

TRANSNET



TRANSNET SOC LIMITED
(REGISTRATION NO.1990/000900/30)
TRADING AS
TRANSNET FREIGHT RAIL

NEC3 Engineering & Construction Short Contract
(ECSC)

RFQ No. MMC-ERAC-FDT-014747 CIDB

Supply And Replace Catenary Wire With Tiger Wire, On The
No. 1,2 & 3 Line Between Blackhill- Ogres, Under Control Of
The Depot Engineer, Ermelo

Opens on:	10 September 2014
Closing date:	25 September 2014 (at 10h00)
Validity date:	31 December 2014

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Part T1: Tendering Procedures

"PREVIEW COPY ONLY"

PART T1: TENDERING PROCEDURES

T1.1 TENDER NOTICE AND INVITATION TO TENDER

RFQ No MMC-ERAC-FDT-014747 CIDB

Transnet SOC Limited trading as Transnet Freight Rail invites tenderers for the Supply And Replace Catenary Wire With Tiger Wire, On The No. 1,2 & 3 Line Between Blackhill- Ogres, Under Control Of The Depot Engineer, Ermelo

Tenderers should have a CIDB contractor grading designation of 4 EB or higher.

Queries relating to the administrative issues of these documents may be addressed to:

Ms. Matete Madisha

Tel. No. 013 656 4254

Fax. No. 013 656 4259

E-mail: Matete.Madisha@transnet.net

A compulsory clarification meeting with representatives of the Employer will take place on

Wednesday, 17 September 2014, at 10H00 at Transnet - Main Gate, Main Road at Ogies Depot, and thereafter proceed to substation for physical viewing.

(For direction please contact: **Zanele Shweni** on Tel. 017 801 2148 or cell 071 899 2769).

Tenderers without a valid tender document in their possession will not be allowed to attend this compulsory clarification meeting/site inspections. Tenderers shall be responsible for their own travel arrangements and cost regarding the site meeting and site inspections.

[Respondent to provide own PPE, transportation and accommodation].

Transnet reserves the right to accept the whole or any part of a tender. Transnet also reserves the right to negotiate terms and conditions with all, or a short-listed group of contenders, or the preferred tenderer, should it be deemed necessary.

This tender closes punctually at 10h00 on Thursday, 25 September 2014.

Tenders may only be submitted on the tender documentation that is issued. Telegraphic, telephonic, facsimile and late tenders will not be accepted. Tenderers are warned that a tender will be liable to disqualification should any attempt be made by a Tenderer either directly or indirectly to canvass any officer(s) or employees of Transnet Limited in respect of a tender between the date the tender is submitted and the date of the award. A Tenderer may, however, at any time communicate with the Chairperson of the Transnet Freight Rail Acquisition Council, at telephone no. 011 5449486 on any matter relating to his tender.

Envelopes must not contain documents relating to any tender other than that shown on the envelope. *No slips are to be attached to the tender documents. Any additional conditions must be embodied in an accompanying letter. Alterations, additions or deletions must not be made by the Tenderer to the actual tender documents.* Tenders submitted by Tenderers must be neatly bound and the inclusion of loose documents must be avoided.

Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data.

Compliance of tender(s) with Transnet's requirements is the sole responsibility of the Tenderer and any costs incurred in subsequent modifications to or replacement of equipment accepted by Transnet Limited in good faith on the grounds of certified compliance with specified standards by the contractor and in fact found to be inadequate in such respects, will be to the relevant Tenderer's account.

BROAD-BASED BLACK ECONOMIC EMPOWERMENT (BBBEE)

TRANSNET fully endorses and supports the South African Government's Broad-Based Black Economic Empowerment Programme and it is strongly of the opinion that all business enterprises have an equal obligation to redress the imbalances of the past.

TRANSNET would therefore prefer to do business with business enterprises who share these same values and who are prepared to contribute to meaningful BBBEE initiatives (including and not limited to enterprise development, subcontracting and Joint Ventures) as part of their tender response.

Transnet would accordingly allow a "preference" in accordance with the 10% preference system, as per the Preferential Procurement Policy Framework Act 5 of 2000 (as amended) to companies who provide a BBBEE accreditation Certificate. All procurement and disposal transactions in excess of R30000 (thirty thousand ZAR) will be evaluated accordingly. All transactions below R30000 will, as far as possible, be earmarked for Exempted Micro Enterprises (EME's).

TRANSNET consequently urges Respondents (Large enterprises and QSE's – see below) to have themselves duly accredited by any one of the Accreditation Agencies approved by SANAS (South African National Accreditation System, under the auspices of the DTI).

In terms of Government Gazette No. 32467, Notice No. 810 dated 31 July 2009, as from 1 February 2010 only BBBEE certificates issued by Accredited Verification Agencies of Verification Agencies that are in possession of a valid pre-assessment letter from South African National Accreditation System will be valid.

However accreditation certificates issued by non-accredited verification agencies before 01 February 2010 and which are still within their one (1) year validity period will still be acceptable, until their expiry date provided that the accreditation was done in accordance with the latest codes (i.e. those promulgated on 9 February 2007).

BBBEE Accreditation Certificates issued after the published date i.e. 01 February 2010, by a Verification Agency not approved by SANAS, will NOT be acceptable as from 01 February 2010.

Enterprises will be rated by such Accreditation Agencies based on the following:

- (a) **Large Enterprises (i.e. annual turnover >R35 million):**
 - Rating level based on all 7 (seven) elements of the BBBEE scorecard

- Enterprises to provide BBBEE certificate and detailed scorecard (to be renewed annually)
- (b) **Qualifying Small Enterprises – QSE (i.e. annual turnover >R5 million but <R35 million):**
 - Rating based on any 4 (four) of the elements of the BBBEE scorecard
 - Enterprises to provide BBBEE certificate and detailed scorecard (to be renewed annually)
- (c) **Exempted Micro Enterprises – EME (i.e. annual turnover <R5m are exempted from being rated or verified):**
 - Automatic BBBEE Level 4 rating, irrespective of race ownership, i.e. 100% BBBEE recognition
 - Black ownership >50% or Black Women ownership >30% automatically qualify as Level 3 BBBEE rating, i.e. 110% BBBEE recognition
 - EME's should provide documentary proof of annual turnover (i.e. audited financials) plus proof of Black ownership if Black ownership >50% or Black Women ownership >30% (to be renewed annually) from their Auditors / Accounting Officers

In addition to the above, Respondents who wish to enter into a Joint Venture (JV) or subcontract portions of the contract to BBBEE companies must state in their Tenders / Proposals the percentage of the total contract value which would be allocated to such BBBEE companies, should they be successful in being awarded any business. A rating certificate in respect of such BBBEE JV-partners and/or sub-contractors, as well as a breakdown of the distribution of the aforementioned percentage allocation must also be furnished with the tender response to enable Transnet to evaluate / adjudicate on all tenders received on a fair basis.

Each Respondent is required to furnish proof of its BBBEE status (Certificate and Detailed Scorecard) and ensure that the documentation is valid at the date of Tender Submission as stipulated above to TRANSNET.

Failure to submit your BBBEE Certificate and Detailed Scorecard will result in a score of zero being allocated for BBBEE evaluation.

Turnover: Indicate your company's most recent annual turnover:

R.....

- If annual turnover <R5m, please attach auditors / accounting officers letter confirming annual turnover and percentage black ownership as well as Black Women ownership
- If annual turnover >R5m please attach BBBEE certificate and detailed scorecard from an accredited rating agency.

The DTI has created an online B-BBEE Registry (<http://www.dti.gov.za>) in order to provide a central and standardized source of the B-BBEE status of all entities, and to facilitate the flow of this information amongst entities by providing a Unique Profile Number (UPN) per each listing. Existing and prospective suppliers are therefore urged to list their B-BBEE status on the DTI Registry. Hence, entities verified by DTI, will receive the following benefits:

- Their BBBEE status will be verified and confirmed by the DTI, before listing on the Registry
- Listing on the Registry will provide suppliers the option to market themselves on the DTI B-BBEE Opportunities Network. This is a search engine that is designed to help businesses find B-BBEE compliant entities who match specific requirements in terms of the nature of services/goods provided, region, B-BBEE status or other search criteria.

Transnet supports this DTI initiative and will use the DTI Registry to verify prospective and existing suppliers' BBBEE credentials.

Kindly provide Transnet with your DTI B-BBEE UNIQUE PROFILE NUMBER with all tender submissions.

DTI BBBEE UNIQUE PROFILE NUMBER:

Failure to submit your BBBEE information in terms of the above-mentioned clauses will result in a score of zero being allocated for BBBEE evaluation.

Suppliers and Tenderers are requested to duly complete the Supplier Declaration Form (SDF) and provide all the relevant supporting attachments as requested. Failure to provide the following may disqualify your tender submission:-

1. Duly completed SDF
2. BBBEE Certificate and detailed scorecard
3. Current tax clearance certificate

The Supplier and Tenderer shall furnish proof of the above to Transnet.

Transnet at its sole discretion may decide to allow certain price preferences in order to uplift the historically disadvantaged in terms of the PPRFA (Act 5 of 2000).

Transnet insists on honesty and integrity beyond reproach at all times and will not tolerate any form of improper influencing, bribery, corruption, fraud, or any other unethical conduct on the part of bidders/ Transnet employees. If, in the opinion of Transnet's Chief Operating Officer, a tenderer/contractor/ supplier has or has caused to be promised, offered or given to any Transnet employee, any bribe, commission, gift, loan, advantage or other consideration, Transnet shall be entitled to revoke the tender / contract by following its internal policies that govern the Exclusion process. In such an event Transnet will be entitled to place any Tenderer/Contractor/Supplier who has contravened the provisions of Transnet's business ethics on its List of Excluded Tenderers. This List will also be distributed to all other State Owned Enterprises and Government Departments.

Transnet invites its valued suppliers to report any allegations of fraud, corruption or other unethical activities to Transnet Tip-offs Anonymous, at any of the following addresses/contract numbers :-

- Toll free anonymous hotline – 0800 003 056
- Email – Transnet@tip-offs.com
- Fax number – 0800 007 788
- Freepost DN 298, Umhlanga Rocks, 4320

CONFIDENTIALITY IS GUARANTEED.

Part T1.2: Tender Data

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T1.2 TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in Annexure F of the CIDB Standard for Uniformity in Construction Procurement. (See www.cidb.org.za) The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the standard conditions of tender. Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.

F.1.1 The employer is **Transnet Limited trading as Transnet Freight Rail**.

F.1.2 The tender documents issued by the employer comprise:

Part T1: Tendering procedure

T1.1 Tender notice and invitation to tender

- Suppliers Code of Conduct

T1.2 Tender data

Part T2: Returnable documents

T2.1 List of returnable documents

T2.2 Returnable Schedules

Part C1: Agreements and contract data

C1.1 Contract Data: General

C1.2 Contract data: The contractor's Offer and Acceptance

C1.3 Contract Data: Works Information

Part C2: Pricing data

C2.1 Pricing instructions

C2.2 Price list

Part C3: Scope of work

C3.1 Works Information

C3.2 Secondary specifications

C3.3 General specifications

Part C4: Site information

C4 Site information

- Principal Controlled insurance

F.1.4 The employer's agent is:

Name: Zanele Shweni

Engineering Technician (Electrical)

Tel: 017 801 2148

Cell no: 071 899 2769

E-mail: Zanele.Shweni@transnet.net

F.2.11 The following Tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a **4 EP** class of construction work, are eligible to submit tenders.

- a) contractors who have a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a **4 EP** class of construction work; and

F.2.11(b) The arrangements for a compulsory clarification meeting are as stated in the Tender Notice and Invitation to Tender. Tenderers must 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.2.12 If a Tenderer wishes to submit an alternative tender offer, the only criteria permitted for such alternative tender offer is that it demonstrably satisfies the Employer's standards and requirements, the details of which may be obtained from the Employer's Agent.

Calculations, drawings and all other pertinent technical information and characteristics as well as modified or proposed Pricing Data must be submitted with the alternative tender offer to enable the Employer to evaluate the efficacy of the alternative and its principal elements, to take a view on the degree to which the alternative complies with the Employer's standards and requirements and to evaluate the acceptability of the pricing proposals. Calculations must be set out in a clear and logical sequence and must clearly reflect all design assumptions. Pricing Data must reflect all assumptions in the development of the pricing proposal.

Acceptance of an alternative tender offer will mean acceptance in principle of the offer. It will be an obligation of the contract for the Tenderer, in the event that the alternative is accepted, to accept full responsibility and liability that the alternative offer complies in all respects with the Employer's standards and requirements.

The Modified Pricing Data must include an amount equal to 5% of the amount tendered for the alternative offer to cover the Employer's costs of confirming the acceptability of the detailed design before it is constructed. No alternative tender offers will be considered.

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 in black ink.

F.2.13.3 Parts of the tender offer communicated on paper shall be submitted as an original, plus one copy.

F.2.13.5 The employer's address for delivery of tender offers and identification details to be shown on each tender offer package are:

If posted, the envelope must be addressed to:
The Chairperson

Transnet Freight Rail Acquisition Council
P.O. Box 4244
JOHANNESBURG
2000

and must be dispatched in time for sorting by the Post Office to reach the Post Office Box indicated above, before the closing time of the tender.

If delivered by hand, to be deposited to the Transnet Freight Rail Acquisition Council tender box which is located in the foyer, and to be addressed as follows:

The Chairperson
Transnet Freight Rail Acquisition Council
Ground Floor, Inyanda House
21 Wellington Road
ParkTown
JOHANNESBURG
2001

It should also be noted that the above tender box is accessible to the public 24 hours per day, 7 days a week.

The measurements of the "tender slot" are 500mm wide x 100mm high, and Tenderers must please ensure that tender documents/files are not 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.

Identification details

Tenders must be submitted before the closing hour on the date as shown in F.2.15 below, and must be enclosed in a sealed envelope which must have inscribed on the outside:

- (a) **Tender No**
- (b) **Description of work**
- (c) **Closing date of tender**

F.2.13.6 A two-envelope procedure will not be followed.

F.2.15 The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender.

F.2.15 Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.

F.2.16 The tender offer validity period is **(31 December 2014)**

F.2.19 Access shall be provided for the following inspections, tests and analysis:
Inspection of current arrangement foundation and steelwork condition and measurements in substation yards during the tender period after the site meeting and prior to the closing date of tender.

F.2.23 The Tenderer is required to submit with his tender:

Either a Certificate of Registration issued by the Construction Industry Development Board or a copy of the application Form for registration in terms of the construction Industry Development Board Act (Form F006) and an original valid Tax Clearance Certificate issued by the South African Revenue Services.

F.3.4 The time and location for opening of the tender offers are:

Time: **10:00** on the closing date of tender.

Location: **Transnet Freight Rail Acquisition Council,
Ground Floor,
Inyanda House,
21 Wellington Road,
Park Town,
JOHANNESBURG**

F.3.11.1 The procedure for the evaluation of responsive tenders is

The score for quality is to be calculated using the following formula:

$$W_Q = W_2 \times S_O / M_S$$

Where: W_2 is the percentage score given to quality and equals **60**

S_O is the score for quality allocated to the submission under consideration

M_S is the maximum possible score for quality in respect of a submission

The score for financial offer is calculated using Formula 2 (option 1) of SANS294

Formula	Comparison aimed at achieving	Option 1	Option 2
1	Highest price or discount	$A = (1 + \frac{P - P_m}{P_m})$	$A = P / P_m$
2	Lowest price or percentage commission / fee	$A = (1 - \frac{P - P_m}{P_m})$	$A = P_m / P$

Where:

P_m = the comparative offer of the most favourable tender offer.

P = the comparative offer of tender offer under consideration

Where: W_1 is the percentage score given to financial offer and equals 100 minus W_2 .

The score for quality and financial offer is to be combined, before the addition of the score for preference, as follows:

$$W_C = W_3 \times (1 + \frac{S - S_m}{S_m})$$

S_m

Where W_3 is the number of tender evaluation points for quality and financial offer and equals:

- 1) 90 where the financial value, VAT inclusive, of all responsive tenders received have a value in excess of R1,000,000; or
- 2) 80 where the financial value, VAT inclusive, of one or more responsive tender offers equals or is less than R1,000,000.

S is the sum of score for quality and financial offer of the submission under consideration.

S_m is sum of the score for quality and financial offer of the submission scoring the highest number of points

Up to 100 minus W_3 tender evaluation points will be awarded to Tenderers who complete the preference schedule and who are found to be eligible for the preference claimed. Tenderers shall submit BBEE rating certificates with detailed scorecards that will be issued by the verification agencies that do their BBEE ratings in accordance with the latest Department of Trade and Industry codes of Good Practice.

F.3.11.3 Only those Tenderers who score a minimum score of **60** points in respect of the following quality criteria are eligible to submit tenders.

As prescribed in terms of the Preferential Procurement Policy Framework Act (PPPFA), Act 5 of 2000 and its Regulations, Respondents are to note the following:

- Functionality is included at a pre-qualification stage with a prescribed percentage threshold of **60**
- Proposals will be evaluated on price which will be allocated **80 or 90 points** and preference which will be allocated **20 or 10 points**, dependent on the value of the Services.
- The 80/20 preference point system applies where the acquisition of the Goods or Services will be less than R1 000 000.00.
- If the 80/20 preference point system is stipulated and all Bids received exceed R1 000 000.00, the RFQ will be cancelled.

