



**TRANSNET FREIGHT RAIL RME**, a division of

**TRANSNET SOC LTD**

Registration Number 1990/000900/30

[hereinafter referred to as **Transnet**]

**REQUEST FOR QUOTATION [RFQ] No RME RBY 059/2014**

**FOR THE SUPPLY OF: 13m PRE-STRESSED CONCRETE MASTS, COMPLETE WITH  
HOT DIPPED GALVANISED REINFORCING, AS PER  
SPECIFICATION NO: CEE-0159.98 AND DRAWING NO:  
CEE-TMB-115.**

**FOR DELIVERY AND OFF-LOADING AT:**

**NSEZI LOCOMOTIVE DEPOT, RICHARDS BAY, KZN.  
(ONCE OFF SUPPLY, ONLY.)**

**ISSUE DATE: 04 August 2014 to 13 August 2014**

**CLOSING DATE: 14 August 2014**

**CLOSING TIME: 10:00**

**Section 1**  
**NOTICE TO BIDDERS**

Quotations which must be completed as indicated in Section 2 of this RFQ are to be submitted as follows:

**METHOD:** Tender Submissions by fax or e-mail only. (Complete documents, with all supporting documents)

**CLOSING VENUE:** Fax/E-Mail tenders to; 011-774 9760/011-774 9129/011-774 9186 or [Nomsa.maseko@transnet.net](mailto:Nomsa.maseko@transnet.net) .  
Transnet Freight Rail (RME), The Chairman of the Acquisition Council, Inyanda House 1, 21 Wellington Road, Parktown, Gauteng.

**PROOF OF SUBMISSION:** Please fax / e-mail your "PROOF" (Fax Report or E-Mail Proof) with first page of tender document that is stamped with company detail to, 086 515 9978/or [TCPtender@Transnet.net](mailto:TCPtender@Transnet.net) as proof that your submission was submitted successfully.

**1 Responses to RFQ**

Responses to this RFQ [Quotations] must not include documents or reference relating to any other quotation or proposal. Any additional conditions must be embodied in an accompanying letter.

**2 Broad-Based Black Economic Empowerment [B-BBEE]**

Transnet fully endorses and supports the Government's Broad-Based Black Economic Empowerment Programme and it would therefore prefer to do business with local business enterprises who share these same values. Transnet will accordingly allow a "preference" to companies who provide a valid B-BBEE Verification Certificate. All procurement transactions will be evaluated accordingly.

**2.1 B-BBEE Scorecard and Rating**

As prescribed in terms of the Preferential Procurement Policy Framework Act (PPPFA), Act 5 of 2009 and its Regulations, Respondents are to note that the following preference point systems are applicable to all bids:

- the 80/20 system for requirements with a Rand value of up to R1 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R1 000 000 (all applicable taxes included).
- Bidders are to note that if the 80/20 preference point system is stipulated in this RFP and all Bids received exceed R1 000 000.00, the RFP must be cancelled. Similarly, if the 90/10 preference point system is stipulated in this RFP and all Bids received are equal to or below R1 000 000.00, the RFP must be cancelled.

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

When Transnet invites prospective suppliers to submit Proposals for its various expenditure programmes, it requires Respondents to have their B-BBEE status verified in compliance with the Codes of Good Practice issued in terms of the Broad Based Black Economic Empowerment Act No. 53 of 2003.

The Department of Trade and Industry recently revised the Codes of Good Practice on 11 October 2013 [Government Gazette No. 36928]. The Revised Codes will replace the Black Economic Empowerment Codes of Good Practice issued on 9 February 2007. The Revised Codes provide for a one year transitional period starting 11 October 2013. During the transitional period, companies may elect to be measured in terms of the Revised Codes or the 2007 version of the Codes. After the first year of the implementation of the Revised Codes, B-BBEE compliance will be measured in terms of the Revised Codes without any discretion. Companies which are governed by Sector-specific Codes will be measured in terms of those Sector Codes.

As such, Transnet will accept B-BBEE certificates issued based on the Revised Codes. Transnet will also continue to accept B-BBEE certificates issued in terms of the 2007 version of the Codes provided it was issued before 10 October 2014. Thereafter, Transnet will only accept B-BBEE certificates issued based on the Revised Codes.

Respondents are required to complete Annexure A [the B-BBEE Preference Point Claim Form] and submit it together with proof of their B-BBEE status as stipulated in the Claim Form in order to obtain preference points for their B-BBEE status.

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

*[Refer clause 20 below for Returnable Documents required]*

## 2.2 B-BBEE Improvement Plan

B-BBEE Improvement Plan will not be required for this tender.

## 2.3 Supplier Development Initiatives

Supplier development will not apply to this tender.

## 3 Communication

Respondents are warned that a response will be liable for disqualification should any attempt be made by a Respondent either directly or indirectly to canvass any officer(s) or employee of Transnet in respect of this RFQ between the closing date and the date of the award of the business.

A Respondent may, however, before the closing date and time, direct any written enquiries relating to the RFQ to the following Transnet employee:

Name: Eddie Quinn  
Email: eddie.quinn@transnet.net

Respondents may also, at any time after the closing date of the RFQ, communicate with the Regional Supply Chain Manager of the Supply Chain Department on any matter relating to its RFQ response:

Telephone 035 905 4609  
Email Lizelle.smith@transnet.net

**4 Tax Clearance**

The Respondent's original and valid Tax Clearance Certificate must accompany the Quotation. Note that no business shall be awarded to any Respondent whose tax matters have not been declared by SARS to be in order.

**5 VAT Registration**

The valid VAT registration number must be stated here: \_\_\_\_\_ [if applicable].

**6 Legal Compliance**

The successful Respondent shall be in full and complete compliance with any and all applicable national and local laws and regulations.

**7 Changes to Quotations**

Changes by the Respondent to its submission will not be considered after the closing date and time.

**8 Pricing**

All prices must be quoted in South African Rand on a fixed price basis, excluding VAT.

**9 Prices Subject to Confirmation**

Prices quoted which are subject to confirmation will not be considered.

**10 Negotiations**

Transnet reserves the right to undertake post-tender negotiations with selected Respondents or any number of shortlisted Respondents.

**11 Binding Offer**

Any Quotation furnished pursuant to this Request shall be deemed to be an offer. Any exceptions to this statement must be clearly and specifically indicated.

**12 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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Respondent's Signature

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Date & Company Stamp

Transnet reserves the right to award business to the highest scoring bidder/s unless objective criteria justify the award to another bidder.

**13 Transnet’s supplier integrity pact**

Transnet’s Integrity Pact requires a commitment from suppliers and Transnet that they will not engage in any corrupt and fraudulent practices, anti-competitive practices; and act in bad faith towards each other. The Integrity Pact also serves to communicate Transnet’s Gift Policy as well as the remedies available to Transnet where a Respondent contravenes any provision of the Integrity Pact.

Respondents are required to familiarise themselves with the contents of the Integrity Pact which is available on the Transnet Internet site [www.transnet.net/Tenders/Pages/default.aspx] or on request. Furthermore, Respondents are required to certify that they have acquainted themselves with all the documentation comprising the Transnet Integrity Pact and that they fully comply with all the terms and conditions stipulated in the Transnet Supplier Integrity Pact as follows:

<b>YES</b>		<b>NO</b>	
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Should a Respondent need to declare previous transgressions or a serious breach of law in the preceding 5 years as required by Annexure A to the Integrity Pact, such declaration must accompany the Respondent’s bid submission.

