

NEC3 Engineering and Construction Short Contract (ECSC)

entered into by and between

Transnet SOC Ltd

Registration Number 1990/000900/30 (hereinafter referred to as the "Employer")

and

PENDING

Tender Number

Description

1616433.001

RELATED NETWORK AND COMMUNICATION INFRASTRUCTURE AT SELECTED TRANSNET TRACTION FEEDER SUBSTATIONS ALONG THE SISHEN SALDANHA IRON ORE RAIL LINE

CONTRACT DOCUMENTS

Form of Offer and Acceptance

Contract Data

Part One – Data provided by the Employer

Part Two - Data provided by the Contractor

Conditions of Contract (3rd edition – available separately) PREVIEW CORY ONLY

Pricing Data

Works Information

Site Information

Appendices

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C4 Site Information

T1.1 TENDER NOTICE AND INVITATION TO TENDER

SECTION 1: NOTICE TO TENDERERS

1. INVITATION TO BID

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	SUPPLY, INSTALL AND COMMISSION SMART ENERGY METERS AND RELATED NETWORK AND COMMUNICATION INFRASTRUCTURE AT SELECTED TRANSNET TRACTION FEEDER SUBSTATIONS ALONG THE SISSEL SALDANHA IRON ORE RAIL LINE	
BID FEE AND BANKING DETAILS	Tender document is free of charge	
INSPECT / COLLECT DOCUMENTS FROM	The physical address for collection of tender doc ments: Transnet Freight Rail Bellville Square, off Robert Sobukwe Road behind Transnet Park Bellville South	
ISSUE DATE AND COLLECTION DATE DEADLINE	Documents may be detected during working hours between 00,000 16,000 from	
COMPULSORY BRIEFING SESSION	Refer to "formal bliefing" Paragraph 2 for details.	
CLOSING DATE	10:00 or Thes lay 06 September 2016 Tendent's must ensure that tenders are delivered timeously to the correct address. As a general role of a tender is late or delivered to the incorrect address, it will not be accepted for consideration.	
VALIDITY PERIOD	Tenderers are to note that they may be requested to extend the validity period of their render, 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. FORMAL BRIEFING

A compulsory pre-proposal Tender briefing will be conducted **on Monday, 29 August 2016,** at **11:00 [11 O'clock] Tenderers are to meet at Transnet Freight Rail Spioenkop Saldanha. For directions please contact Petrus Oosthuizen on cell no. 071 889 8325. Tenderers to bring their own PPE (personal protective equipment) and I.D document. [Tenderers to provide own transportation and accommodation]. The briefing session will start punctually and information will not be repeated for the benefit of Tenderers arriving late.**

- 2.1 A Certificate of Attendance in the form set out in the **Returnable Schedule T2.2-15** hereto must be completed and submitted with your Tender as proof of attendance is required for a **compulsory** site meeting and/or tender briefing. Tenders are required to bring this **Returnable Schedule T2.2-15** (attached to the **Tender document**) to the briefing session to be signed by the *Employer's* Representative.
- 2.2 Tenderers failing to attend the compulsory tender briefing will be disqualified.
- 2.3 Respondents without a valid RFP document in their possession will not be allowed to attend the RFP briefing.

3. TENDER SUBMISSION

Tender Offers must be submitted in a sealed envelope addressed as follows:

The Secretariat, Transnet Freight Rail Acquisition Council

RFQ No: CPT 1616433.001

Description: SUPPLY, INSTALL AND COMMISSION SMART ENERGY METER AND RELATED NETWORK AND COMMUNICATION INFRASTRUCTURE AT STEELED TRANSNET TRACTION

FEEDER SUBSTATIONS ALONG THE SISHEN SALDANNA TRON ORE RAIL LINE

Closing date and time:

Tuesday, 06 September 2016 at 10:0

Closing address:

[Refer to options in paragraph 4 below]

All envelopes must reflect the return address of the Pespe dent on the reverse side.

4. DELIVERY INSTRUCTIONS FOR TENDER

4.1. Delivery by hand

If delivered by hand, the envelope must be deposited in the Transnet tender box which is located at The On the Ground Floor, Behin Acception and must be addressed as follows:

THE SECRETARIAT

TRANSMET FRESHT RAIL ACQUISITION COUNCIL

6TH FLOC

TI ANS NET ARK

OF ROBERT SOBUKWE ROAD

LLVILLE

The measurements of the "tender slot" are 400mm wide \times 100mm high, and Tenderers must please ensure that tender documents or files are no larger than the above dimensions. Tenders which are too bulky [i.e. more than 100mm thick] must be split into two or more files, and placed in separate envelopes, each such envelope to be addressed as required in paragraph 3 above.

4.2 Dispatch by courier

If dispatched by courier, the envelope must be addressed as follows and delivered to the Office of The Secretariat, Transnet Freight Rail Acquisition Council and a signature obtained from that Office:

THE SECRETARIAT

TRANSNET FREIGHT RAIL ACQUISITION COUNCIL

6TH FLOOR

TRANSNET PARK

OFF ROBERT SOBUKWE ROAD

BELLVILLE

- 4.3 If tender offers are not delivered as stipulated herein, such tenders will not be considered.
- 4.4 No email or faxed tenders will be considered, unless otherwise stated herein.
- 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.
- 4.6 Envelopes must not contain documents relating to appropriate than that shown on the envelope.

5. 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. Separticular, please note that Transnet reserves the right to:

- 5.1 a) Modify the tender services and request Tenderers to re-tender on any changes;
 - b) Reject any tender which does not conform to instructions and specifications which are detailed herein;
 - c) Disqualify terder, submitted after the stated submission deadline [closing date];
 - d) Not necessary accept the lowest priced tender or an alternative Tender;
 - e) Go to the open market if the quoted rates (for award of work) are deemed unreasonable;
 - f) Rejust all tenders, if it so decides;
 - g) Withdraw the tender on good cause shown;
 - h) Award business in connection with this tender at any time after the tender closing date;
 - i) Award business for only a portion of the proposed services which are reflected in the scope of this tender
 - j) Split the award of business between more than one service providers should it be more advantageous in terms of, amongst others, cost or developmental considerations at Transnet's discretion;
 - k) 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 cancel the contract;

- To request audited financial statements or other documentation for the purposes of a due diligence exercise;
- m) Not accept any changes or purported changes by the Tenderer to the tender rates after the closing date;
- n) To 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;
- o) Undertake post-tender negotiations with those persons/Tenderers appearing on the list of preferred Tenderers once such list is approved by relevant person(s) with delegated authority;
- p) 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.
- q) To award the business to the highest scoring Tenderer/s unless spicince criteria justify the award to another Tenderer.

In addition, Transnet reserves the right to exclude any Tenderers from the bidding process who has been convicted of a serious breach of law during the preceding 5 [five] years including by not limited to breaches of the competition Act 89 of 1998. Respondents are required to indicate in tender returnable [cause 12 on T2.2-43], [breach of law] whether or not they have been found guilty of a serious breach of law during the past 5 [five] years.

Should the preferred Tenderer fail to sign or can mence with the contract within a reasonable period after being requested to do so, Transnet reserves the right at ward the business to the next ranked Tenderer, provided that he/she is still prepared to provide the required got is at the quoted rate.

6. NATIONAL TREASURY SUPPLIER REGISTRATION

In terms of paragraph 5.5 of the NATIONAL TREASURY SCM INSTRUCTION NO 4 OF 2016/2017, which became effective on 1 May 2016, Transpir transport may only award bids to suppliers after verifying that the supplier is registered as prospective suppliers on the National Treasury Central Supplier Database.

Please follow the following steps to register your company on the National Treasury Central Supplier Database and confirm your registration by submitting your National Treasury "MAAA" supplier reference number.

- Step 1: Access the CSD site on https://secure.csd.gov.za/
- Step 2: Register a new CSD account https://secure.csd.gov.za/Account/Register
- Step 3: Receive an activation email and click activate account
- Step 4: Activate account by requesting and entering the OTP
- Step 5: Log in the CSD
- Step 6: Complete supplier identification information
- Step 7: Complete contact information

- Step 8: Complete address information
- Step 9: Complete bank account information
- Step 10: Complete tax information
- Step 11: Complete directors/members information (if non-CIPC company)
- Step 12: Complete associations (if relevant)
- Step 13: Complete commodities information
- Step 14: Complete B-BBBEE information (future phase)
- Step 15: Maintain users
- Step 16: Complete notification information
- Step 17: Complete accreditations
- Step 18: Click on submit
- Step 19: A CSD supplier number and unique registration reference number is auto-generated and communicated

Kindly note that Transnet will not reimburse any Tenderer for any proparatory costs or other work performed in connection with this Tender, whether or not the Tenderer is a warded a contract.

Transnet urges its clients, suppliers and the general public to report any fraud or corruption to TIP-OFFS ANONYMOUS: 08 0 003 056 OR Transnet@tip-offs.com

Transnet has appointed a Procurement Ombodsman of investigate any material complaint in respect of RFPs exceeding R5million [five million S.A. Rand] in value, should a Respondent have any material concern regarding an RFP process which meets this threshold, a complaint may be lodged with the Ombudsman for further investigation. The Ombudsman reserves the right to refer the control of the contr

It is incumbent on the Cesp index to familiarise himself/herself with the Terms of Reference OF the Ombudsman which are available for review at cransnet'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 abovementioned threshold, a complaint may be lodged with the Chief Procurement Officer of the relevant Transnet Operating Division/Specialist Unit.

Respondents are to 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 Bidder on its List of Excluded Bidders

ACKNOWLEDGMENT OF RECEIPT OF DOCUMENTS AND INTENTION TO TENDER

(To be returned within 5 days after receipt)

Project No.:

Tender No.:

Closing

1616433

CPT 1616433.001

Tuesday, 06 September 2016

	Date	
		V
For: SUPPLY, INSTALL AND COMMISSION SMART		
COMMUNICATION INFRASTRUCTURE AT SELECTED	TRANSNET TRACTION FEE	DER SUBSTATIONS ALONG
THE SISHEN SALDANHA IRON ORE RAIL LINE		
We: Do wish to tender for the work and shall return above	our types by the due date	Check Yes □
Do not wish to tender on this occasion and	herewith return all your	No 🗆
documents received		1
REASON FOR NOT TENDERING;		
	-	
COMPANY'S NAME, ADDRESS, CONTACT, PHONE AND TELEF	AX NUMBERS	
CICNATURE		
SIGNATURE:		
TITLE:		
M. J. 2015		

March 2015

FAX TO:

Transnet Freight Rail

Attention: Celeste Jacobs

Email: celeste.jacobs@transnet.net

Part T1: Tendering procedures

T 1.1: Tender Notice and Invitation to Tender

T1.2 TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in Annex F of the CIDB Standard for Uniformity in Construction Procurement (January 2009) as published in Government Gazette No 31823, Board Notice 12 of 2009 of 30 January 2009, subsequently amended (May 2010), Board Notice 86 of 2010. (See www.cidb.org.za)

The Standard Conditions of Tender make several references to Tender Data for details that apply specifically to this tender. This 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		Dața
F.1.1	The <i>Employer</i> is	Transnet 90C Ltd (Rcg No. 1990/000900/30)
F.1.2	The tender documents issued by the E	ir ployer 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 11: "greements and contract data	C1.1 Form of offer and acceptance C1.2 Contract data (Part 1 & 2)
	Part C2: Pricing data	C2.1 Pricing instructions C2.2 Price List
	Part C3: Scope of work	C3 Works Information
	Part C4: Site information	C4 Site information
F.1.4	The Employer's agent is:	Contract Assistant
	Name:	Celeste Jacobs
	Address:	Beliville Square, off Modderdam Road, behind, Transnet Park, Beliville South

March 2015

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Part 1: Tendering Procedures T1.2: Tender Data Tel No.

021 940 1887

E - mail

Celeste.jacobs@transnet.net

- F1.6 The competitive negotiation procedure may be applied.
- F.2.1 Only those tenderers who satisfy the following eligibility criteria are eligible to submit tenders:
 - 1. Tenderers will only be considered if:
 - a) Technical Compliance Sheet to be complete, sign and stamped
 - b) Price List
 - c) Form of Offer
 - d) A minimum BBBEE criteria of a Level 4 is required to participate in this bid process.
 - e) Registered with Department of Labour as Electrical Contractor in terms of the Electrical Installation Regulations 2009
 - f) Qualified Electrician with Trade papers
 - 2. Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in 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 3 EP or higher class of construction work, are eligible to have their tenders evaluated.

3. Joint Venture (2V)

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

- 1. wry he liber of the joint venture is registered with the CIDB;
- the lead partner has a contractor grading designation in the 3 EP or higher class of construction work; and
- 3. 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 3 EP 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
- 4. the Contractor shall provide the employer with a certified copy of its signed joint venture agreement;
- 5. and in the event that the joint venture is an 'Incorporated Joint Venture' the Memorandum of Incorporation to be provided within 4 (four) weeks of the Contract Date.

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4. Pre-Qualifying Quality (Functionality) Criteria)

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

In the event that all tenderers that are evaluated in terms of quality (functionality) do not meet the minimum stipulated points (threshold) or quality (functionality), Transnet reserves the right to lower the minimum stipulated threshold points (threshold) from 60 to 50 points.

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

Quality criteria	Sub Weight	Maximum number of points
 Program Prepare Safety File in accordance with the Health and safety act 85 Safety induction Establishment to site Ordering of optic fibre related material Ordering of electrical instrumentation material Install Optic fibre cable and connect both ends Install instrumentation Program and test instrumentation De establishment 	30	30
 Quality Management Pien A sign off coccess at to be produced showing critical holding points The Contractors Quality Policy Checklisterior various activities Proof of previous COC's Management organogram (proof of creditation diplomas etc.) 	20	20
Health and Safety Plan - A health and safety plan to be submitted in accordance with the OHSA1993 and Transnet Freight Rail's Health and Safety Specification TFR-ISM-RN-R&C-F009 which shall include for risk assessment. - A safety organogram to be submitted & Certificates to be attached / accompanied - Works method statement	20	20

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Part 1: Tendering Procedures T1.2: Tender Data

Previous Experience - Proof of previous Smart Meters, related Network and communication infrastructure experience on Transnet Substations	30	30
Apply electrical high voltage instruction when working in the vicinity of or near exposed " live" high voltage overhead equipment		
Maximum possible score for quality (W _Q)		100

Quality shall be scored by not less than three evaluators and averaged in accordance with the schedules below. Failure to submit these schedules will result by a tenderer scoring zero.

- T2.2-2 Programme
- T2.2-20 Quality Management Plan
- T2.2-22 Health and Safety
- T2.2-25 Previous Experience

The minimum number of evaluation points or quality is 60.

Each evaluation criteria will be assessed in terms of scores of 0, 40, 70, 90 or 100. The scores of each of the evaluators will be averaged, weighted and then totalled to obtain the final score for quality, unless scores collectively. (See CIDB Inform Practice Note #9)

Note: Any tender not complying with the above mentioned stipulations, will be regarded as non-responsive and will therefore <u>not</u> be considered for further evaluation

F.2.7 The arrangements for a compulsory clarification meeting are as stated in the Tender Notice and Invitation to Tender.

Tenderers houst sign the attendance list in the name of the tendering entity. Addenda will be issued to and tenders will be received only from those tendering entities appearing on the attendance list.

F.2.13.3 Parts of each tender offer communicated on paper shall be as an original.

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Part 1: Tendering Procedures T1.2: Tender Data F.2.13.5 The Employer's details and address for delivery of tender offers and identification details that are to be shown on each tender offer package are:

Location of tender box

On the Ground Floor behind reception

(TRANSNET FREIGHT RAIL)

Physical address:

 6^{TH} Floor Transnet Park, off Robert Sobukwe,

behind Transnet Park, Bellville South

Identification details:

The tender documents must be submitted labelled with:

- Name of Tenderer:
- Contact person and details:
- The Tender Number: CPT 15 013 001
- The Tender Description SURPLY, INSTALL AND COMMISSION SMAPT ENERGY METERS AND RELITED NETWORK AND COMMUNICATION INFRASTRUCTURE AT SELECTED TRANSMET TRACTION FEEDER SUBSTATIONS ALONG THE SISHEN SALD WITH IRON ORE RAIL LINE

Documents must be marked for the attention of The Secretariat, Transnet Freight Rail A quisition Council

Proor arrangement on the submittal of large tender documents should be made with the Procurement Manager.

NO LATE TENDERS WILL BE ACCEPTED

F.2.13.9	Telephonic telegraphic, facsimile or e-mailed tender offers will not be accepted.
F.2.15	The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender.
F.2.16	The tender offer validity period is Ninety (90) Business Days from Closing Date
F.2.23	The tenderer is required to submit with his tender: 1. An original valid Tax Clearance Certificate issued by the South African Revenue Services;

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- 2. A valid certified SANAS or IRBA B-BBEE accreditation certificate, and
- 3. Certified Letter of Good Standing

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

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Part 1: Tendering Procedures

T1.2: Tender Data

- F.3.11.3 The procedure for the evaluation of responsive tenders is Method 2.
- F.3.11.7 The financial offer will be scored using Formula 2 (option 1) in Table F.1 where the value of W_1 is:

90 where the financial value inclusive of VAT of one or more responsive tenders received have a value in excess of R 1,000 000

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, Transnet reserves the right to award no points and/or declare the tender void. Transnet also reserves the right to can be out an independent audit of the tenderers scorecard components at any stage from the date of close of the tenders until completion of the contract. Tenderers with no accreditation will score zero points for preferencing.

Note: In the event that, in the application of the 90/10 preference point system as stipulated, all tenders received are equal to, or higher than P1 000 000, the tender invitation must be cancelled

- F.3.13 Tender offers will only be accepted if:
 - a) The tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading lesignation;
 - b) the tenderer or any of its directors/shareholders is not listed on the Register of Tender Defaulters in terms of the recention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector;
 - c) the tenderer does not ppear on Transnet list for restricted tenderers;
 - d) 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 are permitted to submit tenders or participate in the contract;
 - e) the tentierer is registered and in good standing with the compensation fund or with a licensed compensation insurer;
 - f) the Employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2014, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely.
 - g) the tenderer fully and properly completes T2.2-34 Supplier Declaration Form
- F.3.17 The number of paper copies of the signed contract to be provided by the Employer is 1 (one).

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Part 1: Tendering Procedures T1.2: Tender Data

T1.3 CIDB Standard Conditions of Tender

July 2015 Edition



As published in Annexure F of the cidb Standard for Uniformity for construction Procurement, Board Notice 136 Government Gazette No 38960 of 10 July 2015

F.1 General

F.1.1 Actions

- F.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 it. F.2 and F.3, timeously and with integrity, and behave equitably, honestly and transparently, comply with all legal obligations and not engage in inticompetitive practices.
- F1.1.2 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 of 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.
 - A conflict of interest may arise due to a conflict of roles which might provide an inventive 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.
- F.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.

F.1.2 Tender Documents

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

F.1.3 Interpretation

- **F.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.
- F.1.3.2 These conditions of tender, the tender data and tender schedules which are only required for tender evaluation purposes, shall not form part of any contract arising from the invitation to tender.
- **F.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 impactially;
 - ii) an individual or organisation 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 organisation which employs that employee.
 - b) comparative offer means the price offer he 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 ffering, 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 or the adaptive set artificial levels;
 - e) **organization** means a company, firm, enterprise, association or other legal entity, whether incorporated or not, or a public body;
 - f) **reactionality** means the measurement according to the predetermined norms of a service or commodity designed to be practical and useful, working or operating, taking into account quality, reliability, viability and durability of a service and technical capacity and ability of a tenderer.

F.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.

F.1.5 Cancellation and Re-Invitation of Tenders

- F.1.5.1 An organ of state 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 services, works or goods requested; or
 - (b) funds are no longer available to cover the total envisaged expenditure; or

(c) no acceptable tenders are received.

The employer may accept or reject any variation, deviation, tender offer, or alternative tender offer, and may cancel the tender process and reject all tender offers at any time before the formation of a contract. The employer shall not accept or incur any liability to a tenderer for such cancellation and rejection, but will give written reasons for such action upon written request to do so.

F1.5.2 The decision to cancel a tender must be published in the cidb website and in the government Tender Bulletin for the media in which the original tender invitation was advertised.

F.1.6 Procurement procedures

F.1.6.1 General

Unless otherwise stated in the tender data, a contract will, subject to F.3.13, be concluded with the tenderer who in terms of F.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 the closing time for tenders.

F.1.6.2 Competitive negotiation procedure

- F.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 F.3.4, the employer shall announce only the names of the tenderers who make a submission. The requirements of F.3.8 relating to the material deviations or qualifications which affect the competitive position of tenderers shall not apply.
- F.1.6.2.2 All responsive tenderers, or not less than three responsive tenderers that are highest ranked in teleps of the evaluation method and evaluation criteria stated in the tender data, shall be invited in each round to enter into competitive negotiations, based on the principle of equal treatment and keeping confidential the proposed solutions and associated information. Notwithstanding the provisions of F.2.17, the employer may request that tenders be clarified, specified and fine-tuned in order to improve a tenderer's competitive position provided the 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.
- F.1.6.2 At the conclusion of each round of negotiations, tenderers shall be invited by the employer to make a fresh 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.
- F.1.6.2.4 The contract shall be awarded in accordance with the provisions of F.3.11 and F.3.13 after tenderers have been requested to submit their best and final offer.

F.1.6.3 Proposal procedure using the two stage-system

F.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.

F.1.6.3.2 Option 2

- **F.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.
- **F.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.

F.2 Tenderer's obligations

F.2.1 Eligibility

- F.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.
- F.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 chieria which formed part of the qualifying requirements used by the imployer 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.

F.2.2 Cost of tendering

- F2.2.1 Accept that, unless otherwise states 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.
- The cost of the tender cocuments charged by the employer shall be limited to the actual cost incurred by the employer for printing the documents. Employers must attempt to make a gillable the tender documents on its website so as not to incur any costs pertaining to the printing of the tender documents.

F.2.3 Check documents

Check the tender acsultients on receipt for completeness and notify the employer of any discrepancy or mission.

F.2.4 Confidentiality and copyright of documents

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

F.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.

F.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.

F.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.

F.2.8 Seek clarification

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

F.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.

F.2.10 Pricing the tender offer

- F.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 14 days before the closing time stated in the tender data.
- **F.2.10.2** Show VAT payable by the employer separately as an addition to the tendered total of the prices.
- F.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.
- F.2.10.4 State the rates and prices in Rand unless instructed otherwise in the tender data. The conditions of contract identified 1 the contract data may provide for part payment in other currencies.

F.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 slightly itial all such alterations.

F.2.12 Alternative tender offers

- F.2.12.1 Unless othewish 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.
- **F.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.
- F.2. 2.3 An alternative tender offer may only be considered in the event that the main tender offer is the winning tender.

F.2.13 Submitting a tender offer

- **F.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, services or supply identified in the contract data and described in the scope of works, unless stated otherwise in the tender data.
- **F.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.
- F.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 language other than English, and the parts communicated electronically in the same format as they were issued by the employer.

- **F.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.
- F.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.
- 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.
- F.2.13.7 Seal the original tender offer and copy packages and identification details as stated in the tender data.
- **F.2.13.8** Accept that the employer will not assume any responsibility for the misplacement or premature opening of the tender offe, if the outer package is not sealed and marked as stated.
- **F.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.

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

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

F.2.15 Closing time

- F.2.15.1 Ensure that he employer receives the tender offer at the address specified in the tender data no later than the closing time stated in the tender data. Accept that proof of posting shall not be accepted as proof of delivery.
- F.2.15.2 According 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 cented deadline.

F.2.16 Tender offer validity

- F.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.
- **F.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.
- **F.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.
- **F.2.16.4** Where a tender submission is to be substituted, submit a substitute tender in accordance with the requirements of F.2.13 with the packages clearly marked as "SUBSTITUTE".

F.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 F.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.

F.2.18 Provide other material

- F.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 notalized joint venture agreements), preferencing arrangements, or samples of ma erials, 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-responding.
- **F.2.18.2** Dispose of samples of materials provided for valuation by the employer, where required.

F.2.19 Inspections, tests and analysis

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

F.2.20 Submit securities, bonds, policies, etc.

If requested, submit for the employer 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.

F.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

F.2.22 Return of other tender a cuments

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

F.2.23 Certifica c

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

F.3 The employer's undertakings

F.3.1 Respond to requests from the tenderer

- F.3.1.1 Unless otherwise stated in the tender Data, respond to a request for clarification received up to five working days before the tender closing time stated in the Tender Data and notify all tenderers who drew procurement documents.
- F.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.

F.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 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 drew documents.

F.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.

F.3.4 Opening of tender submissions

- F.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. Tend or submissions for which acceptable reasons for withdrawal have been submitted will not be opened.
- F.3.4.2 Announce at the meeting had immediately after the opening of tender submissions, at a venue indicated in the tender data, the name of each tenderer whose tender offer is extended 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.
- F.3.4.3 Make available the record outlined in F.3.4.2 to all interested persons upon request

F.3.5 Two-envelope system

- F.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.
- F.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.

F.3.6 Non-disclosure

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.

F.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.

F.3.8 Test for responsiveness

- **F.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 cocuments.
- F.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 o Work,
 - b) significantly change the Employer's of 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.
 - d) Reject a non-responsive ender offer, and not allow it to be subsequently made respon ive by correction or withdrawal of the non-conforming deviation of reservation.

F.3.9 Arithmetical errors, omissions and discussancies

- F.3.9.1 Check the highest ranked tender or tenderer with the highest number of tender evaluation points after the evaluation of tender offers in accordance with F.3.11 for:
 - a) the gross mist arement of the decimal point in any unit rate;
 - b) omissions made in completing the pricing schedule or bills of quantities; or
 - c) (ith netic errors in:
 - ine 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.
- **F.3.9.2.** The employer must correct the arithmetical errors in the following manner:
 - a) Where there is a discrepancy between the amounts in words and amounts in figures, the amount in words shall govern.
 - b) 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.
 - c) 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.

d) Consider the rejection of a tender offer if the tenderer does not correct or accept the correction of the arithmetical error in the manner described above.

Clarification of a tender offer F.3.10

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

F.3.11 **Evaluation of tender offers**

F.3.11.1 General

Appoint an evaluation panel of not less than three persons. Reduce each responsive tender offer to a comparative offer and evaluate them using the tender evaluation methods and associated evaluation criteria and weightings that are specified in the tender data.

F.3.11.2 Method 1: Price and Preference

In the case of a price and preference:

- 1) Score tender evaluation points for price.
- 2) Score points for BBBEE contribution.
- 3) Add the points scored for price and BBBEE

F.3.11.3 Method 2: Functionality, Price and Pres

In the case of a functionality, price and pleference:

- Score functionality, rejecting all to a roffers that fail to achieve the minimum number of points for functionality as stated in the Tender Data.
- No tender must be regarded as an acceptable tender if it fails to achieve the minimum qualifying score functionality as indicated in the tender invitation.
- Tenders that have achieved the minimum qualification score for functionality must be e all ated author in terms of the preference points system prescribed in paragraphs 4 and 4 and 5 below.

The 80/20 preference point system for acquisition of services, works or goods up to Rand value of R1 million

> (i) The following formula must be used to calculate the points for price in respect of tenders(including price quotation) with a rand value equal to, or above R 30 000 and up to Rand value of R 1 000 000 (all applicable taxes included):

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

Where:

Ps = Points scored for comparative price of tender or offer under consideration; Pt = Comparative price of tender or offer under consideration; and

Pmin = Comparative price of lowest acceptable tender or offer.

- (4) (a)(ii) An employer of state may apply the formula in paragraph (i) for price quotations with a value less than R30 000, if and when appropriate:
- (4) (b) Subject to subparagraph(4)(c), points must be awarded to a tender for attaining the B-BBEE status level of contributor in accordance with the table below:

B-BBEE status level of contributor

Number of points

Non-compliant contributor	0
8	2
7	4
6	6
5	8
4	12
3	16
2	18
1	20

- (4) (c) A maximum of 20 points may be allocated in accordance with subparagraph (4)(b)
- (4) (d) The points scored by tender in respect of B-BBEE contribution contemplated in contemplated in subpar graph (4) (b) must be added to the points scored for price as calculated accordance with subparagraph (4)(a).
- (4) (e) Subject to paragraph 4.3.8 the contract must be awarded to the tender who scores the highest total number of points.

The 90/ 10 preference points system for acquisition f services, works or goods with a Rand value above R 1 million

(5)(a) The following formula must be used to calculate the points for price in respect of tenders with a Rand value above R1 000 000 (all applicable taxes included):

90/10

$$Ps=90\left(1=\frac{Pt-Pmin}{Pmin}\right)$$

Where

Ps = Points scorescomparative price of tender or offer under consideration;

Pt = Comparative price of tender or offer under consideration; and

Pmin = Comparative price of lowest acceptable tender or offer.

(5)(b)Subject to Subparagraph(5)(c), points must be awarded to a tender for attaining the BBBEE status level of contributor in accordance with the table below:

B-BBEE status level of contributor	Number of points
1	10
2	9
3	8

4	5	
5	4	
6	3	
7	2	
8	1	
Non-compliant contributor	0	

- (5)(c)A maximum of 10 points may be allocated in accordance with subparagraph (5)(b).
- The points scored by tender in respect of B-BBEE contribution contemplate in contemplated in (5)(d)subparagraph (5) (b) must be added to the points scored for price as calculated in accordance with subparagraph (5)(a).
- (5)(e)Subject to paragraph 4.3.8 the contract must be awarded to the wno scores the highest total number of points.

F.3.11.6 **Decimal places**

Score price, preference and functionality, as relevant, to two decimal places.

F.3.11.7 **Scoring Financial Offers**

Score price of remaining sive tender offers using the following espol formula:

 $NFO = W_1 \times A$

where:

re number of tender evaluation points awarded for price.

W1 is the maximum possible number of tender evaluation points

varted for price as stated in the Tender Data. Is a number calculated using the formula and option described in

pble F.1 as stated in the Tender Data.

Table F.1: Formulae for culating the value of A

		1) I, •
lighest price or discount	$A = (1 + (\underline{P - Pm}))$ \underline{Pm}	A = P/Pm
owest price or percentage ommission / fee	A = (1 - (<u>P - Pm</u>)) Pm	A = Pm / P
	owest price or percentage	owest price or percentage ommission / fee $A = (1 - (P - Pm))$

P is the comparative offer of the tender offer under consideration.

F.3.11.8 Scoring preferences

Confirm that tenderers are eligible for the preferences claimed in accordance with the provisions of the tender data and reject all claims for preferences where tenderers are not eligible for such preferences.

Calculate the total number of tender evaluation points for preferences claimed in accordance with the provisions of the tender data.

F.3.11.9 Scoring quality

DESCRIPTION: SUPPLY, INSTALL AND COMMISSION SMART ENERGY METERS AND RELATED NETWORK AND COMMUNICATION INFRASTRUCTURE AT SELECTED TRANSNET TRACTION FEEDER SUBSTATIONS ALONG THE SISHEN SALDANHA IRON ORE RAIL LINE

Score each of the criteria and subcriteria for quality in accordance with the

Calculate the total number of tender evaluation points for quality using the following formula::

No = W2x So/Ms

provisions of the Tender Data.

where:

So is the score for quality allocated to the submission under consideration;
Ms is the maximum possible score for quality in respect of a submission; and
W2 is the maximum possible number of tender evaluation points awarded for the quality
as stated in the tender data:

F.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 employer to provide.

F.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 up 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 to the contract,
- d) is not insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act, 2 108 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 alite, in the opinion of the employer, to perform the contract free of conflicts of interes.

F.3.14 Prepare contract documents

- **F.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.
- **F.3.14.2** Complete the schedule of deviations attached to the form of offer and acceptance, if any.

F.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.

F.3.16 Notice to unsuccessful tenderers

- **F.3.16.1** Notify the successful tenderer of the employer's acceptance of his tender offer by completing and returning one copy of the form of offer and acceptance before the expiry of the validity period stated in the tender data, or agreed additional period.
- **F.3.16.2** After the successful tenderer has been notified of the employer's acceptance of the tender, notify other tenderers that their tender offers have not been accepted.

F.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.

F.3.18 Provide written reasons for actions taken

Provide upon request written reasons to tenderers for any action that it 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.

F3.19 Transparency in the procurement process

- F3.19.1 The cidb prescripts require that tenders must be advertised and be registered on the cidb i.Tender system.
- F3.19.2 The employer must adopt a transparency rodel that incorporates the disclosure and accountability as transparency requirements in the procurement process.
- F3.19.3 The transparency model must identify the criteria for selection of projects, project information template and the threshold value of the projects to be disclosed in the public domain at various intervals of delivery of infrastructure projects.
- F3.19.4 The client must publish the information on a quarterly basis which contains the following information.

Procurement planning process

- Procurement manned and evaluation process
- Contact vne
- Optract status
- Jumber of firms tendering
 - Cost estimate
 - Contract title
- Contract firm(s)
- Contract price
- Contract scope of work
- Contract start date and duration
- Contract evaluation reports
- F3.19.5 The employer must establish a Consultative Forum which will conduct a random audit in the implementation of the transparency requirements in the procurement process.
- F3.19.6 Consultative Forum must be an independent structure from the bid committees.
- F3.19.7 The information must be published on the employer's website.

F 3.19.8 Records of such disclosed information must be retained for audit purposes.

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T2.1 List of Returnable Documents

1. These schedules are required for eligibility purposes:

Tenders comply with the Technical Compliance Sheet. (complete, sign and stamp)

Price List

Form of Offer

2. These schedules will be utilised for the evaluation of Functionality Criteria

T2.2-2 Programme

T2.2-20 Quality Management Plan

T2.2-22 Health and Safety Plan

T2.2-25 Previous experience

3. Returnable Schedules

T2.2-1 Changes to tender documents

T2.2-3 Risk Elements

T2.2-4 Availability of equipment and other resources

T2.2-7 Management and CV's of key People

T2.2-8 Schedule of proposit Subcontractors/consultants

T2.2-9 Insurance profiled by the Contractor

T2.2-10 Ste Establishment requirements

T2.2-14 Authority to submit tender

T2.2-15 Certificate of attendance at tender clarification meeting

T2.2-16 Record of addenda to tender documents

T2.2-17 Compulsory Enterprise Questionnaire

T2.2-21 Environmental Management Plan

T2.2-27 Broad-Based Black Economic Empowerment and Socio-Economic Obligations

T2.2-31 Supplier Integrity Pact

T2.2-33 Mutual Non-Disclosure Agreement

T2.2-34 Supplier Declaration Form

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Part T2: Returnable Documents T2.2: Returnable Schedules

T2.2-36	RFQ Declaration Form
T2.2-37	Method Statement
T2.2-38	Declaration of Understanding (Environmental and Health & Safety)
T2.2-43	RFQ – Breach of Law
T2.2-50	B-BBEE Preference Points Claim Form
T2.2-51	Certificate of Acquaintance with Tender Documents

- , PREVILEN 4. C1.1: Offer portion of Form of Offer & Acceptance
- C1.2: Contract Data Part 2: Data by Contractor
- C2.2: Price List

T2.2 Returnable Schedules

T2.2-1	Changes to tender documents
T2.2-2	Program
T2.2-3	Risk Elements
T2.2-4	Availability of equipment and other resources
T2.2-7	Management and CV's of Key People
T2.2-8	Schedule of proposed Subcontractors/consultants
T2.2-9	Insurance provided by the Contractor
T2.2-10	Site Establishment requirements
T2.2-14	Authority to submit tender
T2.2-15	Certificate of attendance at tender clarification meeting
T2.2-16	Record of addenda to tender documents
T2.2-17	Compulsory Enterprise Questionnaire
T2.2-20	Quality Management Plan
T2.2-21	Environmental Management Plan
T2.2-22	Health and Safety Plan
T2.2-25	Previous experience
T2.2-27	Broad-Based Black Economic Empowerment and Socio-Economic Obligations
T2.2-31	Supplier Integrity Part
T2.2-33	Mutual non-bisclosure Agreement
T2.2-34	Supplier Declaration Form
T2.2-36	RFQ Declaration Form
T2.2-37	Method Statement
T2.2-38	Declaration of Understanding (Environmental and Health & Safety)
T2.2-43	RFQ – Breach of Law
T2.2-50	B-BBEE Preference Points Claim Form
T2.2-51	Certificate of Acquaintance with Tender Documents
Technical Co	ompliance Sheet

T2.2-1: 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:

- **F.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.
- **F.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
Signed	Date
Name 	Position
Tenderer _	

March 2015 Page 1 of 1

Part T2: Returnable Schedules

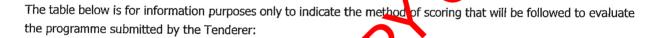
T2.2-1: Changes to Tender Documents

T2.2-2: Programme: Pre - Qualifying Quality (Functionality) Criteria

The Tenderer details the proposed programme below or makes reference to his proposed programme and attaches it to this schedule. If the Tenderer is awarded the contract this document will become the Accepted Programme, subject to Clarifications issued by the Employer.

Please provide your proposed programme, inclusive but not limited to the following:

- Prepare Safety File in accordance with the Health and Safety Act 85
- Safety Induction
- Establishment on Site
- Ordering of optic fibre related material
- Ordering of electrical instrumentation material
- Install Optic fibre cable and connect both ends
- Install instrumentation
- Program and test instrumentation
- De-establishment



Scoring will be as follows:

	Programme	
No Response (score 0)	The tenderer has submitted no information or inadequate information to determine a score.	
Poor (score 40)	The programme is poor and is unlikely to satisfy project objectives or requirements. The tendeder has misunderstood certain aspects of the scope of the works and does not deal with the critical aspects of the project.	
Satisfactory (score 70)	The programme is generic and not tailored to address specific project objectives. The programme does not adequately deal with the critical characteristics of the project.	
Good (score 90) Very Good (score 100)	The programme addresses the specific project objectives and is sufficiently flexible to accommodate changes that may occur during execution. Besides meeting the "good" rating, the important issues are approached in an innovative and efficient way, indicating that the tenderer has outstanding	
	knowledge of state-of-the-art approaches.	

TRANSNET FREIGHT RAIL
ENQUIRY NUMBER: CPT 1616433,001
DESCRIPTION: SUPPLY, INSTALL AND COMMISSION SMART ENERGY METERS AND RELATED NETWORK AND COMMUNICATION
INFRASTRUCTURE AT SELECTED TRANSNET TRACTION FEEDER SUBSTATIONS ALONG THE SISHEN SALDANHA IRON ORE RAIL LINE

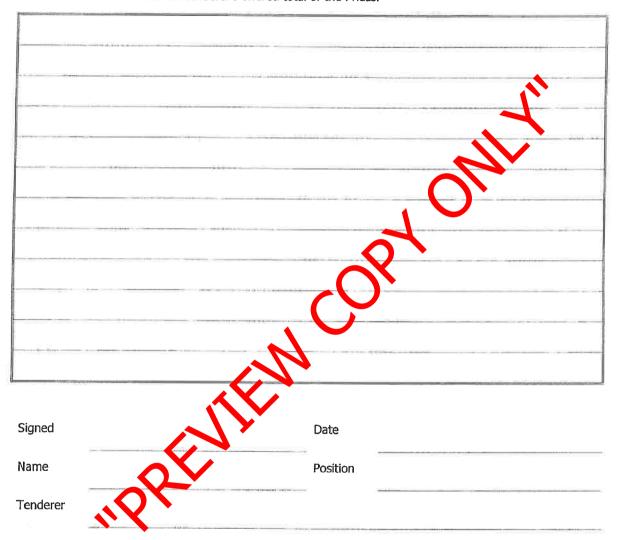
The undersigned, who warrants that he/she is duly authorised to do so on behalf of the Tenderer, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Signed	Date
Name	Position
Tenderer	rosition — — — — — — — — — — — — — — — — — — —
	, Ο'
_1	

T2.2-3: Risk Elements

Tenderers to review the potential risk elements associated with the Project. The risk elements are to be listed separately in this Schedule. If No Risks are identified "No Risks" must be stated on this schedule.

Notwithstanding this information, all costs related to risk elements which are at the *Contractor's* risk are deemed to be included in the tenderer's offered total of the Prices.