The 90/10 preference point system applies where acquisition of the Goods or Services will exceed R1 000 000.00

- If the 90/10 preference point system is stipulated and all Bids received are equal to or below R1 000 000.00, the RFQ will be cancelled.
- In this RFQ, Transnet will apply **90/10** preference point system prescribed in the PPPFA.

In compliance with the Government Gazette No 34612, Notice No. 754 dated 23 September 2011, as from 1 October 2011 valid B-BBEE Verification Certificates must be issued by:

- Verification Agencies accredited by the South African National Accreditation System [SANAS]; or
- Registered Auditors approved by the Independent Regulatory Board of Auditors [IRBA], in accordance with the approval granted by the Department of Trade and Industry.

Enterprises will be rated by such agencies based on the following:

a) Large Enterprises [i.e. annual turnover greater than R35 million]:

Rating level based on all seven elements of the B-BBEE scorecard

b) Qualifying Small Enterprises – QSE [i.e. annual turnover between R5 million and R35 million]:

Rating based on any four of the elements of the B-BBEE scorecard

c) Exempted Micro Enterprises – EME [i.e. annual turnover less than R5 million]:

In accordance with B-BBEE Codes of Good Practice [Statement 000, Section 4], any enterprise with an annual total revenue of R 5 million or less qualifies as an EME.

- Automatic rating of B-BBEE Level 4 irrespective of race or ownership
- Black ownership greater than 50% or Black Women ownership greater than 50% automatically qualify as B-BBEE Level 3

Sufficient evidence to qualify as an EME would be a certificate (which may be in the form of a letter) from an auditor or accounting officer or a certificate from a Verification Agency accredited by SANAS. The certificate must confirm the company's turnover, black ownership / black female ownership, B-BBEE status level and validity date.

Respondents are required to furnish proof of the above to Transnet. [i.e. a valid detailed scorecard as stipulated above in respect of Large Enterprises and QSEs, or a valid certificate in respect of EMEs].

Transnet will accordingly allocate a maximum of **20 [twenty] points** in accordance with the **80/20** preference point system prescribed in the Preferential Procurement Policy Framework Act (PPPFA), Act 5 of 2000 and its Regulations to the Respondent's final score based on an entity's B-BBEE scorecard rating. [Refer **Annexure A- B-BBEE Preference Points Claim Form** for further details].

N.B. Failure to submit a B-BBEE certificate, which is valid as at the Closing Date of this RFP, will result in a score of zero being allocated for B-BBEE.

F3.11.4 Transnet will utilise the following criteria in choosing a Supplier/Service Provider, if so required:

Stage One - Administrative responsiveness

- Completeness of response and returnable documents
- Valid returnable documents

Stage Two - Substantive responsiveness (Mandatory requirements)

- All respondents must be graded on a 4 EP CIDB grading.
- Valid Letter of Good Standing from Department of Labour
- All OHTE relevant certificates

The test for Administrative responsiveness and Substantive responsiveness must be passed for a Respondent's Quotations to progress to Stage Three for further evaluation.

Stage Three - A minimum 60% must be obtained in Technical threshold.

FUNCTIONAL EVALUATION	RATING					WEIGHT	TOTAL
	1	2	3	4	5		
Production Plan (Work breakdown)						25	
Submitted Risk/Safety Plan for the project						25	
Technical Capacity/material or equipment for similar project						10	
Relevant experience similar to project						25	
OHTE relevant certificates						15	
	TOTAL					100	

Criteria to be evaluated on the following scales as per CIDB BEST PRACTICE GUIDELINES #A4:

- | | | |
|--------------|---|---------|
| a) Poor | = | 20 = 1 |
| Satisfactory | = | 40 = 2 |
| Good | = | 60 = 3 |
| Very good | = | 80 = 4 |
| Excellent | = | 100 = 5 |

Stage: 4 – PRICING AND BBB-EE scorecard

This is a weighted evaluation system based on **90/10** preference point system.

Pricing and price basis [firm] - whilst not the sole factor for consideration, competitive pricing and overall level of unconditional discounts¹ will be critical

- B-BBEE status of company

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

B-BBEE Status Level of Contributor	Number of points (80/20 system)
1	20
2	18
3	16
4	14
5	12
6	10
7	8
8	6
Non-compliant contributor	0

¹ Only unconditional discounts will be taken into account during evaluation. A discount which has been offered conditionally will, despite not being taken into account for evaluation purposes, be implemented when payment is effected.

Health, Risk & Safety Plan

A detailed plan indicating how risks and safety will be managed in a site must have the following key points depending on project requirements:

- a) Safe working procedures.
 - Construction Work supervisor
 - Subordinate construction work supervisor
 - Construction Safety officer
 - Health and safety representative
- b) SHE Organisation
 - Health and safety committees
 - Composition
 - Frequency of meetings
 - Minutes of meetings
 - Legal compliance audits
 - Audit report
 - Frequency of audits
 - Finding and analysis
 - Corrective action
- c) Risk Assessment/Management
 - Task descriptions
 - Risk identification, analysis, mitigating steps, monitoring steps and review plan.
 - Risk assessment
- d) Education and training
 - Induction training
 - Site specific training
 - Certificate of competence
- e) Emergency planning (Evacuation plan)
 - Client procedure
 - Site procedure
- f) SHE communications
 - Safety/toolbox talks
 - Incident recall
- g) Safe working Procedures and Methods

- Method statements.
- Safe operating procedures
- Task/job observations
- h) Personal Protective Equipment and Clothing
 - PPE required after all controls have been considered
 - PPE proof of issue
- i) Project security
 - Security risks identified
 - Access control
- j) Incident management
- k) Fall protection plan
- l) Substance abuse testing
- m) Logbooks and registers
- n) Health and Safety Costs

Technical Capacity/Resources

The following criteria will be used to evaluate technical capacity and resources:

- Availability of instrumentation/equipment to execute the work.
- Technical personnel with qualifications (certificates) who will perform work execution.
- Capacity of equipment to execute the work.

F.3.13.1 Tender offers will only be accepted if:

- a) The Tenderer has in his or her possession an original valid Tax Clearance Certificate issued by the South African Revenue Services or has made arrangements to meet outstanding tax obligations.
- b) The Tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation;
- c) The Tenderer or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector.
- d) The Tenderer has not:
 - i) abused the Employer's Supply Chain Management System; or
 - ii) failed to perform on any previous contract and has been given a written notice to this effect; and
- e) has 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.

- F.3.18 The number of paper copies of the signed contract to be provided by the employer is two.

The additional conditions of tender are:

1. The Tenderer is deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the *works* and of the prices stated in the priced Activity Schedule in the *works* Information. The rates and prices (except in so far as otherwise provided in the Tender) collectively cover full payment for the discharge of all his obligations under the Contract and all matters and things necessary for the proper completion of the *works*.
2. ***The tenders shall be completed in black ink only.***
3. ***Additional Tender Conditions***
 - 3.1 Contractors shall duly fill in the attached 'Bill of Quantities'. The prices shall be fixed for the duration of the contract and no escalation will be allowed. Items not reflected in the 'Bill of Quantities', but covered in the project specification or agreed at site meetings, shall be added to the 'Bill of Quantities' by the Contractor and quoted for accordingly.
 - 3.2 Tenderers shall submit qualifications of the staff that will be performing the work or project. Only qualified technical personnel shall perform the works on electrical equipment or installation thereof.
 - 3.3 ***Clause by clause statement of compliance to General conditions of contract and technical specifications:***
 - 3.4 *Tenderers shall indicate clause-by-clause compliance to technical specifications. This shall take the form of a separate document listing all the specifications and clause numbers indicating the individual statement of compliance or non-compliance.*
 - 3.5 *Tenderers shall motivate the statement of non-compliance.*
 - 3.6 *Number the specification according to the tender documentations issued by Transnet.*
 - 3.7 *The heading and sub-heading must be listed next to the specification number.*
 - 3.8 *Indicate statement of compliance and motivate (give reasons for non-compliance)*
 - 3.9 *Indicate other statements that do not require compliance.*
 - 3.10 *Where equipment offered does not comply with standards or publications referred to in the specification, Contractors shall state which standards apply and submit a copy in English or certified translation.*
 - 3.11 ***The Tenderer shall provide a provisional Gantt Chart or a similar bar chart showing when the work will be done and energised.***
 - 3.12

- 3.13 Contractors shall submit descriptive literature consisting of detailed technical specifications, general constructional details and principal dimensions, together with clear illustrations of the equipment offered.
- 3.14 During the duration of the contract period, the successful Contractor shall be required to inform the Project Manager / Supervisor of any changes to equipment offered and submits detailed information on replacement equipment for approval prior to it being used on this contract.
- 3.15 Contractors shall submit equipment type test certificates as specified on the contract. These shall be in English or certified translation.

5. DISCLAIMERS

Transnet is not committed to any course of action as a result of its issuance of this RFQ and/or its receipt of a quotation in response to it. Please note that Transnet reserves the right to:

- modify the RFQ's goods / service(s) and request Respondents to re-bid on any changes;
- reject any Quotation which does not conform to instructions and specifications which are detailed herein;
- disqualify Quotations submitted after the stated submission deadline;
- not necessarily accept the lowest priced Quotation;
- reject all Quotations, if it so decides;
- place an order in connection with this Quotation at any time after the RFQ's closing date;
- award only a portion of the proposed goods / service/s which are reflected in the scope of this RFQ;
- split the award of the order/s between more than one Supplier/Service Provider; or
- make no award at all.

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Part T2: Returnable Documents

PART T2: RETURNABLE DOCUMENTS / SCHEDULES

T2.1 LIST OF RETURNABLE DOCUMENTS

The tenderer must complete the following returnable documents:

1.0 Returnable documents required for tender evaluation purposes

No	Returnable Documents
1	Letter of Good Standing with the Compensation Commissioner
2	Safety Plan and Fall Protection Plan in accordance with the Construction Regulations of 2003 and Transnet's E4E
3	Quality Assurance/control Plan
4	Environmental Management Plan
5	Certified copy of CIDB certification
6	Proposed Organization and Staffing
7	Certified Copy of Share Certificates CK1 & CK2
8	Certified Copy of Certificate of Incorporation and CM29 and CM9
9	Certified Copy of Identity Documents of Shareholders / Directors / Members (where applicable)
10	Original or certified cancelled cheque OR original or certified letter from the bank verifying banking details (with bank stamp and signature)
11	Current and original or certified Tax Clearance Certificate
12	Certified VAT registration certificate
13	A signed letter from the Accountant/Auditor confirming most recent annual turnover and percentage black ownership in the company AND/OR certified BBBEE certificate and scorecard from an accredited rating agency
14	Programme and method statement
15	Statement of compliance or non-compliance with all clauses of the Scope of Works and all the technical specifications. The clause-by-clause statement of compliance shall take the form of a separate document listing all the clause numbers of all the above specifications indicating the individual statement of compliance or non-compliance. Tenderers shall motivate a statement of non-compliance.

T2.2 RETURNABLE SCHEDULES

The tenderer must complete the following returnable schedules:

2.0 Returnable Schedules required for tender evaluation purposes

No	Returnable schedules
1	Certificate of Attendance of Information Briefing Session or site inspection
2	Certificate of Authority for Signatory (Resolution by Board)
3	Schedule of Tenderers experience
4	Schedule of Subcontractors (where applicable)
5	Certificate of authority for joint ventures (where applicable)
6	Schedule of Plant and Equipment (Tools and Machinery)
7	Foreign Exchange Rate Information (where applicable)
8	Record of Addenda to Tender Document
9	Supplier declaration form. Duly completed SDF (Supplier declaration form)
10	Compulsory enterprise Questionnaire
11	Approach paper which responds to the proposed scope of works.
12	Experience of Key Staff in the form of Curriculum Vitae
13	Transnet SOC limited contractual safety clauses which will form part of any resulting contract
14	Proposed amendments and qualifications
15	Labour Payment Schedule

3.0 Returnable Schedules that will be incorporated into the contract

- 3.1 Certificate of attendance of information briefing session/site inspection
- 3.2 Certificate of Authority for Signatory (Resolution by Board)
- 3.3 Schedule of Tenderers experience
- 3.4 Schedule of Sub-contractors
- 3.5 Certificate of authority for joint ventures (where applicable)
- 3.6 Schedule of Plant and equipment
- 3.7 Foreign Exchange Rate Information (where applicable)
- 3.8 Record of Addenda to Tender Document
- 3.9 Supplier declaration form duly completed (SDF)
- 3.10 Compulsory Enterprise Questionnaire
- 3.11 Approach paper, which responds to the proposed scope of works.
- 3.12 Experience of key staff in the form of Curriculum vitae
- 3.13 Transnet SOC Limited contractual safety clauses which will form part of any resulting contract
- 3.14 Proposed amendments and qualifications.
- 3.15 Labour Payment Schedule.

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Part T2: Returnable Schedules

CERTIFICATE OF ATTENDANCE AT INFORMATION BRIEFING SESSION/SITE INSPECTION

This is to certify that

_____ (Tenderer)
of __________ (address)

was represented by the person(s) named below at the compulsory site meeting held for all tenderers at _____ (location) on _____ (date), starting at _____. We acknowledge that the purpose of the meeting was to acquaint ourselves with the Site of the Works and/or matters incidental to doing the work specified in the tender documents in order for us to take account of everything necessary when compiling our rates and prices included in the tender.

Particulars of person(s) attending the meeting/site inspections:

Name: _____ Signature _____

Capacity: _____

Name: _____ Signature _____

Capacity: _____

Attendance of the above persons at the meeting is confirmed by the Employer's representative,
namely, _____

Name: _____ Signature _____

Capacity: _____ Date and time _____

RESOLUTION OF BOARD OF DIRECTORS

Name of firm _____

It was resolved at a meeting of the Board of Directors held on _____ that

FULL NAME(S) _____

_____**SIGNATURE** _____

_____in his capacity of _____ is/are hereby authorised to enter into, sign and
execute and complete any documents relating to tenders and/or Contracts for the supply of goods
and services.

Confirm: Date _____

FULL NAME _____**CHAIRMAN****FULL NAME** _____**SECRETARY**

Certified true copy:

SIGNED AT _____ ON THIS _____ DAY OF _____ 20____

SCHEDULE OF THE TENDERER'S EXPERIENCE

The following is a statement of similar work successfully executed by myself/ourselves:

Employer, contact person and telephone number	Description of contract	Value of work inclusive of VAT (Rand)	Date completed
"PREVIEW COPY ONLY"			

Signed _____

Date _____

Name _____

Position _____

Tenderer _____

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.

We confirm that all subcontractors who are contracted to construct a house are registered as home builders with the National Home Builders Registration Council.

	Name and address of proposed Subcontractor	Nature and extent of work	Previous experience with Subcontractor.
1.			
2.			
3.			
4.			
5.			

Signed _____

Date _____

Name _____

Position _____

Tenderer _____

SCHEDULE OF PLANT AND EQUIPMENT

The following are lists of major items of relevant Plant and Equipment that I/we presently own or lease and will have available for this contract or will acquire or hire for this contract if my/our tender is accepted.

(a) Details of major Plant and Equipment that is owned by and immediately available for this contract.

Quantity	Description, size, capacity, etc.

Attach additional pages if more space is required.

(b) Details of major Plant and Equipment that will be hired, or acquired for this contract if my/our tender is acceptable

Quantity	Description, size, capacity, etc.

Attach additional pages if more space is required.

Signed _____

Date _____

Name _____

Position _____

Tenderer _____

FOREIGN EXCHANGE RATE INFORMATION REQUIRED TO BE FURNISHED BY TENDERERS.

1. Particulars of the exchange rate on which prices are based:

_____ (Foreign currency) equals R _____ (South African currency)

Note: Tenderers who offer imported material shall base their tenders on the selling rate of exchange that ruling on the last working day of the month prior to the closing date of tenders.

2. The percentage of the tender prices which is to be remitted by the Tenderers from South Africa to another country is _____% of the f.o.b./c. and f.i.o.r. in bond price (delete those not applicable).

Note: (1) The percentage quoted above will be deemed to apply even though a portion only of the item(s) tendered for is accepted.

(2) Adjustment in respect of variation in exchange rate will be allowed only on the percentage of the tendered price quoted above.

3. The tendered price shall be computed at the rate of exchange stated by the Tenderer in paragraphs 1 and 2 above as applied to the percentage of the tendered price quoted.

4. Transnet Freight Rail will accept for its account, in respect of such percentage of the tendered price as will be affected by the rate of exchange, any variation between the rate mentioned in paragraph 1 above, and the rate ruling at the date when payment for the goods is made by Transnet Freight Rail; provided that if the Contractor is required to remit the whole or portion of the contract price to another country in payment for goods or portion thereof prior to receiving payment from Transnet Freight Rail, the date(s) of such remittance(s) shall be deemed to be the date(s) of payment by Transnet Freight Rail for the purposes of this paragraph.

5. In the absence of a specific indication by the Contractor at the time of tendering that the proviso to paragraph 3 will apply, it will be assumed that the Contractor desires the adjustment to be effected by reference to the date on which actual payment is made by Transnet Freight Rail.

6. (a) The Contractor shall, if so required, furnish documentary proof to establish that the percentage of the contract price specified by him in paragraph 2 has actually been remitted to another country and the rate of exchange at which that was done.

