taken over a period of 12 months is the same as mentioned above for roads.

3.3.9 Remedial Measures

- All remedial measures will be carried out and completed to the standards set by the various controlling authorities.
- Roads remedial measures plus time related professional costs needed to reinstate roads and fill embankments will be the Contractor's liability.
- Remedial measures are those relating to the need to put right settlement and movement of road surfaces, formation layers or fill embankments including providing all road safety markers, traffic control, or signs and all associated needs of the road authority to allow remedial work to proceed without danger to workers or traffic.
- The Contractor must arrange all matters regarding remedial work with the road authority.
 In most instances these measures will comprise jacking up concrete roads using grout and
 re-grading to original elevation formation layers and premix surfacing as well as mending
 drainage fixtures where these have been damaged.
- All the remedial work will be directed by the Engineer to his satisfaction and approval.
- Railways remedial measures plus time related professional costs needed to reinstate railway lines and fill embankments will be the Contractor's liability.

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay

 Remedial measures are those relating to the cost of realigning railway lines, re-grading of ballast, and stabilising fill embankments. All the remedial work will be directed by the Engineer to his satisfaction and approval.

3.3.10 Excavation

General

 Except as required in terms of 5.2.5 SANS 1200 LG 1983 the provisions of SANS 1200 DA shall apply.

3.3.11 Thrust Pits

- Claims arising out of any accidents or incidents in or adjacent to these access pits will not be considered by the Employer.
- Stormwater control measures around these pits are also necessary to prevent water ingress into the pits. Provision must be made by the Contractor to keep both thrust and reception pits free of seepage and stormwater.
- Thrust pits will in general only be permitted at positions indicated on the drawings or where
 manholes or junctions are required. Jacking pits shall be of sufficient size to accommodate
 the jacking operation and any manhole structure to be constructed upon completion of the
 jacking. The approximate dimensions of the pits shall be agreed with the Engineer before
 work commences.
- The Contractor will be required to design and construct all thrust blocks, bases and other temporary works required to maintain the stability of the pits and shall demolish and remove these upon completion of the jacking operation and the Contractor shall take into account all such limiting factors when preparing his/her tender.

3.3.12 Intermediate Jacking Pits

- In circumstances where it is desirable to use jacking pits intermediate between manholes or junctions indicated on the drawings, the number and type of such intermediate jacking pits is to be determined by the Contractor. Such intermediate jacking pits will only be permitted where conditions of access and working space permit.
- Full details of the intermediate jacking pits and the junction box constructed as a closure between the ends of the jacked pipes are to be submitted with the tender.

3.3.13 Jacking of Pipeline

General

- A lead pipe with a rebated front end over which the trailing end of the shield is fitted should be the first concrete pipe used. This should minimise overbreak. No material may be removed in advance of the leading edge of the shield in unstable or loose materials.
- As the pipe is advanced, excavation is to take place within the lead pipe under the full-time supervision of a responsible foreman to ensure that the end of the shield is always fully plugged with earth at a safe angle of repose within the pipe.

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay

• The Contractor shall ensure that there is not uncontrolled flow of sand, mud or earth into the pipe which could result in imperilling excavation personnel or the formation of cavities above or around the sleeve pipe. If at any stage during the jacking operation such

conditions arise the Contractor shall immediately plug the pipe and stabilise the material

before proceeding with further work.

 Should it be necessary, the Contractor shall allow for stabilizing the soil by dewatering, chemical grouting, or any other approved means. The design of the shield shall be such as to permit the face to be completely or partially closed by boarding or similar to control material flow from the face.

• During weekend or holiday stoppages the Contractor must make sure that a plug of soil is left in the shield.

3.3.14 Continuous Jacking

In order to minimise problems due to the build-up of skin friction on a static pipe, the pipes
are to be jacked continuously unless agreed to otherwise with the Engineer, allowing for
overnight stoppage.

3.4 Jacking Procedure

3.4.1 Procedure

• Each jack shall be fitted with a pressure gauge suitably calibrated such that the actual jacking forces can be read at any time.

• Suitable packing of hard materials shall be inserted between the abutting vertical ends of the pipes in order to transfer the jacking force. The packing shall constitute a complete circle and be sufficiently wide to transfer the applied load.

A suitable adjustable shield is to be fitted to the front of the lead pipe. The shield is to
incorporate cutting edges which can be varied by control jacks to maintain the pipe on line
and level.

• Pipe jacking may generally be carried out either upgrade or downgrade to suit the Contractor's requirements subject to the approval of the Engineer, and provided that provision is made by the Contractor for the necessary drainage required.

3.4.2 Lubrication of Structure during Jacking

• To ease pipe friction, the Contractor shall make provision for the injection of bentonite or other approved lubricant.

3.4.3 Backfilling

• Both thrust and reception pits must be backfilled using the removed material. Backfill compaction rates must not be less than 90 percent Modified AASHTO with the top 1,5m of backfill being compacted to a minimum 92% Modified AASHTO.

• The backfill must be built up to at least 500mm above the natural ground level to prevent stormwater pounding around the excavation pits.

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area

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3.4.4 Grouting and Plugging

• In soft material the grout shall consist of cement/bentonite with a compressive strength of 5MPa at 28 days. In hard material and rock the grout shall consist of cement/sand with a compressive strength of 25 MPa at 28 days.

3.4.5 Markers

• On completion of the backfill the Contractor must place a marker concrete post (prestressed lintel) into the ground directly above the centre line of the pipe at the entrance. The post must stick 1,0m above the ground and at least be buried 1,5m in the ground. The top 0,5m of the post must be painted bright red.

3.4.6 Measurement

- Throughout the jacking operation the Contractor is requested to take and record the following measurements.
- A plot of pressure (kN/m²) and total force (kN) originating from the combined force of all hydraulic jacks used to move pipes versus accumulative length of jacked pipe. As soon as a lubricant is used it must be recorded on the plot. If heavy ground water seepage is noted this must also be recorded on the plot. A time scale in days should also be used in conjunction with jacked length of pipe. It is also important to record start up force required to move pipes after a delay, ie after weekend.
- The dimensions of the thrust block used must be recorded as well as the accumulative thrust force on the block (kN) together with lateral movement of the thrust block (mm).

4. Drawings

Description				
Drawing No.	Revision	Description		
C2119273-1-000-C-LA-0001-01	01	SITE LAYOUT-SHEET 01 OF 02		

5. Constraints on how the Contractor Provides the Works

Access into the Port and to the work site.

6. Requirements for the programme

A programme is required for this tender.

- The programme for the works to be submitted in MS Projects 2013 format
- the starting date, access dates, Key Dates and Completion Dates,
- planned Completion,
- the order and timing of the operations which the Contractor plans to do in order to Provide the Works,

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area from SMH08 to SMH09, in the port of Richards Bay

- the order and timing of the work of the Employer and Others as last agreed with them by the Contractor or, of not so agreed, as stated in the Works Information,
- the dates when the Contractor plans to meet each Condition stated for the Key Dates and to complete other work needed to allow the Employer and Others to do their work,
- provisions for
- float,
- time risk allowances,
- health and safety requirements and
- the procedures set out in this contract.

7. Services and other things provided by the Employer

Item	Date by which it will be provided		
Water	Current		
Electricity	Current		
Latrine Facilities			

8. Procurement

8.1 Code of Conduct

- Transnet aims to achieve the best value for money when buying or selling goods and obtaining services. This however must be done in an open and fair manner that supports and drives a competitive economy. Underpinning our process are several acts and policies that any supplier dealing with Transnet must understand and support. These are:
- The Transnet Detailed Procurement Procedure (DPP).
- Section 217 of the Constitution the five pillars of Public PSCM (Procurement and Supply Chain Management): fair, equitable, transparent, competitive and cost effective.
- The Public Finance Management Act (PFMA);
- The Broad Based Black Economic Empowerment Act (BBBEE); and
- The Anti-Corruption Act.
- This code of conduct has been included in this contract to formally apprise Transnet Suppliers of Transnet's expectations regarding behaviour and conduct of its Suppliers.

a) Prohibition of Bribes, Kickbacks, Unlawful Payments, and Other Corrupt Practices

• Transnet is in the process of transforming itself into a self-sustaining State-Owned Enterprise, actively competing in the logistics industry. Our aim is to become a world class, profitable, logistics organisation. As such, our transformation is focused on adopting a performance culture and to adopt behaviours that will enable this transformation.

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area

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b) Transnet will not participate in corrupt practices and therefore expects its suppliers to act in a similar manner.

- Transnet and its employees will follow the laws of this country and keep accurate business records that reflect actual transactions with and payments to our suppliers.
- Employees must not accept or request money or anything of value, directly or indirectly, to:
- Illegally influence their judgement or conduct or to ensure the desired outcome of a sourcing activity.
- Win or retain business or to influence any act or decision of any decision stakeholders involved in sourcing decisions; or
- Gain an improper advantage.
- There may be times when a supplier is confronted with fraudulent or corrupt behaviour of Transnet employees. We expect our Suppliers to use our "Tip-offs Anonymous" Hot line to report these acts. (0800 003 056).

c) Transnet is firmly committed to the ideas of free and competitive enterprise.

Suppliers are expected to comply with all applicable laws and regulations regarding fair competition and antitrust.

Transnet does not engage with non-value adding agents or representatives solely for the purpose of increasing BBBEE spend (fronting)

d) Transnet's relationship with suppliers requires us to clearly define requirements, exchange information and share mutual benefits.

- Generally, Suppliers have their own business standards and regulations. Although Transnet cannot control the actions of our suppliers, we will not tolerate any illegal activities. These include, but are not limited to:
 - Misrepresentation of their product (origin of manufacture, specifications, intellectual property rights, etc).
 - o Collusion.
 - Failure to disclose accurate information required during the sourcing activity (ownership, financial situation, BBBEE status, etc).
 - Corrupt activities listed above; and
 - Harassment, intimidation, or other aggressive actions towards Transnet employees.
 - Suppliers must be evaluated and approved before any materials, components, products, or services are purchased from them. Rigorous due diligence is

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area

from SMH08 to SMH09, in the port of Richards Bay

conducted, and the supplier is expected to participate in an honest and straight forward manner.

Suppliers must record and report facts accurately, honestly, and objectively.
 Financial records must be accurate in all material respects.

e) Conflicts of Interest

- A conflict of interest arises when personal interests or activities influence (or appear to influence) the ability to act in the best interests of Transnet.
 - Doing business with family members
 - o Having a financial interest in another company in our industry

9. The Contractor's Invoices

- When the Project Manager certifies payment (see ECSC Clause 50) following an assessment date, the Contractor complies with the Employer's procedure for invoice submission.
- The invoice must correspond to the Project Manager's assessment of the amount due to the Contractor as stated in the payment certificate.
- The invoice states the following:
 - o Invoice addressed to Transnet Limited.
 - o Transnet Limited's VAT No: 4720103177.
 - Invoice number;
 - o The Contractor's VAT Number; and
 - o The Contract number [TBA].
- The invoice contains the supporting detail.
- The invoice is presented either by post or by hand delivery.
- Invoices submitted by post are addressed to: Transnet Freight Rail
 P.O Box
 Empangeni
 3880
- For the attention of the Contract Specialist TBA
- Invoices submitted by hand are presented to: Transnet Freight Rail

TRANSNET FREIGHT RAIL

Enquiry: SIM22022CIDB / ERAC-RCB-39788

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area

from SMH08 to SMH09, in the port of Richards Bay

Malahle House 4 Kiewiet Street Empangeni 3880

- For the attention of the Contract Specialist, TBA
- The invoice is presented as an original.

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area

from SMH08 to SMH09, in the port of Richards Bay



TRANSNER

PART 4: SITE INFORMATION

Core clause 11.2(16) states

"Site Information is information which

- describes the Site and its surroundings and
- is in the documents which the Contract Data states it is in."

In Contract Data, reference has been made to this Part 4 of the contract for the location of Site Information.

1. Description of the Site and its surroundings

1.1. General description

The Site is situated inside the Port of Richards Bay and is accessible through the Bayvue and East gates of the Port of Richards Bay, via NewArk Road.

The site location is at these GPS Coordinates: -28,7891150 32,0352730

The Dutch Area is accessible via Dumra road. Dumra road connects Ventura and Octopus roads. The Dutch Area has a Railway Shunting Line and is in the adjacent internal Roads around offloading Area

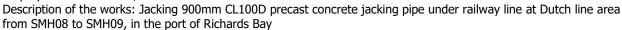


1.2. Information about the site at time of tender which may affect the work in this contract

1.2.1 Access limitations

The Contractor will need site access to get to this site which will be obtained through the TNPA Security, who provides permits to enter the Port of Richards Bay. Trucks entering the Port of Richards Bay need a permit worth R389.69, which is valid for the financial year, i.e. until 31 March 2023. Without the site access the contractor will not be able to enter site and







TRANSNER

perform his/her duties. All works shall be performed under supervision of a Transnet authorised personnel.

The service shall be performed inside the Port of Richards Bay, table below depicts the site details.

Site Name	Region	Latitude	Longitude	Depot	Areas
Richards Bay	Eastern	-28.7891150	32.0352730	Richards Bay	Port Of Richards Bay

1.2.2 Existing buildings, structures, and plant & machinery on the Site

The Dutch Area has a Railway Shunting Line and is in the adjacent internal Roads around offloading Area.

1.2.3 Access conditions in areas affected by work in this contract

The Dutch Area is accessible via Dumra road. Dumra road connects Ventura and Octopus roads. The Dutch Area has a Railway Shunting Line and is in the adjacent internal Roads around offloading Area.

1.2.4 Hidden and other services within the site

Existing stormwater pipes and electrical cable.

2. Site Inspection

A site inspection will be arranged, which must be attended by tenderers. Further details regarding date and time will appear in the appointment letter.

TRANSNET



Transnet SOC Limited Registration Number 1990/00900/06

TRANSNET SPECIFICATION

E7/1 - SPECIFICATION FOR GENERAL WORK AND WORKS ON, OVER, UNDER OR ADJACENT TO RAILWAY LINES AND NEAR HIGH VOLTAGE EQUIPMENT

(This specification shall be used in network operator contracts)

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(This page not to be issued with contract)

SPECIFICATION FOR GENERAL WORK AND WORKS ON, OVER, UNDER OR ADJACENT TO RAILWAY LINES AND NEAR HIGH VOLTAGE EQUIPMENT

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Authorised:	Chief Engineer Infrastructure Engineering	J. van Aardt

Date:

May 2011

(This page not to be issued with contract)

TRANSNET



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1.0 SCOPE

1.1 This specification covers the network operator's requirements for general work and works on, over, under or adjacent to railway lines and near high voltage equipment.

2.0 DEFINITIONS

The following definitions shall apply:

"Authorised Person" - A person whether an employee of the network operator or not, who has been specially authorised to undertake specific duties in terms of Transnet' publication Electrical Safety Instructions, and who holds a certificate or letter of authority to that effect.

"Barrier" Any device designed to restrict access to "live" high-voltage electrical equipment.

"Bond" - A short conductor installed to provide electrical continuity.

"Contractor" - Any person or organisation appointed by the network operator to carry out work on its behalf.

"Contract Supervisor" - The person or juristic person appointed by the network operator from time to time as the Contract Supervisor, to administer the Contractor's performance and execution of the Works according to the powers and rights held by and obligations placed upon the Contract Supervisor in terms of the Contract.

"Dead" - Isolated and earthed.

"Electrical Officer (Contracts)" - The person appointed in writing by the Project Manager in terms of this specification as the person who shall be consulted by the Contractor in all electrical matters to ensure that adequate safety precautions are taken by the Contractor.

"Executive Officer" - The person appointed by the network operator from time to time as the Executive Officer to act according to the rights and powers held by and obligations placed upon him in terms of the Contract.

"High-Voltage" - A voltage normally exceeding 1000 volts.

"Live" - A conductor is said to be "live" when it is at a potential different from that of the earth or any other conductor of the system of which it forms a part.

"Near" - To be in such a position that a person's body or the tools he is using or any equipment he is handling may come within 3 metres of "live" exposed high-voltage electrical equipment.

"Occupation" - An authorisation granted by the network operator for work to be carried out under specified conditions on, over, under or adjacent to railway lines.

"Occupation Between Trains" - An occupation during an interval between successive trains.

"Optical Fibre Cable" - Buried or suspended composite cable containing optical fibres used in:

- telecommunication networks for transmission of digital information and
- safety sensitive train operations systems.

"Project Manager" – As defined in the special conditions of the contract. The person or juristic person appointed by the network operator from time to time as the Project Manager, to administer the Contract according to the powers and rights held by and obligations placed upon him in terms of the Contract.

"Responsible Representative" - The responsible person in charge, appointed by a contractor, who has undergone specific training (and holds a certificate) to supervise (general or direct) staff under his control who perform general work or to work on, over, under or adjacent to railway lines and in the vicinity of high-voltage electrical equipment.

"Total Occupation" - An occupation for a period when trains are not to traverse the section of line covered by the occupation.

"Work on" - Work undertaken on or so close to the equipment that the specified working clearances to the "live" equipment cannot be maintained.

"Work Permit" - A combined written application and authority to proceed with work on or near dead electrical equipment.

"Works" - The contractual intent for the work to be done as defined in the contract at a defined work site.

PART A - GENERAL SPECIFICATION

3.0 AUTHORITY OF OFFICERS OF TRANSNET

- 3.1 The Contractor shall co-operate with the officers of the network operator and shall comply with all instructions issued and restrictions imposed with respect to the Works which bear on the existence and operation of the network operator's railway lines and high-voltage equipment.
- 3.2 Without limiting the generality of the provisions of clause 3.1, any duly authorised representative of the network operator, having identified himself, may stop the work if, in his opinion, the safe passage of trains or the safety of the network operator's assets or any person is affected. **CONSIDERATIONS OF SAFETY SHALL TAKE PRECEDENCE OVER ALL OTHER CONSIDERATIONS**.

4.0 CONTRACTOR'S REPRESENTATIVES AND STAFF

- 4.1 The Contractor shall nominate Responsible Representatives of whom at least one shall be available at any hour for call-out in cases of emergency. The Contractor shall provide the Contract Supervisor with the names, addresses and telephone numbers of the representatives.
- 4.2 The Contractor guarantees that he has satisfied himself that the Responsible Representative is fully conversant with this specification and that he shall comply with all his obligations in respect thereof.
- 4.3 The Contractor shall ensure that all contractor staff receives relevant awareness, educational and competence training regarding safety as prescribed.

5.0 OCCUPATIONS AND WORK PERMITS

- 5.1 Work to be done during total occupation or during an occupation between trains or under a work permit shall be done in a manner decided by the Contract Supervisor and at times to suit the network operator requirements.
- 5.2 The Contractor shall organise the Works in a manner which will minimise the number and duration of occupations and work permits required.
- 5.3 The network operator will not be liable for any financial or other loss suffered by the Contractor arising from his failure to complete any work scheduled during the period of an occupation or work permit.
- 5.4 The Contractor shall submit to the Contract Supervisor, in writing, requests for occupations or work permits together with details of the work to be undertaken, at least 21 days before they are required. The network operator does not undertake to grant an occupation or work permit for any particular date, time or duration.
- 5.5 The network operator reserves the right to cancel any occupation or work permit at any time before or during the period of occupation or work permit. If, due to cancellation or change in date or time, the Contractor is not permitted to start work under conditions of total occupation or work permit at the time arranged, all costs caused by the cancellation shall be born by the Contractor except as provided for in clauses 5.6 to 5.8.
- When the Contractor is notified less than 2 hours before the scheduled starting time that the occupation or work permit is cancelled, he may claim reimbursement of his direct financial losses caused by the loss of working time up to the time his labour and plant are employed on other work, but not exceeding the period of the cancelled occupation or work permit.
- 5.7 When the Contractor is notified less than 2 hours before the scheduled starting time, or during an occupation or work permit, that the duration of the occupation or work permit is reduced, he may claim reimbursement of his direct financial losses caused by the loss of working time due to the reduced duration of the occupation or work permit.
- 5.8 Reimbursement of the Contractor for any loss of working time in terms of clause 5.6 and 5.7, shall be subject to his claims being submitted within 14 days of the event with full details of labour and plant involved, and provided that the Contract Supervisor certifies that no other work on which the labour and plant could be employed was immediately available.
- 5.9 Before starting any work for which an occupation has been arranged, the Contractor shall obtain from the Contract Supervisor written confirmation of the date, time and duration of the occupation.
- 5.10 Before starting any work for which a work permit has been arranged, the Responsible Representative shall read and sign portion C of the Work Permit, signifying that he is aware of the work boundaries within which work may be undertaken. After the work for which the permit was granted has been completed, or when the

work permit is due to be terminated, or if the permit is cancelled after the start, the same person who signed portion C shall sign portion D of the Work Permit, thereby acknowledging that he is aware that the electrical equipment is to be made "live". The Contractor shall advise all his workmen accordingly.

6.0 SPEED RESTRICTIONS AND PROTECTION

- 6.1 When speed restrictions are imposed by the network operator because of the Contractor's activities, the Contractor shall organise and carry out his work so as to permit the removal of the restrictions as soon as possible.
- When the Contract Supervisor considers protection to be necessary the Contractor shall, unless otherwise agreed, provide all protection including flagmen, other personnel and all equipment for the protection of the network operator's and the Contractor's personnel and assets, the public and including trains.
- 6.2.1 The network operator will provide training free of charge of the Contractor's flagmen and other personnel performing protection duties. The Contractor shall consult with the Contract Supervisor, whenever he considers that protection will be necessary, taking into account the minimum permissible clearances set out in the Manual for Track Maintenance (Document no. BBB0481):
 - Drawing no. BE-97 Sheet 1: Horizontal Clearances: 1065mm gauge (Annexure 1 sheet 1)
 - Drawing no. BE-97 Sheet 2: Vertical Clearances: 1065mm gauge (Annexure 1 sheet 2)
 - Drawing no. BE-97 Sheet 3: Clearances: Platform (Annexure 1 sheet 3)
 - Drawing no. BE-97 Sheet 5: Clearances: 610mm Gauge (Annexure 1 sheet 5)
- 6.3 The Contractor shall appoint a Responsible Representative to receive and transmit any instruction which may be given by the network operator personnel providing protection.

7.0 ROADS AND ROADS ON THE NETWORK OPERATOR'S PROPERTY

- 7.1 The Contractor shall take every reasonable precaution to prevent damage to any roads or bridges used to obtain access to the site, and shall select routes, use vehicles, and restrict loads so that any extraordinary traffic as may arise from the moving of plant or material to or from the site shall be limited as far as is reasonably possible.
- 7.2 The Contractor shall not occupy or interfere in any way with the free use of any public or private road, right-of-way, path or street unless the Contract Supervisor has obtained the approval of the road authority concerned.

8.0 CLEARANCES

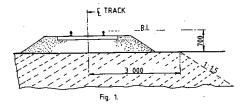
- 8.1 No temporary works shall encroach on the appropriate minimum clearances set out in the Manual for Track Maintenance (Document no. BBB0481):
 - Drawing no. BE-97 Sheet 1: Horizontal Clearances: 1065mm gauge (Annexure 1 sheet 1)
 - Drawing no. BE-97 Sheet 2: Vertical Clearances: 1065mm gauge (Annexure 1 sheet 2)
 - Drawing no. BE-97 Sheet 3: Clearances: Platform (Annexure 1 sheet 3)
 - Drawing no. BE-97 Sheet 5: Clearances: 610mm Gauge (Annexure 1 sheet 5)

9.0 STACKING OF MATERIAL

9.1 The Contractor shall not stack any material closer than 3m from the centre line of any railway line without prior approval of the Contract Supervisor.

10.0 EXCAVATION, SHORING, DEWATERING AND DRAINAGE

10.1 Unless otherwise approved by the Contract Supervisor any excavation adjacent to a railway line shall not encroach on the hatched area shown in Figure 1.



- 10.2 The Contractor shall provide, at his own cost any shoring, dewatering or drainage of any excavation unless otherwise stipulated elsewhere in the Contract.
- 10.3 Where required by the Contract Supervisor, drawings of shoring for any excavation under or adjacent to a railway line shall be submitted and permission to proceed, obtained before the excavation is commenced.
- 10.4 The Contractor shall prevent ingress of water to the excavation but where water does enter, he shall dispose of it as directed by the Contract Supervisor.
- 10.5 The Contractor shall not block, obstruct or damage any existing drains either above or below ground level unless he has made adequate prior arrangements to deal with drainage.

11.0 FALSEWORK FOR STRUCTURES

- 11.1 Drawings of falsework for the construction of any structure over, under or adjacent to any railway line shall be submitted to the Contract Supervisor and his permission to proceed obtained before the falsework is erected. Each drawing shall be given a title and a distinguishing number and shall be signed by a registered professional engineer certifying that he has checked the design of the falsework and that the drawings are correct and in accordance with the design.
- 11.2 After the falsework has been erected and before any load is applied, the Contractor shall submit to the Contract Supervisor a certificate signed by a registered professional engineer certifying that he has checked the falsework and that it has been erected in accordance with the drawings. Titles and numbers of the drawings shall be stated in the certificate. Notwithstanding permission given by the Contract Supervisor to proceed, the Contractor shall be entirely responsible for the safety and adequacy of the falsework.

12.0 PILING

12.1 The Contract Supervisor will specify the conditions under which piles may be installed on the network operator's property.

13.0 UNDERGROUND SERVICES

- 13.1 No pegs or stakes shall be driven or any excavation made before the Contractor has established that there are no underground services which may be damaged thereby.
- Any damage shall be reported immediately to the Contract Supervisor, or to the official in charge at the nearest station, or to the traffic controller in the case of centralised traffic control.

14.0 BLASTING AND USE OF EXPLOSIVES

- 14.1 When blasting within 500m of a railway line, the Contractor shall observe the requirements stipulated in this specification.
- 14.2 No blasting shall be carried out except with the prior written permission of the Contract Supervisor and under such conditions as he may impose.
- 14.3 On electrified lines the Contractor shall also obtain the permission of the Electrical Officer (Contracts) before blasting, and shall give at least 21 days notice of his intention to blast. No blasting shall be done in the vicinity of electrified lines unless a member of the network operator's electrical personnel is present.
- 14.4 The Contractor shall arrange for the supply, transport storage and use of explosives.
- The Contractor shall have labour, tools and plant, to the satisfaction of the Contract Supervisor, available on the site to clear immediately any stones or debris deposited on the track or formation by blasting, and to repair any damage to the track or formation immediately after blasting. Repairs to the track shall be carried out only under the supervision of a duly authorised representative of the network operator.
- 14.6 The Contractor shall notify the Contract Supervisor of his intention to blast at least 21 days before the commencement of any blasting operations.
- 14.7 Before any blasting is undertaken, the Contractor and the Contract Supervisor shall jointly examine and measure up any buildings, houses or structures in the vicinity of the proposed blasting to establish the extent of any existing cracking or damage to such structures, etc. The Contractor, shall, subject to the provisions stipulated in the Contract Insurance Policy, make good any deterioration of such buildings, houses, or structures, which, in the opinion of the Contract Supervisor, was directly caused by the blasting.
- 14.8 After completion of the blasting the Contractor shall obtain a written clearance from each landowner in

- the vicinity of the blasting operations to the effect that all claims for compensation in respect of damage caused by the blasting operations to their respective properties, have been settled.
- 14.9 The Contractor shall provide proof that he has complied with the provisions of clauses 10.17.1 to 10.17.4 of the Explosives Regulations (Act 26 of 1956 as amended).
- 14.10 Blasting within 500m of a railway line will only be permitted during intervals between trains. A person appointed by the Contract Supervisor, assisted by flagmen with the necessary protective equipment, will be in communication with the controlling railway station.
 - Only this person will be authorised to give the Contractor permission to blast, and the Contractor shall obey his instructions implicitly regarding the time during which blasting may take place.
- 14.11 The flagmen described in clause14.10, where provided by the network operator, are for the protection of trains and the network operator's property only, and their presence does not relieve the Contractor in any manner of his responsibilities in terms of Explosives Act or Regulations, or any obligation in terms of this Contract.
- 14.12 The person described in clause 14.10 will record in a book provided and retained by the network operator, the dates and times:-
 - (i) when each request is made by him to the controlling station for permission to blast;
 - (ii) when blasting may take place;
 - (iii) when blasting actually takes place; and
 - (iv) when he advises the controlling station that the line is safe for the passage of trains.
- 14.13 Before each blast the Contractor shall record in the same book, the details of the blast to be carried out. The person appointed by the Contract Supervisor and the person who will do the blasting shall both sign the book whenever an entry described in clause 14.12 is made.

15.0 RAIL TROLLEYS

- 15.1 The use of rail trolleys or trestle trolleys on a railway line for working on high voltage equipment will be permitted only if approved by the Contract Supervisor and under the conditions stipulated by him.
- 15.2 All costs in connection with trolley working and any train protection services requested by the Contractor shall, be borne by the Contractor, unless otherwise agreed.

16.0 SIGNAL TRACK CIRCUITS

- Where signal track circuits are installed, the Contractor shall ensure that no material capable of conducting an electrical current makes contact between rails of railway line/lines.
- 16.2 No signal connections on track-circuited tracks shall be severed without the Contract Supervisor's knowledge and consent.

17.0 PENALTY FOR DELAYS TO TRAINS

17.1 If any trains are delayed by the Contractor and the Contract Supervisor is satisfied that the delay was avoidable, a penalty will be imposed on the Contractor as stipulated in the contract, for the period and number of trains delayed.

18.0 SURVEY BEACONS AND PEGS

- 18.1 The Contractor shall not on any account move or damage any beacon, bench mark, reference mark, signal or trigonometrical station in the execution of the Works without the written approval of the Contract Supervisor.
 - Should the Contractor be responsible for any such occurrence, he shall report the circumstances to the Contract Supervisor who will arrange with the Director-General of Surveys for replacement of the beacon or mark at the cost of the Contractor.
- 18.2 The Contractor shall not move or damage any cadastral or mining beacon without the written approval of the Contract Supervisor and before it has been referenced by a registered land surveyor. Any old boundary beacon, which becomes an internal beacon on creation of new boundaries, shall not be moved without the written approval of the Contract Supervisor.

- Should the Contractor move or damage any cadastral or mining beacon without authority, he shall be responsible for having it replaced, at his cost, by a land surveyor.
- 18.3 The Contractor shall preserve all pegs and bench marks. Such survey points shall not be removed without the written approval of the Contract Supervisor. Should any peg or benchmark be removed without authority, the Contract Supervisor will arrange for its replacement and the cost will be recovered from the Contractor. No claim will be considered for delay in replacing any such peg or bench mark. Each peg replaced shall be checked by the Contractor.
- 18.4 Where a new boundary has been established, beacons on the fence line shall not be disturbed, and fence posts or anchors may not be placed or excavations made within 0,6 m of any beacon without the prior written approval of the Contract Supervisor.

19.0 TEMPORARY LEVEL CROSSINGS

- 19.1 The Contract Supervisor may, on request of the Contractor, and if necessary for the purpose of execution of the Works, permit the construction of a temporary level crossing over a railway a line at a position approved by the Contract Supervisor and at the Contractor's cost. The period for which the temporary level crossing is permitted will be at the discretion of the Contract Supervisor.
- 19.2 The Contractor will provide protection and supervise the construction of the road over the track(s) and within the railway servitude at the level crossing, as well as the erection of all road signs and height gauges. All cost to be borne by the applicant.
 - The Contractor shall exercise extreme caution in carrying out this work, especially in respect of damage to tracks, services, overhead power and communications routes and prevent contact with "live" overhead electrical equipment.
 - Unless otherwise agreed, the Contractor will provide the service deviations or alterations to the network operator's track-, structure-, drainage-, electrical-, telecommunications- and train authorisation systems to accommodate the level crossing.
- 19.3 The Contractor shall take all necessary steps including the provision of gates, locks and, where necessary, watchmen to restrict the use of the temporary level crossing to himself and his employees, his subcontractors and their employees, the staff of the network operator and to such other persons as the Contract Supervisor may permit and of whose identity the Contractor will be advised. If so ordered by the Contract Supervisor, the Contractor shall provide persons to control road traffic using the temporary level crossing. Such persons shall stop all road traffic when any approaching train is within seven hundred and fifty (750) metres of the temporary level crossing, and shall not allow road traffic to proceed over it until the lines are clear.
- 19.4 The Contractor shall maintain the temporary level crossing within the railway servitude in good condition for the period it is in use. A temporary agreement with the road authority to be concluded for the maintenance of the level crossing outside the railway servitude.
- When the temporary level crossing is no longer required by the Contractor, or permitted by the network operator, the Contractor shall at his own cost remove it and restore the site and the network operator's track-, structure-, drainage-, electrical-, telecommunications- and train authorisation systems to its original condition. Work over the tracks and within the railway servitude will be supervised by the network operator.

20.0 COMPLETION OF THE WORKS

20.1 On completion of the works, the Contractor shall remove all the remaining construction plant and material from the site, other than material which is the property of the network operator, and leave the site in a clean, neat and tidy condition. If material and plant is required for the liability and maintenance period the Contract supervisor must authorise it's retention on site.

21.0 PROTECTION OF PERSONS AND PROPERTY

21.1 The Contractor shall provide and maintain all lights, guards, barriers, fencing and watchmen when and where necessary or as required by the Contract Supervisor or by any statutory authority, for the protection of the Works and for the safety and convenience of the public.

Red, yellow, green or blue lights may not be used by the Contractor as they can be mistaken for signals. Red, yellow, green or white flags shall only be used for protection by the Contractor. Within the precincts of a port the Contractor shall obtain the permission of the Port Captain before installing any light.

- 21.2 The Contractor shall take all the requisite measures and precautions during the course of the Works to:
 - (i) protect the public and property of the public,
 - (ii) protect the property and workmen of both the network operator and the Contractor,
 - (iii) avoid damage to and prevent trespass on adjoining properties, and
 - (iv) ensure compliance with any instruction issued by the Contract Supervisor or other authorised person, and with any stipulation embodied in the contract documents which affects the safety of any person or thing.
- 21.3 The network operator will provide, at its own cost, protection for the safe working of trains during such operations as the Contract Supervisor may consider necessary. Protection by the network operator for any purpose whatsoever, does not absolve the Contractor of his responsibilities in terms of the Contract.
- 21.4 The Contractor shall take all precautions and appoint guards, watchmen and compound managers for prevention of disorder among and misconduct by the persons employed on the Works and by any other persons, whether employees or not, on the work site and for the preservation of the peace and protection of persons and property in the direct neighbourhood. Any relocation of camps because of disorder shall be at the Contractor's expense.
- 21.5 All operations necessary for the execution of the Works, including the provision of any temporary work and camping sites, shall be carried out so as not to cause veldt fires, ground and environmental pollution, soil erosion or restriction of or interference with streams, furrows, drains and water supplies.
 - If the original surface of the ground is disturbed in connection with the Works, it shall be made good by the Contractor to the satisfaction of the land owner, occupier or responsible authority.
- 21.6 The Contractor shall take all reasonable steps to minimise noise and disturbance when carrying out the Works, including work permitted outside normal working hours.
- 21.7 Dumping of waste or excess materials by the Contractor shall, in urban areas, be done under the direction and control of, and at sites made available by the local authority. Dumping outside local authority boundaries shall be done only with the express permission and under the direction and control of the Contract Supervisor.
- 21.8 The Contractor shall comply with environmental protection measures and specifications stipulated by the Contract Supervisor and/or local and environmental authorities.

22.0 INTERFERENCE WITH THE NETWORK OPERATOR'S ASSETS AND WORK ON OPEN LINES

- 22.1 The Contractor shall not interfere in any manner whatsoever with an open line, nor shall he carry out any work or perform any act which affects the security, use or safety of an open line except with the authority of the Contract Supervisor and in the presence of a duly authorised representative of the network operator.
- 22.2 The Contractor shall not carry out any work or operate any plant, or place any material whatsoever nearer than three metres from the centre line of any open line except with the written permission of the Contract Supervisor and subject to such conditions as he may impose.
- 22.3 Care must be taken not to interfere with or damage any services such as overhead wire routes, cables or pipes and optical fibre cable, except as provided for the work specified. The Contractor will be held responsible for any damage to or interruption of such services arising from any act or omission on his part or of any of his employees, or persons engaged by him on the Works. The cost of repairing, replacing or restoring the services, as well as all other costs arising from any damage to services, shall be borne by, and will be recovered from the Contractor.
- 22.4 Authority granted by the Contract Supervisor and the presence of an authorised representative of the network operator in terms hereof, shall not relieve the Contractor of his duty to comply with this specification.

23.0 ACCESS, RIGHTS-OF-WAY AND CAMPSITES

- 23.1 Where entry onto the network operator's property is restricted, permission to enter will be given only for the purpose of carrying out the Works and will be subject to the terms and conditions laid down by the network operator.
- 23.2 The Contractor shall arrange for campsites, workplaces and access thereto as well as for any right-of-

way over private property to the site of the Works, and for access within the boundaries of the network operator's property. The owners of private property to be traversed shall be approached and treated with tact and courtesy by the Contractor, who shall, if necessary, obtain a letter of introduction to such property owners from the Contract Supervisor.