T2.2-4: Availability of Equipment and Other Resources

Tenderers to submit a list of all Equipment and specialised equipment to be used and other resources that he proposes to use to execute the work as described in the Works Information, as well as the availability and details of ownership for each item.

Number of Equipment	Equipment Type — Description	Hourly Rate
	Medicality	and the second s
W-0-17/17		20 V 12/4 Mar
		- Hinney
		at and a second of the second
		and the second s
		A SAUDO

Signed	Date
Name	Position
Tenderer	

T2.2-7: Management & CV's of Key Persons – ECSC¹

Please describe the management arrangements for the works.

Submit the following documents as a minimum with your tender document:

- 1. An organisation chart showing on site and off-site management (including the key people you have identified in the Contract Data Part two and identify the required legal appointments.)
- 2. CV's and proof of qualifications for people proposed for all identified posts including Safety Officer and Quality Assurance Representative.
- 3. Details of the location (and functions) of offices from which the works will be manage
- 4. Details of the experience of the staff who will be working on the works with respect to:
 - Working with the NEC3 Engineering and Construction Short Contract Option sen for this contract. If staff experience of these matters is limited, an indication, relevant training that they have attended would be helpful.
- 5. An explanation of how you propose to allocate adequate resources to enable you to comply with the requirements and prohibitions imposed on you by or unterme statutory provisions relating to health and safety,

Attached s	bmissions to this schedule:
Signed	Date
Name	Position
Tenderer	

¹NEC3 Engineering & Construction Short Contract (with amendments June 2006 and April 2013)

T2.2-8: Schedule of Proposed Subcontractors

We notify you that it is our intention to employ the following subcontractors for work in this contract.

If we are awarded a contract we agree that this notification does not change the requirement for us to submit the names of proposed Subcontractors in accordance with requirements in the contract for such appointments. If there are no such requirements in the contract, then your written acceptance of this list shall be binding between us.

	Name and address of proposed Subcontractor/ Consultant	Nature and extent of work	Previous experience with Subcontractor/ Consultant.	B-BBEEE Level Certificates to be attached	Value of subcontracts d Work (excl. 14% Vat)	% Ownership Black Ownership
1.					26	
2.			.(R		
3.			10			
4.						
5.		S	Y			
5	110					
iane			Dato		J	

Signed	Date	
Name	Position	International Control of the State of S
Tenderer		

T2.2-9: Insurance provided by the *Contractor*

Clause 84.1 in NEC3 Engineering & Construction Short 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.

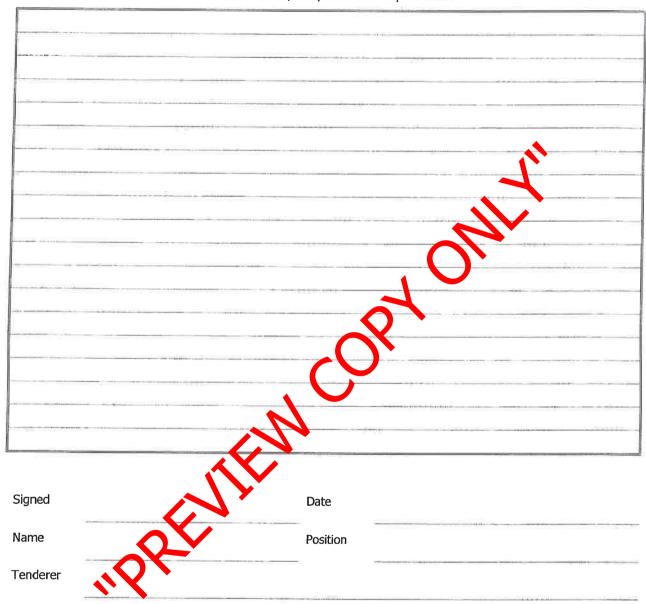
Please provide the following details for insurance which the *Contractor* is still to provide. Notwithstanding this information all costs related to insurance are deemed included in the tenderer's rates and prices.

Insurance against (See clause 82.1 of the ECSC)	Name of Insurance Company	Cover	Premium
Loss of or damage to the works.			
Loss of or damage to Equipment, Plant and Materials.		W.	
The Contractor's liability for loss of or damage to property (except the works, Plant and Materials and Equipment) and for bodily injury to or death of a person (not an employee of the Contractor) arising from or in connection with this Contractor's Providing the Works.	684		
Liability for death of or bodily injury to employees of the Contractor arising out of and in the course of their employment in connection with this contract	N		
(Other)			

.02			
Signed	Date		
Name	Position		
Fenderer	- Cliffing		P 000 4 - 00 - 04 - 010

T2.2-10: Site Establishment / Laydown Area

Tenderers to indicate their Site establishment and/or laydown area requirements:



T2.2-14: 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. Certificate for Company	
I,, chairperson	of the board of director of
, hereby confirm	
, was authorised to sign all document contract resulting from it on behalf of the company.	s in connection with this tender offer and any
Signed	
Name	Chairman of the Board of Directors
"bPENIL"	

B. Certificate for	Partnership		
We, the undersigne	d, being the key partners in the busines	ss trading as	
	hereby authorise Mr/Ms		
	, to sign all documents in conn	ection with the tender offer for Contr	act
	_ and any contract resulting from it on ou	behalf.	
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.

C. Certificate for Joint Venture		
We, the undersigned, are submitting thi , an authorised sign , acting in the capacity of i Contract and any contract	natory of the company lead partner, to sign all documents	
This authorisation is evidenced by the at partners to the Joint Venture.	ttached power of attorney signed by	legally authorised signatories of all the
Furthermore we attach to this Schedule all partners are liable jointly and severall to incur liabilities, receive instructions an and on behalf of any and all the partners	ly for the execution of the contract and payments and be responsible for	and that the lead partner is authorised
		Authorising signature, name (in

D. Certificate for Sole Proprietor		
I,	, hereby confirm th	at I am the sole owner of the business trading as
Signed	Date	
Name	Position	Sole Proprietor
		3
	N	
"bbr		

T2.2-15: Certificate of Attendance at Tender Clarification Meeting

This is to certi	fy that		
			(Tenderer)
of			(address)
was represent	ed by the person(s) named below at the comp	ulsory tender clarification mee	eting
Held at:	TRANSNET FREIGHT RAIL SPIOENKOP	SALDANHA	
On (date)	Monday, 29 August 2016	Starting time: 12.00 am	2
business to far in order for us rates and price We further und the <i>Employer I</i> working days b	er we undertake that by said persons attenmiliarise ourselves with all aspects of the work to take account of everything necessary to es included in the tender offer. I derstand that in addition to any quesies raised a Purchaser's Representative to request clarific person (s) attending the reseting:	ss / source / supply specified provide a responsive tender on behalf of us at the meetication of the tender document	in the tender documents offer and to compile our ng we may still approach
Name		Signature	
Capacity			
	f the above persons at the meeting was o	confirmed by the procuring	g organisation's
Name		Signature	
Capacity		Date & time	and the state of t

T2.2-16: Record of Addenda to Tender Documents

We confirm 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 tender offer:

1 2 3 4 5 5 6 7 8 9 9 10 10 Cttach additional pages if more space is required. Signed Date Name Position		Date	Title or Details
3 4 5 6 7 8 9 10 Signed Date	1		
4	2		
5 6 7 8 9 9 10 Attach additional pages if more space is required. Signed Date	3		
6 7 8 9 10 10 Signed Date	4		
7 8 9 10 Attach additional pages if more space is required. Signed Date	5		
9 10 Attach additional pages if more space is required. Signed Date	6	***	
10 Attach additional pages if more space is required. Signed Date	7		
Attach additional pages if more space is required. Signed Date	8		
Attach additional pages if more space is required. Signed Date	9		
Signed Date	10		
Name Position			
		Name	Position

T2.2-17: Compulsory Enterprise Questionnaire

The following particulars must be furnished.	In the case of a joint venture,	separate enterprise	questionnaires in
respect of each partner must be completed a	nd submitted.		

Section 1:	Name of enterprise:
Section 2:	VAT registration number, if any:
Section 3:	CIDB registration number, if any:

Section 4: Particulars of sole proprietors and partners in partnerships

Name	Identity number	Personal in some tax number

^{*} Complete only if sole proprietor or partnership and attach separate page if more than 3 partners

Section 5:	Particulars	of	companies	and	close	or	po.	atic	hs
------------	--------------------	----	-----------	-----	-------	----	-----	------	----

Company registration number	 	
Close corporation number	 	
Tax reference number	 	
10		

Section 6: Record in the service of the state

Indicate by marking the relevant boxes with a cross, if any sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months in the service of any of the following:

a member of any municipal council	an employee of any provincial department, national or
a member of any provincial legislature	provincial public entity or constitutional institution within the meaning of the Public Finance Management
a member of the National Assembly or the	Act, 1999 (Act 1 of 1999)
National Council of Province	a member of an accounting authority of any national
a member of the board of directors of any	or provincial public entity
municipal entity	an employee of Parliament on a provincial legislature
an official of any municipality or municipal entity	

If any of the above boxes are marked, disclose the following:

Name of sole proprietor, partner, director, manager,	Name of institution, set lie office, board or organ of state and position held	Status of service (tick appropriate column)		
principal shareholder or stakeholder		Current	Within last 12 months	

^{*}insert separate page if peces, try

Section 7: Record of spouses, children and parents in the service of the state

Indicate by marking the relevant boxes with a cross, if any spouse, child or parent of a sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months been in the service of any of the following:

a member of any municipal council	an employee of any provincial department, national or
a member of any provincial legislature	provincial public entity or constitutional institution within the meaning of the Public Finance Management Act,
a member of the National Assembly or the	1999 (Act 1 of 1999)
National Council of Province	a member of an accounting authority of any national or
a member of the board of directors of any	provincial public entity
municipal entity	an employee of Parliament or a provincial legislature
an official of any municipality or municipal entity	

Name of spouse, child or parent	Name of institution, public office, board or organ of state and position held		atus of service opriate column)
		Current	Within last 12 months
7.5			
-1111			

^{*}insert separate page if necessaria

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 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 of 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 tendered 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 with my personal knowledge and are to the best of my belief both true and correct.

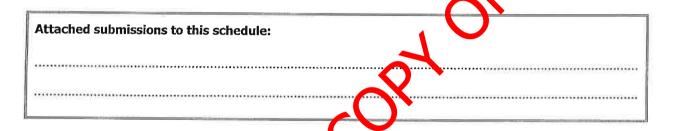
Signed	Date	
Name	Position	
Enterprise name		

T2.2-20: Quality Management Plan: Pre – Qualifying Quality (Functionality) Criteria

Due consideration must be given to the deliverables required to execute and complete the contract as per the Quality Management Standard stated in the Works Information and should include but not be limited to:

Quality Plan: A sign off document to be produced showing critical holding points:

- 1. The Contractor's Quality Policy.
- 2. Checklist for the various activities
- 3. Proof of various COC's
- Management Organogram (Proof of creditation diplomas etc)



The table below is for information purposes only to indicate the method of scoring that will be followed to evaluate the programme submitted by the Tenderer:

Scoring will be as follows:

	Quality Plan		
No Response (score 0)	ailed to provide information.		
Poor (score 40)	roor response lacks detail and will not meet the requirements of the Employer.		
Satisfactory (score 70)	Satisfactory response will comply with the Employers stated requirements, but is generic and not site specific.		
Good (score 90)	Good response demonstrates an understanding and will comply to the Employers stated requirements and submits a contract specific Quality Plan showing the critical holding points and Checklists for the various activities to be performed		
Very Good (score 100)	Very good response, gives real confidence that the tenderer understands and will comply to the Employers stated requirements and submits a contract specific Quality Plan showing the critical holding points, mitigations, Checklists for the various activities to be performed and is ISO registered.		

March 2015

Part T2: Returnable Schedules T2.2-20: Quality Plan TRANSNET FREIGHT RAIL
ENQUIRY NUMBER: CPT 1616433,001
DESCRIPTION: SUPPLY, INSTALL AND COMMISSION SMART ENERGY METERS AND RELATED NETWORK AND COMMUNICATION
INFRASTRUCTURE AT SELECTED TRANSNET TRACTION FEEDER SUBSTATIONS ALONG THE SISHEN SALDANHA IRON ORE RAIL LINE

The 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	
	St. O.

T2.2-21: Environmental Management Plan

- 1. The tenderer must provide their environmental management policy detailing the Managements commitment to preventing and controlling environmental impacts.
- 2. The tenderer must provide specific Environmental Management Plan which describes relevant roles and responsibilities, and how potential environmental impacts will be identified and managed including the monitoring and recording thereof.

The following documents are key - TFR / EMS (SES) - 001

- 3. Organisational charts depicting key environmental staff must be accompanied by staff V's showing staff competencies, together with qualifications.
- 4. Tender to provide a signed declaration of understanding (Form P.O-FAT-0912 T2.2-38) as part of the returnable acknowledging understanding thereof and the budget provision for the implementation of environmental management requirements.
- 5. By signing this Tender Schedule, the tenderer confirms that they will **comply** with the above requirements and in particular Transnet **policy statements** and **environmental specifications**.

Attached submissions to this	schedule:		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
he undersigned, who warrants do	nat he/she is duly authori	ised to do so ge and are to	on behalf of the	Tenderer, confirms that the
and correct.				
Signed ————————————————————————————————————	Dat	te		early or communication and a second
Name	Pos	sition		
enderer				

March 2015

T2.2-22: Health and Safety Plan: Pre – Qualifying Quality (Functionality) Criteria

Submit the following documents as a minimum with your tender:

- 1. Valid letter of good standing.
- 2. A safety plan to be submitted in accordance with the OHSA1993 and Transnet Freight Rail's health and Safety Specification TFR-ISM-RN-R&C-FM009 which shall include for a risk assessment.
- 3. A Safety organogram to be submitted Certificates to be attached / accompanied
- 4. Works Method Statement

The table below is for information purposes only to indicate the method of scoring that will be followed to evaluate the programme submitted by the Tenderer:

Scoring will be as follows:

	Health and Safety	
No Response (score 0)	Failed to provide information.	
Poor (score 40)	Poor response lacks detail and will not meet the Employers stated requirements.	
Satisfactory (score 70)	Satisfactory response will amply with the Employers stated requirements but is generic and not site specific. Submits a valid letter of Goodstanding.	
Good (score 90)	Good response demonstrates an understanding and will comply to the Employers stated requirements and submits a site specific Health and Safety Plan in accordance with the OHSA1993 and Transnet Freight Rail's health and Safety Specification FFR-ISM-RN-R&C-FM009 and a valid Letter of Goodstanding.	
Very Good (score 100)	Specification VFR-ISM-RN-R&C-FM009 and a valid Letter of Goodstanding. Very good response, gives real confidence that the tenderer understands and will amply with the Employers stated requirements and submits a comprehensive site Specific Health and Safety Plan in accordance with the OHSA1993 and Transnet Freight Rail's health and Safety Specification TFR-ISM-RN-R&C-FM009. This also includes a risk assessment, Fall protection plan for working at heights, Construction Safety File Index, Construction Safety Work Method Statement and valid Letter of Goodstanding.	

The 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	A Company of the Comp
Tenderer	 ****	

March 2015

T2.2-25: Previous Experience: Pre – Qualifying Quality (Functionality) Criteria

Note to tenderers:

Tenderers are required to demonstrate their experience and to this end shall supply a sufficiently detailed reference list with contact details of existing customers (Contact Person and contact number) and also indicate their previous experience and value of contracts completed.

Index of documentation attached to this schedule:	

The table below is for information purposes only to indicate the method of scoring that all be followed to evaluate the programme submitted by the Tenderer:

Scoring will be as follows:

	Previous Experience	
No Response (score 0)	The tenderer has submitted no information to determine a score.	
Poor (score 40)	The tenderer has limited experience (≤ 2 years).	
Satisfactory (score 70)	Tenderer's experience transonable and has successfully executed projects of a similar nature as defined in the scope of works at least twice with 2 – 3 years' experience.	
Good (score 90)	The ten ere has extensive experience and has successfully executed projects under similar conditions and circumstances as defined in the scope of works at least five times and has 4 years' experience	
Very Good (score 100)	The tenderer has outstanding experience and has successfully executed projects under similar conditions and circumstances as defined in the scope of works at least ≥5 times and has ≥5 years' experience.	

The 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		

T2.2-27 BBBEE AND SOCIO ECONOMIC OBLIGATIONS

1 BROAD-BASED BLACK ECONOMIC EMPOWERMENT AND SOCIO-ECONOMIC OBLIGATIONS

As described in more detail in the attached BBBEE Claim Form and as prescribed in terms of the Preferential Procurement Policy Framework Act (PPPFA), Act 5 of 2000 and its Regulations, Tenderers are to note that Transnet will allow a "preference" to companies who provide a valid B-BBEE Verification Centificate.

The value of this bid is estimated to exceed R1 000 000 (all applicable taxes included; and therefore the **90/10** system shall be applicable.

Tenderers are required to complete Returnable Schedule T2.2-50 [the B-Bitter Proference Point Claim Form] and submit it together with proof of their B-BBEE Status as stipulated in the Saim Form in order to obtain preference points for their B-BBEE status. Tenderers are required to at all time comply with the latest B-BBEE legislation and/or instruction notes as issued from time to time by the DTI.

Note: Failure to submit a valid and original (or certified copy) as proof of the Tenderer's compliance with the B-BBEE requirements structed in Section 8 of this TENDER (the B-BBEE Preference Points Claim Form) at the Clasing Date of this TENDER, will result in a score of zero being allocated for B-BBEE.

The Table below indicates the various options available to Large Enterprises, QSEs and EMEs to verify their B-BLEF status.

Enterprise	Certificate
Large	Certificate issued by SANAS accredited verification agency
	Certificate issued by an IRBA approved auditor
QSE	Certificate issued by SANAS accredited verification agency
11X	Certificate issued by an IRBA approved auditor
	Sworn Affidavit (only black-owned EMEs - 51% to 100% Black owned)
EME	Certificate issued by SANAS accredited verification agency
	Certificate issued by an IRBA approved auditor
	Sworn Affidavit
	Certificate issued by CIPC (formerly CIPRO
	Auditor or Accounting Officer (only in terms of 2007 Codes)

1.1 B-BBEE Joint Ventures or Consortiums

Tenderers who would wish to respond to this TENDER as a Joint Venture [JV] or consortium with B-BBEE entities, must state their intention to do so in their TENDER submission. Such Tenderers 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 TENDER 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.

Tenderers are to note the requirements for B-BBEE compliance of JVs or consortiums as required by Returnable Schedule T2.2-50 [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.

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

1.2 Subcontracting

Transnet fully endorses Government's transformation and empowerment objectives and when contemplating subcontracting Tenderers are requested to give preference to companies which are Black Owned, Black Women Owned, Black Youth Owned, owned by Black People with Disabilities, EMEs and QSEs including any companies designated as R-BBILE Faulitators¹.

If contemplating subconfracting, please note that a Tenderer will not be awarded points for B-BBEE if it is indicated in its Tender Offer that such Tenderer intends subcontracting more than 25% [twenty-five percent] of the value of the contract to an entity/entities that do not qualify for at least the same points that the Tenderer qualities for, unless the intended subcontractor is an EME with the capability to execute the contract.

A person awarded a contract may not subcontract more than 25% [twenty-five percent] 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 subcontracted to an EME that has the capability and ability to execute the subcontract.

¹ The Minister of the Department of Trade and Industry has the power to designate certain Organs of State or Public Entities as B-BBEE Facilitators. For example, the South African National Military Veterans' Association (SANMVA) has been designated as a B-BBEE Facilitator. As such they will be treated as having rights of ownership held 100% by Black People, 40% by Black Women and 20% by Black designated groups.

In terms of Returnable Schedule T2.2-50 of this TENDER [the B-BBEE Preference Point Claim Form] Tenderers are required to indicate the percentage of the contract that will be sub-contracted as well as the B-BBEE status of the sub-contractor/s.

Turnover:		
Kindly indicate your compa	ny's annual turnover for the past year	
ZAR		
Signed	Date	
Name	Position	
Tenderer		
108		
117		



T2.2-31 Service Provider Integrity Pact

Important Note: All potential tenderers must read this document and certify in the RFX 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 as part of the final concluded contract.

INTEGRITY PACT

Between

TRANSNET SOC LTD

Registration Number: 1990/000900/30

("Transnet")

and

The Tenderer / Service Provider/ Service Provider / Contractor (heremafter referred to as the "Tenderer / Service Provider/Contractor")

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 contraction 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.

1 OBJECTIVES

- 1.1 Transnet and the Tenderer / Service Provider / Contractor agree to enter into this Integrity Pact, to avoid all forms of dishonesty, fraud and corruption in the ing 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 / unprejugned dealings prior to, during and subsequent to the currency of the contract to be entered in a 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 cross to secure the contract.

2 COMMITMENTS OF TRANSME

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

- 2.1 Transnet reliably undertakes that no employee of Transnet connected directly or indirectly with the sourcing evant and ensuing contract, will demand, take a promise for or accept directly or through interned aries any bribe, consideration, gift, reward, favour or any material or immaterial benefit of 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.
- 2.2 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.
- 2.3 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.
- 2.4 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.

3 OBLIGATIONS OF THE TENDERER / SERVICE PROVIDER

- 3.1 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
- 3.2 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 1 900 within a 12 month period;
 - c) hospitality packages do not exceed R5 000 revalue or many low value hospitality packages do not cumulatively exceed R5 000;
 - d) a Tenderer / Service Provider does no give a Transnet employee more than 2 (two) gifts within a 12 (twelve) month period, irrespective of value;
 - e) a Tenderer / Service Provicer does not accept more than 1 (one) gift in excess of R750 (seven hundred and fift) Ral d) 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 are gift, business courtesy, including an invitation to a business meal and /or drinks, or pospitality 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 received 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.
- 3.3 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.
- 3.4 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.
- 3.5 The Tenderer / Service Provider / Contractor will not commit any criminal offence under the relevant anti-corruption 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.

- 3.6 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.
- 3.7 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.
- 3.8 The Tenderer / Service Provider / Contractor shall furnish Transnet with a lopy of its code of conduct, which code of conduct shall reject the use of bribes and other disholest and unethical conduct, as well as compliance programme for the implementation of the code of conduct.
- 3.9 The Tenderer / Service Provider / Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

4 INDEPENDENT TENDERING

- 4.1 For the purposes of that Certificate in relation to any submitted Tender, the Tenderer declares to fully understand that the word "competitor" griall accide any individual or organisation, other than the Tenderer, whether or not affiliated with the Tenderer, who:
 - a) has been requested to submit a hander in response to this Tender invitation;
 - b) could potentially submit a Tender in response to this Tender invitation, based on their qualifications, abilities or type ience; and
 - c) provides the same Goods and Services as the Tenderer and/or is in the same line of business as the Tenderer.
- 4.2 The Tenderer has an year the his submitted Tender independently from, and without consultation, communication agreement or arrangement with any competitor. However communication between partier in a joint venture or consortium will not be construed as collusive tendering.
- 4.3 In particular, without limiting the generality of paragraph 5 above, there has been no consultation, company cation, 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.
- 4.4 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.
- 4.5 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.

- 4.6 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 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.
- 4.7 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.

5 DISQUALIFICATION FROM TENDERING PROCESS

- 5.1 If the Tenderer / Service Provider / Contractor has committed a san gression 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 teject the renderer'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.
- 5.2 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 expering 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 arround 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.
- 5.3 If the Tendorer 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 cromstances of the case may require, Transnet may at its own discretion revoke the exclusion or suspend the imposed penalty.

6 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.
- 6.2 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.
- 6.3 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.

- 6.4 A Service Provider or Contractor to Transnet may not subcontract any portion of the contract to a blacklisted company.
- 6.5 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;
 - 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;
 - 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 pad in the 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 FBB E status and is unable to prove to the satisfaction of Transnet that:
 - (i) he made the statement in good faith be estly 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, 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.
- 6.6 Grounds for Decklisting include a company/person recorded as being a company or person prohibiter from decing business with the public sector on National Treasury's database of Restricted Service Professor Register of Tender Defaulters.
- 6.7 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.

7 PREVIOUS TRANSGRESSIONS

- 7.1 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.
- 7.2 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.)

8 SANCTIONS FOR VIOLATIONS

- 8.1 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 the 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 and if furnished by the Tenderer / Service Provider / Contractor, in order to recover the payments, already made by Transnet, along with interest;
- 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.

9 CONFLICTS OF INTEREST

- 9.1 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 interest of 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.
- 9.2 A Transnet employed uses his, her position, or privileges or information obtained while acting in the capacity as an employed for:
 - a) Private gain or advancement; or
 - b) The expectation of private gain, or advancement, or any other advantage accruing to the employed must be declared in a prescribed form.
 - Thus, conflicts of interest of any Tender committee member or any person involved in the sourcing placess must be declared in a prescribed form.
- 9.3 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.
- 9.4 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.

10 MONITORING

- 10.1 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;
 - b) 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.
- 10.2 The Monitor will be subjected to Transnet's Terms of Conditions of Contract of the Provision of Services to Transnet, as well as to Transnet's Service Provider Code of Conduct

11 EXAMINATION OF FINANCIAL RECORDS, DOCUMENTATION AND/OR EXECTRONIC 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.

12 DISPUTE RESOLUTION

- 12.1 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 convercial relationships are based. Accordingly, following a blacklisting process as mentioned in paragraph 6 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 bas faith in Judes, but is not limited to the following instances:
 - a) **Vexations proceedings:** these are frivolous proceedings which have been instituted without proper grounds;
 - b) **Perioty** 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.

13 GENERAL

- 13.1 This Integrity Pact is governed by and interpreted in accordance with the laws of the Republic of South Africa.
- 13.2 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.

- 13.3 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.
- 13.4 Should one or several provisions of this Integrity Pact turn out to be invalid the remainder of this Integrity Pact remains valid.
- 13.5 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 guaranteed.

The Parties hereby declare that each of them has read and understood the clauses of this Integrity Pact and shall tender by it. To the best of the Parties' knowledge and belief, the information provided in this Integrity Pact is true and correct.

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T2.2-33: Mutual Non-Disclosure Agreement

Note to tenderers: This Non-Disclosure Agreement signatory:	is to be completed and signed by an authorised
THIS AGREEMENT is made effective as of day of	20 by and between:
Transnet SOC Ltd (Registration No. 1990/000900/30), a	
South Africa, having its principal place of business at Car 2001, South Africa,	lton Centre, 150 Commissioner Street, Johannesburg,
and(Reg	
(Reg	istration No), a private
company incorporated and existing under the laws of S	
	ः प्रयोग्यास्तराम् । योष्ट्राप्तराम् । विद्याचेत्रायाः विद्याचेत्राः । विद्याचेत्राः । विद्याचेत्राः । विद्याच

1. Purpose

The parties to this Agreement have a business relationship under which each party may disclose its Confidential Information to the other for the purpose of SUPPLY, INSTALL AND COMMISSION SMART ENERGY METERS AND RELATED NETWORK (IND COMMUNICATION INFRASTRUCTURE AT SELECTED TRANSNET TRACTION FEEDLR SUBSTATIONS ALONG THE SISHEN SALDANHA IRON ORE RAIL LINE (the Purpose"). Each party (the receiving party") shall treat as confidential all information and know-how which it may receive from the other party ("the disclosing party") in terms of this Agreement (hereinafter referred to as "tonfidential information"), and shall not divulge to any other party in any circumstances any such confidential information, and, in particular, any such confidential information as is covered by the National Key Points Act (Act No. 102 of 1980), whether during the currency of this Agreement or at any time the east er, without the prior written consent of the disclosing party.

2. Definition

"Confidential Information" means any information, technical data, or know-how, including, but not limited to, that which relates to research, product plans, products, services, customers, markets, software, developments, inventions, processes, designs, drawings, engineering, hardware configuration information, marketing or finances.

3. Exclusions

Confidential Information does not include information, technical data or know-how which:

- 3.1. is in the possession of the receiving party at the time of disclosure as shown by the receiving party's files and records immediately prior to the time of disclosure;
- 3.2. prior or after the time of disclosure becomes part of the public knowledge or literature, not as a result of any inaction or action of the receiving party;
- 3.3. is developed by the receiving party through its independent resources without reference to the disclosing party's Confidential Information;

March 2015

Part T2: Returnable Schedules

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- 3.4. is disclosed to the receiving party by a third party without restriction and, to the knowledge of the receiving party, without violation of any obligation of confidentiality; or
- 3.5. is approved for release by the disclosing party in writing.

4. Non-Disclosure of Confidential Information

- 4.1. The parties to this Agreement agree not to use the Confidential Information disclosed to it by the other party for its own use or for any purpose except to carry out the Purpose as contained in this Agreement. Neither party will disclose any Confidential Information of the other party to third parties except those directors, officers, employees, consultants and agents who are required to have the information in order to carry out the discussions of the contemplated Purpose. Each party will notify those directors, officers, employees, consultants and agents to whom Confidential Information of the other party is disclosed or who have access to Confidential Information of the other party that they are bound by the obligations of this Non-Disclosure Agreement.
- 4.2. Each party agrees that it will take all reasonable measures to protect the secrecy of and avoid disclosure or use of Confidential Information of the other party in order to prevent it from falling into the public domain or the possession of persons other than those persons authorised hereunder to have any such information, which measures shall include the highest degree of care that either party utilises to protect its own Confidential Information of a similar nature. Each party agrees to notify the other party in writing of any misuse or misappropriation of such Confidential Information of the other party which may come to its attention.

5. Promotion of Access to Information Act, No.2 of 2000

- 5.1. All information relating to the liclosing party and which the disclosing party has indicated to the receiving party in writing to be confidential information, shall be deemed to be confidential information.
- 5.2. No provision of this Agreement shall be construed in such a way that the disclosing party is deemed to have grant of it content to the receiving party to disclose the whole or any part of the confidential information in the event that the receiving party receives a request for the whole or any part of the confidential information in terms of the provisions of the Promotion of Access to Information Act, No.2 of 2000, as may be amended from time to time ("the Act").
- 5.3. Subject to the provisions of sub-clause 5.3 below, the disclosure of confidential information by the receiving party otherwise than in accordance with the provisions of this Agreement will entitle the disclosing party to institute action for breach of confidence against the receiving party, as envisaged by Section 65 of Act No.2 of 2000.
- 5.4. The receiving party acknowledges that the provisions of sub-clause 5.2 above shall not be construed in such a manner as to exclude the applicability of any other grounds of refusal contained in Act No.2 of 2000 which may be applicable in the event that the receiving party receives a request for the whole or any part of the confidential information in terms of Act No.2 of 2000.

6. Non-Solicitation

During the two-year period following the execution of this Agreement, neither party will solicit for employment, on its own behalf or that of any other person, any officer, director or employee of the other

party at the level of director, vice-president or higher with whom the soliciting party became acquainted during the course of the discussions contemplated by this Agreement; provided, that the foregoing shall not be deemed to prohibit either party or a subsidiary of such party from making a general, public solicitation of employment in the ordinary course of such party or subsidiary's business, provided that such solicitation is not directed specifically to employees of the other party.

7. Mandatory Disclosure

In the event that either party or their respective directors, officers, employees, consultants or agents are requested or required by legal process to disclose any of the Confidential Information of the other party, the party required to make such disclosure shall give prompt notice so that the other party may seek a protective order or other appropriate relief. In the event that such protective order is not obtained the party required to make such disclosure shall disclose only that portion of the Confidential Information, which its counsel advises that it is legally required to disclose.

8. Variation, Addition or Cancellation

No variation of, addition to, cancellation or novation of this Agreement in its entirety or of any term or condition thereof shall be of any force or effect unless such amendment or cancellation is reduced to writing and signed by both parties.

9. No License Granted

Nothing in this Agreement is intended to grant a ly rights to either party under any patent, copyright, trade secret or other intellectual property right not shall this Agreement grant either party any rights in or to the other party's Confidential Information, except the limited right to review such Confidential Information solely for the purposes of the contemplater business relationship between the parties.

10. No Representations

No party makes any representation or warranty as to the accurateness or completeness of any Confidential Information provided her under. Neither party shall have any liability to the other arising from, or related to, the other party's us of Confidential Information provided hereunder.

11. Term

The foregoing commitments of either party in this Agreement shall survive any termination of the business relationship under the contemplated Purpose between the parties, and shall continue relative to any Confidential Information disclosed hereunder for a period of 10 (ten) years following the disclosure of such Confidential Information.

12. Miscellaneous

This Agreement shall be binding upon and for the benefit of the undersigned parties, their successors and assigns, provided that Confidential Information of either party may not be assigned without the prior written consent of the disclosing party. Failure to enforce any provision of this Agreement shall not constitute a waiver of any term hereof.

13. Governing Law and Jurisdiction

This Agreement shall be governed by and construed and enforced in accordance with the laws of the Republic of South Africa, and shall be binding upon the parties hereto in South Africa and worldwide.

14. Disputes

Any dispute or difference arising out of or relating to this Confidentiality Agreement shall be referred to arbitration and settled by arbitration according to the rules then in effect of the Arbitration Foundation of Southern Africa. Such arbitration shall be held in Johannesburg, and conducted in the English language before 1 (one) arbitrator appointed in accordance with the said rules. The arbitrator shall apply the law chosen by the parties elsewhere in this Agreement to the merits of the dispute. This Agreement is arbitrate shall be enforceable in, and judgement upon any award may be entered in any country having appropriate jurisdiction.

15. Remedies

Each party agrees that its obligations hereunder are necessary and reasonable in order to protect the other party and the other party's business, and expressly agrees that monetary damages may be inadequate to compensate the other party for any breach by either party or any covenants and agreements set forth herein. Accordingly, each party agrees and acknowledges that any such violation or threatened violation may cause irreparable injury to the other party and that, in addition to any other remedies that may be available, in law, in equity or otherwise, the other party shall be entitled to obtain injunctive relief against the threatened breach of this Agreement or the continuation of any such breach, without the necessity of proving actual damages.

Signed	Date	
Name	Position	
Tenderer		



SUPPLIER DECLARATION FORM

Transnet Vendor Management has received a request to load / change your company details on to the Transnet vendor database. Please return the completed Supplier Declaration Form (SDF) together with the required supporting documents as per Appendix V to the Transnet Official who is intending to procure your company's services / products, to enable us to process this request. Please only submit the documentation relevant to your request.

NB: Effective 1 April 2016 all organisations, institutions and individuals who wish to provide goods and/or services to Organs of the State must be registered on the National Treasury Central Supplier Database (CSD). This needs to be done via their portal at https://scoure.csd.gov.za/ **before applying to Transnet**.

General Terms and Conditions:

Failure to submit the relevant documentation will delay the vendor creation / change process.

Where applicable, the respective Transnet Operating Division processing your application may request further information from you.

The Service Provider warrants that the details or its bank account ("the nominated account") provided herein, are correct and acknowledges that payments due to the Supplier will be made into the nominated account. If details of the nominated account should change, the Service Provider must notify Transnet in writing of such change, failing which any payments made by Transnet into the nominated account will constitute a full discharge of the indebtedness of Transnet to the Supplier in respect of the payment so made. Transnet will incur no liability for any payments made to the incorrect account or any costs associated therewith. In such event, the Service Provider indemnifies and holds Transnet harmless in respect of any payments made to an incorrect bank account and will, on demand, pay Transnet any costs associated herewith.

Transnet expects is suppliers to timeously renew their Tax Clearance and B-BBEE certificates (where applicable, as EMEs and QSEs are only expected to supply an affidavit as per Appendix III and IV), as well as all affidavits, annually. Failure to do so may result in the supplier's account being temporarily suspended.

Document Name: Supplier Declaration Form



SUPPLIER DECLARATION FORM

Organs of the Stat	te must be registe	ered on the Nat	tional Treasury C	entral Supplier Da	provide goods and	/or services to s needs to be done
via their portal at CSD Number (MAA	https://secure.cs	d.gov.za/ befo	re applying to 1	Fransnet.	Addase (COD). This	The do be dolle
Company Trading						
Company Register						
Company Registral Sole Proprietor		If a		***		
Company Income	Tax Number			¥/		***
	CC	Trust	Pty Ltd	Limited	ership	Sole Proprietor
Form of Entity	Non-profit	Personal Liability Co	State Owned Co	National Govt		
	Educational Institution	Specialised Profession	Financial Institution	Foreign Internation	Toreign Branch Office	
Did your company	previously operat	e under anothe	er name?		Yes	No
If YES state the pre						
Trading Name						
Registered Name				,		
Company Registrati Sole Proprietor	on No Or ID No	If a				
	CC	Trust	Pty Ltd	Limited	Partnership	Sole Proprietor
Form of Entity	Non-profit	Personal Liability Go	Sta. Cwned Co	National Govt	Provincial Govt	Local Govt
	Educational Institution	Specialised Profession	Financial Institution	Foreign International	Foreign Branch Office	
Your Current Compa	any's VAT Registr	a ion status				
VAT Registration Nu						
If Exempted from state reason and sul SARS in confirming t status	bmit proof from the exemption					
If your business ent Your Non VAT Regis	cy in it VAT Reg	gistered, please confirmed annu	submit a curren ally.	t original sworn a	ffidavit (see exam	ple in Appendix I).
Company Banking D	etails			Bank Name		
Universal Branch Coo	de			Bank Account N	lumber	
Company Physical Ad	ddress				Code	
Company Postal Add	ress				Code	
Company Telephone	number				,	
Company Fax Number	er					
Company E-Mail Add	ress					***************************************
Company Website Ad	ldress					
Company Contact Per	rson Name				- 1	
Designation						
Telephone						

Document Name: Supplier Declaration Form

Revision: Version 7.3

Date: 4 April 2016

Email

TRANSNET



Is your company a Labour Bro					Yes			No	
Main Product / Service Supplie									
Labour etc.						llr	ur = Market Sev	1	
How many personnel does the			Full Tin			1,000	t Time		
Please Note: Should your busing	ness employ more	e than 2 full time	employe	ees wh	o are not cor	nected	persons	as defin	ed in
the Income Tax Act, please sul	omit a sworn affi	davit, as per App	endix II.						
Most recent Financial Year's An	nual Turnover	<r10million< td=""><td></td><td></td><td>0Million</td><td></td><td>>R50</td><td>Million</td><td></td></r10million<>			0Million		>R50	Million	
	Talay Talay To	17(20) 1111011		<r5< td=""><td>0Million</td><td>ļ</td><td>7100</td><td>TIMOTI</td><td></td></r5<>	0Million	ļ	7100	TIMOTI	
Does your company have a vali	d BBBEE certifica	te?				Yes		No	
What is your broad based BEE s	status (Level 1 to	9)							
Majority Race of Ownership						1			
% Black Ownership	% Black Wor	men	% Bla	ack Di	sabled		% Black	Youth	
L	ownershi		person	(s) ow	nership		owners		
Please Note: Please provide pro	of of BBBEE stati	is as per Append	lix V. If y	ou qu	alify as an EN	IE or Q	SE then p	rovide a	an
affidavit following the examples	provided in Appe	endix III and IV i	respectiv	ely. If	you have he	cated I	Black Disa	ibled	41
person(s) ownership, then providisability.	de a certified is	etter signed by a	pnysiciar	1, on 1	ne physicani	sietteri	nead, con	nrming	tne
						120000000			
By signing below, I hereby a and that all information con	relitisy diferentation Tentrana	duly all the is	ed to sty	n ft.	on beh	alf of f	lim / en	grinisa.	I(0)1)
	COLLECTRIAL MENTER	HIGH STREET, S	HEAVE .	111.50.51	(alega little file ala	2 64 87			
Name			Desig	gnatio	1				
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Signature			Date						
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Signature			Telep	hone	No				
	•								

Document Name: Supplier Declaration Form



Company	Trading Name								
Company	Registered Nam	ne							
क्षाना ।	ng Division				omine e				
TFR	TFR RME	TE	TPT	TPL	TNPA	TRN PROP	TRN TCC	TRN FOUN	TRN TCP
Create		Am	end		Block		Un	block	
Extend		Del	ete		Undelete		2201Y	ce-Off / ergency	
Please inc If yes, ple	dicate whether the ase submit a co	ne Supplie py of the	er has a contr adjudication	ract with sou document /	urcing Transn signed-off co	et OD omparative sc	Yes hedule		No
Transnet Contact P	B-BBEE Departm erson	ent			Si	gnature	1		
Contact n	umber				Fr	nail			

THE FOLLOWING IS TO BE COMPLETED BY THE TRANSNET REQUEST VG/SOURCING DEPARTMENT. THE FULL SET OF VENDOR RELATED DOCUMENTS MUST THEN BE FORWARD D TO THE APPROPRIATE VENDOR APPROVAL OFFICIAL FOR APPROVAL

that is being procured from the supplier?	加速是少在30.3 5	BUSKELLE VERSELLE HER STEELE
i. Products Only	The last	l No l
ii. Services Only	Yes	No
iii. Labour Only	Yes	No
iv. Mix of Products and Services	Yes	No
v. Mix of Services and Labour	Yes	No

If your answer is **YES** to any of the questions into vabove and the applicant supplier has not submitted a sworn affidavit as per Appendix II, the matter should be having investigated in terms of the Tax Withholding Procedures. Where necessary you may approach your Operating Division's Procurement Department for guidance in this regard. Details of the appropriate Transnet decision-making body such as a Cross Functional Sourcing Team, should be indicated below. **A copy of the signed-off document by the mantioned decision-making body should also be attached.**

102	The second second	duct ax	If Tax should be deducted (Indicate % to be deducted)	Department Responsible for Payment (PROCUREMENT OR *PAYROLL) * IF PAYROLL SHOULD EFFECT PAYMENT, THE DOCUMENTS SHOULD BE FORWARDED TO THEIR OFFICE
Service Provider	Yes	No		
Labour broker without IRP30 exemption certificate	Yes	No		
Labour broker with IRP30 exemption certificate	Yes	No		
Personal Service Provider	Yes	No		
Independent Contractor	Yes	No		
None of the above apply, state reason If PAYE is to be deducted, please indicate w				

If PAYE is to be deducted, please indicate whether the applicant supplier has indicated in writing that it is prepared to comply with Transnet's PAYE conditions. (**Please attached a copy of the written communication**)

If the reply is "NO", the vendor application will be regarded as cancelled and another service provider should be sourced.