- (b) Whenever the Contractor is required to remit the whole or portion of the contract price, to another country as contemplated in the proviso to paragraph 2 above, he shall notify Transnet Freight Rail forthwith and furnish documentary evidence of such remittance and of the rate of exchange at which that was done.

7. Invoices in respect of goods supplied must reflect the amount remitted or to be remitted to another country and the amount to be retained in South Africa.

8. The Contractor shall take out forward cover for all imported materials and services within 14 days of award of the contract. Proof shall be submitted to the Project Manager of the contract. The cost of forward cover shall be invoiced separate from the contract invoices and shall not be included in the tender price.

SIGNATURE OF TENDERER

DATE: _____

WITNESSES:

1. _____

2. _____

ADDRESS:

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:

	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Attach additional pages if more space is required.

Signed _____

Date _____

Name _____

Position _____

Tenderer _____

TRANSNET SUPPLIER DECLARATION/APPLICATION

The Financial Director or Company Secretary

Transnet Vendor Management has received a request to load your company on to the Transnet vendor database. Please furnish us with the following to enable us to process this request:

2. Complete the "Supplier Declaration Form" (**SDF**) on page 2 of this letter
3. **Original** cancelled cheque **OR** letter from the bank verifying banking details (**with bank stamp**)
4. **Certified** copy of Identity document of Shareholders/Directors/Members (where applicable)
5. **Certified** copy of certificate of incorporation, CM29 / CM9 (name change)
6. **Certified** copy of share Certificates of Shareholders, CM1 / CM2 (if CC)
7. A letter with the company's letterhead confirming physical and postal addresses
8. **Original** or **certified** copy of SARS Tax Clearance certificate and Vat registration certificate
9. A signed letter from the Auditor / Accountant confirming most recent annual turnover and percentage black ownership in the company **AND/OR** BBBEE certificate and detailed scorecard from an accredited rating agency (SANAS member).

NB: ▪ **Failure to submit the above documentation will delay the vendor creation process.**

▪ **Where applicable, the respective Transnet business unit processing your application may request further information from you. E.g. proof of an existence of a Service/Business contract between your business and the respective Transnet business unit etc.**

IMPORTANT NOTES:

- a) **If your annual turnover is less than R5 million**, then in terms of the DTI codes, you are classified as an Exempted Micro Enterprise (EME). If your company is classified as an EME, please include in your submission, a signed letter from your Auditor / Accountant confirming your company's most recent annual turnover is less than R5 million and percentage of black ownership and black female ownership in the company **AND/OR** BBBEE certificate and detailed scorecard from an accredited rating agency (e.g. permanent SANAS Member), should you feel you will be able to attain a better BBBEE score.
- b) **If your annual turnover is between R5 million and R35million**, then in terms of the DTI codes, you are classified as a Qualifying Small Enterprise (QSE) and you claim a specific BBBEE level based on any 4 of the 7 elements of the BBBEE score-card, please include your BEE certificate in your submission as confirmation of your status.
NB: BBBEE certificate and detailed scorecard should be obtained from an accredited rating agency e.g. permanent SANASMember).
- c) **If your annual turnover is in excess of R35million**, then in terms of the DTI codes, you are classified as a Large Enterprise and you claim a specific BEE level based on all seven elements of the BBBEE generic score-card. Please include your BEE certificate in your submission as confirmation of your status.
NB: BBBEE certificate and detailed scorecard should be obtained from an accredited rating agency (permanent SANASMember).

- d) **To avoid PAYE tax being automatically deducted from any invoices received from you,** you must also contact the Transnet person who lodged this request on your behalf, so as to be correctly classified in terms of Tax legislation.
- e) Unfortunately, **No payments can be made to a vendor** until the vendor has been registered, and no vendor can be registered until the vendor application form, together with its supporting documentation, has been received and processed.
- f) **Please return the completed Supplier Declaration Form (SLF) together with the required supporting documents mentioned above to the Transnet Official who is intending to procure your company's services/products in order that he/she should complete and Internal Transnet Departmental Questionnaire before referring the matter to the appropriate Transnet Vendor Master Office.**

Regards,

Transnet Vendor/Supplier Management *[please substitute this with your relevant Transnet department before sending this document out]*

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Company Trading Name							
Company Registered Name							
Company Registration Number Or ID Number If A Sole Proprietor							
Form of entity	CC	Trust	Pty Ltd	Limited	Partnership	Sole Proprietor	
VAT number (if registered)							
Company Telephone Number							
Company Fax Number							
Company E-Mail Address							
Company Website Address							
Bank Name				Bank Account Number			
Postal Address						Code	
Physical Address						Code	
Contact Person							
Designation							
Telephone							
Email							
Annual Turnover Range (Financial Year)		Last	< R5 Million		R5-35 million		> R35 million
Does Your Company Provide			Products		Services		Both
Area Of Delivery			National		Provincial		Local
Is Your Company A Public Or Private Entity					Public		Private
Does Your Company Have A Tax Directive Or IRP30 Certificate					Yes		No
Main Product Or Service Supplied (E.G.: Stationery/Consulting)							
BEE Ownership Details							
% Black Ownership		% Black women ownership		% Disabled person/s ownership			
Does your company have a BEE certificate			Yes	No			
What is your broad based BEE status (Level 1 to 9 / Unknown)							
How many personnel does the firm employ			Permanent		Part time		
Transnet Contact Person							
Contact number							
Transnet operating division							
Duly Authorised To Sign For And On Behalf Of Firm / Organisation							
Name				Designation			
Signature				Date			

Stamp And Signature Of Commissioner Of Oath

Name		Date	
Signature		Telephone No.	

NB: Please return the completed Supplier Declaration Form (SDF) together with the required supporting documents mentioned above to the Transnet Official who is intending to procure your company's services/products.

2. VENDOR TYPE OF BUSINESS

(Please tick as applicable) (* - Minimum requirements)

2.1	Indicate the business sector in which your company is involved/operating:									
Agriculture				Mining and Quarrying						
Manufacturing				Construction						
Electricity, Gas and Water				Finance and Business Services						
Retail, Motor Trade and Repair Services				Wholesale Trade, Commercial Agents and Allied Services						
Catering, accommodation and Other Trade				Transport, Storage and Communications						
Community, Social and Personal Services				Other (Specify)						
Principal Business Activity *										
Types of Services Provided										
Since when has the firm been in business?										
2.2	What is your company's annual turnover (excluding VAT)? *									
	<R20k	>R20k <R0.3m	>R0.3m <R1m	>R1m <R5m	>R5m <R10m	>R10m <R15m	>R15m <R25m	>R25m <R30m	>R30m <R34m	>R34m <R35m
2.3	Where are your operating/distribution centres situated *									

3. VENDOR OWNERSHIP DETAIL

(Please tick as applicable)

(* - Minimum requirements)

3.1	Did the firm previously operate under another name? *
------------	--------------------------------------------------------------

YES		NO	
3.2	If Yes state its previous name:*		
Registered Name			
Trading Name			
3.3	Who were its previous owners / partners / directors?*		
SURNAME & INITIALS		ID NUMBERS	

3.4	List Details of current partners, proprietors and shareholders by name, identity number, citizenship, status and ownership as relevant: *							
SURNAME & INITIALS	IDENTITY NUMBER	CITIZENSHIP	HDI	DISABLED	GENDER	DATE OF OWNERSHIP	% OWNED	% VOTING

3.5	List details of current directors, officers, chairman, secretary etc. of the firm:					
SURNAME & INITIALS	IDENTITY NUMBER	TITLE	DISABLED	GENDER	% OF TIME DEVOTED TO THE FIRM	CONTACT NUMBER

3.6	List details of firms personnel who have an ownership interest in another firm: *				
SURNAME & INITIALS	IDENTITY NUMBER	NAME & ADDRESS OF OTHER FIRM	TITLE IN OTHER FIRM	% OWNED	TYPE OF BUSINESS OF OTHER FIRM

4. VENDOR DETAIL

(Please tick as applicable)

(* - Minimum requirements)

4.1	How many personnel does the firm employ? *
------------	---------------------------------------------------

	BLACK	WHITE	COLOURED	INDIAN	OTHER	TOTAL
Permanent						
Part Time						

4.1.1 In terms of above kindly provide numbers on women and disabled personnel? *

	BLACK	WHITE	COLOURED	INDIAN	OTHER	TOTAL
Women						
Disabled						

4.2 Provide Details of Contact Person/s Responsible for Broad Based Black Economic Empowerment (BBBEE) in the Company *

SURNAME	INITIALS	DESIGNATION	TELEPHONE NO.

4.2.1 Is your company a value adding supplier (i.e. registered as a vendor under the VAT Act of 1991, where NPAT - total labour cost > 25% of total revenue)?

YES		NO	
-----	--	----	--

4.2.2 Is your company a recipient of Enterprise Development Contributions?*

YES		NO	
-----	--	----	--

4.2.3 May the above mentioned information be shared and included in Transnet Supplier Database for future reference? *

YES		NO	
-----	--	----	--

4.2.4 If you are successful in the tender/contract (where applicable) and this is awarded to your company / organisation, will this have a positive impact on your employment plans? *

YES		NO	
-----	--	----	--

4.2.5 If yes (above) kindly provide the following information:

	BLACK	WHITE	COLOURED	INDIAN	OTHER	TOTAL
Permanent						
Part Time						

4.2.6 In terms of above kindly provide numbers on woman and disabled personnel:

	BLACK	WHITE	COLOURED	INDIAN	OTHER	TOTAL
Women						
Disabled						

4.2.7 Are any of your members/shareholders/directors ex employees of Transnet?

YES		NO	
-----	--	----	--

4.2.8 Are any of your family members employees of Transnet?

YES		NO	
-----	--	----	--

4.2.9 If Yes to points 4.2.7 & 4.2.8, list details of employees/ex-employees

SURNAME & INITIALS	IDENTITY NUMBER	NAME & ADDRESS OF OTHER FIRM	TITLE IN OTHER FIRM	% OWNED	TYPE OF BUSINESS OF OTHER

					FIRM

Internal Transnet Departmental Questionnaire (for office use only)

Section 1: To be completed by the Transnet Requesting / Sourcing Department

TFR		TRE		TPT		TPL		TNPA		TRN	
Creat		Amen		Block		Unbloc		Once-Off /	Emergency		
Exten		Delete		Undel							

Supplier's trading name						
Supplier's registered name						
Please indicate if the Supplier has a contract with sourcing Transnet OD					Yes	No
If yes please submit a copy of the letter of award						

a) What is being procured from the supplier?			
i. Products only	Yes	No	
ii. Services only	Yes	No	
iii. Labour only	Yes	No	
iv. Mix of services and products	Yes	No	
v. Mix of services and labour	Yes	No	

- b) If your answer is **YES** to questions II, III, IV or V in paragraph a) above, please indicate whether the relevant **TAXE questionnaires** have been forwarded to the appropriate **Transnet Operational Divisions'** decision making bodies/ **Strategic Supply Management** team for a directive / decision on tax withholding from payments to this supplier.

Yes	No
-----	----

- c) If your reply to (b) is "NO", please furnish

d) Certification and Approval of proposed Vendor Creation/Unblocking/Other Changes by Transnet Official with Appropriate Delegated Authority :

I HEREBY CERTIFY THAT THE TRANSNET DETAILED PROCUREMENT PROCESS (DPP) / PROCUREMENT MECHANISM HAS IN ALL RESPECTS BEEN ADHERED TO AND I THEREFORE APPROVE THE PROPOSED VENDOR CREATION/APPROVAL/OTHER CHANGES TO BE EFFECTED ON THE VENDOR MASTER

	Grade	Date								Signature
		Y	Y	Y	Y	M	M	D	D	
Tel No:		Fax								

Section 2: To be completed by the BEE Department (this section is for

NARROW BASED (NB)				BROADBASED (BBBEE)										
BEE O	BWBE	DPBE	MR	CONTR. LEVEL	EME: <R5m	QSE: >R5m <R35m	LARGE: >R35m	VALIDITY DATE						
				Grade		Date						Signature		
						Y	Y	Y	Y	M	M	D	D	
						Y	Y	Y	Y	M	M	D	D	

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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 and 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 income 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 corporations

Company registration number:

Close corporation number:

Tax reference number:

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:

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

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

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

*insert separate page if necessary

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

☐ a member of any provincial legislature

☐ a member of the National Assembly or the National Council of Provinces

☐ a member of the board of directors of any municipal entity

☐ an official of any municipality or municipal entity

☐ an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999)

☐ a member of an accounting authority of any national or provincial public entity

☐ an employee of Parliament or a provincial legislature

Name of spouse, child or parent	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		Current	Within last 12 months

*insert separate page if necessary

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

- authorizes the Employer to obtain a tax clearance certificate from the South African Revenue Services that my / our tax matters are in order;
- 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;
- confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;
- confirms that I / we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest; and
- confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

Signed _____ Date _____

Name _____ Position _____

Enterprise name _____

EVALUATION SCHEDULE: APPROACH PAPER

The approach paper must respond to the scope of work and outline the proposed approach / methodology including that relating to health and safety. The approach paper should articulate what value add the tenderer will provide in achieving the stated objectives for the project.

The tenderer must as such explain his / her understanding of the objectives of the assignment and the Employer's stated and implied requirements, highlight the issues of importance, and explain the technical approach they would adopt to address them. The approach paper should explain the methodologies which are to be adopted, demonstrate the compatibility of those methodologies with the proposed approach. The approach should also include a quality plan which outlines processes, procedures and associated resources, applied by whom and when, to meet the requirements and indicate how risks will be managed and what contribution can be made regarding value management.

The tenderer must attach his / her approach paper to this page. The approach paper should not be longer than 8 pages.

The scoring of the approach paper will be as follows:

	Technical approach and methodology
Poor (score 40)	The technical approach and / or methodology is poor / is unlikely to satisfy project objectives or requirements. The tenderer has misunderstood certain aspects of the scope of work and does not deal with the critical aspects of the project.
Satisfactory (score 70)	The approach is generic and not tailored to address the specific project objectives and methodology. The approach does not adequately deal with the critical characteristics of the project. The quality plan, manner in which risk is to be managed etc is too generic.
Good (score 90)	The approach is specifically tailored to address the specific project objectives and methodology and is sufficiently flexible to accommodate changes that may occur during execution. The quality plan and approach to managing risk etc is specifically tailored to the critical characteristics of the project.
Very good (score 100)	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. The approach paper details ways to improve the project outcomes and the quality of the outputs

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

CURRICULUM VITAE OF KEY PERSONNEL

Name:	Date of birth:
Profession:	Nationality:
Qualifications:	
Professional registration number:	
Name of employer (firm):	
Current Position:	Years with the firm:
Employment record: (list in chronological order starting with earliest work experience)	
Experience record pertinent to required service	
Certification: I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience.	
<i>[Signature of person named in schedule]</i>	Date

TRANSNET SOC LIMITED / CONTRACTORS / SUB-CONTRACTORS**CONTRACTUAL SAFETY CLAUSES WHICH WILL FORM PART OF ANY RESULTING CONTRACT**

The parties agree on the following arrangements according to section 37 (2) of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) to ensure compliance by the mandatory with provisions of the Act.

- 1) That the Contractor is an "employer" in his own right as defined in section 1 of Act 85 of 1993 and that he must fulfil all his obligations as an employer in terms of the Act.
- 2) The Contractor shall comply with the requirements of Act 85 of 1993 in its entirety.
- 3) Where special permits are required, such as electrical switching, hot work permits, etc. the Contractor shall obtain them from a person designated by Transnet SOC Limited for this purpose, and all requirements of the Contractor must rigidly comply with the permit.
- 4) The Contractor shall conduct a risk assessment of the work to be performed by a competent person prior to the commencement of work, to identify risks and hazards that persons may be exposed to, analyse and evaluate identified hazards.
- 5) The Contractor shall have a documented Health and Safety Plan based on the risks and hazards identified before commencement of work.
- 6) The Health and Safety Plan shall include the following:
 - 6.1 The safety management structure to be instituted with all appointments in terms of the Act and Regulations
 - 6.2 The safe working methods and procedures to be implemented to ensure work are performed in compliance to the Act.
 - 6.3 The safety equipment, devices and clothing to be made available by the Contractor to his employees.
 - 6.4 The site access control measures pertaining to health and safety to be implemented.
 - 6.5 Control measures for ensuring that the Health and Safety Plan is maintained and monitored for the duration of the contract.
- 7) The Contractor shall ensure that all work is performed under the close supervision of a person trained to understand the hazards associated with the work performed and who has authority to ensure that the necessary precautionary measures are implemented.
- 8) The Contractor must appoint a Health and Safety Co-ordinator to liaise with Transnet SOC Limited on matters pertaining to occupational health and safety.
- 9) The appointed Safety Co-ordinator must liaise at least once a week with the* Health and Safety Section / Risk Manager /Occupational Risk Manager of Transnet SOC Limited.
- 10) The Contractor shall furnish the* Health and Safety Section/ Risk Manager/ Occupational Risk Manager of Transnet SOC Limited immediately with full particulars of any sub-Contractor which he may involve in the contract in order that the sub-Contractor himself can be made aware of all the clauses in this contract pertaining to health and safety.