**14 Respondent’s Samples**

Respondent’s samples will not be required for this tender.

**15 Evaluation Criteria**

Transnet will utilise the following criteria [not necessarily in this order] in choosing a Supplier/Service Provider, if so required:

Criterion/Criteria	Explanation
<b>Administrative responsiveness</b>	Completeness of response and returnable documents
<b>Substantive responsiveness</b>	Prequalification criteria, if any, must be met and whether the Bid materially complies with the scope and/or specification given. <ul style="list-style-type: none"> <li>• All items on the Pricing Schedule should be priced; if not it will result in a bid being disqualified.</li> </ul>
<b>Final weighted</b>	<ul style="list-style-type: none"> <li>• Pricing and price basis [firm] - whilst not the sole factor for consideration,</li> </ul>

<p><b>evaluation based on 80/20 preference point system as indicated in paragraph 2</b></p>	<p>competitive pricing and overall level of unconditional discounts<sup>1</sup> will be critical</p> <ul style="list-style-type: none"> <li>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 indicated in Annexure A.</li> </ul>
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**16 Validity Period**

Transnet desires a validity period of 90 [ninety] days from the closing date of this RFQ.  
 This RFQ is valid until \_\_\_\_\_.

**17 Banking Details**

BANK: \_\_\_\_\_  
 BRANCH NAME / CODE: \_\_\_\_\_  
 ACCOUNT HOLDER: \_\_\_\_\_  
 ACCOUNT NUMBER: \_\_\_\_\_

**18 Company Registration**

Registration number of company / C.C. \_\_\_\_\_  
 Registered name of company / C.C. \_\_\_\_\_

**19 Disclosure of Prices Quoted**

Respondents must indicate here whether Transnet may disclose their quoted prices and conditions to other Respondents:

YES  NO

**20 Returnable Documents**

**Returnable Documents** means all the documents, Sections and Annexures, as listed in the tables below.

a) Respondents are required to submit with their Quotations the **mandatory Returnable Documents**, as detailed below.

***Failure to provide all these Returnable Documents at the Closing Date and time of this RFQ will result in a Respondent's disqualification. Respondents are therefore urged to ensure that all these Documents are returned with their Quotations.***

All Sections, as indicated in the footer of each page, must be signed, stamped and dated by the Respondent. Please confirm submission of these mandatory Returnable Documents by so indicating [Yes or No] in the table below:

<sup>1</sup> 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.

<b>Mandatory Returnable Documents</b>	<b>Submitted [Yes or No]</b>
SECTION 2 : Quotation Form	

- b) In addition to the requirements of section (a) above, Respondents are further required to submit with their Quotations the following **essential Returnable Documents** as detailed below.

***Failure to provide all these Returnable Documents may result in a Respondent's disqualification. Respondents are therefore urged to ensure that all these documents are returned with their Quotations.***

All Sections, as indicated in the footer of each page, must be signed, stamped and dated by the Respondent. Please confirm submission of these essential Returnable Documents by so indicating [Yes or No] in the table below:

<b>Essential Returnable Documents</b>	<b>Submitted [Yes or No]</b>
SECTION 1 : Notice to Bidders	
- Valid and original B-BBEE Verification Certificate or certified copy thereof [Large Enterprises and QSEs] Note: failure to provide a valid B-BBEE Verification Certificate at the closing date and time of the RFQ will result in an automatic score of zero for preference	
- Valid and original B-BBEE certificate/ sworn affidavit or certified copy thereof from auditor, accounting officer or SANAS accredited Verification Agency [EMEs] Note: failure to provide a valid B-BBEE Verification Certificate at the closing date and time of the RFQ will result in an automatic score of zero being allocated for preference	
- In the case of Joint Ventures, a copy of the Joint Venture Agreement or written confirmation of the intention to enter into a Joint Venture Agreement	
- Original and Tax Clearance Certificate [Consortia / Joint Ventures must submit a separate Tax Clearance Certificate for each party]	
- SECTION 3: Standard Terms and Conditions of Contract for the Supply of Goods or Services to Transnet	
SECTION 4 : Vendor Application Form	
- Original cancelled cheque or bank verification of banking details	
- Certified copies of IDs of shareholder/directors/members [as applicable]	
- Certified copies of the relevant company registration documents from Companies and Intellectual Property Commission (CIPC)	
- Certified copies of the company's shareholding/director's portfolio	
- Entity's letterhead	
- Certified copy of VAT Registration Certificate [RSA entities only]	
- Certified copy of valid Company Registration Certificate [if applicable]	
- A signed letter from Respondent's auditor or accountant confirming most recent annual turnover figures	
ANNEXURE A – B-BBEE Preference Points Claim Form	

Essential Returnable Documents	Submitted [Yes or No]
ANNEXURE B – Specification of the Goods	

**"PREVIEW COPY ONLY"**

\_\_\_\_\_  
Respondent's Signature

\_\_\_\_\_  
Date & Company Stamp



## Section 2 QUOTATION FORM

I/We \_\_\_\_\_  
hereby offer to supply the goods/services at the prices quoted in the Price Schedule below, in accordance with the conditions related thereto.

I/We agree to be bound by those terms and conditions in:

- the Standard Terms and Conditions for the Supply of Goods or Services to Transnet [Section 3 hereof]; and
- any other standard or special conditions mentioned and/or embodied in this Request for Quotation.

I/We accept that unless Transnet should otherwise decide and so inform me/us, this Quotation [and, if any, its covering letter and any subsequent exchange of correspondence], together with Transnet's acceptance thereof shall constitute a binding contract between Transnet and me/us.

I/We further agree that if, after I/we have been notified of the acceptance of my/our Quotation, I/we fail to deliver the said goods/service/s within the delivery lead-time quoted, Transnet may, without prejudice to any other legal remedy which it may have, cancel the order and recover from me/us any expenses incurred by Transnet in calling for Quotations, and/or having to accept any less favourable offer.

### Price Schedule

I/We quote as follows for the goods required, on a "delivered nominated destination" basis, excluding VAT:

Item No	Description of Goods /Services	Unit of Measure	Quantity	Unit Price (ZAR)	Total Price (ZAR)
1	13m, .84KN –m, Pre-Stressed Concrete Mast, concrete with Hot Dipped Galvanised Reinforcing, as per Specification No: CEE-0159, Issued in 2015, and Drawing No: CEE-TMB-115.	Each	215		

**Delivery Lead-Time from date of purchase order:** \_\_\_\_\_ [days/weeks]

#### Notes to Pricing:

- a) All Prices must be quoted in South African Rand, exclusive of VAT
- b) To facilitate like-for-like comparison bidders must submit pricing strictly in accordance with this price schedule and not utilise a different format. Deviation from this pricing schedule could result in a bid being disqualified.
- c) Please note that should you have offered a discounted price(s), Transnet will only consider such price discount(s) in the final evaluation stage if offered on an unconditional basis.
- d) Prices are to be quoted on a delivery and offloaded basis to the Nsezi Locomotive Depot, Richards Bay, KZN, as per Annexure B: Specification of Goods.