The Contractor shall be responsible for the closing of all gates on roads and tracks used by him or his employees. Except with the prior approval of the Contract Supervisor and the owner or occupier of any private land to be traversed, the Contractor shall not cut, lower, damage, remove or otherwise interfere with any fence or gate which is either on the network operator's property or on private property and which restricts access to the Works. Where such approval has been given, the Contractor shall prevent entry of animals or unauthorised persons onto the network operator's or private property, and shall make the fences safe against trespass at the close of each day's work.

- 23.3 The Contractor shall take all reasonable steps to confine the movement of vehicles and plant to the approved right-of-way to minimise damage to property, crops and natural vegetation.
- 23.4 When access is no longer required, and before completion of the Works, the Contractor shall repair, restore or replace any fence or gate damaged during execution of the Works to the satisfaction of the Contract Supervisor and shall furnish the Contract Supervisor with a certificate signed by the owner and occupier of land over which he has gained access to a campsite, workplace and the Works, certifying that the owner and occupier have no claim against the Contractor or the network operator arising from the Contractor's use of the land. Should the Contractor be unable to obtain the required certificate, he shall report the circumstances to the Contract Supervisor.

24.0 SUPERVISION

- 24.1 The Contract Supervisor will provide overall technical superintendence of the Works, and may direct the Contractor in terms of the provisions of the Contract or in respect of any measures which the Contract Supervisor may require for the operations of the network operator, the safety of trains, property and workmen of the network operator, and for the safety of other property and persons. The Contractor shall carry out the directions of the Contract Supervisor. The superintendence exercised by the Contract Supervisor, including any agreement, approval, refusal or withdrawal of any approval given, shall not relieve the Contractor of any of his duties and liabilities under the Contract, and shall not imply any assumption by the network operator or by the Contract Supervisor of the legal and other responsibilities of the Contractor in carrying out the Works.
- 24.2 The Contract Supervisor may delegate to any deputy or other person, any of his duties or functions under the Contract. On receiving notice in writing of such delegation, the Contractor shall recognise and obey the deputy or person to whom any such duties or functions have been delegated as if he were the Contract Supervisor.
- 24.3 The Contractor shall exercise supervision over the Works at all times when work is performed or shall be represented by an agent having full power and authority to act on behalf of the Contractor. Such agent shall be competent and responsible, and have adequate experience in carrying out work of a similar nature to the Works, and shall exercise personal supervision on behalf of the Contractor. The Contract Supervisor shall be notified in writing of such appointment which will be subject to his approval.
- 24.4 The Contractor or his duly authorised agent shall be available on the site at all times while the Works are in progress to receive the orders and directions of the Contract Supervisor.

25.0 HOUSING OF EMPLOYEES

- 25.1 The Contractor shall, where necessary, make his own arrangements for suitable housing of his employees. Where temporary housing is permitted by the Contract Supervisor on any part of the site, the Contractor shall provide suitable sanitation, lighting and potable water supplies in terms of the requirements of the local authority or the current network operator's specification; Minimum Communal Health Requirements in Areas outside the Jurisdiction of a Local Authority E.4B, as applicable.
- 25.2 Fouling the area inside or outside the network operator's boundaries shall be prevented. The Contractor will be called upon by the Contract Supervisor to dispose of any foul or waste matter generated by the Contractor.

26.0 OPTICAL FIBRE CABLE ROUTES

- 26.1 The Contractor shall not handle, impact, move or deviate any optical fibre cable without prior approval.
- 26.2 Works that in any way affect the optical fibre cable requires prior approval from the Contract Supervisor

BBD8210 Version 1 who will determine the work method and procedures to be followed.

PART B - SPECIFICATION FOR WORK NEAR HIGH-VOLTAGE ELECTRICAL EQUIPMENT

27.0 GENERAL

- 27.1 This specification is based on the contents of Transnet's publication ELECTRICAL SAFETY INSTRUCTIONS, as amended, a copy of which will be made available on loan to the Contractor for the duration of the contract.
 - These instructions apply to all work near "live" high-voltage equipment maintained and/or operated by the network operator, and the onus rests on the Contractor to ensure that he obtains a copy.
- 27.2 This specification must be read in conjunction with and not in lieu of the Electrical Safety Instructions.
- 27.3 The Contractor's attention is drawn in particular to the contents of Part I, Sections 1 and 2 of the Electrical Safety Instructions.
- 27.4 The Electrical Safety Instructions cover the minimum safety precautions which must be taken to ensure safe working on or near high-voltage electrical equipment, and must be observed at all times. Should additional safety measures be considered necessary because of peculiar local conditions, these may be ordered by and at the discretion of the Electrical Officer (Contracts).
- 27.5 The Contractor shall obtain the approval of the Electrical Officer (Contracts) before any work is done which causes or could cause any portion of a person's body or the tools he is using or any equipment he is handling, to come within 3 metres of any "live" high-voltage equipment.
- 27.6 The Contractor shall regard all high-voltage equipment as "live" unless a work permit is in force.
- 27.7 Safety precautions taken or barriers erected shall comply with the requirements of the Electrical Officer (Contracts), and shall be approved by him before the work to be protected is undertaken by the Contractor. The Contractor shall unless otherwise agreed, bear the cost of the provision of the barriers and other safety precautions required, including the attendance of the network operator's staff where this is necessary.
- 27.8 No barrier shall be removed unless authorised by the Electrical Officer (Contracts).

28.0 WORK ON BUILDINGS OR FIXED STRUCTURES

- 28.1 Before any work is carried out or measurements are taken on any part of a building, fixed structure or earthworks of any kind above ground level situated within 3 metres of "live" high-voltage equipment, the Electrical Officer (Contracts) shall be consulted to ascertain the conditions under which the work may be carried out.
- 28.2 No barrier erected to comply with the requirements of the Electrical Officer (Contracts) shall be used as temporary staging or shuttering for any part of the Works.
- 28.3 The shuttering for bridge piers, abutments, retaining walls or parapets adjacent to or over any track may be permitted to serve as a barrier, provided that it extends at least 2,5 metres above any working level in the case of piers, abutments and retaining walls and 1,5 metres above any working level in the case of parapets.

29.0 WORK DONE ON OR OUTSIDE OF ROLLING STOCK, INCLUDING LOADING OR UNLOADING

- 29.1 No person may stand, climb or work, whilst on any platform, surface or foothold:
- 29.1.1 higher than the normal unrestricted access way, namely -
- 29.1.1.1 external walkways on diesel, steam and electric locomotives, steam heat vans, etc. and
- 29.1.1.2 walkways between coaches and locomotives.
- 29.1.2 of restricted access ways in terms of the Electrical Safety Instructions namely -
- 29.1.2.1 the floor level of open wagons
- 29.1.2.2 external walkways or decks of road-rail vehicles, on-track maintenance machines and material trains.
- 29.1.3 Unauthorised staff working on these platforms must be directly supervised by duly authorised persons in terms of clause 607.1.3 of the Electrical Safety Instructions. These persons must attend the relevant electrical safety module training. A letter of training must then be issued by an accredited training authority. A Category C Certificate of Authority must be obtained from the

local depot examining officer.

- 29.2 When in the above positions no person may raise his hands or any equipment he is handling above his head.
- 29.3 In cases where the Contractor operates his own rail mounted equipment, he shall arrange for the walkways on this plant to be inspected by the Electrical Officer (Contracts) and approved, before commencement of work.
- 29.4 The handling of long lengths of material such as metal pipes, reinforcing bars, etc should be avoided, but if essential they shall be handled as nearly as possible in a horizontal position below head height.
- 29.5 The Responsible Representative shall warn all persons under his control of the danger of being near "live" high-voltage equipment, and shall ensure that the warning is fully understood.
- 29.6 Where the conditions in clauses 30.1 to 30.4 cannot be observed the Electrical Officer (Contracts), shall be notified. He will arrange for suitable Safety measures to be taken. The Electrical Officer (Contracts), may in his discretion and in appropriate circumstances, arrange for a suitable employee of the Contractor to be specially trained by the network operator and at the Contractor's cost, as an Authorised Person to work closer than 3 metres from "live" overhead conductors and under such conditions as may be imposed by the senior responsible electrical engineer of the network operator.

30.0 USE OF EQUIPMENT

- 30.1 Measuring Tapes and Devices
- 30.1.1 Measuring tapes may be used near "live" high-voltage equipment provided that no part of any tape or a person's body comes within 3 metres of the "live" equipment.
- 30.1.2 In windy conditions the distance shall be increased to ensure that if the tape should fall it will not be blown nearer than 3 metres from the "live" high-voltage equipment.
- 30.1.3 Special measuring devices longer than 2 metres such as survey sticks and rods may be used if these are of non-conducting material and approved by the responsible Electrical Engineer of the network operator, but these devices must not be used within 3 metres of "live" high-voltage equipment in rainy or wet conditions.
- 30.1.4 The assistance of the Electrical Officer (Contracts) shall be requested when measurements within the limits defined in clauses 31.1.1 to 31.1.3 are required.
- 30.1.5 The restrictions described in 31.1.1 to 31.1.3 do not apply on a bridge deck between permanent parapets nor in other situations where a barrier effectively prevents contact with the "live" high-voltage equipment.
- 30.2 Portable Ladders
- 30.2.1 Any type of portable ladder longer then 2 metres may only be used near "live" high-voltage equipment under the direct supervision of the Responsible Representative. He shall ensure that the ladder is always used in such a manner that the distance from the base of the ladder to any "live" high-voltage equipment is greater than the fully extended length of the ladder plus 3 metres. Where these conditions cannot be observed, the Electrical Officer (Contracts) shall be advised, and he will arrange for suitable safety measures to be taken.

31.0 CARRYING AND HANDLING MATERIAL AND EQUIPMENT

- 31.1 Pipes, scaffolding, iron sheets, reinforcing bars and other material which exceeds 2 metres in length shall be carried completely below head height near "live" high-voltage equipment. For maximum safety such material should be carried by two or more persons so as to maintain it as nearly as possible in a horizontal position. The utmost care must be taken to ensure that no part of the material comes within 3 metres of any "live" high-voltage equipment.
- 31.2 Long lengths of wire or cable shall never be run out in conditions where a part of a wire or cable can come within 3 metres of any "live" high-voltage equipment unless the Electrical Officer (Contracts) has been advised and has approved appropriate safety precautions.
- 31.3 The presence of overhead power lines shall always be taken account of especially when communications lines or cables or aerial cables, stay wires, etc. are being erected above ground level.

32.0 PRECAUTIONS TO BE TAKEN WHEN ERECTING OR REMOVING POLES, ANTENNAE, TREES ETC.

32.1 A pole may be handled for the purpose of erection or removal near high-voltage equipment under the following conditions:

- (i) If the distance between the point at which the pole is to be erected or removed and the nearest "live" high-voltage equipment is more than the length of the pole plus 3 metres, the work shall be supervised by the Responsible Representative.
- (ii) If the distance described in (i) is less than the length of the pole plus 3 metres, the Electrical Officer (Contracts) shall be consulted to arrange for an Authorised Person to supervise the work and to ensure that the pole is earthed where possible. The pole shall be kept in contact with the point of erection, and adequate precautions shall be taken to prevent contact with "live" high-voltage equipment.
- 32.2 The cost of supervision by an Authorised Person and the provision of earthing shall, unless otherwise agreed, be borne by the Contractor.
- 32.3 The provisions of clauses 33.1 and 33.2 shall also apply to the erection or removal of columns, antennae, trees, posts, etc.

33.0 USE OF WATER

33.1 No water shall be used in the form of a jet if it can make contact with any "live" high-voltage equipment or with any person working on such equipment.

34.0 USE OF CONSTRUCTION PLANT

- 34.1 "Construction plant" entails all types of plant including cranes, piling frames, boring machines, excavators, draglines, dewatering equipment and road vehicles with or without lifting equipment.
- When work is being undertaken in such a position that it is possible for construction plant or its load to come within 3 metres of "live" high-voltage equipment, the Electrical Officer (Contracts) shall be consulted. He will arrange for an Authorised Person to supervise the work and to ensure that the plant is adequately earthed. The Electrical Officer (Contracts) will decide whether further safety measures are necessary.
- 34.3 The cost of any supervision by an Authorised Person and the provision of earthing shall, unless otherwise agreed, be borne by the Contractor.
- When loads are handled by cranes, non-metallic rope hand lines shall be used, affixed to such loads so as to prevent their swinging and coming within 3 metres of "live" high-voltage equipment.
- 34.5 Clauses 35.1 to 35.4 shall apply *mutatis mutandis* to the use of maintenance machines of any nature.

35.0 WORK PERFORMED UNDER DEAD CONDITIONS UNDER COVER OF A WORK PERMIT

- 35.1 If the Responsible Representative finds that the work cannot be done in safety with the high-voltage electrical equipment "live", he shall consult the Electrical Officer (Contracts) who will decide on the action to be taken.
- 35.2 If a work permit is issued the Responsible Representative shall-
 - (i) before commencement of work ensure that the limits within which work may be carried out have been explained to him by the Authorised Person who issued the permit to him, and that he fully understands these limits.
 - (ii) sign portion C of the permit before commencement of work;
 - (iii) explain to all persons under his control the limits within which work may be carried out, and ensure that they fully understand these limits;
 - (iv) care for the safety of all persons under his control whilst work is in progress; and
 - (v) withdraw all personnel under his control from the equipment on completion of the work before he signs portion D of the work permit.

36.0 TRACTION RETURN CIRCUITS IN RAILS

- 36.1 DANGEROUS CONDITIONS CAN BE CREATED BY REMOVING OR SEVERING ANY BOND.
- 36.2 Broken rails with an air gap between the ends, and joints at which fishplates are removed under "broken bond" conditions, are potentially lethal. The rails on either side of an air gap between rail ends on electrified lines shall not be touched simultaneously until rendered safe by the network operator personnel.
- The Contractor shall not break any permanent bonds between rails or between rails and any structure. He shall give the Contract Supervisor at least 7 days written notice when removal of such bonds is necessary.

36.4 No work on the track which involves interference with the traction return rail circuit either by cutting or removing the rails, or by removal of bonds shall be done unless the Electrical Officer (Contracts) is consulted. He will take such precautions as may be necessary to ensure continuity of the return circuit before permitting the work to be commenced.

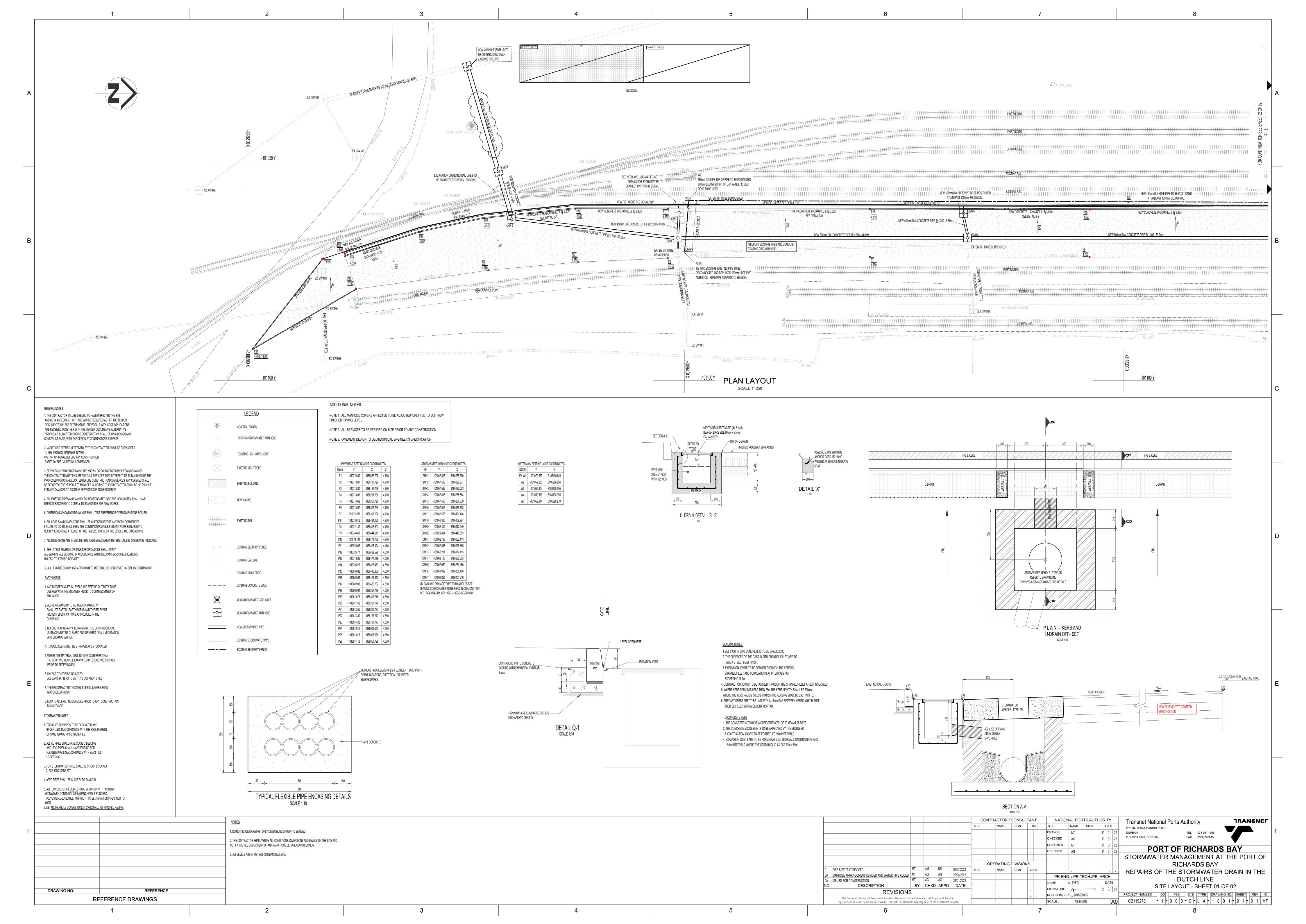
37.0 HIGH-VOLTAGE ELECTRICAL EQUIPMENT NOT MAINTAINED AND/OR OPERATED BY THE NETWORK OPERATOR

Where the work is undertaken on or near high-voltage electrical equipment which is not maintained and/or operated by the network operator, the Occupational Health and Safety Act No. 85 of 1993, and Regulations and Instructions, or the Mines Health and Safety Act (Act 29 of 1996), shall apply.

Such equipment includes:-

- (i) Eskom and municipal equipment;
- (ii) The Contractor's own power supplies; and
- (iii) Electrical equipment being installed but not yet taken over from the Contractor.

END



GOVERNMENT NOTICE

DEPARTMENT OF WATER AFFAIRS

No. 665 6 September 2013

REVISION OF GENERAL AUTHORISATIONS IN TERMS OF SECTION 39 OF THE NATIONAL WATER ACT, 1998 (ACT NO. 36 OF 1998) (THE ACT)

I, Bomo Edna Molewa, in my capacity as the Minister of Water and Environmental Affairs in terms of section 39 of the National Water Act, 1998 (Act No. 36 of 1998) hereby revise the general authorisation in section 3 of the Schedule to Government Notice No. 398 of 26 March 2004, and the general authorisations in sections 2, 3 and 4 of the Schedule to Government Notice No. 399 of 26 March 2004, as contained in the Schedule hereto.

MRS BEE MÖLEWA, MP

MINISTER OF WATER AND ENVIRONMENTAL AFFAIRS

DATE: 2013.08.30

SCHEDULE

1. ENGAGING IN A CONTROLLED ACTIVITY, IDENTIFIED AS SUCH IN SECTION 37(1)(a): IRRIGATION OF ANY LAND WITH WASTE OR WATER CONTAINING WASTE GENERATED THROUGH ANY INDUSTRIAL ACTIVITY OR BY A WATERWORK

[Section 21(e)]

Purpose of authorisation

1.1 This general authorisation replaces the need for a water user to apply for a licence in terms of the Act, provided that the water use is within the limits and conditions as set out in this general authorisation.

Exclusion

1.2 This authorisation does not apply to a person who is not the lawful occupier of the land on which the wastewater irrigation takes place.

Compliance with Act and other laws

- 1.3 (1) This authorisation does not—
- (a) replace any existing authorisation that is recognised under the Act; and
- (b) exempt a person who uses water from compliance with any other provision of the Act, unless stated otherwise in this notice, or any other applicable law, regulation, ordinance or by-law.
- (2) A person who uses water in terms of this authorisation is exempted from compliance with section 22(2)(e) of the Act.

Area of applicability

1.4 This authorisation is applicable throughout the Republic of South Africa.

Duration of authorisation

- 1.5 This authorisation will be applicable for a period of five years from the date of publication of this notice, unless—
- (a) it is amended by the responsible authority at any review period;
- (b) the period is extended by a notice in the Gazette;
- (c) it is replaced with a general authorisation in relation to a specific water resource or within a specific area; or
- (d) the water user is instructed in writing by the responsible authority to apply for a licence in terms of the Act.

Definitions

1.6 In this general authorisation, unless the context indicates otherwise, any word or expression to which a meaning has been assigned in terms of the Act shall have that meaning, and—

- "biodegradable industrial wastewater" means wastewater that contains predominantly organic waste arising from industrial activities and premises including—
- (a) milk processing;
- (b) manufacture of fruit and vegetable products;
- (c) sugar mills;
- (d) manufacture and bottling of soft drinks;
- (e) production of alcohol and alcoholic beverages in breweries, wineries or malt houses:
- (f) manufacture of animal feed from plant or animal products;
- (g) manufacture of gelatine and glue from hides, skin and bones;
- (h) abattoirs;
- (i) fish processing; and
- (j) confined animal feeding operations.
- "commercial activity" means those activities identified in the Standard Industrial Classification of All Economic Activities (5th Edition), published by the Central Statistics Service, 1993, as amended and supplemented, under the following categories—
- (a) 6: wholesale and retail trade;
- (b) 7: transport, storage and communication;
- (c) 8: business services;
- (d) 9: community, social and personal services and
- (e) 0: personal and other services;
- "domestic wastewater" means wastewater arising from domestic and commercial activities and premises, and may contain sewage;
- "irrigation" means the application of wastewater to any land or property for the purpose of crop production, and includes the cultivation of pasture or any other suitable purpose;
- "monitoring programme" means a programme for taking regular measurements of the quantity and quality of a water resource, waste or wastewater discharge at specified intervals and at specific locations to determine the chemical, physical and biological nature of the water resource, waste or wastewater discharge;
- "organic waste" means waste of non-anthropogenic origin that is readily biodegradable in the environment and does not contain any toxic substances that may accumulate in the environment;
- "primary treatment" means treatment of wastewater by a physical process, which may involve maceration, sedimentation, screening and grit removal;
- "secondary treatment" means treatment of wastewater by a biological process, which amongst others may involve solar and other energy, bacteria, algae and a variety of aquatic biota, to remove organic matter;
- "wastewater" means water containing waste, or water that has been in contact with waste material.

Irrigation with wastewater

- 1.7(1) A person who—
- (a) owns or lawfully occupies property registered in the Deeds Office as at the date of this notice;
- (b) lawfully occupies or uses land that is not registered or surveyed; or
- (c) lawfully has access to land on which the use of water takes place,

may on that property or land-

(i) irrigate up to 2000 cubic metres of domestic and biodegradable industrial waste water on any given day as set out in Table 1.1:

Table 1.1: Wastewater limit values applicable to the irrigation of any land or property up to 2000 cubic metres

Variables	Limits	
pH	not less than 5,5 or more than 9,5 pH	
	units	
Electrical Conductivity	does not exceed 70 milliSiemens above	
	intake to a maximum of 150 milliSiemens	
	per metre (mS/m)	
Suspended Solids	does not exceed 25 mg/l	
Chloride as Free Chlorine	does not exceed 0,25 mg/l	
Fluoride	does not exceed 1 mg/l	
Soap, Oil and Grease	does not exceed 2,5 mg/l	
Chemical Oxygen Demand	does not exceed 75 mg/l	
Faecal coliforms	do not exceed 1000 per 100 ml	
Ammonia (ionised and un-ionised) as	does not exceed 3mg/l	
Nitrogen		
Nitrate/Nitrite as Nitrogen	does not exceed 15 mg/l	
Ortho-Phosphate as phosphorous	does not exceed 10 mg/l	

(ii) irrigate up to 500 cubic metres of domestic or biodegradable industrial wastewater on any given day, as set out in Table 1.2:

Table 1.2: Wastewater limit values applicable to the irrigation of any land or property up to 500 cubic metres

Variables	Limits	
pH	not less than 6 or more than 9 pH units	
Electrical conductivity	not exceed 200 milliSiemens per metre (mS/m);	
Chemical Oxygen Demand (COD)	does not exceed 400 mg/l after removal of algae;	
Faecal coliforms	do not exceed 100 000 per 100 ml	
Sodium Adsorption Ratio (SAR)	does not exceed 5 for biodegradable industrial wastewater	

(iii) irrigate up to 50 cubic metres of domestic or biodegradable industrial wastewater on any given day, as set out in Table 1.3:-

Table 1.3: Wastewater limit values applicable to the irrigation of any land or property up to 50 cubic metres

Variables	Limits	
рН	not less than 6 or more than 9 pH units	
Electrical conductivity	not exceed 200 milliSiemens per metre (mS/m);	
Chemical Oxygen Demand (COD)	does not exceed 5000 mg/l after removal of algae;	
Faecal coliforms	do not exceed 100 000 per 100 ml	
Sodium Adsorption Ratio (SAR)	does not exceed 5 for	
-	biodegradable industrial wastewater	

- (iv) irrigate provided that the irrigated wastewater does not impact on the water resource or any other person's water use, property or land; and
- (v) irrigate provided that the irrigated wastewater is not detrimental to the health and safety of the public in the vicinity of the activity.

Registration of irrigation with wastewater

- 1.8(1) A person who irrigates with wastewater in terms of this authorisation must submit to the responsible authority a completed registration form or any other information requested in writing by the responsible authority for the registration of the water use before commencement of irrigation.
- (2) On written receipt of a registration certificate from the responsible authority, the person will be regarded as a registered water user.
- (3) All forms for registration of water use are obtainable from any office of the responsible authority, as well as from the web-site at http://www.dwa.gov.za.

Location of irrigation with wastewater

- 1.9 Wastewater irrigation in terms of this authorisation is only permitted if the irrigation takes place—
- (a) at least 50m above the 1 in 100 year flood line or riparian habitat whichever is the greatest, or alternatively at least 100 metres from a water course whichever is the greatest, or at least further than 500m radius from a borehole that is utilised for drinking water or stock watering;
- (b) on land that is not, or does not, overlie a major aquifer (identification of a major aquifer will be provided by the Department, upon written request); and
- (c) at least outside 500m radius from the boundary of a wetland.

Precautionary practices

- 1.10(1) The water user must follow acceptable construction, maintenance and operational practices to ensure the consistent, effective and safe performance of the wastewater irrigation system, including the prevention of—
- (a) waterlogging of the soil and pooling of wastewater on the surface of the soil;

- (b) nuisance conditions such as flies or mosquitoes, odour or secondary pollution;
- (c) waste, wastewater or contaminated stormwater entering into a water resource;
- (d) the contamination of run-off water or stormwater:
- (e) the unreasonable chemical or physical deterioration of, or any other damage to, the soil of the irrigation site;
- (f) the unauthorised use of the wastewater by members of the public; and
- (g) people being exposed to the mist originating from the irrigation of the wastewater.
- (2) Suspended solids must be removed from any wastewater, and the resulting sludge disposed of according to the requirements of any relevant law or regulation, including the document Guidelines for the Utilisation and Disposal of Wastewater Sludge, Volumes 1-5, Water Research Commission Reports TT 261/06, 262/06, 349/09, 350/09, 351/09, as amended from time to time (obtainable from the responsible authority upon written request).
- (3) All reasonable measures must be taken to provide for mechanical, electrical, operational, or process failures and malfunctions of the wastewater irrigation system.
- (4) All reasonable measures must be taken for storage of the wastewater used for irrigation when irrigation cannot be undertaken, of which the storage must be in accordance with general authorisation in section 3 of this Notice.
- (5) All reasonable measures must be taken to collect contaminated stormwater or runoff emanating from the area under irrigation and to retain it for disposal of which the disposal must be in accordance with general authorisation in section 3 of this Notice.
- (6) Upon the written request of the responsible authority the registered user must ensure the implementation of any additional construction, maintenance and operational practices that may be required in the opinion of the responsible authority to ensure the consistent, effective, safe and sustainable performance of the wastewater irrigation system.

Record-keeping and disclosure of information

- 1.11(1) The water user must ensure the establishment of monitoring programmes to monitor the quantity and quality of the wastewater to be used for irrigation prior to commencement and thereafter, in the following manner:
- (a) The quantity must be metered and the total recorded weekly; and
- (b) the quality of water irrigated must be monitored once every month by taking a grab sample at the point at which the wastewater enters the irrigation system for all parameters listed in paragraph 1.7(1)(i), (ii) and (iii) and results submitted to the responsible authority.
- (2) Upon the written request from the responsible authority the water user must—
- (a) ensure the establishment of any additional monitoring programmes; and
- (b) appoint a competent person to assess the water use measurements made in terms of this authorisation and submit the findings to the responsible authority for evaluation.
- (3) The water user must keep a written record, for at least five years, of the following information:
- (a) Both the location of the irrigation area and the extent of the area or areas under irrigation, which must be demarcated on a suitable scale map;
- (b) details of the crops and the size of the area under irrigation;
- (c) details of the type of irrigation being practiced;
- (d) details of the monitoring programme, including—

- (a) Both the location of the irrigation area and the extent of the area or areas under irrigation, which must be demarcated on a suitable scale map;
- (b) details of the crops and the size of the area under irrigation;
- (c) details of the type of irrigation being practiced;
- (d) details of the monitoring programme, including—
 - (i) the quantity of wastewater irrigated;
 - (ii) the results of the analysis of the quality of wastewater irrigated as obtained from the laboratory for the samples taken in accordance with paragraph 1.12;
- (e) details of the irrigation management techniques being practised;
- (f) details of precautionary practices and pollution prevention measures implemented; and
- (g) details of failure and malfunctions in the irrigation system, and details of the effects of (if any), as well as details of, measures taken to prevent such failures and malfunctions in the future. The above mentioned information must be made available upon written request to the responsible authority and interested and affected parties regarding the wastewater irrigation and related activities.

Methods for sampling and analysis

- 1.12 The following methods for sampling and analysis must be adhered to:
- (a) Samples of the water containing waste must be taken in accordance with the applicable South African National Standard (SANS) for sampling.
- (b) The methods for the measurement of specific substances and parameters in any waste or wastewater must be carried out by a—
 - (i) laboratory that has been accredited in accordance with SANS 17025:2005 by the South African National Accreditation System (SANAS) to conduct the analysis in accordance with the prescribed SANS method for each applicable variables; or
 - (ii) laboratory that participates in a recognised Proficiency Testing Scheme (Z-scores results should be presented);
 - (iii) laboratory that has proof of intra- and inter-laboratory proficiency (quality assurance as prescribed in Standard Methods).
- (c) Water users who can be able to demonstrate to the responsible authority that there is no accredited laboratory within their vicinity may use methods 1.12(b)(ii) and (iii) above.

Inspections

1.13 Any property or land in respect of which a water use has been authorised in terms of this general authorisation, such property or land must be made available for inspection by an authorised person in terms of section 125 of the Act.

Incidence reporting

1.14 Any information on the occurrence of any incident that has or is likely to have a detrimental impact on the water resource quality must be reported to the responsible authority within 24 hours.

Offences

1.15 A person who contravenes any provision of this general authorisation is guilty of an offence and is subject to the penalty set out in section 151(2) of the Act.

2. DISCHARGE OF WASTE OR WATER CONTAINING WASTE INTO A WATER RESOURCE THROUGH A PIPE, CANAL, SEWER OR OTHER CONDUIT; AND DISPOSING IN ANY MANNER OF WATER WHICH CONTAINS WASTE FROM, OR WHICH HAS BEEN HEATED IN, ANY INDUSTRIAL OR POWER GENERATION PROCESS

[Sections 21(f) and (h)]

Purpose of authorisation

2.1 This general authorisation replaces the need for a water user to apply for a licence in terms of the Act, provided that the water use is within the limits and conditions as set out in this general authorisation.

Exclusion

- 2.2 This authorisation does not apply to a person who discharges wastewater—
- (a) through sea outfalls;
- (b) to an aquifer;
- (c) any other groundwater resource;
- (d) any water resource with a closed drainage system; or
- (e) directly into an off channel dam.

Compliance with Act and other laws

- 2.3(1) This authorisation does not—
- (a) replace any existing authorisation that is recognised under the Act;
- (b) exempt a person who uses water from compliance with any other provision of the Act, unless stated otherwise in this notice, or any other applicable law, regulation, ordinance or by-law;
- (c) apply to any water use under Schedule 1 of the Act; and
- (d) apply to Category A mine.
- (2) A person who uses water in terms of this authorisation is exempted from compliance with section 22(2)(e) of the Act.

Area of applicability

2.4 This authorisation is applicable throughout the Republic of South Africa, except as excluded in paragraph 2.2.

Duration of authorisation

- 2.5 This authorisation will be applicable for a period of five years from the date of publication of this notice, unless—
- (a) it is amended by the responsible authority at any review period;
- (b) the period is extended by a notice in the Gazette;
- (c) it is replaced with a general authorisation in relation to a specific water resource or within a specific area; or
- (d) the water user is instructed in writing by the responsible authority to apply for a licence in terms of the Act

Definitions

2.6 In this general authorisation, unless the context indicates otherwise, any word or expression to which a meaning has been assigned in terms of the Act shall have that meaning, and—

"category A mine" means—

- (a) any gold or coal mine
- (b) any mine with an extractive metallurgical process, including heap leaching; or
- (c) any mine where sulphate producing or acid generating material occurs;

"commercial activity" means those activities identified in the Standard Industrial Classification of All Economic Activities (5th Edition), published by the Central Statistics Service, 1993, as amended and supplemented, under the following categories—

- (a) 6: wholesale and retail trade;
- (b) 7: transport, storage and communication;
- (c) 8: business services;
- (d) 9: community, social and personal services and
- (e) 0: personal and other services;

"complex industrial wastewater" means wastewater arising from industrial activities and premises, that contains—

- (a) a complex mixture of substances that are difficult or impractical to chemically characterise and quantify; or
- (b) one or more substances, for which a wastewater limit value has not been specified, and which may be harmful or potentially harmful to human health, or to the water resource (identification of complex industrial wastewater will be provided by the Department upon written request);

"domestic wastewater" means wastewater arising from domestic and commercial activities and premises, and may contain sewage;

"domestic wastewater discharge" means a wastewater discharge consisting of 90% or more domestic wastewater, by volume, that is collected, treated and subsequently disposed of;

"industrial activity" means those activities identified in the Standard Industrial Classification of All Economic Activities (5th Edition), published by the Central Statistics Service, 1993, as amended and supplemented, under the following categories—

- (a) 2: mining and quarrying,
- (b) 3: manufacturing,
- (c) 4: electricity, gas and water supply,
- (d) 5: construction;

"industrial wastewater discharge" means a wastewater discharge consisting of more than 10% industrial wastewater, by volume, that is collected, treated and subsequently disposed of; "intake" for the purposes of this general authorisation is water taken from a water resource, and excludes water taken from any source that is not a water resource;

"listed water resources" are those water resources listed in Table 2.3 and includes any tributary of a listed water resource, and any water resource draining the catchment area of a listed water resource;

"monitoring programme" means a programme for taking regular measurements of the quantity and quality of a water resource, waste or wastewater discharge at specified intervals and at specific locations to determine the chemical, physical and biological nature of the water resource, waste or wastewater discharge;

"wastewater" means water containing waste, or water that has been in contact with waste material;

"wastewater limit value" means the mass expressed in terms of the concentration and level of a substance which may not be exceeded at any time. Wastewater limit values shall apply at the last point where the discharge of wastewater enters into a water resource, dilution being disregarded when determining compliance with the wastewater limit values. Where discharge of wastewater does not directly enter a water resource, the wastewater limit values shall apply at the last point where the wastewater leaves the premises of collection and treatment.