- 11) The Contractor shall stop any sub-contractor from executing work which is not in accordance with the Health and Safety Plan or which poses a threat to health and safety of persons.
- 12) The Contractor shall ensure that all his employees and visitors undergoes health and safety induction pertaining to the hazards prevalent, proof of such training must be kept on file.
- 13) In the event where the risk assessment reveals the risk relating to working from an elevated position the Contractor shall cause the designation of a competent person, responsible for the preparation of a Fall Protection Plan.
- 14) The Fall Protection Plan shall include:
 - 14.1 A risk assessment of all work carried out from an elevated position
 - 14.2 Procedures and methods to address all the identified risks per location
 - 14.3 Evaluation of employee's physical and psychological fitness necessary to work at elevated position.
 - 14.4 The training of employees working from an elevated position.
 - 14.5 Procedure addressing the inspection, testing and maintenance of all fall protection equipment.
- 15) The Contractor shall advise the * Health and Safety Section / Risk Manager/ Occupational Risk Manager of Transnet SOC Limited of any hazardous situations which may arise from work being performed either by the Contractor or his sub-Contractor.
- 16) Copies of all appointments required by the act must be given to * Health and Safety Section / Risk Manager / Occupational Risk Manager of Transnet SOC Limited.
- 17) The Contractor shall ensure that a Health and Safety File is available which shall include all documentation as required by the Act, copy of his and his Sub-Contractors Risk Assessment and Health and Safety Plan.
- 18) All incidents referred to in Section 24 of the Act involving the Contractor and his Sub-Contractor on Transnet Ltd premises, shall be reported as prescribed. Transnet Ltd hereby obtains an interest in the issue of any investigation, formal inquiry conducted in terms of Section 31 and 32 of the Act into any incident involving the Contractor, his Sub-Contractor, any person or machinery under his control on Transnet Ltd premises.
- 19) No alcohol or any other intoxicating substance shall be allowed on Transnet Ltd premises. The Contractor shall not allow anyone under or suspected to be under the influence of alcohol or any other intoxicating substance on Transnet Ltd premises.
- 20) Contractor to ensure its employees undergo medical surveillance as required by legislation
- 21) Contractor will be required to provide monthly safety performance reports and statistics
- 22) A letter of good standing in terms of Section 80 (Employer to register with the Compensation Commissioner) of the Compensation for Occupational Injuries and Disease Act 1993 (Act 130 of 1993) must also be furnished.
- 23) All clauses in the contract pertaining health and safety form an integral part of the contract and if not complied with may be construed as breach of contract.

*As applicable

Tenderer OH & S Management System Questionnaire

This questionnaire forms part of TFR tender evaluation process and is to be completed by all Tenderer's and submitted with their tender offer. The objective of the questionnaire is to provide an overview of the status of the Tenderer's OH&S management system. Tenderers will be required to verify their responses noted in their questionnaire by providing evidence of their ability and capacity in relevant matters. **TFR will verify accuracy of this information during the physical visit as part of the tender evaluation.**

The information provided in this questionnaire is an accurate summary of the company's occupational health and safety management system.		
Company Name:		
Signed:	Name:	
Position:	Date:	
Tender Description:		
Tender Number:		
Tenderer OH&S Management System Questionnaire	Yes	No
1. OH&S Policy and Management		
- Is there a written company health and safety policy? - If yes provide a copy of the policy		
- Does the company have an OH&S Management system e.g NOSA, OHSAS, IRCA System etc - If yes provide details		
- Is there a company OH&S Management System, procedures manual or plan? - If yes provide a copy of the content page(s)		
- Are health and safety responsibilities clearly identified for all levels of Management and employees? - If yes provide details		
2. Safe Work Practices and Procedures		
- Are safe operating procedures or specific safety instructions relevant to its operations available? - If yes provide a summary listing of procedures or instructions		
- Is there a register of injury document? If yes provide a copy		
- Are Risk Assessments conducted and appropriate techniques used? - If yes provide details		

3. OH&S Training		
Describe briefly how health and safety training is conducted in your company:		
<ul style="list-style-type: none"> - Is a record maintained of all training and induction programs undertaken for employees in your company? - If yes provide examples of safety training records 		
4. Health and Safety Workplace Inspection		
<ul style="list-style-type: none"> - Are regular health and safety inspections at worksites undertaken? - If yes provide details 		
<ul style="list-style-type: none"> - Is there a procedure by which employees can report hazards at workplaces? - If yes provide details 		
5. Health and Safety Consultation		
<ul style="list-style-type: none"> - Is there a workplace health and safety committee? 		
<ul style="list-style-type: none"> - Are employees involved in decision making over OH&S matters? - If yes provide details 		
<ul style="list-style-type: none"> - Are there employee elected health and safety representatives? - Comments 		
6. OH&S Performance Monitoring		
<ul style="list-style-type: none"> - Is there a system for recording and analysing health and safety performance statistics including injuries and incidents? - If yes provide details 		
<ul style="list-style-type: none"> - Are employees regularly provided with information on company health and safety performance? - If yes provide details 		
<ul style="list-style-type: none"> - Is company registered with workmen's compensation and up to date? - If yes provide proof of letter of good standing 		
<ul style="list-style-type: none"> - Has the company ever been convicted of an occupational health and safety offence? - If yes provide details 		

Safety Performance Report**Monthly DIFR for previous months**

Previous Year	No of Disabling Injuries	Total Number of employees	DIFR per month
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

DIFR = Number of Disabling injuries x 200000 divided by number of man hours worked for the period

Signed _____
(Tenderer)

PROPOSED AMENDMENTS AND QUALIFICATIONS

The Tenderer should record any deviations or qualifications he may wish to make to the tender documents in this Returnable Schedule. Alternatively, a tenderer may state such deviations and qualifications in a covering letter to his tender and reference such letter in this schedule.

The Tenderer's attention is drawn to clause F.3.8 of the Standard Conditions of Tender referenced in the Tender Data regarding the employer's handling of material deviations and qualifications.

Page	Clause or item	Proposal

Signed

Date

Name

Position

Tenderer

TRANSNET SOC LIMITED
(REGISTRATION No. 1990/000900/06)
TRADING AS
TRANSNET FREIGHT RAIL

LABOUR PAYMENT SCHEDULE

TENDERERS ARE REQUIRED TO COMPLETE THE FOLLOWING SCHEDULE:

DAY LABOUR (IF REQUIRED)

Skilled	Hour _____
Unskilled	Hour _____
Labourer	Hour _____
Driver/Operator	Hour _____
% Profit on Material	_____

TRANSPORT AND MACHINERY

	RUNNING	STANDING
1. Light vehicle up to 1 ton	_____	_____
2. 5 Ton vehicle	_____	_____
3. 10 Ton vehicle with crane	_____	_____
4. Crane	_____	_____
5. Scaffolding	_____	_____
6. Generator	_____	_____
7. Other equipment:	_____	_____

8. Full details of any other charges:

TENDERER: _____

DATE: _____

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Part C1:
Agreement and Contract Data

Contract Data

The Employer is

Name Transnet Limited Trading as Transnet Freight Rail

Address 19-21 Pavillion Building
Corner Botha & Rhodes Streets
(013) 656 4254 Fax No. (013) 656 4259

E-mail Nhlanhla.vilakazi@Transnet.net

The works is Supply And Replace Catenary Wire With Tiger Wire, On
The No. 1,2 & 3 Line Between Blackhill- Ogies, Under
Control Of The Depot Engineer, Ermelo.

The site is No. 1,2 & 3 line between Blackhill-Ogies (20 km)

The starting date is

The completion date is

Duration of contract **3 Months**

The reply period is two weeks

The defects date is two weeks after completion

The defect correction period is **52 (fifty two) weeks**

The delay damages are **R4, 000.00 per day**

The assessment day is the **13th (thirteen)** of each month

The retention is **10% on Twelve Month period**

Does the United Kingdom Housing Grants, Construction and
Regeneration Act (1996) apply? **No**

The Adjudicator is

Name To be advised if disputes arises.....

Address

Telephone **Fax No.**

E-mail

Contract Data

The interest rate on late payment is % per complete week of delay.

The *Contractor* is not liable to the *Employer* for loss of or damage to the *Employer's* property in excess of..... for any one event.

The *Employer* provides this

Insurance Transnet Principal Control Insurance

The minimum amount of cover for the third insurance stated in the

Insurance Table is **> R25,000.00 (Limited to R 10,000 000.00. for any one event)**

The minimum amount of cover for the fourth insurance stated in the

Insurance Table is **Not applicable**.....

The adjudicator nominating

body is **The Chairman of the Association of Arbitrators (Southern Africa)**

The tribunal is **Arbitration**.....

If the tribunal is arbitration,
the arbitration procedure is **The rules for the Conduct of Arbitrators of the Association of Arbitrators (Southern Africa)**.....

The *conditions of contract* are the NEC3 Engineering and Construction Short Contract (June 2005) and the following additional conditions:

As mentioned in paragraph 1.0 (Contractual obligations)

1.0 CONTRACTUAL OBLIGATIONS

A:

A compulsory clarification meeting with representatives of the Employer will take place on **Wednesday, 17 September 2014, 10H00 at Main Road, Ogies Depot thereafter proceed to the entire buildings for physical site briefing.**

(For direction please contact: Arinao Nembilwi on 083 555 0230).

[Respondent to provide own PPE, transportation and accommodation].

- 1.1 Tenders must be deposited to the Tender Box, which will be located in the foyer of INYANDA HOUSE, Transnet freight rail and shall be addressed as follows: Chairperson, Transnet Freight Rail Acquisition Council, Inyanda House, 21 Wellington Road, Parktown.
- 1.2 Tenders must be enclosed in a sealed envelope bearing the tender number **“MMC-ERAC-FDT-014747”** on the outside.
- 1.3 **Please note that this tender closes punctually at 10:00 on .**
- 1.4 Tenderers shall submit their **offers in duplicate** otherwise their offers will be over-looked.
- 1.5 Tenderers must duly fill in the Tender Form E4 and its Annexures and submit the same with their offers.

B:

- 1.1 The Contractor shall not make use of any Sub-Contractor to perform the works or parts thereof without prior permission from the Project Manager.
- 1.2 The Contractor shall ensure that a responsible person is on site at all times. All safety measures prescribed by Transnet Freight rail- Electrical Safety Instructions and the Occupational Health and Safety Act 1993 (Act 85 of 1993) associated with working on a project of this nature shall be adhered to.
- 1.3 The Contractor shall comply with all applicable legislation and Transnet safety requirements adopted from time to time and instructed by the Project Manager / Supervisor. Such compliance shall be entirely at his own cost, and shall be deemed to have been allowed for in the rates and prices in the contract.
- 1.4 The Contractor shall, in particular, comply with the following Acts and Transnet Specifications
 - 1.4.1 The Compensation for Occupational Injuries and Diseases Act, No. 130 of 1993. The Contractor shall produce proof of his registration and good standing with the Compensation Commissioner in terms of the Act.
 - 1.4.2 The Occupational Health and Safety Act (Act 85 of 1993).
 - 1.4.3 The explosive Act No. 26 of 1956 (as amended). The Contractor shall, when applicable, furnish the Project Manager / Supervisor with copies of the permits authorising him or his employees, to establish an explosives magazine on or near the site and to undertake blasting operations in compliance with the Act.
 - 1.4.4 The Contractor shall comply with the current Transnet Specification E.4E, Safety Arrangements and Procedural Compliance with the Occupational Health and Safety Act, Act 85 of 1993 and Regulations and shall before commencement with the execution of the contract, which shall include site establishment and delivery of plant, equipment or materials, submit to the Project Manager / Supervisor.
 - 1.4.5 The Contractor shall comply with the current Specification for Works On, Over, Under or Adjacent to Railway Lines and near High Voltage Equipment – E7/1, if applicable, and shall take particular care of the safety of his employees on or in close proximity to a railway line during track occupations as well as under normal operational conditions.

- 1.5 The Contractor's Health and Safety Programme shall be subject to agreement by the Project Manager / Supervisor, who may, in consultation with the Contractor, order supplementary and/or additional safety arrangements and/or different safe working methods to ensure full compliance by the Contractor with his obligations as an employer in terms of the Act.
- 1.6 In addition to compliance with clause 1.4 hereof, the Contractor shall report all incidents in writing to the Project Manager / Supervisor. Any incident resulting in the death of or injury to any person on the works shall be reported within 24 hours of its occurrence and any other incident shall be reported within 48 hours of its occurrence.
- 1.7 The Contractor shall make necessary arrangements for sanitation, water and electricity at these relevant sites during the installation of the equipments.
- 1.8 A penalty charge of **R4, 000.00** per day will be levied for late completion.
- 1.9 The Contractor shall supply a **site diary** (with triplicate pages). This book shall be used to record any unusual events during the period of the work. Any delays to the work shall also be recorded such as delays caused by poor weather conditions, delays caused by permits being cancelled etc. The appointed Project Manager or Supervisor must countersign such delays. Other delays such as non-availability of equipment from 3rd party suppliers must be communicated to the Project Manager or Supervisor in writing.
- 1.10 The Contractor shall supply a **site instruction book** (with triplicate pages). This book shall be used to record any instructions to the Contractor regarding problems encountered on site – for example the quality of work or the placement of equipment. This book shall be filled in by the Project Manager or Supervisor and must be countersigned by the Contractor.
- 1.11 Both books mentioned in 1.10 and 1.11 shall be the property of Transnet Freight Rail and shall be handed over to the Project Manager or Supervisor on the day of energising or handing over.
- 1.12 All processes of the manufacture and assembly of the product components must be subjected to a quality assurance system.
- 1.13 The Contractor will assume full responsibility for assuring that the products purchased meet the requirements of Transnet Freight Rail for function, performance, and reliability, including purchased products from 3rd part suppliers/Manufacturers.
- 1.14 The Contractor shall prove to Transnet Freight Rail that his equipment or those supplied from 3rd party suppliers/manufacturers confirms to Transnet freight rail specifications.
- 1.15 The Contractor will remain liable for contractual delivery dates irrespective of deficiencies discovered during workshop inspections.
- 1.16 The Contractor shall ensure that equipment to be supplied are suitable installation for coastal areas.
- 1.17 Transnet Freight Rail reserves the right to award the contract based on delivery period due to the urgency of this substation.

Contract Data

The *Contractor's* Offer

The Contractor is

Name

Address

Telephone Fax No.

E-mail

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 *Contractor* offers to Provide the Works in accordance with the *conditions of contract* for an amount to be determined in accordance with the *conditions of contract*.

The offered total of the
Prices is

Signed on behalf of the Contractor

Name

Position

Signature Date

The *Employer's* Acceptance

The *Employer* accepts the *Contractor's* Offer to Provide the Works

Signed on behalf of the *Employer*

Name

Position

Signature Date

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**Part C2:
Pricing Data**

1.0 PRICING INSTRUCTIONS

1. The agreement is based on the NEC Engineering and Construction Short Contract 3. The contract specific variables are as stated in the contract data. Only the headings and clause numbers for which allowance must be made in the Price list are recited.
2. Preliminary and General Requirements are based on part 1 of SANS 1921, 'Construction and Management Requirements for Works Contracts'. The additions, deletions and alterations to SANS 1921 as well as the contract specific variables are as stated in the contract data. Only the headings and clause numbers for which allowance must be made in the Price list are recited.
3. It will be assumed that prices included in the Price list are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders.
4. Reference to any particular trademark, name, patent, design, type, specific origin or producer is purely to establish a standard for requirements. Products or articles of an equivalent standard may be substituted.
5. The Price list is not intended for the ordering of materials. Any ordering of materials, based only on the Price list, is at the Contractor's risk.
6. The amount of the Preliminaries to be included in each monthly payment certificate shall be assessed as an amount prorated to the value of the work duly executed in the same ratio as the preliminaries bears to the total of prices excluding any contingency sum, the amount of the Preliminaries and any amount in respect of contract price adjustment provided for in the contract.
7. The amount or items of the Preliminaries shall be adjusted to take account of the theoretical financial effect which changes in time or value (or both) have on this section. Such adjustments shall be based on adjustments in the following categories as recorded in the Price list:
 - a) an amount which is not to be varied, namely Fixed (F).
 - b) an amount which is to be varied in proportion to the contract value, namely Value Related (V).
 - c) an amount which is to be varied in proportion to the contract period as compared to the initial construction period, excluding revisions to the construction period for which no adjustment the contractor is entitled to in terms of the contract, namely Time Related (T).
8. The following abbreviations are used in the Price list:

Hr	=	Hour
Ea	=	Each
OCB	=	Oil Circuit Breaker
GCB	=	Gas Circuit Breaker
PCB	=	Polychlorinated Biphenyl
Quant.	=	Quantity
9. The prices and rates in these Price list are fully inclusive prices for the work described under the items. Such prices and rates cover all costs and expenses that may be required in and for the execution of the work described in accordance with the provisions of the scope of work and shall cover liabilities and obligations set forth or implied in the Contract data, as well as profit.