\_\_\_\_\_  
Respondent's Signature

\_\_\_\_\_  
Date & Company Stamp

### Section 3

#### STANDARD TERMS AND CONDITIONS FOR THE SUPPLY OF GOODS OR SERVICES TO TRANSNET

A Supplier/Service Provider shall be obliged to adhere to the Standard Terms and Conditions for the Supply of Goods and Services to Transnet as expressed hereunder. Should the Respondent find any condition(s) unacceptable, it should indicate which condition(s) is/are unacceptable and offer an alternative(s). A Quotation submitted by a Respondent will be subjected to review and acceptance or rejection of its proposed contractual terms and conditions by Transnet's Legal Counsel, prior to consideration for an award of business.

#### 1 SOLE AGREEMENT

Unless otherwise agreed in writing, these terms [Terms and each Term] and Transnet's purchase order(s) [Order or Orders] represent the only conditions upon which Transnet SOC Ltd [Transnet] procures goods [the Goods] or services [the Services] specified in the Order from the person to whom the Order is addressed [the Supplier/Service Provider]. Transnet does not accept any other conditions which the Supplier/Service Provider may specify, unless otherwise agreed to by Transnet in writing. In the event of any inconsistency between these Terms and any Order, these Terms shall take precedence.

#### 2 CONFORMITY WITH ORDER

Goods/Services shall conform strictly with the Order. The Supplier/Service Provider shall not vary the quantities specified and/or the specification, if any, stipulated in the Order, without the prior written consent of Transnet. The Supplier/Service Provider warrants that the Goods/Services shall be fit for their purpose and of satisfactory quality.

#### 3 DELIVERY AND TITLE

3.1 The delivery dates and addresses are those in the Order. Time shall be of the essence in respect of the Supplier's/Service Provider's obligations under the Order.

3.2 The Supplier/Service Provider will not be excused for delay in delivery or performance except due to circumstances outside its control and then only subject to the Supplier/Service Provider having notified Transnet in writing on becoming aware of such circumstances. Transnet may terminate an Order, in whole or in part, without incurring any liability to the Supplier/Service Provider if such a delay becomes, in Transnet's absolute opinion, significant.

3.3 Risk of loss or damage to Goods shall pass to Transnet on delivery and acceptance, and title shall pass to Transnet when payment to the Supplier for the Goods has been effected.

3.4 If on delivery, the Goods/Services do not conform to the Order, Transnet may reject the Goods/Services and the Supplier/Service Provider shall promptly rectify any defects or in Transnet's opinion, supply appropriate replacement Goods/Services at the Supplier's/Service Provider's expense within the specified delivery times, without any liability due by Transnet. Goods shall be subject to such testing and/or inspection as Transnet may consider necessary.

#### 4 PRICE AND PAYMENT

- 4.1 Prices specified in an Order cannot be increased. Payment for the Goods/Services shall be made by Transnet against an original undisputed invoice(s) [a Tax Invoice], supporting documentation and month-end statement from the Supplier/Service Provider. Tax Invoices plus supporting documentation shall be posted to the address shown in the Order.
- 4.2 Payment of the Supplier's/Service Provider's valid Tax Invoice(s) will be made by Transnet in the South African currency and on the terms stated in the Order, the standard payment terms being 30 [thirty] days from date of receipt by Transnet of a month-end statement, unless otherwise agreed to in writing. Transnet shall arrange for payment of such Tax Invoices and any pre-authorised additional expenses incurred, provided that the authorised expenses are supported by acceptable documentary proof of expenditure incurred [where this is available]. Any amounts due in terms of these Terms shall be paid to the Supplier/Service Provider, taking into account any deduction or set-off and bank charges.

#### 5 PROPRIETARY RIGHTS LIABILITY

If any allegations should be made or any claim asserted against Transnet that ownership of, or any act or omission by Transnet in relation to Goods/Services or any written material provided to Transnet relating to any Goods/Services or pursuant to an Order, being a violation or infringement of any third party's contractual, industrial, commercial or intellectual property rights including but not limited to any patent, registered design, design right, trade mark, copyright or service mark on any application thereof, the Supplier/Service Provider hereby indemnifies Transnet against and hold it harmless from any and all losses, liabilities, costs, claims, damages and expenses [including any legal fees] arising directly or indirectly from such allegation or claim provided that this indemnity shall not apply where the allegation or claim arises solely as a result of the Supplier/Service Provider following a design or process originated and furnished by Transnet. The Supplier/Service Provider shall either

- a) procure for Transnet the right to continue using the infringing Goods; or
- b) modify or replace the Goods/Services so that they become non-infringing,

provided that in both cases the Goods/Services shall continue to meet Transnet's requirements and any specifications stipulated in the Order. Should neither option be possible, the Supplier/Service Provider may remove, with Transnet's prior written consent, such Goods/Services and will pay to Transnet a sum equivalent to the purchase price. If Transnet refuses to give such consent, the Supplier/Service Provider shall have no liability in respect of any continued use of the infringing Goods/Services after Supplier's/Service Provider's prior written request to remove the same.

#### 6 PROPRIETARY INFORMATION

All information which Transnet has divulged or may divulge to the Supplier/Service Provider and any information relating to Transnet's business which may have come into the Supplier's/Service Provider's possession whilst carrying out an Order, and the existence of the Order, shall be treated by the Supplier/Service Provider as confidential information and shall not, without Transnet's prior written consent, be disclosed to any third party, or be used or copied for any purposes other than to perform the Order. This clause does not apply to information which is public knowledge or available from other sources other than by breach of this Term. Upon request by Transnet, the Supplier/Service Provider shall return all

materials issued pursuant to the Order and, pending this, shall protect Transnet's rights in any such materials. Such confidential information shall at all material times be the property of Transnet.

## **7 DEVELOPMENT WORK IN THE PRODUCTION OF GOODS**

If the production or provision of any Goods involves research and/or development which are wholly or partly funded by Transnet, then all intellectual property or other rights as a result thereof shall be the property of Transnet on creation.

## **8 PUBLICITY**

The Supplier/Service Provider shall not name Transnet or use its trademarks, service marks [whether registered or not] or Goods in connection with any publicity without Transnet's prior written consent.

## **9 AFTER SALES SERVICE**

The Supplier shall provide replacement parts necessary to ensure the uninterrupted operation of the Goods supplied for the duration of the warranty period, from delivery of any particular item of the Goods and if requested by Transnet shall make these parts available to a third party maintainer of Transnet's choice at the same price as if the parts had been supplied to Transnet. The Supplier undertakes to provide a maintenance service for Goods, should Transnet so request, on terms to be agreed. If the Order so indicates, the Supplier will provide a warranty service for the Goods at a level to be agreed with Transnet.

## **10 TERMINATION OF ORDER**

10.1 Transnet may cancel an Order in whole or in part at any time upon at least 7 [seven] days' written notice to the Supplier/Service Provider, or when there is a change in control of the Supplier/Service Provider or the Supplier/Service Provider commits any serious breach or any repeated or continued material breach of its obligations under these Terms and/or Order or shall have been guilty of conduct tending to bring itself into disrepute, on written notice to the Supplier/Service Provider when such work on the Order shall stop.

10.2 Transnet shall pay the Supplier/Service Provider a fair and reasonable price for justified work in progress, where such price reflects only those costs not otherwise recoverable by the Supplier/Service Provider, at the time of termination, and the Supplier/Service Provider shall give Transnet full assistance to check the extent of such work in progress. Payment of such price shall be in full and final satisfaction of any claims arising out of such termination and upon such payment the Supplier/Service Provider shall deliver to Transnet all work, including any materials, completed or in progress. The sum payable to the Supplier/Service Provider under this clause will not in any event exceed the total amount that would have been payable to the Supplier/Service Provider had the Order not been terminated.