Document Name: Supplier Declaration Form



CERTIFICATION AND APPROVAL OF PROPOSED VENDOR CREATION/VENDOR DETAILS UPDATE BY TRANSNET OFFICIAL WITH APPROPRIATE DELEGATED AUTHORITY.

I hereby certify that the Transnet Procurement Procedure Manual (PPM) / Procurement Mechanisms have in ALL RESPECTS been adhered to and therefore approve the proposed vendor creation/vendor details update.

Vendor Approval O particles be Name	Designation
Tel No	Fax No
e-Mail	
Signature	Date Y Y Y M M D
i e	
•	

Document Name: Supplier Declaration Form

Example of an Affidavit or Solemn Declaration as to VAT registration status

Affidavit or Solemn Declaration	on
Ĭ,	solemnly swear/declare that
	is not a registered VAT vendor and is not required to
register as a VAT vendor because	the combined value of taxable supplies made by the provider in
any 12 month period has not exc	ceeded or is not expected to exceed [1] million threshold, as
required in terms of the Value Adde	ed Tax Act.
Signature:	
Designation:	
Date:	
Commissioner of Oaths	
Thus signed and swort to before me	e atday of
and that he/she has no objection to	at he/she knows and understands the contents of this Affidavit, o taking the prescribed oath, which he/she regards binding on gations herein contained are all true and correct.
8	
Commissioner of Oaths	

Example of an Affidavit or Solemn Declaration as to number of employees Affidavit or Solemn Declaration I, _____solemnly swear/declare that _____ employs three or more full time employees, which employees are engaged in the business of rendering the services of the organisation and are not connected persons as defined in the Income Tax Act. Signature: Designation: Date: **Commissioner of Oaths** Thus signed and sworr to before me at _ _____on this the _____day of ___ the Deponent having knowledge that he/she knows and understands the contents of this Affidavit, and that he/she has no objection to taking the prescribed oath, which he/she regards binding on his/her conscience and that the allegations herein contained are all true and correct.

Commissioner of Oaths

SWORN AFFIDAVIT - B-BBEE EXEMPTED MICRO ENTERPRISE

I, the undersigned,		TED INICIO ENTER	MOL
Full Name & Surname			
Identity Number			
Hereby declare under oat 1. The contents of this sta 2. I am a member / direct	atement are to the best of	my knowledge a true reflection of genterprise and am duly authorise	tive facts. If to act on its behalf.
Enterprise Name			
Trading Name			**
Registration Number			
Enterprise Address		2	
 The enterprise is The enterprise is The enterprise is Based on the mana income did not ex Please confirm on the table	% black of	voman owned; cuin owned; disabled owned; ner information available for the en million rand). el contributor, by ticking the appli	
Mo	i One		
owned	el wo (125% B-BBEE proc s man 51% black	curement recognition)	
Less than 51% black Level owned	el Four (100% B-BBEE prod	curement recognition)	
I know and understand to consider the oath binding of matter.	the contents of this affidation on my conscience and on	the dti Codes of Good Practice. vit and I have no objection to take the owners of the enterprise whic months from the date signed by o	h I represent in this

Commissioner of Oaths

Signature & stamp

Deponent Signature:

Date:

Example of an Affidavit or Solemn Declaration as to QSE B-BBEE Status

I, the undersigned,	SWORN AFFIDAVIT –	B-BBEE QUALIFYING SMALL ENTERPRISE	
Full Name & Surname			
Identity Number			
Hereby declare under oath a 1. The contents of this state 2. I am a member / director /	ment are to the best of my kn	owledge a true reflection of the facts. prise and am duly authorised to act on its behalf.	
Enterprise Name			
Trading Name			
Registration Number			
Enterprise Address			
The enterprise is The enterprise is The enterprise is Based on the manage not exceed R50,000 The entity is an empor Codes of Good Prace (a) At least 25% of cost of s labour costs and depreciation procurement from local procurem	% black owned % black woman % black youth o % black disable ment accounts and other info 0,000.00 (fifty million cand); wering supplier interns of Cl ctice. (Tick approprate box ales, (excl ding on) must be flucers or suppliers in singusty include 5% ion of raw material / onel manufacturing, and / or packaging osts should be paid to service industry	connection available for the financial year, the incompanies as 3.3 (a) or (b) or (c) or (d) or as amended 3.3 (e) of the in table below). (b) Job Creation – 50% of jobs created are for black people, provided that the number of black employees in the immediate prior verified B-BBEE measurement is maintained (d) At least 12 days per annum of productivity deployed in assisting QSE and EME beneficiaries to increase their operation or financial capacity	
100% black owned		E procurement recognition)	
More than 51% black owned	Level Two (125% B-BBE	E procurement recognition)	
oath binding on my conscienc	e and on the owners of the e	I have no objection to take the prescribed oath and conside nterprise which I represent in this matter. s from the date signed by commissioner.	r the
	Depon	ent Signature:	
Commissioner of Oaths Signature & stamp	Date: _		

			Note: All dates	Required Ve	frican Entities endor Docume er to date of reg		entity)
Entity Type	Company Registration	Proof of Ownership	Proof of Banking Details	Income Tax	VAT Registration	Company Name Change	Proof Addre
Sole Proprietor	No company registration number is required for a sole proprietor. Trade Name Certificate — Filed in the city province where the business is located (Non-Mandatory)	Clear certified copy of South African Identity document	Current original certified letter from Bank with Bank stamp and / or original cancelled cheque	A valid original SARS Tax Certificate (Personal) No business rule applicable	If registered for VAT – VAT certificate. Mandatory for a person outliness that males, or is likery make, tax simplies in xce of R1 mion in any consecutive twelve month period to register for VAT As from 1st March 2012, qualifying micro businesses that are registered for Turnover Tax may also choose to register for VAT.	N/A Trade Name Certificate — Filed in the city province where the business is located (Non- Mandatory)	Letterhea confirmir physical postal addresse

		•	Note: All dates	Required Ve	frican Entities endor Docume er to date of reg		entity)
Entity Type	Company Registration	Proof of Ownership	Proof of Banking Details	Income Tax	VAT Registration	Company Name Change	Proof Addre
Close Corporation — CC CC = /23	Before 1 May 2011 CK 1 (Close Corporations, Founding Statement) CK 2 (Founding Statement) and, if a CK2 (Amended Founding Statement) has been registered, the last CK2 (Amended Founding Statement) As from 1 May 2011 No new close corporations will be registered. No company conversions to close corporations will be registered. Any future changes to a close corporation would still have to be made in terms of the CC Act for CC amendments (CK2/CK2A)	Clear certified copy of Member/s Identity document/s Before 1 May 2011 CK 1 (Close Corporations, Founding Statement) and, if a CK2 (Amended Founding Statement) has been registered, the last CK2 (Amended Founding Statement) As from 1 May 2011 No new clost contrations will be registered. No company conversions to close corporations	Current original certified letter from Bank with Bank stamp and / or original cancelled cheque	A valid original SARS Tax clearance certificate Labour Broker IRP30 (Labour Broker Exemption Certificate) An exemption certificate is only valid in many the date of issue (tate of issue (tate of issue) application or data when all requirements have been met) until the end of the tax year.	If registered for VAT – VAT certificate. Mandatory for a person business that ma tes, or is likely make, tax soplies, in any consecutive twelve month period to register for VAT. As from 1st March 2012, qualifying micro businesses that are registered for Turnover Tax may also choose to register for VAT.	Before 1 May 2011 CK2(Amended Founding Statement) After 1 May 2011 Any future changes to a CC would still have to be made in terms of the CC Act 1. CC amendments (CK2/CK2A) 2. Letter for accounting officer resignations 3. Liabilities exceed assets letters 4. Annual returns Voluntarily CoR 18.1 (Notice of Conversion of a close corporation)	Letterher confirmir physical postal addresse

		(N	ote: All dates i	Required Ve	rican Entitles Indor Docume or to date of reg	nts istration of the o	entity)
Entity Type	Company Registration	Proof of Ownership	Proof of Banking Details	Income Tax	VAT Registration	Company Name Change	Proof Addre
		will be registered. Any future changes to a close corporation would still have to be made in terms of the CC Act for CC amendments (CK2/CK2A)		S		and, CoR 18.3 (Registration Certificate)	
			OR				
	"bbc						

		South African Entities Required Vendor Documents [Note: All dates in this table refer to date of registration of the entity]						
Entity Type	Company Registration	Proof of Ownership	Proof of Banking Details	Income Tax	VAT Registration	Company Name Change	Proof Addre	
Partnership	Duly signed partnership agreement which is still in full force and effect.	Letter stating Partners with ID numbers. Clear certified copy of Partner's Identity Documents Duly signed partnership agreement which is still in full force and effect.	Current original certified letter from Bank with Bank stamp and / or original cancelled cheque	A valid original SARS Tax Clearance certificate of each Partner Labour Broker IRP30 (Labour Broker Exemption Certificate) An exemption certificate is only valid from the date of its sue (date of re beipt of application or date when all requirements have been met) until the end of the tax year.	If registered for VAT – VAT certificate. Mandatory or a person ousiness that males, or is likery wake, tax simplies in vce of R1 moion in any consecutive twelve month period to register for VAT. As from 1st March 2012, qualifying micro businesses that are registered for Turnover Tax may also choose to register for VAT.	Refer to the entity type entering into the Partnership for requirements.	Letterher confirmir physical postal addresse	
	"bbE							

		0	Vote: All dates i	Required Ve	frican Entities endor Documer er to date of regi		entity)
Entity Type	Company Registration	Proof of Ownership	Proof of Banking Details	Income Tax	VAT Registration	Company Name Change	Pro Ado
Public Companies – LTD Ltd = /06	Before 1 May 2011 CM1 — (Incorporation of a Company) - Mandatory CM9 — (Change of Name of Company) CM22 — (Notice of Registered Office & Postal Address of Company) After 1 May 2011 CoR 14.3 -(Company Registration Certificate) - Mandatory CoR 21.1 — (Notice of Change of Registered Office)	Clear certified copy of Identity Document/s of Directors Before 1 May 2011 CM29 – (Contents of Register of Directors, Auditors and Officers) - Mandatory After 1 May 2011 CoR 15.1 - (Memorandum of Incorporation - MOI) - Mandatory CoR 39 -(Notice of Change of Directors)	Current original certified letter from Bank with Bank stamp and / or original cancelled cheque	A valid original SARS Tax Clearance certificate Labour Broker IRP30 (Labour Broker Exemption Certificate) An exemption certificate is only varid from the date of issue (a te of a clication or data when all requirements have been met) until the end of the tax year.	If registered for VAT – VAT certificate. Mandatox or a person/usiness that males, or is likely chake, tax supplies in excelled of R1 million in any consecutive twelve month period to register for VAT	Before 1 May 2011 CM9 – (Change of Name of Company) After 1 May 2011 CoR 15.2 – (Change of Name of Company)	Letterh confirm physica postal address CoR 21 (Notice Change Registe Office)
	"bbE						

		South African Entities Required Vendor Documents (Note: All dates in this table refer to date of registration of the entity)								
Entity Type	Company Registration	Proof of Ownership	Proof of Banking Details	Income Tax	VAT Registration	Company Name Change	Proo Addr			
Private Companies - (PTY) LTD (Pty) Ltd = /07	Before 1 May 2011 CM1 — (Incorporation of a Company) CM9 — (Change of Name of Company) CM22 — (Notice of Registered Office & Postal Address of Company) After 1 May 2011 CoR 14.3 — (Company Registration Certificate) — Mandatory CoR 21.1 - (Notice of Change Registered Office)	Clear certified copy of Identity Document/s of Directors Before 1 May 2011 CM29 – (Contents of Register of Directors, Auditors and Officers) After 1 May 2011 CoR 15.1 - (Memorandum of Incorporation - MOI) CoR 39 – (Contents of Register of Directors, Auditors and Officers)	Current original certified letter from Bank with Bank stamp and / or original cancelled cheque	A valid original SARS Tax Clearance certificate Labour Broker IRP30 (Labour Broker Exemption Certificate) An exemption certificate is only valid in the date of issue (a te of a plication or date when all requirements have been met) until the end of the tax year.	If registered for VAT – VAT certificate. Mandatory for a person business that males, or is likely make, tax supplies in vce of R1 maion in any consecutive twelve month period to register for VAT. As from 1st March 2012, qualifying micro businesses that are registered for Turnover Tax may also choose to register for VAT.	Before 1 May 2011 CM9 — (Change of Name of Company) After 1 May 2011 CoR 15.2 — (Change of Name of Company)	Letterhe confirming physical postal addresses CoR 21. (Notice of Change Registern Office)			
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		South African Entities Required Vendor Documents (Note: All dates in this table refer to date of registration of the entity)							
Entity Type	Company Registration	Proof of Ownership	Proof of Banking Details	Income Tax	VAT Registration	Company Name Change	Proo Addr		
Business Trust	Deed of Trust – Trust agreement	Clear certified copy of identity document/s of Founders, Beneficiaries and Trustees Trust Deed, Power of Attorney	Current original certified letter from Bank with Bank stamp and / or original cancelled cheque	A valid original SARS Tax clearance certificate	If registered for VAT VAT certificate. Mandatox for a person fusiness that males, or is likely that make, tax supplies in excelled of R1 muon in any consecutive twelve month period to register for VAT. As from 1st March 2012, qualifying micro businesses that are registered for Turnover Tax may also choose to register for VAT.	N/A	Letterhe confirmin physical postal addresse		
	"DPE								

Non Profit Companies(NPC) Before 1 May 2011 Companies(NPC) CM3 - (Incorporation Certificate Section) CM4 - (Memorandum of Association –MOI) CM22 - (Notice of Registered Office & Postal Address of Company) After 1 May 2011 Cor 14.3 - (Company Registration Certificate) - Mandatory After 1 May 2011 Cor 14.3 - (Company Registration Certificate) - Mandatory CR 39 - (Contents of Register of Directors, Auditors and Officers) Cor 39 - (Contents of Register of Directors, Auditors) - Mandatory Cor 39 - (Contents of Register of Directors, Auditors) - Mandatory Cor 39 - (Contents of Register of Directors, Auditors) - Mandatory Cor 39 - (Contents of Register of Directors, Auditors) - Mandatory Cor 39 - (Contents of Register of Directors, Auditors) - Mandatory Cor 39 - (Contents of Register of Directors, Auditors) - Mandatory Cor 39 - (Contents of Register of Directors, Auditors) - Mandatory Cor 39 - (Contents of Register of Directors, Auditors) - Mandatory Cor 39 - (Contents of Register of Directors, Auditors) - Mandatory Cor 39 - (Contents of Register of Directors, Auditors) - Mandatory Cor 39 - (Contents of Register of Directors, Auditors) - Mandatory Cor 39 - (Contents of Register of Directors, Auditors) - Mandatory Cor 39 - (Contents of Register of Directors, Auditors) - Mandatory Cor 39 - (Contents of Register of Directors, Auditors) - Mandatory Cor 39 - (Contents of Register of Directors, Auditors) - Mandatory Cor 39 - (Contents of Register of Directors, Auditors) - Mandatory		South African Entities Required Vendor Documents (Note: All dates in this table refer to date of registration of the entity								
Companies (NPC) CM3 - (Incorporation Certificate Section) CM4 - (Memorandum of Association –MOI) CM2 – (Notice of Registered Office & Postal Address of Company) After 1 May 2011 CoR 14.3 - (Company Registration Certificate) – Mandatory After 2 May 2011 CoR 15.1C,D,E – (Incorporation Certificate) – Mandatory CoR 39 – (Contents of Register of Directors, Auditors and Officers) After 3 May 2011 CoR 15.1C,D,E – (Incorporation Certificate) – Mandatory CoR 39 – (Contents of Register of Directors, Auditors) – Mandatory CoR 39 – (Contents of Register of Directors) – Mandatory Cory of Members/Directors identity entitled letter form Bank with Bank stamp and / or original certificate ter form Bank with Bank stamp and / or original certificate entities letter form Bank with Bank stamp and / or original certificate. CM9 – (Change of Name of Company) After 1 May 2011 CoR 15.1C,D,E – (Incorporation Certificate Section) – Mandatory CoR 39 – (Contents of Register of Directors, Auditors) and Officers After 3 March 2012, qualifying micro businesses that are registered for Turnover Tax may also choose to	Entity Type	Company Registration		Banking	Income Tax		Name	Proc Add		
Directors, Auditor and Officers	Companies(NPC)	CM3 - (Incorporation Certificate Section) CM4 - (Memorandum of Association –MOI) CM22 – (Notice of Registered Office & Postal Address of Company) After 1 May 2011 CoR 14.3 - (Company Registration Certificate) -	copy of Members/Directors Identity Document/s Before 1 May 2011 CM29 – (Contents of Register of Directors, Auditors and Officers) After 1 May 2011 CoR 15.1C,D,E - (Incorporation Certificate Section) - Mandatory CoR 39 – (Contents of Register of Directors, Auditor	original certified letter from Bank with Bank stamp and / or original cancelled	SARS Tax Clearance	VAT – VAT certificate. Mandatory for a person business that may es, or is likely make, tax supplies in xce s of R1 maion in any consecutive twelve month period to register for VAT. As from 1st March 2012, qualifying micro businesses that are registered for Turnover Tax may also	2011 CM9 - (Change of Name of Company) After 1 May 2011 CoR 15.2 - (Change of Name of	Letterne confirmi physica postal address CoR 21 (Notice Change Register Office)		

		(1	Note: All dates i	Required Ve	rican Entities indor Documer or to date of regl		entity)
Entity Type	Company Registration	Proof of Ownership	Proof of Banking Details	Income Tax	VAT Registration	Company Name Change	Proo Addr
Personal Liability Companies (INC) INC =/21	Before 1 May 2011 CM1 – (Incorporation of a Company) CM9 – (Change of Name of Company) CM22 - (Notice of Registered Office & Postal Address of Company) After 1 May 2011 CoR 14.3 - (Company Registration Certificate) - Mandatory CoR 21.1 - (Notice of Change Registered Office)	Clear certified copy of Identity Document/s Before 1 May 2011 CM29 – (Contents of Register of Directors, Auditors and Officers) After 1 May 2011 CoR 15.1 - (Memorandum of Incorporation - MOI) OR CoR 39 – (Contents of Register of Directors, Auditors and Officers and Officers	Current original Certified letter from Bank with Bank stamp and / or original cancelled cheque	A valid original SARS Tax Clearance certificate	If registered for VAT – VAT certificate. Mandatox or a person/business that males, or is likely, make, tax stabilies in code of R1 mon in any consecutive twelve month period to register for VAT. As from 1st March 2012, qualifying micro businesses that are registered for Turnover Tax may also choose to register for VAT.	Before 1 May 2011 CM9 — (Change of Name of Company) After 1 May 2011 CoR 15.2 — (Change of Name of Company)	Letterhe confirming physical postal addresse CoR 21. (Notice of Change Register Office)
	"bbE						

		(6	Note: All dates l	Required Ve	rican Entities indor Docume or to date of reg		entity)
Entity Type	Company Registration	Proof of Ownership	Proof of Banking Details	Income Tax	VAT Registration	Company Name Change	Proc Addi
State Owned Companies (SOC Ltd) (E.g. Transnet, Eskom, etc.) SOC =/30	A SOC is either a company defined as a "state-owned enterprise" in the Public Finance Management Act 1 of 1999 or a company owned by a municipality. The majority of the provisions of a public company will apply to state- owned as well. Before 1 May 2011 CM1 — (Incorporation of a Company) CM9 — (Change of Name of Company) CM22 - (Notice of Registered Office & Postal Address of Company) After 1 May 2011 CoR 14.3 - (Company Registration Certificate) - Mandatory CoR 21.1 - (Notice of Change Registered Office)	Clear certified copy of Identity Document/s of Directors Before 1 May 2011 CM29 – (Contents of Register of Directors, Auditors and Officers) After 1 May 2011 CoR 15.1 - (Memorandum of Incorporation - MOI) CoR 39 – (Contents of Register of Directors, Auditors and Officers)	Current original certified letter from Bank with Bank stamp and / or original cancelled cheque	A valid original SARS Tax clearance certificate	VAT certificate	Before 1 May 2011 CM9 – (Change of Name of Company) After 1 May 2011 CoR 15.2 – (Change of Name of Company)	Letterhe confirmi physical postal address CoR 21 (Notice Change Register Office)

		South African Entities Required Vendor Documents (Note: All dates in this table refer to date of registration of the entity)							
Entity Type	Company Registration	Proof of Ownership	Proof of Banking Details	Income Tax	VAT Registration	Company Name Change	Proo Addre		
National Government	N/A	Letterhead confirming name of entity OR Invoice not older than three months	Current original certified letter from Bank with Bank stamp and / or original cancelled cheque OR Invoice not older than three months	A valid original SARS Tax Clearance certificate	If registered for VAT – VAT certificate. Mandatox for a personabusiness that males, or is likely that the personabusiness that males, or is likely that the personabusiness in any consecutive twelve month period to register for VAT. As from 1st March 2012, qualifying micro businesses that are registered for Turnover Tax may also choose to register for VAT.	Letterhead confirming name of entity OR Invoice not older than three months	Letterheconfirmir street an postal action OR Invoice in older that three mo		
	"bbE				***				

		South African Entities Required Vendor Documents (Note: All dates in this table refer to date of registration of the entity)							
Entity Type	Company Registration	Proof of Ownership	Proof of Banking Details	Income Tax	VAT Registration	Company Name Change	Proo Addr		
Provincial Government	N/A	Letterhead confirming name of entity OR Invoice not older than three months	Current original certified letter from Bank with Bank stamp and / or original cancelled cheque OR Invoice not older than three months	A valid original SARS Tax Clearance certificate	If registered for VAT – VAT certificate. Mandatery for a person business that makes, or is likely to make, tax shoplies, in excess of R1 makes of R1	Letterhead confirming name of entity OR Invoice not older than three months	Letterhe confirmit street an postal ad OR Invoice rolder that three mo		
	"PRE								

		South African Entifies Required Vendor Documents (Note: All dates in this table refer to date of registration of the entity)							
Entity Type	Company Registration	Proof of Ownership	Proof of Banking Details	Income Tax	VAT Registration	Company Name Change	Pro- Add		
Local Government	N/A	Letterhead confirming name of entity OR Invoice not older than three months	Current original certified letter from Bank with Bank stamp and / or original cancelled cheque OR Invoice not older than three months	A valid original SARS Tax Clearance certificate	If registered for VAT – VAT certificate. Mandatory for a person business that males, or is likely, make, tax supplies in cross of R1 maion in any consecutive fivelive month period to register for VAT. As from 1st March 2012, qualifying micro businesses that are registered for Turnover Tax may also choose to register for VAT.	Letterhead confirming name of entity OR Invoice not older than three months	Letterniconfirm street a postal a OR Invoice older th three m		
	"BAE								

Entity Type Company Registration Proof of Ownership Banking Details Income Tax Registration Name Change Foreign Branch Office CM 49 - Certificate of Registration and Cmanage Change Change CM 49 - Certificate of Registration and CM 49 - Certificate of	Pro Add
Office CM 49 - Certificate of Registration and original certified registration in Change of	
Registration of Memorandum of External Company After 1 May 2011 Company In addition to vendor documentation defined for Foreign Vendors In addition to vendor documentation defined for Foreign Vendors After 1 May 2011 Company In addition to vendor documentation defined for Foreign Vendors After 1 May 2011 Company After 1 May 2011 Company After 1 May 2011 Company In addition to vendor documentation defined for Foreign Vendors After 1 May 2011 Company In addition to vendor documentation defined for Foreign Vendors Vendors After 1 May 2011 Company In addition to vendor documentation defined for Foreign Vendors Vendors After 1 May 2011 Company In addition to vendor documentation defined for Foreign Vendors Vendors After 1 May 2011 Company In addition to vendor documentation defined for Foreign Vendors Vendors After 1 May 2011 Company In addition to vendor documentation defined for Foreign Vendors Vendors Vendors Company In addition to vendor documentation defined for Foreign Vendors In addition to vendor documentation defined for Foreign Vendors In addition to vendor documentation defined for Foreign Vendors After 1 May 2011 In addition to vendor documentation defined for Foreign Vendors After 1 May 2011 In addition to vendor documentation defined for Foreign Vendors After 1 May 2011 In addition to vendor documentation defined for Foreign Vendors After 1 May 2011 In addition to vendor documentation defined for Foreign Vendors After 1 May 2011 In addition to vendor documentation defined for F	Lettern confirm street a postal In addi vendor docum defined Foreigi Vendor

		J).	Note: All dates i	Required Ve	frican Entitles endor Docume er to date of reg	nts	entity)
Entity Type	Company Registration	Proof of Ownership	Proof of Banking Details	Income Tax	VAT Registration	Company Name Change	Proo Addr
Foreign International Vendors Note: All documents sourced from foreign vendors need to be in the International Business Language (English)	Proof of company registration/Memorandum of incorporation (in accordance with foreign country's applicable legislation)	Proof of ownership/Record of Directors (in accordance with foreign country's applicable legislation)	Current original certified letter from Bank with Bank stamp and / or original cancelled cheque	Proof of Income Tax Registration	Proof of VAT Registration	Proof of company name change (in accordance with foreign country's applicable legislation)	Letterhe confirmii street ar postal ad
		11				L	
	"bbr						

		(Note: All dates	Required Ve	frican Entities endor Documer er to date of regi	nts stration of the	entity)
Entity Type	Company Registration	Proof of Ownership	Proof of Banking Details	Income Tax	VAT Registration	Company Name Change	Proc Addr
Educational Institution (e.g. Universities / colleges / schools) Note: Educational Institutions are not seen as a vendor type. Other vendor types can be marked as an educational Institution (E.g. a Private company may be indicated to be an educational Institution)		CK documents / Certified Letter head Any other registration /accreditation certificate pertaining to the relevant industry	Current original certified letter from Bank with Bank stamp and / or original cancelled cheque	A valid original SARS Tax Clearance certificate	If registered for VAT – VAT certificate. Mandate v. for a person business that males, or is likely to make, tax supplier, in types of R1 maion in any consecutive twelve month period to register for VAT		Letterhe confirmi physical postal address
	"BEE						

			Note: All dates	Required Ve	frican Entitles endor Documer er to date of regi		entity)
Entity Type	Company Registration	Proof of Ownership	Proof of Banking Details	Income Tax	VAT Registration	Company Name Change	Proof Addre
Specialised Professions (E.g. Promotional Speakers, Doctors, Specialists, Security, Construction Contractors, Food Suppliers, IT Related Vendors, etc.) INC =/21	Practice Number Attorneys - Fidelity Fund certificate - renewable each year PSIRA certificate if a security company Compliance with CIDB CIDB Registration Certificate. Register for a project of which the project value exceeds R200 000. Private sector projects of which the project value exceeds R3 million on 30 August 2005. Renew certificate every 3 years for requalification of grades. Particulars to be contained in Register of Contractors Categories of Registration Requirements in relation to contractor grading designation, financial capability Certificate of Acceptability from Municipality Accreditation certificate	Clear certified copy of Identity Document/s CK documents / Certified Letterhead Any other registration certificate pertaining to the relevant industry	Current original certified letter from Bank with Bank stamp and / or original cancelled cheque	A valid original SARS Tax Clearance certificate	If registered for VAT – VAT certificate. Mandatory for a person business that males, or is likely to make, tax supplied, in tyce of R1 maton in any consecutive twelve month period to register for VAT. As from 1st March 2012, qualifying micro businesses that are registered for Turnover Tax may also choose to register for VAT.		Letterhea confirmir physical postal addresse

		h	lote: All dates i	Required Ve	rican Entities indor Documer or to date of regi		entity)
Entity Type	Company Registration	Proof of Ownership	Proof of Banking Details	Income Tax	VAT Registration	Company Name Change	Proof Addre
Financial Institutions (e.g. banks)	See relevant entity above e.g. LTD Financial Services Board Licence (FSB)		Current original Certified letter from Bank with Bank stamp and / or original cancelled cheque	A valid original SARS Tax Clearance certificate	If registered for VAT – VAT certificate. Mandatory for a person business that males, or is likely that make, tax subject, in type of R1 malon in any consecutive twelve month period to register for VAT		Letterhea confirmir physical postal addresse
	"bbc		C _X				

SUMMARY OF COMPANY FORMS TO BE SUBMITTED WHEN THERE ARE CHANGES

Old form(s)	New Form
CM1, 2A, 2B, 2C, CM44: Table A CM44C	CoR 15.1 A
CM1, 2, 2A, 2C, 2D, Table B of Form CM44	CoR 15.1 B
CM3, 4, 4A, 4B, CM44, & CM44C	CoR 15.1 C
CM3, 4, 4A, 4B, CM44, & CM44C	CoR 15.1 D
CM3, 4, 4A, 4B, CM44, & CM44C	CoR 15.1.E
No forms	CoR 17.3
CM1, 2, 2A, 2B, 2C, 2D, CK2, CK2A	Con 8.1
CM46	CoR 18.3
CM49	CoR 20.2
CM22	CoR 21
	CoR 25
	CoR 39
CM01	CoR 44
	CM1, 2A, 2B, 2C, CM44: Table A CM44C CM1, 2, 2A, 2C, 2D, Table B of Form CM44 CM3, 4, 4A, 4B, CM44, & CM44C CM3, 4, 4A, 4B, CM44, & CM44C CM3, 4, 4A, 4B, CM44, & CM44C No forms CM1, 2, 2A, 2B, 2C, 2D, CK2, CK2A CM46 CM49

)		ting Transnet Suppuired when there i	oliers: s a change in deta	iils
Company Registration	Ownership	Banking Details	Income Tax	VAT Registration	Company Name	A
If the registration number of a company has changed, it is essentially a new company and therefore applicable documents to indicate the new registration number must be submitted with a letterhead signed by the owner / MD / Partner / Director of the entity. The letterhead should also reflect the new registration number.	If there are changes to the directorship / ownership or BBBEE details, a letter signed by owner / MD / partner / director of the entity detailing the changes is required on a company letterhead. The official updated registration document confirming directorship must also be attached, and share certificates if applicable.	If there are changes to the banking details of an existing supplier the information can be submitted on a company letterhead signed by owner / MD / partner / director of entity requesting the changes. Reasons for changing banking details must also be indicated in the letter. Accompanying this letter must be an ORIGINAL letter from the bank, signed and stamped, stipulating the new account details.	If the Income Tax registration number of an existing supplier changes the supplier must notify Transnet by sending the information on a company letterhead signed by owner / MD / partner / director of entity requesting changes. The new original SARS Tax Clearance certificate must be attached to the letter.	If the VAT registration number of an existing supplier changes the supplier must notify. Transnet by sending the information in a company letterhoad signed by owner. MD / partner / directs or intity reconsting changes. The new VAT 103 document and the new Tax Clearance certificate must be attached to the letter.	In the event of a name change to an existing supplier the information must be sent on a company letterhead signed by owner / MD / partner / director of entity confirming that it is only a name change that is required. Applicable COR from CIPC documents stating the name change must be submitted.	If there to the coaddress signed I MD / Pa Director request is required letterhe compar should; the new

	Foreign Trade Vendors Required Vendor Documents (External = /10) Note: All documents sourced from foreign vendors need to be in the International Bus									
Entity Type	Company Registration	Proof of Ownership	Copy of ID of Business Owner / Director(s)	Proof of Banking Details	Income Tax	VAT Registration	Company N Change			
Sole Proprietor	Company Registration (Proof of Ownership) Supply proof of address of registered offices	N/A Industry / Commercial Licence and permit	Clear copy of certified Identity Document/s of Owner and or Directors Certified Copy of Passport/s	Banking details on supplier's letterhead signed by Owner or Director and letter from the bank to confirm banking details Beneficiary Details Residential Status — Temporary resident / Non-resident Account number / IBAN — IBAN	Foreign Vendor with branch/es in RSA. A valid certified original Tax Clearance Certificate / certified letterhead	Foreign Vendor with branch/es in RSA need VAT registration in RSA. Compulsory registration only if 12 monthly turnover is or is expected to be more than R1 million. Optional registration for turnover R50000-R1 million.	Official name change document from the relevant authority			

		lote: All docum	ents sourced for	Requi	reign Trade Ven ired Vendor Doc (External = /10	uments	nel Busine
Entity Type	Company Registration	Proof of Ownership	Copy of ID of Business Owner / Director(s)	Proof of Banking Details	Income Tax	VAT Registration	Company N Change
				Branch Branch/Sort Code Swift/BIC Physical address (not a PO Box)\ Suburb Town/City Country Beneficiary reference (e.g. Account No) Intermediary Bank – Not mandatory Statutory Re ortin 1 - Special Cases Punos of payment (Provide full a) d precise details of the payment) SARB authority number / Date Loan reference number (as allocated by the SA Reserve Bank)			

		Vote: All docum	ents sourced fro	Requi	reign Trade Ven red Vendor Doc (External = /10	uments).	ma (mu cibro
Entity Type	Company Registration	Proof of Ownership	Copy of ID of Business Owner / Director(s)	Proof of Banking Details	Income Tax	VAT Registration	Company N Change
Partnerships	Duly signed partnership agreement which is still in force and effect and Industry / Commercial Licence and permit Supply proof of address of registered offices	Duly signed partnership agreement which is still in force and effect and Industry / Commercial Licence and permit	Clear copy of certified Identity Document/s of Owner and or Directors Certified Copy of Passport/s	Banking details on Supplier's letterhead signed by Owner or Director and letter from the bank to confirm banking details	Refer to the entity type entering into the Partnership for requirements. Details of majority partner apply.	Refer to the entity type entering into the Partnership for requirements. Details of majority partner apply.	Refer to the type entering the Partners for requirem
				38			

		Note: All darum	ents sourced fro	Requi	reign Trade Ven red Vendor Doc (External = /10)	uments	nal Busines
Entity Type	Company Registration	Proof of Ownership	Copy of ID of Business Owner / Director(s)	Proof of Banking Details	Income Tax	VAT Registration	Company N Change
Public / Private Company	Proof of registration and Industry / Commercial Licence and permit Supply proof of address of registered offices Before 1 May 2011 CM49 After 1 May 2011 Con 20.2 Registration Certificate of External Company	Proof of registration and Industry / Commercial Licence and permit	Clear copy of certified Identity Document/s of Owner and or Directors Certified Copy of Passport/s	Banking details on Supplier's letterhead signed by Owner or Director and letter from the bank to confirm banking details	Foreign Vendor with branch/es in RSA. A valid certified original Tax Clearance Certificate / certified letterhead	Foreign Vendor with branch/es in RSA need VAT registration in RSA. Compulsory registration only if 12 monthly turnover is or is expected to be more than R1 million. Optional registration for turnover R50000-R1 million.	Official name change document from the relevant authority
	110	REVI					

		lote: All docum	ents sourced fr	Requi	reign Trade Ven red Vendor Doc (External = /10)	uments	nal Busine
Entity Type	Company Registration	Proof of Ownership	Copy of ID of Business Owner / Director(s)	Proof of Banking Details	Income Tax	VAT Registration	Company N Change
Business Trust	Deed of Trust Agreement and Industry / Commercial Licence and permit Supply proof of address of Registered offices	Deed of Trust Agreement and Industry / Commercial Licence and permit	Clear copy of certified Identity Document/s of Owner and or Directors Certified Copy of Passport/s	Banking details on Supplier's letterhead signed by Owner or Director and letter from the bank to confirm banking details	Foreign Vendor with branch/es in RSA. A valid certified original Tax Clearance Certificate / certified letterhead	Foreign Vendor with branch/es in RSA need VAT registration in RSA. Compulsory registration only if 12 monthly turnover is or is expected to be more than R1 million. Optional registration for turnover R50000-R1 million.	Official name change document from the relevant authority
				284			
	110	5K.					

		Note: All docum		Requi	reign Trade Ven red Vendor Doc (External = /10	uments	
Entity Type	Company Registration	Proof of Ownership	Copy of ID of Business Owner / Director(s)	Proof of Banking Details	Income Tax	VAT Registration	Company N Change
Non Profit Organisation	Proof of registration and Industry / Commercial Licence and permit Supply proof of address of registered offices Before 1 May 2011 CM49 After 1 May 2011 CoR 20.2 Registration Certificate of External Company	Proof of registration and Industry / Commercial Licence and permit	Clear copy of certified Identity Document/s of Owner and or Directors Certified Copy of Passport/s	Banking details on Supplier Letterhead signed by Owner or Director and letter from the bank to confirm banking detail	Foreign Vendor with branch/es in RSA. A valid certified original Tax Clearance Certificate / certified letterhead	Foreign Vendor with branch/es in RSA need VAT registration in RSA. Compulsory registration only if 12 monthly turnover is or is expected to be more than R1 million. Optional registration for turnover R50000-R1 million.	Official name change document for the relevant authority
	"Q	2EVI					

		Note: All darum	ents sourced fro	Requi	reign Trade Ven red Vendor Doc (External = /10)	uments	10
Entity Type	Company Registration	Proof of Ownership	Copy of ID of Business Owner / Director(s)	Proof of Banking Details	Income Tax	VAT Registration	Company t Chang
Other	Proof of registration and Industry / Commercial Licence and permit Supply proof of address of registered offices Before 1 May 2011 CM49 After 1 May 2011 CoR 20.2 Registration Certificate of External Company	Proof of registration and Industry / Commercial Licence and permit	Clear copy of certified Identity Document/s of Owner and or Directors Certified Copy of Passport/s	Banking details on Supplier's letterhead signed by Owner or Director and letter from the bank to confirm banking detail	Foreign Vendor with branch/es in RSA. A valid certified original Tax Clearance Certificate / certified letterhead	Foreign Vendor with branch/es in RSA need VAT registration in RSA. Compulsory registration only if 12 monthly turnover is or is expected to be more than R1 million. Optional registration for turnover R50000- R1 million.	Official namchange document from the relevant authority
		QEVI					

T2.2-36: TENDER DECLARATION FORM

NAM	E OF COMPANY:	
We _	do hereby certify that:	
1.	Transnet has supplied and we have received appropriate tender offers to any/all questions (a which were submitted by ourselves for tender clarification purposes;	s 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 this Transnet sources, other than information formally received from the designated Transnet of nominated in the tender documents;	
4.	we are satisfied, insofar as our company is concerned, that the processes and procedures Transnet in issuing this TENDER and the requirements requested from lenderers in respon TENDER have been conducted in a fair and transparent manner; and	
5.	furthermore, we acknowledge that a direct relationship exists between a family member and/or member / director / partner / shareholder (unlisted companies) of our company and an employ member of the Transnet Group as indicated below. **Respondent to indicate if this section is not	ee or board
	FULL NAME OF OWNER/MEMBER/ORPETOR/ PARTNER/SHAREHOLDER: ADDRESS: Indicate nature of relationship with Transnet:	
	[Failure to furnish complete and accurate information in this regard may lead disqualification of your response and may preclude a Respondent from doing future busing Transport]	

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writing of such circumstances.