- 10 Where the scope of work requires detailed drawings and designs or other information to be provided, all costs associated therewith are deemed to have been provided for and included in the unit rates and sum amount tendered for such items.
- 11 Where no quantity has been provided against an item in the Price list, the Contractor shall use their discretion and provide the quantity.
- 12 The quantities set out in these Price list are approximate and do not necessarily represent the actual amount of work to be done. The quantities of work accepted and certified for payment will be used for determining payments due and not the quantities given in these Price list.
- 13 The short descriptions of the items of payment given in these Price list are only for purposes of identifying the items. More details regarding the extent of the work entailed under each item appear in the Scope of Work.
- 14 Tenderers shall ensure that provision (financial as well as time) for excavations in a range of soil types is made for in their tenders.
- 15 For each item in the Price list, including Preliminaries, the Contractor shall provide in the appropriate column the portion of the tendered sum (inclusive of labour and material) which has been sourced locally (Republic of South Africa).
- 16 The Contractor shall also arrange forward cover within two weeks after contract award on all imported items.
- 17 The Contractor shall provide information related to imported content, i.e. equipment to be imported, value and applicable exchange rates. This information shall be provided as an Annexure to the Price list.
- 18 The total in the Price list shall be exclusive of VAT.

Contract Data Price List

Ite	Description	Unit	Qty	Rate	Price
A	Blackhill-ogies				
1	Removal of existing Copper Catenary on the No. 1,2 & 3 line between Blackhill-Ogies which includes the Make-off Spans and Cross-over Spans.	km	20		
2	Installation of 160 mm ² Tiger Wire complete with new 160 bimetallic Feeder clamps, including the Boven/nylon clip of each stainless steel dropper	km	20		
3	Transporting and delivery of old material removed from site to Ogies Electrical Depot.	sum	1		
4	Labour	sum	1		
5	P's and G's	sum	1		
6	Security	sum	1		
A	Total Price =		R		
B	VAT (14%) =		R		
C	Gross Total (A+B) =		R		

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Part C3: Scope of Work

Contract Data

Works Information

2.0 DESCRIPTION OF WORK

Project Specification For The Following Work:

- Replacement of 80 mm² catenary wire with 160 mm² Tiger wire and new clamps.
 - 2.1 Replacement of catenary wire with 160 mm² tiger wire on the No. 1, 2 & 3 line between Blackhill to Ogies ML.
 - 2.1.1 The removal of the existing 80mm² copper catenary.
 - 2.1.2 Install new 160 mm² tiger wire and clamps as per drawing
 - 2.1.3 The installation must be such that there are no splices within the span of one overlap (spring to spring).
 - 2.1.4 All clamps specified as per drawing shall be filled with anticorrosive grease and torque to the correct value.
 - 2.1.5 The old catenary wire and clamps shall be transported and delivered to the Ogies Electrical Depot.
 - 2.2 Details of splices and terminations
 - 2.2.1 Catenary copper or Tiger wire to Steel wire connection: Connect a strain clamp to the catenary; connect the steel wire using a clevis pin, thimble and three Crosby clamps.
 - 2.2.2 Steel catenary wire to turn buckle, anchor mast side: Connect the steel wire via three Crosby clamps, thimble, two clevis pins, and two extension straps to the turnbuckle.
 - 2.2.3 Contact wire to Steel wire splice: Connect end cone to the contact wire. Use thimble, two clevis pins, two extension straps and three Crosby clamps onto the steel wire.
 - 2.2.4 Steel contact wire to tension spring equipment: Connect the steel wire to the turnbuckle at the spring with three Crosby clamps, thimble, two extension straps and two clevis pins.
 - 2.2.5 Sag and tension the tension length to CEE-TV-50.
 - 2.2.6 The galvanised steel wires shall be tied together at the interval of 1.5m – 2m apart using 4.25mm² binding wire (at least three turns around the steel wire and tied using pliers).
 - 2.2.7 Sag and tension the catenary wire and the contact wire in the middle of the make-off tension length (mid span) in compliance to CEE-TV-183 or CEE-TV-38 or CEE-TV-39.

2.2.8 All existing damaged components shall be replaced and transported to the depot stores.

3.0 OCCUPATIONS

3.1 This work will be covered during a normal day occupations. From Monday to Friday

3.2 No work must be done during weekends, And no work will be arranged on Public Holidays unless otherwise agreed.

3.3 No extra time will be worked except during emergency situations and if the Contractor exceeds the occupation time, penalties in terms of clause 5 hereof shall apply. **NO OVER RUNNING WILL BE ALLOWED!!**

3.4 The occupation dates may be altered if so required on the sole discretion of the Manager / Technical Officer

3.5 The occupation time will be from 08:00 to 15:00, but may vary depending on Operating, The Length shall not be less than 6 hours, but the starting and ending time may vary. And During Shutdown the occupation will start from 06:00 to 18:00.

3.6 Applications for occupations will be done by Foremen OHTe.

4.0 INTERCONNECTION OF EQUIPMENT

4.1 High conductive silicon grease shall be liberally applied to all the connections.

4.2 All dissimilar metal connections (Cu to Al) shall be made using bi-metallic clamps that are specifically designed and manufactured to make that particular connection (ad hoc fabricated clamps are not acceptable).

5.0 COMMISSIONING OF EQUIPMENT

5.1 Commissioning will only take place after all defects have been rectified to the satisfaction of the Project Manager or Supervisor.

5.2 On completion of commissioning, the Contractor will hand the equipment over to the Project Manager or Supervisor in terms of the relevant instruction.

5.3 The commissioning of protection equipment by Transnet Freight Rail will in no way absolve the Contractor from any of his responsibilities during the guarantee period.

5.4 It is the Contractor's responsibility to satisfy himself or herself that the commissioning of the protection equipment has been carried out in a satisfactory manner, and in no way compromises the proper operation of the equipment supplied in terms of the contract.

5.5 The Contractor shall be present during the testing and setting of the protection to rectify any faults found.

6.0 GUARANTEE AND DEFECTS

- 6.1 The Contractor shall guarantee the satisfactory operation of the complete electrical installation supplied and erected by him and accept liability for maker's defects that may appear in design, materials and workmanship.
- 6.2 The Contractor shall be issued with a completion certificate with the list of all defects to be repaired within 14 working days after commissioning.
- 6.3 The guarantee period for this traction substation shall expire after: A period of 12 months commencing on the date of completion of the contract or the date the substation was handed over to Transnet Freight Rail.
- 6.4 Any defects that may become apparent during the guarantee period shall be rectified to the satisfaction of Transnet Freight Rail, and to the account of the Contractor.
- 6.5 The Contractor shall undertake work on the rectification of any defects that may arise during the guarantee period within 7-days of him being notified by Transnet Freight Rail of such defects.
- 6.6 Should the Contractor fail to comply with the requirements stipulated above, Transnet Freight Rail shall be entitled to undertake the necessary repair work or effect replacement of defective apparatus or materials, and the Contractor shall reimburse Transnet Freight Rail the total cost of such repair or replacements, including the labour costs incurred in replacing defective material.
- 6.7 Any specific type of fault occurring three times within the guarantee period and which cannot be proven to be due to other faulty equipment not forming part of this contract e.g., faulty locomotive or overhead track equipment, etc., shall automatically be deemed an inherent defect. Such inherent defect shall be fully rectified to the satisfaction of the Project Manager or Supervisor and at the cost of the Contractor.
- 6.8 If urgent repairs have to be carried out by Transnet Freight Rail staff to maintain supply during the guarantee period, the Contractor shall inspect such repairs to ensure that the guarantee period is not affected and should they be covered by the guarantee, reimburse Transnet Freight Rail the cost of material and labour.

7.0 QUALITY AND INSPECTION

- 7.1 Transnet Freight Rail shall inspect the equipment under contract on the premises of the Manufacturer or successful Contractor.
- 7.2 The Contractor shall notify Transnet Freight Rail 14 days in advance of such an inspection date.
- 7.3 The Contractor shall apply 14 days in advance for the date of energizing and ensure that all work is completed before any commissioning can take place.
- 7.4 The Contractor shall be responsible to issue a compliance certificate in terms of SANS 0142 for each site before energizing of the equipment shall take place.

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Part C3: Works Information

Contract Data

Works Information

8.0 Specifications and Drawings

8.1 Transnet Freight Rail Specification:

- | | | |
|-------|------------|-----------------------------------------------------------------------------------------------------------------|
| 8.1.1 | CEE-T-T64 | 3kV DC electrification overhead equipment |
| 8.1.2 | CEE.0128.5 | Maintenance of 3kV DC electrification
Appendix 1, 2 & 3 |
| 8.1.3 | E 7/1 | Specification for works on, over, under or
adjacent to the railway lines and near high
voltage equipment. |

8.2 Transnet Freight Rail Drawings:

- | | | |
|-------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8.2.1 | BBB 8990 | Alternative catenary wire make-off
arrangement 3kV DC electrification |
| 8.2.2 | CEE-T-T64 | Electrification types: Closed overlap span,
catenary and contact wire make-off stay wire
construction, universal columns (single &
double track). |
| 8.2.3 | CEE-TVC16 | Dropper Cart 3kV Fixed Cantilever. |
| 8.2.4 | CEE-TNB33 | 3kV DC contact wire spring tension device. |

NOTE: Any other specifications referenced in the above mentioned specification, will be for information purposes and may be provided on request.

- 8.3 Occupational Health and Safety Act No. 85 of 1993 (Available at depot for referral)

9.0 Constraints on how the Contractor Provides the Works

- 9.1 The constraints shall be as specified in the specifications of the particular equipment.

10.0 Requirements for the programme

- 10.1 Programme of work : To be submitted by successful Contractor
10.2 CIDB rating : **4EP and above**

- 10.3 Format : Bar chart
- 10.4 Information : How work is going to be executed and commissioned
- 10.5 Submission : Not Applicable
- 10.6 Site diary : Successful Contractor to supply in triplicates carbon copies
- 10.7 Site instruction book : Successful Contractor to supply in triplicates carbon copies

11.0 Services and other things provided by the Employer

- 11.1 Transnet Freight Rail shall have an electrician available for isolation and the erection of barriers to live electrical equipment and issuing of work permits.
- 11.2 Upon successful completion of the works to the satisfaction of Transnet Freight Rail, Transnet Freight Rail shall perform necessary protection tests and commission the equipment.

12. Installation

- 12.1 The contractor shall be responsible for the transport to site, offloading, handling storage and security of all material required for the construction/execution of the works.
- 12.2. All fasteners on the steelwork components and electrical connection (nuts and bolts) shall be secured using flat as well as lock washers.

13. Work to be done by Transnet Freight Rail

- 13.1 Transnet Freight Rail shall have an officer available for issuing of work permits and arrangement of track occupation if the works involves such safety requirements.

14. Special Conditions

- 14.1. All work shall be carried out in a neat and orderly manner to the satisfaction of the Manager (Technical officer (Electrical)).
- 14.2. All electrical installation to be done in accordance with Transnet Freight Rail's High voltage Safety Regulations. The E 7/1 Specification is included.
- 14.3. The tender price for the above work must include the cost of all tools, plant and labour necessary for the proper execution of all works in every aspect.
- If any of the equipment required to perform the works is not available on site or is not used as per Transnet Freight Rail specifications, the work will not be approved.**
- 14.4. The contractor shall supply a site diary and Site instruction book in triplicate, these books shall remain on site at all times.
- 14.5. The contractor shall provide a safety file in terms of the E4E and only on approval of the safety file will access to site be granted to start with the work.
- 14.6. It will be required for the contractor to start with replacing the tiger wire immediately which will be 01/09/2014. This work shall continue up until 30 November 2014.

14.7. It will be required that the contractor make use of 5 erectors, or linesmen, 3 Flagmen and 15 infra worker in order to execute the work. With relevant and valid certificates , C green , flagmen, first Aid, working on highs.

14.8 The contactor shall also be able to show / prove that same work has been executed successfully before.

14.9. Contactor must provide a work plan on how the work will be executed in the required period.

14.10. Contractor should also indicate the equipment that they will use to execute the work.

14.11. The specific location where the work will first commence will be included.

14.12. The work will be done according to the program attached, the proceed with No. 1 line

"PREVIEW COPY ONLY"

Contract Data

Site Information

The works shall be performed from **Blackhill to Ogies**. Line 1, 2 & 3.

"PREVIEW COPY ONLY"

TRANSNET



Transnet SOC Limited Registration Number 1990/00900/06

TRANSNET SPECIFICATION

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

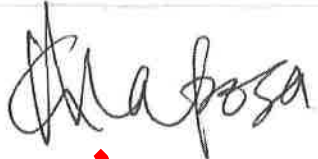





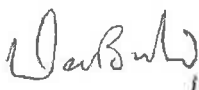

(This specification shall be used in network operator contracts)

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

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Authorised:	Chief Engineer Infrastructure Engineering	J. van Aardt	 2011/06/30

Date: May 2011

(This page not to be issued with contract)

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Transnet SOC Limited Registration Number 1990/00900/06

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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's publication Electrical Safety Instructions, and who holds a certificate or letter of authority to that effect.

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

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

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

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

"Dead" - Isolated and earthed.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

PART A - GENERAL SPECIFICATION

3.0 AUTHORITY OF OFFICERS OF TRANSNET

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

4.0 CONTRACTOR'S REPRESENTATIVES AND STAFF

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

5.0 OCCUPATIONS AND WORK PERMITS

- 5.1 Work to be done during total occupation or during an occupation between trains or under a work permit shall be done in a manner decided by the Contract Supervisor and at times to suit the network operator requirements.
- 5.2 The Contractor shall organise the Works in a manner which will minimise the number and duration of occupations and work permits required.
- 5.3 The network operator will not be liable for any financial or other loss suffered by the Contractor arising from his failure to complete any work scheduled during the period of an occupation or work permit.
- 5.4 The Contractor shall submit to the Contract Supervisor, in writing, requests for occupations or work permits together with details of the work to be undertaken, at least 21 days before they are required. The network operator does not undertake to grant an occupation or work permit for any particular date, time or duration.
- 5.5 The network operator reserves the right to cancel any occupation or work permit at any time before or during the period of occupation or work permit. If, due to cancellation or change in date or time, the Contractor is not permitted to start work under conditions of total occupation or work permit at the time arranged, all losses caused by the cancellation shall be born by the Contractor except as provided for in clauses 5.6 to 5.8.
- 5.6 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.
- 6.2 When the Contract Supervisor considers protection to be necessary the Contractor shall, unless otherwise agreed, provide all protection including flagmen, other personnel and all equipment for the protection of the network operator's and the Contractor's personnel and assets, the public and including trains.
- 6.2.1 The network operator will provide training free of charge of the Contractor's flagmen and other personnel performing protection duties. The Contractor shall consult with the Contract Supervisor, whenever he considers that protection will be necessary, taking into account the minimum permissible clearances set out in the Manual for Track Maintenance (Document no. BBB0481):

- Drawing no. BE-97 Sheet 1: Horizontal Clearances: 1065mm gauge (Annexure 1 sheet 1)
- Drawing no. BE-97 Sheet 2: Vertical Clearances: 1065mm gauge (Annexure 1 sheet 2)
- Drawing no. BE-97 Sheet 3: Clearances: Platform (Annexure 1 sheet 3)
- Drawing no. BE-97 Sheet 5: Clearances: 610mm Gauge (Annexure 1 sheet 5)

- 6.3 The Contractor shall appoint a Responsible Representative to receive and transmit any instruction which may be given by the network operator personnel providing protection.

7.0 ROADS AND ROADS ON THE NETWORK OPERATOR'S PROPERTY

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

8.0 CLEARANCES

- 8.1 No temporary works shall encroach on the appropriate minimum clearances set out in the Manual for Track Maintenance (Document no. BBB0481):

- Drawing no. BE-97 Sheet 1: Horizontal Clearances: 1065mm gauge (Annexure 1 sheet 1)
- Drawing no. BE-97 Sheet 2: Vertical Clearances: 1065mm gauge (Annexure 1 sheet 2)
- Drawing no. BE-97 Sheet 3: Clearances: Platform (Annexure 1 sheet 3)
- Drawing no. BE-97 Sheet 5: Clearances: 610mm Gauge (Annexure 1 sheet 5)

9.0 STACKING OF MATERIAL

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

10.0 EXCAVATION, SHORING, DEWATERING AND DRAINAGE

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

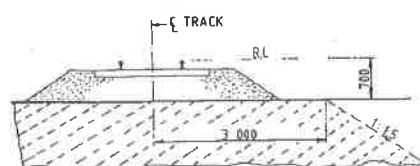


Fig. 1

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

11.0 FALSEWORK FOR STRUCTURES

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

12.0 PILING

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

13.0 UNDERGROUND SERVICES

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

14.0 BLASTING AND USE OF EXPLOSIVES

- 14.1 When blasting within 500m of a railway line, the Contractor shall observe the requirements stipulated in this specification.
- 14.2 No blasting shall be carried out except with the prior written permission of the Contract Supervisor and under such conditions as he may impose.
- 14.3 On electrified lines the Contractor shall also obtain the permission of the Electrical Officer (Contracts) before blasting, and shall give at least 21 days notice of his intention to blast. No blasting shall be done in the vicinity of electrified lines unless a member of the network operator's electrical personnel is present.
- 14.4 The Contractor shall arrange for the supply, transport storage and use of explosives.
- 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 clause 14.10, where provided by the network operator, are for the protection of trains and the network operator's property only, and their presence does not relieve the Contractor in any manner of his responsibilities in terms of Explosives Act or Regulations, or any obligation in terms of this Contract.