10.3 In the event of termination the Supplier/Service Provider must submit all claims within 2 [two] months of termination after which time claims will only be met in what Transnet considers exceptional circumstances.

10.4 If the Goods or Services are not provided in accordance with an Order, the Order shall be deemed terminated and the Supplier/Service Provider shall compensate Transnet for any costs incurred in obtaining substitute Goods or any damage caused due to the failure or delay in the delivery.

**11 ACCESS**

The Supplier/Service Provider shall be liable for the acts, omissions and defaults of its personnel or agents who, for the purposes of the Order, shall be treated as if they are the Supplier's/Service Provider's employees. The Supplier/Service Provider shall ensure that any such personnel or agents, whilst on Transnet's premises, shall comply with Transnet's health and safety, security and system security rules and procedures as and where required.

**12 WARRANTY**

The Supplier/Service Provider warrants that it is competent to supply the Goods/Services in accordance with these Terms to the reasonable satisfaction of Transnet and that all Goods/Services delivered under the Order: (a) conform and comply in all relevant legislation, standards, directives and orders related to *[inter alia]* the supply, manufacture and use of the Goods/Services in force at the time of delivery, and to any specifications referred to in the Order; (b) will not cause any deterioration in the functionality of any Transnet equipment; and (c) do not infringe any third party rights of any kind. The Supplier/Service Provider hereby indemnifies Transnet against all losses, liabilities, costs, claims, damages, expenses and awards of any kinds incurred or made against Transnet in connection with any breach of this warranty.

**13 INSOLVENCY**

If the Supplier/Service Provider shall have a receiver, manager, administrator, liquidator or like person appointed over all or any part of its assets or if the Supplier/Service Provider compounds with its creditors or passes a resolution for the winding up or administration of the Supplier/Service Provider, Transnet is at liberty to terminate the Order or Orders forthwith, or at its option, to seek performance by any such appointed person.

**14 ASSIGNMENT**

The Supplier/Service Provider shall not assign its obligations under an Order without Transnet's prior written consent, which consent shall not be unreasonably withheld or delayed.

**15 NOTICES**

Notices under these Terms shall be delivered by hand to the relevant addresses of the parties in the Order or may be served by facsimile or by email, in which event notice shall be deemed served on acknowledgement of receipt by the recipient.

**16 LAW**

Orders shall be governed by and interpreted in accordance with South African law and any disputes arising herein shall be subject to South African arbitration under the rules of the Arbitration Foundation of South Africa, which rules are deemed incorporated by reference in this clause. The reference to arbitration shall not prevent Transnet referring the matter to any South African courts, having jurisdiction, to which the Supplier/Service Provider hereby irrevocably submits but without prejudice to Transnet's right to take proceedings against the Supplier/Service Provider in other jurisdictions and/or obtaining interim relief on an urgent basis from a court of competent jurisdiction pending the decision in other courts or from instituting in any court of competent jurisdiction any proceedings for an interdict or any other injunctive relief. If the Supplier/Service Provider does not have a registered office in the South Africa it will at all times maintain

an agent for service of process in South Africa and shall give Transnet the name and address of such agent as such may be amended, in writing, from time to time.

**17 GENERAL**

Completion or termination of an Order shall be without prejudice to any Term herein which by its nature would be deemed to continue after completion or termination, including but not limited to clauses 5, 6 and 10. Headings are included herein for convenience only. If any Term herein be held illegal or unenforceable, the validity or enforceability of the remaining Terms shall not be affected. No failure or delay by Transnet to enforce any rights under these Terms will operate as a waiver thereof by Transnet. All rights and remedies available to either party under these Terms shall be in addition to, not to the exclusion of, rights otherwise available at law.

**18 COUNTERPARTS**

These Terms and conditions may be signed in any number of counterparts, all of which taken together shall constitute one and the same instrument. Any party may enter into this agreement by signing any such counterpart.

"PREVIEW COPY ONLY"

By signing this RFQ document, the Respondent is deemed to acknowledge that he/she has made himself/herself thoroughly familiar with all the conditions governing this RFQ, including those contained in any printed form stated to form part hereof and Transnet SOC Ltd will recognise no claim for relief based on an allegation that the Respondent overlooked any such condition or failed to properly take it into account for the purpose of calculating quoted prices or otherwise.

SIGNED at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_

.....  
SIGNATURE OF RESPONDENT'S AUTHORISED REPRESENTATIVE

NAME: \_\_\_\_\_

DESIGNATION: \_\_\_\_\_

REGISTERED NAME OF COMPANY: \_\_\_\_\_

PHYSICAL ADDRESS:  
\_\_\_\_\_  
\_\_\_\_\_

**Respondent's contact person** *[Please complete]*

Name	:	
Designation	:	
Telephone	:	
Cell Phone	:	
Fax/mile	:	
Email	:	
Website	:	

**"PREVIEW COPY ONLY"**

**Transnet urges its clients, suppliers and the general public  
to report any fraud or corruption to  
TIP-OFFS ANONYMOUS : 0800 003 056**

\_\_\_\_\_  
Respondent's Signature

\_\_\_\_\_  
Date & Company Stamp

**Section 4**  
**VENDOR APPLICATION FORM**

*Respondents are to furnish the following documentation and complete the Vendor Application Form below:*

1. **Original** cancelled cheque **OR** letter from the Respondent's bank verifying banking details **[with bank stamp]**
2. **Certified** copy of Identity Document(s) of Shareholders/Directors/Members [where applicable]
3. **Certified copies** of the relevant company registration documents from Companies and Intellectual Property Commission (CIPC)
4. **Certified copies** of the company's shareholding/director's portfolio
5. A letter on the company's letterhead confirm physical and postal addresses
6. **Original** valid SARS Tax Clearance Certificate
7. **Certified copy** of VAT Registration Certificate
8. **A valid and original** B-BBEE Verification Certificate / sworn affidavit **or certified copy** thereof meeting the requirements for B-BBEE compliance as per the B-BBEE Codes of Good Practice
9. **Certified copy** of valid Company Registration Certificate [if applicable]

**Vendor Application Form**

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 email address

Company website address

Bank name     Branch & Branch code

Account holder     Bank account number

Postal address

\_\_\_\_\_  
Respondent's Signature

\_\_\_\_\_  
Date & Company Stamp



Code

Physical Address Code

Contact person

Designation

Telephone

Email

Annual turnover range [last financial year] < R5 m R5 - 35 m > R35 m

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 services [e.g. Stationery/Consulting]

Complete B-BBEE Ownership Details:

% Black ownership % Black women ownership % Disabled Black ownership % Youth ownership

Does your entity have a B-BBEE certificate Yes No

What is your B-BBEE status [Level 1 to 9 / Unknown]

How many permanent employees does the entity employ Permanent Part time

If you are an existing vendor with Transnet please complete the following:

Transnet contact person

Contact number

Transnet Operating Division

Duly authorised to sign for and on behalf of Company / Organisation:

Name		Designation	
Signature		Date	

**FOR THE SUPPLY OF 13m PRE-STRESSED CONCRETE MASTS, DELIVERED AND OFFLOADED AT THE NSEZI LOCOMOTIVE DEPOT IN RICHARDS BAY.  
(ONCE OFF SUPPLY.)**