Discharging of domestic and industrial wastewater into water resources

- 2.7 A person who—
- (a) owns or lawfully occupies property registered in the Deeds Office as at the date of this notice:
- (b) lawfully occupies or uses land that is not registered or surveyed; or
- (c) lawfully has access to land on which the use of water takes place,

may on that property or land outside the areas excluded in paragraph 2.2 above,

- (i) discharge up to 2 000 cubic metres of wastewater on any given day into a water resource that is not a listed water resource set out in Table 2.3, which may be amended from time to time, provided the discharge—
 - (a) complies with the general wastewater limit values set out in Table 2.1, which may be amended from time to time;
 - (b) does not alter the natural ambient water temperature of the receiving water resource by more than 3 degrees Celsius; and
 - (c) is not a complex industrial wastewater.
- (ii) discharge up to 2 000 cubic metres of wastewater on any given day into a listed water resource set out in Table 2.3, which may be amended from time to time, provided the discharge—
 - (a) complies with the special wastewater limit values set out in Table 2.1, which may be amended from time to time;

- (b) does not alter the natural ambient water temperature of the receiving water resource by more than 2 degrees Celsius; and
- (c) is not a complex industrial wastewater,

and if the discharging of wastewater—

- (aa) does not impact on a water resource or any other person's water use, property or land; and
- (ab) is not detrimental to the health and safety of the public in the vicinity of the activity.
- (iii) not discharge storm water runoff from any premises containing waste, or water containing waste emanating from industrial activities and premises, into a water resource.

TABLE 2.1: Wastewater limit values applicable to discharge of wastewater into a water resource

OUDOTANIOE (DADAMETED	CENTED AT LINET	ODEOLA LINE
SUBSTANCE/PARAMETER	GENERAL LIMIT	SPECIAL LIMIT
Faecal Coliforms (per 100 ml)	1000	0
Chemical Oxygen Demand (mg/l)	75 (i)	(30(i)
pH	5,5-9,5	<mark>5,5-7,5</mark>
Ammonia (ionised and un-ionised) as Nitrogen (mg/l)	6	2
Nitrate/Nitrite as Nitrogen (mg/l)	(<mark>15</mark>	<mark>1,5</mark>
Chlorine as Free Chlorine (mg/l)	<mark>0,25</mark>	0
Suspended Solids (mg/I)	<mark>25</mark>	<mark>10</mark>
Electrical Conductivity (mS/m)	70 mS/m above intake to a maximum of 150 mS/m	50 mS/m above background receiving water, to a maximum of 100 mS/m
Ortho-Phosphate as phosphorous (mg/l)	<mark>10</mark>	1 (median) and 2,5 (maximum)
Fluoride (mg/l)	1	1
Soap, oil or grease (mg/l)	<mark>2,5</mark>	0
Dissolved Arsenic (mg/l)	0,02	0,01
Dissolved Cadm ium (mg/l)	0,005	0,001
Dissolved Chromium (VI) (mg/I)	0,05	0,02
Dissolved Copper (mg/l)	0,01	0,002
Dissolved Cyanide (mg/l)	0,02	0,01
Dissolved Iron (mg/l)	0,3	0,3
Dissolved Lead (mg/l)	0,01	0,006
Dissolved Manganese (mg/l)	0,1	0,1
Mercury and its compounds (mg/l)	0,005	0,001
Dissolved Selenium (mg/l)	0,02	0,02
Dissolved Zinc (mg/l)	0,1	0,04
Boron (mg/l)		0,5

(Table 2.1: Above wastewater limits will be subject to review from time to time based on the outcome of the classification and resource quality objectives processes)

Precautionary practices

- 2.8(1) The water user must follow acceptable design, construction, maintenance and operational practices to ensure the consistent, effective and safe performance of the wastewater discharge system, including the prevention of—
- (a) nuisance conditions such as flies or mosquitoes, odour or secondary pollution;
- (b) the contamination of run-off water or stormwater;
- (c) contaminated stormwater entering into a water resource; and
- (d) the unauthorised use of the wastewater by members of the public.
- (2) Suspended solids must be removed from any wastewater, and the resulting sludge disposed of according to the requirements of any relevant law or regulation, including the document entitled "Guidelines for the Utilisation and Disposal of Wastewater Sludge, Volumes 1-5, Water Research Commission Reports No TT 261/06, 262/06, 349/09, 350/09, 351/09, as amended from time to time (obtainable from the Department upon written request).
- (3) All reasonable measures must be taken to provide for mechanical, electrical, operational, or process failures and malfunctions of the wastewater discharge system.
- (4) All reasonable measures must be taken for storage of the wastewater when discharge cannot be undertaken, which storage must be in accordance with general authorisation in section 3 of this Notice.
- (5) All reasonable measures must be taken to collect contaminated stormwater runoff and to retain it for disposal which disposal must be in accordance with general authorisation in section 3 of this Notice.
- (6) Upon the written request of the responsible authority the registered user must ensure the implementation of any additional construction, maintenance and operational practices that may be required in the opinion of the responsible authority to ensure the consistent, effective, safe and sustainable performance of the wastewater discharge system.

Registration of discharges into water resources

- 2.9(1) A person who discharges wastewater into a water resource in terms of this authorisation must submit a registration form or any other information requested in writing by the responsible authority for registration of the water use before commencement of the discharge.
- (2) On written receipt of and/or a registration certificate from the responsible authority, the person will be regarded as a registered water user.
- (3) All forms for registration of water use are obtainable from any office of the responsible authority, as well as from the web-site at http://www.dwa.gov.za.

Record-keeping and disclosure of information

2.10(1) The water user must ensure the establishment of monitoring programmes to monitor the quantity and quality of the discharge prior to the commencement of the discharge, in the following manner:

- (a) The quantity of the discharge must be metered and the total recorded weekly;
- (b) the quality of domestic wastewater discharges must be monitored once every month by taking a grab sampling and analysed for specific substances and parameters as required by the responsible authority as set out in Table 2.2, which may be amended from time to time; and results submitted to the responsible authority

TABLE 2.2: Monitoring requirements for domestic wastewater discharges

DISCHARGE VOLUME ON ANY GIVEN DAY	MINIMUM MONITORING REQUIREMENTS
10 to 100 cubic metres	pH Electrical Conductivity (mS/m) Faecal Coliforms (per 100 ml)
100 to 1 000 cubic metres	pH Electrical Conductivity (mS/m) Faecal Coliforms (per 100 ml) Chemical Oxygen demand (mg/l) Ammonia as Nitrogen (mg/l) Suspended Solids (mg/l) Phosphate (mg/l)
1 000 to 2 000 cubic metres	pH Electrical Conductivity (mS/m) Faecal Coliforms (per 100 ml) Chemical Oxygen demand (mg/l) Ammonia as Nitrogen (mg/l) Nitrate/Nitrite as Nitrogen (mg/l) Free Chlorine (mg/l) Suspended Solids (mg/l) Ortho-Phosphate as Phosphorous (mg/l)

- (c) The quality of industrial wastewater discharges must be monitored once every month by grab sampling—
 - (i) for all substances which have been added to the water through any industrial activity;
 - (ii) for all substances which have been concentrated in the water through any industrial activity:
 - (iii) for all substances which may be harmful or potentially harmful to human health or to the water resource quality; and
 - (iv) as set out in paragraph 2.10(1)(b), if the wastewater contains any domestic wastewater.
- (d) monitoring for the quantity and quality of the discharge shall be done at the point of discharge into a water resource and results submitted to the responsible authority
- (2) Upon the written request from the responsible authority the registered user must—
- (a) ensure the establishment of any additional monitoring programmes; and
- (b) appoint a competent person to assess the water use measurements made in terms of this authorisation and submit the findings to the responsible authority for evaluation.
- (3) Subject to paragraph 2.10(1), the water user must, on a monthly basis, submit the following information to the responsible authority—
- (a) the quantity of wastewater discharged;
- (b) the quality of wastewater discharged;
- (c) details of the monitoring programmes;
- (d) details of failures and malfunctions in the discharge system and details of

measures taken. Such information must be made available upon written request to the responsible authority.

Methods for sampling and analysis

- 2.11 The following methods for sampling and analysis must be adhered to:
- (a) Samples of the water containing waste must be taken as prescribed in the Notice, and in accordance with the applicable South African National Standard (SANS) for sampling.
- (b) The methods for the measurement of specific substances and parameters in any waste or wastewater must be carried out by a—
 - (i) laboratory that has been accredited in accordance with SANS 17025:2005 by the South African National Accreditation System (SANAS) to conduct the analysis in accordance with the prescribed SANS method for each applicable variables; or
 - (ii) laboratory that participates in a recognised Proficiency Testing Scheme (Z-scores results should be presented);
 - (iii) laboratory that has proof of intra- and inter-laboratory proficiency (quality assurance as prescribed in Standard Methods).
- (c) Water users who can be able to demonstrate to the responsible authority that there is no accredited laboratory within their vicinity may use methods 1.12(b)(ii) and (iii) above.

Inspections

2.12 Any property or land in respect of which a water use has been authorised in terms of this general authorisation, such property or land must be made available for inspection by an authorised person in terms of section 125 of the Act.

Incidence reporting

2.13 Any information on the occurrence of any incident that has or is likely to have a detrimental impact on the water resource quality must be reported to the responsible authority within 24 hours.

Offences

2.14 A person who contravenes any provision of this general authorisation is guilty of an offence and is subject to the penalty set out in section 151(2) of the Act.

TABLE 2.3: Listed Water Resources (*This table will be subject to review from time to time based on the outcome of the classification and resource quality objectives processes*)

	WATER RESOURCE	
1	Hout Bay River to tidal water in the Western Cape	
2	Palmiet River from Kogelberg Dam to its estuary in the Western Cape	
3	Lourens River to tidal water in the Western Cape	
4	Steenbras River to tidal water in the Western Cape	
5	Berg and Dwars Rivers to their confluence in the Western Cape	
6	Little Berg River to Vogelvlei weir in the Western Cape	
7	7 Sonderend, Du Toits and Elandskloof Rivers upstream and inclusive of Thee waterskloof Dam in the Western Cape	
8	Witte River to confluence with Breede River in the Western Cape	

0	Duran Diver offer and diverse with Titus Diverse the hear day 10 M/U Diverse 10 M/U Diverse O		
9	Dwars River after confluence with Titus River to the boundary with Witte River in the Western Cape		
10	Olifants River to the boundary of the Breë River District Council (Ceres divisional boundary) – Witsenberg Transitiona Representative Council Ceres divisional boundary		
11	Holsloot and Smalblaar (or Molenaars) Rivers to their confluence with Breede River in the Western Cape		
12	Hex River to its confluence with Breede River in the Western Cape		
13	Van Stadens River to tidal water in the Eastern Cape		
14	Buffalo River to the boundary from its source to where it enters the King Williams Town limits		
15	Klipplaat River from its source to Waterdown Dam		
16	Swart Kei River to its confluence with the Klipplaat River in the Eastern Cape		
17	Great Brak River		
18	Bongola River to Bongola Dam in the Eastern Cape		
19	Kubusi River to the boundary of the Stutterheim urban area in the Eastern Cape		
20	Langkloof River from its source to Barkly East limits		
21	Kraai River to its confluence with the Langkloof River		
22	Little Tsomo River in the Eastern Cape		
23	Xuka River to Elliot limits in the Eastern Cape		
24	Umtata River to the Kambi Falls in the Eastern Cape		
25	Tsitsa and Inxu Rivers to their confluence in the Eastern Cape		
26	Kenegha River to its confluence with the Umzimvubu River in the Eastern Cape		
27	Mvenyane and Mzimvubu Rivers from sources to their confluence in the Eastern Cape		
28	Umzimhlavana River to its confluence with the Umzimhlava River in the Eastern Cape		
29	Ingwangwana River to its confluence with Umzimkulu River in KwaZulu-Natal		
30	Umzimkulu and Polela Rivers to their confluence in KwaZulu-Natal		
31	Elands River to the Pietermaritzburg-Bulwer main road in KwaZulu-Natal		
32	Umtamvuma and Weza Rivers to their confluence in KwaZulu-Natal		
33	Umkomaas and Isinga Rivers to their confluence in KwaZulu-Natal		
34	Lurane River to its confluence with the Umkomaas River in KwaZulu-Natal		
35	Sitnundjwana Spruit to its confluence with the Umkomaas River in KwaZulu-Natal		
36	Inudwini River to the Polela district boundary in KwaZulu-Natal		
37	Inkonza River to the bridge on the Donnybrook-Creighton road in KwaZulu-Natal		
38	Umlaas to the bridge on District Road 334 on the farm Maybole in KwaZulu-Natal		
39	Umgeni and Lions Rivers to their confluence in KwaZulu-Natal		
40	Mooi River to the road bridge at Rosetta in KwaZulu-Natal		
41	Little Mooi and Hlatikula Rivers to their confluence in KwaZulu-Natal		
42	Bushmans River to the Wagendrift Dam in KwaZulu-Natal		
43	Little Tugela River and Sterkspruit to their confluence in KwaZulu-Natal		
44	M'Lambonjwa and Mhlawazeni Rivers to their confluence in KwaZulu-Natal		
45			
46	Mnweni and Sandhlwana Rivers to their confluence in KwaZulu-Natal		
	Tugela River to its confluence with the Kombe Spruit in KwaZulu-Natal		
47	Inyamvubu (or Mnyamvubu) River to the Craigie Burn Dam in KwaZulu-Natal		
48	Umvoti River to the bridge on the Seven Oaks -Rietvlei road in KwaZulu-Natal		
49	Yarrow River to its confluence with the Karkloof River in KwaZulu-Natal		
50	Incandu and Ncibidwane Rivers to their confluence in KwaZulu-Natal		
51	Ingogo River to its confluence with the Harte River in KwaZulu-Natal		
52	Pivaan River to its confluence with Soetmelkspruit in KwaZulu-Natal		
53	Slang River and the Wakkerstroom to their confluence in Mpumalanga		
54	Elands and Swartkoppie Spruit to their confluence in Mpumalanga		
55	All tributaries of the Komati River between Nooitgedacht Dam and its confluence with and including Zevenfontein Spruit in Mpumalanga		
56	Seekoeispruit to its confluence with Buffelspruit in Mpumalanga		
57	Crocodile River and Buffelskloofspruit to their confluence in Mpumalanga		
58	All tributaries of the Steelpoort River down to its confluence with and including the Dwars River		
59	Potspruit to its confluence with the Waterval River in Mpumalanga		
60	Dorps River (or Spekboom River) to its confluence with the Marambanspruit in Mpumalanga		
,			

62	Klein-Spekboom River to its confluence with the Spekboom River in Mpumalanga	
63	Blyde River to the Pilgrim's Rest municipal boundary in Mpumalanga	
64	Sabie River to the Sabie municipal boundary in Mpumalanga	
65	Nels River to the Pilgrim's Rest district boundary in Mpumalanga	
70	Houtbosloop River to the Lydenburg district boundary in Mpumalanga	
71	Blinkwaterspruit to the Longmere Dam in Mpumalanga	
72	Assegaai River upstream and inclusive of the Heyshope Dam	
73	Komati River upstream and inclusive of the Nooitgedacht Dam and the Vygeboom Dam	
74	Ngwempisi River upstream and inclusive of Jericho Dam and Morgenstond Dam	
75	Slang River upstream and inclusive of Zaaihoek Dam	
76	All streams flowing into the Olifants River upstream and inclusive of Loskop Dam, Witbank Dam and Middelburg Dam	
77	All streams flowing into Ebenezer Dam on the Great Letaba River in Limpopo	
78	Dokolewa River to its confluence with the Politzi River in Limpopo	
79	Ramadiepa River to the Merensky Dam on the farm Westfalia 223, Letaba in Limpopo	
	LISTED WATER RESOURCES WHERE SPECIAL LIMIT FOR ORTHO-PHOSPHATE AS PHOSPHOROUS IS	
	APPLICABLE (Crocodile (west) Marico Water Management Area)	
80	Pienaars River and tributaries as far as Klipvoor Dam	
81	Crocodile River and tributaries as far as Roodekopjies Dam	
82	Elands and Hex River and trrbutaries as far as Vaalkop Dam	
83	Molopo River and tributaries as far as Madimola Dam	
84	Kaalspruit , Hennops rivers and tributaries as far as Rietvlei Dam	
85	Pienaars, Moreleta, Hartebesspruit rivers and tributaries as far as Roodeplaat Dam	
86	Moretele, Apies, Pienaars rivers and tributaries as far as Klipvoor Dam	
87	Magalies, Crocodile, Jukskei, Hennops rivers and tributaries as far as Hartebeespoort Dam	
88	Hex river and tributaries as far as Bospoort Dam	

	RAMSAR LISTED WETLANDS	PROVINCE	PROVINCE
89	Barberspan	North -West	26°33′ S 25°37′ E
90	Blesbokspruit	Gauteng	26°17 [′] S 28°30 [′] E
91	De Hoop Vlei	Western Cape	34°27 S 20°20 E
92	De Mond (Heuningnes Estuary)	Western Cape	34°43′ S 20°07′ E
93	Kosi Bay	Kwazulu-Natal	27°01′ S 32°48′ E
94	Lake Sibaya	Kwazulu-Natal	27°20′ S 32°38′ E
95	Langebaan	Western Cape	33°06 S 18°01 E
96	Orange River Mouth	Northern Cape	28°40 [°] S 16°30 [°] E
97	St Lucia System	Kwazulu-Natal	28°00′ S 32°28′ E
98	Seekoeivlei Nature Reserve	Free State	27°34′ S 29°35′ E
99	Verlorenvlei	Western Cape	32°24 S 18°26 E
100	Verloren Valei	Mpumalanga	25°14 ['] S 30°4 ['] E
101	Nylsvlei	Northern	24°39′ S 28°42′ E
102	Wilderness Lakes	Western Cape	33°59 S 22°39 E

3. DISPOSING OF WASTE IN A MANNER WHICH MAY DETRIMENTALLY IMPACT ON A WATER RESOURCE

[Section 21(g)]

Purpose of authorisation

3.1 This general authorisation replaces the need for a water user to apply for a licence in terms of the Act, provided that the water use is within the limits and conditions as set out in this general authorisation.

Exclusion

This authorisation does not apply to a person who is not the lawful occupier of the land or who does not have lawful access to the land on which the disposal takes place.

Compliance with Act and other laws

- 3.3(1) This authorisation does not—
- (a) replace any existing authorisation that is recognised under the Act;
- (b) exempt a person who uses water from compliance with any other provision of the Act unless stated otherwise in this notice, or any other applicable law, regulation, ordinance or by-law;
- (c) apply to any water use under Schedule 1 of the Act.
- (2) A person who uses water in terms of this authorisation is exempted from compliance with section 22(2)(e) of the Act.

Area of applicability

3.4 This authorisation is applicable throughout the Republic of South Africa, except for those subterranean government water control areas set out in Table 3.1, which may be amended from time to time.

Duration of authorisation

- 3.5 This authorisation will be applicable for five years from the date of publication of this notice, unless—
- (a) it is amended by the responsible authority at any review period; or
- (b) the period is extended by a notice in the Gazette;
- (c) it is replaced with a general authorisation in relation to a specific water resource or within a specific area; or
- (d) the water user is instructed in writing by the responsible authority to apply for a licence in terms of the Act.

Definitions

3.6 In this general authorisation, unless the context indicates otherwise, any word or expression to which a meaning has been assigned in terms of the Act shall have that meaning, and—

"biodegradable industrial wastewater" means wastewater that contains

predominantly organic waste arising from industrial activities and premises including—

- (a) milk processing;
- (b) manufacture of fruit and vegetable products;
- (c) sugar mills;
- (d) manufacture and bottling of soft drinks;
- (e) production of alcohol and alcoholic beverages in breweries, wineries or malt houses;
- (f) manufacture of animal feed from plant or animal products;
- (g) manufacture of gelatine and glue from hides, skin and bones;
- (h) abattoirs;
- (i) fish processing; and
- (j) confined animal feeding operations;

"category A mine" means—

- (a) any gold or coal mine
- (b) any mine with an extractive metallurgical process, including heap leaching; or
- (c) any mine where sulphate producing or acid generating material occurs;

"complex industrial wastewater" means wastewater arising from industrial activities and premises, that contains—

- (a) a complex mixture of substances that are difficult or impractical to chemically characterise and quantify; or
- (b) one or more substances, for which a wastewater limit value has not been specified, and which may be harmful or potentially harmful to human health, or to the water resource (identification of complex industrial wastewater will be provided by the Department upon written request);

"domestic wastewater" means wastewater arising from domestic and commercial activities and premises, and may contain sewage;

"evaporation pond" means a dam designed to collect and dispose of wastewater through evaporation, from which any concentrated waste or sludge must be removed and disposed of according to the requirements of any relevant laws and regulations;

"grey water" refers to wastewater generated through domestic activities and premises, including washing, bathing and food preparation, but does not contain sewage;

"monitoring programme" means a programme for taking regular measurements of the quantity and quality of a water resource, waste or wastewater discharge at specified intervals and at specific locations to determine the chemical, physical and biological nature of the water resource, waste or wastewater discharge;

"on-site disposal" refers to the disposal of wastewater on individual properties not permanently linked to a central waste collection, treatment and disposal systems, such as septic tank systems, conservancy tank systems, soakaway systems, french drains, pit latrines, some package plants and related activities;

"organic waste" means waste of non-anthropogenic origin that is readily biodegradable in the environment and does not contain any toxic substances that

may accumulate in the environment;

"primary treatment" means treatment of wastewater by a physical process, which may involve maceration, sedimentation, screening and grit removal;

"secondary treatment" means treatment of wastewater by a biological process, which amongst others may involve solar and other energy, bacteria, algae and a variety of aquatic biota, to remove organic matter;

"wastewater" means water containing waste, or water that has been in contact with waste material;

"wastewater pond system" means a dam or system of dams designed to collect wastewater and to conduct primary and secondary treatment, from which treated wastewater is disposed of.

Storage of domestic and biodegradable industrial wastewater for the purpose of re-use

- 3.7 A person who-
- (a) owns or lawfully occupies property registered in the Deeds Office as at the date of this notice;
- (b) lawfully occupies or uses land that is not registered or surveyed; or
- (c) lawfully has access to land on which the use of water takes place,

may on that property or land outside the areas set out in Table 3.1—

- (i) store up to 5 000 cubic metres of domestic and biodegradable industrial wastewater for the purpose of re-use, if the storing of the wastewater—
- (a) does not impact on a water resource or on any other person's water use, property or land; and
- (b) is not detrimental to the health and safety of the public in the vicinity of the activity.

Storage of domestic and biodegradable industrial wastewater for the purpose of disposal

- 3.8 A person who-
- (a) owns or lawfully occupies property registered in the Deeds Office as at the date of this notice;
- (b) lawfully occupies or uses land that is not registered or surveyed; or
- (c) lawfully has access to land on which the use of water takes place,

may on that property or land outside the areas set out in Table 3.1—

- (i) store domestic and biodegradable industrial wastewater for the purpose of disposal of—
 - (a) up to 10 000 cubic metres per property or land; or
 - (b) up to 50 000 cubic metres in a wastewater pond system per property or land.

if the storing of the wastewater-

- (b) does not impact on a water resource or on any other person's water use, property or land; and
- (c) is not detrimental to the health and safety of the public in the vicinity of the activity.

Disposal of domestic and biodegradable industrial wastewater

- 3.9 A person who-
- (a) owns or lawfully occupies property registered in the Deeds Office as at the date of this notice:
- (b) lawfully occupies or uses land that is not registered or surveyed; or
- (c) lawfully has access to land on which the use of water takes place,

nay on that property or land outside the areas set out in Table 3.1, dispose of—

- (i) up to 1 000 cubic metres of domestic and biodegradable industrial wastewater, on any given day—
 - (a) into a wastewater pond system; or
 - (b) into an evaporation pond system;
- (ii) domestic wastewater or biodegradable wastewater into a wastewater irrigation system as set out in general authorisation 1 in this Notice;
- (iii) wastewater to an on-site disposal facility—
 - (a) for grey water generated by a single household;
 - (b) up to one cubic metre of biodegradable industrial wastewater on any given day; or
 - (c) domestic wastewater to a communal conservancy tank serving no more than 50 households:
- (iv) domestic wastewater generated by a single household not permanently linked to a central waste collection, treatment and disposal system to an on-site disposal facility; and
- (v) stormwater runoff from any premises containing waste or wastewater from industrial activities and premises,

if the disposing of wastewater—

- (a) does not impact on a water resource or on any other person's water use, property or land; and
- (b) is not detrimental to the health and safety of the public in the vicinity of the activity.

Disposal of mine waste or residue

- 3.10 A person may dispose of mine residue into mine residue deposits provided that—
- (a) the mine residue is not from a Category A mine;
- (b) the disposal is in accordance with Government Notice No. 704 of 4 June 1999 as amended from time to time; and

(c) the disposal is in accordance with SANS 10286: 1998, as amended from time to time

Registration of wastewater storage

- 3.11(1) A person who stores wastewater in terms of this authorisation must submit a registration form for registration of the water use before commencement of storage if more than 1 000 cubic metres are stored for disposal or if more than 500 cubic metres are stored for re-use.
- (2) On written communication and or registration certificate from the responsible authority the person will be regarded as a registered water user.
- (3) All forms for registration of water use are obtainable from any office of the responsible authority as well as from the web-site at http://www.dwa.gov.za.

Registration of wastewater disposal

- 3.12(1) A person who disposes of wastewater in terms of this authorisation must submit a registration form for registration of the water use before the commencement of the disposal if more than 50 cubic metres of domestic wastewater or biodegradable industrial wastewater is disposed of on any given day.
- (2) The responsible local authority must submit a registration form obtained from the responsible authority, to register the water use for disposal of domestic wastewater in—
- (a) areas where more than 5 000 households are served by on-site disposal sites;
- (b) areas where the density of on-site disposal sites exceeds 10 per hectare; or
- (c) areas served by communal septic tanks.
- (3) On written communication and or registration certificate from the responsible authority, the person will be regarded as a water user.
- (4) All forms for registration of water use are obtainable from any office of the responsible authority as well as from the web-site at http://www.dwa.gov.za.

Location of wastewater storage dams and wastewater disposal sites

- 3.13 Wastewater storage dams and wastewater disposal sites must be located—
- (a) outside of a watercourse;
 - (b) above the 1 in 100 year flood line or riparian habitat whichever is the greatest, or alternatively at least 100 metres from a water resource whichever is the greatest or at least further than a 500m radius from a borehole that is utilised for drinking water or stock watering; and
 - (c) at least outside a 500m radius from the boundary of a wetland,
 - (d) on land that is not, or does not, overlie, a major aquifer (identification of a major aquifer will be provided by the responsible authority upon written request).

Record-keeping and disclosure of information

- 3.14(1) The water user must ensure the establishment of monitoring programmes to monitor the quantity and quality of the wastewater prior to storage or disposal, as follows-
- (a) for the storage of wastewater, the quantity must be recorded monthly; or
- (b) for the disposal of wastewater, the quantity must be gauged or metered and recorded monthly.
- (2) Upon the written request from the responsible authority, the water user must—
- (a) ensure the establishment of any additional monitoring programmes; and
- (b) appoint a competent person to assess the water use measurements made in terms of this authorisation, and to submit the findings to the responsible authority for evaluation.
- (3) Monitoring of quality must be done once every month and results submitted to the responsible authority.
- (4) Subject to subparagraph 3.14(1), the water user must keep a written record of the following wastewater storage or wastewater disposal and related activities—
- (a) the location of the storage dam or wastewater disposal site;
- (b) the quantity of wastewater stored or disposed of or re -used;
- (c) the quality of wastewater stored or disposed of, where applicable;
- (d) details of the monitoring programme;
- (e) details of failures and malfunctions of any wastewater disposal system or wastewater storage dam that the registered user is responsible for, and such information must be made available upon written request to the responsible authority.

Methods for sampling and analysis

- 3.15 The following methods for sampling and analysis must be adhered to:
- (a) Samples of the water containing waste must be taken as prescribed in the Notice, and in accordance with the applicable South African National Standard (SANS) for sampling.
- (b) The methods for the measurement of specific substances and parameters in any waste or wastewater must be carried out by a—
 - (i) laboratory that has been accredited in accordance with SANS 17025:2005 by the South African National Accreditation System (SANAS) to conduct the analysis in accordance with the prescribed SANS method for each applicable variables; or
 - (ii) laboratory that participates in a recognised Proficiency Testing Scheme (Z-scores results should be presented);
 - (iii) laboratory that has proof of intra- and inter-laboratory proficiency (quality assurance as prescribed in Standard Methods).
- (c) Water users who can be able to demonstrate to the responsible authority that there is no accredited laboratory within their vicinity may use methods 1.12(b)(ii) and (iii) above.

Precautionary practices

- 3.16(1)The water user must follow acceptable design, construction, maintenance and operational practices to ensure the consistent, effective and safe performance of the wastewater discharge system, including the prevention of—
- (a) nuisance conditions such as flies or mosquitoes, odour or secondary pollution;
- (b) the contamination of run-off water or stormwater:
- (c) contaminated stormwater entering into a water resource; and
- (d) the unauthorised use of the wastewater by members of the public.
- (2) Suspended solids must be removed from any wastewater, and the resulting sludge disposed of according to the requirements of any relevant law or regulation.
- (3) All reasonable measures must be taken to prevent wastewater overflowing from any wastewater disposal system or wastewater storage dam.
- (4) All reasonable measures must be taken to provide for mechanical, electrical, or operational failures and malfunctions of any wastewater disposal system or wastewater storage dam.
- (5) Sewage sludge must be removed from any wastewater and the resulting sludge disposed of according to the requirements of any relevant law and regulation, including—
- (a) Guidelines for the Utilisation and Disposal of Wastewater Sludge, Volumes 1-5, Water Research Commission Reports TT 261/06, 262/06, 349/09, 350/09, 351/09, as amended from time to time; and
- (b) "Guide: Permissable utilisation and disposal of treated sewage effluent", 1978, Department of National Health and Population Development Report No. 11/2/5/3, as amended from time to time (obtainable from the Department upon written request).

Inspections

3.17 Any property or land in respect of which a water use has been authorised in terms of this general authorisation, such property or land must be made available for inspection by an authorised person in terms of section 125 of the Act.

Incidence reporting

3.18 Any information on the occurrence of any incident that has or is likely to have a detrimental impact on the water resource quality must be reported to the responsible authority within 24 hours.

Offences

3.20 A person who contravenes any provision of this general authorisation is guilty of an offence and is subject to the penalty set out in section 151(2) of the Act.

NOTE: Information regarding the drainage regions referred to in Table 3.1 can be obtained from the Responsible Authority upon written request.

TABLE 3.1: Subterranean government water control areas excluded from general authorisation for disposal of waste

Primary drainage region	Tertiary/Quaternary drainage region	Description of subterranean government water control are	Government Notice No.	Government Gazette Date
H	H30	Baden	136	1967-06-16
Α	A30	Bo-Molopo	1324	1963-08-30
С	C30	Bo-Molopo	1993	1965-12-17
D	D41	Bo-Molopo	R634	1966-04-29
A	A24	Crocodile River Valley	208	1981-10-23
Α	A21	Crocodile River Valley	18	1983-02-18
Α	A21, A22	Kroondal-Marikana	180	1963-06-17
G	G10, G30	Lower Berg River Valley/Saldanha	185	1976-09-10
A,B	A60, B50, B31	Nyl River Valley	56	1971-03-26
G	G30	Strandfontein	2463	1988-12-09
M	M10, M20, M30	Uitenhage	260	1957-08-23
G	G30	Wadrif	992	1990-05-11
G	G20	Yzerfontein	27	1990-02-09
G	G30	Graafwater	1423	1990-06-29
A	A70	Dendron-Vivo	813	1994-04-29
A	A60	Dorpsrivier	312	1990-02-16
С	C24	Ventersdorp	777	1995-06-02

4. 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

[Section 21*(j)*]

Purpose of authorisation

4.1 This general authorisation replaces the need for a water user to apply for a licence in terms of the Act, provided that the water use is within the limits and conditions as set out in this general authorisation.

Exclusion

- 4.2 This authorisation does not apply to-
- (a) a person who is not the lawful occupier of the land or who does not have lawful access to the land on which the disposal takes place
- (b) Category A mine

Compliance with Act and other laws

- 4.3(1) This authorisation does not—
- (a) replace any existing authorisation that is recognised under the Act;
- (b) exempt a person who uses water from compliance with any other provision of the Act unless stated otherwise in this notice, or any other applicable law, regulation, ordinance or by-law;
- (2) A person who uses water in terms of this authorisation is exempted from compliance with section 22(2)(e) of the Act.

Area of applicability

4.4 This authorisation is applicable throughout the Republic of South Africa.

Duration of authorisation

- 4.5 This authorisation will be applicable for five years from the date of publication of this notice, unless—
- (a) it is amended by the responsible authority at any review period;
- (b) the period is extended by a notice in the Gazette;
- (c) it is replaced with a general authorisation in relation to a specific water resource or within a specific area; or
- (d) the water user is instructed in writing by the responsible authority to apply for a licence in terms of the Act.

Definitions

4.6 In this general authorisation, unless the context indicates otherwise, any word or expression to which a meaning has been assigned in terms of the Act shall have that meaning, and—

"category A mine" means—

- (a) any gold or coal mine
- (b) any mine with an extractive metallurgical process, including heap leaching; or
- (c) any mine where sulphate producing or acid generating material occurs;

"monitoring programme" means a programme for taking regular measurements of the quantity and quality of a water resource, waste or wastewater discharge at specified intervals and at specific locations to determine the chemical, physical and biological nature of the water resource, waste or wastewater discharge;

"water found underground" means water that enters mine workings, basements, tunnels or other construction through seepage or runoff and does not refer to water found in an aquifer.

Removing water found underground

- 4.7(1) A person who—
- (a) owns or lawfully occupies property registered at the Deeds Office as at the date of this notice;
- (b) lawfully occupies or uses land that is not registered or surveyed; or
- (c) lawfully has access to land on which the use of water takes place, may remove up to 100 cubic metres of water found underground on any given day, if—
- (i) the removing of water—
 - (a) does not impact on a water resource or on any other person's water use, property or land;
 - (b) is not detrimental to the health and safety of the public in the vicinity of the activity; and
 - (c) does not detrimentally impact the stability or health of the surrounding ecological functioning of any hydrologically linked water resources.
- (ii) the removal of water is not harmful or potentially harmful to human health, or to any water resource.
- (2) The water found underground must be—
- (a) discharged to—
 - (i) a water resource in terms of general authorisation in section 2 of this Notice:
- (b) disposed of in terms of general authorisation in section 3 of this Notice;
- (c) re-used in accordance with this general authorisation and the general authorisations for the water uses contemplated in section 21(e), (f), (g) and

(h) of the Act.

- (3) This general authorisation authorises the removal of up to 50 cubic meters of water found underground on any given day, on condition that the removal of water—
- (a) does not impact on a water resource or on any other person's water use, property or land:
- (b) does not detrimentally impact the stability or health of the surrounding ecological functioning of any hydrologically linked water resources; and
- (c) is not detrimental to the health and safety of the public in the vicinity of the activity.

Registration of removal of underground water

- (1) On receipt of a registration certificate from the responsible authority, the person will be regarded as a registered water user.
- (2) All forms for registration of water use are obtainable from any office of the responsible authority as well as from the web-site at http://www.dwa.gov.za.

Record-keeping and disclosure of information

- 4.8(1) The water user must ensure the establishment of monitoring programmes to monitor the quantity and the quality of water removed from underground, prior to commencement of removal and thereafter, in the following manner:
- (a) The quantity of water removed from underground must be metered and recorded on the last day of every month; and
- (b) the quality of water removed from underground must be monitored monthly by taking a grab sample at the point at which the water is removed, which must be analysed by an accredited laboratory as specified in the general authorisations for the water uses contemplated in section 21 .(e), (f), (h) and (g), and results submitted to the responsible authority.
- (c) upon written request from the responsible authority the registered user must ensure the establishment of any additional monitoring programme.
- (2) The water user must keep a written record for at least ten years of the following information, which must be made available upon written request to the responsible authority, regarding the removal of water found underground and related activities:
- (a) The location of the removal of water found underground must be demarcated on a suitable scale map, which must be updated:
- (b) details of the monitoring programme including—
 - (i) the quantity of water removed underground as measured under subparagraph 4.8(1);
 - (ii) the results of the analysis of the quality of water removed from underground as obtained from the laboratory for the samples taken in accordance with paragraph 4.8(1)(b);
- (c) details on the re-use, discharge and/or disposal of the water found underground;
- (d) details of designs, precautionary practices and pollution prevention measures implemented; and
- (e) details of failure and malfunctions in the underground water removal system, and details of the effects of (if any), as well as details of measures taken to prevent such failures and malfunctions in the future

- (3) Where it is deemed necessary, or upon the written request of the responsible authority, the registered water user must ensure the establishment of additional monitoring programmes for monitoring the water use.
- (4) Upon the written request of the responsible authority the registered water user must appoint an external auditor to assess the water use in terms of this general authorisation, and submit the findings to the responsible authority for evaluation.