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

TRANSNET FREIGHT RAIL ENQUIRY NUMBER: CPT 1616433.001 ENQUIRY NUMBER: CPT 1616433.001 DESCRIPTION: SUPPLY, INSTALL AND COMMISSION SMART ENERGY METERS AND RELATED NETWORK AND COMMUNICATION INFRASTRUCTURE AT SELECTED TRANSNET TRACTION FEEDER SUBSTATIONS ALONG THE SISHEN SALDANHA IRON ORE RAIL LINE

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

his day of 20
AS WITNESS:
Name:
Position:
Signative:
OX.

T2.2-37: Method Statement

Note to tenderers:

Method statement

In addition to general methodology for the project please provide specific information for the following points:

A detailed method statement describing exactly how each aspect of the work will be executed and the order in which it will be done

- The physical description of the activities
- Consideration w.r.t. to safety is important
- Curing times and hold points to be noted if any.
- Any special conditions to be mentioned, critical

Attached submissions to this so	chedule:	

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		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		MATTER MATERIAL MATER
,		

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

Signed	Date	
Name	Position	· mathe
Tenderer		

T2.2-38: Declaration of Understanding

PROJECT NAME:	SUPPLY, INSTALL AND COMMISSION SMART ENERGY METERS AND RELATED NETWORK AND COMMUNICATION INFRASTRUCTURE AT SELECTED TRANSNET TRACTION FEEDER SUBSTATIONS ALONG THE SISHEN SALDANHA IRON ORE RAIL LINE	DOCUMENT NO:	001
PROJECT NO:	1616433	DATE:	
CONTRACTOR:		CONTRACT NO:	CPT 1616433.001
		CONTRACT NO:	CPT 1616433.001

cupational Tearth & Safety Act and Regulations

I also declare that I understand by re-ponsibilities in terms of enforcing and implementing the Environmental Specifications for the aforemental Contract.

Signed	Signature	Date
Place		
Witness 1:	Signature	Date
Witness 2:		

NAME OF COMPANY:	
I / We	do hereby certify that <i>I/we</i>
	eding 5 (five) years of a serious breach of law, including but
	1998, by a court of law, tribunal or other administrative body.
	quired to disclose excludes relatively minor offences or
misdemeanours, e.g. traffic offences.	
Where found guilty of such a serious breach, please di	isclose:
NATURE OF BREACH:	
DATE OF BREACH:	
·	
Furthermore I/wa acknowledge that Transport COC	td reserves the right to exclude any Respondent from the
	been found guilty of a serious breach of law, tribunal or
regulatory obligation.	been round guilty of a serious breach of law, dibultar of
SIGNED of	
SIGNED at on this	day of 20
· •	
SIGNATURE OF WITNESS	SIGNATURE OF RESPONDENT

SIGNATURE OF RESPONDENT

T2.2-50: B-BBEE PREFERENCE POINTS CLAIM FORM (SBD 6.1)

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

1. INTRODUCTION

- 1.1 A total of 10 preference points shall be awarded for B-BBEE Status Level of Cortribution.
- 1.2 Failure on the part of a Tenderer to fill in and/or to sign this form and schmit a B-BBEE Verification Certificate from a Verification Agency accredited by the South African Accreditation System [SANAS] or a Registered Auditor approved by the Independent Angulatory Board of Auditors [IRBA] or an Accounting Officer as contemplated in the Clase Corporation Act [CCA] together with the Tender will be interpreted to mean that preference points for B-BBEE Status Level of Contribution are not claimed.
- 1.3 Transnet reserves the right to require of a Tenusce, either before a Tender is adjudicated or at any time subsequently, to substantiate ary claim in regard to preferences, in any manner required by Transnet.

2. GENERAL DEFINITIONS

- 2.1 "all applicable taxes" not de varue-added tax, pay as you earn, income tax, unemployment insurance fund contributions of skills development levies;
- 2.2 **"B-BBEE"** mean, broad-based black economic empowerment as defined in section 1 of the Broad-Based black Economic Empowerment Act;
- 2.3 **"B-BBEI status of contributor"** means the B-BBEE status received by a measured entity based on it overall performance using the relevant scorecard contained in the Codes of Good Practice on Brack Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- 2.4 **"Tender"** means a written offer in a prescribed or stipulated form in response to an invitation by Transnet for the provision of goods, works or services;
- 2.5 **"Broad-Based Black Economic Empowerment Act"** means the Broad-Based Black Economic Empowerment Act, 2003 [Act No. 53 of 2003];
- 2.6 **"comparative price"** means the price after the factors of a non-firm price and all unconditional discounts that can utilised have been taken into consideration;
- 2.7 "consortium or joint venture" means an association of persons for the purpose of combining their expertise, property, capital, efforts, skills and knowledge in an activity for the execution of a contract;
- 2.8 "contract" means the agreement that results from the acceptance of a Tender by Transnet;

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- 2.9 "EME" means any enterprise with an annual total revenue of R5 [five] million or less as per the 2007 version of the B-BBEE Codes of Good Practice and means any enterprise with an annual total revenue of R10 [ten] million or less as per the Revised Codes of Good Practice issued on 11 October 2013 in terms of Government Gazette No. 36928;
- 2.10 "firm price" means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs and excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract;
- 2.11 "functionality" means the measurement according to predetermined norm, as set out in the Tender documents, of a service or commodity that is designed to be practical and useful, working or operating, taking into account, among other factors, the quality reliability, viability and durability of a service and the technical capacity and ability of a Tenter
- "non-firm prices" means all prices other than "firm" prices;
- "person" includes reference to a juristic person;
- "QSE" means any enterprise with an annual total 2.14 even e between R5 [five] million and R35 [thirty five] million as per the 2007 version of the BEE Codes of Good Practice and means any enterprise with an annual total revenue of by tween R10 [ten] million and R50 [fifty] million as per the Revised Codes of Good Practice isseed on 11 October 2013 in terms of Government Gazette No. 36928
- 2.15 "rand value" means the total estimated value of a contract in South African currency, calculated at the time of Tender invitations, and includes all applicable taxes and excise duties;
- "subcontract" means the rimary contractor's assigning or leasing or making out work to, or 2.16 employing another per on **x** support such primary contractor in the execution of part of a project in terms of the contract,
- "total revelue" lears the same meaning assigned to this expression in the Codes of Good Practice in Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black En powerment Act and promulgated in the Government Gazette on 9 February 2007;
- "trust" means the arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person; and
- "trustee" means any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.

ADJUDICATION USING A POINT SYSTEM 3.

- 3.1 The Tenderer obtaining the highest number of total points for the evaluation criteria as enumerated in Section 2 of the RFP will be awarded the contract, unless objective criteria justifies the award to another Tenderer.
- 3.2 Preference points shall be calculated after prices have been brought to a comparative basis taking into account all factors of non-firm prices and all unconditional discounts.

Page 2 of 6 Part T2: Returnable Schedule T2.2-50: BBBEE Preference Points Claim Form

- 3.3 Points scored will be rounded off to 2 [two] decimal places.
- 3.4 In the event of equal points scored, the Tender will be awarded to the Tenderer scoring the highest number of preference points for B-BBEE.
- 3.5 However, when functionality is part of the evaluation process and two or more Tenders have scored equal points including equal preference points for B-BBEE, the successful Tender will be the one scoring the highest score for functionality.
- 3.6 Should two or more Tenders be equal in all respect, the award shall be decided by the drawing of lots.

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

4.1 In terms of the Preferential Procurement Regulations, 2011, preference points shall be awarded to a Tenderer for attaining the B-BBEE status level of contribution in accordance with the table below:

B-BBEE Status Level of Contributor	Number of Points
	[Maximum 10]
1	10
2	94
3	8
4	5
5	4
6	3
	2
8	1
io -c impliant contributor	0

- 4.2 Tenderers who qualify as EMEs in terms of the 2007 version of the Codes of Good Practice must submit a certificate issued by an Accounting Officer as contemplated in the CCA or a Verification Agency accredited by SANAS or a Registered Auditor. Registered auditors do not need to meet the prerequisite for IRBA's approval for the purpose of conducting verification and issuing EME's with B-BBEE Status Level Certificates.
- 4.3 Tenderers who qualify as EMEs in terms of the Revised Codes of Good Practice issued on 11 October 2013 in terms of Government Gazette No. 36928 are only required to obtain a sworn affidavit on an annual basis confirming that the entity has an Annual Total Revenue of R10 million or less and the entity's Level of Black ownership.

March 2015

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- 4.4 In terms of the 2007 version of the Codes of Good Practice, Tenderers other than EMEs must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.
- 4.5 The Department of Trade and Industry recently revised the Codes of Good Practice on 11 October 2013 [Government Gazette No. 36928]. The Revised Codes will replace the Black Economic Empowerment Codes of Good Practice issued on 9 February 2007. The Revised Codes provide for a transitional period ending 30 April 2015. During the transitional period, companies may elect to be measured in terms of the Revised Codes or the 2007 version of the Codes. Companies which are governed by Sector-specific Codes will be measured in terms of those Sector Codes.
- As such, Transnet will accept B-BBEE certificates issued based on the Revised Godes. Transnet will also continue to accept B-BBEE certificates issued in terms of the 2017 version of the Codes provided it was issued before 1 May 2015. Thereafter, Transnet will only accept B-BBEE certificates issued based on the Revised Codes.
- 4.7 In terms of the Revised Codes of Good Practice, Tendered, who qualify as QSEs must comply with all the elements of B-BBEE for the purposes of measurement. QSEs that are at least 51% or 100% Black owned are only required to obtain a swork affidavit on an annual basis confirming that the entity has an Annual Total Revenue of 1500 million or less and the entity's Level of Black ownership. Large enterprises must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.
- 4.8 A trust, consortium or joint centure will qualify for points for its B-BBEE status level as a legal entity, provided that the ontit, ubmits its B-BBEE status level certificate.
- 4.9 A trust, consortion of joint venture will qualify for points for their B-BBEE status level as an unincorporate excity, provided that the entity submits their consolidated B-BBEE scorecard as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate Textler.
- 4.10 Tertiary institutions and public entities will be required to submit their B-BBEE status level certificates in terms of the specialised scorecard contained in the B-BBEE Codes of Good Practice.
- 4.11 A person will not be awarded points for B-BBEE status level if it is indicated in the Tender documents that such a Tenderer intends subcontracting more than 25% [twenty-five per cent] of the value of the contract to any other enterprise that does not qualify for at least the same number of points that such a Tenderer qualifies for, unless the intended subcontractor is an EME that has the capability and ability to execute the subcontract.
- 4.12 A person awarded a contract may not subcontract more than 25% [twenty-five per cent] 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 subcontracted to an EME that has the capability and ability to execute the subcontract.

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Part T2: Returnable Schedule T2.2-50: BBBEE Preference Points Claim Form 4.13 Tenderers are to note that in terms of paragraph 2.6 of Statement 000 of the Revised Codes of Good Practice issued on 11 October 2013 in terms of Government Gazette No. 36928, any representation made by an entity about its B-BBEE compliance must be supported by suitable evidence or documentation. As such, Transnet reserves the right to request such evidence or documentation from Tenderers in order to verify any B-BBEE recognition claimed.

В-В	BEE STAT	TUS AND SUBCONTRACTING			
5.1		rers who claim points in respect of B-BBEE Status Level of Co	ntribution must		
	complete the following:				
	B-BBEE Status Level of Contributor = [maximum of to joints]				
	Note: Points claimed in respect of this paragraph 5.1 must be in a cordance with the table				
		reflected in paragraph 4.1 above and must be substantiated by made or a B-BBEE certificate			
	issued b	by a Verification Agency accredited by SANAS or a Registered Auditor app	roved by IRBA or		
		affidavit in the case of an EME or QSE.			
5.2	Subcon	tracting:			
	Will any	portion of the contract be subcontracted? YES/NO [delete which is not ap	plicable]		
	If YES, ir				
	(i)	What percentage of the contraction be subcontracted?	%		
	(ii)	The name of the subcentractor			
	(iii)	The B-BBEE status level of the subcontractor	*****************		
	(iv)	Is the subcontractor an EME?	YES/NO		
5.3	Declaration	on with regard to Company/Firm			
	(i)	Name of Company/Firm			
		AT registration number			
		on any registration number			
	(iv)	Type of Company / Firm [TICK APPLICABLE BOX]			
		□Partnership/Joint Venture/Consortium			
		©One person business/sole propriety			
		Close Corporations			
	.	Company (Pty) Ltd			
	(v) E	Describe Principal Business Activities			

5.

(vi)	Company Classification [TICK APPLICABLE BOX]
	□Manufacturer
	□Supplier
	□Professional Service Provider
	□Other Service Providers e.g. Transporter, etc.
(vii)	Total number of years the company/firm has been in business

TENDER DECLARATION

I/we, the undersigned, who warrants that he/she is duly authorised to do so in behalf of the company/firm, certify that points claimed, based on the B-BBEE status level of court bution indicated in paragraph 4 above, qualifies the company/firm for the preference(s) shown and I / we acknowledge that:

- (i) The information furnished is true and correct.
- (ii) In the event of a contract being awarded as a result of points claimed as shown in paragraph 6 above, the contractor may be required to furnish documentary proof to the satisfaction of Transnet that the claims are conject.
- (iii) If the B-BBEE status level of contribution has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, Transnet may, in addition to any other remedy it may have
 - (a) disqualify the person from the Tenderding process;
 - (b) recover costs, loss is 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) restrict the Tenderer or contractor, its shareholders and directors, and/or associated entities, or only the shareholders and directors who acted in a traudulent manner, from obtaining business from Transnet for a period not exceeding 10 years, after the *audi alteram partem* [hear the other side] rule has been applied; and/or
 - (e) forward the matter for criminal prosecution.

	WITNESSES:	
		2
1.		
2		SIGNATURE OF TENDERER
2.		DATE
		DATE:
	COMPANY NAME:	
	ADDRESS:	

T2.2-51: Certificate of Acquaintance with Tender Documents

NAME OF TENDERING ENTITY:

- I/we do hereby certify that I/we acquainted myself/ourselves with all the documentation comprising this TENDER and all conditions contained therein, as laid down by Transnet SOC Ltd for the carrying out of the proposed supply/service/works for which I/we submitted my/our Tender.
- I/we furthermore agree that Transnet SOC Ltd shall recognise no claim from me/us not 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 the 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 Tenderder, whether or not affiliated with the Tenderder, who:
 - a) has been requested to submit a Tender in response to this Tender invitation;
 - b) could potentially submit a Fencer in response to this Tender invitation, based on their qualifications, abilities or experience; and
 - c) provides the same Services as the Tenderder and/or is in the same line of business as the Tenderder
- The Tenderder 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 Tenderding.
- 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]
 - 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 TENDER; or
 - f) Tenderding with the intention not winning the Tender.

TRANSNET FREIGHT RAIL
ENQUIRY NUMBER: CPT 1616433,001
DESCRIPTION: SUPPLY, INSTALL AND COMMISSION SMART ENERGY METERS AND RELATED NETWORK AND COMMUNICATION
INFRASTRUCTURE AT SELECTED TRANSNET TRACTION FEEDER SUBSTATIONS ALONG THE SISHEN SALDANHA IRON ORE RAIL LINE

- 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 Tenderder, directly or indirectly, to any competitor, prior to the date and time of the official Tender opening or of the awarding of the contract.
- 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, Tenderders 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 2001 of any other applicable legislation.

SIGNED at	on this day of	
SIGNATURE OF WITNESS		
"bbr		

freight rail

CPT 1616433.001: SUPPLY, INSTALL AND COMMISSION SMART ENERGY METERS AND RELATED NETWORK AND COMMUNICATION INFRASTRUCTURE AT SELECTED TRANSNET TRACTION FEEDER SUBSTATIONS ALONG THE SISHEN SALDANHA IRON ORE RAIL LINE

Aechnical Compliance Sheet

TECHNICAL COMPLIANCE SHEET - C3.1 WORKS INFORMATION

The compliance response is to contain ONLY the following statements, "Comply", or "Do not comply".

he deviation from the requirement is required Where "do not comply" is inserted, remarks as to the rease

Description of the Works Engineering and the Contractor's Design Construction Plant and Materials Standards anc Workmanship List of Drawings	Reason for deviation					
Description Description of the Works Engineering and the Contractor's Design Construction Plant and Materials Standards and Workmanship List of Drawings	Compli nce Response	2		5		
	Description	Description of the Works	Engineering and the Contractor's Design	Construction	erials Standards	List of Drawings
	Item	1 $1.1 - 1.3$	2 2.1-2.9	3 3.1-3.2	4 4.1 – 4.3	5 5.1

Management and 97, 44 139	2	Procurement	
6 6.1-6.10		7 7.1-7.6	

Date & Company Stamp

Respondent's Signature

C1.1 Form of Offer & Acceptance

Offer

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

SUPPLY, INSTALL AND COMMISSION SMART ENERGY METERS AND RELATED NETWORK AND COMMUNICATION INFRASTRUCTURE AT SELECTED TRANSNET TRACTION FEEDER SUBSTATIONS ALONG THE SISHEN SALDANHA IRON ORE RAIL LINE

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 his Offer has accepted the Conditions of Tender.

By the representative of the tenderer, deemed to be duly authorised, signing has 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 @ 14% 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 the Acceptance part of this Form of Offer and 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)	116,		
Name(s)			
Capacity			
For the tenderer:			(1.11.11.11.11.11.11.11.11.11.11.11.11.1
Name & signature of witness		Date	4 - 400-1410
Tenderer's CII	OB registration number:		

Contract FORM: PRO-FAT-0203 Rev02

C1.1: Form of Offer and Acceptance

Acceptance

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 Ter der 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 terest, this agreement comes into effect on the date when the tenderer receives one fully completed diginal topy of this document, including the Schedule of Deviations (if any).

Unless the tenderer (new Contractor) within five working days of the date of such receipt notifies the Employer in writing of environment, which is agreement shall constitute a binding conflact between the Parties.

Signature(s)		
Name(s)		
Capacity	West defined that he had a	
for the Employer	Transnet SOC Ltd Bellville Square, off Robert Sobukewe Road Behind Transnet Park, Bellville South	
Name & signature of witness		Date
Note: If a tend	erer wishes to submit alternative tenders, use a	nother copy of this Form of Offer and

Contract FORM: PRO-FAT-0203 Rev02

Acceptance.

Schedule of Deviations

Note:

- 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.
- 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		
6		
7		

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 the eto listed in the Tender Schedules, as well as any confirmation, clarification or changes to the tends 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 of effect in the contract between the parties arising from this Agreement.

	For the tendetery	For the Employer
Signature	The same is the sa	
Name		
Capacity		
On behalf of	(Insert name and address of organisation)	Transnet SOC Ltd Bellville Square, off Robert Sobukwe Road Behind Transnet Park, Bellville South
Name & signature of witness		
Date		

Contract FORM: PRO-FAT-0203 Rev02

C1.2 Contract Data

Data provided by the Employer

Clause	Statement	Data
	General	
10.1	The <i>Employer</i> is	Transnet SOC Ltd
	Address	Registered address: Carlton Centre 150 Commissioner Street Johannesburg
	Having elected its Contractual Address for the purposes of this contract as:	Transnet Freight Rall RME Bellville Square Off Robert Sobukwe Road Bekind Transnet Park Pollvine South Lost I Address: 2.0. Box 338 Kasseslylei 7535
	Tel No.	(021) 940 1800
	Fax No.	(021) 940 1940
11.2(11)	The works are	Supply, Install and Commission Smart Energy meters and related network and communication infrastructure at selected Transnet Traction Feeder Substations along the Sishen Saldanha Iron Ore Rail Line
11.2(13)	The Works information is in	the document called 'Works Information' in Part 3 of this contract.
11.2(12)	The Site Information is in	the document called 'Site Information' in Part 4 of this contract.
11.2(12)	The site is	Substations along the Sishen Saldanha Iron Ore Rail Line
30.1	The starting date is	Contract Date
11.2(2)	The completion date is	3 months
13.2	The period for reply is	2 weeks
14.4	The <i>Employer's</i> representative is (name) Address	Darren Cupido Bellville Square, off Robert Sobukwe Road, behind Transnet Park, Bellville

Tel No.	083 852 0709
Fax No.	None
The authority of the <i>Employer's</i> representative is	The <i>Employers Representative</i> is delegated to carry out all the actions of the Employer in this Contract
The defects date is	26 weeks after Completion
The defect correction period is	2 weeks
The assessment day is on the	10 th of each month.
The delay damages are	R 1000.00 per day
The retention is	10% on all payments certified
The currency of this contract is the	South African Rand
The period within which payments are made is	Payment will be exected on or before the last day of the mouth following the month during which a valid Tax invoice and statement were received
The interest rate on late payment is	The prime lending rate of the Standard Bank of South Africa
The Contractor is not liable to the Employer for loss of or damage to the Employer's property in excess of	What wer the Contractor deems desirable in addition to that provided by the Employer for my one event
Employer's property in excess of	ny one event
	Fax No. The authority of the Employer's representative is The defects date is The defect correction period is The assessment day is on the The delay damages are The retention is The currency of this contract is the The period within which payments are made is The interest rate on late payment is The Contractor is not liable to the Employer for loss of or damage to the

82.1 The *Employer* provides this insurance

1. Insurance against:

Insurance against of or damage to the works, Plant & Materials is as stated in the Insurance policy for Contract works and public liability (Blanket Principal Controlled Insurance)

Cover / indemnity.

Cover / Indemnity is to the extent as stated in the insurance policy for contract works and public liability (Blanket Principal controlled Insurance)

The deductibles are:

As stated in the Blanket Rhocipal Controlled insurance policy for Contract Works / Public Liability

2 Insurance against:

Loss of or damage Europent (Temporary Works only) as stated the insurance policy for contract works and public liability.

Cover / indemnity

Is to the ettent as stated in the insurance policy for contract works and public liability (Blanket Principal Controlled Insurance)

The deductibles are

is stand in the Blanket Principal Controlled usurance policy for Contract Works / Public labelity

3 Insurance against:

Cover / indemnity:

Deductibles:

The *Employer* provides these additional insurances

Insurance against:

Cover / indemnity:

Deductibles:

The Contractor provides these additional insurances:

1 Insurance against:

Loss of or damage to property (except the works, plant, materials & 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 as stated in the insurance policy for contract works and public liability (Blanket Principal Controlled Insurance)

Is to the extent as stated in the insurance policy for contract works and public liability (Blanket Principal Controlled Insurance)

As stated in the Blanket Principal Controlled insurance policy for Control Works / Public Liability

Contract Works ASRIA insurance subject to the terms, exceptions and conditions of the SASRIA coupon

Crystandemnity is to the extent provided by the SASRIA coupon

the deductible are as stated in the Contract works SASRIA policy

- Where the contract requires that the design of any part of the works shall be provided by the Contractor he 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
- Should the Employer have an insurable interest in such items during manufacture of fabrication, such interest shall not be noted by endorsement to the Contractor's policies of insurance as well as those of any subcontractor.
- 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.

5. The insurance coverage referred to in 1, 2, 3 and 4 above shall be obtained from an insurer
in terms of an insurance policy approved by
the Employer. The Contractor shall arrange
with the insurer to submit to the Employers
Representative 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.

83.1	The minimum amount of cover for insurance in respect of loss of or damage to property (except the <i>Employer's</i> property, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i>) arising from or in connection with the <i>Contractor's</i> Providing the Service for any one event is:	
83.1	insurance in respect of death of or body	The Contractor must comply at a minimum with the provisions of the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 as amended.
93.1	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> .
93.2(2)	The Adjudicatominating body is:	
	If no Adjudicator nominating body is entered, it is	The Association of Arbitrators (Southern Africa)
93.4	The tribunal is:	Arbitration
If the tribunal is arbitration	The arbitration procedure is	The Rules for the Conduct of Arbitrations of the Association of Arbitrators (Southern Africa)
complete this data.	The place where arbitration is to be held is	Northern Cape
and the section of th	The person or organisation who will choose an arbitrator if the Parties cannot agree a choice or if the arbitration procedure does not	The Chairman of the Appeainting of Aubituation

if the arbitration procedure does not

state who selects an arbitrator, is

The Chairman of the Association of Arbitrators

(Southern Africa)

Data provided by the Contractor (the Contractor's Offer)

The tendering contractor is advised to read both the NEC3 Engineering and Construction Short Contract (June 2005) and the relevant parts of its Guidance Notes (ECSC3-GN)¹ 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 page 26 of the ECSC3 Guidance Notes.

Completion of the data in full is essential to create a complete contract.

The Contractor is (Name):	
Address	
Tel No.	
Fax No.	
E-mail address	
The percentage for overheads and profit added to the Defined Cost for people is	
The percentage for overheads and profit added to other Defined Cost is	%
The Price List is in	the document called 'Price List' in Part 2 of this contract.
The offered total of the Prices is	R excluding VAT
List]:	[in words]
	excluding VAT
2	
	Address Tel No. Fax No. E-mail address The percentage for overheads and profit added to the Defined Cost for people is The percentage for overheads and profit added to other Defined Cost is The Price List is in The offered total of the Prices is [Enter the total of the Prices form the Price

¹ Available from Engineering Contract Strategies Tel 011 803 3008, Fax 011 803 3009.

TRANSNET



C2 Pricing Data

C2.1 Pricing Instructions

Entries in the first four columns in the Price List are made either by the Employer or the tenderer.

If the *Contractor* is to be paid an amount for the item which is not adjusted if the quantity of work in the item changes, the tenderer enters the amount in the Price olumn only; the Unit, Quantity and Rate columns being left blank.

If the *Contractor* is to be paid an amount for youtem of work which is the rate for the work multiplied by the quantity completed, the tenderer enters the rate which is then multiplied by the expected quantity to produce the Price, which is also entered.

All Prices are to be shown excluding VAT unless instructed otherwise by the *Employer* in Tender Data or in an instruction the *Employer* has given before the tenderer enters his Prices.

If there is insufficient space in the Price List which follows, state in which document the Price List is contained.

C2.2 Price List

I PREVILEN

CONTRACT NUMBER: CPT 1616433.001

SUPPLY, INSTALL AND COMMISSION SMART ENERGY METERS AND RELATED NETWORK AND COMMUNICATION INFRASTRUCTURE AT SELECTED TRANSNET TRACTION FEEDER SUBSTATIONS ALONG THE SISHEN SALDANHA IRON ORE RAIL LINE

TEM	DESCRIPTION	UNIT	QTY	RATE (R)	AMOUNT (R)
1	SECTION 1 : PRELIMINARY & GENERAL				11100111 (11)
- 1	Tenderers are to price this Schedule strictly in accordance with the Specifications and SANS 1200, where a conflict arises between these two documents the Specifications shall take precedence. Where a conflict arises between this Schedule and the Specifications, the Specifications shall take precedence. Tenderers shall study all relevant information before pricing this Schedule and the Schedule shall be priced to provide the complete Works				
.1	GENERAL				
	Travel All travel required to complete project as per specification	sum	1		
	Quality All quality aspecs to complete quality as per specification	sum	1		11
	Safety All Safety to comply to the safety spec provided	sum	1		
A	Accommodation All accommodation needed to complete the project as per required spec.	Sum	1	0	
	SECTION 2: SUMS STATED PROVISIONALLY BY EMPLOYER				
	General				
i)	Accredited training of <i>Employer's</i> personnel w.r t system nonitoring and fault reporting (3 x technicians and 3 x process yorkers	10	6		
i)	DRFP Distance Protection integration. DRFP Distance Protection integration & x technicians and 3 x rocess workers	по	6		
i)	WWAN Connection to assist with commissioning WWAN Connection to assist with commissioning (3 x technicians and 3 x process workers	no	3		
1) 5	Signage & labelling etc. Signage & labelling as may be required by the Employer's presentative(s) 250mm x 250mm pvc	no 8	О		
i) A	SCADA monitoring and control work Additional SCADA monitoring and control work, including but	no 3			
not	limited to new equipment, software and licenses, arammino. labour etc. (3 x Technicians)				

ITEM	DESCRIPTION	UNI	T QT	RATE	AMOUNT
	TOTAL BROUGHT FORWARD				
3	SECTION 3 : ELECTRICAL & ELECTRONIC INSTALLATIONS				
	NOTE			ſ.	
	Tenderers are to price this Schedule strictly in accordance with the Drawings, Specifications and SANS 1200. Where a conflict arises between this Schedule and the Specifications, the Specifications shall take precedence. Where a conflict arises between the Specificaitons and the Drawings, the latest Drawings shall take precedence. Tenderers shall study all relevant information before pricing this Schedule and the Schedule shall be priced to provide the complete Works i.e. the supply where required, installation, testing and commissioning plus handing over of the fully functional equipment / installation				
	The Contractor to furnish all design and shop drawings if applicable and any associated equipment specs for approval prior to manufacturing and delivery to site			1	
3.1	FIBER OPTIC CABLES				
U	<u>Note</u>		4	\mathbf{O}	
	All fibre optic cables to be UV stabilised				
.1.1	Single mode fibre optic armoured cable in sleeves and/ or supported on poles	1	\	•	
1	a) 24 core				
	i) Supply	m	500		
i	ii) Install	m	500		
i.2	FIBER OPTIC CABLE TERMINATION				
I	Note				
t	Complete termination kits for three optic cable, including 1xE-2000 cray, cassettes and 12x rights, filter splices etc.				
2.1	Single mode fibr. op c chie indoor termination				
a	a) 24 core				
i)	Supply	No.	8		
lii) Install	No.	8		
<u>b</u>) 24 core cable, only 12 cores terminated				
i)	Supply	No.	8		Rate only
ii)) Install	No.	8		Rate only

ITEM	DESCRIPTION	1		-		
	SMART METERS	UI	TIV	QTY	RATE	AMOUNT
	Texas and annual and a second and a second	- 1				
	a) "ION Smart Meters" Type P7650A0C0B5E0A0A mounted on fi for purpose 19" blanking plates	t.				
	To burbose 19 blanking blates					
	i) Supply	N	o.	4		
	ii) Install					
		No	o.	4		
	iii) Commission	No	,	4		1
	LA WANT OF THE PARTY OF THE PAR			.		
li t	 b) "ION Smart Meters" Type P7650B1F0B5E0A0A mounted on fit for purpose 19" blanking plates 	-		- 1		
		1				
ļi.) Supply	No	. [Rate on
lii	i) Install					
133	£	No	. [Rate on
ii	i) Commission	No.				Rate on
C.	110 A / 1 VAC (Int			- 1		hate on
(1) 10 A / 1 VAC Universal Technic Clamp On Current Probe M1UB10A1V-10A)	1				
				- 1		
(1)	Supply	No.				Rate onl
ii)	Install					
		No.	+			Rate onl
iii)) Commission	No.	V		•	Rate only
3.4 CF	PU/ ETHERNET CARDS					1,400 0,11
	THERNET CARDS				L.	
<u>a)</u>	CPU/ Ethernet card for Protecta DRFP-EP Distance Protection			1	1	
Re	elay	1			1	
i) s	Supply	No.	8			
		INO.	6	,		
ii) 1	Install	No.	8	Ē		
(iii)	Commission			. [
",		No.	8			
<u>b) I</u>	Program CPU/ Ethernet care	No.	8		1	
.5 SW	/ITCHES				1	
.5 544	TICHES					
a) "	Cisco Ethernet Very ork Switch" Type 3650 24 4x1G 230VAC,			1		d
HICH	uding power stipply, nick mount kit. 1x SFP module per switch					
i) Su	er 2 support and licensina upply	No.	4			
		NO.	-4			
ii) Ir	nstall	No.	4			
iii) C	Commission			1	1	
,,,,,	OTHERSOOT	No.	4			
<u>b) "(</u>	Cisco Ethernet Network Switch" Type IE-3010-16S-8PC: 16 100					}
SFP,	8 10/100 PoE,2 GEuplinks, including power supply, rack mount aver 2 support and licensing	- 1				1
MC. 1	avel 2 Subbort and licensing					i
i) Su	ppiy	No.				Rate only
ii\ te-	etall					Nate only
ii) Ins	Stall	No.				Rate only
iii) Co	ommission	No.			1	.
	5	110.				Rate only

ITE		UN	п от	Y RATE	AMOUNT
	c) Transceiver module 10/100/1000 Base-T Gigabit R345 copper SFP to be "Cisco" compatible				
	i) Supply	No			Rate onl
	ii) Install	No			Rate onl
	iii) Commission	No			
	d) SFP module				Rate onl
3.6	UPS'S, BATTERIES & POWER OUTLET INSTALLATIONS	No.	1		
3.6.1					
3.0.1		1			
	a) "APC Smart-UPS X 750VA LCD 230V" Type smx750i mounted to 19" rack mount, including rack mount kit	Σ.			
	i) Supply	No.	4		
	ii) Install	No.	4		
	iii) Commission	No.	4		
	b) "APC Smart-UPS" Type BK650-AS, freestanding				
	i) Supply	N	4		
	ii) Install	No.	4		
	iii) Commission	No.	4		
	Self-contained charger and battery pack a) Closed voltage current 48 volt 12 an opere sharger with and including 48 Volt 45 ampere hous sain anarce free batteries all self contained within suitable fousing una. Minimum standby load of 9.1 amperes for a 3 hour duration				
	i) Supply	No.			Rate only
	ii) Install	No.			Rate only
li	ii) Commission	No.			Rate Only
6.3	Indoor type socket installation				
E	a) Supply and install 230 Volt switched socket outlet including equired 20A circuitbreaker and associated wiring from nearest sub- listribution board	No.	4		
.7 F	RACKS & ACCESSORIES				
h) Freestanding/ surface mount 19" rack including all mounting ardware and blanking plates at Helios, Garona, Lewensaar and errum				
li	Supply	No.	4		
1.7	T. C.				
) Install	No.	4		

TEM	DESCRIPTION	UNIT	OTY	RATE	AMOUNT
	b) Brush panels to suit 19" freestanding/ surface mount rack at				
	TFS and Signal Hut				
	ls a 1				
	i) Supply	No.	12		
	ii) Install	No.	12		
	A factor condition to the condition				
	c) 1m long patch leads Type E-2000				
	i) Supply		,		
	і у Зарріу	No.	12		
	ii) Install	No.	12		
		INO.	12		
	d) 5m long Cat6 Ethernet fly leads		- 1		
	The state of the s				
i	i) Supply	No.	15		
	-				
i	ii) Install	No.	15		
				•	
			4		
- 1					
- 1					
- 1				•	
- 1					
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OTA	L CARRIED TO C1.1 FORM OF OFFER AND ACCEPTANCE				
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	"6,				
	"bbErly"				

PART C3: SCOPE OF WORK

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1 DESCRIPTION OF THE WORKS

1.1 Executive Overview

The works involves the supply, installation, commissioning of remote Supply Measuring Equipment, Fibre Optic Cables and associated equipment. The monitor parameters will include inputs from the electrical network to provide visual feedback on the unique electrical states which can lead to power outages of the Ore Line Over Head Track Equipment (OHTE) under varying circumstances. Monitoring and visualisation is to be performed remotely from the *Employer's* Central Train Control Operations Centre in Saldanha via a Fibre Optic network backbone provided by others.

The power supply for the electrified ore railway line is through seven Traction Feeder Substitions (TFSs), located along the rail line in the vicinity of the following areas:

(All recognised names are mentioned in an effort to limit confusion – this is due to the different *Employer's* divisions and ESKOM referring to the electrical and other elements by their own particular naming convention, for a "loop/ rail siding/ station", "Traction Feeder Substation" and "Main Transmission Substation")

- Loop 0 (Saldanha) Aurora / Salkor (±15km from Saldanha)
- Loop 4 Juno / Knersvlak (±20km from Vredendal)
- Loop 8 Helios / Sous (±70km from Loeriesfontein)
- Loop 12 Aries / Kolke (±50km from Kenhardt)
- Loop 16 Garona / Rooilyf (±35km from Groble shoot)
- Loop 18 Lewensaar / Vrolik (±30km from Olifan sho k)
- Loop 20 (Sishen) Ferrum / Erts (±20km ft m Kz/hu)

The Traction Feeder Substations (TFSs) are currently fed by 2x 40MVA upstream transformers at each of the ESKOM Main Transmission Substations (MTSs.) via overhead distribution lines.

The *Employer* will be implementing a Technical Ethernet Network to serve the Iron Orc Export (Orex) Line. A project has been initiated at Aurora, Juno and Aries Traction Feeder Substations and associated signal huts to establish standards for communications and equipment.

The new work will be carried out at the following sites namely:

- Loop 8 H (ios / Sols (±70km from Loeriesfontein)
- Loop 16 Carona / Rooilyf (±35km from Groblershoop)
- Loo, 18 ewensaar / Vrolik (±30km from Olifantshoek)
- Loop 20 (Sishen) Ferrum / Erts (±20km from Kathu)

The requirements at the above can be summarised as follows:

Supply and Install Field Equipment

TFS Electrical Control Building

Ion Meter

Program and commission Ion Meter

Surface / Wall mount 19" rack enclosure

UPS

Cisco Ethernet Switch

Cisco SFP modules

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Program and commission Cisco Ethernet Switch

230V supply to 19" rack enclosure

Ethernet cards for DRFP

Program and commission DRFP Ethernet cards

Cat 5/6 Ethernet fly-leads for Ion Meter and DRFP

Fibre optic patch panel

Signal Hut

Fibre optic patch panel

Link TFS Electrical Control Building and Signal Hut

Trenching

Sleeves and Manholes

Fibre optic cable

Terminate fibre optic cable on both ends

1.1.1 Current status of the installed infrastructure

- 1. The seven Traction Feeder Substations (no transferred solutions i.e. switching only) serving the entire 860km *Employer* Orex railway line comprise of:
 - a. 6x old generation Traction Feeder (ubstations (Aurora, Juno, Helios, Aries, Garona and Ferrum)
 - b. 1x new generation Traction Feeder Substation (Lewensaar)
 - c. The 50KV Medium Voltage work ead feeder lines from the ESKOM Main Distribution Substation to the Employer's Traction Feeder Substations varies from less than 100m to as much as 25km
- The seven Traction Feeder Substations are equipped with different types of circuit breakers and the protection devices at all different settings:
 - a. 1 older pereration Traction Feeder Substation (Ferrum) is equipped with older generation oil insulated circuit breakers (OCBs) with the over-current protective device set at a tripping current of 730 VV th 50V DC control voltage
 - b. 5 older generation Traction Feeder Substations (Aurora, Juno, Aries, Helios and Garona) are equipped with new generation gas insulated circuit breakers (GCBs) with the over-current protective device set at a tripping current of 730 A with 110V DC control voltage
 - c. the only new generation Traction Feeder Substation (Lewensaar), is equipped with gas insulated circuit breakers with the over-current protective device set at a tripping current of 730 A
 - d. All telecontrol equipment is powered by 50V DC
- Each Traction Feeder Substation is equipped with 1x EuroProt Protecta DRFP-EP Distance Protection Relay
 per Single Phase circuit that can perform various remote functions and have built-in data reporting
 capability
 - a. Current monitoring input is provided by CTs rated at 1000/3A and 1000/5A
 - b. Voltage monitoring input is provided by VTs rated at 50000/100V 200VA
 - c. Supply voltage to the distance protection is 50V DC

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- 4. Each Traction Feeder Substation continuously streams a limited set of data back to the Central Train Control building on the SALKOR premises in Saldanha
 - a. A project is underway to provide Ethernet over Fibre Optic network capability between the Traction Feeder Substations and the Central Control Room in Saldanha. Completion for the entire 800km to 900km Orex Line Ethernet network is envisaged by the end of 2015.
- From a technical or maintenance perspective, the collected information must be readily available/accessible in a user friendly manner to assist with fault finding and/or maintenance planning exercises.