- 14.12 The person described in clause 14.10 will record in a book provided and retained by the network operator, the dates and times:-

(i) when each request is made by him to the controlling station for permission to blast;

(ii) when blasting may take place;

(iii) when blasting actually takes place; and

(iv) when he advises the controlling station that the line is safe for the passage of trains.

- 14.13 Before each blast the Contractor shall record in the same book, the details of the blast to be carried out. The person appointed by the Contract Supervisor and the person who will do the blasting shall both sign the book whenever an entry described in clause 14.12 is made.

15.0 RAIL TROLLEYS

- 15.1 The use of rail trolleys or trestle trolleys on a railway line for working on high voltage equipment will be permitted only if approved by the Contract Supervisor and under the conditions stipulated by him.

- 15.2 All costs in connection with trolley working and any train protection services requested by the Contractor shall, be borne by the Contractor, unless otherwise agreed.

16.0 SIGNAL TRACK CIRCUITS

- 16.1 Where signal track circuits are installed, the Contractor shall ensure that no material capable of conducting an electric current makes contact between rails of railway line/lines.

- 16.2 No signal connections on track-circuited tracks shall be severed without the Contract Supervisor's knowledge and consent.

17.0 PENALTY FOR DELAYS TO TRAINS

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

18.0 SURVEY BEACONS AND PEGS

- 18.1 The Contractor shall not on any account move or damage any beacon, bench mark, reference mark, signal or trigonometrical station in the execution of the Works without the written approval of the Contract Supervisor.

Should the Contractor be responsible for any such occurrence, he shall report the circumstances to the Contract Supervisor who will arrange with the Director-General of Surveys for replacement of the beacon or mark at the cost of the Contractor.

- 18.2 The Contractor shall not move or damage any cadastral or mining beacon without the written approval of the Contract Supervisor and before it has been referenced by a registered land surveyor. Any old boundary beacon, which becomes an internal beacon on creation of new boundaries, shall not be moved without the written approval of the Contract Supervisor.

Should the Contractor move or damage any cadastral or mining beacon without authority, he shall be responsible for having it replaced, at his cost, by a land surveyor.

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

19.0 TEMPORARY LEVEL CROSSINGS

- 19.1 The Contract Supervisor may, on request of the Contractor, and if necessary for the purpose of execution of the Works, permit the construction of a temporary level crossing over a railway a line at a position approved by the Contract Supervisor and at the Contractor's cost. The period for which the temporary level crossing is permitted will be at the discretion of the Contract Supervisor.

- 19.2 The Contractor will provide protection and supervise the construction of the road over the track(s) and within the railway servitude at the level crossing, as well as the erection of all road signs and height gauges. All cost to be borne by the applicant.

The Contractor shall exercise extreme caution in carrying out this work, especially in respect of damage to tracks, services, overhead power and communication's routes and prevent contact with "live" overhead electrical equipment.

Unless otherwise agreed, the Contractor will provide the service deviations or alterations to the network operator's track-, structure-, drainage-, electrical-, telecommunications- and train authorisation systems to accommodate the level crossing.

- 19.3 The Contractor shall take all necessary steps including the provision of gates, locks and, where necessary, watchmen to restrict the use of the temporary level crossing to himself and his employees, his subcontractors and their employees, the staff of the network operator and to such other persons as the Contract Supervisor may permit and of whose identity the Contractor will be advised. If so ordered by the Contract Supervisor, the Contractor shall provide persons to control road traffic using the temporary level crossing. Such persons shall stop all road traffic when any approaching train is within seven hundred and fifty (750) metres of the temporary level crossing, and shall not allow road traffic to proceed over it until the lines are clear.
- 19.4 The Contractor shall maintain the temporary level crossing within the railway servitude in good condition for the period it is in use. A temporary agreement with the road authority to be concluded for the maintenance of the level crossing outside the railway servitude.
- 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 its retention on site.

21.0 PROTECTION OF PERSONS AND PROPERTY

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

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

- 21.2 The Contractor shall take all the requisite measures and precautions during the course of the Works to:
- (i) protect the public and property of the public,
 - (ii) protect the property and workmen of both the network operator and the Contractor,
 - (iii) avoid damage to and prevent trespass on adjoining properties, and
 - (iv) ensure compliance with any instruction issued by the Contract Supervisor or other authorised person, and with any stipulation embodied in the contract documents which affects the safety of any person or thing.
- 21.3 The network operator will provide, at its own cost, protection for the safe working of trains during such operations as the Contract Supervisor may consider necessary. Protection by the network operator for any purpose whatsoever, does not absolve the Contractor of his responsibilities in terms of the Contract.
- 21.4 The Contractor shall take all precautions and appoint guards, watchmen and compound managers for prevention of disorder among and misconduct by the persons employed on the Works and by any other persons, whether employees or not, on the work site and for the preservation of the peace and protection of persons and property in the direct neighbourhood. Any relocation of camps because of disorder shall be at the Contractor's expense.
- 21.5 All operations necessary for the execution of the Works, including the provision of any temporary work and camping sites, shall be carried out so as not to cause voids, fire, ground and environmental pollution, soil erosion or restriction of or interference with streams, furrows, drains and water supplies.
- If the original surface of the ground is disturbed in connection with the Works, it shall be made good by the Contractor to the satisfaction of the land owner, occupier or responsible authority.
- 21.6 The Contractor shall take all reasonable steps to minimise noise and disturbance when carrying out the Works, including work permitted outside normal working hours.
- 21.7 Dumping of waste or excess materials by the Contractor shall, in urban areas, be done under the direction and control of, and at sites made available by the local authority. Dumping outside local authority boundaries shall be done only with the express permission and under the direction and control of the Contract Supervisor.
- 21.8 The Contractor shall comply with environmental protection measures and specifications stipulated by the Contract Supervisor and/or local and environmental authorities.
- 22.0 INTERFERENCE WITH THE NETWORK OPERATOR'S ASSETS AND WORK ON OPEN LINES**
- 22.1 The Contractor shall not interfere in any manner whatsoever with an open line, nor shall he carry out any work or perform any act which affects the security, use or safety of an open line except with the authority of the Contract Supervisor and in the presence of a duly authorised representative of the network operator.
- 22.2 The Contractor shall not carry out any work or operate any plant, or place any material whatsoever nearer than three metres from the centre line of any open line except with the written permission of the Contract Supervisor and subject to such conditions as he may impose.
- 22.3 Care must be taken not to interfere with or damage any services such as overhead wire routes, cables or pipes and optical fibre cable, except as provided for the work specified. The Contractor will be held responsible for any damage to or interruption of such services arising from any act or omission on his part or of any of his employees, or persons engaged by him on the Works. The cost of repairing, replacing or restoring the services, as well as all other costs arising from any damage to services, shall be borne by, and will be recovered from the Contractor.
- 22.4 Authority granted by the Contract Supervisor and the presence of an authorised representative of the network operator in terms hereof, shall not relieve the Contractor of his duty to comply with this specification.
- 23.0 ACCESS, RIGHTS-OF-WAY AND CAMPSITES**
- 23.1 Where entry onto the network operator's property is restricted, permission to enter will be given only for the purpose of carrying out the Works and will be subject to the terms and conditions laid down by the network operator.
- 23.2 The Contractor shall arrange for campsites, workplaces and access thereto as well as for any right-of-

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

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

- 23.3 The Contractor shall take all reasonable steps to confine the movement of vehicles and plant to the approved right-of-way to minimise damage to property, crops and natural vegetation.

- 23.4 When access is no longer required, and before completion of the Works, the Contractor shall repair, restore or replace any fence or gate damaged during execution of the Works to the satisfaction of the Contract Supervisor and shall furnish the Contract Supervisor with a certificate signed by the owner and occupier of land over which he has gained access to a campsite, workplace and the Works, certifying that the owner and occupier have no claim against the Contractor or the network operator arising from the Contractor's use of the land. Should the Contractor be unable to obtain the required certificate, he shall report the circumstances to the Contract Supervisor.

24.0 SUPERVISION

- 24.1 The Contract Supervisor will provide overall technical superintendence of the Works, and may direct the Contractor in terms of the provisions of the Contract or in respect of any measures which the Contract Supervisor may require for the operations of the network operator, the safety of trains, property and workmen of the network operator, and for the safety of other property and persons. The Contractor shall carry out the directions of the Contract Supervisor. The superintendence exercised by the Contract Supervisor, including any agreement, approval, refusal or withdrawal of any approval given, shall not relieve the Contractor of any of his duties and liabilities under the Contract, and shall not imply any assumption by the network operator or by the Contract Supervisor of the legal and other responsibilities of the Contractor in carrying out the Works.

- 24.2 The Contract Supervisor may delegate to any deputy or other person, any of his duties or functions under the Contract. On receiving notice in writing of such delegation, the Contractor shall recognise and obey the deputy or person to whom any such duties or functions have been delegated as if he were the Contract Supervisor.

- 24.3 The Contractor shall exercise supervision over the Works at all times when work is performed or shall be represented by an agent having full power and authority to act on behalf of the Contractor. Such agent shall be competent and responsible, and have adequate experience in carrying out work of a similar nature to the Works, and shall exercise personal supervision on behalf of the Contractor. The Contract Supervisor shall be notified in writing of such appointment which will be subject to his approval.

- 24.4 The Contractor or his duly authorised agent shall be available on the site at all times while the Works are in progress to receive the orders and directions of the Contract Supervisor.

25.0 HOUSING OF EMPLOYEES

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

- 25.2 Fouling the area inside or outside the network operator's boundaries shall be prevented. The Contractor will be called upon by the Contract Supervisor to dispose of any foul or waste matter generated by the Contractor.

26.0 OPTICAL FIBRE CABLE ROUTES

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

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

"PREVIEW COPY ONLY"

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

27.0 GENERAL

- 27.1 This specification is based on the contents of Transnet's publication ELECTRICAL SAFETY INSTRUCTIONS, as amended, a copy of which will be made available on loan to the Contractor for the duration of the contract.

These instructions apply to all work near "live" high-voltage equipment maintained and/or operated by the network operator, and the onus rests on the Contractor to ensure that he obtains a copy.

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

28.0 WORK ON BUILDINGS OR FIXED STRUCTURES

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

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

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

local depot examining officer.

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

30.0 USE OF EQUIPMENT

30.1 Measuring Tapes and Devices

- 30.1.1 Measuring tapes may be used near "live" high-voltage equipment provided that no part of any tape or a person's body comes within 3 metres of the "live" equipment.
- 30.1.2 In windy conditions the distance shall be increased to ensure that if the tape should fall it will not be blown nearer than 3 metres from the "live" high-voltage equipment.
- 30.1.3 Special measuring devices longer than 2 metres such as survey sticks and rods may be used if these are of non-conducting material and approved by the responsible Electrical Engineer of the network operator, but these devices must not be used within 3 metres of "live" high-voltage equipment in rainy or wet conditions.
- 30.1.4 The assistance of the Electrical Officer (Contracts) shall be requested when measurements within the limits defined in clauses 31.1.1 to 31.1.3 are required.
- 30.1.5 The restrictions described in 30.1.1 to 31.1.3 do not apply on a bridge deck between permanent parapets nor in other situations where a barrier effectively prevents contact with the "live" high-voltage equipment.

30.2 Portable Ladders

- 30.2.1 Any type of portable ladder longer than 2 metres may only be used near "live" high-voltage equipment under the direct supervision of the Responsible Representative. He shall ensure that the ladder is always used in such a manner that the distance from the base of the ladder to any "live" high-voltage equipment is greater than the fully extended length of the ladder plus 3 metres. Where these conditions cannot be observed, the Electrical Officer (Contracts) shall be advised, and he will arrange for suitable safety measures to be taken.

31.0 CARRYING AND HANDLING MATERIAL AND EQUIPMENT

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

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

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

(i) If the distance between the point at which the pole is to be erected or removed and the nearest "live" high-voltage equipment is more than the length of the pole plus 3 metres, the work shall be supervised by the Responsible Representative.

(ii) If the distance described in (i) is less than the length of the pole plus 3 metres, the Electrical Officer (Contracts) shall be consulted to arrange for an Authorised Person to supervise the work and to ensure that the pole is earthed where possible. The pole shall be kept in contact with the point of erection, and adequate precautions shall be taken to prevent contact with "live" high-voltage equipment.

32.2 The cost of supervision by an Authorised Person and the provision of earthing shall, unless otherwise agreed, be borne by the Contractor.

32.3 The provisions of clauses 33.1 and 33.2 shall also apply to the erection or removal of columns, antennae, trees, posts, etc.

33.0 USE OF WATER

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

34.0 USE OF CONSTRUCTION PLANT

34.1 "Construction plant" entails all types of plant including cranes, piling frames, boring machines, excavators, draglines, dewatering equipment and road vehicles with or without lifting equipment.

34.2 When work is being undertaken in such a position that it is possible for construction plant or its load to come within 3 metres of "live" high-voltage equipment, the Electrical Officer (Contracts) shall be consulted. He will arrange for an Authorised Person to supervise the work and to ensure that the plant is adequately earthed. The Electrical Officer (Contracts) will decide whether further safety measures are necessary.

34.3 The cost of any supervision by an Authorised Person and the provision of earthing shall, unless otherwise agreed, be borne by the Contractor.

34.4 When loads are handled by cranes, non-metallic rope hand lines shall be used, affixed to such loads so as to prevent their swinging and coming within 3 metres of "live" high-voltage equipment.

34.5 Clauses 35.1 to 35.4 shall apply *mutatis mutandis* to the use of maintenance machines of any nature.

35.0 WORK PERFORMED UNDER DEAD CONDITIONS UNDER COVER OF A WORK PERMIT

35.1 If the Responsible Representative finds that the work cannot be done in safety with the high-voltage electrical equipment "live", he shall consult the Electrical Officer (Contracts) who will decide on the action to be taken.

35.2 If a work permit is issued the Responsible Representative shall-

(i) before commencement of work ensure that the limits within which work may be carried out have been explained to him by the Authorised Person who issued the permit to him, and that he fully understands these limits.

(ii) sign portion C of the permit before commencement of work;

(iii) explain to all persons under his control the limits within which work may be carried out, and ensure that they fully understand these limits;

(iv) care for the safety of all persons under his control whilst work is in progress; and

(v) withdraw all personnel under his control from the equipment on completion of the work before he signs portion D of the work permit.

36.0 TRACTION RETURN CIRCUITS IN RAILS

36.1 DANGEROUS CONDITIONS CAN BE CREATED BY REMOVING OR SEVERING ANY BOND.

36.2 Broken rails with an air gap between the ends, and joints at which fishplates are removed under "broken bond" conditions, are potentially lethal. The rails on either side of an air gap between rail ends on electrified lines shall not be touched simultaneously until rendered safe by the network operator personnel.

36.3 The Contractor shall not break any permanent bonds between rails or between rails and any structure. He shall give the Contract Supervisor at least 7 days written notice when removal of such bonds is necessary.

36.4 No work on the track which involves interference with the traction return rail circuit either by cutting or removing the rails, or by removal of bonds shall be done unless the Electrical Officer (Contracts) is consulted. He will take such precautions as may be necessary to ensure continuity of the return circuit before permitting the work to be commenced.

37.0 HIGH-VOLTAGE ELECTRICAL EQUIPMENT NOT MAINTAINED AND/OR OPERATED BY THE NETWORK OPERATOR

Where the work is undertaken on or near high-voltage electrical equipment which is not maintained and/or operated by the network operator, the Occupational Health and Safety Act No. 85 of 1993, and Regulations and Instructions, or the Mines Health and Safety Act (Act 29 of 1996), shall apply.

Such equipment includes:-

- (i) Eskom and municipal equipment;
- (ii) The Contractor's own power supplies; and
- (iii) Electrical equipment being installed but not yet taken over from the Contractor.