**ANNEXURE A: B-BBEE PREFERENCE POINTS CLAIM FORM**

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

**1. INTRODUCTION**

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

**2. GENERAL DEFINITIONS**

- 2.1 **"all applicable taxes"** include value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies;
- 2.2 **"B-BBEE"** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- 2.3 **"B-BBEE status of contributor"** means the B-BBEE status received by a measured entity based on its overall performance using the relevant scorecard contained in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- 2.4 **"Bid"** means a written offer in a prescribed or stipulated form in response to an invitation by Transnet for the provision of goods, works or services;
- 2.5 **"Broad-Based Black Economic Empowerment Act"** means the Broad-Based Black Economic Empowerment Act, 2003 [Act No. 53 of 2003];
- 2.6 **"comparative price"** means the price after the factors of a non-firm price and all unconditional discounts that can be utilised have been taken into consideration;
- 2.7 **"consortium or joint venture"** means an association of persons for the purpose of combining

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

**3. ADJUDICATION USING A POINT SYSTEM**

- 3.1 The Bidder obtaining the highest number of total points for the evaluation criteria as enumerated in Section 2 of the RFP will be awarded the contract, unless objective criteria justifies the award to another bidder.
- 3.2 Preference points shall be calculated after prices have been brought to a comparative basis taking into account all factors of non-firm prices and all unconditional discounts.
- 3.3 Points scored will be rounded off to 2 [two] decimal places.
- 3.4 In the event of equal points scored, the Bid will be awarded to the Bidder scoring the highest number of preference points for B-BBEE.
- 3.5 However, when functionality is part of the evaluation process and two or more Bids have scored equal points including equal preference points for B-BBEE, the successful Bid will be the one scoring the highest score for functionality.
- 3.6 Should two or more Bids be equal in all respect, the award shall be decided by the drawing of lots.

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

- 4.1 In terms of the Preferential Procurement Regulations, 2011, preference points shall be awarded to a 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 [Maximum 10]
1	10
2	9.5
3	8.0
4	7.5
5	6.0
6	4.5
7	4.0
8	1.0
Non-compliant contributor	0

- 4.2 Bidders who qualify as EMEs in terms of the 2007 version of the Codes of Good Practice must submit a certificate issued by an Accounting Officer as contemplated in the CCA or a Verification Agency accredited by SANAS or a Registered Auditor. Registered auditors do not need to meet the prerequisite for IRBA's approval for the purpose of conducting verification and issuing EME's with B-BBEE Status Level Certificates.
- 4.3 Bidders who qualify as EMEs in terms of the Revised Codes of Good Practice issued on 11 October 2013 in terms of Government Gazette No. 36928 are only required to obtain a sworn affidavit on an annual basis confirming that the entity has an Annual Total Revenue of R10 million or less and the entity's level of Black ownership.
- 4.4 In terms of the 2007 version of the Codes of Good Practice, Bidders other than EMEs must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.
- 4.5 In terms of the Revised Codes of Good Practice issued on 11 October 2013 in terms of Government Gazette No. 36928, Bidders who qualify as QSEs are only required to obtain a sworn affidavit on an annual basis confirming that the entity has an Annual Total Revenue of R50 million or less and the entity's Level of Black ownership. Large enterprises must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.
- 4.6 A trust, consortium or joint venture will qualify for points for its B-BBEE status level as a legal entity, provided that the entity submits its B-BBEE status level certificate.
- 4.7 A trust, consortium or joint venture will qualify for points for their B-BBEE status level as an unincorporated entity, provided that the entity submits their consolidated B-BBEE scorecard as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate bid.
- 4.8 Tertiary institutions and public entities will be required to submit their B-BBEE status level

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certificates in terms of the specialised scorecard contained in the B-BBEE Codes of Good Practice.

- 4.9 A person will not be awarded points for B-BBEE status level if it is indicated in the Bid documents that such a Bidder intends subcontracting more than 25% [twenty-five per cent] of the value of the contract to any other enterprise that does not qualify for at least the same number of points that such a Bidder qualifies for, unless the intended subcontractor is an EME that has the capability and ability to execute the subcontract.
- 4.10 A person awarded a contract may not subcontract more than 25% [twenty-five per cent] of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is subcontracted to an EME that has the capability and ability to execute the subcontract.
- 4.11 Bidders are to note that in terms of paragraph 2.6 of Statement 000 of the Revised Codes of Good Practice issued on 11 October 2013 in terms of Government Gazette No. 36928, any representation made by an entity about its B-BBEE compliance must be supported by suitable evidence or documentation. As such, Transnet reserves the right to request such evidence or documentation from Bidders in order to verify any B-BBEE recognition claimed.

**5. B-BBEE STATUS AND SUBCONTRACTING**

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

B-BBEE Status Level of Contributor \_\_\_\_\_ = \_\_\_\_\_ [maximum of 10 points]

Note: Points claimed in respect of this paragraph 5.1 must be in accordance with the table reflected in paragraph 4.1 above and must be substantiated by means of a B-BBEE certificate issued by a Verification Agency accredited by SANAS or a Registered Auditor approved by IRBA or a sworn affidavit in the case of an EME or QSE.

**5.2 Subcontracting:**

Will any portion of the contract be subcontracted? YES/NO [delete which is not applicable]

If YES, indicate:

- (i) What percentage of the contract will be subcontracted? .....%
- (ii) The name of the subcontractor .....
- (iii) The B-BBEE status level of the subcontractor .....
- (iv) Is the subcontractor an EME? YES/NO

**5.3 Declaration with regard to Company/Firm**

- (i) Name of Company/Firm.....
- (ii) VAT registration number.....
- (iii) Company registration number.....
- (iv) Type of Company / Firm [TICK APPLICABLE BOX]
  - Partnership/Joint Venture/Consortium
  - One person business/sole propriety
  - Close Corporations

\_\_\_\_\_  
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- Company (Pty) Ltd
- (v) Describe Principal Business Activities

.....  
 .....  
 .....

(vi) Company Classification [TICK APPLICABLE BOX]

- Manufacturer
- Supplier
- Professional Service Provider
- Other Service Providers, e.g. Transporter, etc.

(vii) Total number of years the company/firm has been in business.....

**BID DECLARATION**

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

- (i) The information furnished is true and correct.
- (ii) In the event of a contract being awarded as a result of points claimed as shown in paragraph 6 above, the contractor may be required to furnish documentary proof to the satisfaction of Transnet that the claims are correct.
- (iii) If the B-BBEE status level of contribution has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, Transnet may, in addition to any other remedy it may have:
  - (a) disqualify the person from the bidding process;
  - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
  - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
  - (d) restrict the Bidder or contractor, its shareholders and directors, and/or associated entities, or only the shareholders and directors who acted in a fraudulent manner, from obtaining business from Transnet for a period not exceeding 10 years, after the *audi alteram partem* [hear the other side] rule has been applied; and/or
  - (e) forward the matter for criminal prosecution.

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**WITNESSES:**

1. ....

2. ....

SIGNATURE OF BIDDER

DATE:.....

COMPANY NAME: .....

ADDRESS:.....

## **ANNEXURE B: SPECIFICATION OF GOODS**

### **FOR THE SUPPLY OF 13m PRE-STRESSED CONCRETE MASTS, DELIVERED AND OFFLOADED TO THE NSEZI LOCOMOTIVE DEPOT IN RICHARDS BAY. (ONCE OFF SUPPLY.)**

#### **1. SCOPE**

The contract will be for the supply, delivery and safe offloading of 13m pre-stressed concrete masts. (Once off supply only.)