Precautionary practices

- 4.9.(1) The water user must follow acceptable design, construction, maintenance and operational practices to ensure the consistent, effective and safe performance of the underground water removal system, including the prevention of—
- (a) ponding of water;
- (b) waste, wastewater or contaminated stormwater entering into a water resource;
- (c) the contamination of run-off water or stormwater;
- (d) the unreasonable chemical or physical deterioration of, or any other damage to soil or water resources;
- (e) overflows of the wastewater storage and disposal facility during excessive flood events; and
- (f) the unauthorised use of the wastewater by members of the public.
- (2) Suspended solids must be removed from any wastewater, and the resulting sludge disposed of according to the requirements of any relevant law or regulation.
- (3) Reasonable measures must be taken to provide for mechanical, electrical, operational or process failures and malfunctions of the underground water removal system.
- (4) Upon the written request of the responsible authority the registered user must ensure the implementation of any additional construction, maintenance and operational practices that may be required in the opinion of the responsible authority to ensure the consistent, effective, safe and sustainable performance of the underground water removal system.
- (5) The discharged water must not detrimentally impact on the water quality of the receiving water resource.

Inspections

4.10 Any property or land in respect of which a water use has been authorised in terms of this general authorisation, such property or land must be made available for inspection by an authorised person in terms of section 125 of the Act.

Incidence reporting

4.11 Any information on the occurrence of any incident that has or is likely to have a detrimental impact on the water resource quality must be reported to the responsible authority within 24 hours.

Offences

4.12 A person who contravenes any provision of this general authorisation is guilty of an offence and is subject to the penalty set out in section 151(2) of the Act.



KWAZULU-NATAL PROVINCIAL OPERATIONS

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Transnet SOC Ltd PO Box 425 Richards Bay 3900

ATTENTION: MS. N HADEBE

GENERAL AUTHORISATION IN TERMS OF SECTION 39 OF THE NATIONAL WATER ACT, 1998 (ACT 36 OF 1998): TRANSNET SOC LTD: DUTCHLINE STORMWATER DRAINAGE MAINTENANCE IN THE PORT OF RICHARD'S BAY (WU26228)

Your request to use water in terms of Section 21(j) of the National Water Act, 1998 (Act 36 of 1998), associated with maintenance work on sections of the stormwater drainage system, within the Port of Richards Bay, refers. The site is located in Richard's Bay, KwaZulu-Natal.

The Department has evaluated the submitted documents and has confirmed that the intended water uses in terms of Section 21(j) of the Act fall within the ambit of the General Authorisation: No. 665 dated 06 September 2013 as published in Government Gazette No.36820 and General Authorisation: No. 383 dated 12 July 2019 as published in Government Gazette No.42576.

The Department hereby authorises the following water uses under General Authorisation:

1. Water User: Transnet SOC Ltd

2. Water Use(s): Section 21(j) of the Act: 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.

3. Table of Water Uses and Properties where Water Uses will occur

Table 1: Water Use Table

Water use(s)	Description/Purpose	Volume	Farm Name	Co-ordinates: X (DMS)
21 (j)	Maintenance work on sections of the stormwater drainage system	1500m³ per anum	Land Parcel 16230 of the Major Region GV	28°47'14.93"S32° 2'6.21"E

Director: Proto CMA

You are required to fully comply with the conditions of aforementioned Government Notices. Please take note that if you do not comply with the conditions of the General Authorisation, your Section 21(j) water use will be regarded as unlawful. You may subsequently be required to apply for a water use licence in terms of the National Water Act, (Act 36 of 1998), however the issuing of such a licence cannot be guaranteed. Furthermore, failure to comply with the conditions of the General Authorisations constitutes an offence and is subject to a penalty as set out in Section 151(2) of the Act.

Your attention is further drawn to the following:

- 1. This Authorisation is valid from the date of publication of the General Authorisation: No. 665 dated 06 September 2013 as published in Government Gazette No.36820 and General Authorisation: No. 383 dated 12 July 2019 as published in Government Gazette No.42576, unless it is replaced by another General Authorisation or the water user is required to apply for a licence in terms of the Act.
- 2. The conditions of this authorisation shall be brought to the attention of all persons (employees, sub-consultants, contractors etc.) associated with the undertaking of this activities and the authorised party shall take such measures that are necessary to bind such persons to these conditions.
- 3. The proposed water use activities have been Generally Authorised because the ecological risks involved are minimal.
- 4. The responsible person for these activities shall ensure that the registered wastewater disposal company only disposes of the waste at a wastewater treatment works which has a valid water use authorisation.
- 5. The responsible person for these activities shall immediately inform the Department of any change in the name, address and/ or premises and legal status.
- 6. The Department accepts no liability of any damage, loss or inconvenience of whatever nature, suffered as a result of the authorised activities.
- 7. This Authorisation shall not be construed as exempting the water user from compliance with any other applicable Act, Ordinance, Regulation or By-law.
- 8. This Department reserves the right to request additional measures that could be taken, which may include an application for a water use licence, should the activity be deemed to cause a significant impact to the environment.

Yours faithfully

Acting Director: Proto CMA (Pongola to Umzimkhulu WMA)

Mr S.O. Naidoo Date: //// /27~

Director: Proto CMA





TRANSNET GROUP CAPITAL ENVIRONMENT & SUSTAINABILITY

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (CEMP)

ENV-STD-001 Rev04

Document Control

This document will be managed and controlled in terms of the Transnet Document, Data and Records Management Procedure.

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Author	Date	Description	Revision
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This document has been reviewed by:

Reviewer	Date reviewed
Stehan Bouwer	30 November 2017

Document Approvals List

This document has been approved by

Name	Designation	Signature	Date approved
Khathutshelo Tshipala	Executive Manager: Environment and Sustainability	Sto	30 November 2017

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1 Purpose

This document describes the main environmental management requirements that the Contractor must comply with during the construction phase to ensure that the environment is considered, negative impacts avoided or minimised, and positive impacts enhanced. This document is critical to the principal Contractor and the Contractor's Environmental Officer (EO) as well as any subcontractors performing work on the principal Contractor's behalf.

The purpose of this Document is to:

- Describe how project environmental risks will be identified and managed during the construction phase;
- Detail the roles and responsibilities of all parties with respect to environmental management during construction;
- Outline the organisational structure for effective implementation of the CEMP;
- Assist the Contractor in understanding the requirements of complying with the CEMP and any relevant specifications; and
- Provide a set of standards for environmental management during the construction phase.

2 Scope

This standard applies to Contractors that work on site under the control of Transnet Group Capital (TGC).

3 Abbreviations and Definitions

3.1 Abbreviations

Abbreviation	Meaning
СЕМР	Construction Environmental Management Plan
CV	Curriculum Vitae
DEA	Department of Environmental Affairs
EA	Environmental Authorisation
ECO	Environmental Control Officer
EO	Environmental Officer

Abbreviation	Meaning
EGF	Environmental Governance Framework
EMP	Environmental Management Plan
EMPr	Environmental Management Programme
NEMA	National Environmental Management Act 107 of 1998 (as amended)
NCR	Non-conformance Report
PES	Project Environmental Specification
SES	Standard Environmental Specification
SHEQ	Safety, Health, Environment and Quality
TGC	Transnet Group Capital
СМ	Construction Manager
PEM	Project Environmental Manager
PM	Project Manager

3.2 Definitions

Compliance The action or fact of complying with legislation or regulations.

Conformance The action or fact of conforming to this standard and other

internal policies, procedures, guidelines and best practice.

Construction Manager Works together with the Project Manager and the TGC EO to

ensure that construction proceeds in accordance with the

relevant specifications and agreed schedule.

Contractor The Principal Contractor as engaged by Transnet Group Capital

for infrastructure construction operations, including all subcontractors appointed by the main contractor of his own volition

for the execution of parts of the construction operations; and

any other contractor from time to time engaged by Transnet

Group Capital directly in connection with any part of the

construction operations which is not a nominated sub-contractor

to the Principal Contractor.

Contractor's

Environmental Officer

Contractor's Environmental Officer responsible for ensuring compliance with the CEMP.

Corrective Action

It is generally a reactive process used to address problems after they have occurred. Corrective action may be triggered by a variety of events, e.g. Non-conformance to documented procedures and work instructions, non-conformances raised through internal audits, unacceptable monitoring and measurement results, internal & external SHEQ complaints, etc.

Emergency

Sudden unforeseen event needing immediate or prompt action.

Environment

Surroundings in which the Contractor operates, including air, water, land, natural resources, flora, fauna, humans and their interrelations.

Environmental Aspect

Element of a Contractor's activities, products or services that can interact with the environment and cause an environmental impact (e.g. dust, noise etc.).

Environmental Authorisation

Environmental Authorisation is the authorisation granted by a competent authority of a listed activity or specified activity in terms of National Environmental Management Act 107 of 1998 (as amended).

Environmental Impact

Any change to the environment, whether adverse or beneficial, wholly or partially resulting from a Contractor's activities, products or services.

Environmental Management Plan

A plan generated by the Contractor describing the relevant roles and responsibilities and how potential environmental risks will be assessed and managed including the monitoring and recording thereof.

Environmental

Management Programme

A programme that has been approved by the Competent Authority in terms of NEMA, 107 of 1998 stipulating information on any proposed management, mitigation, protection or remedial measures that will be undertaken to address the environmental impacts that have been identified

Environmental Risk

The product of the likelihood and severity of an unforeseen occurrence/incident/aspect and the impact it would have, if realised, on the environment

Incident/Occurrence

An undesired event occurring at work that results in physical harm to a person or death, or damage to the environment, plant and/or equipment, and/or loss of production.

Method Statement

A document that describes how the Contractor will implement environmental management measures associated with a particular environmental aspect during construction.

Non-conformance

An action or situation that does not conform to Transnet/TGC's SHEQ standards, procedures or legislative requirement(s) and that can be, or lead to, an unacceptable SHEQ incident.

Non-compliance

Contravention to environmental legislative requirements.

Project Environmental

Manager

Works together with the Project Manager and Construction Manager to ensure that the requirements of the CEMP/SES and applicable PES are met.

Project Manager

A person/s, as appointed by Transnet, responsible for the overall management and implementation of a project.

4 Overview of the CEMP

It is the stated goal of TGC to implement sustainable environmental management practices within the organisation. This will apply to the planning, design, construction, operation, restoration, reuse and decommissioning activities related to all infrastructure development, upgrade and maintenance. The CEMP is the tool used to ensure this goal is achieved during the construction and commissioning phases. Some decommissioning may occur during site clearing in brownfield sites and this CEMP will also apply to those activities.

The CEMP has been developed in line with the requirements of all relevant South African Environmental Legislation and Standards of Best Practice.

The CEMP and associated documents or specifications as well as the EA will be included in the Tender Documents issued to the prospective Contractors. The Contractors will incorporate all requirements set out in the specifications in their submissions to TGC.

There are two types of environmental specifications:

- **Standard Environmental Specification** (SES) describes the minimum standards for environmental management for a range of environmental aspects associated with all construction projects with which the Contractor must comply.
- Project Environmental Specification (PES) describes standards specific to a particular project. Variations and additions to the SES are set out in this PES. These would include the EA issued to the project or elements generally drawn from the EA or permits for that project or from specific requirements set by TGC Clients. The PES may also require a more stringent standard to that described in the SES if required by the EA or a particular industry code to which Transnet subscribes including any environmental constraints at a construction site. The PES need not be a separate document; however it can be in a format of an appendix/addendum making reference to environmental authorisation(s), permit(s) or licence(s) applicable to the project. In cases where the project does not trigger any of the NEMA listed activities or any permit(s)/licence(s), the PES may be compiled to prescribe additional environmental management measures over and above the measures stipulated on the SES.

The specifications are configured as performance specifications to ensure that TGC and any entities that enter into formal agreements with TGC achieve the required level of environmental performance.

NOTE: No advice, approval of method statements or any other form of communication from TGC will be construed as an acceptance by TGC of any obligation that indemnifies the Contractor from achieving any required level of performance. Further, there is no acceptance of liability by TGC which may result from the Contractor failing to comply with the specifications, i.e. the Contractor remains responsible for achieving the required performance levels.

5 Implementation of the CEMP

5.1 Roles and Responsibilities

5.1.1 TGC Project Environmental Manager (PEM)

The TGC PEM will be responsible for ensuring that the CEMP and associated specifications or requirements are complied with during construction. The TGC PEM will report functionally to the TGC Senior Manager: Environment and Sustainability, and relevant Project Manager.

Specific tasks during the construction stage will include:

- Liaison with the relevant authorities;
- Preparation of the PES;
- Tender evaluation, development of environmental criteria and adjudication thereof;
- Review all reports from the Environmental Officer/Specialist, including sign off on Method Statements and Monthly Audit reports;
- Conduct any environmental incident enquiries;
- Identify, with support from the TGC Construction Manager; the need for corrective or remedial measures with regard to proposed works;
- Ensure induction material includes project appropriate environmental issues;
- Approve training programmes and other awareness initiatives;
- Coordinate or facilitate internal environmental audits;
- Sign-off on audit reports prepared by ECOs; and
- Prepare environmental monitoring protocols (if monitoring to be done by Environmental Officer and not by an outside consultant).

The TGC PEM may delegate part or all of these responsibilities to the TGC Environmental Officer, based on the merits of the particular project at hand.

5.1.2 TGC Construction Manager

The TGC Construction Manager has overall responsibility for environmental management on site which includes the implementation of the CEMP, SES and PES and reports to the Project Manager. The TGC Construction Manager is supported by the TGC Environmental Officer/Specialist.

The specific environmental tasks for TGC the Construction Manager during the construction phase will include:

- Reviewing the monthly reports compiled by the TGC Environmental Officer/Specialist;
- Communicating directly with the Contractors on environmental issues observed on site;
 and
- Issuing non-conformance notifications to Contractors in consultation with the TGC Environmental Officer/Specialist

5.1.3 TGC Environmental Officer

The TGC Environmental Officer reports functionally to the TGC Construction Manager and TGC PEM and is responsible for conducting the tasks required to ensure that the CEMP, SES and PES are implemented on the construction site.

The TGC Environmental Officer will conduct the following tasks:

- Ensure that environmental issues receive adequate attention in the site induction training;
- Prepare Risk Reports;
- Prepare and conduct environmental awareness training, as and when required (e.g. posters, tool box talks, signage);
- Generate an inspection checklist prior to the project commencement for sign off by the TGC PEM;
- · Review and approve site layout plan;
- Conduct monthly observation & inspection of all work places based on the approved inspection checklist;
- Monitor the Contractor's compliance with the CEMP, SES and PES;

- Develop an Audit Finding and Close out Register that documents all audit findings, close out actions and the time frame allowed for in order to close the finding/s;
- Ensure that all environmental monitoring programmes (sampling, measuring, recording etc. when specified) are carried out according to protocols and schedules;
- Measurement of completed work (e.g. areas top soiled, re-vegetated, stabilised etc.);
- Attendance at scheduled SHE meetings, as and when required, and project coordination meetings;
- Ensure that site documentation (permits, EA, EMPr, CEMP, method statements, audit reports, waste disposal slips etc.) related to environmental management is maintained on the relevant Document Control System;
- Inspect and report on environmental incidents and check corrective action;
- Keep a photographic record of all environmental incidents;
- Completion of Flash Reports for all Level 1 and 2 environmental incidents;
- Implementation of environmental-related actions arising from the minutes of scheduled meetings;
- Management of complaints register;
- Review and Sign off Method Statements prepared by Contractor's EO, as delegated by the TGC PEM;
- Audit conformance to Environmental Method Statements;
- Collate information received, including monitoring results into a monthly report that is supported with photographic records to the TGC Construction Manager showing progress against targets; and
- Report environmental performance of the project on a monthly basis through relevant governance channels.

The key deliverables will include the compilation of:

- Project Start Up Checklist
- Monthly Inspection Checklist
- Monthly Environmental Audit Report
- Monitoring Results, where required
- Flash reports
- Incident investigation Reports
- Environmental Incident Register
- Environmental Non-Conformance Register & Reports
- Complaints Register

• Method Statements Register

• Site Close Out Inspection

• Site Close-Out Reports

5.1.4 Environmental Control Officer

The Environmental Control Officer (ECO) is an independent person legally appointed to monitor compliance of construction related activities with the conditions of the Environmental Authorisation. The ECO fulfils an autonomous role and submits audit reports to the Competent Authority at intervals specified in the EA.

The ECO will conduct the following tasks:

 Monitor compliance to the conditions of the EA, EMPr and can include permits and licenses applicable to a project;

Attend project meetings as and when required;

Conduct audits at a frequency stipulated on the EA/EMPr; and

Compile audit reports and submits them to relevant authorities.

5.1.5 Contractor's Environmental Officer

The Contractor will appoint an Environmental Officer before commencement of any work on site whose role is to ensure implementation of the requirements of the CEMP, SES and PES where applicable. The Contractor will submit the name and CV of the Environmental Officer as well as an Environmental Management Plan detailing roles and responsibilities with their tender submission. The Environmental Officer should have relevant environmental qualifications and experience required for the project. The level of qualifications and experience will depend on the complexity of the project and the sensitivity of the site. This will be for TGC's approval and no work can commence on site if this has not been done.

The Contractor's Environmental Plan will include, but not be limited to:

Contractor's Environmental Organogram;

 A description of environmental management responsibilities of the Contractor's Project Manager, Contractor's Site Manager and the Contractor's Environmental Officer;

A signed and dated organisational Environmental Policy;

· Environmental Method Statements; and

Project-specific Environmental Management Plan;

The Contractor's Environmental Officer will liaise with the TGC Environmental Officer on site. It will be the responsibility of the Contractor's Environmental Officer to ensure that all work is conducted according to the approved Environmental Method Statements and that the roles and responsibilities as set out in this document are fulfilled. The Contractor Environmental Officer's tasks will include:

- Daily and weekly inspections of the work area(s) as per schedule or authorised through written instruction by TGC PEM or Environmental Officer. The Contractor is referred to Section 7 for an example of the items that will need to be inspected and which items will be audited by the TGC Environmental Officer;
- Prepare project-specific activity/aspect based Environmental Method Statements;
- Identify local, provincial and national environmental legislation that applies to the Contractor's activities;
- Ensure conformance/compliance to the CEMP, SES, PES, licenses and permits and approved Environmental Method Statements:
- Conduct ongoing Environmental Awareness Training of the Contractor's site personnel;
- Reporting, investigating and recording of any environmental incidents caused by the Contractor or due to the Contractor's activities, including their sub-contractors;
- Close out of environmental incidents;
- Attendance at all SHE meetings and induction programmes, and toolbox talks where required
- Monitor Waste Management;
- Monitor Water and Energy use;
- Ensure that environmental signage and barriers are correctly placed;
- Taking required corrective action within specified time frame and close out of nonconformances:
- Maintain site documentation related to environmental management (permits, CEMP, method statements, EA, reports, audits, monitoring results, receipts for waste removal etc.). Documentation to be maintained on the relevant site Document Control System;
- The compilation of the Project Environmental Management File
- Hazardous Substances Register; and
- Ensure the environmental file content is scanned monthly or in intervals agreed to by the TGC EO, as per the TGC index and submitted to the TGC document control monthly.

The Contractor's Environmental Officer will be expected to submit daily/weekly checklists as

agreed by the TGC Environmental Officer to the TGC Environmental Officer.

When the Contractor's Environmental Officer is replaced after the person has been approved by

TGC, the Contractor will submit a CV of a replacement Environmental Officer who has at least

the same level of qualification and experience of the previous approved person for approval by

the TGC Environmental Officer and TGC Construction Manager. No work can proceed until the

replacement Environmental Officer has been approved.

5.1.6 The Contractor

The Contractor shall comply with the requirements of the CEMP and abide by the TGC Project

Manager's and TGC Environmental Officer/Specialist's instructions regarding the implementation

of the CEMP.

The Declaration of Understanding, as detailed in **Section 6**, must be signed during tender stage,

and a signed copy must be submitted to the TGC Environmental Officer prior to the start of

construction.

Section 6 details some of the main actions required from the Contractor at various stages during

the contract. The TGC Environmental Officer will monitor that all of these actions are undertaken

in accordance with the CEMP.

It must be noted, however, that **Section 6** does not list all the requirements of the CEMP, but

rather serves as a guide as to where definite actions are required before certain activities can

commence. It should be read in conjunction with the SES, and the PES.

Section 7 contains aspects that will be subject to regular inspections and audits by the various

parties.

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5.2 Organisational structure

The organisational structure identifies and defines the responsibilities and authority of the various entities involved in the project. All instructions and official communications regarding environmental matters will follow the organisational structure shown in **Figure 1**.

All instructions that relate to the CEMP will be given to the Contractor via the TGC Project Manager. In an emergency situation, however, the TGC Environmental Officer may give an instruction directly to the Contractor. Environmental Management of the site will be an item on the agenda of the monthly site meetings, and the TGC Environmental Officer will attend these meetings on request by the Contractor. If at any time the TGC Project Manager is uncertain in any way with respect to an environmentally related issue or specification in the CEMP, he will consult with the TGC PEM.

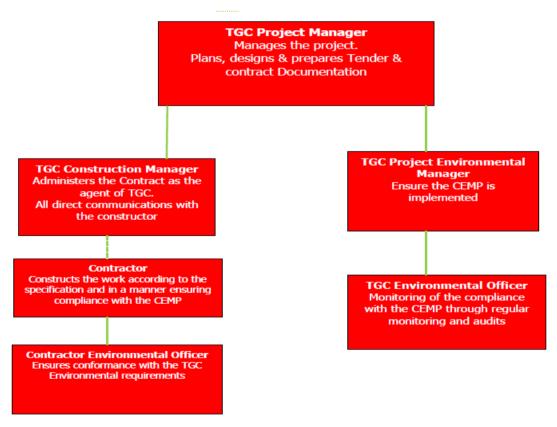


Figure 1: Typical TGC Organogram for Construction

5.3 Availability of the CEMP

Copies of the relevant CEMP documentation (SES, & PES, and any Contractor's Guideline Documents) must be available at the site offices of the Contractor and/or on site.

5.4 Project Environmental Management Plan

The Contractor is required to submit an Environmental Management Plan (EMP) with his Tender Documents. The EMP should describe the relevant roles and responsibilities and how potential environmental risks will be assessed and managed including the monitoring and recording thereof. These will be used to establish a Contractor's competency and experience of preventing and managing potential environmental impacts.

5.5 Environmental Method Statements

Environmental Method Statements are written submissions by the Contractor to the TGC Construction Manager and Environmental Officer describing:

- The proposed activity, setting out the plant, equipment, materials, labour and method the Contractor proposes using to carry out an activity;
- The environmental management of site conditions waste management, housekeeping, site establishment;
- Transportation of the equipment to and from site;
- How the equipment/ material will be moved while on site;
- · How and where material will be stored;
- The containment (or action to be taken if containment is not possible) of leaks or spills of any liquid or material that may occur;
- · Timing and location of activities;
- Description of potential positive and negative environmental impacts and how they will be managed;
- Conformance/ non-conformance with the Standard Environmental Specification and any other statutory and best practice standards;
- Monitoring and reporting requirements;
- Records Management; and
- Any other information deemed necessary by the TGC Construction Manager and TGC EO as well as ECO where applicable.

The Contractor will compile Activity/Aspect-based Environmental Method Statements for all

activities proposed. The Environmental Method Statements will enable the potential positive and

negative environmental impacts associated with the proposed construction activity to be

identified and mitigation measures put in place. All method statements must be signed by both

the Contractor and TGC CM and EO, with the addition of the ECO on authorised projects, thereby

indicating that the works will be carried out according to the methodology described therein.

Activities may only commence once the Environmental Method Statements have been approved

by the TGC PEM, Construction Manager and/or ECO. In some instances local authorities may also

need to approve the method statements. This will be highlighted in the Project Environmental

Specification, when applicable.

All changes to the original Method Statements must be approved by the TGC PEM/EO and/or

TGC Construction Manager prior to implementation. The Contractor, TGC CM, EO and/or ECO will

also be required to re-sign the amended Environmental Method Statement.

To enable timely approvals, the environmental method statements will be submitted to the TGC

Construction Manager and TGC Environmental Officer for review two (2) weeks prior to the

intended date of commencement of the activity, or as directed by the TGC Project

Manager/Construction Manager.

Where changes to the work methodology are proposed, Environmental Method Statements must

be amended accordingly and signed off by all relevant parties as indicated above. These

Environmental Method Statements MUST contain sufficient information and detail to enable the

TGC Construction Manager and/or Environmental Officer to apply their minds to the potential

impacts of the works on the environment. The Contractor will also need to thoroughly understand

what is required of him/her in order to undertake the works.

The initial Environmental Method Statements required for submission and approval are listed in

the environmental specifications. Others may be requested by the TGC Construction Manager

and/or TGC Environmental Officer/ECO during the Contract.

An explanatory example of an environmental method statement on the pro forma method

statement sheet to be completed has been included as **Annexure B**.

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5.6 Environmental Incidents

Environmental incidents are classified under four levels: 1, 2, 3 and 4. For the purpose of this

document; they are defined as follows:

5.6.1 Level 1 Environmental Incident

An incident or sequel of incidents, whether immediate or delayed, that results or has the potential

to result in:

• A significant impact on the physical or biological environment (air, ground, water and

habitat) with extensive or long term impairment of ecosystem function or surface and

ground water resources.

• An inconvenience/ disturbance/disruption/annoyance (including odour, dust, noise, traffic

problem, loss of water supply) of a long duration or with a long term impact on interested

and affected parties. A release of material (gas, liquid, solid) or energy that will cause

chronic illness, permanent lost time injury, fatality or extensive property damage

experienced by interested and affected parties.

Irreparable damage to highly valued structures and sacred locations.

• Public or national / international media outcry.

• Instances where inspections undertaken by or for the regulator to check legal compliance,

were found to be outside the permitted limits and have resulted in prosecution.

Where the environmental impact of a Level 2 environmental incident is still present 120 days

after occurrence, the incident will be reclassified as a Level 1 incident.

NOTE: A Level 1 environmental incident usually should be reported to the authorities, the

incident usually results in significant pollution and may entail risk of public danger. Level 1

environmental incidents usually cause an irreversible impact even with the involvement of long-

term external intervention i.e. expertise, best available technology, remedial actions, excessive

financial cost etc.

5.6.2 Level 2 Environmental Incident

An incident or sequel of incidents, whether immediate or delayed, that results or has the potential

to result in:

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- A moderate impact on the physical or biological environment (air, ground, water or habitat) with limited impairment of ecosystem function and/or surface and ground water resources.
- An inconvenience disturbance/ disruption/annoyance (including odour, dust, noise, traffic problems, loss of water supply) of moderate or with medium effect on interested and affected parties.
- A release of material (gas, liquid, solid) or energy that causes severe but reversible illness, non-lost time injury or moderate property damage experienced by interested and affected parties.
- Damage to rare structures of cultural significance or significant infringement of cultural values / sacred locations.
- Attention from local media or widespread complaints.
- Instances where inspections undertaken by or for the regulator to check legal compliance have been outside the permitted limits and an official pre-directive or directive was issued.
- Inability of Contractors to close out corrective actions in an NCR without proper reason.

NOTE: A Level 2 environmental incident may be reported to the authorities, can result in significant pollution or my entail risk of public danger. The impact of Level 2 environmental incidents should be reversible within a short to medium term with or without intervention.

5.6.3 Level 3 Environmental Incident

An incident or sequel of incidents, whether immediate or delayed, that results or has the potential to result in:

- A minor impact on the physical or biological environment (air, ground, water or habitat), with no significant or long-term impairment to the ecosystem function or surface/ground water resources.
- An inconvenience / disturbance / disruption / annoyance (including odour, dust, noise, traffic problems, loss of water supply) of short duration and with no long-term effect on the employees and the community.
- A release of material (gas, liquid, solid) or energy that has the potential to cause illness, or that causes short term discomfort or reversible health effect to interested and affected parties.
- Isolated complaints by interested and affected parties.

 Instances where inspections undertaken taken by or for the regulator to check for legal compliance, have been outside the permitted limits and a non-compliance notice was issued.

NOTE: A Level 3 environmental incident is not reportable to authorities, should not result in pollution and may not have a risk of public danger. The impact of Level 3 environmental incidents should be insignificant immediately after occurrence and/or once-off intervention on the day of occurrence.

5.6.4 Level 4 Environmental Incident

A minor incident with lesser significance that did not necessarily result in damage or injury but that had the potential to cause damage to the environment, including:

- Could result in service disruption with a lesser significance;
- Did not necessarily result in damage; and/or
- Had the potential, under different circumstances, to cause major damage to the environment

In the event of an environmental incident, the Contractor will follow the following procedure:

Step 1: Immediately take all reasonable measures to contain and minimise the effects of the incident, including its effects on the environment and any risks posed by the incident to the health, safety and property of persons;

Step 2: Telephonically notify the TGC Environmental Officer and follow up in writing within *one(1) working day* including the following information: the nature of the incident and initial classification; substances involved with quantities; initial measures taken to minimise impacts; causes of the incident; measures taken and proposed to avoid the reoccurrence of the incident;

Step 3: Step 3: Report the incident on all relevant documents and systems - TGC Environmental Incident Register; TGC Environmental Incident Report and TGC Incident Flash Report;

Step 4: Undertake clean-up procedures;

Step 5: Remedy the effects of the incident; and

Step 6: Assess the immediate and long-term effects of the incident on the

environment and on public health;

In the event of any Level 1 or 2 environmental incidents, the Contractor's Environmental Officer

must complete a TGC Incident Flash Report (FAC-FAT-0005); TGC Environmental Incident Report

and document the incident on the TGC Environmental Incident Register.

In the event of any Level 1 or 2 environmental incidents, the TGC Environmental Officer will:

• Ensure that an Incident Flash Report (FAC-FAT-0005) has been compiled and that it

contains the necessary information; and

• Ensure that Contractor has complied with relevant Transnet protocols on Occurrence

Management.

In the event of any Level 3 environmental incident, the Contractor's Environmental Officer must

complete a TGC Environmental Incident Report and document the incident on the TGC

Environmental Incident Register.

In the event of any Level 4 environmental incidents, the Contractor's Environmental Officer must

document the incident on the TGC Environmental Incident Register and/or the Contractor's

Incident Register.

In the event of an incident (regardless of level) occurring, the TGC EO shall ensure that the

problem statement on the report is clear, the actual or potential consequences are noted, and

priority mitigation actions and responsibility for actions are indicated where necessary.

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5.7 Public Complaints

Any public complaint received shall be dealt with as depicted in Figure 2.

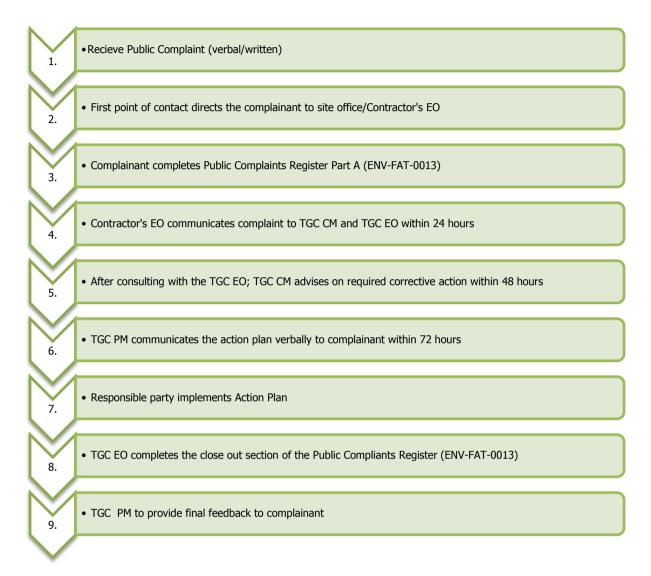


Figure 2: Public Complaints Procedure

5.8 Environmental Non-Conformances

A non-conformance may be issued to the Contractor by the TGC Project Manager/Construction Manager/Environmental Officer where:

- The incident response procedure described in section 5.6 above (including administrative requirements) was not successfully implemented; or
- There are repeated incidents due to inadequate environmental practices on site;
- Documentation required to comply with the CEMP is not prepared or maintained adequately on site; or

• Any non-compliance/non-conformance with the requirements of the Environmental Authorisations, the CEMP, permit(s), licence(s) and Environmental Specifications are

identified.

Any environmental non-conformance will be dealt with similarly to a *Defect* as defined in the Contract. A defect is due to non-compliance with the *Works Information* and it is the responsibility of the Contractor to correct the defect in order to ensure that the work takes place in accordance with the *Works Information*. Similarly, non-conformance with the CEMP and SES or with any other permit or licence will be regarded as a non-conformance with the *Works Information*. The

Contractor is responsible to rectify any *defect* (non-conformance) as defined above promptly.

The Contractor's EO shall be responsible to search for and identify non-conformances with the environmental specifications at inspection intervals agreed to with the TGC Environmental Officer. The TGC Environmental Officer shall also undertake such inspections on a monthly basis. If such monthly inspections indicate that any part of the Contractor's work is non-conformant with the requirements of the CEMP, permit(s), licence(s), the TGC Environmental Officer shall complete an Environmental Non-Conformance Report and advise the TGC PM to issue a Defects Notification to the Contractor accordingly. The Contractor shall correct the non-conformance (defect) within the timeframes specified in the report and notification and submit proof of such correction to the TGC Environmental Officer by virtue of a completed Non-Conformance Report and up to date

Non-Conformance Register.

The Contractor shall be responsible to rectify all environmental non-conformances at the time depicted as per Non-conformances that have not been rectified by the defects in the Contract date, the TGC Environmental Officer shall not issue the Contractor with a Site Closure Certificate. In such an event, the Supervisor may also make use of any reasonable contractual means to rectify the pop-conformance(s) as allowed by the Contract (retention moneys etc.)

rectify the non-conformance(s) as allowed by the Contract (retention moneys etc.).

If the defect (non-conformance) is not corrected within the Defect Correction Period, the TGC Construction Manager can assess the cost of correction by others, and this amount needs to be

paid by the Contractor.

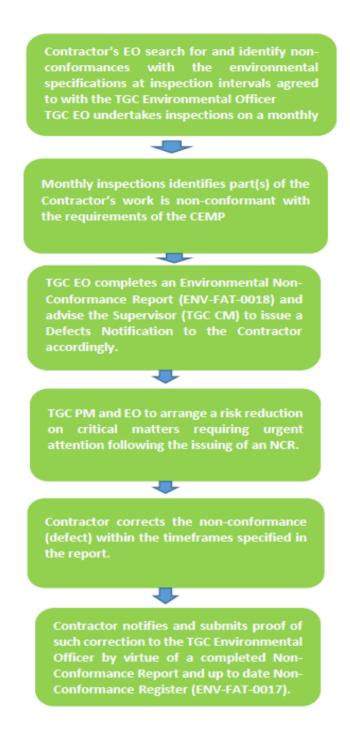


Figure 3: Non-Conformance procedure

NOTE: Each Non-conformance should be listed and numbered separately.

5.9 Documentation and Records

The TGC Document Control will ensure that the Contractor is supplied with all required/applicable documents listed in the TGC Contents for the Contractors Environmental Management File. This Document has been included as **Annexure A.**

The Contractor's Environmental Officer will complete and maintain copies of all documents and

records listed in Annexure A and ensure that these documents and records are kept up to date.

The Contractor's Environmental Officer will submit these documents to the TGC Environmental

Officer on a frequency as agreed to, except where documents have remained unchanged in which

case written notification to this effect must be provided to the TGC Environmental Officer. The

Contractor's EO must ensure that electronic copies of these documents are saved on the system.

Once the construction activities have been completed and the TGC Environmental Officer has

conducted a site closure inspection and notified the Contractor that site closure will be granted,

all documents described above must be handed over to the TGC Environmental Officer after

which a Site Closure Certificate will be issued.

NOTE: All documents/records are to be retained, within the TGC Document Control System, for

a period of 10 years. In the event of environmental documentation/record being lost before

receiving a Site Closure Certificate, the Contractor will be penalised according to the specifications

laid down in the relevant project-specific contract.

5.10 Application for Exemption

It is intended that the CEMP and SES be applicable to projects or activities of any size or

complexity. For projects with minimal environmental impacts, or where the scope of work is

limited; the Contractor may request, in writing to the TGC Project Manager, for exemption from

parts of the CEMP. The TGC Project Manager will consult the TGC PEM/TGC Environmental Officer

in reaching a decision on whether exemption from some of the CEMP provisions may be granted.

6 Main Actions required by the Contractor to comply

6.1 Prior to Commencement

The TGC Project Manager must ensure that the requirements below are requested of the

Contractor in the Project Construction Contract Document, the Letter of Appointment and any

other relevant correspondence with the Contractor prior to the start of works, as relevant.

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6.1.1 Declaration of Understanding (DoU)

The Declaration of Understanding will be signed, by a person of authority, and provided by the Contractor as part of his Tender Document. The signed DoU is a written confirmation by the Contractor that the requirements of the CEMP, PES, EA, EMPr and other licenses/permits are understood and will be complied with for the duration of their works on site. Post-contract award, a DoU must be signed by the Contractor's EO to confirm that the requirements of the CEMP, SES, PES and other applicable permits and licences will be compiled with. A signed DoU must be kept in the green file at all times.