END

"PREVIEW COPY ONLY"

Mass Date	Tiger / catenary	C B R	M / R B	C B R	D B	C B R D S	D A T E R E P A I R E D
Mass Date	Tiger / catenary	No.3	No.3	NO3	YES	YES	
0/1	TIGER	Carce			YES	YES	
0/2	TIGER						
0/2	TIGER						
0/3	TIGER		YES				
0/4	TIGER						
0/5	TIGER						
0/6	TIGER						
0/7	TIGER				YES	YES	
0/8	TIGER						
0/9	TIGER						
0/10	TIGER						
0/11	TIGER		YES				
0/12	TIGER	Carce					
0/13	TIGER						
0/14	TIGER						
0/15	TIGER						
0/16	TIGER						
0/17	TIGER		YES				
0/18	TIGER						
0/19	TIGER		YES				
1/1	TIGER		YES				
1/2	CATERNARY						
1/3	CATERNARY						
1/4	TIGER						
1/5	TIGER						
1/6	TIGER						
1/7	TIGER						
1/8	TIGER		YES				
1/9	CATERNARY						
1/10	CATERNARY		YES				
1/11	CATERNARY						
1/12	TIGER						
1/13	TIGER		YES				
1/14	TIGER						
1/15	TIGER						
2/1	TIGER		YES				
2/2	TIGER						
2/3	CATERNARY						
2/4	CATERNARY		YES				
2/5	CATERNARY						
2/6	CATERNARY						
2/7	CATERNARY		YES				
2/8	CATERNARY						
2/9	CATERNARY						
2/10	CATERNARY		YES				
2/11	CATERNARY						
2/12	CATERNARY						
2/13	CATERNARY		YES				
2/14	CATERNARY						
2/15	TIGER						
3/1	TIGER		YES				
3/2	CATERNARY						
3/3	CATERNARY						
3/4	CATERNARY		YES				
3/5	TIGER						
3/6	TIGER		YES				
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3/9	TIGER		YES				
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4/15			YES				
4/16							
5/1			YES				

			M / R	C	D	C B O N D S	D A T E R E P A I R E D
Mass Point	Tiger / casemetry	No.3	No.3	NO3			
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5/7		Curve	YES				
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9/12		Curve	YES				
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9/16			YES				
9/17							

Mass Pair	Tiger / category	C	M / R B	C	D	C B O N D S	D A T E R E P A I R E D
*****		No3	No3	NO3			
9/18							
9/19							
9/20			YES				
9/21							
10/1							
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10/17			YES				
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11/4		Curve	YES				
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11/7			YES				
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13/15		Curve					
13/16			YES				
13/17							

Maxi Pair	Tiger / catenary	C	M / R	C	D	B	DATE REPAIRED
13/18		No 3	No 3	NO3			
14/1		Curve					
14/2							
14/3			YES				
14/4							
14/5							
14/6							
14/7		Curve					
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14/9							
14/10							
14/11							
14/12			YES				
14/13			YES				
14/14							
14/15							
15/1							
15/2			YES				
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15/8		Curve					
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16/2			YES	YES			02/05/2012
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16/4		Curve					
16/5			YES				24/04/2012
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16/8							
16/9							
16/10							
16/11							
16/12			YES				24/04/2012
16/13							
16/14			YES				
16/15			YES				24/04/2012
16/16							
16/17							
17/1							
17/2		Curve		YES			23/04/2012
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17/9			YES				24/04/2012
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17/13			YES	YES			23/04/2012
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18/5			YES				
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18/10		Curve	YES	YES			22/04/2012
18/11							
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18/14			YES				
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18/16							
18/17							
19/1							

Mass Date	Tiger / category	C F E	M / R B F E I B	C F E B C E	D F E B	C B O N D S	D A T E R E P A I R E D
19/2		No3	No3	NO3			
19/3							
19/4			YES				
19/5			YES				
19/6							
19/7							
19/8			YES				
19/9		Curve		YES			22/04/2012
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20/5		Curve	YES	YES			
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20/11			YES				
20/12							
20/13		Curve					
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20/17			YES				
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21/2			YES				
21/3			YES				
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21/5							
21/6					YES	YES	
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22/14			YES	YES			
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23/2			YES	YES			
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24/4			YES		YES	YES	
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			M / R B	C	D	C	D
Mass Point	Tiger / extension						
24/6		No.3	YES	NO3			
24/7				YES			
24/8		Curve					
24/9							
24/10			YES	YES			
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25/16							
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26/5		Curve					
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26/7			YES				
26/8							
26/9							
26/10							
26/11			YES	YES			
26/12							
26/13							
26/14							
26/15			YES	YES			
26/16							
26/17							
27/1							
27/2			YES	YES			
27/3							
27/4							
27/5							
27/6			YES	YES			
27/7							
27/8							
27/9							
27/10		Curve	YES	YES			
27/11							
27/12							
27/13							
27/14			YES	YES			
27/15							
27/16							
27/17							
27/18							
28/1			YES	YES			
28/2							
28/3							
28/4			YES				
28/5							
28/6							
28/7							
28/8							
28/9							
28/10							
28/11							
28/12							
28/13			YES				
28/14			YES	YES			
28/15							
28/16			YES				
28/17							
28/18							
28/19			YES		YES	YES	
28/20			YES				
29/1			YES				

Max Pmin	Tiger / stenacy	C	M / R	C	B	C B O N D S	D A T E R E P A I R E D
*****		No3	No3	NO3			
29/2							
29/3							
29/4			YES				
29/5							
29/6							
29/7			YES	YES			
29/8							
29/9							
29/10			YES	YES			
29/11			YES	YES			
29/12							
29/13							
29/14							
29/15							
29/16			YES	YES			
30/1			YES				
30/2							
30/3							
30/4							
30/5			YES				
30/6							
30/7							
30/8							
30/9			YES	YES			
30/10							
30/11							
30/12							
30/13			YES	YES			
30/14							
30/15							
30/16							
30/17			YES	YES			
30/18							
30/19							
31/1							
31/2							
31/3							
31/4							
31/5							
31/6			YES	YES			
31/7							
31/8							
31/9							
31/10			YES	YES			
31/11							
31/12							
31/13							
31/14			YES	YES			
31/15							
31/16							
31/17			YES	YES			
31/18							
31/19							
31/20							
31/21							
31/22			YES	YES			
31/23							
31/24							
32/1							
32/2							
32/3							
32/4							
32/5							
32/6							
32/7							
32/8			YES	YES			
32/9							
32/10							
32/11							
32/12			YES	YES			
32/13							
32/14							
32/15			YES	YES			
32/16							
32/17							
32/18							
32/19		Curve	YES	YES			
32/20							
32/21							
32/22							
33/1			YES	YES			
33/2							

Mass Point	Tiger Frequency	C	M / R B	C	D	C B O N D S	D A T E R E P A I R E D
33/3		No.3	No.3	NO3			
33/4							
33/5			YES	YES			
33/6							
33/7							
33/8		Curve					
33/9							
33/10			YES	YES			
33/11							
33/12							
33/13							
33/14							
33/15							
33/16			YES	YES			
33/17							
33/18							
33/19							
33/20			YES	YES			
33/21							
33/22							
34/1							
34/2							
34/3			YES	YES			
34/4							
34/5							
34/6			YES	YES			
34/7							
34/8							
34/9							
34/10			YES	YES			
34/11							
34/12							
34/13			YES	YES			
34/14							
34/15							
34/16							
34/17							
35/1							
35/2							
35/3							
35/4							
35/5							
35/6							
35/7							
35/8							
35/9							
35/10							
35/11			YES	YES			
35/12							
35/13							
35/14							
35/15			YES	YES			
36/1							
36/2							
36/3							
36/4							
36/5			YES	YES			
36/6							
36/7							
36/8							
36/9							
36/10							
36/11			YES	YES			
36/12							
36/13		Curve					
36/14			YES	YES			
36/15							
36/16							
36/17							
36/18							
36/19							
36/20							
37/1							
37/2			YES	YES			
37/3							
37/4		Curve					
37/5							
37/6			YES	YES			
37/7		Curve					
37/8							
37/9			YES	YES			

			M / R	C	D	C	D
			B	B	B	B	B
Mask Plate	Tiger / currency						
37/10		No.3	No.3	NO3			
37/11							
37/12							
37/13							
37/14							
37/15							
37/16							
37/17							
37/18							
37/19							
37/20							
37/21							
37/22							
37/23							
37/24		Curve					
38/1							
38/2			YES	YES			
38/3							
38/4							
38/5							
38/6							
38/7							
38/8							
38/9							
38/10			YES	YES			
38/11							
38/12							
38/13							
38/14			YES	YES			
38/15							
38/16							
38/17							
38/18							
38/19							
39/1							
39/2			YES	YES			
39/3							
39/4							
39/5		Curve					
39/6							
39/7							
39/8							
39/9							
39/10							
39/11							
39/12			YES				
39/13							
39/14							
39/15			YES				
39/16			YES				
39/17							
39/18							
40/1							
40/2			YES				
40/3							
40/3							
40/4							
40/5							
40/6			YES				
40/7							
40/8							
40/9							
40/10			YES				
40/11							
40/12			YES				
40/13							
40/14							
40/15							
40/16							
40/17							
40/18		Curve					
40/19							
40/20							
41/1			YES				
41/2							
41/3							
41/4			YES				
41/5		Curve					
41/6							
41/7			YES				
41/8							
41/9							

			M / R B	C B	D B	C B O N D S	D A T E R E P A I R E D
Meal/Pair	Tiger / catenary	No.3	No.3	NO3			
41/10							
41/11							
41/12			YES	YES			
41/13							
41/14							
41/15							
41/16			YES				
41/17							
41/18							
41/19							
41/20							
41/21		Curve					
42/1			YES				
42/2							
42/3							
42/4							
42/5							
42/6			YES	YES			
42/7							
42/8							
42/9			YES	YES			
42/10			YES	YES			
42/11							
42/12							
42/13							
42/14			YES				
42/15							
42/16							
43/1							
43/2			YES				
43/3							
43/4							
43/5							
43/6			YES	YES			
43/7							
43/8							
43/9							
43/10		Curve	YES				
43/11			YES	YES			
43/12							
43/13			YES	YES			18/04/2012
43/14			YES				
43/15			YES				
43/16							
44/1							
44/2			YES				
44/3		Curve	YES				
44/4							
44/5				YES			
44/6							
44/7		Curve	YES				
44/8							
44/9				YES			
44/10							
44/11			YES				
44/12							
44/13							
44/14							
44/15			YES				
45/1				YES			
45/2							
45/3							
45/4			YES				
45/5		Curve		YES			
45/6							
45/7		Curve					
45/8			YES				
45/9							
45/10							
45/11							
45/12			YES				
45/13							
45/14							
45/15							
45/16			YES				
45/17							
45/18							
45/19							
45/20			YES				
45/21							
45/22							
45/23		Curve					

Max Pate	Tiger / Ostrich	C	M / R	C	D	C	D
		No 3	No 3	NO3			
45/24			YES				
46/1							
46/2							
46/3			YES				
46/4			YES				
46/5							
46/7							
46/8			YES	YES			
46/9							
46/10							
46/11							
46/12			YES				
46/13			YES				
46/14							
46/15			YES	YES			
46/16							
46/17							
47/1			YES	YES			
47/2							
47/3							
47/4							
47/5							
47/6			YES	YES			
47/7							
47/8							
47/9							
47/10			YES				
47/11							
47/12							
47/13			YES	YES			
47/14							
47/15							
47/16							
48/1			YES	YES			
48/2			YES	YES			
48/3							
48/4							
48/5			YES				
48/6							
48/7							
48/8							
48/9			YES				
48/10							
48/11							
48/12							
48/13							
48/14			YES				
48/15							
49/1			YES				
49/2				YES			
49/3							
49/4			YES				
49/5							
49/6				YES			
49/7							
49/8			YES				
49/9							
49/10			YES	YES			
49/11							
49/12							
49/13							
49/14			YES				
49/15							
49/16							
49/17		Curve					
49/18							
49/19							
49/20							
49/21			YES	YES			
50/1							
50/2							
50/3			YES	YES			
50/4							
50/5							
50/6		Curve					
50/7		Curve		YES			
50/8			YES	YES			
50/9							
50/10							
50/11		Curve	YES	YES			
50/12							
50/13							

Mean Pairs	Tiger / catenary	C H P B	M / R B	C B	D B	C B O N D S	D A T E R E P A I R E D
50/14		No3	No3	NO3			
50/15			YES	YES			
50/16							
50/17							
50/18				YES			
51/1			YES	YES			
51/2							
51/3							
51/4							
51/5			YES				
51/6							
51/7							
51/8							
51/9			YES				
51/10							
51/11							
51/12							
51/13			YES				
51/14							
51/15							
52/1							
52/2			YES	YES			
52/1							
52/2							
52/3							
52/4			YES				
52/5							
52/6			YES	YES			
52/7							
52/8							
52/9							
52/10			YES	YES			
52/11							
52/12							
52/13							
52/14			YES				
52/15							
52/16		Curve		YES			
52/17			YES	YES			
52/18							
53/1							
53/2							
53/3							
53/4			YES	YES			
53/5							
53/6							
53/7							
53/8			YES	YES			
53/9							
53/10			YES				
53/11							
53/12			YES	YES			18/04/2012
53/13							
53/14		Curve					
53/15							
53/16			YES	YES			
54/1							
54/2							
54/3							
54/4							
54/5							
54/6							
54/7							
54/8							
54/9			YES				17/04/2012
54/10							
54/11							
54/12			YES	YES			17/04/2012
54/13							
54/14			YES				
54/15							
54/16							
55/1							
55/2							
55/3							
55/4			YES	YES			16/04/2012
55/5							
55/6							
55/7			YES	YES			16/04/2012
55/8			YES				
55/9							
55/10							

			M / R B	C B	D B	C B O N D S	D A T E R E P A I R E D
Mass Point	Tiger / catenary	No.3	No.3	NO3			
55/11			YES	YES	YES	YES	15/04/2012
55/12			YES				
55/13							
55/14							
56/1		Curve					
56/2							
56/1							
56/2							
56/3							
56/4							
56/5							
56/6							
56/7							
56/8							
56/9		Curve	YES				
56/10							
56/11			YES	YES			
56/12							
56/13							
56/14							
56/15			YES				
56/16							
56/17							
56/18							
57/1							
57/2							
57/3			YES				
57/4							
57/5							
57/6							
57/7			YES				
57/8							
57/9							
57/10			YES	YES			
57/11						YES	YES
57/12							
57/13							
57/14							
57/14a							
57/15		Curve					
57/16							
57/17			YES				
58/1			YES				
58/2							
58/3							
58/4						YES	YES
58/5			YES				
58/6			YES	YES			
58/7							
58/8							
58/9							
58/10			YES	YES			
58/11		Curve					
58/12							
58/13			YES	YES			
58/14							
58/15							
58/16							
58/17							
58/18			YES	YES			
58/19							
58/20							
59/1							
59/2			YES	YES			
59/3							
59/4							
59/5							
59/6							
59/7							
59/8		Curve					
59/9							
59/10			YES	YES			
59/11							
59/12							
59/13							
59/14							
59/15							
59/16							
59/17							
59/18			YES	YES			
59/19							
59/20							

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

"PREVIEW COPY ONLY"

		C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D	
Mast Pole lokasies	Tiger / catenary	No3 Curve	No3	NO3				
0/1	TIGER				YES	YES		
0/2	TIGER							
0/2	TIGER							
0/3	TIGER		YES					
0/4	TIGER							
0/5	TIGER							
0/6	TIGER							
0/7	TIGER				YES	YES		
0/8	TIGER							
0/9	TIGER							
0/10	TIGER							
0/11	TIGER		YES					
0/12	TIGER	Curve						
0/13	TIGER							
0/14	TIGER							
0/15	TIGER							
0/16	TIGER							
0/17	TIGER		YES					
0/18	TIGER							
0/19	TIGER		YES					
1/1	TIGER		YES					
1/2	CATERNARY							
1/3	CATERNARY							
1/4	TIGER							
1/5	TIGER							
1/6	TIGER							
1/7	TIGER							
1/8	TIGER		YES					
1/9	TIGER							
1/10	TIGER		YES					
1/11	CATERNARY							
1/12	TIGER							
1/13	TIGER		YES					
1/14	TIGER							
1/15	TIGER							
2/1	TIGER		YES					
2/2	TIGER							
2/3	CATERNARY							
2/4	CATERNARY		YES					
2/5	CATERNARY							
2/6	CATERNARY							
2/7	CATERNARY		YES					
2/8	CATERNARY							
2/9	CATERNARY							
2/10	CATERNARY		YES					
2/11	CATERNARY							
2/12	CATERNARY							
2/13	CATERNARY		YES					
2/14	CATERNARY							

		C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D
Mast Pole	Tiger / catenary						
lokasies		No3	No3	NO3			
2/15	TIGER						
3/1	TIGER		YES				
3/2	CATERNARY						
3/3	CATERNARY						
3/4	CATERNARY		YES				
3/5	TIGER						
3/6	TIGER		YES				
3/7	CATERNARY						
3/8	CATERNARY						
3/9	TIGER		YES				
3/10							
3/11							
3/12			YES				
3/13							
3/14							
3/15			YES				
4/1							
4/2							
4/3			YES				
4/4							
4/5							
4/6			YES				
4/7							
4/8							
4/9			YES				
4/10							
4/11							
4/12			YES				
4/13							
4/14							
4/15			YES				
4/16							
5/1			YES				
5/2							
5/3							
5/4							
5/5							
5/6							
5/7		Curve	YES				
5/8							
5/9							
5/10							
5/11							
5/12			YES				
5/13							
5/14							
5/15							
5/16							
5/17			YES				

		C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D
Mast Pole lokasies	Tiger / catenary	No3	No3	NO3			
6/1							
6/2							
6/3		Curve					
6/4			YES				
6/5			YES				
6/6							
6/7			YES	YES			
6/8							
6/9			YES				
6/10							
6/11							
6/12			YES				
6/13			YES				
6/14							
6/15			YES				
6/16							
6/17			YES				
7/1			YES				
7/2							
7/3			YES				
7/4			YES				
7/5							
7/6							
7/7							
7/8			YES				
7/9							
7/10							
7/11							
7/12			YES				
7/13							
7/14							
7/15			YES				
8/1			YES				
8/2							
8/3			YES				
8/4							
8/5							
8/6							
8/7							
8/8							
8/9							
8/10			YES				
8/11							
8/12							
8/13							
8/14			YES				
8/15							
8/16							
8/17			YES				