#### **2. SPECIFICATIONS**

Transnet only approve products that comply with the attached specification number: CEE-0159 issue 2013 and drawing number: CEE-TMB-115, if any other product is offered, this product has to be accompanied with a Transnet Certificate of approval.

#### **3. DELIVERY REQUIREMENTS**

The 13m Pre-Stressed Concrete Masts are required at the Nsezi Locomotive Depot in Richards Bay.

#### **4. SITE REQUIREMENTS**

All personnel to be fully dressed with standard PPE at all times and adhere to site safety requirements. The delivery vehicle to be fully road worthy, with no fuel/oil leaks at all.

The lifting / off-loading equipment must have valid test certificates and proof of the qualified rigging team to safely offload the 13m masts at our Nsezi locomotive depot.





**TRANSNET**  
freight rail

A Division of Transnet Limited

## TECHNOLOGY MANAGEMENT

### SPECIFICATION

# PRE-STRESSED CONCRETE MASTS FOR ELECTRIFICATION PROJECTS

Author: Chief Engineering Technician  
Technology Management

W.Schoeman.

Approved: Engineer  
Technology Management

B.Vandeyar.

Authorised: Senior Engineer  
Technology Management

L.Borchard .

Date: 03 July 2013

Circulation Restricted To:

Transnet Freight Rail

Transnet and Relevant Third Parties

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**1.0 SCOPE**

This specification covers Transnet Freight Rail's requirements for the design, manufacture and supply of pre-stressed concrete masts for use as support structures for electrification systems. Two types of masts can be specified: - Type A to be used with core type foundations; Type B to be used with bolt group foundations.

**2.0 APPENDICES**

The following appendices form an integral part of this specification:

- Appendix 1 - Schedule of requirements
- Appendix 2 - Technical data sheet
- Appendix 3 - Mast loading detail
- Appendix 4 - Foundation design requirements

**3.0 STANDARDS AND PUBLICATIONS**

The following publications (latest edition) are referred to herein:

**3.1 South African Bureau of Standards:**

- SANS 10100 - 1: The Structural Use of Concrete.
- SANS 9001: Quality Management.
- SANS 10111: Engineering Drawing.
- SANS 121 Hot dip galvanized coatings on fabricated iron and steel articles. Specifications and test methods

**3.2 Transnet Freight Rail:**

- CEE-0045: Painting of Steel Components of Electrical Equipment.
- CEE-0183: Hot Dip Galvanising and Painting of Electrification Steelwork.
- CEE-0244 Drawings, Catalogues, Instruction manuals and Spares list for Electrical Equipment supplied under contract.

**4.0 DEFINITIONS**

For the purpose of this standard the following definitions shall apply:

- 4.1 **WORKING LOAD.** The load applied in a transverse direction at a point 7 500mm plus the specified depth in the foundation from the butt of the mast (if type A) which equates to the rated bending moment. (See Appendix 1 clause 3).
- 4.2 **DESIGN LOAD.** The working load multiplied by a factor of safety of 2. The ultimate strength of the mast shall equal or exceed this value.
- 4.3 **ULTIMATE LOAD.** The load at which failure occurs when tested as described in section 12.
- 4.4 **PROOF LOAD (Tp).** The load applied to the mast to determine the maximum deflection.  
NOTE: For the purpose of this specification the proof load will be equal to the working load.
- 4.5 **STATIC LOAD (Tst).** The load applied to the mast over an 8 hour period to determine the creep deflection.  
NOTE: For the purpose of this specification the static load will be equal to  $\frac{2}{3}$  of the proof load.
- 4.6 **LONGITUDINAL DIRECTION.** The horizontal direction in the same line as the run of the overhead track conductors.
- 4.7 **TRANSVERSE DIRECTION.** The horizontal direction at right angles to the run of the overhead conductors.
- 4.8 **FAILURE.** The inability of a mast under test to support any further additional load.

## 5.0 METHOD OF TENDERING

The "Technical Data Sheet" - Appendix 2 to this specification shall be fully completed by tenderers in respect of each design/size of mast offered. Failure to submit fully completed data sheet(s) may preclude a tender from further consideration.

## 6.0 SERVICE CONDITIONS

- 6.1 The masts offered shall be designed for use and operate satisfactorily under the following environmental conditions:

Altitude: 0 - 1 800m above sea level.

Relative Humidity: 10% to 90%.

Ambient Temperature: Minus 10 °C to plus 55 °C.

Level of Pollution: Heavily salt laden or polluted with smoke from industrial sources.

Lightning conditions: 19.2 ground flashes/km<sup>2</sup>/annum

- 6.2 The masts offered shall be designed for use and operate satisfactorily under the following service conditions:

Air Pollution: Steam and diesel electric locomotives will operate under the traction equipment.

Vibration: Severe, train traffic in the immediate vicinity.

Fire Hazard: Grass verges surrounding Transnet Freight Rail's track formations are burnt annually. Otherwise fire hazard normal.

## 7.0 QUALITY MANAGEMENT

- 7.1 The manufacturer must indicate at the tendering stage what steps have been taken to implement a Quality System in terms of SANS 9001. Preference shall be given to tenderers implementing a Quality System to SANS 9001.

- 7.2 A system of Statistical Process Control must be part of the manufacturing procedure.

- 7.3 A Quality Plan in terms of SANS 9001 must be forwarded to this office for approval prior to any work being started on this project, so that approval may be obtained before production commences.

## 8.0 COMPLIANCE

Prestressed concrete masts offered by the tenderer and accepted by Transnet Freight Rail on the basis of the tender documents shall be supplied strictly in accordance with the requirements of the contract entered into between the successful tenderer and Transnet Freight Rail. No changes or substitutes will be allowed without the written consent of Transnet Freight Rail to such changes or substitutes.

## 9.0 GENERAL INFORMATION

This specification covers *inter alia* the design, manufacture and supply of equipment which only firms with special knowledge and experience can perform to Transnet Freight Rail's satisfaction. Tenders of firms, who have designed, manufactured and supplied similar equipment to Transnet Freight Rail or other railways will receive preference. Any other designs depicting improvements to the Transnet Freight Rail specification will be considered at the discretion of Transnet Freight Rail and shall be submitted as a fully alternative offer. The design thereof shall be supported by fully detailed and completed calculations (not computer

printouts) and these calculations shall be made available to Transnet Freight Rail at the time of tender.