The pro forma DoU to be signed by the Contractor has been included as **Annexure C.**

6.1.2 Appointment of Contractor's Environmental Officer

The Contractor will appoint an Environmental Officer or depending on the environmental impact of the project, assign a competent person, roles and responsibilities for environmental management during construction. The qualifications and experience of this person shall be stipulated at tender stage taking due regard to the complexity of the project and the sensitivity of the environment. The Contractor will forward details of the appointment to the TGC Construction Manager and TGC PEM for their review and approval. Should the Contractor's Environmental Officer or the person originally assigned with responsibilities for environmental management change from that person identified during either the tender stage, or the construction period, the Contractor will submit the details of such appointment or assignment for the TGC Project Manager's approval. No work will proceed until the new Environmental Officer is assigned or appointed. The Contractor's EO must be employed for the duration of the contract and be 100% allocated to project. Sharing of an EO resource between projects is not allowed unless if it's agreed upon with TGC Environment and Sustainability Department.

The pro forma appointment letter for the Environmental Officer to be appointed by the Contractor has been included as **Annexure D**.

6.1.3 Environmental Management Plans and Method Statements

Where relevant, an Environmental Management Plan and Environmental Method Statements, to meet the requirements of the CEMP, SES and relevant EA, permits/licences (activity based environmental method statements), will be provided by the Contractor as part of their Tender.

Required method statements will be specified in the Quality Criteria of the tender. These include, but are not limited to, the following where applicable:

- Establishment of construction lay down area
- Hazardous and non-hazardous waste management
- Storm water management
- Handling, Storage and Management of Hazardous Substances
- Contaminated water management
- Prevention of marine pollution
- Hydrocarbon spills
- Diesel tanks and refuelling procedures
- Dust control
- Spoil dumping
- Sourcing, excavating, transporting and dumping of fill material
- Noise and vibration control
- Removal of rare, endemic or endangered species
- Removal and stockpiling of topsoil
- Rodent and pest control
- Environmental awareness training
- Site establishment and demarcation
- Emergency procedures for environmental incidents
- · Closure of construction laydown area
- Rehabilitation

Emergency construction activity Environmental Method Statements may also be required. The activities requiring Environmental Method Statements cannot commence if they have not been approved by the Construction Manager and PEM, ECO or Environmental Officer.

6.1.4 Environmental Induction

The Contractor will ensure that all management, foremen and the general workforce, as well as all sub-contractors, suppliers and visitors to site have attended the TGC Environmental Induction Programme prior to commencing any work on site. Where new personnel commence work on site during the construction period, the Contractor will ensure that these personnel also undergo the TGC Environmental Induction Programme and are made aware of the environmental specifications on site. The Contractor must ensure that all of their personnel understand the

requirements of the EA, EMPr, CEMP, SES, relevant permits and licences and PES as relevant to their scope of work.

6.2 During Construction

6.2.1 Copy of the CEMP and familiarisation thereof

A copy of the CEMP, SES and where relevant, EA, licenses and permits will be available on site and the Contractor will ensure that all the personnel on Site (including sub-contractors and their staff) as well as suppliers, are familiar with and understand the specifications contained in these documents.

6.2.2 Compliance with the SES and PES and relevant permits and licences

The Contractor will ensure that all sections of the SES and PES (where relevant), relevant EA, permits and licences are complied with during the construction period.

6.2.3 Site clean-up for Closure

Retention moneys will not be paid until a Site Closure Inspection (conducted by the TGC Environmental Officer) has taken place and site closure granted and signed off by the TGC Construction Manager and TGC PEM together with the Site Closure Certificate.

7 Environmental Inspections and Audits

7.1 Environmental Inspections and Audits

Environmental inspections and audits are conducted using five basic techniques:

- Interviews with Contractor's staff including Sub-contractors and suppliers
- Document review
- Observations
- Monitoring
- Measurement and verification

This document sets out the areas and aspects of the construction site that will be inspected or audited, the frequency of such audits, the auditor and auditee.

It should be noted that these lists are not exhaustive and that each site will have specific issues that will need to be audited.

For each construction project, the auditor and auditee are as follows:

Table 1: Relationship between Auditor/Auditee

Place	Inspector/Auditor	Auditee	Inspection/audit
			frequency
Work places	Contractor's Environmental Officer	Contractor's team	Daily/Weekly Inspection
Construction site (entire area)	TGC Environmental Officer	Contractor's Environmental Officer	Monthly Audit
Construction site (entire area)	Environmental Specialist: Assurance	TGC EO and PEM	As stipulated on the annual audit protocol
Construction site (entire area)	Environmental Control Officer	Construction team (TGC and Contractors)	As stipulated on the EA or TGC Contract

7.1.1 Work Places Inspection

The Contractor's Environmental Officer will be required to conduct daily/weekly inspections of all work places for which the Contractor is responsible, including but not limited to the following:

- · Contractor's camp, recreational and canteen facilities
- Material lay down areas
- Liquid and solid waste storage facilities (general, hazardous, recycling and scrap)
- Workshops
- Oil traps
- Wash bays
- Construction work area
- Spray Booths
- Haul roads
- No-go areas
- Storm water drains

• Any other construction area for which the SHE Officer is responsible

At each of these sites, the Contractor's Environmental Officer will be required on a daily basis to check for the following, where relevant:

By observation:

- Litter
- Separation of solid waste as per system
- Hydrocarbon spills
- Effectiveness of dust control measures
- Illegal washing out of containers in drains
- Wash bay drainage systems are working
- Correct usage of drip trays
- Effectiveness of oil separators
- Water use and wastage
- Pollution of rivers and sea
- Provision and use of toilet facilities
- Any other illegal activities

By document check:

- Removal of oil for recycling as per schedule
- Removal of packaging as per agreements with suppliers
- Removal of hazardous waste by specialist Contractors as per schedule
- Correct placement of environmental signage and posters
- Document board listing emergency numbers, hazmat info sheets, etc.

The following records must also be kept up to date (information must include that of subcontractors where relevant):

- Fuel consumption for entire contract period measured in litres (including plant, generators, other equipment, vehicles etc.)
- Electricity consumption for entire contract period measured in Watt hours
- Quantities of general waste submitted for recycling measured in kilograms
- Quantities of general waste disposed of to landfill measured in kilograms
- Quantities of hazardous waste submitted for recycling measured in kilograms
- Quantities of hazardous waste disposed of to landfill measured in kilograms

 Water consumption, including water used for construction and human consumption measured in litres

7.1.2 Construction Site Audit

The TGC Environmental Officer will be required to conduct monthly inspections of the entire construction site, which may involve more than one Contractor and may include, but not be limited to the following:

- Entire site
- Fencing
- Environmentally sensitive areas
- Contractor's camp, recreational and canteen facilities
- Material lay down areas
- Scrap yard
- Workshops
- Oil traps
- Wash bays
- Sewage plant
- Quarries and borrow pits used for fill and construction material
- Spoil dumping areas
- Solid waste disposal areas
- Liquid waste disposal areas
- Bioremediation site
- Area for the temporary storage of hazardous waste
- Fuel depot and hydrocarbon storage areas
- Construction work area
- Concrete batching plant
- · Spray booths
- · Haul roads
- No-go areas
- Storm water drains
- And any other construction areas not listed

At each of these sites, the TGC Environmental Officer will be required to check for the following, where relevant:

By observation:

- Litter
- Separation of solid waste as per system
- Hydrocarbon spills
- Use of bunding, hard standing and other protection measures
- Illegal dumping
- Effectiveness of dust control measures
- Illegal washing out of containers in drains
- · Wash bay drainage systems are working
- Correct usage of drip trays
- Effectiveness of oil separators
- Illegal use of tracks and off-road driving in no-go areas
- Correct procedures are followed for topsoil removal and stockpiling
- · Effectiveness of erosion protection measures
- Excess noise and vibration
- Water use and wastage
- Pollution of rivers and sea
- Provision and use of toilet facilities
- Topsoil removed and stockpiled
- · Any other illegal activities

By document check:

- · All receipts for the collection of old oil, general recycled waste and hazardous waste
- Correct placement of environmental signage, SHEQ policies and posters
- Document board listing emergency numbers, hazmat info sheets, etc.
- Complete and accurate record of Contractor's Environmental File

By measurement:

- Amount of water used by each Contractor (where practical and/or required by TGC EO)
- Amount of land stabilisation completed
- Area re-vegetated
- Amount of waste recycled, sent to scrap yard or disposed in dump
- Amount of material treated in the bioremediation site

By monitoring:

· Effectiveness of dust control systems

• Effectiveness of pollution control systems

• Effectiveness of rehabilitation and re-vegetation programmes

· Effectiveness of erosion control methods

Effectiveness of noise control barriers

A site-specific inspection checklist will be provided to the TGC Environmental Officer, by the Contractor's EO, prior to site establishment.

7.2 Environmental Performance Criteria

The Contractor will be required to achieve the minimum requirement for environmental audits. The standard/minimum requirement for all environmental audits, as per the TGC Environmental Governance Framework is 80%. Furthermore, the standard/minimum requirement for all audits conducted by ECO is 90%.

8 Associated Forms

The list of applicable environmental forms and templates will be maintained by TGC's Document Management Department, and these are revised as and when required.

9 Records

All environmental records/documents generated during the construction phase of the project will be managed in terms of the Transnet Document, Data and Records Management Procedure.

10 Annexures

Annexure A: Contents for Contractor's Environmental File Annexure B: Environmental Method Statement Example

Annexure C: Declaration of Understanding

Annexure D: Appointment of Contractor's Environmental Officer

Annexure A: Contents for Contractor's Environmental File



CONTENTS FOR CONTRACTOR'S ENVIRONMENTAL FILE

PROJECT NAME:	DOCUMENT NO:	
PROJECT NO:	DATE:	
CONTRACTOR:	CONTRACT NO:	

The following documents must be incorporated into the Contractors Environmental File

No	Item Description	Document No	Tick
1.1	Transnet Safety, Health, Environmental and Quality – Risk Management Policy Statement dated 10 June 2016.		
1.2	TGC Safety, Health, Environmental Management and Quality Policy dated 01 June 2016.		
1.3	Transnet Construction Environmental Management Plan (CEMP) as supplied to Contractor by Transnet Group Capital	ENV-STD-001 Rev03	
1.4	Transnet Standard Environmental Specification (SES) as supplied to Contractor by Transnet Group Capital	ENV-STD-002 Rev03	
2	Project Environmental Specification (PES) as supplied to Contractor by Transnet Group Capital	ENV-FAT-0001	
3	Declaration of Understanding (Signed)	ENV-FAT-0002	
4.1	Contractor's Information	ENV-FAT-0003	
4.2	Contractor's Environmental Policy		
4.3	Contractor's Organogram		
4.4	Contractor's Environmental Management Plan		
4.5	Appointment of Contractors EO and Declaration of Understanding (Including CV and Job Profile)	ENV-FAT-0004	
5	Schedule of Contractor's Construction Plant and Equipment	ENV-FAT-0005	
6	Hazardous Substances Register	ENV-FAT-0006	
7	Emergency Contacts Register	ENV-FAT-0007	
8	Energy Consumption Register	ENV-FAT-0032	

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CONTENTS FOR CONTRACTOR'S ENVIRONMENTAL FILE

9	Water Usage Register	ENV-FAT-0033
10	List of Interested and Affected Parties	ENV-FAT-0008
11	Induction Attendance Register	Rev 00-01
12	Project Start-Up Checklist	ENV-FAT-0022
13	Site Access Certificate	ENV-FAT-0010
14	Method Statement Register	ENV-FAT-0011
15	Method Statements	ENV-FAT-0026
16	Waste Disposal Register	ENV-FAT-0012
17	Daily Inspection Checklist	ENV-FAT-0023
18	Weekly Inspection Checklist	ENV-FAT-0024
19	Monthly Compliance Audits	ENV-FAT-0025
20	Public Complaints Register	ENV-FAT-0013
21	Record of Formal External Communications	ENV-FAT-0014
22	Incident Register	ENV-FAT-0015
23	Incident Reports	ENV-FAT-0016
24	Non Conformance Register	ENV-FAT-0017
25	Non Conformance Reports	ENV-FAT-0018
26	Awareness/Toolbox Attendance Register (Including Awareness Material)	ENV-FAT-0019
27	Minutes of Monthly SHE Meetings	
28.1	Environmental Site Rules for Visitors	ENV-GL-0002
28.2	Environmental Site Rules for Contractors	ENV-GL-0003
29	Basic Site Procedures	ENV-GL-0001

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CONTENTS FOR CONTRACTOR'S ENVIRONMENTAL FILE

30	TGC Environmental Induction		
31	Contractor's Environmental Management File Handover	ENV-FAT-0020	
32	Site Closure Inspection Form	ENV-FAT-0021	
33	Site Closure Certificate	ENV-FAT-0021	
34	Application for Exemption	ENV-FAT-0034	

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Annexure B: Environmental Method Statement Example

ENVIR	ONMENTAL METH	OD STATEMENT	-
PROJECT NAME:			
PROJECT NO:		DOCUMENT NO:	
CONTRACTOR:		DATE:	
PROPOSED ACTIVITY (give title o	of method statement and	reference number from t	the CEMP):
WHAT WORK IS TO BE UNDERT	AKEN (nive a brief deer	rintion of the works):	
WINT WORK IS TO BE ONDER IT	AREIT (give a brief desc	inputor of the works,	
WHERE ARE THE WORKS TO BE		possible, provide an anno	stated plan and a full
description of the extent of the work	(S):		
	-		
START AND END DATE OF THE V	NUBRE EUD MITCH T	HE METHOD STATEME	NT IS REQUIRED.
	TORKS FOR WITCH I		11 13 KEQUIKED:
Start Date:		End Date:	
MANAGED (provide as much detail ENVIRONMENTAL STANDARDS			
ENVIRONMENTAL STANDARDS	(iist the applicable enviro	omiental standards to be	mer).
MONITORING AND RECORD KE environmental standards are met, as	EPING (Describe how to s well as the records to i	the activity will be monito be kept):	ored to ensure that th
DECLARATIONS			
CONTRACTOR'S ENVIRONMENT Statement, if carried out according			
environmental harm):			
Print Name	Sig	nature	Date
PERSON UNDERTAKING THE WO Statement and the scope of the wor			
Statement may be amended on app Environmental Manager and Constru	lication to other signator	ies and that Transnet Gro	oup Capital
	accont manager will about	my compliance with the	concerns or uns
Environmental Method Statement ENV-FAT-0026			Rev 2 Page 1



ENVIRONMENTAL METHOD STATEMENT

ENV-FAT-0026 Rev 2 Page 1

Annexure C: Declaration of Understanding				
			TRANSNEI	
DECLARATION OF U	INDERSTANDIN	G		
PROJECT NAME:		DOCUMENT NO:		
PROJECT NO:		DATE:		
CONTRACTOR:		CONTRACT NO:		
(Name)		(Designation)		
Declare that I have read and Plan (ENV-STD-001) and asso				
I also declare that I understa Environmental Specifications f			plementing the	
Signed	Signature		Date	
Place				
Witness 1:	Signature		Date	
M2 2:				

Annexure D: Appointment of Contractor's Environmental Officer



APPOINTMENT OF CONTRACTOR ENVIRONMENTAL OFFICER & DECLARATION OF UNDERSTANDING

DEC	CONTRACTOR		NTAL OFFICER AND DING	REFERENCE		
We,				(Cc	ontractor	, hereby confirm that
		has be	een appointed as Environn	nental Officer for	the dura	tion of Contract
	, the s	cope of which e	entails			
				(Descri	iption of	scope of works)
			(Anneloted France)	omostal Offered	doda	that I have used an
understand the contents of:			(Appointed Enviro	nmental Officer)	declare	that I have read and
The Transnet Group Capital	(TGC) Constru	ction Environme	ental Management Plan (C	EMP) and Standa	ard Enviro	onmental Specification
(SES), documentation issue I, (Appointed Environmental					onforcing	and implementing the
requirements of the Constr						
	(PES) that ma	y be relevant or	r required for this project.			
Environmental Specifications						
nvironmental Officer	γ	N	Environmental O Job Description a		Υ	N
nvironmental Officer V attached Signed (Contractors		N ature			γ	N
nvironmental Officer V attached Signed (Contractors	Sign	ature	Job Description a		γ	N
nvironmental Officer V attached Signed (Contractors Environmental Officer)	Sign		Job Description a		Y	N
Signed (Contractors Environmental Officer) Received By (TGC Environmental	Sign	ature	Job Description a		Υ	N





TRANSNET GROUP CAPITAL ENVIRONMENT AND SUSTAINABILITY

STANDARD ENVIRONMENTAL SPECIFICATION (SES) ENV-STD-002 Rev04

Document Control

This document will be managed and controlled in terms of the Transnet Document, Data and Records Management Procedure.

Revision History

Author	Date	Description	Revision
Khathutshelo	15 September 2011	Standard Environmental	00
Tshipala		Specification (SES)	
Khathutshelo	6 June 2013	Standard Environmental	01
Tshipala		Specification (SES)	
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		Specification (SES)	
Nonkululeko	30 November 2017	Standard Environmental	04
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This document has been reviewed by:

Reviewer	Date reviewed
Stehan Bouwer	30 November 2017

Document Approvals List

This document has been approved by

Name	SAP Component	Signature	Date approved
Khathutshelo Tshipala	Executive Manager:		
	Environment and	3	30 November 2017
ι στιιραία	Sustainability		

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1 Purpose

This specification describes the minimum standards for environmental management to which Contractors and Sub-contractors on a construction site must comply. It is a generic standard for use across all construction works executed by Transnet Group Capital (TGC).

There may be project specific environmental standards in addition to the standards in this document that exceed the standards prescribed here. The project specific environmental standards will be described in the Project Environmental Specification (PES) that will be issued separately for each project (where relevant).

This document must be read in conjunction with the TGC Construction Environmental Management Plan (CEMP).

2 Scope

This standard applies to Contractors that work on site under the authority of TGC.

3 Abbreviations and Definitions

3.1 Abbreviations

Abbreviation	Meaning	
СЕМР	Construction Environmental Management Plan	
СМ	Construction Manager	
DEA	Department of Environmental Affairs	
EA	Environmental Authorisation	
EO	Environmental Officer	
EGF	Environmental Governance Framework	
NEMA	National Environmental Management Act 107 of 1998 (as amended)	
NEM:BA	National Environmental Management: Biodiversity Act 10 of 2004	
NWA	National Water Act 36 of 1998	
PEM	Project Environmental Manager	

PM	Project Manager	
PES	Project Environmental Specification	
SES	Standard Environmental Specification	
SHEQ	Safety, Health, Environment and Quality	
TGC	Transnet Group Capital	

3.2 Definitions

Fauna A group of animals specific to a certain region or time period.

Flora A group of plants specific to a certain region or time period.

General waste Waste that does not pose an immediate hazard or threat to

health or to the environment; and includes: domestic waste;

building and demolition waste; (b)

(c) business waste;

(a)

(d) inert waste; or

(e) any waste classified as non-hazardous waste in terms of NEMWA, 59 of 2008.

Hazardous waste Any waste that contains organic or inorganic elements or

> compounds that may, owing to the inherent physical, chemical or toxicological characteristics of that waste, have a detrimental impact on health and the environment and includes hazardous substances, materials or objects within business waste, residue

deposits and residue stockpiles.

Indigenous vegetation Plants that naturally occur in an area.

Liquid Waste that appear in liquid form such as used oil, grease and/or

waste contaminated water or waste water.

Standard Environmental Specification (SES) ENV-STD-002 Rev. 04

Method statement

A document that describes how the Contractor will implement environmental management measures associated with a particular environmental aspect during construction. It is a written submission by the Contractor to the TGC Environmental Officer/Construction Manager in response to this Specification or a request by the Engineer, an ECO or Authorities setting out the equipment, plant, materials, labour and method the Contractor proposes to use to carry out an activity identified by this Specification or the TGC EO when requesting the Method Statement, in such detail that the TGC EO is able to assess whether the Contractor's proposal is in accordance with this Specification and/ or will produce results in accordance with this Specification.

Natural Vegetation

All existing species, indigenous or otherwise, of trees, shrubs, groundcover, grasses and all other plants found growing on the site.

Rehabilitation

Refers measures that must be put in place to restore the site to its pre-construction or enhanced state, subsequent to construction taking place.

Responsible Authority

A Responsible Authority, according to the National Water Act 36 of 1998, relates to specific power or authority in respect of water uses that is assigned by the Minister to a Catchment Management Agency or to a Regional Office.

Sensitive area

Any area that is denoted as sensitive by this Specification due to its particular attributes, which could include the presence of rare or endangered vegetation, the presence of heritage resources (*e.g.* archaeological artefact or graves), the presence of a unique natural feature, the presence of a watercourse or water body, the presence of steep slopes.

Solid waste

All solid waste, including construction debris, chemical waste, excess cement/ concrete, wrapping materials, timber, tins and cans, drums, wire, nails, food and domestic waste (e.g. plastic packets and wrappers).

Spoil

Excavated material which is unsuitable for re-use as material in the Works or any other use; or is material which is surplus to the requirements of the Works.

Temporary Storage

A once-off storage of waste for a period not exceeding 90 days.

Topsoil

Means a varying depth (up to 300 mm) of the soil profile irrespective of the fertility appearance, structure, agricultural potential, fertility and composition of the soil.

Waste

Any substance, material or object, that is unwanted, rejected, abandoned, discarded or disposed of, or that is intended or required to be discarded or disposed of, by the holder of that substance, material or object, whether or not such substance, material or object can be re-used, recycled or recovered and includes all wastes. Waste or a portion of waste ceases to be a waste only once the waste is, or has been re-used, recycled or recovered.

Watercourse

Means:

- a) a river or spring;
- a natural channel in which water flows regularly or intermittently;
- a wetland, lake or dam into which, or from which, water flows; and
- any collection of water gazetted by the National Water Act, 36 of 1998 as a watercourse and a reference to a watercourse includes, where relevant, its bed and banks

Wetland

Land which is transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is periodically covered with shallow water, and which land in normal circumstances supports or would support vegetation typically adapted to life in saturated soil.

4 Minimum Standards for Environmental Management

The Contractor shall identify the potential environmental aspects and impacts that may occur as a result of his/her activities and accordingly prepare separate Method Statements describing how each of these impacts will be prevented or managed so that the standards set out in this document are achieved. These method statements will be prepared in accordance with the requirements set out in the CEMP.

The Contractor will comply with the standards described below.

4.1 Site Planning and Establishment

The Contractor shall establish his construction camps, offices, workshops, eating areas and any other facilities on the site in a manner that does not adversely affect the environment. These facilities must not be sited in close proximity to sensitive areas. Where required a buffer must be determined by the ecological requirements of the fauna/flora found on-site.

The Contractor shall ensure that a most recent Transnet SHEQ Policy is displayed on the noticeboard at all times.

4.1.1 Site plan

Before the onset of construction, the Contractor shall submit to the TGC Construction Manager and TGC Environmental Officer for their approval, plans of the exact location, extent and construction details of the proposed facilities and the impact mitigation measures the Contractor proposes to put in place. Any changes to the location of the facilities and site activities as per the approved site layout plan shall be re-submitted for approval prior to implementation of changes.

The Site Plan must as a minimum include but not necessarily be limited to:

 Detailed layout of the construction works areas including access roads, site offices, material laydown areas, temporary stockpile areas and parking areas;

 Detailed locality and layout of all waste storage and handling facilities for litter, kitchen refuse and workshop-derived liquid waste;

Proposed areas for the stockpiling of topsoil and excavated spoil material;

 Demarcation of the construction footprint including areas not to be disturbed by the development; and

 Location of sewage and sanitary facilities at the site offices and staff accommodation and at all localities on the site where there will be a concentration of labour. Sanitary arrangements should be to the satisfaction of the TGC Construction Manager and Environmental Officer.

The site offices should not be sited in close proximity to steep areas. It is recommended that the offices, and in particular the ablution facilities, aggregate stockpiles, spoil areas and hazardous material stockpiles be located as far away as possible from any watercourse. Should this not be possible, approval for the location of these facilities must be granted by the TGC Environmental Officer.

4.1.2 Identification and establishment of suitable access routes/roads

Existing access routes to the construction/works areas must be used as far as possible. The building of access roads must be restricted to within the development footprint to prevent unnecessary disturbance of the surrounding environment. However, prior to making a decision about a new access road, the TGC Environmental Officer must assess the proposed access road against the prevailing environmental legislation to confirm/rule out possible EIA triggers. Access tracks must be maintained in a good condition at all times during construction to minimize erosion and dust generation.

4.1.3 Demarcation of site limits

Prior to the commencement of construction, the actual site to be developed must be clearly demarcated through the most effective means. Vegetation within the demarcated zone may be

cleared only upon obtaining approval from the TGC Environmental Officer. Disturbance of

vegetation outside of the demarcated development footprint is not permitted.

All plant, material and equipment required for construction must be located within the

designated areas. Laydown areas must be clearly demarcated within the site limits. No activities

are allowed outside of the demarcated development footprint.

4.1.4 Eating Areas

The Contractor is responsible for providing adequate eating facilities within the works area to

ensure that workers do not leave the site to eat during working hours. Refuse bags/bins must

be provided at all established eating areas and when full it should be disposed as required by

Section 4.3 below.

4.1.5 Liquid waste Management

Liquid waste water from site shall be stored on-site in a properly designed and constructed

system, situated so as not to adversely affect water courses (streams, rivers, pans, dams etc.).

Only domestic type wastewater, i.e. toilet, shower, basin, kitchen water shall be allowed to enter

the designated system.

4.2 Sewage and Sanitation

The Contractor is responsible for providing adequate sanitary facilities including toilets, toilet

paper, wash basins etc. to all workers on site and for enforcing the proper use of these facilities.

Safe and effective sewage treatment will require one of the following sewage handling methods:

dry-composting toilets such as "enviro loos" or the use of chemical toilets which are supplied

and maintained by a suitably qualified Sub-contractor. The type of sewage treatment will depend

on the location of the site and the surrounding land uses, the duration of the contract and

proximity (availability) of providers of chemical toilets.

Toilet facilities shall be serviced regularly and the waste material generated from these facilities

shall be disposed of at a registered waste water treatment works/macerator and proof of

servicing and disposal shall be made available in the Contractor EO's File.

Standard Environmental Specification (SES)

Toilets and latrines shall be easily accessible and shall be positioned within walking distance from wherever employees are employed on the works. Use of open areas (i.e. the veldt) shall not, under any circumstances, be allowed. For projects of high mobility a mobile toilet facility shall be made available by the Contractor.

Outside toilets shall be provided with locks and doors and shall be secured to prevent them from blowing over. Toilets must not be placed in areas susceptible to flooding or high winds. The Contractor shall arrange for regular emptying of toilets and shall be entirely responsible for enforcing their use and for maintaining such facilities in a clean, orderly and hygienic condition to the satisfaction of the TGC Construction Manager.

4.3 Waste Management

Waste is grouped into "general" or "hazardous", depending on its characteristics. The classification determines handling methods and the ultimate disposal of material.

General waste to be expected during construction includes the following:

- Trash (waste paper, plastics, cardboard, etc.) and food waste from offices, warehouses and construction personnel;
- Uncontaminated construction debris such as used wood and scrap metal; and
- Uncontaminated soil and non-hazardous rubble from excavation or demolition.

The Contractor shall classify all waste expected to be generated during the construction period. Examples of typical construction waste which could be expected on the site and how they should be classified are indicated in the following table:

TABLE 1: EXAMPLE OF CONSTRUCTION WASTE CLASSIFICATION

WASTE	CLASSIFICATION	
WASIL	HAZARDOUS	GENERAL
Aerosol containers	Х	
Batteries, light bulbs, circuit boards, etc.	Х	Х
Clean soil		Х
Construction debris contaminated by oil or organic compounds	X	

WASTE	CLASSIFICATION	
WASIE	HAZARDOUS	GENERAL
Domestic waste		Χ
Empty drums (depends on prior use)	X	Χ
Empty paint and coating containers		X
Explosive waste	X	
PCB waste	X	
Rubble (not contaminated by oil or organic		Χ
compounds)		
Waste Cable		Χ
Waste plastic		Χ
Waste paint and/or solvent	X	
Waste oil	X	
Waste concrete		Χ
Waste cement powder	X	
Waste empty cement bags (must be thoroughly		X
decanted)		
Waste containing fibrous asbestos	X	
Waste timber		Χ
Sewerage sludge	X	
Scrap metal		X
Chemically-derived sanitary waste	Х	

A hierarchical control approach to waste management is encouraged. Waste should preferably be managed in the following order of preference:

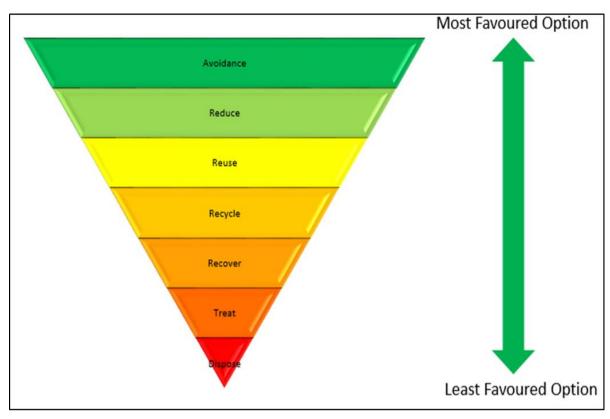


FIGURE 1: THE WASTE MANAGEMENT HIERARCHY

(Transnet Environmental Risk Management Strategy and Framework, 2015:42)

Avoidance/Prevention: using goods in a manner that minimises their waste

components

Reduction/Minimisation: reduction of the quantity and toxicity of waste

generated during construction

Re-use: removing an article from a waste stream for use in

a similar or different purpose without changing its

form or properties

Recycling: separating articles from a waste stream and

processing them as products or raw materials

Recovery: reclaiming particular components or materials, or

using the waste as a fuel

Treatment: processing of waste by changing its form or

properties in order to reduce toxicity and quantity

Disposal: burial, deposit, discharge, abandoning or release of

waste

The Contractor is responsible for the removal of all waste from site generated through the construction activities. The Contractor shall ensure that all waste is removed to appropriate licensed waste management facilities. (For the identification of an appropriate facility, the following source may be utilized: http://sawic.environment.gov.za/.

The Contractor's Environmental Officer will work in conjunction with the Contractor's Safety and Health personnel to create a Hazardous Materials Management Program. This program will establish the necessary protocol for proper handling and removal of hazardous materials on the site.

The Contractor shall manage **GENERAL WASTE** that is anticipated to be generated by operations as follows:

- Notify waste hauler when container is full so that it can be removed and replaced with an empty container/skip;
- No littering is allowed on site. In the event where staff mobility is high, refuse bags will be made available by the Contractor;
- Provide documented evidence of proper disposal of waste (Waste Disposal Certificate)

The Contractor shall recycle **GENERAL WASTE** (as far as practically possible) that is anticipated to be generated by its operations as follows:

- Obtain and label recycling containers for the following (whichever relevant) and locate them within temporary office building and trailers:
 - Office Waste;
 - Aluminium;
 - Steel;
 - Glass;
 - Ferrous Metals;
 - Non Ferrous Metals; and
 - Waste Timber
- Establish recycled material collection schedule
- Arrange for full bins to be hauled away

Spent batteries, circuit boards, and bulbs, while non-hazardous, require separate storage, special collection and handling.

No burning, burying or dumping of waste of any kind will be permitted.

The Contractor shall manage **HAZARDOUS WASTE** anticipated to be generated by his operations as follows:

- Obtain and provide an acceptable container with correct and visible classification label;
- Place hazardous waste material in allocated container;
- Inspect the container on a regular basis as prescribed by the Contractor's waste management plan;
- Track the accumulation time for the waste, haul the full container to the registered hazardous disposal site;
- Notify the waste hauler when container is full so that it can be removed and replaced with an empty container/skip; and
- Provide documented evidence of proper waste disposal of the waste (Waste Disposal Certificate).

The Contractor shall quantify all waste disposed of, whether general or hazardous (including waste disposed of by any sub-contractors) and keep record of these quantities on site.

4.4 Workshops, equipment maintenance and storage

All vehicles and equipment must be kept in good working order to maximise efficiency and minimise pollution. Maintenance, including washing and refueling of plant on site must be done at designated locations at workshop areas. These designated areas must be agreed with the TGC Construction Manager and TGC Environmental Officer. The Contractor must ensure that no contamination of soil or vegetation occurs around workshops and plant maintenance facilities. All machinery servicing areas must be bunded. Drip trays should be used to collect used oil, lubricants at all times. Drip trays must be provided for all stationary plant. Washing of equipment should be restricted to urgent maintenance requirements only. Adequate wastewater collection facilities must be provided and the wastewater should be disposed of at a registered hazardous waste disposal site.

4.5 Vehicle and Equipment Refueling

4.5.1 Stationary/Designated Refueling

No vehicles or machines shall be serviced or refuelled on site except at designated and approved servicing or refuelling locations. No oil or lubricant changes shall be made except at designate locations, or in case of breakdown or emergency repair.

The Contractor shall store fuel and oil at a secure area, which shall be bunded to contain 110% of the total volume within the bund and designed with an impervious layer or liner or paved surface to prevent spillage from entering the ground.

The Contractor shall provide details of its proposed fuel storage and fuelling facility to the TGC Environmental Officer for approval. The design shall comply with the regulations of the National Water Act, (Act 36 of 1998), the Hazardous Substances Act, (Act 15 of 1973), the Environmental Conservation Act, (Act 73 of 1989), National Environmental Management Act, (Act 107 of 1998), and the Occupational Health and Safety Act, (Act 85 of 1993), mainly the Construction - and Hazardous Chemical Substances Regulations.

4.5.2 Mobile Refueling

In certain circumstances, the refuelling of vehicles or equipment in a designated area is not a viable/practicable option and refuelling has to be done from a tank, truck, bowser or container moved around on site. In such circumstances, the Contractor may request approval from the TGC Construction Manager to conduct mobile refuelling subject to the following control measures:

- Secondary containment equipment shall be in place. This equipment shall be sized to contain the most likely volume of fuel that could be spilt during transfer.
- Absorbent pads or drip trays are to be placed around the fuel inlet prior to dispensing.
- Mobile refuelling units are to be operated by a designated competent person.
- The transfer of fuel must be stopped prior to overflowing. Fuel tanks or refuelling equipment on vehicles may only be filled to 90% carrying capacity.
- Mobile fuelling tanks must be stored in an area where they are not susceptible to collisions.
 The fuel storage area must be located away from drainage channels.

Mobile refuelling operations shall not take place within 30 meters of any watercourses or

7.5 meters from a their structures are supplied to the structure of the structur

7.5 meter from other structures, property lines, public ways or combustible storage.

• All mobile refuelling tanks are to be properly labelled and fire extinguishers with valid

service dates shall be located near the fuel storage areas. These extinguishers must be of

a suitable type and size.

4.6 Spill Response

The Contractor shall have adequate spill response materials/equipment on site which must be

aligned with the volumes of hazardous substances used on site and the risk of pollution to

sensitive environmental attributes.

The Contractor shall provide details for approval by the TGC Construction Manager and TGC

Environmental Officer of its spill response plan in the event of any spills of fuel, oils, solvents,

paints or other hazardous materials. The plan will show measures to be taken in removing

contaminated material from site and demonstrate complete removal of contamination.

The Contractor shall instruct construction personnel on the following spill prevention and

containment responsibilities:

Immediately repair all leaks of hydrocarbons or chemicals;

Take all reasonable means to prevent spills or leaks;

Do not allow sumps receiving oil or oily water to overflow;

• Prevent storm water runoff from contamination by leaking or spilled drums of oil or

chemicals; and

• Do not discharge oil or contaminants into storm water or sewer systems.

If a spill occurs on land, the Contractor must:

Immediately stop or reduce the spill

Contain the spill

Recover the spilled product

· Remediate the site

• Implement actions necessary to prevent the spill from contaminating groundwater or off-

site surface water

• Dispose of contaminated material at a registered hazardous waste disposal site and

provide proof thereof (SDCs)

Standard Environmental Specification (SES)

Any spill to water has the potential to disperse quickly, therefore, the spill must be contained immediately using appropriate containment equipment.

If a spill to water occurs, the Contractor must:

- Take immediate action to stop or reduce the spill and contain it
- Notify the appropriate on-site authorities
- Implement actions necessary to prevent the spread of the contamination by deploying booms and/or absorbent material
- Recover the spilled product
- Dispose of spilled material at a registered hazardous waste disposal site and provide SDCs
- Water samples to be taken downstream from where the spill took place to trace the extent of pollution

4.7 Spray Painting and Sandblasting

Spray painting and sandblasting should be kept to a minimum. All painting should, as far as practicable, be done before equipment and material is brought on site. Touch-up painting is to be done by hand painting or by an approved procedure. A Method Statement shall be submitted to the TGC Environmental Officer for approval.

The relevant Contractor will inform his Environmental Officer of when and where spray painting or sandblasting is to be carried out prior to commencement of work. The Contractor's Environmental Officer will monitor these activities to ensure that adequate measures are taken to prevent contamination of the soil.