1.2 Employer's objectives

The Employer's objectives are:

- 1. To collect and transmit the collected information/data to a central data server at Electrical Control at the CTC Building at Salkor.
- 2. To disseminate the collected data to Electrical Maintenance in structured fashion via SCADA and/or Electrical Reporting software.
- 3. To develop a reporting system for the Technical Divisions to enablement to access the collected data in a user friendly manner to assist with forecasting, fault finding and maintenance planning exercises.
- 4. To implement a full featured Quality of Supply Monit ring system over the entire length of the Orex railway line

1.3 Interpretation and terminology

The following abbreviations are used in this Works Information:

Abbreviation	Meaning given to the abbreviation	
AIA	Authorized Inspection Authority	
AC	Albernating Current	
BBBEE	Broad Based Black Economic Empowerment	
CEMP	Construction Environmental Management Plan	
CD	Compact Disc	
CDR	Contractor Documentation Register	
CDS	Contractor Documentation Schedule	
CIRP	Contractor's Industrial Relations Practitioner	
CRL	Contractor Review Label	
CSHEO	Contractor's Safety, Health and Environmental Officer	
СТ	Current Transformer	
СТС	Central Trail Control	
СМ	Construction Manager	
DC	Direct Current	

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DTI	Department of Trade and Industry		
DWG	Drawings		
EO	Environmental Officer		
ЕоТВ	End of Train Beacon		
GCB	Gas Insulated Circuit Breaker		
HAW	Hazard Assessment Workshop		
HAZOP	Hazard and Operability Study		
HSSP	Health and Safety Surveillance Plan		
INC	Independent Nominated Consultant		
IP	Industrial Participation		
IR	Industrial Relations		
IPP	Industrial Participation Policy		
IPO	Industrial Participation Obligation		
IPS	Industrial Participation Secretariat		
IRCC	Industrial Relations Co-ordinaling Committee		
JSA	Job Safety Analysis		
MTS	Main Transmission Substation (ESKOM)		
Native	Original electronic inerformat of documentation		
OCB	Oil Insulated Circuit Breaker		
OHTE	Overhend To Etion Equipment		
OREX	Ore Export Line		
PES	Project Environmental Specifications		
PHA	Preliminary Hazard Assessment		
PIRM	Programme Industrial Relations Manager		
PIRPMP	Programme Industrial Relations Policy and Management Plan		
PLA	Project Labour Agreements		
PLC	Programmable Logic Controller		
PSIRM	Project Site Industrial Relations Manager		
PSPM	Project Safety Program Manager		
PSSM	Project Site Safety Manager		
ProgEM	Programme Environmental Manager		
ProjEM	Project Environmental Manager		
QA	Quality Assurance		

R&D	Research and Development
RTU	Remote Terminal Unit
SANS	South African National Standards
SASRIA	South African Special Risks Insurance Association
SES	Standard Environmental Specification
SHE	Safety, Health and Environment
SHEC	Safety, Health and Environment Co-ordinator
SIP	Site Induction Programme
SMP	Safety Management Plan
SSRC	Site Safety Review Committee
TCO	Train Control Officer
TFR	The Employer Freight Rail
TFS	Traction Feeder Substation (The Excelorer)
UPS	Uninterruptable Power Supply
VDU	Video / Visual Display Un
	Voltage Transformer

2 ENGINEERING AND THE CONTRACTOR'S DESIGN

2.1 Employer's design requirements

- 2.1.1 The Employer requires the Contractor to:
 - 1. Make provision for the application for Permits to work as required
 - 2. Install 24 core armoured fibre optic cables in new trenches, in new and/or existing sleeves
 - 3. In conjunction with the relevant *Employer* division and the *Employers Representative*, identify the position and/or route of new trenches and sleeves
 - 4. Supply, install and commission appropriately sized cabinets (typically 12U wall/surface mounted 19 inch rack) to house smart meters, UPSs and Ethernet switches, complete with all the associated wiring, hardware, interface and power cables (230VAC), power socket outlets etc. necessary to complete and commission these installations.
 - 5. Supply, install and commission all type E-2000 19 inch rack mount fibre optic terminations inclusive of trays, cassettes, fusion joints, terminal blanks and brush panels complete at the TFS control building and Signal Huts / Bungalows
 - 6. Supply, install and commission new smart meters at Traction feeder Substations complete with suitable mounting back plates to install smart meters within 19 inch, rack inclosures.
 - 7. Supply, install and commission new UPSs.
 - 8. Supply, install Cisco 3650 24 4x1G 230VAC Etherne Switches within new cabinets at the Traction Feeder Substations
 - 9. Supply, install and commission analogue / digital / Ethernet interfaces
 - 10. Supply and install appropriately sized parel wiring between the existing terminals of the respective CTs and VTs and the new smart meters inside be control panel of the Substation Control Building. There will be no field wiring required between the yard and the Control Building.
 - 11. Program all installed smart meters compete.
 - 12. Supply, install and commission new CPU/Ethernet cards for the Protecta DRFP-EP Distance Protection Relays.
 - 13. Test to ensure all the data signals are received by the monitor PC at the CTC building at Salkor.
- 2.1.2 The *Employer* grants the *Contractor* a licence to use the copyright in design data presented to the *Contractor* for the purpose of the *Works* (and the *Contractor's* obligation under paragraph 2.2 of the *Employer's* Works Information on 1.1

2.2 Parts of the works which the Contractor is to design

- 2.2.1 The Contractor is to design the following parts of the works.
 - 1. Interface hardware and connection to electrical equipment to collect input data at the TFS
 - 2. Transmitting the data to the Signal Hut via Ethernet Network Protocol
 - 3. Receive/Collect the data at the CTC building

2.3 Procedure for submission and acceptance of Contractor's design

- 2.3.1 In submitting designs, the Contractor shall follow the procedures as described below:
 - The Contractor's documentation shall be issued to the Employers Representative under cover of the Contractor's Transmittal Note, indicating all Contract references (i.e. Project No, Contract No, etc.) as well as the Contractor's Project Document Number, Revision Number, Title and chronological listing of transmitted documentation.

- Formats of the *Contractor* data submitted is dependent on the project procedure and shall be specified by the *Employers Representative*, upon the notified request of the *Contractor*.
- The *Contractor* shall deliver both hard copies and electronic media copies (CD Rom) to the *Employers Representative* at the address stated within the Contract Data.
- All electronic documentation shall be submitted by the Contractor in Adobe Acrobat (.PDF) and Native file format.
- Acceptance of documentation by the *Employers Representative* will in no way relieve the *Contractor* of his responsibility for the correctness of information, or conformance with his obligation to provide the *works*. This obligation rests solely with the *Contractor*.
- After review, a copy of the original reviewed/marked-up drawing/document, with the *Employers Representative's* consolidated comments and document status marked on the *Contractor* Review Label, is scanned and the hard copy shall be returned to the *Contractor* under cover of the project's Transmittal Note for revision or re-submittal as instructed.
- The Contractor shall allow the Employers Representative 2 weeks to review and respond to the Contractor's submission of their documentation, i.e. from time of receipt by the project to the time of despatch.
- On receipt of the reviewed documentation, the *Contracto*, she make any modifications requested/marked-up and resubmit the revised documentation to the *Employers Representative* within 2 weeks. Queries regarding comments/changes must be addressed with the *Employers Representative* prior to re-submittal.
- Any re-submittals, which have not included the changes, comments identified, will be returned to the *Contractor* to be corrected. The *Contractor* shall re-issue the revised documentation, incorporating all comments and other specified details not included in the previous issue, within 2 working days of receipt of the marked-up document.
- The *Contractor* shall undertake design safety eviews as and when requested by the *Employers Representative*.

Any drawings submitted for acceptance to the *Employers Representative* shall be checked and bear the *Contractor*'s own in-house acceptance samp before acceptance will be considered by the *Employers Representative*. In addition to this grawings of purpose made equipment for this installation, shall be checked and signed by a Professional Engineer appointed by the *Contractor*. Drawings not complying with this requirement will summarily be returned to the *Contractor*.

It is the responsibility of the Contractor to obtain the Employers Representative's acceptance before commencement of any relevant manufacture or installation work and to stay within the time-constraints of the contract. The Contractor shall submit two sets of paper prints of workshop drawings for acceptance of which one set shall be returned with comments or acceptances given.

2.3.2 Documentation Submission

In undertaking the 'works' (including all incidental services required), the Supplier / Contractor shall conform and adhere to the requirements of the 'Contractor Document Submittal Requirements' Standard included in Annexure 1 (Refer DOC-STD-0001).

2.4 Review and Acceptance of Contractor Documentation

The *Contractor* submits documentation as the 'Works Information' requires to the *Employers Representative* for review and acceptance.

In undertaking the 'works' (including all incidental services required), the Supplier shall conform and adhere to the requirements of the 'Contractor Document Submittal Requirements' Standard included in Annexure 1 (Refer DOC-STD-0001).

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2.5 Other requirements of the Contractor's design

2.5.1 The *Contractor's* design complies with the following:

When work or design work is undertaken in close proximity of infrastructure owned by tenants, it will be the responsibility of the *Contractor* to liaise with the relevant tenant to ascertain whether his planned activity or design is in accordance with their applicable standards, procedures and requirements. Protection of all industry equipment and infrastructure will remain the responsibility of the *Contractor* at all times.

2.6 Use of Contractor's design

- 2.6.1 The Contractor grants the Employer a licence to use the copyright in all design data presented to the Employer in relation to the works for any purpose in connection with the construction, re-construction refurbishment, repair, maintenance and extension of the works with such licence being capable of transfer to any third party without the consent of the Contractor.
- 2.6.2 The *Contractor* vests in the *Employer* full title guarantee in the intellectual or perty and copyright in the design data created in relation to all *works* irrespective of where or what those marks may be.

2.7 Design of Equipment

2.7.1 In the unlikely event that the Contractor may be required to design sophisticated equipment for any construction activity, whether that be for the construction or fitment of project equipment or for temporary works, details of such designs shall be submitted to the Employers Representative for his perusal. Depending on the nature of the design complexity or any other matter related to the design of such equipment, approval of such design may be required by the Employers Representative or his team of design consultants. Manufacturing or use of any of such equipment may therefore be allowed only after design approval by the Employers Representative or his team of design consultants.

2.8 Equipment required to be not ded in the works

- 24 Port Ethernet Witche, with 4 x SFP capable ports each for the fibre connection
- AC input supply requipment inside TFS control building
- SFP Single Note modules for distance up to 10km with LC connector for the TFS switches.
- 24 cor Single Mode fibre aerial and/or armoured cable.
- Ruggedized E-2000 APC to LC fibre patch leads (1m)
- Installation and configuration of the Ethernet switches.
- Final network connectivity tests per site.
- Cabinet (19" rack type) for fibre cable termination and Ethernet switch in TFS's.
- Termination of the fibre cable at the TFS and Signal Hut.
- Fibre splicing items like mid couplers, splicing tray, splice cassettes, pigtails etc.
- Pre and post acceptance tests.
- Cable sleeves, trenches and built and/or precast manholes and/or "ram bore" drilling
- Installation of sleeves and fibre cables.
- Smart meters
- CPU/Ethernet cards for Protecta DRFP-EP Distance Protection Relays
- RTUs
- CTs

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- VTs
- UPSs
- All required licencing

2.9 As-built drawings, operating manuals and maintenance schedules

2.9.1 The *Contractor* provides the following:

- 1. General arrangement, layout and single line drawings of their intended design for each TFS, for approval prior to construction.
- 2. As-built information
- 3. Maintenance and Operation manuals
- 4. OEM documentation
- 5. Training of the Employer's personnel

2.9.2 The Contractor shall provide the following documentation within 11 working days after completion of the works:

- Redline mark-up drawings, covering the entire site, with act wate information pertaining to all constructed
 equipment and infrastructure, irrespective whether the equipment and infrastructure is underground or
 above ground, shall be submitted.
- Maintenance schedules for all components, where re evant, are to be provided by the *Contractor*. These schedules shall be neatly bound in a single A4 or A5 format book or file, and it may be requested at the time that additional copies that contain the various components and/or disciplines separately, be provided. Three paper copies as well as an electronic PSF version are required.
- Results of polarity and insulation tests including test voltage, time duration, insulation resistance, leakage current, etc.
- Survey information
- Certificate of compliand
- Issuing of SANS approval documentation for luminaires and poles
- OTDR tests (Option Time Domain Reflectometer)

2.9.3 As-Built/Final log mentation

In undertaking the 'works' (including all incidental services required), the Contractor shall conform and adhere to the requirements of the 'Contractor Document Submittal Requirements' Standard included in Annexure 1 (Refer DOC-STD-0001).

2.9.4 Installation, Maintenance and Operating Manuals and Data Books

In undertaking the 'works' (including all incidental services required), the Contractor shall conform and adhere to the requirements of the 'Data Books and Manuals' Standard included in Annexure 1 (Refer DOC-STD-0001) and the 'Contractor Documentation Submittal Requirements' Standard included in Annexure 1 (Refer to DOC-STD-0001).

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3 CONSTRUCTION

3.1 Temporary works, Site services & construction constraints

- 3.1.1 Employer's Site entry and security control, permits, and Site regulations
 - The works are to be carried out adjacent to existing rail lines at various Traction Feeder Substations and Signal Huts and at the Salkor Central Train Control building at Saldanha. Access to the site will be arranged by the *Employer*. The appointed *Contractor* shall strictly abide by all the *Employer* terms and conditions for such access, as specified in their procedures, which will be issued to the *Contractor* ahead of the works.
 - 2. The *Contractor* shall ensure that all vehicles and plant are suitable for undertaking work at the designated work areas. The *Employer* will not be liable for any access constraints arising from poor or unfavourable ground conditions.
 - 3. The *Employer* will share all available information regarding the location of under round services with the *Contractor* ahead of the commencement of *works*:
 - 4. The Contractor shall hand locate existing services to ensure no cable are landged during excavations.
 - 5. All work may only be undertaken under the relevant the Employ of Permit to Work System.

Contractors shall be deemed to have allowed in their tender for any additional cost to be involved due to the foregoing, as no claims for any extras in connection with the position or nature of the work will be entertained.

The *Contractor* shall take out temporary entry permits for all staff working within the rail corridor. All costs incurred shall be borne by the *Contractor* or his staff.

The fullest collaboration between the *Contractor, Employer*, the *Supervisor* and other parties is essential with regard to the working of the Ore Line. The commercial activities shall at all times take priority over the construction activities.

The *Contractor* shall comply with the standard conditions of entry and exit for all temporary permit holders, as enforced by TFR and the requirements of the *Employer*. It is the responsibility of the *Contractor* to ensure that all his employees are properly versed as to what these are.

The following access and permitting a guarements shall apply for work done within and outside of the rail corridor boundaries:

- All of the *Contractors* of shall undergo inductions by *the Employer*. Medical and drug test certificates are to be submitted to *the Employer* prior to the inductions.
- Access casts for insucted staff are to be obtained from the Employer, which shall be presented to the Employer as curity staff upon entering or exiting the rail corridor area.
- All safety plans, issued in accordance with the Safety Risk Management procedures, shall be submitted to the Employer for their review and comment at least two weeks prior to the commencement of works.
- The *Contractor* shall submit all documentation as required by *the Employer* timeously and shall strictly abide by the conditions attached to the approved permits and wayleaves.
- Daily meetings shall be held between the Contractor's site manager, the Employers Representative and a
 designated the Employer representative to discuss and arrange access for the execution of work within the
 rail corridor boundaries.
- Preference shall at all times be given to the Employer's operations, which may not be disrupted.
- 3.1.2 The *Contractor* shall comply with all the rules and regulations relevant to and implemented at the *Employer's* sites and provided at the *Employer's* induction course. The *Contractor* shall make sure that all staff complies.
- 3.1.3 Restrictions to access on Site, roads, walkways and barricades

Apart from when gaining entry or exit, the *Contractor* shall ensure that his staff members do not wander about the railway in areas where they are not allowed. This would include all areas outside the security gate and on tenant properties.

3.1.4 The *Contractor* shall comply with the following requirements of the *Employer*:

Staff members shall refrain from walking in roads and close vicinity to the water's edge without wearing a personal floating device (PFD). Red lines clearly demarcate areas which can only be entered upon wearing a PFD.

Staff members shall refrain from entering buildings currently occupied by *the Employer's* employees, unless they are there to perform specific work and have obtain the relevant clearance and approval from *the Employer*.

3.1.5 People restrictions on Site; hours of work, conduct and records:

The working hours shall be in accordance with the requirements of the Department of Labour or with the agreement of the relevant trade unions. This information relating to working hours shall be supplied to the *Supervisor* prior to commencement of the proposed working hours. The *Contractor* shall keep daily records of his people engaged on the site and working areas (including Sub *Contractors*) with access to such daily records available for inspection by the *Employers Representative* at all reasonable times.

- 3.1.6 The *Contractor* shall comply with the requirements stated under paragraph 6.3 of C3.1 *Employer's* Works Information.
- 3.1.7 The *Contractor* complies with the CEMP, SES and PES in the contraction of the *works*, all as described under paragraph 6.4 of C3.1 *Employer's* Works Information.
- 3.1.8 Title to Materials from demolition and excavation

As per standard *Employer's* regulation s, the *Contracto* shall have no title to any materials from any excavation or demolition. Where such materials become available for spoiling, the *Employers Representative* shall instruct the *Contractor* how to label, mark, set aside and/or dispose of such Materials for the benefit of the *Employer* in accordance with NEC3 ECSC.

3.1.9 Co-operating with and obtaining coep to ice of others

The rail corridor is used by numerous tenants and being developed, modified and maintained by the tenants and others. The *Contractor* shall also note of others when executing the *works* and accept the possible nuisance factor of accommodation are activities on site at all times.

- 3.1.10 The Contract visibility arform the works and co-operate with:
 - All officials and employees of the Employer
 - All parties acting on behalf of the Employer
 - All staff members of the tenants
 - All others currently working on Site
 - All others that will commence works on Site prior to the completion of this contract

3.1.11 Publicity and progress photographs

The *Contractor* shall not be allowed to take any photographs on site without proper authorisation from the *Employer* and proper scrutiny of all photographs taken by officials from the *Employer* or officials representing the *Employer*. This is mostly to protect the rights of all tenants with regard to potential strategic equipment or infrastructure they may have on site.

The *Contractor* shall refrain from making any statements in the media or engaging with the media on any matter relating to this project.

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- 3.1.12 The *Contractor* may be required to provide progress photographs. Detailed progress will be recorded in the Site Diary and reflected and updated weekly on the *Contractor's* construction schedule.
- 3.1.13 The *Contractor* shall not advertise the contract or the project to any third party, nor communicate directly with the media (in any jurisdiction) whatsoever without the express written notification and consent of the *Employers Representative*.
- 3.1.14 The *Contractor* keeps daily records of his Equipment used on Site and the Working Areas (distinguishing between owned and hired Equipment) with access to such daily records available for inspection by the *Employers Representative* at all reasonable times.
- 3.1.15 Equipment provided by the Employer

None

3.1.16 Site services and facilities

The *Contractor* shall make provision for his own power, water, waste disposal, telecoms, ablutions, lighting and fire protection and everything else required for providing the *works*.

3.1.17 The *Employer* provides the following facilities for the *Cor cachor*:

Access

Sites will be made available to the *Contractor* for the duration of the *works*. The *Employer* will not provide any security for the *works*.

Contractor's Yard

No office or facilities are required for the Day lover's staff.

- 3.1.18 Wherever the *Employer* provides facilities (including, *inter alia*, temporary power, water, waste disposal, telecommunications etc.) for the *Contractor's* use within the Working Areas and the *Contractor* adapts such facilities for use, then the *Contractor* makes good and provides full reinstatement to the land (including all apparatus of the *Employer* and Others in, on or under the land) and surrounding areas to its original standard upon dismantling of standard hand-back to the *Employer*.
- 3.1.19 Facilities provided by the Contractor:

Contractor's Office

N/A

Existing Structures

The *Contractor* will be held responsible for any damage to existing structures and surfacing caused by the *Contractor* during the execution of the contract; fair wear and tear excluded, and shall repair it to the satisfaction of the *Supervisor* on conclusion of the *works*. For this purpose a joint inspection with the *Supervisor* will be carried out prior to occupation of the Site(s) and any existing damage noted.

Electrical supply

The *Contractor* shall provide at his cost, a metered electrical supply to his site offices and other facilities on the Site, if so required.

NEC3 CONTRACT FORM: PRO-FAT-0222 Rev04

CONTRACT NUMBER: CPT 1616433.001

DESCRIPTION: SUPPLY, INSTALL AND COMMISSION SMART ENERGY METERS AND RELATED NETWORK AND COMMUNICATION INFRASTRUCTURE AT SELECTED TRANSNET TRACTION FEEDER SUBSTATIONS ALONG THE SISHEN SALDANHA IRON ORE RAIL LINE

Housing

Housing on Site will not be permitted.

- 3.1.20 Wherever the *Contractor* provides facilities (either his own or for the *Employers Representative* and/or *Supervisor*) and all items of Equipment, involving, *inter alia*, offices, accommodation, laboratories, Materials storage, compound areas etc., within the Working Areas, then the *Contractor* makes good and provides full reinstatement to the land (including all apparatus of the *Employer* and Others in, on or under the land) and surrounding areas to its original standard, upon dismantling of such facilities and items of Equipment.
- 3.1.21 Unless expressly stated as a responsibility of the *Employer* as stated under site services and facilities, all residual requirements for the provision of facilities and all items of Equipment necessary for the *Contractor* to provide the *works* remains the responsibility of the *Contractor*.
- 3.1.22 Existing premises, inspection of adjoining properties and checking work of Other
- 3.1.23 Existing Premises, inspection of adjoining Private and Public Propertie

The *Contractor* shall inspect and survey the following buildings and facilities adjacent to the Site, with the idea in mind of noting the present condition, in conjunction with the *Imployers Representative*:

- All buildings (Substations, Plant, Offices etc.)
- Roadways
- Rail lines
- Electrical power lines
- 3.1.24 Control of noise, dust, water and waste

The *Contractor* shall take all reasonable ups to contain unacceptable levels of noise and dust, in accordance with the specified and referenced wironmental, health and safety requirements.

The *Contractor* shall dispose of all waste products in a suitably located area, to be approved by the *Employers Representative*.

3.1.25 Sequences of coastr ction or installation

The *Contractor* has be responsible for his own construction programme, which shall be subject to approval by the *Employers and Employers Representative* within the parameters of the Contract Data.

The *Contractor* shall notify the *Supervisor* prior to covering up any of the completed *works*, so as to allow the *Supervisor* time for inspection of those *works*. This shall include, but not be limited to:

- All trenching earthworks
- Fibre terminations and tests
- Substation equipment installation
- CTC equipment installation

NEC3 CONTRACT FORM: PRO-FAT-0222 Rev04

3.2 Completion, testing, commissioning and correction of Defects

3.2.1 The works to be done by the Completion Date:

The *Contractor* shall have done everything required to provide the *works* on or before the Completion Date, and certain individual items before the Sectional Completion Dates, as stated in the Contract Data.

3.2.2 The *Contractor* is permitted to carry out the following *works* after Completion:

None.

3.2.3 Use of the works before Completion has been certified:

It is not anticipated that the monitor system or portions thereof will be used by either Party, prior to certification, other than for testing and commissioning procedures.

3.2.4 Access given by the *Employer* for correction of Defects:

Should the *Contractor* have to return to the site after completion of the works to effect an improvement or repair, the *Contractor* shall organise access for all staff members required to perfor the work and also carry the costs of such access cards.

3.2.5 Commissioning:

The Contractor shall include commissioning in his programme and allow adequate time for all associated activities.

3.2.6 Training and technology transfer:

As part of the commissioning activities, in *Contractor* shall provide the necessary training to the relevant officials, so as to enable them to be fally stable of testing and operating the new monitor system.

Training may however not be in ited to these parties, or this period. As part of his Commissioning Documentation, the *Contractor* shall include dates and programmes for training workshops of all relevant officials.

NEC3 CONTRACT FORM: PRO-FAT-0222 Rev04

4 PLANT AND MATERIALS STANDARDS AND WORKMANSHIP

4.1 Building works

- 4.1.1 Where the Association of South African Quantity Surveyors Model Preamble for Trades 1999 are used within the Works Information, the following interpretations and meanings shall apply:
- 4.1.2 In case of any conflict in interpretation, ambiguity or discrepancy between any Model Preamble for Trades 1999 (whether standard or written as a particular project specification) contained in the Works Information and the conditions of contract, the conditions of contract take precedence within the NEC3 ECSC Contract.
- 4.1.3 In case of any conflict in interpretation, ambiguity or discrepancy between any Model Ireamble for Trades 1999 (whether standard or written as a particular project specification) contained in this paragraph 4.2 of C3.1 *Employer's* Works Information and specific statements contained elsewhere in C3.1 *Employer's* Works Information, the specific statements contained elsewhere shall prevail, without prejudice to the *Employers Representative's* express duty to resolve any ambiguity or inconsistency in the Yorks Information under NEC3 ECSC.
- 4.1.4 Within the Model Preambles for Trades 1999, the following amendment and interpretations shall apply:

Where the word or expression "Principal Agent" is used, read "En players Representative" or "Supervisor" as the context requires.

Where the word or expression "Contractor" is used, read "Contractor".

Where the word or expression "Engineer" is used, rea "Employers Representative" or "Supervisor" as the context requires.

Where the Model Preambles for Trades 1999 melition "intes" for measured work and any contractual statements relating to payment, all such statements shall be accounted, with the NEC3 ECSC conditions of contract taking precedence.

4.1.5 Within the Model Preambles for Tracks 1999, A. GENERAL, the following amendments and interpretations shall apply:

Where the word or expression vills of quantities" is used, this shall be discounted for the purposes of the Works Information. The NEC3 ECSC extract Data - Part one states the main option to apply within the NEC3 ECSC between the Parties.

- 4.1.6 Within the Model Pre-mbles for Trades 1999, B. ALTERATIONS, B.2 MATERIALS FROM THE ALTERATIONS, CREDIT, Tit and C. EARTHWORKS, C1.4 Materials from demolitions shall not apply. C3.1 *Employer's* Works Information paragraph 3.1.6 states details of the *Contractor's* title (if any) to Materials arising from excavations and/or demolitions and how such Materials are either to be disposed of or re-used in the *works*.
- 4.1.7 Within the Model Preamble for Trades 1999 U. EXTERNAL WORKS, U.3.8 Process control tests shall be deemed to be included within paragraph 3.2.1 of C3.1 *Employer's* Works Information.

4.2 Electrical & mechanical engineering works

4.2.1 Where SANS 10142 specifications are used within the Works Information, then where the term "Equipment" (or the like) is used with the meaning of installation and items left behind in the *works*, then please read this term as "Plant and Materials" for NEC3 ECSC defined term compliance.

NEC3 CONTRACT FORM: PRO-FAT-0222 Rev04

4.3 Process control and IT works

The Employer's specifications particular to this works.

- E4E Jan2004
- E7 1 Drawings for Spec BBD8210
- E7 1 Specification BBD8210
- PRC 00017 Optic Fibre Waste Rev2
- PRC 00106 Post Installation Test; for Optic Fibre Cable Rev 2
- PRC 00107 Pre Test Quality of Optic Fibre Cable on Drums Rev 2
- PRC 00112 Safe Work for Erection of Self Supporting Optical Fibre Cable on ACDHTE Rev 2
- SOP OH 00 Confined Space
- SPC 00029 Trenching Laying Hauling in of Communication Cables Rev
- SPC 00033 Optical Fibre Testing Equipment Rev 4 00 Draft 2
- SPC 00571 Single Mode Optical Fibres Rev 4 (signed)
- SPC 00573 Optical Fibre Cable Make Up Underground Actial Installation Rev 4
- SPC 00575 Erection of self-support OFC REV7.10
- SPC 00583 Optical Fibre Accessories Rev 3
- SPC 00587 Horizontal Directional Drilling Lad ground Telecommunication Cable System Rev 2
- SPC 00588 Main and Sub Cable Conduit rotection of Underground Telecom Cables Rev 2
- SPC 00589 Civil Engineering Works Associated Construction Underground Telecomm Plant Rev 2
- SPC 00590 Wayleave; Site Establishment Safety Local Authority Requirements Rev 2
- SPC 01242 Wooden Telepton Poles Rev I
- SPC 01279 Erection of Wooder relephone Poles Support of Optical Fibre Cables Rev 2

5 LIST OF DRAWINGS

5.1 Drawings issued by the Employer

This is the list of drawings issued by the *Employer* at or before the Contract Date and which apply to this contract.

Note: Some drawings may contain both Works Information and Site Information.

Drawing number	Title
1424506-4-361-E-LA-0002	Electrical Condition & Power Monitoring on the Ore Line Between Saldanha Bay & Sishen: Locality Plan & Fibre Optic Cable Route Helios / Loop 8 - Sous TFS
1424506-4-561-E-LA-0002	Electrical Condition & Power Monitoring on the Ore Line Between Saldanha Bay & Sishen: Locally Plan & Fibre Optic Cable Route Garona / Lop 16 - Röoilyf TFS
1424506-4-661-E-LA-0001	Electrical Condition & Power Monitoring on the Ore Line Between Saldanha Bay & Silhen: Locality Plan & Fibre Optic Cable Route Lewensyar / Loop 18 - Vrolik TFS
1424506-4-761-E-LA-0001	Electrical Condition & Power Monitoring on the Ore Line Between Saldanha Bay & Sishen g: Locality Plan & Fibre Optic Cable Route Ferrum - Erts TFS
1424506-4-164-E-GA-0001	Electrical Condition & Power Monitoring on the Ore Line Retween Saldanha Bay & Sishen: General Arrangement Drawing
1424506-4-860-E-PD-0002	Electrical Condition & Power Monitoring on the Ore ine Between Saldanha Bay & Sishen: I/O Requirements & Data Network Diagram

SECTION 2

6 MANAGEMENT AND START UP

6.1 Management meetings

Regular meetings of a general nature may be convened and chaired by the Employers Representative as follows:

Title and purpose	Approximate time & interval	Location	Attendance by:
Kick-Off Meeting	Prior to Commencement of Construction	Saldanha	Employer, Contractor (key persons) and Employers Representative appropriate delegates)
Contract Progress Meeting	Fortnightly	Saldanha	Employer, Contractor (Ny persons) and Employers Representative (appropriate delegates)
Risk Register and Compensation Events	Fortnightly	Saldanha	Employers Representative (and appropriate delegates), Supervisor (and appropriate delegates) and Contractor (appropriate key proons)
Monthly SHE Meeting	Monthly	Salda mā	Apployer, Employers Representative (and appropriate delegates), Contractor (line management, site supervisors, safety officer and safety reps)
Safety Visible Felt Leadership Walkabout	Weekly	On Site	Employers Representative (and appropriate delegates) and Contractor (appropriate key persons)
Safety Workshop	Monthly	On Site	Supervisors
Safety Committee Meeting	Bi Yonthly	Saldanha	Employer, Contractor (key persons) and Employers Representative (appropriate delegates)

Meetings of a specialist nature may be convened as specified elsewhere in this Works Information or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the *works*. Records of these meetings are to be submitted to the *Employers Representative* by the person convening the meeting within five days of the meeting.

All meetings are to be recorded using minutes or a register prepared and circulated by the person who convened the meeting. Such minutes or register are not to be used for the purpose of confirming actions or instructions under the contract as these are to be done separately by the person identified in the *conditions of contract* to carry out such actions or instructions.

6.2 Documentation Control

6.2.1 The *Contractor* provides documentation in accordance with the requirements of the *Contractor* Documentation Submittal Requirements and the *Contractor* Documentation Schedule (CDS) and makes specific reference thereto within his Quality Management System and Quality Procedures.

6.3 Safety risk management

The Contractor complies with the following SMP:

- Health & Safety Specification TFR-ISM-RN-R&C-FM009
- TCP Health & Safety Management Health & Safety Guideline HAS-GL-001
- Occupational Health and Safety Act No. 85 of 1993 and Regulations
- E7/1 (July 1998) Specification for works on, over, under or adjacent to Railway Lines and near High Voltage Equipment
- All other applicable Legislation

The Contractor ensures that its Subcontractors comply with the requirements of the SMP.

The *Contractor* shall submit a safety file as per the set requirements to the client or hit representative. No work may commence unless such safety file has been approved and signed off.

The *Contractor* performs the *works* having due regard to all Health and Safety Legislation, Standards and Specifications as indicated above.

The *Contractor*, in the performance of the *works*, establishes an incentive programme for its employees with respect to SMP compliance.

The *Employer* will acknowledge the achievement of specific safety mile tone set for the project with regards to incident statistics, incident recording, safety observation and conversations (SOC's) participation, safety initiatives, etc.. Recognition will include a function and specified gift.

The *Contractor* complies with the requirements of the SSK with respect to his own activities and others on the Site and Working Areas.

The *Contractor* makes the SMP available to its employees and subcontractors in the language of this contract and other local languages as required.

The *Contractor* participates in a HAZOP, at legular intervals upon the instruction and direction of the *Employers Representative*.

The Contractor completes a DSTI prior to carrying out any operation on the Site and/or Working Area to the approval of the Employers Representative.

The lines of communication of the verbus personnel acting on behalf of the *Employers Representative*, who communicate directly with the *Consector* and his key persons with respect to the SMP, are contained within all Health and Safety Legislation, Standards and Specifications as indicated above.

The roles and responsibilities of the various personnel acting on behalf of the *Employers Representative* with respect to the SMr and he km and safety issues are as stated in all Health and Safety Legislation, Standards and Specifications as included above.

The Contractor shall provide safety officers in line with Annexure E: Health and Safety Specification and Standard (HAS-SP-0001) and (HAS-STD-0002). A full time Safety Officer shall be provided unless otherwise decided by the client or his representative. The Contractor shall provide such a safety officer, regardless of the number of people on site.

The CM is responsible, within the context of the SMP, for health and safety on the Site and Working Areas and reports to the *Employers Representative*.

The CM specific tasks are as detailed in all Health and Safety Legislation, Standards and Specifications as indicated above.

The PSSM is responsible for ensuring that the *Contractor* complies with the SMP. The PSSM acts on behalf of the *Employers Representative*. The PSSM specific tasks are as detailed in all Health and Safety Legislation, Standards and Specifications as indicated above.

All items of equipment and vehicles travelling within the Site shall be equipped with fully operational amber rotating flashing lights.

6.4 Environmental constraints and management

A project specific Environmental Management Plan EMPr (1424506-S001-SP-0003) has been compiled and is included under Annexure G. This is aligned with the *Employer's* standard Construction Environmental Management Plan and Standard Environmental Specifications.

The EMPr provides an integrated approach to environmental management. This approach is designed to guide the appropriate allocation of human resources, assign responsibilities, develop procedures and ensure project compliance with regulatory and best practice requirements.

Where conflict exists between this and any other document/specification, the following shall apply in descending order of applicability:

- The EMPr.
- Environmental Specification TFR/EMS (SES) 001
- Contractual Specifications.

The *Contractor* shall be required to perform the *works* and all construction activities within the Site and Working Areas, having due regard to the environment and to environmental managements actices.

The CEMP and SES have been included for information purposes only. The EMPr has been designed to take all conditions relevant to the project from these overarching Translat documents in order to simplify the requirements for small projects.

The *Contractor* shall ensure that its management, foremen and the general workforce, as well as all suppliers and visitors to Site have attended the Induction Programme Lefo e undertaking any work on Site. A guideline has been included within the EMPr. If new personnel comprehate work on the Site during construction, the *Contractor* shall ensure that these personnel undergo the Induction Programme and are made aware of the environmental specifications on Site.

The *Contractor* must have a nominated person on sit fulfil the role of Environmental Officer (EO) to monitor environmental issues, e.g. litter, spills, illegal activities, fence patrol, dust, etc. This appointment, along with details of the individual being appointed and be descriptions, must be sent to the *Employers Representative* for his approval. This may be a shared role owing to the size of the project.

During the construction period, the Contractor complies with the following:

- Method statements that are required during construction must be submitted to the *Employers Representative* for approval at least 20 days prior to the proposed commencement of the activity. Emergency construction activity method statements may also be required. The activities requiring method statements cannot commence if the method statements have not been approved by the *Employers Representative*. The method statements to be completed by the *Contractor* are listed within the EMPr.
- Where applie ple, the *Contractor* shall provide job-specific training on an ad hoc basis when workers are engaged in activities which require method statements.

The *Contractor* shall clear and clean the Site and Working Areas and ensure that everything not forming part of the *works* is removed from the Site and Working Areas and that all re-instatement has taken place in accordance with the EMPr.

The *Contractor* shall comply with the findings of all environmental inspections and audits, as per the EMPr and/or as instructed by the *Employer*.

The *Contractor* shall ensure that environmental issues are taken into account in the establishment of the Site offices and all other facilities on Site.

The lines of communication of the various personnel acting on behalf of the *Employers Representative* who communicate to the *Contractor* and his keys persons with respect to the CEMP are contained within the EMPr.

The CM is responsible (in the context of the EMPr) for environmental management on the Site and Working Areas and reports to the *Employers Representative*. The CM acts on behalf of the *Employers Representative*.

The complete environmental file as kept by the *Contractor* is to be handed over to *the Employer* at the closure of the contract. This file must contain:

Declaration of Understanding (ENV-FAT-0002)

- Contractors Information (ENV-FAT-0003)
- Contractors Environmental Policy
- Contractors Organogram
- Contractors Environmental Management Plan
- Appointment of Contractors EO and Declaration of Understanding (ENV-FAT-0004)
- Hazardous Substances Register (ENV-FAT-0006)
- Emergency Contacts Register (ENV-FAT-0007)
- Induction Attendance Register
- Method Statement Register (ENV-FAT-0011)
- Waste Disposal Register (ENV-FAT-0012)
- Daily Inspection Checklist (ENV-FAT-0023)
- Monthly Compliance Audits (ENV-FAT-0025)
- Public Complaints Register (ENV-FAT-0013)
- Record of Formal External Communications (ENV-FAT-0014)
- Incident Register (ENV-FAT-0015)
- Incident Reports (ENV-FAT-0016)
- Non-conformance Register (ENV-FAT-0017)
- Non-conformance Reports (ENV-FAT-0018)
- Training Attendance Register (Revision 00-)
- Environmental Site Rules for Visitors (ENV SL-00)
- Environmental Site Rules for Contractors (ENV-GL-0003)
- Basic Site Procedures (ENV-GL-90)
- Contractors Environmental (aprigement File Handover (ENV-FAT-0020)

6.5 Quality assurance equipments

6.5.1 General Requirem 113

The Contractor had execute the works in accordance with the project specification "General Quality Requirements of Contractors and Suppliers" ACM-PG-QU-PR-002 included in Annexure F of the Works Information

The *Contractor's* Quality Management System shall conform to the International ISO 9001 Standard or an equivalent standard acceptable to the *Employers Representative*.

The *Contractor* shall submit his Quality Assurance proposal(s) for the Contract. This proposal shall detail the *Contractor's* quality management system as it applies to all aspects of supply or service provision, including Design, Procurement, Manufacturing, Construction, Installation, Erection and Commissioning. Additionally, the *Contractor* shall include for the provision of suitably qualified quality control staff to manage and carry out inspection on all Supplier/Sub-*Contractor* activities in all disciplines included within the Works Information.

6.5.2 Quality Policy

The Quality Policy is a concise document, approved by the *Contractor's* executive management, which defines organisational goals and objectives with regard to quality, a commitment to meeting stated requirements and an undertaking to drive continuous improvement throughout the organisation's activities. It must be suitable for the organisation and provide a framework for establishing, communicating and monitoring performance against agreed quality objectives.

6.5.3 Project Quality Plan

The Contractor shall submit a Project Quality Plan (PQP), which shall also contain specific proposals and details with regard to Quality Control for the Works Information.

The Project Quality Plan (PQP) includes the Contractor's statement that outlines strategy, methodology, resources allocation, QA and Quality Control co-ordination activities to ensure that the works meet the standards stated in the Works Information.

The Project Quality Plan is mostly in narrative form, detailing the Project Specific QA and QC systems and controls required for the Contractor to complete the specific works.