## 10.0 TECHNICAL REQUIREMENTS

- 10.1 The pre-stressed concrete masts shall be designed for use as electrification structures to support an electrical overhead traction wire system strictly in accordance with the load and deflection requirements laid down in Appendix 3. Two types of pre-stressed masts may be ordered. The first type (A) is a mast suitable for core type foundations, and the second type (B) of mast shall be fitted with a base plate for use with bolt group foundations.
- 10.2 Tenderers shall submit detailed design calculations and drawings of the mast design offered with their tender documents. Full details of similar practical applications, if any, and actual in-service test results should be provided in support of the above.
- 10.3 The design safety factor, based on the destruction tests laid down herein, shall be at least 2. See also SANS 10100 -1 clause 3.4.6.
- 10.4 The corners of all masts shall be rounded to an approximate 4mm radius, and the surface smoothed all around either during manufacture or by grinding after hardening so that they do not present a dangerously sharp edge which could, for example, cause tearing or excessive wear of safety belts. No blow holes in excess of Ø5mm shall be evident, and the density of blow holes shall not exceed 10 holes per dm<sup>2</sup>.
- 10.5 Exposed ends of pre-stressing tendons shall be recessed at the top of the mast and completely sealed with a durable compound. All exposed metal components shall be of stainless steel or recessed and suitably sealed. Tenderers are invited to comment on the need to protect the mast top against lightning.
- 10.6 The concrete cover to all steel reinforcement including stirrups and pre-stressing tendons shall be not less than 25mm. This depth is to be verified with a device designed to measure re-bar position.
- 10.7 Masts are not to be designed to withstand impact stresses such as might occur when a mast is hit by a moving vehicle.
- 10.8 The method to transport and handle the masts during construction must be clearly described.
- 10.9 The tenderer shall state in his tender whether any additives are used with the concrete during any stage of the manufacturing process of the pre-stressed masts.
- 10.10 Masts shall be designed to withstand a longitudinal bending moment of at least 0,25 - times the transverse working bending moment and tenderers shall comment on the ability of the mast to withstand a sudden application of such a load.
- 10.11 Tenderers shall ensure that the dimension of the mast in the plane facing towards the track/s shall be 198 plus/minus 2mm wide from 200mm below the contact wire height specified in Appendix 1 to the top of the mast supplied, whatever the designed width of the mast below this height. The 198 plus/minus 2mm mast dimension is required to suit standardised clamp-on type electrification fittings.
- 10.12 The tenderer shall incorporate in his design and manufacturing process Ø6mm x 30mm deep round holes spaced at 1m intervals on the centre of the mast face normal to the run of the track on one side of the mast only. The holes shall start 1 200mm from the base of the mast. This is required to attach additional bonding wire to the mast.
- 10.13 Two types of base plates could be specified when ordering type B masts.
- Type (B<sub>1</sub>): This is used where the bolt group of the existing foundation is so corroded that they cannot be re-used.
- Type (B<sub>2</sub>): This is used where the bolt groups of the existing foundations can be re-used.
- 10.13.1 The base plate must be strong and rigid and tightly secured to the mast with an epoxy interface, to ensure full contact and to avoid penetration of water.

- 10.13.2 The assembly shall be able to withstand a maximum rated bending moment as specified in Appendix 1 clause 4.0 and an ultimate load of the maximum rated bending moment x 2.
- 10.13.3 No separation between the base plate and mast shall occur at the working load (maximum rated bending moment). A separation not exceeding 0,1mm shall be permitted at 60% of ultimate (design) load.
- 10.13.4 Prior to design load being attained, no reinforcing or pre-stressing wires shall snap and no crushing effect in the concrete shall be evident in the compression zone.
- 10.14 The ability of the assembly to meet the criteria from clause 10.13.1 through to clause 10.13.4 shall be demonstrated in order for a supplier to qualify as a tenderer.
- 10.15 The base plate is to be hot-dip galvanized after manufacture and/or drilling of holes. See Specification CEE-183: Hot Dip Galvanising and Painting of Electrification Steelwork.
- 10.15.1 For further corrosion protection see specification CEE-0045.
- 10.16 The components which secure the base-plate to the mast must be so designed and treated so as to prevent corrosion setting in.
- 10.17 The system used to connect the base plate to the foundation must likewise have adequate corrosion protection.
- 10.18 Adequate corrosion protection implies that the structural and aesthetic appearance of the system is not affected for a period of at least 20 years.
- 10.19 Provision shall be made for an integral earth wire arrangement. The bottom connection shall be at a distance of 300mm above foundation level, and the top connection shall be at specified contact wire height. (IF REQUIRED)
- 10.20 All pre-stressed wires must be Hot Dip Galvanising to SANS 0121:2011, for masts used at coastal areas.

## 11.0 FINISHING AND MARKING

- 11.1 Pre-stressed concrete masts supplied shall be marked with the following information in cast-in letters and figures of at least 20mm in height and 20mm in width and shall be completely legible :-
- Transnet Freight Rail (or any other name as advised on approval of quality plan)
- Contract No.:
- Manufacturer's Name/Symbol or Logo:
- Date of manufacture and mast No.:
- Rated bending moment:
- 11.2 This information shall be depicted on the mast 4,5m from the butt end.

## 12.0 INSPECTION AND TESTING

- 12.1 Transnet Freight Rail reserves the right to be represented at all tests required. The responsibility for arranging these tests and the supply of test equipment shall rest with the successful tenderer and be for his account.
- 12.2 All test equipment required for the testing of the pre-stressed concrete masts shall be covered by calibration certificates issued by a laboratory registered by the National Calibration Service of the CSIR and the certificates shall be available at all tests.
- 12.3 Type Testing.
- 12.3.1 Before the successful tenderer commences with the production of the masts, five (5) test masts of each design to be supplied shall be manufactured in terms of this specification for type testing purposes.

- 12.3.2 Each mast shall be subjected to the deflection and creep tests. The deflection measured shall be monitored constantly and the results recorded.
- 12.3.2.1 The static load, as laid down in Appendix 3 shall be applied in transverse direction 7,5m above the clamping point specified in clause 12.4.2.1 and the deflection measured at this height.
- 12.3.2.2 The deflection shall again be measured after 8 hours.
- 12.3.2.3 The additional deflection due to creep shall not exceed the initial deflection by more than 15mm.
- 12.3.3 After the completion of the creep test, the transverse load shall be increased until the mast fails. The failing load shall be recorded, as well as the location of the failure.
- 12.3.4 Each mast design will be approved provided that :
- 12.3.4.1 The average deflections of the five type tested masts do not exceed those specified in Appendix 3 and none of the deflections of any individual mast exceed the average of the five masts by more than 15mm.
- 12.3.4.2 None of the type tested masts fails at a load less than the design load, and no visible hair cracks occur at loads below 60% of the design load.
- 12.4 Routine Tests.
- 12.4.1 A compression test shall be performed on a 7 day test cube of every mix and the results shall indicate that the 28 day strength specified in Appendix 2 will undoubtedly be obtained.
- 12.4.2 One mast out of each batch shall be selected at random and be tested as follows:
- 12.4.2.1 The mast shall be securely clamped at formation level at a distance from the butt end equal to the specified depth in the foundation (see Appendix 1 clause 3).
- 12.4.2.2 The proof load as laid down in Appendix 2 shall be applied in the transverse direction 7,5m above the clamping point specified in clause 12.4.2.1 - and the deflection measured at the load point.
- 12.4.2.3 The deflection of the mast at the load point shall not exceed the average type test deflections by more than 25% of the maximum transverse proof load deflection submitted in Appendix 2. No hair cracks shall occur.
- 12.4.2.4 The live load deflection at contact wire height shall never exceed 40mm at a live load determined by subtracting Tst from Tp (Appendix 3). This deflection will be measured during the proof load test.
- 12.4.2.5 The static load, as laid down in Appendix 3 shall be applied in transverse direction 7,5m above the clamping point specified in clause 12.4.2.1 and the deflection measured at this height.
- 12.4.2.6 No visible hair cracks shall occur at loads below 60% of the design load. (No Crack Load).
- 12.4.3 Should the mast fail to comply with the requirement of clauses 12.4.2.3 or 12.4.2.6 another two masts in the same batch shall be similarly tested. Should one of these masts fail to meet the requirements then all the remaining masts in the same batch will be rejected.
- 12.5 All masts shall be tested for straightness along the centre line of the mast.
- 12.5.1 A fish line shall run through the centre on the butt of the mast and a distance of 3m from the butt of the mast to the tip of the mast. The deviation shall be measured between the fish line and the centre of the mast tip.
- 12.5.2 The maximum deviation between the centre line of the mast and the fish line shall not exceed 4mm/m (4mm x mast length).
- 12.6 The depth of the pre-stressing tendons shall comply with clause 10.7.
- 12.7 The successful tenderer shall keep a detailed record of all tests performed.
- 12.8 This record shall be kept available for inspection by the representative of Transnet Freight Rail.