If the area is in confined or high (elevated) areas, a protection plan must be issued for approval by the TGC Environmental Officer.

4.8 Dust Management

Contractors are responsible for managing dust generated as a result of their activities. The use of water for dust management must be minimised as far as practically possible. Discretion must be applied on a site-by-site basis in terms of dust control. Dust control measures must be agreed upon by the TGC EO prior to commencement of the Works.

Below are some dust control measures which can be applied during construction:

- Operate vehicles within speed limits, where no speed limit has been specified, the limit shall be 20km/h;
- Minimise haulage distances where possible;
- Environmentally friendly soil stabilisers may be used as additional measures to control dust on gravel roads and construction areas;
- The introduction of hydro-seeding and mulch due to its ability to bind soil particles together and thus reduce fugitive dust on-site;
- Dust suppression measures will also apply to inactive construction areas. (An inactive construction site is one on which construction will not occur for a month or more);
- Minimise disturbance of natural vegetation during right-of-way construction (e.g. transmission lines and erection of fences) to reduce potential erosion, runoff, and airborne dust;
- Material in transit should be loaded and contained within the load bin of the vehicle in such a way as to prevent any spillage onto the roads and the creation of dust clouds. If necessary, the load bin of the vehicle shall be covered with a tarpaulin to prevent dust;
- Implement a system of reporting excessive dust conditions by construction personnel (as instructed through Environmental Awareness Training);
- In cases where water is to be used for dust control; it shall be ensured that only authorised sources are used; and
- Apply water to gravel roads with a spraying truck when required

4.9 Storm water and Dewatering Management

The Contractor shall be aware that, apart from runoff from overburden emplacements and stock piles, storm water can also be contaminated from batch plants, workshops, vehicle wash-down pads etc., and that contaminants during construction may include hydrocarbons from fuels and lubricants, sewerage from employee ablutions and excess fertiliser from rehabilitated areas, etc.

The Contractor shall take note that discharges to controlled waters such as the sea, rivers, groundwater or to sewerage systems are controlled under the South African Water Legislation. The following specific measures are required:

• Temporary drainage must be established on site during the construction period until permanent drainage is in place. Contractors are responsible for maintaining the temporary

drainage in their areas. Contractors must provide secondary drainage that prevents erosion, where necessary.

- Contractors must employ good housekeeping in their areas to prevent contamination of drainage water.
- The Contractor shall clear stagnant water at all times.
- The Contractor shall ensure that no contaminated surface water flows off-site as a result
 of Contractor operations. Where necessary, silt traps shall be constructed to ensure
 retention of silt on site and cut-off ditches shall be constructed to ensure no runoff from
 the site except at points where silt traps are provided. The Contractor shall be responsible
 for checking and maintaining all silt traps for the duration of the project.
- The removal from groundwater is defined as a water-use under the National Water Act 36 of 1998. Therefore, it must be ensured that the project has been authorised by the Responsible Authority to remove groundwater prior to dewatering taking place. If applicable, the Contractor shall be responsible for collection, management, and containment within the site boundaries of all dewatering from all general site preparation activities.
- No discharge/dewatering to off-site land or surface water bodies will be allowed
- On-site drainage shall be accomplished through gravity flow. The surface drainage system shall consist of mild overland slopes, ditches, and culverts. The graded areas adjacent to buildings shall be sloped away with a 5% slope. Other areas shall have a minimum slope of 0,2% or as otherwise indicated
- Ditches shall be designed to carry a 25-year storm event with velocities in accordance to minimise erosion. Erosion protection shall consist of suitable stabilising surfaces in all ditches.
- Culverts shall be designed to ensure passage of the 50-year storm peak runoff flow.

4.10 Erosion Control

All structural and non-structural (vegetative) erosion control measures will be designed, implemented, and properly maintained in accordance with best management practices which will include, but not limited to the following:

- Scheduling of activities to minimise the amount of disturbed area at any one time;
- Implementation of re-vegetation as early as feasible;
- Limiting construction traffic and/or avoidance thereof on access roads and areas to be graded to the extent feasible at drainage ditches;

- Compacting loose soil as soon as possible after excavation, grading, or filling;
- Using silt fences, geo-textiles, temporary rip-rap, soil stabilisation with gravel, diversionary berms or swales, small sedimentation basins, and gravelled roads to minimise transport of sediment;
- Implementing the erosion and sedimentation control plan and ensuring that construction personnel are familiar with and adhere to it;
- Managing runoff during construction; and
- The Contractor shall be responsible for checking and maintaining all erosion and sedimentation controls.

4.11 Noise Management

The Contractor must implement the following measures, as a minimum, to manage noise pollution resulting from his/her activities:

- Keep all equipment in good working order;
- Operate equipment within its specification and capacity and don't overload machines;
- Apply regular maintenance, particularly with regards to lubrication;
- Operate equipment with appropriate noise abatement accessories, such as sound hoods;
- Sensitive social receptors shall be notified of any excessive noise-generating activities that could affect them;
- Ensure that the potential noise source will conform to the South African Bureau of Standards recommended code of practice, *SANS 10103:2004* or the latest at the time, so that it will not produce excessive or undesirable noise when released;
- All the Contractor's equipment shall be fitted with effective exhaust silencers and shall comply with the South African Bureau of Standards recommended code of practice, SANS 10103:2004 or the latest at the time, for construction plant noise generation
- All the Contractor's vehicles shall be fitted with effective exhaust silencers and shall comply
 with the Road Traffic Act, (Act 29 of 1989) when any such vehicle is operated on a public
 road
- If on-site noise control is not effective, protect the victims of noise by ensuring that all noise-related occupational health provisions are met. (Occupational Health and Safety Act, (Act 85 of 1993).

4.12 Protection of heritage resources

4.12.1 Archaeological Sites

If an artefact on site is uncovered, work in the immediate vicinity shall be stopped immediately.

The Contractor shall take reasonable precautions to prevent any person from removing or

damaging any such article and shall immediately upon discovery thereof inform the TGC CM and

TGC EO of such a discovery. The South African Heritage Resources Agency (SAHRA) or relevant

Authority is to be contacted and will appoint an Archaeologist to investigate the find. Work may

only resume once clearance is given in writing by the Archaeologist.

4.12.2 Graves and middens

If a grave or midden is uncovered on site, or discovered before the commencement of work, all

work in the immediate vicinity of the graves/middens shall be stopped and the TGC Construction

Manager and EO informed of the discovery. The South African Heritage Resources Agency

(SAHRA) or relevant Authority should be contacted and in the case of graves, arrangements

made for an undertaker to carry out exhumation and reburial. The undertaker will, together

with the SAHRA, be responsible for attempts to contact family of the deceased and for the site

where the exhumed remains can be re-interred.

4.13 Fire prevention

Fires shall only be allowed in facilities or equipment specially constructed for this purpose.

A firebreak shall be cleared and maintained around the perimeter of the camp and office sites

where and when necessary in accordance with relevant legislative requirements.

All conditions incorporated in the requirements of the Occupational Health and Safety Act shall

be implemented.

Standard Environmental Specification (SES) ENV-STD-002 Rev. 04

4.14 Water Protection and Management

No water shall be abstracted from any water course (stream, river, or dam) without the

expressed permission of the TGC Construction Manager and TGC Environmental Officer. Such

permission shall only be granted once it can be shown that the water is safe for use, that there

is sufficient water in the resource to meet the demand, and once permission has been obtained

from the Department of Water and Sanitation in accordance with the requirements of the

National Water Act (Act 36 of 1998).

Water for human consumption shall be available at the site offices and at other convenient

locations on site. The generally acceptable standard is that a supply of drinking water shall be

available within 200m of any point on the construction site.

Method Statement(s) must be prepared by the Contractor for the various water uses. The

Contractor shall keep a record of the quantities of water used during construction (including use

by sub-contractors), irrespective of the purpose of use.

4.15 Protection of Fauna and the collection of firewood

On no account shall any hunting or fishing activity of any kind be allowed. This includes the

setting of traps, or the killing of any animal caught in construction works.

On no account shall any animal, reptile or bird of any sort be killed. This specifically includes

snakes or other creatures considered potentially dangerous discovered on site. If such an animal

is discovered on site an appropriately skilled person should be summoned to remove the

creature from the site. Consideration should be given to selection and nomination of such a

person prior to site establishment. If no-one is available, training should be provided to at least

two site staff members.

The Contractor shall provide adequate facilities for all his staff so that they are not encouraged

to supplement their comforts on site by accessing what can be taken from the natural

surroundings. The Contractor shall ensure that energy sources are available at all times for

construction and supervision personnel for heating and cooking purposes.

4.16 Environmental Awareness Training

An Environmental Awareness Program is considered a necessary part of the Construction

Environmental Management Plan for the Project. Training of the appropriate construction

personnel will help ensure that all environmental regulations and requirements are followed

which must be defined in the relevant Method Statement to be prepared by the Contractor.

Objectives of environmental awareness training are:

• Environmental Management – protecting the environment from the effects of construction

by making personnel aware of sensitive environmental resources.

• Regulatory compliance - complying with requirements contained in project - specific

permit conditions, also complying with requirements in regional and local regulations.

• Problem recognition and communication – training personnel to recognise potential

environmental problems, i.e. spills, and communicate the problem to the Contractor's EO

for a solution.

• Liability control - non-compliance with regulatory requirements can lead to personal and

corporate liability.

All individuals on the Project construction site will need to have a minimum awareness of

environmental requirements and responsibilities. However, not all need to have the same degree

of awareness. The required degree of knowledge is greatest for personnel in the Safety, Health,

and Environmental Sections and the least for the manual personnel.

The Contractor shall present environmental awareness programmes on a weekly/bi-monthly

basis (depending on project requirements) and keep record of all the environmental related

training of the personnel.

4.17 Handling and Batching of Concrete and Cement

Concrete batching shall only be conducted in demarcated areas which have been approved by

the TGC Construction Manager and TGC EO.

Such areas shall be fitted with a containment facility for the collection of cement-laden water.

This facility shall be bunded and have an impermeable surface protection so as to prevent soil

and groundwater contamination. Drainage of the collection facility will be separated from any

infrastructure that contains clean surface runoff.

The batching facility will not be placed in areas prone to floods or the generation of stagnant

water. Access to the facility will be controlled so as to minimise potential environmental impacts.

Hand mixing of cement and concrete shall be done on mortarboards and/or within the bunded

area with impermeable surface or concrete slab. Bulk and bagged cement and concrete additives

will be stored in an appropriate facility at least 10m away from any watercourses, gullies and

drains.

Waste water collected in the containment facility shall be left to evaporate. The Contractor shall

monitor water levels to prevent overflows from the facility. It is acknowledged that all waste

water will evaporate; it must be ensured that the remaining water can be pumped into sealed

drums for temporary storage and must be disposed of as liquid hazardous waste.

All concrete washing equipment, such as shovels, mixer drums, concrete chutes, etc. shall be

done within the washout facility. Water used for washing shall be restricted as far as practically

possible.

Ready-mix concrete trucks are not allowed to wash out anywhere other than in an area

designated and approved by the TGC Construction Manager and EO for this purpose.

The Contractor shall periodically clean out hardened concrete from the wash-out facility or

concrete mixer, which can either be reused or disposed of as per accepted waste management

procedures.

Empty cement and bags, if temporarily stored on site, must be collected and stored in

weatherproof containers. Used cement bags may not be used for any other purpose and must

be disposed of on a regular basis in accordance with the Contractor's solid waste management

system.

Sand and aggregates containing cement will be kept damp to prevent the generation of dust.

Concrete and cement or any solid waste materials containing concrete and cement will be

disposed of at a relevant registered disposal facility and SDCs kept on the file. Where disposal

facilities for general waste are utilised, written consent from the relevant municipality must be

obtained by the Contractor and proper records kept.

4.18 Stockpiling, Soil Management and Protection of Flora

The Contractor shall measure the extent of all areas cleared for construction purposes and keep

this figure updated. Sensitive areas shall be cordoned off and avoided in this regard.

Stockpiling may only take place in designated areas indicated on the approved site layout plan.

Any area to be used for stockpiling or material laydown shall be stripped of all topsoil.

Clearance of vegetation shall be restricted to that which is required to facilitate the execution

of the works. Vegetation clearance shall occur in a planned manner, and cleared areas shall be

stabilised as soon as possible when and where necessary. The detail of vegetation clearing shall

be subject to the TGC Construction Manager's approval and shall occur in consultation with the

TGC Environmental Officer.

Stockpiles must be positioned in areas sheltered from the wind and rain to prevent erosion and

dispersion of loose materials. Stockpiled soil shall be protected by adequate erosion-control

measures. Soil stockpiles shall be located away from drainage lines, watercourses and areas of

temporary inundation. Stockpiles containing topsoil shall not exceed 2m in height unless

otherwise permitted by Transnet.

Topsoil shall be stockpiled separately from other materials and prevented from movement.

Excavated subsoil, where not contaminated, must be used for backfilling, if possible, and topsoil

for landscaping and rehabilitation of disturbed areas. Where topsoil has become mixed with

subsoil or is not up to the original standard, fertiliser or new topsoil shall be provided by the

Contractor.

No vegetation located outside the construction site shall be destroyed or damaged. As far as is

reasonably practicable, existing roads must be used for access to the site. Before site clearance

takes place, vegetation surveys must be conducted and protected species identified.

Standard Environmental Specification (SES) ENV-STD-002 Rev. 04

No protected plant species shall be removed without written consent from the relevant

authorities. The development of new embankments or fill areas must be undertaken in

consultation with the TGC Environmental Officer.

No dumping of solid waste or refuse shall be allowed within or adjacent to areas of natural

vegetation.

The Contractor shall identify and eradicate all declared alien and invasive plant species occurring

on site.

4.19 Traffic Management

Vehicles usage is permitted **only** on access roads. Vehicles should only be parked within

designated parking areas as demarcated on the site layout plan.

Turning of vehicles should only take place within a clearly demarcated "turn area" located within

the approved construction footprint.

The Contractor must co-ordinate the loading and offloading of material during the construction

phase so as to ensure that vehicular movement is in one direction only at any one time and that

side-tracks are not created on the site.

4.20 Transportation of Materials

The Contractor is responsible for ensuring that all suppliers and delivery drivers are aware of

procedures and restrictions (e.g. no-go areas) in terms of the CEMP and this Specification.

Material must be appropriately secured to ensure safe passage between destinations during

transportation. Loads must have appropriate cover, where ADTs are not utilised, to prevent

spillage from the vehicles. The Contractor will be held responsible for any clean-up resulting

from the failure to properly secure transported materials.

4.21 Borrow Pits and Quarries

The Contractor shall ensure that suppliers of rock and sand raw materials are in possession of

the required permit/license and keep record of the quantity of material supplied.

The Contractor will not make direct use of any borrow pits and quarries unless the borrow pit

has a valid permit, he has obtained written approval from the TGC Construction Manager and

Method Statement has been submitted and approved. The Method Statement will provide the

detailed description of the location of the borrow pits and/or quarries and the procedures that

will be followed to adhere to any pertinent national or local legislation (e.g. mineral extraction,

rehabilitation, safety and noise levels).

4.22 Social and Labour Issues

The criteria for and selection of labourers, sub-contractors and suppliers for the project shall

demonstrate preference for the local community and shall be aligned with the criteria set by

TGC in appointing the Contractor. The Contractor shall keep records of the identity of all staff.

Under no circumstances shall the Contractors engage in formal discussions with landowners

without prior consent by the TGC Construction Manager.

No activity on private property shall be allowed without written consent by the relevant

landowner and TGC Construction Manager/TGC Environmental Officer.

Any damage to private property caused by the Contractor during the construction period, shall

be repaired to the satisfaction of the TGC CM and the TGC EO and the land-owner.

The Contractor shall keep record of any complaint raised during the construction period relating

to the Contractor's activities.

No job-seekers shall be allowed on site and signs reflecting such shall be displayed on the notice

boards.

All public complaints received shall be dealt with as per the CEMP.

4.23 Energy Management

The Contractor shall measure and keep updated records of the following:

• Electricity consumption (to be measured in Kilowatt Hours)

• Fuel consumption (to be measured in liters)

4.24 Handling, Storage and Management of Hazardous Substances

All hazardous materials/substances shall be stored in a secured, designated area that is fenced,

bunded and has restricted entry.

All storage shall take place using suitable containers to the approval of the TGC Construction

Manager and EO.

All hazardous liquids shall be located in a secure, demarcated area and an adequate bund wall

(110% of the total volume stored) shall be provided. The floor and wall of the bund area shall

be impervious to prevent infiltration of any spilled/leaked liquids into the soil.

No spillages or accumulated stormwater within this bunded area will be allowed to be flushed

from the bund into the surrounding area. All fluids accumulated within the bunded area shall be

removed and disposed of in accordance with Section 4.3 above.

Hazard signs indicating the nature and volume of the stored materials shall be displayed on the

storage facility or containment structure.

Weighbills of hazardous substances shall be sourced from suppliers and kept on site for

inspection by the TGC Environmental Officer.

The Contractor must provide a method statement detailing the hazardous substances that are

to be used during construction, as well as the storage, handling and disposal procedures for

each substance. Emergency procedures in the event of misuse or spillage that might negatively

affect the environment must be specified.

Information on each hazardous substance will be available to all persons on site in the form of

Material Safety Data Sheets (MSDS)/Safety Data Sheets (SDS). Training and education about

the proper use, handling, and disposal of the material will be provided to all workers handling

the material.

The Contractor's Environmental Officer must be informed of all activities that involve the use of

hazardous substances to facilitate prompt response in the event of a spill or release.

4.25 Housekeeping

The Contractor must ensure proper housekeeping of the site for the duration of the project. If

practical the contractor shall amongst construction personnel, assign one to be responsible for

good housekeeping

Materials shall be stored in a neat and tidy manner in designated areas as per the approved site

layout plan.

4.26 Rehabilitation

Contractors shall rehabilitate the entire site upon completion of work. A rehabilitation plan will

be submitted to the TGC Construction Manager and EO for approval at least six weeks before

project completion. The following, but not limited are critical issues to be included in the

rehabilitation plan:

• Details of soil preparation procedures including proposed fertilisers or other chemicals

being considered for use;

• A list of the plant species that will be used in the rehabilitation process. Note that these

should all be indigenous species, and preferably species that are endemic to the area.

The assistance of an appropriately qualified Botanist/Horticulturist should be sought in

developing this list;

• Procedures for watering the planted areas (frequency of watering, methodology proposed

etc.);

• An indication of the monitoring procedures that will be put in place to ensure the

successful establishment of the plants (duration and frequency of monitoring, proposed

criteria for declaring rehabilitation as being successful); and

• Procedures for the prevention of the establishment and spread of alien invasive species.

5 Documentation

Refer to the Construction Environmental Management Plan.

6 Records

All documents generated in terms of this procedure will be classed as records and retained for the life of the project for handover by the contractor to TGC (electronic and hard copies).

Enquiry: SIM22022CIDB / ERAC-RCB-39788

Description of the works: Jacking 900mm CL100D precast concrete jacking pipe under railway line at Dutch line area

from SMH08 to SMH09, in the port of Richards Bay





(REGISTRATION NO.1990/000900/30)

TRADING AS TRANSNET FREIGHT RAIL

ADDENDUM NO. 1

TO THE SECONDARY AND GENERAL SPECIFICATIONS OF THE CONTRACT

- 1) Wherever the word "South African Transport Services" or "Spoornet" appears in these specifications, please replace it with "Transnet Freight Rail".
- 2) Wherever the words "Technical Officer" appear in these specifications, please replace with "Supervisor".



MANDATARY AGREEMENT

OCCUPATIONAL HEALTH AND SAFETY ACT 85 of 1993 (AS AMENDED)

AGREEMENT WITH MANDATORY

In terms of Section 37(1) & (2)

WRITTEN AGREEMENT ENTERED INTO AND BETWEEN

Transnet SOC Ltd

(Hereinafter referred to as the Employer)

	AND
(He	ereinafter referred to as Mandatory (Principal Contractor)
Compensation Fund Number	:
Project Name	

Project Name





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PREAMBLE

WHEREAS section 37(1) & (2) of the Occupational Health and Safety Act No 85 of 1993 ("the Act") requires that parties have an agreement in writing to ensure compliance by a mandatory in line with the provisions of the Act.

AND WHEREAS Transnet SOC Ltd requires the services of the Contractors to execute certain projects within its workshops.

AND WHEREAS TRANSNET SOC LTD can be better served by Contractors who have the infrastructure, specialist employees and expertise to execute such projects at the highest level of efficiency on short notice.

NOW THEREFORE the parties agree as follows;

1. **DEFINITIONS**

For the purpose of this agreement, unless the context indicates otherwise, the following definitions are set out for the terms indicated:

- "Act" means the Occupational Health and Safety Act No 85 of 1993;
- 1.2 "Agreement" means this Mandatary agreement;
- 1.3 "Contractor" means the Mandatory;
- 1.4 "COID Act" means the Compensation for Occupational Injuries and Diseases Act No 130 of 1993.
- 1.5 "Effective Date" means the date of signature of this Agreement by the last party signing hereto;
- 1.6 "Employer" refers to TRANSNET SOC LTD;
- 1.7 "Mandatary" means an agent, Contractor or sub-contractor for work, but without derogating from the status in his own right as an employer or user;
- 1.8 "Parties" means TRANSNET SOC LTD and the Contractor, and "Party" shall mean either one of them, as the context indicates:
- "Principal Contract" means the appointed contractor whereby such contractor has to provide goods and or services to TRANSNET SOC LTD.
- 1.10 "**Regulations**" means regulations promulgated in terms of the relevant legislation.
- 1.11 "Section" means the relevant section of the Occupational Health and Safety Act No 85 of 1993
- 1.12 "Services" means the services to be provided by the Contractor to TRANSNET SOC LTD.
- 1.13 "TRANSNET SOC LTD" means Transnet Group and all its operating divisions and Specialist units with (Registration No. 1990/000900/30), a public company incorporated in accordance with the company laws of the Republic of South Africa;

2. INTERPRETATION

2.1 Clause headings in this Agreement are included for ease of reference only and do not form part of this Agreement for the purposes of interpretation or for any other purpose. No provision shall be construed



- against or interpreted to the disadvantage of either Party hereto by reason of such Party having or being deemed to have structured or drafted such provision.
- 2.2 Any term, word or phrase used in this Agreement, other than those defined under the clause heading "Definitions" shall be given its plain English meaning, and those terms, words, acronyms, and phrases used in this Agreement will be interpreted in accordance with the generally accepted meanings accorded thereto.
- 2.3 A reference to the singular incorporates a reference to the plural and vice versa.
- 2.4 A reference to natural persons incorporates a reference to legal persons and vice versa.
- 2.5 A reference to a particular gender incorporates a reference to the other gender.

3. REPORTING

3.1 The Mandatary and/or his designated person appointed in terms of Section 16(2) of the Occupational Health and Safety Act 85 of 1993 ("the OHS Act") shall report to the Risk Manager and/or a Project Manager and/or a representative designated by the Employer prior to commencing the work at the premises of the Employer.

4. WARRANTY OF COMPLIANCE

- 4.1 In terms of this Agreement the Mandatary warrants that he agrees to any of the arrangements and procedures as prescribed by the Employer and as provided for in terms of Section 37(2) of the OHS Act for the purposes of compliance with the OHS Act.
- 4.2 The Mandatary further warrants that he and/or his employees undertake to maintain such compliance with the OHS Act. Without derogating from the generality of the above, nor from the provisions of the said Agreement, the Mandatary shall ensure that the clauses as hereunder described are at all times adhered to by himself and his employees.
- 4.3 The Mandatary hereby undertakes to ensure that the health and safety of any other person on the premises is not endangered by the conduct of his activities and that of his employees.

5. APPOINTMENTS AND TRAINING

- 5.1 The Mandatary shall appoint competent persons as per Section 16(2) of the OHS Act. Any such appointed person shall be trained on any occupational health and safety matter and the OHS Act provisions pertinent to the work is to be performed under his responsibility. Copies of any appointments made by the Mandatary shall immediately be provided to the Employer.
- The Mandatary shall further ensure that all his employees are trained on the health and safety aspects relating to the work to be done on the premises of the Employer and that they understand the hazards associated with such work being carried out on the premises. Without derogating from the foregoing, the Mandatary shall, in particular, ensure that all his users or operators of any materials, machinery or equipment are properly trained in the use of such materials, machinery or equipment.
- 5.3 Notwithstanding the provisions of the above, the Mandatary shall ensure that he, his appointed responsible persons and his employees are at all times familiar with the provisions of the OHS Act, and that they comply with the provisions of the Act.

6. SUPERVISION, DISCIPLINE AND REPORTING

6.1 The Mandatary shall ensure that all work performed on the Employer's a premise is done under strict supervision and that no unsafe or unhealthy work practices are permitted. Discipline regarding health



- and safety matters shall be strictly enforced against any of his employees regarding non-compliance by such employee with any health and safety matters.
- 6.2 The Mandatary shall further ensure that his employees report to him all unsafe or unhealthy work situations immediately after they become aware of such conditions and that he in turn immediately reports these to the Employer and/or his representative.

7. ACCESS TO THE OHS ACT

7.1 The Mandatary shall ensure that he has an updated copy of the OHS Act on site at all times and that this is accessible to his appointed responsible persons and employees, save that the parties may make arrangements for the Mandatary and his appointed responsible persons and employees to have access to the Employer's updated copy/copies of the Act.

8. COOPERATION

- 8.1 The Mandatary and/or his responsible persons and employees shall provide full co-operation and information if and when the Employer or his representative inquires into any occupational health and safety issues concerning the Mandatary. It is hereby recorded that the Employer and his representative shall at all times be entitled to make such inquiry.
- 8.2 Without derogating from the generality of the above, the Mandatary and his responsible persons shall make available to the Employer and his representative, on request, all and/or any checklists and inspection registers required to be kept by him in respect of any of his materials, machinery or equipment.

9. WORK PROCEDURES

- 9.1 The Mandatary shall, after having established the dangers associated with the work performed, develop and implement mitigation measures to minimize or eliminate such dangers for the purpose of ensuring a healthy and safe working environment. The Mandatary shall then ensure that his responsible persons and employees are familiar with such mitigation measures.
- 9.2 The Mandatary shall implement any other safe work practices as prescribed by the Employer and shall ensure that his responsible persons and employees are made conversant with such other safe work practices as prescribed by the Employer and that his responsible persons and employees adhere to such safe work practices.
- 9.3 The Mandatary shall ensure that work for which any permit is required by the Employer is not performed by his employees prior to the Employer obtaining such permit from the Mandatary.

10. HEALTH AND SAFETY MEETINGS

10.1 If required in terms of the OHS Act, the Mandatary shall establish his own health and safety committee(s) and ensure that his employees, being the committee members, provide health and safety representatives to attend the Employer's health and safety committee meetings.

11. COMPENSATION REGISTRATION

11.1 The Mandatary shall ensure that he has a valid proof of registration with the Compensation Commissioner, as required in terms of **COID Act**, and that all payments owing to the Commissioner are discharged. The Mandatary shall further ensure that the cover remain in force while any such employee is present on the premises.

12. MEDICAL EXAMINATIONS

12.1 The Mandatary shall ensure that all his employees undergo routine medical examinations and that they are medically fit for the purposes of the work they are to perform.



13. INCIDENT REPORTING AND INVESTIGATION

- 13.1 All incidents referred to in Section 24 of the OHS Act shall be reported by the Mandatary to the Department of Labour and to the Employer. The Employer shall further be provided with copies of any written documentation relating to any incident.
- 13.2 The Employer retains an interest in the reporting of any incident as described above as well as in any formal investigation and/or inquiry conducted in terms of section 32 of the OHS-Act into such incident.

14. SUBCONTRACTORS

- 14.1 The Mandatary shall notify the Employer of any subcontractor he may wish to perform work on his behalf on the Employer's premises. It is hereby recorded that all the terms and provisions contained in this clause shall be equally binding upon the subcontractor prior to the subcontractor commencing with the work. Without derogating from the generality of this paragraph:
 - 14.1.1 The Mandatary shall ensure that training as discussed under appointments and training, is provided prior to the subcontractor commencing work on the Employer's premises.
 - 14.1.2 The Mandatary shall ensure that work performed by the subcontractor is done under his strict supervision, discipline and reporting.
 - 14.1.3 The Mandatary shall inform the Employer of any health and safety hazards and/or issue that the subcontractor may have brought to his attention.
 - 14.1.4 The Mandatary shall inform the Employer of any difficulty encountered regarding compliance by the subcontractor with any health and safety instruction, procedure and/or legal provision applicable to the work the subcontractor performs on the Employer's premises.

15. SECURITY AND ACCESS

- 15.1 The Mandatary and his employees shall enter and leave the premises only through the main gate(s) and/or checkpoint(s) designated by the Employer. The Mandatary shall ensure that employees observe the security rules of the Employer at all times and shall not permit any person who is not directly associated with the work from entering the premises.
- 15.2 The Mandatary and his employees shall not enter any area of the premises that is not directly associated with their work.
- 15.3 The Mandatary shall ensure that all materials, machinery or equipment brought by him onto the premises are recorded at the main gate(s) and/or checkpoint(s). Failure to do this may result in a refusal by the Employer to allow the materials, machinery or equipment to be removed from the Employer's premises.

16. FIRE PRECAUTIONS AND FACILITIES

- 16.1 The Mandatary shall ensure that an adequate supply of fire-protection and first-aid facilities are provided for the work to be performed on the Employer's premises, save that the Parties may mutually make arrangements for the provision of such facilities.
- 16.2 The Mandatary shall further ensure that all his employees are familiar with fire precautions at the premises, which includes fire-alarm signals and emergency exits, and that such precautions are adhered to.



17. ABLUTION FACILITIES

17.1 The Mandatary shall ensure that an adequate supply of ablution facilities are provided for his employees performing work on the Employer's premises, save that the parties may mutually make arrangements for the provision of such facilities.

18. HYGIENE AND CLEANLINESS

18.1 The Mandatary shall ensure that the work site and surround area is at all times maintained to the reasonably practicable level of hygiene and cleanliness. In this regard, no loose materials shall be left lying about unnecessarily and the work site shall be cleared of waste material regularly and on completion of the work.

19. NO NUISANCE

- 19.1 The Mandatary shall ensure that neither he nor his employees undertake any activity that may cause environmental impairment or constitute any form of nuisance to the Employer and/or his surroundings.
- 19.2 The Mandatary shall ensure that no hindrance, hazard, annoyance or inconvenience is inflicted on the Employer, another Mandatary or any tenants. Where such situations are unavoidable, the Mandatary shall give prior notice to the Employer.

20. INTOXICATION NOT ALLOWED

20.1 No intoxicating substance of any form shall be allowed on site. Any person suspected of being intoxicated shall not be allowed on the site. Any person required to take medication shall notify the relevant responsible person thereof, as well as the potential side effects of the medication.

21. PERSONAL PROTECTIVE EQUIPMENT

21.1 The Mandatary shall ensure that his responsible persons and employees are provided with adequate personal protective equipment (PPE) for the work they may perform and in accordance with the requirements of General Safety Regulation 2 (1) of the OHS Act. The Mandatary shall further ensure that his responsible persons and employees wear the PPE issued to them at all material times.

22. PLANT, MACHINERY AND EQUIPMENT

- 22.1 The Mandatary shall ensure that all the plant, machinery, equipment and/or vehicles he may wish to utilize on the Employer's premises is/are at all times of sound order and fit for the purpose for which it/they is/are attended to, and that it/they complies/comply with the requirements of Section 10 of the OHS Act.
- 22.2 In accordance with the provisions of Section 10(4) of the OHS Act, the Mandatary hereby assumes the liability for taking the necessary steps to ensure that any article or substance that it erects or installs at the premises, or manufactures, sells or supplies to or for the Employer, complies with all the prescribed requirements and will be safe and without risks in terms of health and safety when properly used.

23. NO USAGE OF THE EMPLOYER'S EQUIPMENT

23.1 The Mandatary hereby acknowledges that his employees are not permitted to use any materials, machinery or equipment of the Employer unless the prior written consent of the Employer has been obtained, in which case the Mandatary shall ensure that only those persons authorized to make use of such materials, machinery or equipment, have access thereto.



24. TRANSPORT

- 24.1 The Mandatary shall ensure that all road vehicles used on the premises are in a roadworthy condition and are licensed and insured. The Mandatary shall ensure that all drivers shall have relevant and valid driving licenses and the Mandatary shall ensure that no vehicle/s shall carry passengers unless it is specifically designed to do and that all drivers shall adhere to the speed limits and road signs on the premises at all times.
- 24.2 In the event that any hazardous substances are to be transported on the premises, the Mandatary shall ensure that the requirements of the Hazardous Substances Act 15 of 1973 are complied with fully all times.

25. CLARIFICATION

25.1 In the event that the Mandatary requires clarification of any of the terms or provisions of this Agreement, he should take the necessary steps to contact the Risk Manager of the Employer to obtain such clarification.

26. DURATION OF AGREEMENT

26.1 This Agreement shall remain in force for the duration of the work to be performed by the Mandatary and/or while any of the Mandatary's employees are present on the Employer's premises.

27. NON COMPLIANCE WITH THE AGREEMENT

- 27.1 If the Mandatory fails to comply with any provisions of this Agreement, the Employer shall be entitled to give the mandatory 7 (seven) days written notice to remedy such non-compliance and if the Mandatory fails to comply with such notice, then the Employer shall forthwith be entitled but not obliged, without prejudice to any other rights or remedies which the mandatory may have in law,
 - 271.1 to suspend the main Agreement; or
 - 27.1.2 To claim immediate performance and/or payment of such obligations.
- 27.2 Should mandatory continue to breach the contract on three occasions, then the Employer is authorised to suspend the main contract without complying with the condition stated in the clause above.

28. HEADINGS

The headings as contained in this Agreement are for reference purposes only and shall not be construed as having any interpretative value in them or as giving any indication as to the meaning of the contents of the paragraphs contained in this Agreement.



Thus done and signed			
at	on the	_ day of	_ 201
For and on behalf of the	Employer		
Witnesses:			
1.		_	
2		-	
at	on the	_ day of	_ 201
for and on behalf of the I	Mandatary		
Witnesses:			
3.		-	



TRANSNET FREIGHT RAIL SAFETY HEALTH AND ENVIRONMENTAL (SHE) COMPLIANCE SPECIFICATIONS FOR CONTRACTORS

CONTRACT NAME:	Pipe Jacking, design and install augu	ured piles for the locomotive facility
CONTRACT NUMBER:		
CONTRACT SCOPE:	Pipe Jacking include Pipe Jacking (Applicable to SANS 1200 LG) 900mm concrete pipes between manholes	
	Earthworks for small works and Pipe	e trenches.
	Concrete Non-pressure Pipes	
	Construction and excavation, Backfi	lling
	Lubrication of Structure during Jacki	ing
	Grouting and plugging	
CONTRACT LOCATION:	The port of Richards bay	
CONTRACT DURATION:		
CONTRACT MANAGER:		
TFR TECHNICAL OFFICER:		
SHE SPECIFICATION APPROVAL		
TITLE:	NAME:	SIGNATURE:
TFR CONTRACT MANAGER / TECHNICAL OFFICER		DATE:
RISK / ENVIRONMENTAL SPECIALIST		DATE:
SAFETY SPECIALIST / MANAGER	Phuti Rankapole	DATE:

Contractor Signature	Data
Contractor Signature	Date



1. Introduction

- 1.1 This Safety, Health and Environmental (SHE) specification is Transnet Freight Rail (TFR) minimum requirements to be met by contractors when performing work for or on behalf of TFR. They set out the requirements to be followed by the Contractor and other contractors so that the health and safety of all person's potentially at risk may receive the same priority as other facets of the contract.
- 1.2 The Contractor shall **develop a SHE plan and prepare a SHE file** based on these requirements, risk assessment as well as all the relevant applicable legislation. The contractor shall remain accountable for the quality and execution of his health and safety programme for his employees and sub-contractor employees. This specification in no way releases the contractors from compliance with the relevant legislation.

2 Purpose

- 2.1 The purpose of this specification is to ensure that the Contractor provides and maintains, as far as reasonably practicable a safe working environment for all employees and the public whilst performing work for or on behalf of TFR.
- 2.2 This specification form an integral part of the contract, and the Contractor shall forward this specification to all subcontractors at the bidding stage so that they can in turn prepare health and safety plans relating to their operations

3 Scope and Application

- 3.1 This specification is applicable to all contractors, suppliers and all activities and processes carried out for or on behalf of Transnet Freight Rail. The Specification defines the strategies to manage Health and Safety and is a compliance document drawn up in terms of the Occupational Health and Safety Act 85 of 1993 and Electrical Installation Regulations and National Railway Safety Regulator Act (Act no 16 of 2002) requirements as applicable.
- 3.2 This specification shall also apply to any subcontractors as employers in their own right. The Contractor shall furnish the TFR Contract Manager/Technical Officer with full particulars of such subcontractors and shall ensure that they comply with the OHS Act and Regulations and Transnet's safety requirements and procedures.
- 3.3 Every effort has been made to ensure that this specification document is accurate and adequate in all respects. Should it however, contain any errors or omissions they may not be considered as grounds for claims under the contract for additional reimbursement or extension of time, or relieve the Contractor from his responsibilities and accountability in respect of the contract to which this specification document pertains. Any such inaccuracies, inconsistencies and/or inadequacies must immediately be brought to the attention of the TFR Contract Manager/Technical Officer or Client Agent.