		C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D
Mast Pole	Tiger / catenary						
lokasies		No3 Curve	No3	NO3			
9/1							
9/2							
9/3							
9/4			YES				
9/5							
9/6							
9/7							
9/8			YES				
9/9							
9/10							
9/11							
9/12		Curve	YES				
9/13							
9/14							
9/15							
9/16			YES				
9/17							
9/18							
9/19							
9/20			YES				
9/21							
10/1							
10/2			YES				
10/3							
10/4			YES				
10/5							
10/6							
10/7			YES				
10/8							
10/9							
10/10			YES				
10/11							
10/12							
10/13			YES				
10/14			YES		YES	YES	
10/15							
10/16							
10/17			YES				
11/1							
11/2							
11/3							
11/4		Curve	YES				
11/5							
11/6							
11/7			YES				
11/8							
11/9							
11/10							
11/11			YES				

		C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D
Mast Pole	Tiger / catenary						
lokasies		No3	No3	NO3			
11/12							
11/13							
11/14							
11/15							
11/16			YES				
11/17							
11/18							
11/19			YES				
11/20							
11/21							
12/1							
12/2							
12/3							
12/4			YES				
12/5							
12/6							
12/7							
12/8							
12/9							
12/10			YES				
12/11							
12/12							
12/13							
12/14							
12/15							
12/16							
12/17			YES				
12/18							
12/19		Curve	YES				
12/20			YES				
12/21							
12/22							
12/23							
13/1							
13/2							
13/3			YES		YES	YES	
13/4							
13/5		Curve					
13/6			YES				
13/7							
13/8							
13/9			YES				
13/10							
13/11							
13/12							
13/13							
13/14							
13/15		Curve					
13/16			YES				

Mast Pole	Tiger / catenary	C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D
lokasies		No3	No3	NO3			
13/17							
13/18		Curve					
14/1							
14/2							
14/3							
14/4			YES				
14/5							
14/6							
14/7		Curve					
14/8							
14/9							
14/10							
14/11							
14/12							
14/13			YES				
14/14			YES				
14/15							
15/1							
15/2							
15/3			YES				
15/4							
15/5							
15/6							
15/7							
15/8		Curve					
15/9							
15/10							
15/11							
15/12							
15/13							
15/14							
15/15							
16/1							
16/2							
16/3			YES	YES			02/05/2012
16/4							
16/5		Curve					
16/6			YES				24/04/2012
16/7							
16/8			YES				
16/9							
16/10							
16/11							
16/12							
16/13			YES				24/04/2012
16/14							
16/15			YES				
16/16			YES				24/04/2012
16/17							

		C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D
Mast Pole lokasies	Tiger / catenary	No3	No3	NO3			
17/1							
17/2		Curve		YES			23/04/2012
17/3							
17/4							
17/5							
17/6							
17/7		Curve					
17/8							
17/9							
17/10			YES				24/04/2012
17/11		Curve					
17/12							
17/13							
17/14			YES	YES			23/04/2012
17/15							
17/16							
18/1							
18/2							
18/3							
18/4							
18/5							
18/6			YES				
18/7							
18/8							
18/9							
18/10		Curve	YES	YES			22/04/2012
18/11							
18/12							
18/13							
18/14			YES				
18/15							
18/16							
18/17							
19/1							
19/2							
19/3							
19/4			YES				
19/5			YES				
19/6							
19/7							
19/8			YES				
19/9		Curve		YES			22/04/2012
19/10							
19/11							
19/12							
19/13			YES				
19/14			YES				
19/15			YES				
20/1							

		C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D
Mast Pole	Tiger / catenary						
Iokasies		No3	No3	NO3			
20/2							
20/3		Curve					
20/4							
20/5		Curve	YES	YES			
20/6			YES				
20/7							
20/8			YES				
20/9							
20/10			YES				
20/11			YES				
20/12							
20/13		Curve					
20/14			YES				
20/15							
20/16							
20/17			YES				
21/1							
21/2			YES				
21/3			YES				
21/4							
21/5			YES				
21/6					YES	YES	
21/7							
21/8			YES				
21/9							
21/10			YES				
21/11							
21/12							
21/13			YES				
21/14							
21/15							
22/1			YES				
22/2			YES				
22/3							
22/4			YES				
22/5							
22/6			YES				
22/7			YES	YES			
22/8							
22/9							
22/10			YES	YES			
22/11							
22/12							
22/13							
22/14			YES	YES			
22/15							
23/1							
23/2			YES	YES			
23/4							

		C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D
Mast Pole	Tiger / catenary						
lokasies		No3	No3	NO3			
23/5							
23/6							
23/7			YES	YES			
23/8							
23/9							
23/10							
23/11			YES				
23/12							
23/13							
23/14							
23/15			YES	YES			
23/16							
23/17							
24/1							
24/2			YES	YES			
24/3							
24/4			YES		YES	YES	
24/5							
24/6			YES				
24/7				YES			
24/8		Curve					
24/9							
24/10			YES	YES			
24/11							
24/12							
24/13							
24/14			YES	YES			
24/15							
24/16			YES				
25/1							
25/2							
25/3							
25/4							
25/5		Curve					
25/6							
25/7			YES	YES			
25/8							
25/9							
25/10							
25/11							
25/12							
25/13							
25/14							
25/15			YES	YES			
25/16							
26/1							
26/2							
26/3			YES	YES			
26/4							

		C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D
Mast Pole	Tiger / catenary	No3 Curve	No3	NO3			
lokasies							
26/5							
26/6							
26/7			YES				
26/8							
26/9							
26/10							
26/11			YES	YES			
26/12							
26/13							
26/14							
26/15			YES	YES			
26/16							
26/17							
27/1							
27/2			YES	YES			
27/3							
27/4							
27/5							
27/6			YES	YES			
27/7							
27/8							
27/9							
27/10		Cur	YES	YES			
27/11							
27/12							
27/13							
27/14			YES	YES			
27/15							
27/16							
27/17							
28/1			YES	YES			
28/2							
28/3							
28/4			YES				
28/5							
28/6							
28/7							
28/8							
28/9							
28/10							
28/11							
28/12							
28/13			YES				
28/14			YES	YES			
28/15							
28/16			YES				
28/17							
28/18							
28/19			YES		YES	YES	

		C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D
Mast Pole	Tiger / catenary						
lokasies		No3	No3	NO3			
28/20			YES				
29/1			YES				
29/2							
29/3							
29/4			YES				
29/5							
29/6							
29/7			YES	YES			
29/8							
29/9							
29/10			YES	YES			
29/11			YES	YES			
29/12							
29/13							
29/14							
29/15							
29/16			YES	YES			
30/1			YES				
30/2							
30/3							
30/4							
30/5			YES				
30/6							
30/7							
30/8							
30/9			YES	YES			
30/10							
30/11							
30/12							
30/13			YES	YES			
30/14							
30/15							
30/16							
30/17			YES	YES			
30/18							
30/19							
31/1							
31/2							
31/3							
31/4							
31/5							
31/6			YES	YES			
31/7							
31/8							
31/9							
31/10			YES	YES			
31/11							
31/12							
31/13							

		C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D
Mast Pole	Tiger / catenary	No3	No3	NO3			
lokasies							
31/14			YES	YES			
31/15							
31/16							
31/17							
31/18			YES	YES			
31/19							
31/20							
31/21							
31/22			YES	YES			
31/23							
31/24							
32/1							
32/2							
32/3							
32/4							
32/5							
32/6							
32/7							
32/8			YES	YES			
32/9							
32/10							
32/11							
32/12			YES	YES			
32/13							
32/14							
32/15			YES	YES			
32/16							
32/17							
32/18							
32/19		Curve	YES	YES			
32/20							
32/21							
32/22							
33/1			YES	YES			
33/2							
33/3							
33/4							
33/5			YES	YES			
33/6							
33/7							
33/8		Curve					
33/9							
33/10			YES	YES			
33/11							
33/12							
33/13							
33/14							
33/15							
33/16			YES	YES			

		C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D
Mast Pole	Tiger / catenary	No3	No3	NO3			
lokasies							
33/17							
33/18							
33/19							
33/20			YES	YES			
33/21							
33/22							
34/1							
34/2							
34/3			YES	YES			
34/4							
34/5							
34/5							
34/6			YES	YES			
34/7							
34/8							
34/9							
34/10			YES	YES			
34/11							
34/12							
34/13			YES	YES			
34/14							
34/15							
34/16							
34/17							
35/1							
35/2							
35/3							
35/4							
35/5							
35/6							
35/7							
35/8							
35/9							
35/10							
35/11			YES	YES			
35/12							
35/13							
35/14							
35/15			YES	YES			
36/1							
36/2							
36/3							
36/4							
36/5			YES	YES			
36/6							
36/7							
36/8							
36/9							
36/10							

Mast Pole	Tiger / catenary	C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D
lokasies		No3	No3	NO3			
36/11			YES	YES			
36/12							
36/13		Curve					
36/14			YES	YES			
36/15							
36/16							
36/17							
36/18							
36/19							
36/20							
37/1							
37/2			YES	YES			
37/3							
37/4		Curve					
37/5							
37/6			YES	YES			
37/7		Curve					
37/8							
37/9			YES	YES			
37/10							
37/11							
37/12							
37/13							
37/14							
37/15							
37/16							
37/17							
37/18							
37/19							
37/20							
37/21							
37/22							
37/23							
37/24		Curve					
38/1							
38/2			YES	YES			
38/3							
38/4							
38/5							
38/6							
38/7							
38/8							
38/9							
38/10			YES	YES			
38/11							
38/12							
38/13							
38/14			YES	YES			
38/15							

		C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D	
Mast Pole	Tiger / catenary	No3	No3	NO3				
lokasies								
38/16								
38/17								
38/18								
38/19								
39/1								
39/2			YES	YES				
39/3								
39/4								
39/5		Curve						
39/6								
39/7								
39/8								
39/9								
39/10								
39/11								
39/12			YES					
39/13								
39/14								
39/15			YES					
39/16			YES					
39/17								
39/18								
40/1								
40/2			YES					
40/3								
40/3								
40/4								
40/5								
40/6			YES					
40/7								
40/8								
40/9								
40/10			YES					
40/11								
40/12			YES					
40/13								
40/14								
40/15								
40/16								
40/17								
40/18		Curve						
40/19								
40/20								
41/1			YES					
41/2								
41/3								
41/4			YES					
41/5		Curve						
41/6								

		C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D
Mast Pole	Tiger / catenary	No3	No3	NO3			
Iokasies							
41/7			YES				
41/8							
41/9							
41/10							
41/11							
41/12			YES	YES			
41/13							
41/14							
41/15							
41/16			YES				
41/17							
41/18							
41/19							
41/20							
41/21		Curve					
42/1			YES				
42/2							
42/3							
42/4							
42/5							
42/6			YES	YES			
42/7							
42/8							
42/9			YES	YES			
42/10			YES	YES			
42/11							
42/12							
42/13							
42/14			YES				
42/15							
42/16							
43/1							
43/2			YES				
43/3							
43/4							
43/5							
43/6			YES	YES			
43/7							
43/8							
43/9							
43/10		Curve	YES				
43/11			YES	YES			
43/12							
43/13			YES	YES			18/04/2012
43/14			YES				
43/15			YES				
43/16							
44/1							
44/2			YES				

		C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D
Mast Pole lokasies	Tiger / catenary	No3 Curve	No3 YES	NO3			
44/3							
44/4							
44/5				YES			
44/6							
44/7		Curve	YES				
44/8							
44/9				YES			
44/10							
44/11			YES				
44/12							
44/13							
44/14							
44/15			YES				
45/1				YES			
45/2							
45/3							
45/4			YES				
45/5		Curve		YES			
45/6							
45/7		Curve					
45/8			YES				
45/9							
45/10							
45/11							
45/12			YES				
45/13							
45/14							
45/15							
45/16			YES				
45/17							
45/18							
45/19							
45/20			YES				
45/21							
45/22							
45/23		Curve					
45/24			YES				
46/1							
46/2							
46/3			YES				
46/4			YES				
46/5							
46/7							
46/8			YES	YES			
46/9							
46/10							
46/11							
46/12			YES				
46/13			YES				

		C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D
Mast Pole	Tiger / catenary	No3	No3	NO3			
lokasies							
46/14							
46/15			YES	YES			
46/16							
46/17							
47/1			YES	YES			
47/2							
47/3							
47/4							
47/5							
47/6			YES	YES			
47/7							
47/8							
47/9							
47/10			YES				
47/11							
47/12							
47/13			YES	YES			
47/14							
47/15							
47/16							
48/1			YES	YES			
48/2			YES	YES			
48/3							
48/4							
48/5			YES				
48/6							
48/7							
48/8							
48/9			YES				
48/10							
48/11							
48/12							
48/13							
48/14			YES				
48/15							
49/1			YES				
49/2				YES			
49/3							
49/4			YES				
49/5							
49/6				YES			
49/7							
49/8			YES				
49/9							
49/10			YES	YES			
49/11							
49/12							
49/13							
49/14			YES				

Mast Pole	Tiger / catenary	C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D
Iokasies		No3	No3	NO3			
49/15							
49/16							
49/17		Curve					
49/18							
49/19							
49/20							
49/21			YES	YES			
50/1							
50/2							
50/3			YES	YES			
50/4							
50/5							
50/6		Curve					
50/7				YES			
50/8			YES	YES			
50/9							
50/10							
50/11			YES	YES			
50/12							
50/13							
50/14							
50/15			YES	YES			
50/16							
50/17							
50/18				YES			
51/1			YES	YES			
51/2							
51/3							
51/4							
51/5			YES				
51/6							
51/7							
51/8							
51/9			YES				
51/10							
51/11							
51/12							
51/13			YES				
51/14							
51/15							
52/1							
52/2			YES	YES			
52/1							
52/2							
52/3							
52/4			YES				
52/5							
52/6			YES	YES			
52/7							

Mast Pole	Tiger / catenary	C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D
lokasies		No3	No3	NO3			
52/8							
52/9							
52/10			YES	YES			
52/11							
52/12							
52/13							
52/14			YES				
52/15							
52/16		Curve		YES			
52/17			YES	YES			
52/18							
53/1							
53/2							
53/3							
53/4			YES	YES			
53/5							
53/6							
53/7							
53/8			YES	YES			
53/9							
53/10			YES				
53/11							
53/12			YES	YES			18/04/2012
53/13							
53/14		Curve					
53/15							
53/16			YES	YES			
54/1							
54/2							
54/3							
54/4							
54/5							
54/6							
54/7							
54/8							
54/9			YES				17/04/2012
54/10							
54/11							
54/12			YES	YES			17/04/2012
54/13							
54/14			YES				
54/15							
54/16							
55/1							
55/2							
55/3							
55/4			YES	YES			16/04/2012
55/5							
55/6							

		C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D
Mast Pole lokasies	Tiger / catenary	No3	No3	NO3			
55/7			YES	YES			16/04/2012
55/8			YES				
55/9							
55/10							
55/11			YES	YES	YES	YES	5/04/20
55/12			YES				
55/13							
55/14							
56/1		Curve					
56/2							
56/1							
56/2							
56/3							
56/4							
56/5							
56/6							
56/7							
56/8							
56/9		Curve	YES				
56/10							
56/11							
56/12			YES	YES			
56/13							
56/14							
56/15			YES				
56/16							
56/17							
56/18							
57/1							
57/2							
57/3			YES				
57/4							
57/5							
57/6							
57/7			YES				
57/8							
57/9							
57/10			YES	YES			
57/11						YES	YES
57/12							
57/13							
57/14							
57/14a							
57/15		Curve					
57/16							
57/17			YES				
58/1							
58/2			YES				
58/3							

Mast Pole lokasies	Tiger / catenary	C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D
58/4		No3	No3	NO3		YES	YES
58/5			YES				
58/6			YES	YES			
58/7							
58/8							
58/9							
58/10			YES	YES			
58/11		Curve					
58/12							
58/13							
58/14			YES	YES			
58/15							
58/16							
58/17							
58/18			YES	YES			
58/19							
58/20							
59/1							
59/2			YES	YES			
59/3							
59/4							
59/5							
59/6							
59/7							
59/8		Curve					
59/9							
59/10			YES	YES			
59/11							
59/12							
59/13							
59/14							
59/15							
59/16							
59/17							
59/18			YES	YES			
59/19							
59/20							
60/1							
60/2			YES	YES			
60/3							
60/4			YES	YES			
60/5							
60/6		Curve				YES	YES
60/7							
60/8		Curve	YES	YES			
60/9							
60/10							
60/11							
60/12			YES			YES	YES

Mast Pole	Tiger / catenary	C u r v e	M / R B o n d i n g	C r o s s B o n d i n g	D i a g o n a l B o n d s	C B O N D S	D A T E R E P A I R E D
lokasies		No3	No3	NO3			
60/13			YES				
60/14							
60/15							
60/16							
60/17							
60/18							
60/19			YES				
60/20			YES				
61/1							
61/2							
61/3							
61/4							
61/5							
61/6							
61/7			YES				
61/8							
61/9							
61/10							
61/11			YES				
61/12							
61/13	51/9 L1		YES				
61/14			YES				
61/15							
61/16			YES	YES			
62/1							
62/2			YES				
62/3							
62/4			YES				
62/5							
62/6							
62/7							
62/8			YES				
62/9			YES				
62/10							
62/11			YES	YES			
62/11B			YES				
62/12							
62/13							
62/14							
62/15			YES	YES			
62/16							
62/17							
62/18							
62/19			YES	YES			
62/20							
63/1							
63/2							
63/3			YES				
63/4							