The requirements for a PQP are detailed in the project standard ACM-PG-QU-PR-002 and shall include, but not be limited to, the following:

- Include all quality activities relevant to the Works Information, identifying all procedures, reviews, audits, controls and records used to control and verify compliance with the specified contractual requirements.
- Include a listing of all special processes (e.g. welding and non-destructive testing, cube testing, etc.) envisaged for use, including confirmation of personnel certification as required.
- Include a list of all proposed method statements for site-based activities.
- Include a description of the *Contractor's* project organization, with the positions and responsibilities.

 The organization structure shall also in the resources committed to the management / coordination of QA / QC activities, both within c. atractor's organization and that of his Sub-Contractor's and Suppliers.
- Include a listing of all Quality Control Plans (QCP's), and a sociated rield Inspection Checklists (FIC's), as applicable.
- Identify in the Project Quality Plan any Sub-Suppler/Sb-Contractor work. Sub-Supplier/Sub-Contractor plans shall be approved by the Contractor, and rwarded to the Employers Representative.
- Include the proposed Authorized Inspection thorit (where applicable - for pressurized equipment and systems).
- Include a schedule of proposed quality reco Data Book Index), which will form the permanent record of conformance to requirements

6.5.4 Submissions and Records

The *Contractor* submits his Quality Mayagement System documents to the *Employers Representative* as part of his programme under NEC3 ECC to include details of:

- Project Quality Contract,
- lures to be used.
- of internal and external audits during the Contract. du

The Contractor develops and maintains a comprehensive register of documents that will be generated throughout the Contract, including all quality related documents as part of its Quality Plan.

The Employers Representative indicates the documents to be submitted for information, review or acceptance and the Contractor indicates such requirements within his register of documents. The register shall indicate the dates of issue of the documents and the dates upon which the Employers Representative has responded to documents submitted by the Contractor.

The index of procedures shall contain a list of the Contractor's quality management system procedures to be applied during the course of the project, including any relevant work instructions or 3rd tier quality system documentation. Where aspects of the works are to be subcontracted, the Contractor shall include procedures for the management of Suppliers and Sub-Contractors.

A schedule of internal and external audits shall be maintained by the Contractor, detailing the location, frequency and extent of internal and external quality system audits that have been, or will be, conducted during the contract period. The schedule shall identify audits conducted at the construction sites as well as the premises of Suppliers, Sub-Contractors or Service Providers.

6.6 Programming constraints

- 6.6.1 The contract programme, progress reports, subsequent updates, revisions and supplementary programmes as detailed in this section are an essential part of the project control system used by the *Employers Representative* and *Employer* for managing the *works* and in monitoring the progress of the *works* under the Contract. Key Dates and Completion Dates as defined in the Contract Data are incorporated into the programme.
- 6.6.2 The *Contractor's* detailed programme, which complies with the requirements as indicated in the Works Information, shall be submitted in both hard and soft copy forms. Primavera P6 version 8.2 is being used by the *Employer* for Planning on the Project. The *Contractor* shall use a suitable computerised planning package, as approved by the *Employers Representative*, which is compatible with Primavera P6 version 8.2.
- 6.6.3 The programme shall be resourced with the anticipated man hours for each activity as well as commodity quantities, i.e. m^3 earthworks.

6.6.4 Network

- The Critical Path Method (CPM) technique of planning and scheduling will be used for the Project. The Contractor shall provide a Programme showing the critical path (s), it gether with a total float report for acceptance by the Employers Representative.
- The programme network shall have no fewer activities than the technical and commercial breakdowns listed in the activity programme.
- Networks are constructed to reflect the possible equences of activities, using resource scheduling to stagger the performance of activities into the rost probable sequence.
- The activity durations are estimated in working days and shall be realistic and based on actual quantities and applied resources.
- The calendars used are based of normal working hours per day and working days per week, or as prescribed by the *Employers Resresence* in accordance with the contract.

6.6.5 Structure and Methodology

- The Programme Levout shall take into account the approved Facility Breakdown Structure (FBS), reflecting the manner in which the *works* are to be performed. The following levels of Programme are to be used for this pojects:
 - Level Master Programme defines the major activities and interfaces between engineering, projunction, fabrication and construction, transportation, installation and pre-commissioning, commissioning, and start-up. This is a high level summary programme, and is included in the mosthly progress report.
 - Level 2 Project Programme summary programme "rolled up" from the level 3 project programme. The structure and layout will be in accordance with the FBS as defined in the Level 3 programme.
 - Level 3 Project Programme detailed programme, which is generated for tracking and control
 of various activities and deliverables for all phases of the project. The activities will be coded in
 accordance with the FBS. Various layouts and corresponding filters can be developed to reflect the
 requirements of the Project Leads and Managers.
 - Level 4 Project Programme This detailed, discipline-specific programme is developed and maintained by the Contractor and generated for tracking and control of activities and deliverables for all phases of the Project. This Programme utilizes the FBS structure and relates to the programmed activities in the pricing activity programme or groups of activities. The programme represents the day-to-day activities by discipline that are work-unit based and become summarized in the Level 3 activities.

6.6.6 Reporting and monitoring

- To demonstrate the actual progress and forecast completion of the *works* under the contract, the *Contractor* shall on a weekly basis update and submit to the *Employers Representative* the latest accepted Programme and progress report, including histograms and S- curves.
- Monitoring and review of the progress of *works* under the Contract shall consist of an assessment of all activities currently in progress to determine percentage complete, forecast completion dates, manning histogram, showing plan versus forecast, deviations from the target programme and actions required for remedy.
- Weekly progress review meetings shall be conducted to report and assist control of the Work under the contract.

6.6.7 Reports

- Level 4 Programme updated weekly, showing two separate bars for each lask, i.e. the primary bar shall reflect the current forecast dates and the secondary bar the latest accepted programme.
- 3 week look ahead Programme in the same format as above, updated and ssued weekly.
- Manpower histogram updated and issued weekly, showing actual, forecast and planned.
- **S-curves** updated and issued weekly, showing actual % complete verses planned % for the overall Contract, utilizing the earned values as calculated by the detailed process report.
- **Detailed progress report** updated and issued works utilizing a spreadsheet to calculate earned progress of activities, as reflected on the Level 4 programme, based on installed quantities. Activities shall be weighted using man-hours. Report shall indicate progress 'this period' and 'progress to date'.
- Weekly report a narrative report, consisting of an executive summary, area/facility synopsis of work in progress and critical action items (top 10). The report shall be accompanied with a 3 week look ahead programme and s-curve.
- **Monthly report** a narrative status report, submitted a week before the last Friday of each month, or as required by the *Employers Representative*. The report shall include, but not be limited to, the following:
 - Summary of progress achie et during the reporting period.
 - Latest updated Programe
 - Project Milestones table planned versus actual and forecast.
 - Status and pender ance of on-site works.
 - Status and performance of off-site works.
 - Historymand s-curves.
 - Critical action items list (top 10).

6.7 Contractor's management, supervision and key people

- 6.7.1 The *Contractor* provides an Organogram of all his key people, both as required by the *Employer* and as independently stated by the *Contractor* under Contract Data Part 2, and how such key people communicate with the *Employers Representative* and the *Supervisor* and their delegates.
- 6.7.2 The SCHEC provides the *Employers Representative* with all environmental method statements. The CSHEO tasks are:
 - Daily, weekly, and monthly inspections of the Site and Working Areas. The *Contractor* is referred to Annexure I (Industrial Relations Policy and Management Plan (ACM-IR-POL-001).
 - Monitor compliance with the CEMP (to include the SES and PES) and the environmental method statements submitted to the Employers Representative.
 - Reporting of environmental incidents to the Employers Representative.
 - Attendance at all SHE meetings, toolbox talks and induction programmes.

- Litter control and ensuring the Contractor clears litter from the Site and Working Areas.
- Ensuring that environmental signage and barriers are correctly placed.
- The CSHEO submits daily, weekly and monthly checklists to the SHEC.
- 6.7.3 The *Contractor* employs a CIRP as a key person under NEC3 ECSC. The CIRP's tasks are as detailed in Annexure I: Industrial Relations Policy and Management Plan (ACM-IR-POL-001).
- 6.7.4 The CIRP is based on the Site and ensures that all reports and IR requests are submitted accurately and in a timely manner to the *Employers Representative*. The CIRP tasks are:
 - Dedicated to human resources, industrial relations and any other Contractor employee related function.
 - Resolve all human resources and industrial relations matters arising from the Contractor's employees.
 - Represent the *Contractor* at all industrial relations meetings.
 - Represent the Contractor on the IRCC.

6.8 Training workshops and technology transfer

- 6.8.1 The *Contractor* facilitates the following requirements for training torkshops:
 - Pre-mobilization workshop, scheduled for one week trio to site establishment. Workshop will be attended by the Site Management team including Site Agent, Il supervisors and Safety personnel.
- 6.8.2 The *Contractor* provides the following documentation to the *Employer*.
 - H&S Management Plan and Standard.
 - Incident Management.
 - Performance Reporting.
 - Site Training Packages.
 - Functional Guides.
 - Safe Systems of Work
 - Procedures
 - Risk //szess no. t Process and Systems.

6.9 Insurance provided by the Employer

6.9.1 Insurance provided by the *Employer* is contained in the Contract Data – Part 1.

6.10 Contract change management

6.10.1 No additional requirements apply to NEC3 ECSC Clause 60 series.

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7 PROCUREMENT

7.1 Code of Conduct

The Employer 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 the Employer must understand and support. These are:

- The Employer's Procurement Procedures Manual (PPM):
- 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 (B-BBEE); and
- The Anti-Corruption Act.

This code of conduct has been included in this contract to formally apprise be *imployer's* Suppliers of the *imployer's* expectations regarding behaviour and conduct of its Suppliers

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

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

- 7.2.1 The *Employer* will not participate in corrupt practice, and therefore expects its suppliers to act in a similar manner.
 - The Employer and its employers will be ow the laws of this country and keep accurate business records that reflect actual transactions with ad payments to our suppliers.
 - Employees must not accept of regress money or anything of value, directly or indirectly, to:
 - Illegally influence the judgement or conduct or to ensure the desired outcome of a sourcing activity;
 - Win or recan business or to influence any act or decision of any decision stakeholders involved in sor cini decisions; or
 - Gail al improper advantage.
 - There may be times when a supplier is confronted with fraudulent or corrupt behaviour of *The Employer* employees. We expect our Suppliers to use our "Tip-offs Anonymous" Hot line to report these acts. (0800 003 056).
- 7.2.2 The *Employer* 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.
 - The Employer does not engage with non-value adding agents or representatives solely for the purpose of increasing B-BBEE spend (fronting)
- 7.2.3 The *Employer*'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 the Employer cannot control the actions of our suppliers, we will not tolerate any illegal activities. These include, but are not limited to:

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- 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, B-BBEE status, etc.);
- Corrupt activities listed above; and
- Harassment, intimidation or other aggressive actions towards the Employer 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.

7.2.4 Conflicts of Interest

- A conflict of interest arises when personal interests or activities it to act in the best interests of the Employer.
 - Doing business with family members
 - Having a financial interest in another company in our industry

7.3 The Contractor's Invoices

- 7.3.1 When the *Employers Representative* certifies payment (see NEC3 ECSC Clause 51.1) following an assessment date, the *Contractor* complies with the *Employer's* proof dure for invoice submission.
- 7.3.2 The invoice must correspond to the *Employers Representative's* assessment of the amount due to the *Contractor* as stated in the payment certificat
- 7.3.3 The invoice states the following

Invoice addressed to Tarshet SOC Ltd;

Transnet SOC Lingted's VATNo: 4720103177;

Invoice number

The Contractor's VAT Number; and

The Contract number CPT 1616433.001

7.3.4 The invoice is presented either by post or by hand delivery. Invoices submitted by post are addressed to:

Transnet Freight Rail RME

P.O. Box 338

Kasselsvlei

7533

For the attention of Darren Cupido

NEC3 CONTRACT FORM: PRO-FAT-0222 Rev04

7.3.5 Invoices submitted by hand are presented to:

Transnet Freight Rail RME

Off Robert Sobukwe Road

Behind Transnet Park

Bellville South

For the attention of Darren Cupido

7.3.6 The invoice is presented as an original.

7.4 People

- 7.4.1 Minimum requirements of people employed on the Site include the following:
 - Employer's medical induction.
 - Health and Safety induction training
 - Al Supervisors to attend the High Voltage Awareness Training as required by TFR.
- 7.4.2 The *Contractor* complies with the following PIRPMP (Program me Mdustrial Relations Policy and Management Plan: ACM-IR-POL-001).

7.4.3 Contractor Liability

- The *Contractor* warrants that it will be liable to the *Employer* for any loss or damage caused by strikes, riots, lockouts or any labour dispetes by and/or confined to the *Contractor's* employees, which loss will include any indirect or consequential day ages.
- The *Contractor* warrants that no negotiations or feedback meetings by the *Contractor's* employees shall take place on *the Employer* promises, whether owned or rented by *the Employer*.
- The *Contractor* shall give notice to *the Employer* of any industrial action by the *Contractor's* employees immediately upon becoming aware of any actual or contemplated action that is or may be carried out on the *Employer's* are rises, whether owned or rented, and shall notify the *Employer* of all matters associated with such action that may potentially affect the *Employer*.
- The Contractor is responsible for educating its employees on relevant provisions of the Labour Relations Act witch lear with industrial action processes, and the risks of non-compliance.
- The *Contractor* is required to develop a Contingency Strike Handling Plan, which plan the *Contractor* is obliged to update on a three monthly basis. The *Contractor* must provide *the Employer* with this plan and all updates to the Plan. The *Contractor* is responsible to communicate with its employees on site details of the plan.

7.4.4 Industrial Action by Contractor Employees

- In the event of any industrial action by the *Contractor's* employees, the *Contractor* is required to provide competent contingency resources permitted in law to carry out any of the duties that are or could potentially be interrupted by industrial action in delivering the Service.
- The Contractor warrants that it will compensate the Employer for any costs the Employer incurs in providing additional security to deal with any industrial action by the Contractor's employees.
- In the event of any industrial action by the *Contractor's* employees, the *Contractor* is obliged to prepare and deliver to *the Employer*, within two (2) hours of the commencement of industrial action an Industrial Action Report. If the industrial action persists the *Contractor* is required to deliver the report at 8h30 each day.
- The Industrial Action Report must provide at least the following information:

- Industrial incident report.
- Attendance register,
- Productivity / progress to schedule reports,
- Operational contingency plan,
- Site security report,
- Industrial action intelligence gathered.
- The final Industrial Action Report is to be delivered 24 hours after finalisation of the industrial action.
- The management of the *Contractor* is required to hold a daily industrial action teleconference with personnel identified by *the Employer* to discuss the industrial action, settlement of the industrial action, security issues and the impact on delivery under the contract.
- The resolution of any disputes or industrial action by the *Contractor's* employee is the sole responsibility of the *Contractor*.
- Access to the Employer premises by the Contractor and its employees is only provided for purposes of the Contractor delivering its services to the Employer. Should the Contractor and its employees not, for any reason, be capable of delivering its services the Employer is entitled to estrict or deny access onto its premises and unless otherwise authorized; such person will deem at to be trespassing.
- 7.4.5 The Contractor performs the works having due regard to the PIRPLY.
- 7.4.6 The *Contractor* complies with the requirements of the accommodation contractor engaged (including all future *Contractors*) by the *Employer*.
- 7.4.7 The roles and responsibilities of the various personnel acting on behalf of the *Employers Representative* with respect to IR issues are stated in the paragraphs.
- 7.4.8 The PIRM is responsible for ensuring that the *Contractor* complies with the PIRPMP. The PIRM acts on behalf of the *Employers Representative*
- 7.4.9 The PIRM specific task ar
 - As per Ann Xui 1 (dustrial Relations Policy and Management Plan).
 - To liaize with the *Contractor* prior to the commencement of construction activities, as per the *Contractor's* programme accepted by the *Employers Representative*, with respect to IR issues under the SIP.
- 7.4.10 The PIRM is responsible, inter alia, for day-to-day IR on the Site and Working Areas through the implementation of the PIRPMP. The PIRM reports directly to the *Employers Representative*.

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7.4.11 B-BBEE and preferencing scheme

Points will be awarded to tenderers based on preferencing using the balanced Department of Trade and Industry (DTI) scorecard. The application of the Broad-Based Black Economic Empowerment recognition levels and score preferencing points are as follows:

Contribution Level	Qualification Points on the generic scorecard	Broad-Based BEE Recognition Level	Preferencing Points Scored
Level 1	Greater than or equal to 100 points	135%	10
Level 2	Greater than or equal to 85 points but less than 100 points	125%	9
Level 3	Greater than or equal to 75 points but less than 85 points	110%	8
Level 4	Greater than or equal to 65 points but less than 75 points	100%	5
Level 5	Greater than or equal to 55 points but less than 65 points	80%	4
Level 6	Greater than or equal to 45 points but less than 55 points	50%	3
_evel 7	Greater than or equal to 40 points at less than 55 points	50%	2
Level 8	Greater than or equal to 30 points but less than 40 points	10%	1
_evel 9	Less than 30 polits	0%	0

On the basis the tenderer with a B 3BEP recognition level of 135% will achieve 10 points, and the points will be allocated accordingly on a pip-rate basis as per the table above.

In addition to the above, provision is made for the case where a tenderer has greater than 50% black ownership. In this is tar ce, provided the requisite documentary evidence is supplied, the tenderer will then be awarded preference point's one level above that awarded based on the DTI scorecard. For example, a tenderer with > 50% track ownership obtaining a Level 6 contribution equating to 3 points will be awarded 4 preferencing points (Level 5).

Tenderers clanning Preference Points must submit together with the tender document their generic scorecard, evaluated by an independent accreditation agency. The *Employer* therefore requires tenderers to have been accredited by SANAS or IRBA Accreditation Agencies in accordance with the latest relevant Codes of Practice applicable not more than 3 months prior to the date of tender. Should the B-BBEE rating not be provided, The *Employer* reserves the right to award no points. The *Employer* also reserves the right to carry out an independent audit of the tenderers scorecard components at any stage from the date of close of the tenders until completion of the contract.

Tenderers with no accreditation will score zero points for preferencing.

7.5 Subcontracting

7.5.1 Where the *Contractor* employs a Sub-*Contractor* who constructs or installs part of the *works* or who supplies Plant and Materials for incorporation into the *works* which involves a Sub-*Contractor* operating on the Site and/or Working Areas, then the *Contractor* ensures that any such Sub-*Contractor* complies with the CEMP, SES and PES as appropriate and that the subcontract documentation places back-to-back obligations on the Sub-*Contractor* which reflect the *Contractor's* obligations under the CEMP, SES and PES, all within the *Contractor's* Quality Management System as per paragraph 2.5 of the Works Information.

7.5.2 Where the *Contractor* employs a Sub-*Contractor* who constructs or installs part of the *works* or who supplies Plant and Materials for incorporation into the *works* which involves a Sub-*Contractor* operating on the Site and/or Working Areas, then the *Contractor* ensures that any such Sub-*Contractor* complies with the PIRPMP (described under paragraph 4.1.1 of the Works Information) as appropriate and that the subcontract documentation places back-to-back obligations on the Sub-*Contractor* which reflect the *Contractor's* obligations under the PIRPMP, all within the *Contractor's* Quality Management System as per paragraph 2.5 of the Works Information.

7.6 Plant and Materials

- 7.6.1 The *Contractor* provides Plant and Materials for inclusion in the *works* in accordance with SANS 1200A subparagraph 2.1, unless otherwise stated elsewhere in the Works Information provided by the *Employer*. All Plant and Materials are new, unless the use of old or refurbished goods and/or materials are expressly permitted as stated elsewhere in this Works Information or as may be subsequently instructed by the *Employers Representative*.
- 7.6.2 The *Contractor* replaces any Plant and Materials subject to breakages (whether in the Working Areas or not) or any Plant and Materials not conforming to standards or specifications such and notifies the *Employers Representative* and the *Supervisor* on each occasion where replacement is a gived.



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APPENDIX 1 Project Data Sheets

DOCUMENT NUMBER	TITLE
1424506-4-000-J-DS-0003	FIBRE OPTIC CABLE
1424506-4-000-J-DS-0004	PATCH PANELS
1424506-4-000-J-DS-0005	NETWORK SWITCH
1424506-4-000-J-DS-0006	POWER MONITORING UNIT (METER)
1424506-4-000-J-DS-0007	UN-INTERRUPTIBLE POWER SUPPLY (U.S)
1424506-4-000-J-DS-0008	PRE-CAST MANHOLE AND COVER
"bby	

APPENDIX 2

Project	Electrical and Power Status Monitoring	Date:	2015/11/05
Enquiry Reference	e 1424506-E004	Revision:	2
ECHNICAL SCHED			
N-INTERUPTABLE	POWER SUPPLY (UPS)		
No	ltem	Preferred/Specified	
		Equipment	Offered
1	Quantity		As per BOQ
2	Detail		
	Manufacturer	Schneider APC	
	Туре	SMA750i	
	Mounted	19" Rack	
3	Output		
	Power Capacity	600W/750VA	
	Nominal Output Voltage	Config. 220V - 240	
	Output Frequency	50Hz	
	Waveform	Sine Vave	
4	Input		
	Nominal Input Voltage	X30V	
	Input Frequency	50Hz	
5	Batteries		
		Maintenance-free sealed	
	Туре	lead-acid battery with	
		suspended electrolyte;	
		leak proof	
	Internal Battery	Yes	
	Additional External Battery (SMX48RMB2U)	Yes	
6	Communication and management		
	Interfere ports	Serial (RJ45), USB and	
		Smartslot	
		Alphanumeric LCD display	
	Control panel and alarms	with LED status indicators;	
		alarm on battery, distinctive	
		low battery alarm, and	
		configurable delays	
	Emergency power off (EPO)	Yes	

nquiry Reference	Electrical and Power Status Monitoring	Date:	2015/11/05
		Revision:	2
CHNICAL SCHED			
	POWER SUPPLY (UPS)		
No	ltem	Preferred/Specified	
		Equipment	Offered
7	Surge protection		
	Surge energy rating	540 J	
		Full-time multi-pole	
		noisse filtering: 0.3%	
	Filtering	IEEE surge let-through,	
		zero clamping response	
		time, meets UL 1449	
3	Deviations and Clarifications		
	The Contractor shall state all deviations and clarifications		
	below		
	·		
		- 10	
	OFVIE		
	OREVILL		
	"DREVILL"		
	"barryll"		
	"bbEnly		
	"bbEnly		

Project	Electrical and Power Status Monitoring	Date:	2015/11/05
Enquiry Reference	1424506-E004	Revision:	2
ECHNICAL SCHED	JLE NO.5		
ETWORK SWITCH			
No	Item	Preferred/Specified	
		Equipment	Offered
1	Quantity of units required		As per BOQ
			AS PER DOQ
2	Detail of Switch Type 1		
	Manufacturer	Cisco	
	Туре	WS-C3650-24TS	
	Ports	4XGigabit Ethernet with	
	1 013	Small Form-Factor	
		Pluggable (SFP)	
	Switching Capacity		
	DRAM	88 Gbps 4 Gb	
	Power Supply	240Vac 50Hz	
	Flash Memory	2 Gb	
	Mounted		
	Support	19* rack mounted	
		Layer 2	
	Licensing New or Refurbished	Access You, the ence	
	New or Returbished	Planu Ne	
3	Deviations and Clarifications		
	The Contractor shall state all deviations and clarifications in this	1	
	section.		

Doc No.	TFR-ISM-RN-R&C-FM009	Rail Network Rehabilitation and Construction
Eff. Date	01 April 2014	HEALTH AND SAFETY SPECIFICATION



PROJECT NAME	SUPPLY, INSTALL AND COMMISSION SMART ENERGY METERS AND RELATED NETWORK AND COMMUNICATION INFRASTRUCTURE AT SELECTED TRANSNET TRACTION FEEDER SUBSTATIONS ALONG THE SISHEN SALDANHA IRON ORE RAIL LINE
PROJECT NUMBER	CPT 1616433.001
PROJECT LOCATION	
PROJECT SCOPE	SUPPLY, INSTALL AND COMMISSION SMART ENERGY METERS AND RELATED NETWORK AND COMMUNICATION INFRASTRUCTURE AT SELECTED TRANSNET TRACTION FEEDER SUBSTATIONS ALONG THE SISHEN SALDANHA IRON ORE RAIL LINE
PROJECT DURATION	3 months
COMPILED BY	
APPROVED BY	
RESPONSIBLE SEGMENT	CEV
CONTRACT SPECIALIST	Celeste Jacobs

Doc No.	TFR-ISM-RN-R&C-FM009	Rail Network Rehabilitation and Construction
Eff. Date	01 April 2014	HEALTH AND SAFETY SPECIFICATION

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- 2. Scope
- 3. Abbreviations
- 4. Definitions
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- 7. Health, Safety and Environmental Plan
- 8. Legal and Other Appointments
- 9. Project Organogram
- **10.** Training and Competency Certificates
- 11. Letter of Good Standing and Tax Clearange
- 12. Notification of Construction Work to Dept. Labour
- 13. Client Health, Safety and Environmental Specification
- 14. Mandatory Agreement (37.2)
- 15. Site Access Certificate
- **16.** Site Establishment
- 17. Proof Medical Certificate Fitness
- 18. Minutes of the Meating Safety and Environmental Meeting
- 19. Risk Management
- 20. Incident la agement
- 21. Project Realth, Safety and Environmental Inspection Records
- 22. First Aid Services
- 23. Project Health, Safety and Environmental Audits
- 24. Contingency/Emergency Plan, Procedure and Contact Numbers
- 25. Mobile Plant and/or Construction Vehicles Inspection and Maintenance
- 26. Registers
- 27. Checklists
- 28. Substance Abuse Management
- 29. Training Matrix
- 30. Material Safety Data Sheets(MSDS)

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Eff. Date	01 April 2014	HEALTH AND SAFETY SPECIFICATION

- 31. Health, Safety and Environmental Stats
- 32. Copy of the OHSACT Act (85 of 1993) with Regulations and Other Statutory Legislations
- 33. Welfare Facilities
- 34. Hygiene
- "beriling" out 35. Health, Safety and Environmental File Contents
- 36.
- 37. Waste Management
- 38. Handling of Waste on Site
- 39. Other Records
- 40. Additional requirements

Doc No.	TFR-ISM-RN-R&C-FM009	Rail Network Rehabilitation and Construction
Eff. Date	01 April 2014	HEALTH AND SAFETY SPECIFICATION

1. Purpose

The purposes of this Health, Safety and Environmental Specification is to outline the Health, Safety and Environmental requirements pertaining to Rehabilitation and Construction projects. Also to ensure:

- Compliance with the requirements of Construction Regulations and HSE Legislation as well as Transnet Freight Rail.
- · HSE requirements are budgeted for.
- · Continuous improvement of HSE.

2. Scope

This specification applies to all Rehabilitation and Construction contractor, and rendors

3. Abbreviations

HSEP - Health, Safety and Environmental Plan

RC - Rehabilitation and Construction

RN - Rail Network

SOP - Standard Operating Procedure

TFR - Transnet Freight Rail

COID - Compensation for Occupational Injuries and Diseases

EMP - Environmental Manager ent Plan

DOL - Department of Labour

HCS - Hazardous Chemical Substances

MSDS - Material Sant Data Sheet

OHS - Occupation Health and Safety

PPE - Personal Protective Equipment

HSE - Health, Safety and Environment

KZN - KwaZulu Natal

4. Definitions

Contractors, vendors and any other person is advised to consult the Construction Regulations, OHS Act, Act 85 of 1993 and Environmental Management Act regarding the clarification of certain words used in this specification.

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5. Policies

The contractor shall develop and implement health, safety and environmental policies regarding protection of the employees and environment.

6. HSE Budget

The contractor shall make provision for the cost of HSE measures in order to ensure safe execution of construction work.

7. Health, Safety and Environmental Plan (HSEP)

The Contractor shall develop and implement a health, safety and environmental plan in accordance with this health, safety and environmental specification. The health safety and environmental plan must provide a systematic method of managing hazards according to he risk priority, and must include all mobilization and site set-up activities. The HSEP must be in writing and project specific.

The HSEP shall be accepted by the Regional RC safety epartment i.e. Gauteng, KZN and Cape prior to mobilization to the construction site.

Any proposed amendments or revisions to the approved HSEP shall be submitted to RC for consideration and acceptance.

8. Legal and Other Apprintments

The contractor shall appoint it writing all employees as per project requirements. The duties of appointed employees shall be slearly stated in the appointment letter.

9. Project Olyanogram

The appointed confactor shall draw up an organogram detailing all the key role players and their contact details for the construction project.

10. Training and Competency

The Contractor shall ensure that all employees working in the construction site are adequately trained and competent in the type of work to be performed. The contractor shall provide valid documentation (e.g. certificate, licence etc.) to verify that employees are competent and have appropriate qualifications, job skills and training as required by applicable legislation.

Proof of the following minimum health and safety training is required before construction work commences:

Management and Supervisory Appointees

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- IRCON
- Legal Liability
- HIRA (Hazard Identification and Risk Assessment)
- Incident Investigation
- Safety Officer
 - SAMTRAC
 - Incident Investigation/Root Cause Analysis Technique
 - IRCON
 - HIRA
 - National Diploma in Safety Management or other relevant national diploma (if possible)
- SHE Representative
 - SHE representative course 3/5 days
 - Level 1 incident Investigation
- First Aider
 - First Aid Level 1
- Employees
 - Basic health and safety training

The contractor's employees shall, were required by legislation be in position of relevant certificates or permits where operation being performed requires such certification, for example welder, crane operator, erectors, flagmen etc. The contractor shall develop a training matrix and implement it accordingly.

8.1 Induction Training

Project induction

The contractor shall ensure that all employees undergo RC induction prior to commencement of construction work. This RC induction training shall be conducted by Line Representative to ensure that contractor's employees are aware of and conversant with the requirements of this HSE Specification, Site Rules, Environmental Requirements and other requirements. The contractor shall ensure that all employees present a certificate of fitness to the trainer or safety officer prior to induction training. Failure to present a certificate of fitness will result to an employee not being allowed to partake in the induction training. The contractor shall keep records of all inducted employees.

Site specific induction

The contractor shall ensure that all employees undergo site specific induction focusing on applicable legislative rules, site rules and requirements, existing hazards/risks and SOP's including emergency procedures etc. This induction training is the responsibility of the

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contractor. Whenever there is change in a scope of work or major incident or new method of doing work, employees must be re-inducted.

Visitors induction

The contractor shall ensure visitors undergo site induction training prior to being allowed access to construction site. The contractor shall make proof of induction training available in the form of attendance register and/or induction badge.

Refresher induction

The contractor shall ensure that all employees undergo refresher induction training after an absence of seven (7) consecutive days from the project site.

11. Letter of Good Standing & Tax Clearance

Prior to commencement of Construction work, a contractor shall sult mit valid Letter of Good Standing issued by the Compensation Fund or any other licensed insurer. On expiry of the said letter, the contractor shall resubmit the updated/ valid one for the duration of the construction project. No construction work shall be done without a valid letter of good standing.

A copy of valid Tax Certificate shall be submitted tog ther with the Letter of Good Standing.

12. Notification of Construction Work to Dept. of Labour

A contractor shall notify the Provincial Director of the Department of Labour in writing before carrying out any construction work within 7 (av). The contractor shall ensure that a copy of notification is kept safe on site for inspection by Department of Labour inspector or TFR representative.

13. Client Health Safety and Environmental Specification

A principal contractor or contractor shall provide Client's HSE Specification to other contractors working for the principal contractor or contractor. The HSE Specification shall be kept in the contractor's safety file for reference. Before a contractor can appoint another contractor, the appointing contractor shall furnish R&C Regional Safety Office with the HSE File of the contractor to be appointed for approval.

14. Mandatory Agreement (37.2)

R & C Project Manager and the appointed Contractor Representative shall sign the 37(2) agreement prior to commencement of construction work. The agreement will confirm that the appointed person of any company shall remain responsible and accountable for his own employees, including any labour hire employees.

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15. Site Access Certificate

R & C Project Manager shall issue site access certificate prior to commencement of construction work to all appointed contractors after the approval of the HSE File.

16. Site Establishment

Site establishment shall commence as soon as the Site Access certificate has been granted. In addition, the appointed contractor shall develop a traffic plan for the site to ensure the safe movement of pedestrians, vehicles and all construction mobile plant.

This traffic plan shall be reviewed when necessary. Contractors shall ensure that established sites are adequately secured to protect material, plant, equipment and people.

17. Medical Certificate Of Fitness

Prior to commencement of work, the contractor shall demonstrate or confirm in writing that his/her employees have been declared medically fit by the Reciptered Occupational Health Practitioner. A contractor shall conduct periodic risk based medical examinations as prescribed by the Occupational Health and Safety (OHS) Legislation. For projects langer han12 months, the contractor shall ensure that employees undergo medical examinations at least once a year. Records of such must be kept in safe place and made available on request.

18. Health, Safety and Evironmental Meeting

The Contractor shall conduct monthly project safety meetings with his employees to address HSE related issues and promote safe practices. Records of such meetings including the attendance registers shall be made available to employees and for inspections or audits purposes.

19. Risk Maragement

19.1 Hazard Identification and Risk Assessment (HIRA)

The contractor shall conduct an initial Hazard Identification and Risk Assessment prior to commencement of construction work. Thereafter the contractor shall review the HIRA when there is an incident/accident and/or changes in the scope of work, plant, machinery, equipment, etc.

The contractor shall implement identified control measures to ensure that the risk(s) is/are kept as low as reasonably practicable. A contractor shall appoint a competent risk assessor to facilitate the HIRA process. This HIRA shall be signed and approved by contractor's management.

The approved HIRA shall be communicated and appropriate training shall be provided to employees. The records of communication and training shall be kept on site for inspections and audits purposes.

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19.2 Safe Work Procedures (SWPs) and Other Procedures

The contractor shall develop and implement safe work and other procedures, to ensure that the construction activities are carried out in a safe manner and without risk to the health and safety of employees and the environment. These procedures shall be signed and approved by the contractor's management.

The approved procedures shall be communicated and appropriate training shall be provided to employees. The records of communication and training shall be kept on site for inspections and audits purposes.

19.3 Planned Task Observations (PTOs)

The contractor shall identify critical tasks/activities and develop a schedule for sk observations. The Contractor shall then conduct PTOs as per the task schedule. V hen sub-standard practices are identified they shall be discussed with the employee concerned and rectified immediately.

The PTOs shall be conducted by the following persons:

- · Manager at least once a month
- · Supervisor at least four a month, and
- Other

The records shall be kept on site for inspections and audits purposes.

19.4 Method Statements

The contractor shall compile me thou statements detailing the key activities to be performed in order to reduce as reasonable practically the hazards identified in their risk assessment.

The method statement shall be signed and approved by the contractor's management.

The approved method datement shall be communicated and appropriate training shall be provided to employees. The records of communication and training shall be kept on site for inspections and audits purposes.

19.5 Daily Safety Task Instructions (DSTI)

R & C shall provide contractors with the DSTI template for implementation.

The contractor shall conduct DSTI on a daily basis before work commences and/or when the scope of work changes.

The contractor shall complete the DSTI regarding tasks for the shift, specific hazards and specific precautions and also refer to and discuss the precautions and controls of the relevant Risk Assessments with his/her team. The Supervisor and his team shall then sign the DSTI acknowledging communication thereof.

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19.6 Daily Safety Toolbox Talks

The contractor shall conduct a toolbox talk daily. One topic shall be discussed per week based on the risks associated with the construction projects or on the requirements of Transnet. The contractor shall develop a one page toolbox talk that will be discussed on construction site.

The records of communication shall be kept on site for inspections and audits purposes. It should be short (5 - 10 minutes) and to the point with a specific safety message.

20. Incident Management

20.1 Incident Reporting

The contractor shall report any work related incidents including "near misses" that have occurred on a construction site. The incident shall be reported immediately to R&C Management including HSE Department using the following mechanisms:

- verbally
- · telephonically or
- via sms

Thereafter, the contractor shall submit a detailed inclient rotification to R&C Representative who will in turn complete a flash report within 24 hours of the occurrence.

20.2 Incident Investigation

The contractor shall investigate an incident in conjunction with R&C Representative(s) within seven (7) days of the occurrence. A detailed investigation report shall be submitted to R&C Representatives with seven (7) days of the occurrence.

20.3 Incident legard Keeping

The contractor stall keep all incident records as stipulated in the OHS and Environmental Legislation.

20.4 Incident Close Out

The contractor shall ensure that incident recommendations are implemented and closed out. The proof of incident close out shall be submitted to R&C Representative for capturing.

21. Project Health, Safety and Environmental (HSE) Inspection Records

The contractor shall conduct monthly HSE inspections to ensure compliance with R & C requirements and records of such inspections shall be kept on site for scrutiny by either R & C HSE department or Department Of Labour Inspectors.

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22. First Aid Services

The Contractor shall ensure that he/she implements and complies with OH&S Act - General Safety Regulation 3. The Contractor shall provide a person qualified to give First Aid attention on the Site at all times. The competency certificate must be valid for three (3) years and provided by an accredited service provider. The Contractor shall provide and maintain First Aid equipment on site. The equipment is up to standard as prescribed by the Statutory Regulations.

First Aid Boxes

The contractor shall provide first boxes/kits with contents as per minimum legal requirements. Boxes shall be provided in all working areas and kept locked. Records of such are to be kept in an appropriate register of all treatment done.

Smoking

The contractor shall not permit smoking on site except within designated smoking areas selected in accordance with applicable Laws, Rules and Policies.

Sun Protection

The contractor shall ensure that all employ es are protected in sunlight by the use of long sleeve shirts, long trousers, sun brims on safety helmets, UV factored sunscreen and shade structures.

The contractor shall conduct Thining and Awareness Sessions with his/her employees, advising on the risks of working in the heat and dehydration and the precautions to be taken including an acceptable fully otake depending on conditions. The contractor shall ensure that adequate water is made available to his/her employees.

23. Project Health, Safety and Environmental Audits

The HSE Department it ill conduct internal HSE audits to ensure compliance with R & C requirements. The audit schedul will be determined by the HSE department and will be communicated to the contractor. Contractor's line management shall form part of the HSE audits conducted by R & C HSE department. Findings of the audit will be communicated to the contractor after the audit has taken place on site. Thereafter a detailed report will be forwarded to the contractor within seven (7) days of post audit.

24. Contingency/Emergency Plan, Procedure & Contact Numbers

The contractor shall prepare an emergency procedure which will address any emergency situation that is likely to occur on a project site. The procedure must, in particular, emphasise the importance of the contractor's role in communicating the procedure to all of their site personnel and clearly define the steps and actions the person reporting the emergency is responsible for.

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The Emergency Preparedness Plan deals with the emergency situation as fast and efficiently as possible, to minimise loss of life, the protection of property and the maintenance of services necessary for the wellbeing of employees. The plan shall include valid local emergency contact numbers and must be easily accessible.

25. Mobile Plant and/or Construction Vehicles Inspection and Maintenance Records

The contractor shall ensure that all the construction vehicles and mobile plants are of an acceptable design and construction, maintained in a good working order, are on daily basis inspected prior to use, by competent person who has been appointed in writing and the findings of such are recorded in the register. Before the contractor's plant and machinery could be answer on site, the R & C representative will conduct inspection on them and when compliant they will be given access to R & C sites.

26. Registers

The contractor shall ensure that the registers for example ool, plant, machinery, etc. are kept up to date on site for inspection and audit purposes.

27. Checklists

The contractor shall cause that monthly inspections are conducted and that all relevant checklists are used. These should be kept on lite for inspection and audit purposes.

28. Substance Aquée Management

The contractor shall de elop and implement substance abuse management policy. The policy shall include the frequency of testing and steps to address issues relating to substance abuse and work wellness. The testing of substance shall be conducted by competent person. The results of such tests shall be kept safe and made available during inspection and audits.

29. Material Safety Data Sheets(MSDS)

The contractor whom the scope of work requires him/her to make use of any chemicals, shall be in a possession of a relevant MSDS/s. The MSDS/s shall then be communicated to the employees and be kept on site as a record.

30. Health, Safety and Environmental Statistics

The contractor shall complete and submit consolidated HSE stats to R & C representative on the last day of every month.

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31. Copy of the OHSACT Act (85 of 1993) & Other Statutory Legislations

The contractor shall keep a copy of the Occupational Health and Safety Act 85 of 1993 with the regulations and any other statutory legislation on site at all times.