- 12.9 On completion of the contract the test records shall be submitted to Engineering Infrastructure in terms of clause 14.0.

NOTE: The record shall also include details of masts which failed the tests.

- 12.10 The costs of all tests shall be included in the tender price(s).

### 13.0 DRAWINGS FOR APPROVAL

The successful tenderer shall submit two sets of prints of his final design drawings for approval, before fabrication of the masts is commenced. These drawings shall be prepared in accordance with clause 14.3.

### 14.0 DOCUMENTATION AND DRAWINGS

- 14.1 The successful tenderer shall supply to Transnet Freight Rail a manual containing the following documents:

- 14.1.1 Type test certificates for each design of mast supplied with the actual test data in respect of each mast type tested.

- 14.1.2 A complete schedule of the results of all routine tests fully referenced to a particular batch of masts supplied.

- 14.2 The manuals shall be bound in loose leaf form and three copies shall be supplied to Engineering Infrastructure. The cost shall be included in the tender price.

- 14.3 The successful tenderer shall also supply Engineering Infrastructure with one set of fully dimensioned drawings of each design of mast supplied.

- 14.3.1 These drawings shall comply fully with the requirements of SANS 10111 and/or CEE 0224. Where necessary these drawings shall be cross-referenced by means of an item number to the manual referred to in clause 14.1.

- 14.3.2 All interrelated drawings shall be clearly and adequately cross-referenced to each other.

- 14.3.3 Engineering Infrastructure shall be approached for drawing numbers before the drawings are forwarded for approval.

- 14.3.4 The cost of these drawings shall be included in the tender price.

- 14.4 Documentation shall be supplied within one month of the completion of delivery of the masts.

### 15.0 COPYRIGHT

The tenderer's attention is drawn to the copyright requirements detailed below:

The Contractor hereby grants to Transnet Freight Rail a non-exclusive licence, in accordance with the provisions of sections 22 of the Copyright Act, 1978, (a) to copy any plan, diagram, drawing, specification, bill of quantities, design calculation or other similar document made, other than under the direction or control of Transnet Freight Rail, by the Contractor in connection with the CONTRACT, (b) to make free and unrestricted use thereof for its own purposes, (c) to provide copies thereof to consultants of Transnet Freight Rail to be used by them for the purposes of the consultancy and (d) to provide other parties with copies thereof for the purpose of tenders invited by it. The Contractor furthermore, if any plan, diagram, drawing, specification, bill of quantities, design calculation or other similar document made, other than under the direction or control of Transnet Freight Rail, by any principal or subcontractor of the Contractor, is used in connection with the CONTRACT, shall cause such principal or subcontractor to grant to Transnet Freight Rail a similar non-exclusive licence for the purpose set out herein. The provisions of this clause shall not apply to documents made, in the case of equipment to be supplied, in connection with the manufacturing process of the equipment supplied itself. No separate or extra payment shall be due by Transnet Freight Rail in respect of any non-exclusive licence granted in terms of this clause.



END

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## APPENDIX 1

## SCHEDULE OF REQUIREMENTS

(To be completed by client/project manager)

ITEM	DESCRIPTION	QUANTITY / REQUIREMENTS	
		COASTAL	INLAND
1.0	Quantity of masts		
2.0	Length of mast (m)		
3.0	Depth of mast in foundation (m)		
4.0	Maximum rated bending moment of mast required (kNm)		
5.0	Contact wire height above rail (m)		
6.0	Air pollution for mast location		

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TECHNICAL DATA SHEET

(To be completed by tenderers and submitted as part of their tender)

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>
1.0	Length of mast (m)	_____
2.0	Quantity of masts	_____
3.0	Maximum rated bending moment of the mast (kNm)	_____
4.0	Overall mast dimensions	_____
	(a) Formation level (mm)	_____
	(b) Contact wire height and above (mm)	_____
5.0	Types and grades of concrete used	_____
6.0	Minimum 28 day compression strength (MPa)	_____
7.0	Types and sizes of reinforcing used	_____
8.0	Transverse proof load (kN)	_____
9.0	Maximum transverse proof load deflection (mm)	_____
10.0	Transverse static load (kN)	_____
11.0	(a) Maximum deflection at 7,5m above clamping point(mm)	_____
	(b) Maximum creep after 8 hours (mm)	_____
12.0	Minimum failure load (kN)	_____
13.0	Design factor of safety	_____
14.0	Maximum slenderness ratio	_____
	(equivalent length $\times \lambda$ ) $\Gamma_{y-y}$	_____

TENDERER'S SIGNATURE .....

DATE .....

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MAST LOADING DETAIL



MAST TYPE	RATED BENDING MOMENT OF MAST IN kNm	MEAN HEIGHT OF LOAD IN METRES	Hp	PROOF LOAD TEST		STATIC LOAD TEST	
				PROOF LOAD IN kN	MAX DEFLECTION IN mm AT Hp	STATIC LOAD IN kN	MAX ADDITIONAL DEFLECTION IN mm DUE TO CREEP
I	30	7,5	4,00	150	2,67	100	15
II	40	7,5	5,33	150	3,55	100	15
III	50	7,5	6,67	150	4,45	100	15
IV	60	7,5	8,00	150	5,33	100	15
V	70	7,5	9,33	150	6,22	100	15
VI	80	7,5	10,67	150	7,11	100	15
VII	90	7,5	12,00	150	8,00	100	15
VIII	100	7,5	13,33	150	8,89	100	15

**FOUNDATION DESIGN REQUIREMENTS****1.0 SCOPE**

This appendix calls for the design of a suitable foundation for each mast type specified in the Schedule of Requirements (Appendix 1) of the accompanying specification.

To optimise, a foundation design is required for each of the following soil bearing pressures:

- a) 60 kPa
- b) 120 kPa
- c) 160 kPa

**2.0 GENERAL**

- 2.1 The following shall be borne in mind when designing a suitable foundation:-
- 2.2 The design shall be suitable for use in the various types of formations detailed above and be capable of withstanding the maximum design and erection loads with the appropriate factor of safety without failure or deflection. These designs shall be supported by fully detailed and completed calculations, (not computer printouts).
- 2.3 Fully detailed final design drawings of the foundations for the various soil types and loading conditions shall be submitted for approval. Acceptance and approval of the design shall not absolve the Tenderer of any responsibility for the safe design of the foundations.
- 2.4 The effective depth of the foundation for overturning moment calculation shall commence below the top layer of organic material, loose material etc.
- 2.5 The dimensions of the core opening taking the back-rake of the mast into account shall be sufficient to allow for a minimum of 25mm of grout to be placed all round the mast.
- 2.6 The top of the core type foundations shall not be higher than 100mm above ground level.

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