Contractor Signature Date	



4 General

- 4.1 The Contractor and Transnet Freight Rail are individual employers, each in its own right, with their respective duties and obligations set out in the Occupational Health and Safety Act, Act 85 of 1993 (herein referred as the OHS Act) and applicable Regulations.
- 4.2 The Contractor accepts, in terms of the General Conditions of Contract and in terms of the OHS Act, his obligations as an employer in respect of all persons in his employ, other persons on the premises or the Site or place of work or on the work to be executed by him, and under his control. The Contractor shall, before commencement with the execution of the contract work, comply with the provisions set out in the OHS Act, and shall implement and maintain a SHE Plan approved by Transnet Freight Rail, on the Site and place of work for the duration of the contract.
- 4.3 The Contractor accepts his obligation to complying with the OHS Act and applicable Regulations notwithstanding the omission of some of the provisions of the OHS Act and the Regulations from this document.
- 4.4 Transnet Freight Rail accepts, in terms of the OHS Act, its obligations as an employer of its own employees working on or associated with the site or place of work, and the Contractor and TFR Contract Manager/Technical Officer or his deputy shall at all times, co-operate in respect of the health and safety management of the site, and shall agree on the practical arrangements and procedures to be implemented and maintained during execution of the works
- 4.5 In the event of any discrepancies between any legislation and this specification, the applicable legislation will take precedence.

5. Section 37(2) Agreements

- 5.1 Transnet Freight Rail and the Contractor shall enter into an agreement in terms of section 37(2) of the Occupational Health and Safety Act to the arrangements and procedures between them to ensure compliance by the Contractor with the provisions of the OHS Act.
- 5.2 The agreement shall be completed and signed by the Contractor mandated representative as soon as possible and returned to the relevant TFR Project Manager / TFR Contract Manager for his/her signature on behalf of TFR.
- 5.3 The Contractor shall enter into a Section 37(2) Agreement with their respective subcontractors. Signed copy of such agreement must be kept on the Contractor's SHE file.

6. Definitions

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6.1 In this Specification the definitions as listed in the Occupational Health and Safety Act 85 of 1993 and Construction Regulations, 2014 shall apply, unless the context otherwise indicates: -

6.1.1	Competent person means a pe	erson who—		
Contra	actor Signature		Date	
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- a) has in respect of the work or task to be performed the required knowledge, training and experience and, where applicable, qualifications, specific to that work or task: Provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000 (Act No.67 of 2000), those qualifications and that training must be regarded as the required qualifications and training; and
- b) is familiar with the Act and with the applicable regulations made under the Act;
- 6.1.2 Contractor means an employer (organisation) or a person who performs ANY work and has entered into a legal binding business agreement contract to supply a product or provide services to Transnet. This applies to the Suppliers, Vendors, Consultants, Service Providers or Contractors. NB: A contractor is an employer in his/her own right (includes Principal Contractor and subcontractor);
- 6.1.3 Construction work means any work in connection with the construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to building or any similar structure.

The construction, erection, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system or the moving of land, the making of excavation, piling, any similar civil engineering structure or type of work

- 6.1.4 "designer" means
 - a) a competent person who—
 - (i) prepares a design.
 - (ii) checks and approves a design.
 - (iii) arranges for a person at work under his or her control to prepare a design, including an employee of that person where he or she is the employer; or
 - (iv) designs temporary work, including its components.
 - b) an architect or engineer contributing to, or having overall responsibility for a design;
 - c) a building services engineer designing details for fixed plant.
 - d) a surveyor specifying articles or drawing up specifications.
 - e) a contractor carrying out design work as part of a design and building project; or
 - f) an interior designer, shopfitter or landscape architect

Contractor Signature	Date
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- 6.1.5 **Electrical contractor** means a person who undertakes to perform electrical installation work on behalf of any other person, but excludes an employee of such first –mentioned person
- 6.1.6 **Excavation work** means the making of any man-made cavity, trench, pit, or depression formed by cutting, digging, or scooping
- 6.1.7 **Fall protection plan** means a documented plan, which includes and provides fora) all risks relating to working from a fall risk position, considering the nature of work undertaken; and
 - b) the procedures and methods to be applied in order to eliminate the risk of fall rescue plan and procedures
- 6.1.8 **Health and safety (SHE) plan** means a site, activity or project specific documented plan in accordance with the client's health and safety specification.
- 6.1.9 Responsibility for electrical installation means the user or lessor of an electrical installation shall be responsible for the safety, safe use and maintenance of the electrical installation he or she uses or leases
 Shall be responsible for the safety of the conductors on his or her premises connecting the electrical installation to the point of supply in case where the point of supply is not the point of control.
- 6.1.10 **Risk assessment** means a programme to determine any risk associated with any hazard at a work site, in order to identify the steps needed to be taken to remove, reduce or control such hazard
- 6.1.11 **"Safety, Health and Environmental (SHE) File"** means a file or other record in permanent form, containing the information required to be kept on site in accordance with the OHS Act and applicable Regulations.
- 6.1.12 **"TFR"** means Transnet Freight Rail, a division of Transnet SOC Ltd (Registration No. 1990/000900/30), a public company incorporated in accordance with the company laws of the Republic of South Africa
- 6.1.13 "TFR Contract Manager" means a TFR employee appointed to liaise with the contractor to ensure that the specifications of the contract are met (with special emphasis on safety, technical specifications, inspection of quality and quantity of work). It includes a Technical Officer, Depot Engineering Manager, Engineering Technician, Maintenance Supervisor's, Security Inspector, Depot Security Manager, Real Estate Manager, Facilities Manager etc.
- 6.1.14 "Risk assessment" means a programme to determine any risk associated with any hazard at a work site, in order to identify the steps needed to be taken to remove, reduce or control such hazard

Contractor Signature	Date
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6.1.15 **"Safety, Health and Environmental (SHE) File"** means a file or other record in permanent form, containing the information required to be kept on site in accordance with the OHS Act and applicable Regulations.

7. Notification of Construction Work

- 7.1 The Contractor who intends to carry out any construction work other than work where a Construction Work Permit is required, must at least 7 days before carrying out such work, notify the Provincial Director of the Department of Labour in writing if the construction work:-
 - (a) includes excavation work
 - (b) includes working at a height where there is a risk of a person falling.
 - (c) includes the demolition of a structure; or
 - (d) includes the use of explosives to perform construction work,
- 7.2 The notification to the Provincial Director shall be on a form similar to Annexure 2 of the Construction Regulations, 2014. The Contractor shall ensure that a copy of the completed notification form is kept on site for inspection by an inspector, TFR Contract Manager/Technical Officer or employee.

8. Letter of Good standing

- 8.1 The Contractor shall submit proof of registration and Letter of Good Standing with the compensation fund or with a licensed compensation insurer as contemplated in the Compensation for Occupational Diseases Act,1993 (Act No. 130 of 1993) for his company and each of his sub-contractors'.
- 8.2 No contractor may do any work for TFR without a valid letter of good standing. The Contractor must ensure that the Letter of Good Standing remains valid for the duration of the contract period.
- 8.3 The letter of good standing must reflect the name of the Contractor and/or Subcontractor, registration number and, expiry date.

9. Management and Supervision

- 9.1 The Contractor and all subcontractors shall submit a SHE organogram outlining the site SHE management structure including the relevant appointments/competent persons or the intended appointments where such appointments have not been made.
- 9.2 The Contractor shall, in accordance with the OHS Act and applicable Regulations, make all the necessary appointments of competent persons in writing. Copies should also be retained on the SHE file.

10. SHE Committee Meetings and SHE Representatives

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- 10.1 Where applicable, The Contractor and subcontractors shall appoint SHE Representative/s in writing after consultation with employees and ensure that they are trained in performing their duties.
- 10.2 SHE Representatives duties shall include inspections of the workplace, taking part in incident investigations, risk assessments, attending SHE Committee meetings etc. Records of monthly inspections of SHE Representatives must be kept on the SHE file.
- 10.3 The number of SHE Representatives appointed shall be in accordance with the requirements of the Occupational health and Safety Act 85 of 1993.
- 10.4 When required by legislation, the Contractor must ensure that a SHE Committee meeting is held monthly and minutes of such meeting shall be recorded and records kept on the SHE file. The Contractor representative and appointed SHE representatives shall attend the monthly SHE Committee meeting.
- 10.5 The TFR Contract Manager/Technical Officer or his deputy shall be allowed to attend meetings of the Contractor's health and safety committee as an observer.
- 10.6 Subcontractors appointed by the Contractor shall have their own internal monthly SHE Committee meeting.

11. SHE Audits and Contractor Monthly Reports

- 11.1 The TFR Contract Manager/Technical Officer or his deputy shall ensure that the Contractor's SHE Plan is audited at intervals mutually agreed to between them, but at least once every month to ensure that the SHE Plan is implemented and maintained on site.
- 11.2 TFR Safety Officers / Specialists shall at all reasonable times be allowed access to the work sites, the Contractor site offices and tool-sheds to inspect the Contractor's and its subcontractor's tools, equipment, registers and workplace.
- 11.3 Should any non-compliances or contraventions to the TFR safety requirements, legal requirements, this specification or the Contractor's SHE Plan be identified, such non-compliances or contraventions shall be rectified by the contractor at its cost immediately or within a period specified by the TFR Contract Manager/Technical Officer, his deputy, or TFR Safety Officers / Specialists.
- 11.4 Should the Contractor refuse or fail to rectify such non-compliances or contraventions, TFR may take remedial action at the Contractor's cost as it may deem necessary to ensure safety at the TFR sites at all times.
- 11.5 TFR reserves the right to conduct safety audits without prior warning.
- 11.6 The Contractor on all contracts of more than 1 month shall provide a monthly safety performance report as required by TFR.

Contractor Signature	Date
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11.7 The Monthly safety performance report shall be compiled in terms of Annexure 1 or in any format that the Contractor has as long as it includes all items listed in Annexure 1.

12. Training, Competence and Awareness

12.1 Induction Training

- 12.1.1 The Contractor shall ensure that all his employees and subcontractors employees undergo a TFR SHE Induction with regard to the general hazards prevalent on the site, rules and regulations, and other related aspects before commencing work. It is the responsibility of the contractor to inform TFR whenever new employees are appointed after the initial induction was conducted.
- 12.1.2 In addition to the TFR SHE induction, it is the responsibility of the Contractor to develop and implement a site specific SHE Induction programme, a job specific induction programme and a general employee SHE awareness programme, to develop awareness amongst employees on the generic SHE issues associated with the scope of work and the specific environmental issues in question.
- 12.1.3 The Contractor shall ensure that all visitors and suppliers to the site undergo and comply with Contractors' site-specific safety induction requirement prior to being allowed access to site. All visitors and suppliers shall sign the attendance register.
- 12.1.4 All visitors and suppliers shall wear the necessary personal protective equipment whilst on site and shall remain in the care of the host who understand the scope of work and associated risks.
- 12.1.5 The Contractor shall maintain comprehensive attendance records of SHE induction training on the SHE file.

12.2 Competency / Training

- 12.2.1 The Contractor must ensure that all his employees are adequately trained to perform the tasks allocated to them and that there is the requisite amount of supervision at all times to maintain safe work practices and standards.
- 12.2.2 The Contractor shall identify training requirements of employees whose work may have a significant impact on their health and safety or that might create a significant impact upon the environment and ensure that these employees will receive appropriate training. A Training matrix shall be used as a mechanism to manage and control the training of employees.
- 12.2.3 The Contractor shall identify all training needs and incorporate the site-specific training into the SHE plan.
- 12.2.4 Each Contractor shall be required to ensure that before an employee commences work on the contract that the supervisor in control with responsibility for the employee has informed the employee of his scope of authority and any hazards associated with the work performed. This will include man-job specifications, the discussion of any standard task procedures or hazardous operational procedures to be performed by the employee

Contractor Signature	Date
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- 12.2.5 The Contractor is to ensure that the supervisor has satisfied himself that the employee is conversant with all hazards associated with any work to be performed by conducting task observations.
- 12.2.6 The Contractor must ensure that certificate/s of competence where applicable is/are provided in the SHE File.

12.3 Awareness Training

- 12.3.1 Awareness training required shall be identified for all employees on the contract using the SHE Policy, the SHE Plan, the SHE programmes and procedures.
- 12.3.2 The Contractor shall have a daily safety talk. This talk shall include subcontractor employees.
- 12.3.3 The talk must be brief and concise. Subject topics should be applicable to the job at hand, incidents, accidents and up-and-coming work will be discussed along with suggestions and comments. These meetings can be used as a training meeting with the central idea of educating employees.

13. Health and Safety Plan (SHE Plan)

- 13.1 Potential Contractor submitting tenders shall submit with their tender, a Health and Safety Plan setting out the practical arrangements and procedures to be implemented by him to ensure compliance by him with the OHS Act and Regulations, this SHE specification and particularly in respect of: -
 - (a) The provision, as far as is reasonably practical, of a working environment that is safe and without risk to the health of his employees and subcontractors in terms of section 8 of the OHS Act.
 - (b) the execution of the contract work in such a manner as to ensure in terms of section 9 of the OHS Act that persons other than those in the Contractor's employment, who may be directly affected by the contract work are not thereby exposed to hazards to their health and safety.
 - (c) ensuring, as far as is reasonably practical, in terms of section 37 of the OHS Act that no employee or subcontractor of the Contractor does or omits to do any act which would be an offence for the Contractor to do or omit to do.
- 13.2 The Contractor's Health and Safety Plan shall be based on a risk assessment in respect of the hazards to health and safety of his employees and other persons under his control that are associated with or directly affected by the Contractor's activities in performing the contract work and shall establish precautionary measures as are reasonable and practical in protecting the safety and health of such employees and persons.
- 13.3 The SHE Plan shall include full particulars in respect of: -

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- (a) Safety Management Structure arrangements i.e., Appointments to be done and how.
- (b) SHE Organisation arrangements i.e., SHE Committees, SHE Audits, Findings and Corrective Actions
- (c) Risk Management i.e., Risk Assessment frequencies, methodology
- (d) Education and Training i.e., safety induction, site / job specific training arrangements
- (e) Emergency Planning
- (f) Health and Safety Communication i.e., Toolbox talks, incident recall
- (g) Safe working methods and procedures to be implemented i.e., safe work procedures, task observation
- (h) Fall Protection Plan i.e., documented plan, training/competency, medical surveillance, rescue plan
- (i) Personal protective Equipment and Clothing
- (j) Contract Security i.e., site access control and security
- (k) SHE Costs
- (I) Occupational Health i.e. Medical Surveillance, First Aid, Welfare Facilities, Substance Abuse testing, Noise, Vibration, Manual Handling etc
- (m) Environmental management
- (n) Incident Management i.e. reporting and investigation
- (o) Operational Control
- (p) Review plan of the SHE Plan and
- (q) COVID-19 Requirements
- 13.5 The Contractor shall submit a final SHE Plan after awarding of the contract which shall be subject to the TFR Contract Manager/Technical Officer's approval and he may, in consultation with the Contractor, order that additional and/or supplementary practical arrangements and procedures be implemented and maintained by the Contractor or that different working methods or safety equipment be used or safety clothes be issued which, in the TFR Contract Manager/Technical Officer's opinion, are necessary to ensure full compliance by the Contractor with his obligations as an employer in terms of the OHS Act and Regulations.

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- 13.6 The Contractor shall approve the SHE Plan of the subcontractor and further take reasonable steps to ensure that each subcontractor's SHE Plan is implemented and maintained on the site: Provided that the steps taken, shall include periodic audits at intervals mutually agreed to between them, but at least once every month.
- 13.7 The Contractor shall stop any subcontractor from executing any construction work, which is not in accordance with the Contractor's, and/or subcontractor's SHE Plan for the site or which poses a threat to the health and safety of persons.
- 13.8 The Contractor shall ensure that a copy of the SHE Plan is available on site for inspection by an inspector, TFR Contract Manager/Technical Officer, agent, subcontractor, employee, registered employee organisation, health and safety representative or any member of the health and safety committee.

14. Hazards Identification and Potential Hazardous Situations

- 14.1 The Contractor shall ensure a risk assessment is carried out by a competent person, appointed in writing, before commencement of any work and reviewed during the duration of the contract period. The Risk Assessments shall form part of the Health and Safety Plan to be applied on the site and shall include at least the following:
 - (a) The identification of the risks and hazards (including ergonomic risks) that persons may be exposed to.
 - (b) The analysis and evaluation of the hazards identified.
 - (c) A documented plan, including safe work procedures to mitigate, reduce or control the; risks identified; and
 - (d) A monitoring and review plan.
- 14.2 Risk assessments shall be conducted by a competent person and such person shall use a documented method to analyse and evaluate identified risk and hazards.
- 14.3 The Contractor shall consult with the health and safety committee or, if no health and safety committee exist, with a representative group of employees, on the development, monitoring and review of the risk assessment
- 14.4 The risk assessment shall be reviewed when there are changes that affect the design of the structure that may affect the health, safety and environment on site or after an incident.
- 14.5 The Contractor shall ensure that all employees are to be informed, instructed and trained regarding any risks, hazard and related SHE procedures by a competent person as outlined in the risk assessment prior to commencement of work and thereafter at predetermined intervals as outlined in the monitoring plan.
- 14.6 The Contractor shall ensure that all subcontractors are informed regarding any hazard as stipulated in the risk assessment before any work commences, and thereafter at such intervals as may be determined in the risk assessment.

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- 14.7 The risk assessment shall be available on site for review. Where a risk assessment is not readily available or not communicated to contractor employees, the construction activities shall be stopped until such time the contractor complies.
- 14.8 The Contractor and the TFR Contract Manager/Technical Officer shall immediately notify one another of any hazardous or potentially hazardous situations which may arise during performance of the contract or any subcontractor and, in particular, of such hazards as may be caused by the design, execution and/or location and any other aspect pertaining to the contract work.
- 14.9 The Contractor shall be required to analyse his scope of work and define these critical activities. For each activity, a risk assessment shall be required which defines systems and safe work procedures that will be used in order to complete the activity safely.
- 14.10 Copies of all safe work procedures and proof that employees have been trained on those safe work procedures shall be kept on the SHE file.
- 14.11 Preliminary risk and hazard identification shall be conducted by the Contractor prior to work commencement on site. Should the Client's Agent, Project Manager, TFR Contract Manager/Technical Officer or his duly nominated alternative identify hazardous activities performed by the Contractor on the site for which the Contractor has not submitted a risk assessment, the Contractor shall be required to do so before continuing with work.

15. Safety, Health and Environmental (SHE) File

- 15.1 The Contractor shall prepare a SHE file and submit to TFR Contract Manager for approval prior to commencement of work on site. The file shall include all documentation required as per the OHS Act and applicable regulations.
- 15.2 The approval time of the SHE file is at least 5 working days
- 15.3 The Contractor shall ensure that a copy of both his or her SHE File as well as any subcontractor's SHE File is kept on site and made available to an inspector of the Department of Labour, the TFR Contract Manager/Technical Officer, or subcontractor upon request.
- 15.4 The Contractor shall hand over a consolidated SHE file to the TFR Contract Manager/Technical Officer upon completion of the Construction Work and shall in addition to documentation mentioned in the OHS Act and applicable Regulations include a record of all drawings, designs, materials used and other similar information concerning the completed structure.

16. Occupational Health

16.1 Medical Surveillance Programme

16.1.1 The Contractor shall ensure that all his and subcontractor employees have a valid medical certificate of fitness issued by an Occupational Health Practitioner.

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16.1.2 Medical certificate of fitness must be available and be kept in the SHE file.

16.2 Substance Abuse

- 16.2.1 All Contractors must comply with the Transnet Substance Abuse Policy and Regulation 2A of the General Safety Regulations of the OHS Act.
- 16.2.2 No Contractor may possess, sell, offer to other person, use, store, manufacture, transport, distribute, or transfer drugs or alcohol during work hours, on or off TFR premises.
- 16.2.3 TFR will not tolerate substance abuse or use which put at risk the health and safety of its employees or threatens its services to our stakeholders. It is on this basis that a contractor employee will be considered unfit for work if:
 - (a) He/she is subjected to alcohol screening and/or alcohol testing and is found to have alcohol in his/her breathe and/or blood.
 - (b) Refuses to undergo substance screening and/or testing.
 - (c) He /she produces a positive confirmatory test for any other substances, measured by sample analysis at a registered pathological laboratory and authorised by a medical practitioner; and/or
 - (d) Through observation by security personnel or TFR Contract Manager, it is evident that the contractor's physical, emotional, mental or behavioural state reflects that they are intoxicated or under the influence.
- 16.2.4 Any transgression of this policy will constitute a breach of the relevant contract and may result in the termination of services/contract.
- 16.2.5 Any contractor employee using medication that has a narcotic effect must declare before work to his / her supervisor.

16.3 Occupational Hygiene

- 16.3.1 The Contractor shall conduct Health Risk Assessments of all the Occupational Hygiene / Environmental stressors (e.g. noise, dust, illumination, HCS, heat & cold stressors, ergonomics, etc.) present in the area where they operate to determine if there is any possible worker exposure. Records of all these assessments should be documented and kept up to date.
- 16.3.2 The Contractor shall monitor the extent to which their employees are exposed to the occupational hygiene stressors. These assessments shall be conducted by an Approved Inspection Authority as listed on the Department of Labour database. The findings from these assessments should be kept on the SHE file, communicated to all affected parties and be reported to relevant authorities.

16.4 First Aid requirements

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- 16.4.1 All Contractors shall ensure that their employees receive prompt first aid treatment in case of injury or emergency. The Contractor must have the necessary equipment and/or facility on site for treatment of injured persons.
- 16.4.2 Contractor shall ensure that the first aid box / boxes are available and accessible. More first aid boxes shall be provided if the risks, distance between work teams, or the working environment requires it.
- 16.4.3 Taking into account the type of injuries that are likely to occur on site, the nature of activities performed and the number of employees on site, the Contractor shall ensure that the first aid box contain suitable first aid equipment which includes at least the minimum contents as listed on Annexure 1 of General Safety Regulation (GSR).
- 16.4.4 The Contractor must ensure that trained / certificated first-aid personnel are appointed and be available on site at all times. The ratio of first aiders to employees shall be 1:50.

16.5 Asbestos Control

16.5.1 The Contractor shall inform the TFR Project Manager or TFR Contract Manager if during construction work asbestos or suspected asbestos containing material is found. Only Asbestos Approved Contractor can work on asbestos containing material.

16.6 Noise

- 16.6.1 The Contractor shall ensure that the requirements of the Noise Induced Hearing Loss Regulations are complied with.
- 16.6.2 Contractor shall ensure that machinery and equipment are operated at noise levels not exceeding an equivalent level of 85-dB (A) during normal working conditions.
- 16.6.3 Where the noise levels at the Operator position or to employees working in the vicinity exceed an equivalent level of 85-dB (A) during normal working conditions, the Contractor shall take appropriate measures to reduce such levels to an equivalent level of 85-dB (A). The use of Personal Protective Equipment (PPE) should be the last resort.
- 16.6.4 All employees exposed to noise must be trained on the effects of exposure, precautionary measures to be taken to prevent exposure and the correct use of PPE.
- 16.6.5 Noise zones must be demarcated as such.

16.7 Vibration

- 16.7.1 Contractors must put measures to reduce the risks associated with hand—arm vibrations, avoid, whenever possible, the need for vibration equipment.
- 16.7.2 Contractor shall develop a good maintenance regime for tools and machinery. This may involve ensuring that tools are regularly sharpened, worn components are replaced or engines are regularly tuned and adjusted.

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- 16.7.3 The Contractor must introduce a work pattern that reduces the time exposure to vibrations.
- 16.7.4 The Contractor shall issue employees with gloves and warm clothing. There is a debate as to whether anti-vibration gloves are really effective, but it is agreed that warm clothing helps with blood circulation which reduces the risk of vibration white finger. Care must be taken so that the tool does not cool the hand of the operator.

16.8 Manual Handling

- 16.8.1 Contractor must reduce risk of injury due to manual handling by using mechanical assistance involving the use of mechanical aids to assist the manual handling operation. Mechanical aids such as hand-powered hydraulic hoists, especially adapted trolleys, hoist for lifting patients and roller conveyors can be used.
- 16.8.2 Contractor shall ensure all employees involved in manual handling are trained in good lifting techniques.

16.9 Dust

- 16.9.1 The Contractor shall monitor dust caused by their activities, mobile equipment, generators and other equipment during construction. Factors such as wind can often affect the intensity to which the impact is experienced.
- 16.9.2 Dust suppression measures must be in place to reduce the dust caused by the activities on site.
- 16.9.3 Appropriate PPE should be provided to exposed employees.

16.10 Weather precautions

- 16.10.1 In the event of adverse weather (high winds, flooding, storm surge, lightning etc) or other conditions, the Contractor must institute precautionary measures to protect employees on site.
- 16.10.2 The Contractor shall take steps to prevent heat stroke, dehydration and exhaustion of employees as a result of exposure to excessive heat on site. Such steps may include employees taking regular breaks, consuming enough water, provision of sun brims for their hard hats and sunscreen to protect them against sun burn.
- 16.10.3 The Contractor shall take steps to prevent hypothermia or dangerous overcooling of the body as a result of exposure to cold temperatures.

16.11. Welfare Facilities

16.11.1 The Contractor must ensure that all workplace facilities meet health, safety and welfare needs of all employees, including disabled persons where applicable.

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- 16.11.2 The Contractor must in addition to Facilities Regulations 2004, provide at or within reasonable access of every construction site, the following clean, hygienic and maintained facilities:
 - (a) shower facilities, at least one shower facility per 15 persons
 - (b)at least one sanitary facility for each sex and for every 30 workers
 - (c) changing facilities for each sex; and
 - (d)sheltered eating areas
- 16.11.3 The Contractor must provide reasonable and suitable living accommodation for the workers at construction sites who are far removed from their homes and where adequate transportation between the site and their homes or other suitable living accommodation, is not available

16.12 COVID 19 Requirements

- 16.12.1 The contractor shall complete and submit to the TFR Contract Manager a declaration stating that the contractor is permitted to operate in terms of the provisions of the Disaster Management Act 2002 (Act No 57 of 2002) and Regulations, Transnet COVID-19 Guidelines and COVID-19 Occupational Health and Safety Measures in Workplaces, COVID-19 (C19 OHS), 2020 and have prepared a COVID-19 Workplace Readiness Plan and shall operate within the regulated permissions and restrictions of applicable lockdown level.
- 16.12.2 The contractor must ensure that all its employees are trained on the health risks and hazards associated with COVID-19 and what precautionary measures they must follow for the protection of their health, including the proper use and maintenance of PPE. They are prepared and informed regarding updated rules, hygiene and behavioural practices, complete a "return to work interview" with their line manager and sign commitment to maintain social distancing.
- 16.12.3 The contractor shall ensure that every employee reporting for duty is screened to ascertain whether they have any observable symptoms associated with COVID-19 and require such employee to immediately inform the contractor if he/she experiences such symptoms
- 16.12.4 Non-essential physical work that requires close contact between workers should be avoided where it is possible to do so.
- 16.12.5 Where it is practicable, every employee must be issued with own tool for use for the duration of the shift. Tools and equipment in stores should be sanitised before issued and on return to the stores.
- 16.12.6 Washing hands facilities must be provided on site, and where it is not available, employees should be provided with hand sanitisers. Employees should be encouraged to regularly wash their hands.
- 16.12.7 Alcohol testing on site should be managed in such a way that no employee is exposed to the virus and contractors must promote personal hygiene. Breathalyzer equipped

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with disposable mouthpieces shall be used and shall be cleaned and/or disinfected after every use.

- 16.12.8 All non-essential visitors to site are not allowed, only suppliers are allowed. Suppliers must be advised in advance of the COVID-19 site screening tests and required COVID-19 PPE requirements for the site.
- 16.12.9 Where site meetings are held, only absolutely necessary meeting participants should attend. Social distancing should be maintained.
- 16.12.10 The contractor shall when transporting his employees to TFR premises comply with the regulations which outlines that 70% of the vehicle capacity can be utilised or as applicable at the time.
- 16.12.11 The contractor shall inform the TFR Contract Manager when any of its employees working on TFR premises has been diagnosed with COVID-19. The contractor shall investigate the cause and control failure and review its risk assessment to ensure that the necessary controls and PPE requirements are in place.

16.13 Work in Confined Space

- 16.13.1 The Contractor shall ensure that a confined space is only entered by an employee or any other person only after the air therein has been tested and evaluated by a person who is competent to pronounce on the safety thereof, and who has certified in writing that the confined space is safe and will remain safe while any person is in the confined space, taking into account the nature and duration of the work to be performed therein.
- 16.13.2 The Contractor shall take steps to ensure that any confined space in which there exist or is likely to exist a hazardous gas, vapour, dust or fumes, or which has or likely to have, an oxygen content of less than 20 percent by volume, is entered by an employee or other person only when:
 - (a) the confined space is purged and ventilated to provide a safe atmosphere therein and measures necessary to maintain a safe atmosphere therein have been taken.
 - (b) the confined space is isolated from all pipes, ducts and other communicating openings by means of effective blanking other than the shutting or locking of a value or a cock, or, if this is not practicable, only when all valves and cocks which are a potential source of danger have been locked and securely fastened by means of chains and padlocks.
- 16.13.3 The Contractor shall ensure that the provisions of General Safety Regulation 5 are complied with regard to work on confined space
- 16.13.4 The Contractor must take into consideration that a tunnel is defined as a confined space in terms of the General Safety Regulations and must ensure compliance to the above when working in tunnels.

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17 Incidents/Occurrences

- 17.1 All incidents referred to in Regulation 9 of General Administration Regulations of the OHS Act involving the contractor and his subcontractor on TFR premises, shall be reported to the TFR Contract Manager and Department of Labour as prescribed by the OHS Act.
- 17.2 TFR must be forwarded with a copy of a report of any investigation, formal inquiry conducted in terms of Section 31 and 32 of the Act into any incident involving the contractor, his subcontractor, any person or machinery under his control on TFR premises.
- 17.3 TFR Contract Manager must be informed of the above incidents/occurrences before the end of shift when the incident/occurrence occurred.
- 17.4 The Contractor shall make available its employees to attend as witnesses when required so by TFR during an investigation into any incident where TFR believes the said contractor employees were witnesses or may assist in the investigation.
- 17.5 The contractor shall make available to TFR any documents required to assist in their investigation.

18. SHE Cost

- 18.1 The Contractor shall ensure that it has made adequate provision for the cost of health and safety measures in the tender offer.
- 18.2 The Contractor shall ensure that its subcontractors have made adequate provision for the cost of health and safety measures in the tender offer.

19. Personal Protective Equipment (PPE)

- 19.1 The Contractor shall ensure that all employees are provided with appropriate prescribed Personal Protective Equipment (PPE) free of charge (according to General Safety Regulations (2), suitable for the type of activities that the employees will perform.
- 19.2 Such PPE shall be approved by credible institution such as SABS, EN, or AN.
- 19.3 The Contractor shall manage the issuing of PPE and ensure that PPE is used at all times. Employees shall be trained in the proper use of PPE.

20. Emergency Evacuation Plan and Procedure

- 20.1 The Contractor must establish and implement an emergency evacuation plan to ensure that in the event of fire, explosion structural collapse etc. all staff is able to evacuate the area to a demarcated area for the purpose.
- 20.2 The area so selected must be demarcated and the relevant "Assembly Point" sign displayed where applicable or use TFR nearest assembly point.

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- 20.3 An Emergency Evacuation Procedure must be drawn up; all staff members and contractors shall be given awareness training and participate in regular evacuation drills.
- 20.4 The Contractor and its employees shall collaborate and adhere to TFR evacuation drills and requirements.

21. Access Control and Security

- 21.1 The Contractor shall, before commencing any work, obtain from the TFR Contract Manager/Technical Officer a Site Access Certificate signed by him, permitting and limiting access to the designated site or place of work by the Contractor and any subcontractors under his control.
- 21.2 No Site Access Certificate will be granted to the Contractor who fails to comply with TFR minimum SHE requirements, with the SHE File not approved and without the SHE induction been concluded.
- 21.3 The Contractor must assess the security risks and implement appropriate measures. All contractors are to strictly adhere to all security requirements on the premises.
- 21.4 The Contractor in collaboration with the TFR representative will ensure that proper access control is in place and functional at all times onto and out of the site. A form of access control will be issued to contractor employees who have been inducted and submitted copies of ID documents or work permits (where required).
- 21.5 Access Permits should be carried by a contract employee at all time when on site. Access Permits shall be produced at the point of entry / gate.
- 21.6 Contractors shall ascertain from TFR Contract Manager/Technical Officer the correct route along with their employees may proceed when coming on or going off shift and direct their employees accordingly.

22. Management of Subcontractors

- 22.1 The Contractor is directly responsible for the actions of his contractors/sub-contractors.
- The Contractor will also be responsible for initiating any remedial action (recovery plan) that may be necessary to ensure that the contractor complies with all requirements.
- 22.3 The Contractor shall provide any contractor who is making a bid or appointed to perform construction work, with the relevant sections of the documented SHE specification, who would in turn provide a SHE plan for approval.
- 22.4 The Contractor shall carry out inspection/audits on the contractor/subcontractor to ensure that their SHE plan is being implemented and maintained and submit audit report to TFR Representative.
- 22.5 The Contractor shall stop any contractor/subcontractor from executing construction work which poses a threat to the safety and health of persons or the environment.

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- 22.6 The Contractor shall ensure that the sub-contractors appointed have the necessary competencies and resources to perform the work safely.
- 22.7 The Contractor will be required to submit 37(2) mandatory agreement between the Contractor and subcontractor to the TFR Contract Manager

23. Environmental Management

- 23.1 The Contractor shall identify, document and comply with all pertinent Environmental laws and associated Regulations, approvals, licenses and permits which are applicable to the Services and activities undertaken.
- 23.2 Before commencement with any of the services to be rendered to TFR, the Contractor shall make available all personnel who will be working on the specified contract to be given environmental induction training. All Contractor employees arriving on the site shall attend such induction.
- 23.3 The Contractor shall adhere to all instructions issued by Contract Manager or his /her delegated person in promotion of environmental management and legal compliance.
- 23.4 The Contractor shall determine the correct positioning of topsoil stockpiling to avoid massive disturbance and prepare the topsoil for reuse during landscaping.
- 23.5 Concrete shall not be mixed directly on the ground or any other permeable surface. Should concrete batching activities occur, these should be located in the designated area on site with low environmental sensitivity levels.
- 23.6 All excess concrete shall be removed from site on completion of plastering or concrete pouring and disposed of in an environmentally acceptable manner.
- 23.7 The Contractor shall ensure that his or her employees are aware of the procedures to be followed when dealing with spills and leaks, which shall include notifying the relevant authorities and TFR as required in terms of National Environmental Management Act (NEMA), 1998 and National Water Act (NWA), 1998. The Contractor shall ensure that all necessary material and equipment required for use during clean up/rehabilitation of spills and leaks are available on site at all times. Treatment, remediation and/or rehabilitation of contaminated areas shall be undertaken to the reasonable satisfaction of the TFR Environmental Control Officer or relevant Environmental Specialist.
- 23.8 Contractor shall be solely responsible for the control of dust generated from his or her activities. Excavation, handling and transport of erodable material shall be avoided under aggressive wind conditions or when a visible dust plume is present. If dust damping measures are deemed inadequate, working must cease until the wind speed drops to an acceptable level.
- 23.9 Construction activities generating output levels of 85 db (A) or more shall be confined to the hours 08h00 to 17h00 Mondays to Fridays (close to residential areas).

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- 23.10 No on-site burying or dumping of waste material shall occur. Waste must be collected by a licensed waste transporting contractor and disposed of at a licensed disposal site. Disposal certificate must be made available to TFR on request.
- 23.11 Waste bins must be provided in sufficient number and capacity to store solid waste produced on a daily basis. These bins must be kept closed and emptied regularly.
- 23.12 A designated re-fuelling area (s) must be provided. The re-fuelling area must be protected from hydrocarbon spillage to the reasonable satisfaction of the TFR Environmental Control Officer or Relevant Environmental Specialist. As a minimum requirement, re-fuelling and workshop areas shall have a bunded floor surface and storm water collection mechanism. Refuelling shall always be accompanied by the use of drip trays.
- 23.13 The Contractor must notify the Contract Manager immediately of any pollution incident.