32. Welfare Facilities

The Contractor shall provide at or within reasonable access of every construction site, the following clean, hygienic and maintained facilities:

 At least one sanitary facility (Toilets) for each sex and for every 30 vorkers, changing facilities for each sex; and sheltered eating areas.

33. Hygiene

The Contractor shall ensure that its personnel maintain high standards hygiene in connection with the performance of work. All work areas shall be maintained in a clean and tidy state and must promptly and appropriately dispose of all waste material.

34. Contractor Health, Safety & Environmental File Contents

The contractor shall prepare an HSE file and submit to R & C representative for approval and the files shall contain but not limited to the following documentations:

- Notification of Construction
- Valid Letter of Good standing vit the Compensation Commissioner
- Tax Clearance Certificat
- Policies
- All legal appoint new etters
- List of Continuous's Employee,
- Site specific SHE Plan
- Hazard identification & Risks Assessments (Issue base)
- Method Statements
- SHE Induction Training
- Certificates of medical fitness
- Equipment maintenance and inspection
- PPE Issue control sheet
- Training Records
- Standard Operating Procedures (SOP's)
- Safe Working Procedures
- Daily Safety Talks

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- Project Audit Records
- Incident Management
- Contingency/ Emergency Plan, Procedure & Contact Numbers
- Project Registers/Forms
- Checklists
- RC HSE Specification
- Substance Abuse Management
- HSE Stats
- Material Safety Data Sheet (MSDS)
- Copy of the OHS Act & Regulations and Other Statutory Legislation
- Inspection records
- · Project related procedures
- Planned Task Observations
- Environmental Management Plan
- Additional Task Controls and requirements

The contractor shall keep the file on site for inspection and audit purposes.

35. Environmental Management

The contractor shall ensure that hts/her size complies with the requirements of the National Environmental Management Act (FEMA), 107 of 1998, (duty of care principles) and is committed to the care of the environment and their fore making an effort in implementing best practices in this regard. The contractor working of operating on R & C premises are therefore obliged to operate in an environmental friendly making and put measures in place to prevent pollution and damage to the environment.

36. Waste Management

The contractor shall institute on-site waste management general duties and take all reasonable measures to:

- Dispose in a responsible manner according to waste manifesto and on approved waste disposal site. Record should be kept of waste disposed according to safe disposal certificates.
 These certificates should be kept by contractor and copies with R & C HSE Department. Daily waste disposal should be captured in site diary.
- Not endanger health/environment/cause nuisance-noise, odour or visual impact
- Prevent any employee/any person under supervision from contravening this Act
- Prevent the waste used for unauthorized purpose

The waste management program will address, but is not limited to, the following:

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- An inventory of expected wastes and their categories;
- Categories of waste;
- Plan of dealing with waste (Waste Management Plan)
- Compliance with local authority requirements;

37. Handling of Waste on Sites

The contractor shall have an Environmental Control Plan, which shall be approved by R & C representative. This control plan which must be kept on site at all times must include but not limited to the following:

- Dust control measures
- Noise Control (e.g. source of noise, levels and abatement measures
- Water Management
- Waste Water/effluent Management
- Sewer treatment/disposal plan
- Waste Management Plan (Identify types of most to be generated)
- Pollution control
- Spill response plan
- Rehabilitation and re-vegetation of site

38. Other Records

The contractor shall keep any other records required in terms of Occupational Health and Safety Act 85 of 1993 and Regulatoris to ensure safe execution of the construction project including good practices.

39. Additional requirements

NONE



RISK MANAGEMENT: ENVIRONMENT AND SUSTAINABILITY

NAME OF DOCUMENT:

TFR STANDARD ENVIRONMENTAL SPECIFICATIONS (SES)

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1. DEPARTMENT CODES

Description	Code
Corporate Safety Office	CSO
Environment and Sustainability	E&S
Enterprise Risk Management	ERM
Finance	FIN
Human Capital Management	HCM
Information and Communications Technology	ICTM
TFR Operations	OPS
School-of-Rail	SoR

2. MANAGEMENT SYSTEM CODES

Description	Code	HANDERS BUILDING
Environmental Management System	EMS	
Integrated Management System	IMS	
Occupational Health and Safety	CHSA	
Management System		
Quality Management System	QMS	
Safety Management System	ems .	

3. DOCUMENTATION TYPE CODES

Description	Code
Certificate	CR
Contract	CT
Form	FM
Guideline	GU
Learner Guide	LG
List	
Manual	ML
Memorandum	MM
Policy	P
Policy Manual	PM
Procedure	PR
Process	PS
Work Instruction	WI
Standard Operation Procedure	SOP

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4. PURPOSE

This standard describes the minimum environmental management standards to which TFR project managers, contractors and sub-contractors must conform to while undertaking construction work on construction site. It is a generic standard for use across all construction works within Transnet Freight Rail.

Construction works have the potential to adversely impact the environment. The purpose is to assess, rectify and manage the activities that have potential to cause environment degradation.

One of Transnet Freight Rail (hereinafter referred to as "TFR") environmental strategies is the establishment and maintenance of an Environmental Management System, aligned to the International Standard, ISO 14001. Linked to this is a commitment to the development and implementation of Environmental Management Plans (EMP) for TFR construction activities. The purpose therefore can be summarised as follows:

The main purpose of this standard is to foster environmental due diligence and sustainability into contractor's activities which can be achieved by:

Managing potential negative environmental impacts of activities,

Identifying management plans to mitigate these imparts

Allocating responsibilities and resources to implement identified plans,

Monitoring the effectiveness of these measures.

5. SCOPE AND APPLICABILITY

This standard applies to all contractors that perform construction, maintenance and renovations works on Transnet Freight Ray (TFR) properties.

6. LEGISLATIVE REQUIREMENT

A numbers of environmental laws and regulations present TFR with an obligation to monitor, interpret and implement systems to comply with legal requirements.

The list of environments legislation below was compiled to ensure that contractors working on TFR land properties are aware of legal responsibilities and liabilities. Complying with these laws and regulations will assist in minimising the risks, both legal and financial (claims).

Non-compliance to environmental law is a criminal offence and if prosecuted offenders will be liable for any environmental damage incurred. Moreover, TFR subscribes to polluter-pays and duty of care principles.

ASPECT	REFERENCE/LEGISLATION
Socio cultural issues & Environmental Management	 Constitution of the republic of South Africa 108 of 1996 Occupational Health and Safety Act No. 85 of 1993
Environmental Authorizations – applicable to the project	National Environmental Management Act (Act 107 of 1998)
Dust Management	National Environmental Management Act – Air

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	 Quality (Act 39 of 2004) Atmospheric Prevention Pollution Act No. 45 of 1965
Work close to protected areas	National Environmental Management Act – Protected Areas Act (Act 57 of 2003)
Work along coastline	National Environmental Management Act – Integrate coastal management Act (Act 24 of 2008)
Fire Hazards	National Veld and Forest Fires Act No. 101 of 1998
Applicable Minimum	Standard Acts No. 29 of 1993
Standards	■ ISO 14001-2004
	• ISO 9001 – 2008
	OHSAS 18001 – 2007
	• SANS 10103:2004
Site establishment and Access	 Fencing Act No. 31 of 1963. ⇒ Prohibition of danager of a property owner's gate and tences ⇒ Climbing or trawling over or through fences without permission ⇒ Closing of gates.
	Conservation of Agricultural Resources Act No. 41 of 1183 ⇒ Self conservation Atmospheric Pollution Prevention Act No. 45 of 1965 ⇒ Control all forms of air pollution – dust, vehicle fumes
Water Management	 National Water Act No. 36 of 1998 ⇒ All aspects relating to pollution of surface and ground water. National Water Services Act No.108 of 1997 ⇒ Permits required for use of water and disposal of water effluent.
Flora & Fauna	 National Environmental Management Act – Biodiversity Act (Act 10 of 2004) Sea Shore Act No. 21 of 1995 National Forest Act No. 84 of 1998 Control of veld, forest and mountain fires The protection of biota and ecosystems Protected trees Fire control areas. Conservation of Agricultural Resources Act No. 43 of 1983
	⇒ Control of alien invasive

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	 Environment Conservation Act No. 73 of 1989 ⇒ Protected natural environment.
	 National Environmental Management Act No. 107 of 1998
	⇒ Duty of care & remediation of environmental damage.
Waste Management	 National Environmental Management Act – Waste Act (Act 59 of 2008) Dumping at Sea Control Act No. 73 of 1980 Marine Living Resources Act 18 of 1998 National Water Act No. 36 of 1998 All aspects relating to pollution of surface and ground value. Advertising on Roads and Nibbon Development Act No. 21 of 1940 Prohibition of depositing or leaving of certain articles or material near certain roads Weste near roads. Environmental Conservation Act No. 73 of
	⇒ Controls for the effective protection and utilisation of the environment ⇒ Littering, waste disposal, noise and various other activities which may have a detrimental effect on the environment.
"bby	Occupational Health and Safety Act No. 85 of 1993 ⇒ Exposure of workers to waste products. ⇒ Transportation and disposal of hazardous chemical substances.
	 Health Act No. 63 of 1977 ⇒ Control of health aspects of waste disposal and water treatment.
Spillages of Hazardous Substances	Hazardous Substances Act No. 15 of 1973
Protection of	National Heritage Resources Act 25 of 1999
heritage resources	Environmental Conservation Act No. 73 of 1989
	Transnet Freight Rail Safety, Health and
	Environmental Policy
	 Transnet Freight Rail Construction Environmental Management Plan (CEMP)

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7. STANDARDS FOR ENVIRONMENTAL MANAGEMENT

The contractor shall identify the potential environmental impacts that may occur as a result of their activities and accordingly prepare method statement describing how each of the impacts will be managed or prevented so that the standards set out in this document are achieved.

7.1 SITE ESTABLISHMENT AND ACCESS

7.1.1. Objective

To ensure that environmental issues are taken into account during the establishment of site offices and all other facilities on site.

7.1.2. Scope

This standard applies to all activities relating to the planning, site establishment, operation and closure of the site.

7.1.3. Site plan

The contractor shall establish his construction lamps, offices, workshops, staff accommodation and any other facilities on site in a manner that does not adversely affect the environment. However, before construction can commence, the contractor shall submit to the Construction Manager for his approval; plans of the exact location extend and construction details of these facilities and the inlagation measures the contractor proposes to put in place to remedy any effects.

The plans shall detail the locality as well as the layout of all waste management facilities for litter, kitchen refuse, sewage and workshop-derived effluents. The site offices should not be sited in close proximity to steep an as. It is recommended that the offices, and in particular the ablution facilities, aggregate stockpiles, spoil areas and hazardous material stockpiles are located as far away as possible from any water course. Regardless of the chosen site, the contractor's intended mitigation measures shall be indicated in the plan. Such a site plan shall be submitted for Construction Manager's approval.

7.1.4. Provision o sanitary facilities

Particular reference in the site establishment plan shall be given to any need for handling of sewage to be generated at the site offices, 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 Environmental Manager.

Safe and effective sewage treatment will require one of the following sewage handling methods: Septic tanks and soak – away, dry-composting toilets such as "enviro loos", or the use of chemical toilets which are supplied and maintained by a subcontractor. The type of sewage facility 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. The location shall be decided with input from Environmental Manager. Should a soak-away system be used, it shall not be closer than 800 metres from any natural water course or water retention system. The waste material generated from these facilities shall be serviced on a regular basis.

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Toilet 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 veld) shall not, under any circumstances, be allowed.

Outside toilets shall be provided with locks and doors and shall be secured to prevent them from being blown. The toilets shall also be placed outside areas susceptible to flooding. 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 construction manager.

7.1.5. Access

If private property has to be crossed in order to access the construction site, the landowner(s) should be approached to request access.

No fences or gates that provide access to the construction sites may be cut, lowered, removed or damaged in any way. Private gates should be left as they are found (open or closed). Any irregularities caused by the construction team concerning fences and gates (e.g. an open gate or lowered fence) should be investigated.

7.1.6 Water supply for human use

7.1.6.1. Objective

To ensure that there is adequate, safe water sap by for all personnel on site.

7.1.6.2. Scope

Managing the water supply on site and controlling the abstraction of water from natural resources in the area.

7.1.6.3 Water Management

Oil, petrol, diesel, herbicides, cleaning solvents, etc. must not be allowed to contaminate any surface water, ground water and for drainage systems. Storm water shall be managed to ensure that it does not become polluted. If the substation site is located close to a river, stream, dam, borehole, or the water table is high; contingency plans must be in place to minimise the impact of accidental oil or toxic spillages. All water contaminated by oil or toxic spills must be reported to the Department of Water Affairs and Forestry, via approved reporting procedures.

Storm water run-off must be efficiently managed and must not cause erosion or damage to surrounding property. Guidance on methods to improve drainage of the site erosion should be directed to TFR Infra for Civil Engineering inputs.

Drainage systems must be kept clean and clear of any debris at all times.

7.1.7 Collection of water from natural resources

No water for domestic use (drinking water, for bathing or washing) shall be abstracted from any water resource (stream, river, or dam) without the express permission of the TFR Project Manager. 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 obtained from the Department of Water Affairs in accordance with the requirements of the National Water Act (Act 36 of 1998).

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7.1.8 Provision of drinking water

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.

7.1.9 Provision of energy for camp site

7.1.9.1. Objective

To prevent illegal and unauthorized collection of firewood.

7.1.9.2. Scope

This is applicable to all activities that may require collection of firewood.

7.1.9.3. Collection of firewood

The contractor shall provide adequate facilities for all 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 heating and cooking purposes. No open fires shall be allowed.

7.2. WASTE MANAGEMENT.

7.2.1. Objective

To ensure that all waste generated during construction and commissioning of the facilities is properly disposed of.

7.2.2. Scope

This standard applies to all construction commissioning and site activities that may lead to the generation of waste.

7.2.3. Approach

Waste is grouped into general or hazardous depending on its characteristics. The classification determines landling methods and the ultimate disposal of the material.

General waste to be appetted during construction includes the following:

- rath (waste paper, plastics, cardboard, etc.) and food waste from offices, watchouses and construction personnel.
- Uncontaminated construction debris such as used wood and scrap metal.
- Uncontaminated soil and non-hazardous rubble from excavation or demolition.

Hazardous waste means any waste that contains organic or inorganic elements or compounds that may, owing to the inherent physical, chemical characteristics, such as toxic, ignitable, corrosive, carcinogenic or other properties or toxicological characteristics of that waste, have a detrimental impact on health and the environment.

7.2.4. Waste Hierarchy

A hierarchical control approach to waste management is encouraged. Waste should preferably be managed in the following order:

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Prevent: waste avoidance and minimisation during production

Recycle: waste recycling, recovery and utilisation

Treat: waste treatment in order to reduce to city and to minimise the quantities of waste

Disposal: waste disposal, probably by incineration, destruction or landfill.

7.2.5. Waste management

Littering is prohibited at all times. The contractor is responsible for the removal of all waste from site generated through the contractor's activities. The construction works site should have a proper waste collection facility and a disposal system in place. Waste should only be disposed of at a registered facility – this refers to municipal dumps. The latest list of waste sites in the region is available from the Department of Water Affairs, Department of Environmental Affairs and www.sawic.org.za.

The classification of waste determines handling methods and ultimate disposal of the material. The contractor shall manage hazardous wastes that are anticipated to be generated by his operations as follows:

- Characterise the waste to determine it is general of hazardous
- Obtain and provide an acceptable container with label
- Place hazardous waste material in 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 disposal site
- Provide documentary evidence of proper disposal of the waste to TFR Environmental Management.

The contractor's Environmental Officer must work in conjunction with the contractor's Safety and Industrial Hygiene personnel to create a hazardous materials management program.

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This program will establish the necessary protocol for proper handling and removal of hazardous material on site.

Information on each hazardous substance must be available to all persons on site in the form of Material Safety Data Sheets (MSDS). Training and education about proper use of MSDS, handling, and disposal of the waste must be provided to all workers handling the waste. 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.

All hazardous waste must be suitably enclosed, labelled and stored. The storage area must be properly demarcated and cordoned-off as per legislation. General and hazardous waste must be stored in separate bins. Recycling and re-use is mandatory. Under no circumstances is waste, including cleared vegetation, is to be burnt at the construction work site.

The contractor is obliged to control waste generating activities of control waste described and non-Hazardous waste by:

- Eliminating waste generation or reducing the total volume,
- Reducing the degree of contamination of waste generated,
- Reclaiming materials otherwise considered waste.

The contractor shall recycle general waste that is anticipated to be generated by its operations as follows:

- Obtain and label recycling containers for:
 - Office waste
 - Aluminium
 - Steel
 - Glass
 - Ferrous me als
 - Non Ferrous metals
 - Waste timber
 - Include them within temporary office building and trailers
- stablish recycled material collection schedule
- Arrange for full bins to be hauled away

7.2.6. Effluent management

All effluent water from the camp/office sites shall be disposed of in a properly designed and constructed system, situated so as not to adversely affect water courses (streams, rivers, pans dams etc.). Only domestic type waste water shall be allowed to enter the designated system. Any release of contaminated waste water shall be in accordance with applicable water release standards and permits.

7.3. VEHICLE & EQUIPMENT REFUELLING

7.3.1. Objective

To eliminate or control fuel and oil spillage at refuelling facilities

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7.3.2. Scope

This standard applies to all refuelling, lubrication and oil changing requirements on all vehicles and machinery.

7.3.3. Refuelling

The use of engine driven compressors, pumps, air conditioners and arc welders could generate leaks (usually oil) that can accumulate to become spills, which require clean-up. These leaks become more evident if the equipment remains in the same place for an extended period of time. Damaged fuel tanks, fuel hoses, and fuel pumps can be sources of significant fuel leaks. Hydraulic systems can blow gaskets or hoses resulting in large quantities of hydraulic fluid spilled to the ground.

7.3.3.1. Control

No vehicles or machines shall be serviced or refuelled on site except at designated servicing or refuelling locations. No oil or lubricant changes shall be made except at designate locations, unless in case of breakdown or emergency repair. As part of the method statement, the contractor shall submit to TFR, a standard operating procedure for fuelling.

The contractor shall store fuel and oil at a designated area which shall be bunded to contain 110% of the total volume, the bund wall shall be designed or constructed with an impervious layer or liner or paved surface to prevent spillage from entering the ground.

As part of the method statement, the contractor shall provide details of its proposed fuel storage and fuelling facility to the TFR Environmental Officer for approval. The design shall comply with the regulations of the National Water Act No. 36 of 1998. The Hazardous Substances Act No. 15 of 1973, the Environmental Conservation Act No. 73 of 1989 and the Occupational Health and Safety Ast No. 85 of 1993, with special reference to the requirements of the Hazardous Chemical Substances Regulations.

7.3.3.2. Spill Response

The contractor shall comply with the regulations of the National Water Act No. 36 of 1998, the Hazardous Substances Act No. 15 of 1973, the Environmental Conservation Act No. 73 of 1989 and the Occupational Health and safety Act No. 85 of 1993, when responding to spillage incidences.

The contractor small provide details for approval by the TFR Environment, Fire and Hazmat Manager of its still response plan prior to commencing work on site. The plan will show measures to be taken to remove contaminated soils from site and demonstrate complete removal of contamination in the event of spills.

The contractor shall instruct own 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,
- Do not discharge oil or contaminants into storm water or sewer systems.

If the spill occurs on land, the contractor must:

Immediately stop or reduce the spill.

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- · 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 to a location designated thereto and submit disposal certificate to TFR Environment, Fire and Hazmat Manager.

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,
- Complete section 30 Report and Notify the appropriate of site authorities,
- Implement actions necessary to prevent the spread of the contamination by deploying booms and/or absorbent material,
- Recovery of the spilled product,
- Proper disposal of spilled material.

7.4. SPRAY PAINTING & SAND BLASTING

7.4.1. Objective

To ensure that all the spray painting and sand blasting on site is conducted in a controlled manner where appropriate measures are taken to prevent paint contamination of the soil and to ensure that sandblasting grit/mediate properly contained and disposed of.

7.4.2. Scope

Applicable to all spray painting and saidblasting on site.

7.4.3. Spray Painting and Salid Blasting

Spray painting and said blasting 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 hard pointing or by an approved procedure. This should form part of the method statement of the submitted to the TFR Environmental Manager for approval.

The relevant contractor will inform his Environmental Officer of when and where the spray painting or sand blasting is to be carried out prior to commencement of work. The Environmental Officer will monitor these activities to ensure that adequate measures are taken to prevent contamination of the soil.

NB: if the area is in confined or high (elevated) areas, a protection plan must be issued for approval.

7.5. DUST MANAGEMENT

4.5.1. Objective

To prevent/control the generation of dust on the construction site and access roads.

4.5.2. Scope

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Contractors (associated with activities such as earthworks, geotechnical surveys, pilling storm water drainage, construction of roads and railways, foundations, brick building, operation workshops, fencing, erecting construction camps and batch plant activities, etc.) shall submit a dust control plan for approval by the TFR Environmental Manager.

7.5.3. Management of 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.

Dust is to be controlled on unpaved access roads and site roads using sprayed water contractors are responsible for managing dust generated as a result of their activities. The contractor will be responsible for dust control of the entire construction area.

Some dust control measures which are normally applied during construction are presented in this section for inclusion by the contractor in his dust control method statement.

The dust mitigating procedures include the following:

- Limit vehicle speeds on unpaved roads to 20km/h
- Wash paved surfaces within the construction area tyice a week
- Minimise haulage distances
- Apply water to gravel roads with a spraying truly when required
- Environmentally friendly soil stabilisers may be used as additional measures to control dust on gravel roads and construction treas
- Construction material being transported by trucks must be suitably moistened or covered to prevent dust generation.
- Strip and store topsoil in separate stockpiles with mounds not exceeding 2meters in height to, among other things, of event wind-blown dust.
- Minimise disturbances of natural vegetation during right of way construction (e.g. erection of fences) to reduce notential erosion, runoff and air-borne dust.
- Implement a system of reporting excessive dust conditions by construction personnel (as instructed through prironmental Awareness Training)

Water for dust control shall be taken ONLY from approved sources.

7.6. STORM WATER & DEWATERING MANAGEMENT

7.6.1. Objective

To ensure that storm water and dewatering drainage across the site occurs in a manner that will negate contamination by oils, fuels, litter and other waste to prevent erosion of the construction terrace.

7.6.2. Scope

All runoff and dewatering activities.

7.6.3. Storm Water and dewatering management

Water is a valuable resource. Both the quality and quantity of the water used by the contractor should be considered in making resource conservation plans.

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Construction activities that may potentially impact on surface water and groundwater are: runoff and percolation; dewatering activities; and miscellaneous liquid wastes associated with construction activities.

In general, construction activities may affect water quality and/or quantity of groundwater and/or surface water of the area.

The contractor shall be aware that, apart from runoff from overburden emplacements and stockpiles, 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 fertilizer and rehabilitated areas, etc.

The contractor shall take note that discharges to controlled waters such as ea, rivers, and groundwater or to sewerage systems are controlled under South Africal water Legislation.

7.6.3.1 Surface runoff

Construction activities such as surface grading and excavation will disturb surface areas on site. This will increase the potential for soil erosion and subsequent sediment transport during periods of precipitation runoff or when excavation dewatering is required. Construction activities have a potential to change local surface drainage and sediment transport patterns, site floodplain delineation, and percoll tion rates into soil.

7.6.3.2 Dewatering

Dewatering during groundwork produces a surface water discharge that will require collection and sedimentation. Dewatering also has a potential to affect groundwater quality and quantity.

7.6.3.3 Management Requirements

Temporary drainage must be established on site during construction period until permanent drainage is in place. Contractors we responsible for maintaining the temporary drainage in their areas. Contractors must novide secondary drainage that prevents erosion.

Contractors must analogood housekeeping in their areas to prevent contamination of drainage water.

The contractor shall clear stagnant water.

Specific water management measures (surface and groundwater) for incorporation by Civil/Earthworks contractors into their EMP's include the following:

The Contractor shall ensure that no contaminated surface water shall flow off-site as a result of Contractor operations. Silt traps shall be constructed to ensure retention of slit on site and cut-off ditches shall be constructed to ensure runoff from the site except at point where silt traps are provided.

If applicable, the Contractor shall be responsible for collection, management and containment within the site boundaries of all the dewatering from all general site preparation activities. The dewatering water shall be contained within the site boundaries by subsequently pumping or routing water to and from sub-areas within the site as the

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construction activities precede. 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 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 25-year storm peak runoff flow.

Both structural and non-structural (vegetation) erosion control measures will be designed, Implemented, and properly maintained in accordance with best management practices which will include the following:

Scheduling of activities to minimise the amount of disturbed areas at any one time.

Implementation of re-vegetation as early as feasible

Limiting construction traffic and/or avoidance men of on access roads and areas to be graded to the extend feasible at drainage ditches

Compacting loose soil as soon as possible and excavation, grading and filling.

Using silt fences, geo-textiles, temporary ip-rap, soil stabilisation with gravel, diversionary beams and swales, small sedimentation basins, and gravelled roads to minimise transport of sediment.

Implementing the erosion and segmentation control plan and ensuring that the construction personnel are familiar with and adhere to.

Managing runoff during construction

The contractor shall be responsible for checking and maintaining all erosion and sedimentation control.

7.7. NOISE MANAGEMENT

7.7.1. Objective

To maintain construction noise at the site within legal limits

7.7.2. Scope

Any noise generated at the construction site.

7.7.3. Noise Management

Keep all equipment in good working order.

Operate equipment within specifications and capacity and don't overload the machines.

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Apply regular maintenance, particularly with regards to lubrication

Operate equipment with appropriate noise abatement accessories, such as sound hoods and ear plugs.

Noise control measures for incorporation by the contractor in its noise control plan shall include the following:

Ensure that the potential noise source will conform to the South African Bureau of Standards recommended code of practice, *SANS 10103:2004*, so that it will not produce excessive and undesirable noise when released.

The entire Contractor's equipment shall be fitted with effective exhaust silencers and shall comply with the South African Bureau of Standards recommended code or tractice, SANS 10103:2004, for construction plant noise generation.

All the Contractor's vehicles shall be fitted with effective exhaust stends 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 victions of noise (e.g. ear-plugs) by ensuring that all noise-related occupational health provisions are met. (Occupational Health and Safety Act, (Act 85 of 1993)

7.8. PROTECTION OF HERITAGE RESOURCES

7.8.1. Objective

To ensure the protection of ar has o ogical, historical artefacts, or heritage resources discovered during construction attivities.

7.8.2. Scope

Archaeological, Historica Andrets, or Heritage resources discovered on or near the site.

7.8.3. Archaeological site

If an artefact or size is uncovered, work in the immediate vicinity shall be stopped immediately. The contractor shall take reasonable precautions to prevent any person from removing or tamazing any such article and shall immediately upon discovery thereof inform the engineer of such a discovery. The South African Heritage Resources Agency (SAHRA) is to be contacted and will appoint an archaeological Consultant. Work may only resume once clearance given in writing by the Archaeologist.

7.8.4 Graves and Middens

If a grave or midden is uncovered on site, or discovered before commencement of work, all work in the immediate vicinity of the graves/middens shall be stopped and the engineer be informed of the discovery. The National Monuments council should be contacted and in the cases of graves, arrangements made for an undertaker to carry out an exhumation and reburial. The undertaker will, together with the National Monuments Council, be responsible for attempts to contact family of the deceased and for the site where the exhumed remains can be re-interred.

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7.9. PROTECTION OF LIVESTOCK & GAME

7.9.1. Objective

To prevent illegal activities potentially perpetrated by staff and to prevent the killing of any animals trapped in the construction works or discovered on the construction site or surroundings.

7.9.2. Scope

Managing the activities of site staff during work and after hours.

7.9.3. Poaching of Livestock or Game

On no account shall any hunting or fishing activity of any kind be allowed. This includes setting of traps, or the killing of any animal caught in the construction works.

7.9.4 Killing of animals

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 person prior to site establishment. If no-one is available, training should be provided to at least two site staff members.

7.10. FIRE PREVENTION

7.10.1. Objective

To minimise the risk of uncontrolled fires

7.10.2. Scope

All activities on or near the site that coun initiate and uncontrolled fire.

7.10.3. Fire Control

Fires shall only be allowed in incilities or equipment specially constructed for this purpose. A firebreak shall be cleared and haintained around the perimeter of the camp and office sites. All conditions incorporated in the requirements of the Occupational Health and Safety Act shall be implemented.

7.11. SPILLAGE OF HAZARDOUS SUBSTANCES

7.11.1. Hazardous Spillages Reporting & Records Keeping

In the event of a spillage, the incident will be reported (according to the TFR Occurrence Procedure: IMS PR 014). The investigation report should be copied to the Environmental Manager for record keeping.

Mobile oil clean-up kits must be available for accidental spills. The mobile kit should be available on any vehicle transporting oil containing materials.

In the event of an oil spill, the first priority is to contain the spill. The emergency programme for oil spills, as developed during the Method statement must then be followed. It is preferred that spillages and contaminated areas are treated on site. However, circumstances may necessitate the removal of contaminated soil for treatment – this area must be clearly demarcated and cordoned off.

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Bund walls should be secure from leaks and damage. Oil traps must be pumped out regularly and remain free of debris. Oil taps should be securely closed unless it is necessary for water to be drained from the bund area.

7.12. HANDLING & BATCHING OF CONCRETE AND CEMENT

7.12.1. Objective

To control cement and concrete batching activities so as to prevent the spillage of cement waste water and potential contamination of soil, groundwater and marine environment (where applicable). To avoid or substantially reduce dust emissions caused by cement and concrete activities on site ensure that no noise nuisance results from batching activities.

7.12.2. Scope

Cement and concrete batching activities commonly produce cement aden (contaminated) runoff, mainly from washing of mixing equipment. The contaminated runoff is alkaline and contains high levels of chromium, which causes leachate that may unmately contaminate groundwater. Cement contaminated water can also increase the phrevel of marine waters and cause detrimental damage to aquatic life.

Fine dust particles containing cement and concrete are pollutants and can cause damage to neighbouring amenities when allowed to spread. Excessive noise during batching may cause stress to employees on site and other people vitain the construction vicinity.

This standard applies to all cement and concrete batching activities, delivery of ready mix concrete and small scale mechanical & hand mixing of concrete and cement, as well as the washing of equipment used in these activities on construction sites managed by TFR.

7.12.3. Handling and batching of concrete and cement

7.12.3.1. Siting

Concrete batching shall only be a inducted in demarcated areas which have been approved by the TFR Project Marage. Such areas shall be fitted with a contaminated facility for the collection of cement laden water. This facility shall be bunded and have an impermeable surface protection to as to revent 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.

7.12.3.2. Handling and Storage

Hand mixing of cement and concrete shall be done on a mortarboard and/or within the bunded area with impermeable surface or concrete slab.

Bulk and bagged cement & concrete additives will be stored in an appropriate facility at least 10meters 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. Water can be pumped into sealed drums for temporary storage and must be disposed of as liquid hazardous waste.

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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.

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 practices and procedures.

Empty cement and concrete bags, if temporarily stored on site, will be secured with adequate binding material.

Sand and aggregates containing cement will be kept damp to prevent the generation of dust.

7.12.3.3. Disposal

Concrete or Cement or any solid waste materials containing concrete and cement will be disposed of at a registered disposal facility. Where disposal facilities for general waste are utilised, written consent from the relevant municipality must be attained.

7.13. EROSION PREVENTION

7.13.1. Objective

To prevent Soil Erosion

7.13.2. Scope

All bare soil ground areas susceptible to ero ion including gravel roads.

7.13.3. Erosion Prevention

All vehicle movements must be along existing roads and tracks. Vehicles should be driven at moderate speeds and within legal limits. Special care should be taken (especially in wet weather) to avoid eroding tracks. A single access track / road is to be used and multiple tracks are to be avoided at all times. In urban areas, access roads should be treated, where necessary, to avoid dust collusion.

Erosion of the access oad, which cannot be remedied by simple compaction methods, should be referred to the TFR Infra for further assessment and recommendations. Soil binding agents and gabions are frequent methods used to combat erosion.

7.14. REHABILITATION

7.14.1. Objective

To ensure that all areas affected by the project are appropriately rehabilitated and revegetated in a manner congruent with the surrounding biophysical environment. The prevention of spread of alien invasive species.

7.14.2. Scope

All areas affected by the project including lay down areas.

7.14.3. Rehabilitation

Contractors shall rehabilitate their lay-down area/s upon completion of work on site. A rehabilitation plan will be submitted to the Construction Manager for approval at least six weeks before completion. The following are critical issues to be included in the rehabilitation plan:

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Details of soil preparation procedures including proposed fertilizers or other chemicals being considered for use.

A list of plant species that will be used in the rehabilitation process. Note these should be indigenous species, and preferably species that are endemic to the area. The assistance of an appropriately qualified Botanist should be sought in developing the 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)

Procedures for the prevention of establishment and spread of alien live species.

7.15. SOCIO CULTURAL ISSUES

In the event that private property is damaged, it must be reported immediately to TFR and the landowner(s). Damage must be repaired to the satisfaction of the landowner (written proof of satisfaction must be obtained). Records of any complaints should be kept.

Local communities must be treated with the atmost respect and courtesy at all times. Infringement of their rights is strictly forbidden.

Stock, crops or activities on the surrounding private property should not be interfered with or disturbed. Wandering around the properties is not permissible (remain within the permitted working areas).

A list of the property owner's names, activesses and telephone numbers must be established and kept updated. A plan of action should be drawn up with the property owners. In case of an emergency (veld fire, vegetation problems etc.) The Contractor's contact names and telephone numbers must be given to these landowners.

The culture and lifestyles of the communities living in close proximity to the work sites must be respected.

Removal (pilferno) of agricultural products (sugar cane, fruit, vegetables, stock, firewood, poaching etc.) is prohibited. Receipts must be obtained for any merchandise purchased or received from land- owners (i.e. for meat, vegetables, wood).

Vehicles must be driven carefully in hazardous road conditions (sharp bends, narrow roads, bad weather, children playing on or near the road, domestic animals on or near the road etc.). Vehicle movement should be kept to a minimum during rain to avoid damage to access and farm roads.

Tribal graves, archaeological sites and sites of historical interest in close proximity to work sites are to be treated with respect and protected.

No firewood is to be collected except with the written consent of the landowner.

A register must be maintained of all complaints or queries received as well as action taken.

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Insure that affected property owners are informed of planned TFR activities on their land.

No off-road travelling is permitted in environmentally sensitive areas (Karoo, fynbos, coastal dunes, vleis and wetlands etc.).

7.16. ENVIRONMENTAL AWARENESS TRAINING

7.16.1. Objective

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 conditions, also complying with requirements in the regional and local regulations.

Problem recognition and communication – training personnel to recognise potential environmental, i.e. spills, and communicate the problem to the proper person for solution.

Liability control - non-compliance with regulatory requirements can lead to personal and corporate liability.

7.16.2. Scope

All Personnel on the construction site.

7.16.3. Environmental Awareness training

An Environmental Awareness Program is considered a necessary part of Construction Environmental Management Plan for the project. Training of the appropriate construction personnel will help ensure that all environmental regulations and requirements are followed to be defined in the relevant Method Statement to be prepared by the Contractor.

All individuals on the Project Con truction site will need to have a minimum awareness of environmental requirements and responsibilities. However, not all need to have a 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 keep a record of all the environmental related training of the personnel.

8. DOCUMENTATION

The Contractor must produce a method statement.

9. RECORDS

All documents generated in terms of this standard will be classes as records and retained for the life of the project.



Baseline Risk Assessment

SUPPLY, INSTALL AND COMMISSION SMART ENERGY METERS AND RELATED NETWORK AND COMMUNICATION INFRASTRUCTORE AT SELECTED TRANSNET TRACTION FEEDER SUBSTATIONS **Risk Assessment Title**

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Team Member 4 Team Member 5 Team Member 5 Team Member 6	Team Member 3				i iaili es. baaru@aecom.com
Team Member 5 Team Member 6	Team Member 4				
Team Member 6	Team Member 5				
	Team Member 6				

Designation	Name & Surname	Sign: Ture	Date
Project Manager			
Safety Manager			
		5	

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Step 1: Identify the activity

Describe the activity (or area) SUPPLY, INSTALL AND COMMISSION SMART ENERGY METERS AND RELATED NETWORK AND SELECTED TRANSNET TRACTION FEEDER SUBSTATIONS COMMUNICATION INFRASTRUCTURE AT

Describe the (geographic) location:

Northern Cape

Step 2: Identify who may be at risk by the activity

🍂 needed. These people may include fellow employees, of people at risk. A number of people may be at risk from any activity. This may affect the risk co visitors, contractors and the public. The location of the activity may affect the pa

Steps 3 to 7: Identify the hazards, associated risks, and rate the risks

- 1. An activity may be divided into tasks. For each task identify the hazards and associated risk events.
 2. List existing risk controls and determine a risk rating using the TCP Risk Rating Matrix Annexure 1.
 3. Additional risk controls may be required to achieve an acceptable level of risk. Re-rate the risk if additional risk controls used.



Hazards									
	ards Associated risk event	Existing risk controls	Risk I	Risk rating with existing controls *	* with	Additional risk controls required	Ris with	Risk Rating with additional controls *	ng *
	*		_	U	~	(Apply the hierarchy of risk controls)		U	~
Sending orkers on t without inductions	site Legal Liability	Inducted and informed about rules on site. Shey accordingly. Agal Obligation on struction on struction of specifications of specifications of specifications and Safet Planand and Safet Planand Safe	7	~		Contractual Requirement	7	-	_
			4	Chr.					



	30
	Page 4 of 30
7	Page
7	
All areas to be identified and the contact details for each area to be made available. Emergency Services to be notified of location and possible hazard exposures	
Σ	
2	
Ensure employees are prepared for terrain/site areas Ensure emergency procedure, incident management procedures are known to employees. Emergency procedures to be displayed. Fre extinguisher and first Alu kit must be made available and appoint necessare personals to administer them on site. Develop Emergency Management Plan to manage any insects or snakes observed within the work area, immediate response- affected personnel must move to a safe area and report the observation to	the area supervisor. <i>No</i> <i>personnel are</i>
Loss of life, stranded Loss of time, finances Reputation	
Away from services Two people Veldt fires, Other site dangers Snake bites, Bee stings Scorpion	
2.Snakes, Insects and fires on site	Rev 01



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-	7
7	~
Alcohol misuse increases the possibility of dehydration. Supervisors to do Alcohol Testing (Breathalyses Test) at the start of each shift or time to time.	A Site establishment method statement and risk assessment must be complied and training of such risk assessment pust be done, records kept. TCP site establishment checklist must be completed.
_	Σ
~	6
7	7-
Ensure sufficient drinking water available at all times. SHE Specifications Compliance. Workers must be given break intervals between shifts or shifts or weekends. Sepervisors to manitor all workers during shift and that drinking water is available on site	All areas martor allocated by TGP. Once an area only then can a contractor do site establishment
Liss of life, Liss of the, foance, foance Reputation Epodre employees arr prepared for terrain/site areas	Injuries, damage to property, time delay
Workers working while Sick, hot, long hours	Contractors placing offices anywhere they choose. No site establishment risk assessment done Man handling
3.Heat/Fatigue	4.Site Establishment



		Σ				
		М				
		~				
Supervisor to ensure safe positioning of employees. Employees to stand clear when	lifting commences.				111	
		工		11		
		ო		7	•	
		74	7			
Loading area to be demarcated and all obstacles cleared on path. Competent supervision to	oversee offloading. Competent operator to operate crane truck / low bed.	operator will be repeated fit and in position of a redical fitness certificate is sued	occupational medical practitioner.	procedure. Co-ordinate delivery schedule	knock off time. DSTI to be done. Driven machinery	regulations. DMR 18 (Lifting machines and lifting tackle)
Fatal injury to persons. Damage to equipment.						
Improperly lifted or secured loads may fall. Late arrival of delivery truck	may result in haste or haphazard off-loading:					
5. Offloading of containers and equipment at designated area.						