 An incident record system shall be maintained on site for inspection by TFR and relevant authorities.
- 23.14 All vehicles and equipment's shall be kept in good working condition. All leaking equipment's shall be repaired immediately or removed from site. All vehicles and equipment shall be maintained and not emit excessive noise.
- 23.15 In case of major hydrocarbon spill or leakage as a result of equipment failure, Contract Manager must be made aware of such event and the affected area must be fenced off and be cleaned immediately to the reasonable satisfaction of the TFR Environmental Control Officer to prevent contamination of soil and both surface and groundwater.
- 23.16 The Contractor shall ensure that no spillage occurs when toilets are being cleaned or emptied and that the contents are removed from site by a licensed service provider.
- 23.17 The use of borrow pits for the construction of access roads must comply with the provisions of Minerals and Petroleum Resources Development Act of 2004 as amended and should not be located inside the border of any protected area (e.g. Nature Reserve).
- 23.18 All disturbed areas must be rehabilitated to the reasonable satisfaction of TFR Environmental Control Officer or Relevant Environmental Specialist.
- 23.19 Transportation, handling and storage of all substances classified as hazardous must comply with the provisions of the Hazardous Substances Act, 15 of 1973, relevant Regulations and SANS Codes.
- 23.20 Archaeological remains, artificial features and structures older than 60 years are protected by the Natural Heritage Resources Act, 25 of 1999. Should any archaeological artefact be exposed during construction or any contract work, such work must be stopped immediately. The TFR Environmental Control Officer must be called in for inspection and to recommend the way-forward. Under no circumstances may any artefacts be destroyed or removed from site.

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- 23.21 The extraction of water for construction purposes must at all times comply with licensing requirements of Department of Water Affairs, where applicable. Extraction of water from a stream or a river requires approval.
- 23.22 Blasting work that may be required on site shall be carried out entirely within the provisions of the Explosives Act, 26 of 1956 and other relevant engineering and safety standards.
- 23.23 Office and camp sites shall be established, as far as is practicable, outside the flood plain, above the 1:50 flood level mark within the boundaries of the construction area.
- 23.24 No camp or office site shall be located closer than 100 metres from a stream, river, spring, dam or pan.
- 23.25 The area chosen for these purposes shall be the minimum reasonably required and which will involve the least disturbance to vegetation.
- 23.26 Camps and site offices shall be fenced (where necessary) in consultation with the landowner.
- 23.27 The Project Manager or TFR Contract Manager may, at his or her discretion stop any work, activity or process not in accordance with Environmental laws and associated Regulations, approvals, licenses and permits.
- 23.28 The contractor shall preserve wild life in terms of the NEMA.

24 Operational Safety

24.1 National Safety Regulator requirements

- 24.1.1 The Contractor shall ensure that its equipment, machinery and employees when on TFR premises complies fully with all applicable railway safety requirements and/or regulations of the National Safety Regulator Act 16 of 2002 and the relevant SANS Codes of Practice.
- 24.1.2 Permission for the engagement of a subcontractor by the Principal both initially and during a contract shall be subject to a review by TFR of the capability of the proposed subcontractor to comply with railway safety requirements and user specifications.
- 24.1.3 The Contractor and/or his subcontractors must grant TFR access, during the term of the contract, to review any railway safety related activities, including the coordination of such activities across all parts of the organisation.
- 24.1.4 The Contractor shall ensure that where applicable, such work is performed by person who has the necessary competencies as required in terms of any applicable railway safety standard or code of practice.
- 24.1.5 The Contractor shall ensure that all his employees are protected from the risk of being hit by moving trains.

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24.1.6 The Contractor must ensure that it complies to the requirements of RSR 00-4-1.2016 Edition 1, Part 4-1 Human Factors Management-Fatigue Management standard.

24.2 Special Permits

24.2.1 Where special work permits are required before work may be carried out such as for e.g. hot work (welding, cutting etc.), isolation, and occupations, the Contractor shall apply to the TFR Contract Manager/Technical Officer or the relevant authority for such permits to be issued. The Contractor shall strictly comply with the conditions and requirements pertaining to the issue of such work permits.

24.3 Vehicle Safety

With respect to vehicles, vehicles and mobile plants the Contractor must ensure that:

- 24.3.1 They are of an acceptable design and maintained in a good working order and are used in accordance with their design and the intention for which they were designed
- 24.3.2 Are operated by a person who-has received appropriate training, is certified competent and in possession of proof of competency and is authorised in writing to operate such vehicle and mobile plant;
- 24.3.3 Are operated by a person who has a medical certificate of fitness to operate those vehicle and mobile plant, issued by an occupational health practitioner;
- 24.3.4 Vehicles used to transport employees have seats firmly secured and adequate for the number of employees to be carried. No employees will be allowed to be transported at the back of LDV's / bakkies unless it is provided with a seat and safety belt and further that the risk assessment has indicated it to be a low risk.
- 24.3.5 Vehicles are fitted with structures designed to protect the operator from falling material or from being crushed should the vehicle or mobile plant overturn.
- 24.3.6 Vehicle must be equipped with an acoustic warning device which can be activated by the operator and an automatic acoustic reversing alarm
- 24.3.7 Vehicles must be inspected by the authorised operator or driver on a daily basis using a relevant checklist prior to use and that the findings of such inspection are recorded in a register kept in the construction vehicle or mobile plant.
- 24.3.8 No person rides or is required or permitted to ride on a construction vehicle or mobile plant otherwise than in a safe place provided thereon for that purpose.
- 24.3.9 All vehicles or mobile plant when not in use, have buckets, booms or similar appendages, fully lowered or blocked, controls in a neutral position, motors stopped, wheels chocked, brakes set and ignition secured.
- 24.3.10 Whenever visibility conditions warrant additional lighting, all mobile plant are equipped with at least two headlights and two taillights when in operation

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- 24.3.11 Tools, material and equipment are secured and separated by means of a physical barrier in order to prevent movement when transported in the same compartment with employees.
- 24.3.12 Where applicable, also in collaboration with the TFR representative and other appropriate personnel develop a traffic management plan for the site to ensure the safe movement of all construction related mobile plant where applicable
- 24.3.13 This plan is to be reviewed as and when required to ensure its applicability where applicable.
- 24.3.14 Those working or operating on public roads comply with the requirements of the National Road Traffic Act, 1996.

24.4 Housekeeping and general safeguarding on sites

- 24.4.1 Contractor must ensure that suitable housekeeping is continuously implemented on each work site
- 24.4.2 The Contractor must ensure proper storage of materials and equipment and the removal of scrap, waste and debris at appropriate intervals.
- 24.4.3 The Contractor must ensure that materials required for use, are not placed on the site so as to obstruct means of access to and egress from workplaces and passageways
- 24.4.4 The Contractor must ensure that materials which are no longer required for use, do not accumulate on and are removed from the site at appropriate intervals.

24.5 Hazardous Chemical Substances (HCS)

- 24.5.1 The Contractor must ensure that all employees exposed to hazardous chemicals are trained on the potential source of exposure, potential risk to health caused by exposure and measures to be taken by the contractor and employees against any risk of exposure.
- 24.5.2 HCS risk assessment to be conducted and where it indicates that any employee may be exposed, the contractor shall ensure that monitoring is carried out in terms of regulation 6 and 7 of the Hazardous Chemical Substances Regulations.
- 24.5.3 Employees exposed to hazardous substances shall be under medical surveillance
- 24.5.4 Where herbicides are used, the contractor shall comply with all relevant legislative requirements pertaining to the use of herbicides and that work is undertaken under the supervision of a person with a valid certificate in Pest Control.

24.6 Stacking and Storage

24.6.1 The Contractor shall ensure that a competent person is appointed in writing with the duty of supervising all stacking and storage.

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24.6.2 Adequate storage areas are provided, demarcated as storage areas and are kept neat and under control.

24.7 Fire Precautions and Fire Safety

- 24.7.1 The Contractor must ensure that all appropriate measures are taken to avoid the risk of fire. The Contractor shall comply to the fire precautions as stipulated in the Environmental Regulations for Workplaces, 1987 and regulation 29 of the Construction Regulations, 2014
- 24.7.2 Sufficient and suitable storage is provided for flammable liquids, solids and gases.
- 24.7.3 Smoking is prohibited and notices in this regard are prominently displayed in all places containing readily combustible or flammable materials
- 24.7.4 The Contractor shall ensure that the work areas are clear, at all times, of any material, which could fuel a fire and that ccombustible materials do not accumulate, oily rags, waste and other substances liable to ignite are without delay removed to a safe place.
- 24.7.5 A thorough inspection is made of the work site at the end of any working period to ensure that no material is left at the work site or any situation left in such a manner that a fire or accident could result (all machines to be turned off at main switches, and cylinders to be closed and hoses deflated).
- 24.7.6 Suitable and sufficient fire-extinguishing equipment is placed at strategic locations or as may be recommended by the Fire Chief or local authority concerned and that such equipment is maintained in a good working order.
- 24.7.7 The fire equipment is inspected by a competent person, who has been appointed in writing for that purpose, in the manner indicated by the manufacturer thereof
- 24.7.8 Sufficient number of employees are trained in the use of fire extinguishing equipment and familiarise themselves with locations of fire fighting equipment in the work site.
- 24.7.9 There is an effective evacuation plan providing for all persons to be evacuated speedily without panic, accounted for and a siren is installed and sounded in the event of a fire.
- 24.7.10 Where appropriate, suitable visual signs are provided to clearly indicate the escape routes in the case of a fire and the means of escape is kept clear at all times.
- 24.7.11 The Contractor must ensure that fire fighting equipment are not to be used for any purpose other than their intended use.

24.8 Demarcation of the site

24.8.1 The Contractor shall ensure that its activities are conducted within a limited area to facilitate control and to minimize the impact on the existing natural environment and other TFR activities.

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- 24.8.2 The Contractor shall demarcate the boundaries of the site in order to restrict activities to the site.
- 24.8.3 The method of demarcation and the location of the demarcated area shall be determined by the Contractor and approved by the TFR Contract Manager prior to any work being undertaken. The Contractor shall ensure that all his plant, labour and materials remain within the boundaries of the site.
- 24.8.4 Failure to do so may result in the Contractor being required to fence off the boundaries of the site at his own expense to the satisfaction of the TFR. The contractor is responsible for the safeguarding of his/her own equipment and material while on site.

24.9 Fall Protection Plan

- 24.9.1 In the event of the risk and hazard identification, as required in terms of clause 14 of this Specification, revealing risks relating to working from a fall risk position the contractor shall cause the designation of a competent person, responsible for the preparation of a fall protection plan.
- 24.9.2 The Contractor shall implement, maintain and monitor the fall protection plan for the duration of the contract. The Contractor shall also take such steps to ensure the continued adherence to the fall protection plan.
- 24.9.3 The fall protection plan shall include: -
 - (a) a risk assessment of all work carried out from a fall risk position.
 - (b) the procedures and methods to address all the identified risks per location.
 - (c) the evaluation of the employees physical and psychological fitness necessary to work at fall risk positions.
 - (d) the training of employees working from fall risk positions.
 - (e) rescue plan; and
 - (f) the procedure addressing the inspection, testing and maintenance of all fall protection equipment

24.10 SHE Signage (Symbolic Safety Signs) on plant and in buildings

- 24.10.1The Contractor's employees shall comply with all SHE signage posted at various locations of TFR sites.
- 24.10.2The Contractor shall after occupation of the construction site ensure that appropriate, SHE signs (Symbolic Safety Signs) are displayed on site

24.11 General Machinery, Tools and Equipment

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- 24.11.1 The Contractor shall ensure that all machinery, tools and equipment are identified, numbered or tagged, listed on an inventory list.
- 24.11.2 The Contractor shall ensure that all machinery, tools and equipment are safe to be used and is maintained in a good condition.
- 24.11.3 The Contractor shall ensure that all machines driven by means of belts, gear wheels, chains and couplings shall be adequately guarded in such a manner that persons cannot gain inadvertent access to the moving parts.
- 24.11.4 All machinery, tools and equipment to be regularly inspected at least monthly or as required by legislation and risk assessments. Records of such inspections shall be kept on the SHE file.
- 24.11.5 Where applicable machinery, tools and equipment must have the necessary approved test or calibration documentation.
- 24.11.6 The Contractor shall ensure that all machinery, tools and equipment are operated by persons who have been trained to operate such machinery, tools or equipment.

24.12 Portable Electrical Tools and Explosive Power Tools

- 24.12.1The Contractor shall ensure that use and storage of all explosive power tools and portable electrical tools comply with all applicable legislation.
- 24.12.2The Contractor shall ensure that only trained employees are authorised to use portable electrical tools and explosive power tools
- 24.12.3 The Contractor shall ensure that all portable electrical tools and explosive power tools are kept in a safe working condition.
- 24.12.4 All portable electrical tools and explosive power tools are inspected monthly by a competent person and daily before use by the operator of such tool. Records of such inspections must be kept in the safety file.
- 24.12.5 Users / Operators of electrical power tools and explosive power tools should be issued with suitable protective equipment

24.13 Lifting Machine, Lifting Tackle and Suspended Loads

- 24.13.1The Contractor shall ensure that lifting machine and tackle comply with Driven Machinery Regulation 18 and all other applicable legislative requirements and standards.
- 24.13.2The Contractor shall ensure that lifting machine operators shall be competent to operate a lifting machine. They must be in possession of a valid permit. The training should have been done according to the Code of Practice by a provider registered by the Department of Labour.
- 24.13.3 A lock out system should be implemented to ensure that only an operator that is competent can draw lifting machines and forklifts.

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- 24.13.4 The Contractor shall ensure that before using any lifting machines or tackle the operator inspect it. Records of such inspections and examinations shall be kept on the safety file.
- 24.13.5 All lifting machines shall be examined and subjected to a performance test by an accredited person/company at intervals not exceeding 12 months.
- 24.13.6 All lifting tackle should be recorded on a register and should be examined by an accredited person/company at intervals not exceeding 3 months.
- 24.13.7 All hooks shall be fitted with a safety latch/catch.
- 24.13.8 All lifting tackle should be conspicuously and clearly marked with identification particulars and the maximum mass load which it is designed for.
- 24.13.9 No person shall be moved or supported by means of a lifting machine unless such a machine is fitted with a cradle approved by an inspector.
- 24.13.10 Rigging of loads to be done in accordance with acceptable safe work practices
- 24.13.11 Contractors and their employees shall keep out from under suspended loads, including excavators, and between a load and a solid object where they might be crushed if the load should swing or fall. They shall not pass or work under the boom or any crane or excavator.
- 24.13.12 Contractors and their employees shall ensure that crane loads are not carried over the heads of any workmen.
- 24.13.13 The Contractor shall ensure proper supervision in terms of guiding the load including the use of guide ropes to prevent loads from swinging and a trained person to direct lifting operations and checking the lifting tackle and attachments daily.

24.14 Hand Tools and Pneumatic Tools

- 24.14.1 All hand tools (hammers, chisels, spanners, etc) must be recorded on a register and inspected by a competent person on a monthly basis as well as by users prior to use.
- 24.14.2 All pneumatic tools should be numbered, recorded and inspected at least monthly as well as by users prior to use. And the revolutions per minutes measured in accordance with the manufacturer specifications
- 24.14.3 Tools with sharp points in toolboxes must be protected with a cover.
- 24.14.4 All files and similar tools must be fitted with handles.
- 24.14.5 The Contractor must have a policy on private and makeshift tools on site.

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24.14.6 No pneumatic tool shall be operated by using a compressed gas cylinder. Pneumatic equipment shall only draw supply from mobile air compressors or from compressed air lines installed within the premises.

24.15 Management and control of exposure to Polychlorinated Biphenyls (PCB) contaminated material

- 24.15.1 The Contractor shall ensure that all personnel, persons who work with material that contains PCBs and persons who might come into contact with such material are appropriately familiarized with the danger of working with PCBs.
- 24.15.2 The Contractor shall ensure that provide systems to ensure that personnel who are involved in activities that affect the safe and acceptable use of material that contains PCBs have, at all times, current and suitably authorized documented procedures and standards available, and that such documentation can be retrieved and updated when required.
- 24.15.3 The Contractor shall ensure adequate ventilation in the working area; portable fans at ground level should be used in enclosed substations.
- 24.15.4 The Contractor shall ensure full protective clothing shall be worn, which includes:
 - a) a one-piece chemical resistant suit,
 - b) chemical resistant gloves,
 - c) disposable covers for shoes,
 - d) in confined spaces, approved self-contained breathing apparatus, and
 - e) a full-face mask with a type "CC" replacement canister can be used for lower-level exposure.
- 24.15.5 A respiratory protection device with a full-face mask and a cartridge or canister suitable for use with PCBs is required when PCB liquids hotter than 55 °C are handled, where a significant amount of PCB liquid is exposed to the air, or where adequate ventilation is not possible. In a fire situation where PCBs are involved, self-contained breathing apparatus should be used.
- 24.15.6 The Contractor shall ensure impervious gloves made of butyl rubber, neoprene, nitrite rubber, polyvinyl alcohol, Viton saranex or teflon (NOT ordinary rubber) should be worn when PCB liquids are handled.
- 24.15.7 The Contractor shall ensure that all PPE shall be disposed of after use and potentially contaminated protective equipment shall be treated as material that contains PCB and shall be disposed of accordingly.
- 24.15.8 The Contractor shall ensure that respiratory protective equipment is provided and worn when required as per the requirements of clause 5.2 of SANS 290:2016.

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24.15.9 The Contractor shall ensure that employees likely to be exposed to PCB contaminated material are trained in first aid measure to be taken in case of exposure.

24.16 Ladders

24.16.1 A contractor shall ensure that all ladders are numbered, inspected before use and weekly inspections are recorded in a register. A contractor shall ensure that a competent person who carries the above inspections is appointed in writing.

24.17 Electrical Equipment

The Contractor must ensure that:

- 24.17.1 Implementation and compliance with Electrical Installation Regulations, Electrical Machinery Regulations and regulation 24 of the Construction Regulations and OH&S Act.
- 24.17.2 All electrical installations, machinery and electrical work is performed in compliance with TFR Electrical Safety Instructions.
- 24.17.3 Connections are not made to any power supply without the prior written approval of the TFR Contract Manager.
- 24.17.4 All electrical machines and appliances provided by the Contractor for his own use on the Site are in a serviceable condition
- 24.17.5 Power tools used on the Site are protected by residual current devices approved by TFR Contract Manager and are double insulated.
- 24.17.6 All extension cords, portable tools and electrical plant supplied at a voltage above 32 volts are inspected, tested and tagged by a Licensed Electrician at regular monthly intervals. Details of inspections and tests are kept in Logbooks available for inspection by the TFR Contract Manager or any other authorised Officer of TFR.
- 24.17.7 All electrical installations are inspected by the TFR Contract Manager (or his nominee) to ensure that the installation complies with the Statutory Regulations applicable to the site and TFR Electrical Safety Instructions. Any installations deemed unsatisfactory by the TFR Contract Manager should be removed by the Contractor at his expense.
- 24.17.8 Portable lights have adequate stability and are fitted with a mechanical guard to protect the lamp. Temporary festoon lighting is of the 'double insulated' type and is supported at least 2.5m above the floor, if possible. Hand lamps are of the 'all insulated' type.
- 24.17.9 All temporary light fittings are supplied from more than one final sub-circuit, with the supply from a residual current device, extra low voltage source or an isolating transformer.

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- 24.17.10 The Contractor must obtain approval from the TFR Contract Manager before any of his employees or Sub-contractors commence work within three (3) metres of conductor rails or high-tension wires, or where there is a possibility of equipment coming close to and/or touching a power source and must provide suitable protective insulating barriers. For the erection of scaffolding, the distance is five (5) metres.
- 24.17.11 Only authorised persons may enter Electrical Contactor Houses, Motor Rooms, Switch Rooms, Control Rooms or Cable Ducts. Should the Contractor require entering such places to carry out work, he must first obtain permission from the TFR Contract Manager and obtain a valid Permit to Work.
- 24.17.12 The Contractor's employees required to enter such electrical spaces "authorised persons", with the names entered in the TFR Authorised Persons Register, after receiving approval from the TFR Electrical Officer, or they are accompanied by an authorised person who must supervise the placement of Danger Tags and Out-of-Service Tags, as well as Electrical Isolation Permit.
- 24.17.13 Electrical equipment supply cabling distribution boards, fixed lighting and portable appliances, extension leads, welding machines, compressors, pumps and hand portable tools are inspected on a monthly basis and also by the user daily before use.
- 24.17.14 Such monthly inspection(s) are to be performed by an appropriately qualified Electrician.
- 24.17.15 Contractors working on, over, under, or adjacent to railway lines and near high voltage equipment shall comply with the TFR E7/1 Specification for Works On, Over, Under or Adjacent to Railway Lines and Near High Voltage Equipment.
- 24.17.16 No person may do electrical installation work as an electrical contractor unless that person has been registered as an electrical contractor in terms of the Electrical Installation Regulations.
- 24.17.17 No person shall authorize, design, install or permit or require the installation of an electrical installation, other than in accordance with a health and safety standard provided that the components within an electrical installation shall comply with the standards and proof of compliance shall be identifiable on the components or certification shall be available from the supplier or manufacturer of the components.
- 24.17.18 Contractor shall provide further that items of an electrical installation not covered by such incorporated safety standard, and the conductors between the point of supply and the point of control, shall be installed in accordance with the by-laws or regulations of the supplier concerned.
- 24.17.19 A registered person shall exercise general control over all electrical installation work being carried out, and no person shall allow such work without such control: Provided that where the voltage exceeds 1kV, the installation shall be designed and supervised by a person deemed competent

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24.17.20 No supplier shall restrict the application of a health and safety standard when an electrical installation is installed, except where the distribution system of the supplier may be adversely affected by the application thereof.

25. Scaffolding

- The Contractor must ensure that all scaffolding operations are carried out under the supervision of a competent person and that all erectors, team leaders and inspectors are competent to carry out their work.
- The Contractor must ensure that scaffolding when used and erected, complies with the safety standards as per SANS 10085-1:2004 Please note that Scaffold also need to comply with CR 12 Temporary Works.
- All scaffolding equipment to be inspected and proclaimed safe to use or rectified as to be safe to use after any inclement weather. Signage must be posted to indicate the status of the scaffolding.

26. Excavations, Floor Openings and Trenches

The Contractor must ensure that:

- All excavation work is carried out under the supervision of a competent person who has been appointed in writing for that purpose.
- 26.2 Evaluation of the stability of the ground, as far as is reasonably practicable, before excavation work begins.
- 26.3 Sufficient steps in order to prevent, as far as is reasonably practicable, any person from being buried or trapped by a fall or dislodgement of material in an excavation.
- No person is permitted to work in an excavation which has not been adequately shored or braced: Provided that shoring and bracing may not be necessary where the sides of the excavation are sloped to at least the maximum angle of repose measured relative to the horizontal plane; or such an excavation is in stable material: Provided that permission has been given in writing by the appointed competent person upon evaluation by him or her of the site conditions.
- Where any uncertainty pertaining to the stability of the soil still exists the decision from a professional engineer or a professional technologist competent in excavations is decisive and such a decision must be noted in writing and signed by both the competent person and the professional engineer or technologist, as the case may be.
- 26.6 The shoring or bracing used is designed and constructed in a manner that renders it strong enough to support the sides of the excavation in question.
- 26.7 No load, material, plant or equipment is placed or moved near the edge of any excavation where it may cause its collapse and consequently endangers the safety of any person, unless precautions such as the provision of sufficient and suitable shoring or bracing are taken to prevent the sides from collapsing;

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- 26.8 Where the stability of an adjoining building, structure or road is likely to be affected by the making of an excavation, steps are taken to ensure the stability of such building, structure or road and the safety of persons.
- 26.9 Convenient and safe means of access to be provided to every excavation in which persons are required to work, and such access may not be further than six meters from the point where any worker within the excavation is working.
- 26.10 The location and nature of electricity, water, gas or other similar services which may in any way be affected by the work to be performed and must before the commencement of excavation work that may affect any such service, take the steps that are necessary to render the circumstances safe for all persons involved.
- 26.11 Every excavation, including all bracing and shoring, is inspected by the competent person, daily, prior to the commencement of each shift; after every blasting operation; after an unexpected fall of ground; after damage to supports; and after rain in order to ensure the safety of the excavation and of persons.
- 26.12 The results of such inspections must be recorded in a register kept on site and made available on request to an inspector, the client, the client's agent, any other contractor or any employee.
- 26.13 Every excavation which is accessible to the public or which is adjacent to public roads or thoroughfares, or whereby the safety of persons may be endangered, to be adequately protected by a barrier or fence of at least one metre in height and as close to the excavation as is practicable; and provided with warning illuminates or any other clearly visible boundary indicators at night or when visibility is poor.
- 26.14 All precautionary measures stipulated for confined spaces as determined in the General Safety Regulations, 2003, are complied with by any person entering any excavation.
- 26.15. Where the excavation work involves the use of explosives, appoint a competent person in the use of explosives for excavation, and must ensure that a method statement is developed by that person in accordance with the applicable explosive's legislation.
- 26.16 Warning signs to be positioned next to an excavation within which or where persons are working or carrying out inspections or tests.

27. The designer of a structure must:

- (a) Ensure that the applicable safety standards of the Act are complied with in the design.
- (b) Take into consideration the health and safety specification submitted by the client.
- (c) Before the contract is put out to tender, make available in a report to the client-
 - (i) all relevant health and safety information about the design of the relevant structure that may affect the pricing of the construction work.

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- (ii)the geotechnical-science aspects, where appropriate; and (iii) the loading that the structure is designed to withstand;
- (d) Inform the client in writing of any known or anticipated dangers or hazards relating to the construction work and make available all relevant information required for the safe execution of the work upon being designed or when the design is subsequently altered.
- (e) Refrain from including anything in the design of the structure necessitating the use of dangerous procedures or materials hazardous to the health and safety of persons, which can be avoided by modifying the design or by substituting materials.
- (f) Take into account the hazards relating to any subsequent maintenance of the relevant structure and must make provision in the design for that work to be performed to minimize the risk.
- (g) Carry out the necessary inspections at appropriate stages to verify that the construction of the relevant structure is carried out in accordance with his design
- (h) Stop any contractor from executing any construction work which is not in accordance with the relevant design's health and safety aspects
- (i) In his or her final inspection of the completed structure in accordance with the National Building Regulations, include the health and safety aspects of the structure as far as reasonably practicable, declare the structure safe for use, and issue a completion certificate to the client and a copy thereof to the contractor; and
- (j) During the design stage, take cognizance of ergonomic design principles in order to minimize ergonomic related hazards in all phases of the life cycle of a structure

28 **Temporary works**

- 28.1 The Contractor must appoint a temporary works designer in writing to design, inspect and approve the erected temporary works on site before use.
- 28.2 The Contractor must ensure that all temporary works operations are carried out under the supervision of a competent person who has been appointed in writing for that purpose.

28.3 The Contractor must ensure that-

- (a) All temporary works structures are adequately erected, supported, braced and maintained by a competent person so that they are capable of supporting all anticipated vertical and lateral loads that may be applied to them, and that no loads are imposed onto the structure that the structure is not designed to withstand.
- (b) All temporary works structures are done with close reference to the structural design drawings, and where any uncertainty exists the structural designer should be consulted.

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- (c) Detailed activity specific drawings pertaining to the design of temporary client, the client's works structures are kept on the site and are available on request to an inspector, other contractors, the agent or any employee.
- (d) All persons required to erect, move or dismantle temporary works structures are provided with adequate training and instruction to perform those operations safely.
- (e) All equipment used in temporary works structure are carefully examined and checked for suitability by a competent person, before being used.
- (f) All temporary works structures are inspected by a competent person immediately before, during and after the placement of concrete, after inclement weather or any other imposed load and at least on a daily basis until the temporary works structure has been removed and the results have been recorded in a register and made available on site.
- (g) No person may cast concrete, until authorization in writing has been given by the competent person
- (h) If, after erection, any temporary works structure is found to be damaged or weakened to such a degree that its integrity is affected, it is safely removed or reinforced immediately.
- (i) adequate precautionary measures are taken in order to-
- (i) secure any deck panels against displacement; and
- (ii) prevent any person from slipping on temporary works due to the application of release of agent.
- (j) As far as is reasonably practicable, the health of any person is not affected through the use of solvents or oils or any other similar substances.
- (k) Upon casting concrete, the temporary works structure is left in place until the concrete has acquired sufficient strength to safely support its own weight and any imposed load, and is not removed until authorization in writing has been given by the competent person
- (/) The foundation conditions are suitable to withstand the loads caused by the temporary works structure and any imposed load in accordance with the temporary works design.
- (m) Provision is made for safe access by means of secured ladders or staircases for all work to be carried out above the foundation bearing level.
- (n) A temporary works drawing, or any other relevant document includes construction sequences and methods statements.
- (o) The temporary works designer has been issued with the latest revision of any relevant structural design drawing.
- (p) A temporary works design and drawing is used only for its intended purpose and for a specific portion of a construction site; and

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- (q) The temporary works drawings are approved by the temporary works designer before the erection of any temporary works.
- 28.4 Contractor may not use a temporary works design and drawing for any works other than its intended purpose.

29. Design requirement

- Any building and any structural element or component thereof shall be designed to provide strength, stability, serviceability and durability under all actions which can reasonably be expected to occur in accordance with accepted principles of structural design, and so that it will not impair the integrity of any other building or property.
- 29.2 Any such building shall be so designed that in the event of accidental overloading the structural system will not suffer disastrous or progressive collapse which is disproportionate to the original cause.
- 29.3 The requirements shall be deemed to be satisfied where such building is designed in accordance with SANS 10400.

30. Confidentiality

- 30.1 The Contractor must, at all times, consider all data or information given to him or that is required in connection with the work of the Company, as confidential and not makes unauthorized use of it.
- 30.2 He/she must ensure that such data or information is not given to any non-employee of the contractor without written consent of the TFR Contract Manager.
- 30.3 The Contractor shall be aware of the confidentiality of the mentioned information and is compelled to treat it accordingly.
- 30.4 The Contractor must provide adequate physical protection for any confidential documents, etc, which were obtained from Transnet in connection with the contract work as well as any copies made thereof. If any documents or sketches are lost, the TFR Contract Manager must be notified immediately.

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ANNEXURE 1

CONTRACTOR MONTHLY SHE REPORT

For Month/Year			Name of			
			Contractor			
Name of Contract						
Contract Number		Date of (Commencement	Dat	e of Completio	n
Number of employees	Man-h worked Month		Cumulative (Contract duration man- hours)	Si Ti	an-hours nce last Lost me Incident TI)	DIFR
					_	

1. Details of SHE Incidents

Incident	This Month	Cumulative(Contract duration)	Short description of major/ significant incidents and preventative action taken
Number of			
fatalities			
Number of			
disabling incidents			
Number of			
Medical Treatment			
Cases			
Number of first			
aid Cases			
Number of near			
miss incidents			
Motor vehicle			
incidents			
Number of			
environmental			
incidents			
Positive substance			
abuse incidents			
Substandard Act/			
Conditions			
observed			
Legal violations			
observed			

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2. Details of SHE Meetings

Date	No of participants	Major SHE Concerns	Action taken

3. Details of Audits/Inspections

Date	Area / Facility	Findings/Recommendations	Action taken

5. Details of any SHE Promotional activities for the month

Date	Activity	Remarks

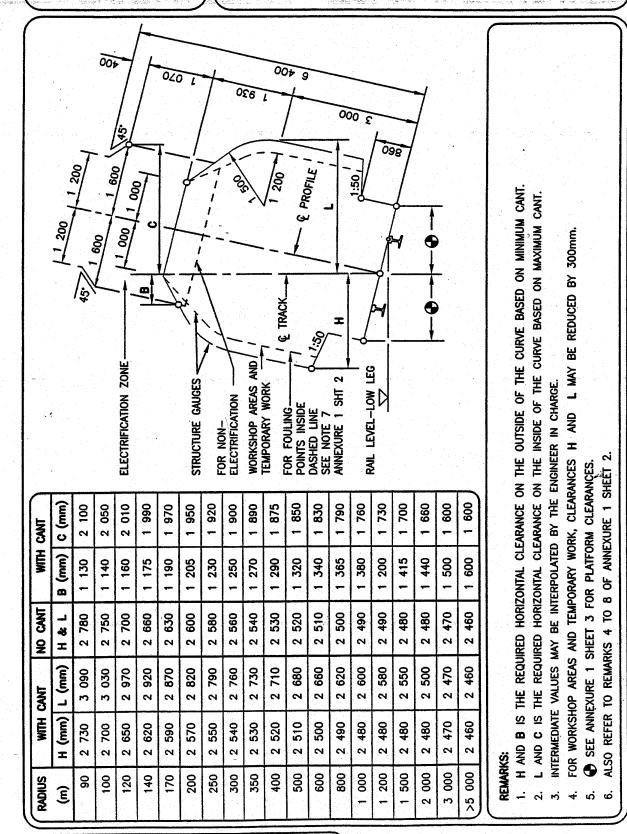
6. Safety Communication

Month	Number of Safety talks held	Remarks

Attach separate sheets for further or other details			
Name of Contractor Representative	Signature	Date	
Contractor Signature	Date		

ANNEXURE 1 SHEET 1 of 5 AMENDMENT

HORIZONTAL CLEARANCES: 1 065mm TRACK GAUGE

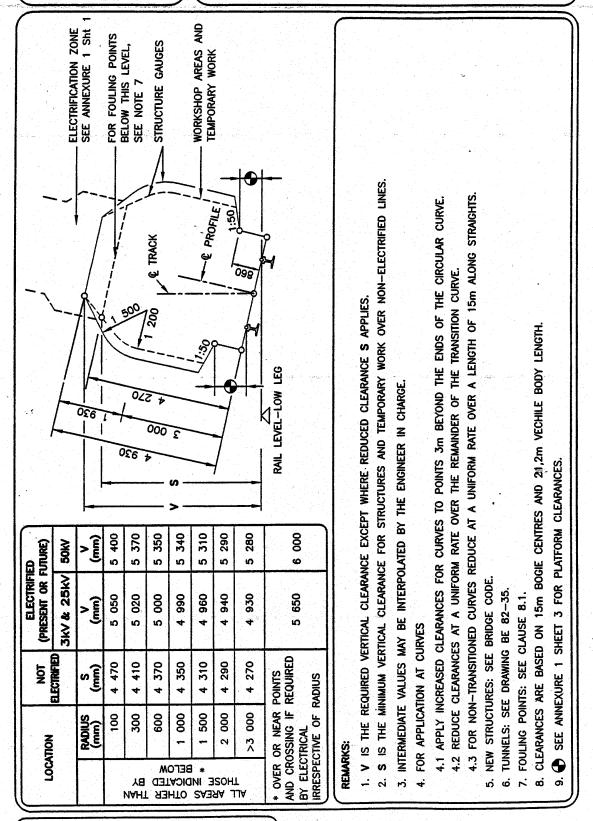


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DATE : JUNE 2000

ANNEXURE 1 SHEET 2 of 5 AMENDMENT

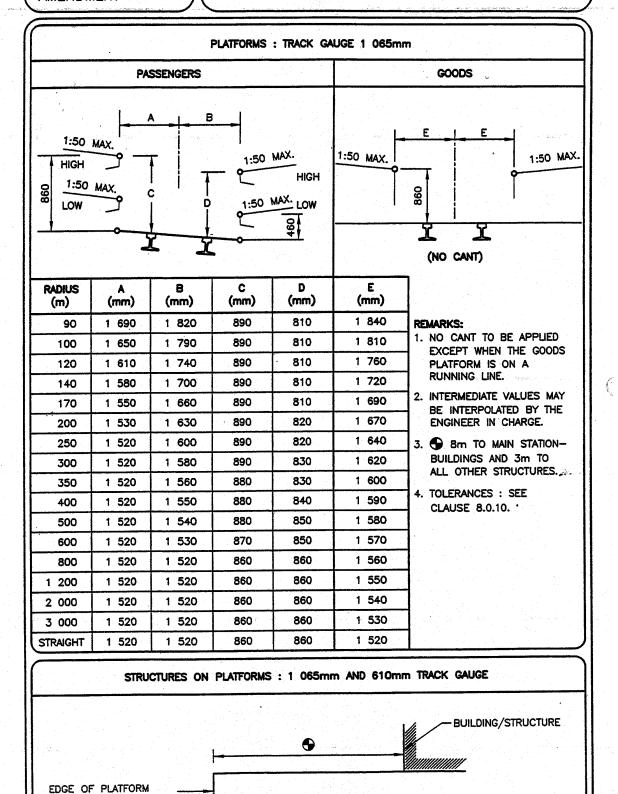
VERTICAL CLEARANCES: 1 065mm TRACK GAUGE



BE 97-01 Sht 2 of 5 DATE : JUNE 2000

ANNEXURE 1 SHEET 3 of 5 AMENDMENT

CLEARANCES: PLATFORMS



BE 97-01 Sht 3 of 5 DATE : JUNE 2000