C Cucot Concing	1									
around offices and containers	orisupervised workers. Material handling. Using spades and picks. Possible TLB or grader used.	to property, time delay	Workers must be supervised at all times. DSTI's must be done. Hand tools training must take place for all workers.	7	2	Σ	Proper supervision at all times. Proof of training records to be kept.	-	7	_1
7. Control of visitors on site (access control).	Unauthorised and or incompetent persons may gain entry to work area:	Injury to 3 rd party liability. Theft, assaults. Compromise of standards. Negative effect on morale	Install warning sgns, security to printed gates, visitor book implementation. Inform suppliers and vendor up front of sitt; rule and PPE.	2	-	٦	Watchmen to control access All Visitors to undergo Visitors to induction. All persons to prominently display permit while on site. GSR 2B (Display of substituted notices and signs)	~	~	
8. No access to service road	TFR/Eskom not opening certain gates	Loss of Time Finances	Pre-arrangements to be made with TFR and Eskom for access to the service roads	2		7	Contractual Requirement	2	-	
9.Utelising farmers Road	Farmer not notified	Disgruntled Farmer	Contractor to notify farmer when driving on his land	7	ო	Σ	Contractor must exsure that the farmer is aware of their presence on his land.	~	7	_



н
-
SWP for manual handling Employees must be trained on safe lifting techniques, using their legs with a straight back. Training on manual handling. Stacking and storage areas must be barricaded. Employees to keep fingers and body parts away from pinch points. PTO to be done on manual handling techniques. CR 28 (Stacking and storage on sites)
77
-1
PPE Supervision Training Goor house kteping
Hand and back injuries
Personal injuries to employees, pinch points
10. Manual Handling/Stacking & Storage.



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н
SWP for manual handling Employees must be trained on safe lifting techniques, using their legs with a straight back. Training on manual handling. Stacking and storage areas must be barricaded. Employees to keep fingers and body parts away from pinch points. PTO to be done on manual handling techniques. CR 28 (Stacking and storage on sites)
Σ
72
7
PPE Supervision Training Goor house keeping
Hand and back injuries Property damage
Pinch Points
11. Offloading of fibre optic cables



	٦
~	~
~	~
Ensure short intitule visitors induction. Ensure chemical toilets are tied down and secured. Ratio per employee 1:10 (Construction Welfare Facilities)	Traffic management system All drivers to stick to the speed limit. CR 23 (Construction vehicles and
	≥
~	7
~	2
Use certified competent approved contractor only. Chemical toilets to be serviced at least once a week.	Over road signs and rules, operato awareless are safely, a road conditions permit Drivers to take rest brake when traveling long distances every 3 hours
En vironmental im sak	Injuries to person and damage to property
Spillage of chemicals	Uneven road ways Poor visibility due to weather conditions. Other traffic in the area Fatigue
12. Installation of chemical toilets	13. Driving to work area



7	
_	
By Law incidents/ accidents must be reported to the client by no later by the end of the shift. Contractor must ensure that he/ she has appropriate resources available to report incidents/ accidents.	
Σ	
ო	
7	4
Contractor must ensure by all means to report incidents/ accidents by the end of the shift and no later than 24 hours.	
Coltradual and legal obligations	
Incidents not reported to the client.	
14. Reporting of incidents	



Worker got bit								ŀ
טואפו א חומשעם	υ	on sansans no				Working next to		
of train driving		appoint a				the rail task		
rough the work		designated spotter				specific risk		
a no flagmen		or competent				assessment must		
ail-ble at that		flagmen must be				be developed by		
e. Spotter not						RME and train		
pace workers		Supervisors to be				workers on it.		
could det ser ously		in radio contact	7	m	Σ	TFR working		m
injare4.						near the rail		
		after shift and				spec to be		
X	_	In the event of an				discussed and		
		emergency.				nsed.		
		Supervisors to				Correct reflective	_	
		esdre DSTI are				vest must be		
		filled in dain, and				used.		
		daily clecks must		_				
		be done on PPE is						
		per DSTI Clore						
		out. Worn out and						
		baggy clothes	1					
		must be						
	_	addressed.						



				=												
				က												
				T												
Site Safety Officer and Supervisors will ensure that work is being done	inside the fenced off/demarcated	area. The risks and hazards associated with	working close to	be discussed in DSTI's and daily	toolbox talks.							N				
				Σ								く				
				m				(1	•					
				2			I									
Flagmen to be deployed. Sufficient construction warning / safety	signage to be displayed on site	railway line. Construction	vehicles will only be allowed to	work inside the demarcated,	barricaced working area thee meas	away fron the railway line.	Site induction to	De done. Cardinal rules and	site specific rules	will be enforced	Construction	Regulations:	(Construction	vehicles and	mobile plant)	Induction
Fatalities and damage to property	X															
Speeding, not obeying the speed limit.																
16. Driving on site																



	·	- CC-CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	Thomas and a Model	Ī			- 1		Ī	
	VOINCIS HOL	volvers parifering	Ercial requirement				Each contractor			
Preparedness	aware of what	in the event of an	is to conduct a				to display			
	to do in the	emergency.	planned				emergency			
	event of an	Serious injury	emergency drill				telephone			
	Emergency.	\	once every 3				numbers on SMI			_
	Not	Ş	months to	7	7	_	(Safety	-	7	_
	having an		familiarise worker				management			
	emergency		with the				information			
	assembly	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	requirements in				boards) all			7
	point/area. Not		the event of an				workers to be			
	conducting 3		emergency.				made aware of			
	monthly						snch numbers			
	emergency						and to be			
	drills. Not		7				trained on the			
	having an						emergency			
	emergency co-						procedures			
	coordinator.									
18. Working in	Slips, trips and	Damage to	Each contractor				Procedure to be			
inclement weather.	falls. Workers	property, injury	must have				drawn up and			
	can get	•	wind/lightening	1			implemented			
•	electrocuted by		detector on site.		(Supervisors must			
	lightening;		Each contractor				stop all work if			
	heavy winds		must take	J	1		the weather			
	exceeding 35		reasonable care of	7	7	7	makes it risky to	7	-	_
	knots can		all his workers				work Reasonable			
	cause hard		during inclement				man's test to			
	hats to fly off		weather to protect				use.			
	into the bay,		and to safe guard							
	including		his workers.							
	workers									



19. I raffic control	חשביושנו	Fatalition to	lies between the A	-						
	200	ו מומוורובים נוס	A designated rall				Site Safety			
	travelling	workers. Property	crossing will be				personal and			
ac	across railway 🗸	damage	established.				Supervisors will			
	lines		High visibility				ensure that			
		Ş	protective safety				Flagmen			
		2	clothing will be				/ Spotters are			
			used. A work				being used to			
			permit to be				control rail			
_		\\ \tag{ \tag} \tag{ \tag{ \tag} \tag{ \tag{ \tag{ \tag{ \tag} \tag{ \ta	obtained from TCP				crossings; the			
			Supervisor to				railway line will			
			enforce cardinal				only be crossed			
			and site specific	^	'n	Σ	when it is clear	-	۲	-
			rules.	1	n	Ξ	of oncomina	-	ຠ	_
			Ask Specific				traffic,			
_			Method Statement				The risks and			
			will le dobe				hazards			
			Supervisor to				associated with			
			ensure sefe				working close to			
			positioning co				railway lines will			
			plant and workers	1			be discussed in			
			at all times.				DSTI's and daily			
			Dsti will be done.				toolbox talks.			
			TFR Safety		1					
			Specification, TCP		1					
			HSS							
			Specification.		•					
			AECOM H&S				•			
_			Specification			•	•			
			Standard							



	2			Page 16 of 30
	m	1		Page
				
Site Safety Personal and Supervisors will ensure that all work is being done inside the demarcated area three metres away from the railway line.				
	Σ	1		
	ო			
	2	7		
No work will be allowed closer than three metres from the railway line. All machinery will be positioned inside the demarcated working area.	means of solid ricid barricading; three martes away from the railway lines Construction safety signs with	erected. The contractor will only be allowed to work inside the fenced off area. Flagman will be deployed to ensure	that all activities are being performed inside the fenced off area. Supervisor to enforce cardinal	and site specific rules. Task Specific Method Statement
Property damage				
Equipment to close to railway lines causing train to de-rail.				
				Rev 01



m	
A train schedule of passing times will be obtained from the rail control room. Proper planning will be ensured at all times.	
Σ	
m	
7	
Proper communication will be ensured between AECOM and the rail master / rail control room. A work permit to be obtained from TOP Supervisor to enforce cardinal and site specific rules. Task opecytic Method Statement will be done. Supervisor to ensure safe positioning of plant and workers. Dst will be done. TFR Safety	Specification
Fatalities to damage damage	
Inadequate communication between contractor and rail master / rail control operator.	



Of TED Electrical	ו ייייייין עובר									l
₹:	ובא בופכתוכשו	Uelay In progress.	Supervisor to	7	7	Σ	Supervisor to		1	T
Engineer on call	engineer not	Serious injuries	ensure that the				contact TFR			
	available or	and deaths due to	TFR Electrical				engineer in			
arrangements	contacted to	ingally entering	engineer contact				advance to notify			
	nnlock sub	sub-stations	number is on hand				when access are			
	stations / or to	5	and notified when				needed in sub			
	issue permits		substation must be		-		stations.			
			opened and				Ensure permit is			
		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	accessed.		_		in place before			
			Supervisor to				work			
			arrange permits				commences in			
			from Electrical				sub stations.			
			en ginger before							
			wark commences							
21.Locating of	Underground	Property damage	Contractor nust	2	2	Z	Contractor must	1	2	L
	services not	Los of production	ensure that the				contact TFR to			
	identified	Serious Injuries,	area Where				request drawings			
		electrocution	excavations				as well as permit			
			being done does				to excavate to			
			not have any	1			ensure that no			
			nnderground				existing services			
			services				are in the area			
				J	1	•	where they want			
							to excavate.			



											•	J															
											ſ	ຠ															
											7	-															
Site Safety	Personal and	Supervisors will	ensure that all	work is being	done inside the	fenced off	/demarcated	area three	meters away	from the railway	line.															\ \frac{1}{2}	
											Σ	Ξ															
											ď	า							_					•	•		
											r	1							1								
A solid rigid	barricading / fence	will be erected	three meters from	the railway line.	Work will only be	allowed inside the	fenced off area.	All construction	vehicles will be	Controlled by	means of flagman.	A vork permit to	b optained from	TCP Surervicor to	enforce cardinal	and site safety	rules.	Task Specific	Method Statement	will be done.	Supervisor to	ensure safe	positioning of	plant and workers.	DSTI to be done	TFR Safety	Specification
Fatalities to	MO			Ş	2			く		×																	
Not following	safe working	distance the	raliway line. (3	meters)																							
								_																			



7
~
Contractual Requirement
74
7
Apply CR 13 as applicable Close same day as per specification Collect data as specification Do not work near excavation place samples away from Construction Plant Wear vests commences Darisks before work compact Leave site clean and tidy. Profile only from safety of solid bank away from equipment, profile excavated earth piles
Injury, Loss of samples Loss of information Downtime Loss of finance Loss of reputation
Using faulty shovels, Lack of access and egress Do not load sides of excavations Fall into Depth of excavation Falling rocks Diminished visibility Cave in, collapse, claustrophobia
22. Hand excavations



7	7	-
~	7-	~
Contractual Requirement	Contractual Requirement	Place on SMI Spoards for awareness.
ب		_
7	- 7	7
~	- 1	~
SHE Specifications Legal Liability- OHSA & Construction Regulations	SHE Specifications Legal Liability- OHSA & Construction Regulations Strage of fuels and razardous Flammable liquids. Ensire safe drip fr(y) No cleaning of plant at sites Security and control of machine overnight. Supervision Inspections and observations	Proper lifting techniques must be demonstrated to workers in tool box talks and DSTI's
Injuries to person and damage to property	Injury, Loss of samples Loss of information Downtime Loss of finance Loss of reputation	Serious injury
Labour not trained or informed of hazards	No checklists, faulty equipment Noise, vibration, Heat No Competency No Planned Maintenance Construction Plant	Workers must use proper lifting techniques to avoid muscle pull
23. Using unskilled local labour	24. Hiring mobile plant equipment from local towns	25. Ergonomics



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7	~
~	~
DSTI to be done Supervisor to give clear instructions to workers on site. Employees to work as a team and communicate when handling	DSTI No personnel allowed within direct line of truck (3m rule) Pre use checklist P.T.O. Planned inspections. Spotter provided with a whistle. Construction Regulation 23
Σ	_
8	И
N	1
Supervision All employees to wear the correct PPE, gloves hard hat safety glasses safety shoes. Team work and communication.	Supervision. Ever ground Authorized/c-rmpet ent //lice/sed operaton Supervision
Injury to entrayees and Carlage to preserv	Injury/ property damage Injury
Workers must use proper lifting techniques to avoid muscle pull	Tipping: Truck tips over: Compactor collides with people:
26. Placing of pipes and fibre optic cables	27. Backfilling.



										İ
28.Transporting employees to site work	Motor vehicle accidents by not using the correct vehicle for the terrain	Mn ar or serious nju es to en oloye s	PDP drivers permit for the driver that's driving employees to work. Transnet: Fleet and Transportation Management Guideline Procedure on employee's	74	8	Σ	No employees to sit on the back of LDVs Drivers to have a valid driver's license All passengers to wear safety belts	/-	~	J
29. Medical assessments for employees	No medicals done for employees Employees medically unfit to execute high risk duties. Uncontrolled exposure	Minor to serious injuries Occupational diseases	All emrloyers to undergo aran medical assessments including drug testing before they commencement duties on site.	al	7	≥	Medicals to be done thru an Occupational health practitioner. Exit medicals to be done for employees leaving site	7-	-	



Employer to provide employees with lockable lockers. Employer to provide employees with shaded area to eat with tables and chairs Refuse bins to be available in these areas and must be kept clean	Supervisors to enforce compliance with pre use inspections and lead by example. Lool specific risk assessment or Safe operating procedures must be in place and training must be done. SOPs of portable equipment must be adhered to
Sufficient running drinking water to be available for employees	Supervisors to ensure workers don use defective equipment. Pre use inspections to be done by all workers on all equipment. Damaged equipment must be quarantined. The correct PPE must be used at all times
Un-heathy Vorking envilonment	Electric shock, serious injury to body parts or death.
No welfare facilities for employees	Using equipment that's not been inspected. Workers not reporting defective equipment. Supervisors forcing workers to use defective equipment. Not wearing the correct PPE when working with portable electrical
30. Employees welfare	31. Using of portable electric equipment



	Li .	ı
0	7	2
7-	-	
Construction regulations 27	Supervisors to get conformation from CTC	Equipment must be inspected daily.
Σ	Ξ	M
2	2	
2	7	7
Each contractor must adopt the housekeeping slogan "a place for everything and everything in its place" Bins and skips must be provided and removed when full.	supervisor must be in constant communication with CTC- he must rotify CTC when he wars to vork, notify CTC where his working, what work his dolugate when he's work is completed	Each vehicle to have spare wheels and jacks, enough fuel at all times to prevent breakdowns.
Injury, damage to environment	Injury to employees	Los of production
No skips on site. No bins. Skips/bins not been removed.	Not Communicated to CTC	Equipment not inspected
32. Housekeeping	33.Informing CTC – Railway control	34.Equipment break down / running out of fuel



35. PPE	Incorrect PPE	Injury to	No lose clothing,	2	2	M	No lose clothing	_	5	_
		Employees	proper yellow				proper yellow		l	1
			visible vests must				visible vests			
			be worn, no red				must be worn, no			
		Ş	vests allowed. No				red vests			
		Q	lose jewellery				allowed. No lose			
			permitted				jewellery			
			(earrings, chains,				permitted			
			bracelets)				(earrings, chains,			
							bracelets)			
36.Working/driving	Electrocution	Injury to	No work may take	2	m	M	No work may	1	7	r
under overhead	Hit by Train	Employees	place under				take place under			
power lines			OF E, or within 5				OHTE, or within			
			pletes OHTE,				5 metres OHTE,			
			control (CTC) to				control (CTC) to			
			be not fied. FFR				be notified. TFR			
			inductions to take				inductions to			
			place. Electrica				take place.			
			engineer from 1FK	<u> </u>			Electrical			
			to notified. OHTE	1			engineer from			
			training.				TFR to notified.			
					(OHTE training.			



1				
		0		
		-		
Construction Regulations: CR 13 (Excavation Work)	Specification and Standard, Task specific RA must be in place	trained to employees and acknowledgment of understanding by employees		
		Σ	1	
	(7		
	(N	4	
TFR will provide the necessary information in the form of drawings regarding any existing	services. An excavation permit will be obtained. Parricade trenches	necklist and inform workers of any buried existing services like pipelines, data	electrical cables. Hand tools to be inspected daily. Supervisor to ensure that all open trenches are being closed/ back	filled after the cables has being removed. Gloves, eye protection to be used.
Hand injuries				
Substandard hand tools being used when opening the cable trench.				
37. Demobilisation. (Removing of offices, temporary electrical supply cables from offices, and equipment after completion of the	project)			



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	7			
	~			
	facilities)	(Personal safety	GSR 2(1)(3)	General Safety Regulations:
	I			
	က			
	7			
manner (bin) Persons engaged in work to wear overalls, safety	off- cuts in a safe	followed. Dispose of wire	procedure to be	Correct manual handling
N				Serious injury to persons.
	R	Q		Serious

	Name:	signature:	Date:
	5	Authorised by	
Step 8: Documentation and Supervisor approval	Name:	Signature:	Date:
Step 8: Docume		Completed by	

Step 9: Implement the additional risk controls identified	Freserave Action reference:	
If no Preventive Action was raised, indicate briefly what additional risk controls from Step 6 above were implemented, when and by whom.	s above were implemented, when and by	v whom.
Risk control: Date:	Inplemented by:	
Risk control: Date:	Implemented by:	
Risk control:	Implemented by:	
Risk control: Date:	Implemented by:	
Risk control:	Implemented by:	



Step 10: Monitor and review the risk controls	It is important to monitor risk controls and review risk assessments regularly. Review is required when there is a change in the process	relevant legal changes, and where a cause for concern has arisen. Reviews could be scheduled on an annual basis. If the risk assessment has	substantially changed a new risk assessment
Step 10: M	It is import	relevant leg	substantially

Review date:	neve wed by:	Authorised by:
Review date:	Key Tework by:	Authorised by:
Review date:	Reviewed by:	Authorised by:
Review date:	Reviewed by:	Authorised by:

Documentation

OH&S Act and Regulations 85 of 1993

13, 14, 23, 28, 30. Itions DMR 8, 18. Facility Regulation – FR 2 Regulations – EMR 10. Pressure Equipment Regulations – PER 9, 11. TCP HSS Construction Regulations of 2014 - CR 7(1) (4) (6) (8), CR 10, 11, 27, 13 General Safety Regulations – GSR 2, 6, 9. Driven Machinery Regulations Electrical Installation Regulations – EIR 6, 9. Electrical Machinery Regulation

Specification. TFR Safety Specification.

AECOM H&S Specification & Standard.



Annexure 1 – TCP Risk Matrix

Consider what can go wrong that carning someone 4. 4. 4. 7.

events are – Likelihood Determine how likely occurrence of the

wd be if the event realises - Consequences Determine what the most likely outcom

Calculate the risk rating (L X C)

Initiate the required action based on risk ra inc

LIKELIHOOD		How likely is the risk event to ealise?	
Likely	က	3 Expected to occur in most circums anges	
Possible	2	2 Could occur at some time	
Unlikely	1	Not likely to occur in normal circumstances only in exceptional circumstances	eptional circumstances

CONSEQUENC	ES	How severely could someone be injured?	N H
Major	က	Hospital admission required, permanent disability or death	ty or death
Moderate	2	Medical treatment required	
Minor	Н	Slight injuries, maybe first aid required	

	Ö	Consequences	Se
Likelihood	Minor (1)	Moderate (2)	Major (3)
Likely (3)	Medium (3)	High (6)	High (9)
Possible (2)	Low (2)	Medium (4)	High (6)
Unlikely (1)	Low (1)	Low (2)	Medium (3)

High	Intolerable - immediate action required before work continues	continues
Medium	Tolerable - action required within 2 weeks, reduce to ALARP	ALARP
Low	Acceptable - monitor risks and reduce further when practicable	racticable

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)

Circulation Not Restricted

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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.

"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 200 volts

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

"Near" - To be in such a position that a prson's body or the tools he is using or any equipment he is handling may come within 3 metrics of "the" 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 rains" An occupation during an interval between successive trains.

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

- telecommunication nétworks 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 and competence training regarding safety as prescribed.

5.0 OCCUPATIONS AND WORK PERMITS

- 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 minner which will minimise the number and duration of occupations and work permits required.
- 5.3 The network operator will not be liable for any manual 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.
- 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 tograff an occupation or work permit for any particular date, time or duration.
- 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 penalted 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 sheets)
 - Drawing no. BE-97 Sheet 5: Clearances: 610mm Gauge (Annexure 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 projection.

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 suits, 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 interiore 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

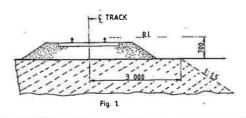
- No temporary works shall ence ach on the appropriate minimum clearances set out in the Manual for Track Maintenance (Documer no BBB0481):
 - Drawing no Bracket 1: Horizontal Clearances: 1065mm gauge (Annexure 1 sheet 1)
 - Drawing no JE-97 Sheet 2: Vertical Clearances: 1065mm gauge (Annexure 1 sheet 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.
- 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.
- 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

- 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.
- 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. It the sand 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 a lequacy 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

- 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 dan aged 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 the may impose.
- 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.
- 14.5 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 s m. d.

15.0 RAIL TROLLEYS

- The use of rail trolleys or trestle trolleys on a rail ay line for working on high voltage equipment will be permitted only if approved by the Contract Supervisor and under the conditions stipulated by him.
- All costs in connection with trolley working and any train protection services requested by the Contractor shall, be borne by the Contractor upless 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 in track-circuited tracks shall be severed without the Contract Supervisor's knowledge and connections.

17.0 PENALTY POR 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

- 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 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 revent 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-, tel communications- 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 temborary level crossing to himself and his employees, his subcontractors and their employees, the staff or 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 step 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 even rossing outside the railway servitude.
- 19.5 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 recause of disorder shall be at the Contractor's expense.
- 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, special and environmental pollution, soil erosion or restriction of or interference with streams, furrows are 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 yours.
- 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 later ere 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.
- The Contractor chair 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.
- 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 super ntendence of the Works, and may direct the Contractor in terms of the provisions of the Contract prin 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, remain or withdrawal of any approval given, shall not relieve the Contractor of any of his duties and labilities 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 any deputy or other person, any of his duties or functions under the Contract. On receiving potics 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 naving full power and authority to act on behalf of the Contractor. Such agent shall be computed 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.
- 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

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

I PREVIEW

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 cold of the provision of the barriers and other safety precautions required, including the attendance of the nativerk 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.
- 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 a a barrier, provided that it extends at least 2,5 metres above any working level in the case of piers, aputments 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.
- 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.
- 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 "I've" 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 31.1.7 to 31.1.3 do not apply on a bridge deck between permanent parapets nor in other situations where a paragreffectively 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 supervisio) 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 Office (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.
- 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

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

- "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.
- 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 netre of "live" high-voltage equipment.
- 34.5 Clauses 35.1 to 35.4 shall apply *mutate metandis* to the use of maintenance machines of any nature.

35.0 WORK PERFORMED UNDER DEAD SONDITIONS 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 issue the Responsible Representative shall-
 - (i) before commercement 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.

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

PART C4: SITE INFORMATION

1.1. General Description

The *Employer* own and operate various rail, port and materials handling facilities at the Port of Saldanha, which caters largely for the export of iron ore, moved by rail from the Northern Cape, some 800 km to the North-East. This is South Africa's main railway corridor utilized for exporting iron ore.

For about 150km south of Strandfontein, the railway runs close to the coast. Inland, much of the line traverses semi desert or desert. The expected temperature range is from -5° C to 50° C. The line passes through a region of low rainfall where the annual rainfall varies from about 200mm on the coastal area reducing to 100mm near Sishen. The line is, however, subjected to periods of flash flooding. Close to the coast the line is subjected to seawater spray carried by the wind creating a very corrosive environment. The geology values along the Line from mostly wind blown sand, in the South, to predominantly rock, in the Central and Northern areas.

The rainy season for the southern part is from mid-April to end-August and for the northern part is from September to February. During these rainy seasons, the service road and surrounding Provincial dirt roads are periodically in a bad condition due to wash-away which makes travelling on a second solvery difficult.

The proposed Site(s) for the *works* is divided into the activities pertaining to (all name references are provided, as the different sites are referred to different names by for instance liskom, Transnet and the local population);

1. Central Train Control (CTC) building (Sall or) unide Saldanha (by Others):

Installation of network cables and fly leads

SCADA Server and Software

Placing workstation PCs at designated positions

Software engineering (SCADA)

Nearest town - Saldanha (argebaan / Vredenburg

From Cape Town to mark to 7 - 130km

Nearest town to stee 1 km

Aurora / Silko / Loop 0 (Completed by Others):

Near st t wh - Saldanha / Langebaan / Vredenburg

From Care Town to nearest town - 130km

Nearest town to site - 15km

2. Juno / Knersvlak / Loop 4 (Completed by Others):

Nearest town - Vredendal / Lutzville

From previous TFS to nearest town - 300km

From Cape Town to nearest town - 330km

Nearest town to site - 24km

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3. Helios / Sous / Loop 8:

Work will require trenching, sleeves, fibre optic cable and electronic equipment installation

Nearest town - Loeriesfontein

From previous TFS to nearest town - 150km

From Cape Town to nearest town - 460km

Nearest town to site - 75km

4. Aries / Kolke / Loop 12 (Completed by Others):

From previous TFS to nearest town - 290km

From Cape Town to nearest town - 720km

Nearest town to site - 50km

5. Garona / Rooilyf / Loop 16:

Work will require trenching, sleeves, fibre optic cable and electranic ment installation

Nearest town - Groblershoop

From previous TFS to nearest town - 135km

From Cape Town to nearest town - 900km

Nearest town to site - 40km

6. Lewensaar / Vrolik / Loop 18:

Work will require trenching, sleeves, here optic cable and electronic equipment installation

Nearest town - Olifantshoek

From previous TFS to near st www

From Cape Town to n

Nearest town to

7. Ferrum (Erts / L

Work will be vire trenching, sleeves, fibre optic cable and electronic equipment installation

Ascitional work is for the planting of poles and stringing the fibre optic cable over the OHTE

Nearest town - Kathu

From previous TFS to nearest town - 60km

From Cape Town to nearest town – 1250km

Nearest town to site - 20km

Access to the site(s) will be via the *Employer's* service road which runs parallel to the Ore line.

At Ferrum access is via the Kumba mine property. Additional safety inductions and driving permits are required. Advance permit application to the mine is required as long waiting times can be expected.

All the works will take place at existing and mature sites, established in the mid to late 1970s. Cognisance must be taken of existing communication cable routes and possible other underground services. A general rule of thumb is that communication conduits will be established between a "signals control hut" and an "electrical

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control hut". Little or no "as built" information is readily available. It will be expected of the *Contractor* to communicate liberally to eliminate delays in all respects.

2. Climate

2.1. Upington area;

The Upington area receives on average about 70mm of rain per year, with most of the rainfall occurring mainly during the autumn months, with the lowest rainfall (0mm) recorded during June and the highest (23mm) recorded during March.

TABLE 1: AVERAGE MONTHLY PRECIPITATION (mm): UPINGTON AREA

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sto	Oct	Nov	Dec
14	25	30	25	14	5	3	3	3	7	8	11

The monthly distribution of average daily maximum temperatures indicate that the average midday temperatures range from 19°C during June to 33°C during January. This region is the coolest during July when the night-time temperature averages \pm 6.3°C.

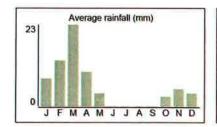
TABLE 2: AVERAGE MID DAY TEMPERATURES (C): UPINGTON AREA

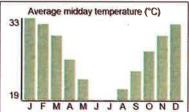
Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec
33	32	30	26	25	19	19	21	24	27	30	32

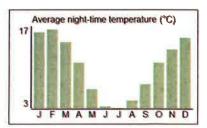
TABLE 3: AVERAGE NIGHT TIME TEMPARETURES (°C): UPINGTON AREA

Jan	Feb	IVIR T	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec
16		M	11	6	3	2.6	4	7	11	13	15

Over a period of time the above mentioned data has been recorded at the Upington weather station. During construction the weather station based at the Upington International Airport will be used. The code name for the weather station is FAUP with GPS coordinates: 28.41°S, 21.26°E.







2.2. Vredendal area;

Vredendal normally receives on average ± 105 mm of rain per year and with most of its rainfall during winter, it is classified as having a Mediterranean climate. The average rainfall values for the Vredendal area per month is indicated in the table included below, it receives the lowest rainfall (0mm) during the month of January and the highest (23mm) during the month of June.

TABLE 4: AVERAGE MONTHLY PRECIPITATION (mm): VREDENDAL AREA

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3	7	17	27	29	29	16	11	1.2	9	7

The monthly distribution of average daily maximum temperatures indicate that the typinge midday temperatures range from 19.2° C during July to 31.5° C during February. This region is the collect during the month of July when the temperature averages \pm 6.3°C during the night time.

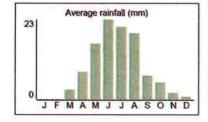
TABLE 5: AVERAGE MID DAY TEMPERATURES (°C): VREDENDAL AREA

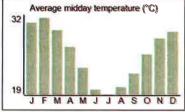
Jan	Feb	Mar	Apr	May	Jun		X	Aug	Sep	Oct	Nov	Dec
31	32	30	27	24	26	1		20	23	26	28	29

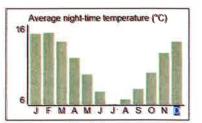
TABLE 6: AVERAGE NIGHT-TIME TERRAPETURES (°C): VREDENDAL AREA

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
15	16	14	12	10	8	6	7	8	10	13	14

Over a period of time the above mentioned data has been recorded at the Vredendal weather station approximately. Takes from the intended construction site. During construction the weather station based at the Vredendal Angort will be used. The code name for the weather station is 68614, GPS coordinates: 31.67°S, 18.50°E.







3. Soil Conditions

3.1. Regional Geology

A Geotechnical "Desk-study" revealed the following high level geological characteristic pertaining to the Juno Main Transmission Substation, Helios Main Transmission Substation, Aries Main Transmission Substation and Garona Main Transmission Substation areas.

3.2. For the purposes of trenching the following information gleaned from high level studies for a construction project at Juno may be used.

In terms of the construction of the mast structures and given the often loose soil consistency of the near surface soils in this area, founding conditions are not considered to be favourable for founding at shallow depth due to the variable consistency and collapse potential of the transported (Aeolian) sands. It was noted in previous investigations in the Lutzville area that a pin hole voided or open texture occurs in this sandy material.

In order to achieve suitable founding conditions, it is anticipated that soil improvement will be required to densify the loose sandy soils and minimise the collapse potential of the subsoils. It is anticipated that where loose sandy soils are encountered, re-engineering of the subsoils by way of heavy compaction or cement stabilisation will be required. These loose sandy soils would classify as a Type 3 or 4 solls in tentos of construction specifications. Where cemented pedogenic or Dorbank material is encountered at shallow cepth, conventional founding will be possible and the typical bearing capacities could vary between 2 to 400 kPa (depending on thickness and the degree of cementation). Where bedrock is encountered, bearing capacities in excess of 400 kPa is anticipated depending on the hardness and degree of weathering or the rock. Nesse soils will classify as a Type 1 soil.

Until the final geotechnical investigation and associated aboratory testing and field information has been undertaken it would be premature to decide upon the remarkation system to be used across the site. At this stage it is anticipated that conventional founding solutions either taken well into the sandy transported soils or seated on re-engineered soils could be implemented at this site.

In terms of the substation founding requirements (as well as earthing requirements), it is anticipated that an engineered fill platform comprising of suitable granular material, which has been carefully selected and well compacted in thin layers would be constructed. The near surface reworked and transported soils would need to be removed or improved in-stu by compaction. Suitable granular material (sourced from transported material) compacted to at least 25% of the Modified AASHTO density would have a bearing capacity in the order of 150kPa.

3.3. For the purposes of trenching the following information gleaned from high level studies for a construction project at Helios may be used.

In terms of the construction of the mast structures founding conditions are considered to be favourable for founding at relatively shallow depth. Footings should be taken through the near surface sandy transported soils and founded within the residual soils and/or onto the shale bedrock. The residual soils and bedrock would classify as Type 1 soils.

In terms of the substation founding requirements (as well as earthing requirements), it is anticipated that an engineered fill platform comprising of suitable granular material, which has been carefully selected and well compacted in thin layers would be constructed. The upper 0.50 metres of the subsoil profile would need to be removed or improved in-situ by compaction. Suitable granular material (sourced from transported and residual material) compacted to at least 95% of the Modified AASHTO density would have a minimum bearing capacity in the order of 150kPa.

3.4. For the purposes of trenching the following information gleaned from high level studies for a construction project at Aries may be used.

In terms of the construction of the mast structures founding conditions are considered to be favourable for founding at relatively shallow depth. Footings should be taken through the near surface sandy transported soils

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and founded within the residual soils and/or onto the tillite bedrock. The residual soils and bedrock would classify as Type 1 soils.

In terms of the substation founding requirements (as well as earthing requirements), it is anticipated that an engineered fill platform comprising of suitable granular material, which has been carefully selected and well compacted in thin layers would be constructed. The upper 0.50 metres of the subsoil profile would need to be removed or improved in-situ by compaction. Suitable granular material (sourced from transported and residual material) compacted to at least 95% of the Modified AASHTO density would have a bearing capacity in the order of 150kPa.

3.5. For the purposes of trenching the following information gleaned from high level studies for a construction project at Garona may be used.

In terms of the construction of the mast structures and given the often loose soil consistency of the near surface soils in this area, founding conditions are not considered to be favourable for founding at shallow depth due to the variable consistency and collapse potential of the transported (aeolian) sand. It is noted that the sands of the Kalahari Group generally has a pinhole voided or open texture, which is a potential indicator that the soil is a problem soil.

In order to achieve suitable founding conditions, it is anticipated that some provement will be required to densify the loose sandy soils and minimise the collapse potential of the subsoils.

It is anticipated that where loose sandy soils are encountered re-engineering of the subsoils by way of heavy compaction or cement stabilisation will be required. These was sandy soils would classify as a Type 3 or 4 soils in terms of construction specifications.

Where cemented pedogenic material is encounted at shallow depth, conventional founding will be possible and the typical bearing capacities of 100kPa are expected (depending on thickness and the degree of cementation). Where bedrock is encountered, bearing capacities in excess of 300 kPa is anticipated depending on the hardness and degree of weathering or the rock. These elemented soils and bedrock will classify as a Type 1 soil.

4. Adjoining Infrastructure and Land use

The land upon which the wasks has to take place is owned by the *Employer*.

Permitting requirements for works within these properties are as described in the Works Information. The *Contractor* is to contractor is to contractor is to contractor is to note that it contains instances the works will be undertaken within close proximity of fully operational railway lines and also include the crossing of the fully operational railway lines with the works.

5. Site Access

Access to the various sections of the Site can be via the *Employer's* service road. The necessary permitting arrangements will be the responsibility of the *Contractor*, and arrangements will be done in accordance with the requirements as refer to in the Works Information.

The road is controlled by Transnet Freight Rail, use of the road will be subject to the terms and conditions as prescribed by Transnet Freight Rail.

Take note that Ferrum traction substation is located on Anglo American mining property and additional SHEQ requirements needs to be met.

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6. Utilities and Services

6.1. CTC building (Salkor) outside Saldanha (SCADA Portion):



FIGURE 1: SITE LOCATION

For this proposed construction site, no accommodation, to electricity, no water nor sanitation systems will be provided. The *Contractor* will thus be required to make his own provision / arrangements for these services.

6.2. Aurora / Salkor / Loop 0 (coppleted by Others):



For this proposed construction site, no accommodation, no electricity, no water nor sanitation systems will be provided. The *Contractor* will thus be required to make his own provision / arrangements for these services.



FIRE OPTION

"bbchlen

FIGURE 3: AURORA FIBRE OPTIC ROUTE

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6.3. Juno / Knersvlak / Loop 4 (Completed by Others):

FIGURE 4: JUNO SITE LOCATION

For this proposed construction site, no accommodation, to lectricity, no water nor sanitation systems will be provided. The *Contractor* will thus be required to make his own provision / arrangements for these services.



FIGURE 5: JUNO 13 RE OPTIC ROUTE

6.4. Helios / Sous / Loop 8:

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FIGURE 6: HELIOS SITE LOCATION

For this proposed construction site, no accommodation, no electricity, no water nor sanitation systems will be provided. The *Contractor* will thus be required to make his own provision / arrangements for these services.



FIGURE 7: HELIOS REPOPTIC ROUTE

6.5. Aries / Kolke / Loop 12 (Completed by Others):

Light Same The Control of Control

FIGURE 8: ARIES SITE LOCATION

For this proposed construction site, no accommodation, in electricity, no water nor sanitation systems will be provided. The *Contractor* will thus be required to make his win provision / arrangements for these services.



FIGURE 9: ARIES FIBRE ROUTE

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6.6. Garona / Rooilyf / Loop 16:

FIGURE 10. GARONA SITE LOCATION

A Last Site Control

A Last Site Contro

FIGURE 10: GARONA SITE LOCATION

For this proposed construction site, no accommodation, in electricity, no water nor sanitation systems will be provided. The *Contractor* will thus be required to make his own provision / arrangements for these services.

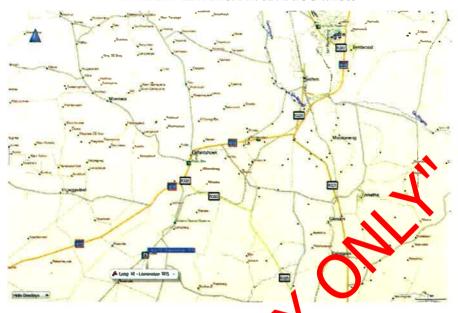


FIGURE 11: CARONA FIBRE OPTIC ROUTE

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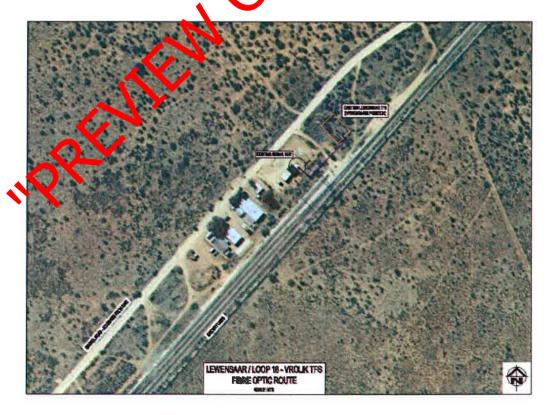
6.7. Lewensaar / Vrolik / Loop 18:

FIGURE 12: LEWENSAAR SITE LOCATION



For this proposed construction site, no accommodation, to ectricity, no water nor sanitation systems will be provided. The *Contractor* will thus be required to make his one provision / arrangements for these services.

FIGURE13: LEWEN SAAR FIBRE OPTIC ROUTE



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6.8. Ferrum / Erts / Loop 20:

FIGURE 14: FERRUM SITE LOCATION

For this proposed construction site, no accommodation, to electricity, no water nor sanitation systems will be provided. The *Contractor* will thus be required to make his own provision / arrangements for these services.

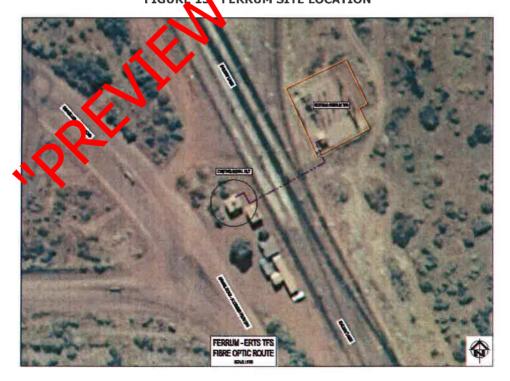


FIGURE 13: FERRUM SITE LOCATION

7. Interface with Other Contractors

Interfacing with Others will be as described within the Part C3: Works Information.

