TRANSNET SOC LTD
[Registration No. 1990/000900/30]

TO REVIEW AND EVALUATE RESILIENT RAIL PADS FOR USE IN TUNNELS WITH ULTIMATE OBJECTION TO APPROVE PRODUCTS.

RFI NUMBER	CRAC-13249
ISSUE DATE:	13 March 2014
CLOSING DATE:	10 April 2014
CLOSING TIME:	10h00 am
BID VALIDITY PERIOD:	**90 days from Closing Date**

To review and Evaluate Resilient Rail Pads for use in Tunnels with ultimate objection to approve Products nationally.

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RFI for Review and Evaluate Resilient Rail Pads for use in Tunnels with ultimate objection to approve products.
for Transnet SOC Ltd operating as Transnet Freight Rail

Section 1: NOTICE TO RESPONDENTS

1 INFORMATION REQUEST

Information is requested from interested persons, companies, close corporations or enterprises [hereinafter referred to as the **Respondent(s)**] to supply the aforementioned information to Transnet.

DESCRIPTION	To Review and Evaluate Resilient Rail Pads for use in Tunnels with ultimate objection to approve products nationally.
BID FEE AND BANKING DETAILS	**This RFI is issued free of charge.**
INSPECT / COLLECT DOCUMENTS FROM	The office of the Secretariat, Transnet Freight Rail Inyanda House 1 21 Wellington Road Parktown 1st Floor
ISSUE DATE AND COLLECTION DATE DEADLINE	Between 09:00 and 15:00 from 13th March 2014 until 17 March 2014.
NON COMPULSORY BRIEFING SESSION	Transnet Freight Rail Inyanda House 2 15 Girton Road Bombela Boardroom Parktown Johannesburg
CLOSING DATE	**10:00 on Tuesday 10 April 2014** Bidders must ensure that bids are delivered timeously to the correct address. As a general rule, if a bid is late or delivered to the incorrect address, it will not be accepted for consideration.

Any additional information or clarification will be faxed or emailed to all Respondents, if necessary.

2 FORMAL BRIEFING

A non-compulsory meeting will be conducted at 15 Girton Road, Transnet Freight Rail, Inyanda House 2 Bombela Boardroom, Parktown, and Johannesburg on the **18 March 2014,** at 10:00 am for a period of ± 2 hours. [Respondents to provide own transportation and accommodation]. The briefing session will start punctually and information will not be repeated for the benefit of Respondents arriving late.

2.1 A Certificate of Attendance set out in Annexure E, hereto must be completed and submitted with your RFI response as proof of attendance for reference purpose only.

2.2 Despite the briefing session being non-compulsory, Transnet nevertheless encourages all Respondents to attend. Transnet will not be held responsible if any Respondent who did not attend the non-compulsory session subsequently feels disadvantaged as a result thereof.

3 RESPONSE SUBMISSION

Proposals must be submitted in a sealed envelope addressed as follows:

The Secretariat, Transnet Acquisition Council

Tender Advice Centre
Transnet Freight Rail
Ground Floor
Inyanda House 1
21 Wellington Road
Parktown

Description: To Review and Evaluate Resilient Rail Pads for use in Tunnel with ultimate objection to approve products nationally.

Closing date and time: 10 April 2014, 10:00am
Closing address *[Refer to options above]*

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

4 DELIVERY INSTRUCTIONS FOR RFI

Delivery by hand

If delivered by hand, the envelope must be deposited in the Transnet tender box which is, and must be addressed as follows:

Tender Advice Centre
Transnet Freight Rail
Ground Floor
Inyanda House 1
21 Wellington Road

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

It should also be noted that the above tender box is located at:

Tender Advice Centre
Transnet Freight Rail
Ground Floor
Inyanda House 1
21 Wellington Road
Parktown

Dispatch by courier

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

Tender Advice Centre
Transnet Freight Rail
Ground Floor
Inyanda House 1
21 Wellington Road
Parktown

If responses are not delivered as stipulated herein, such responses will not be considered.

No email or faxed responses will be considered, unless otherwise stated herein.

The responses to this RFI will be opened as soon as possible after the closing date and time.

Transnet shall not, at the opening of responses, disclose to any other company any confidential details pertaining to the Proposals / information received, i.e. pricing, delivery, etc. The names and locations of the Respondents will be divulged to other Respondents upon request.

Envelopes must not contain documents relating to any RFI other than that shown on the envelope.

5 COMMUNICATION

Any queries regarding this document should be emailed to Mr Julias Moeti of the Transnet by no later than Friday 28 April 2014 on Julias.moeti@transnet.net using the RFI Clarification Request Form, substantially as set out in Section 7 hereof and TFR will respond not later than 04th April 2014.

6 INSTRUCTIONS FOR COMPLETION OF RFI

6.1 RFI proposals must be submitted in duplicate hard copies [1 original and 1 copy] and must be bound.

6.2 All returnable documents listed in the expression of interest [section 4] in this RFI must be returned with your submission.

6.3 The person or persons signing the submission must be legally authorised by the respondent to do so.

7 STATUS OF THIS RFI AND SUBSEQUENT PROCESS

It is envisaged that Supplier/Service Provider will be appointed, through a separate RFP process, to supply or provide Resilient Pads for Tunnel.

7.1 It is envisaged that Respondents to this RFI will be subjected to pre-qualification criteria and will be shortlisted in order to proceed to a second stage of evaluation.

7.2 This RFI is not an offer to purchase and Transnet is under no obligation to accept any proposals in this process and/or the subsequent RFP which may be issued hereafter.

7.3 As this is a Request for Information only, no business will be awarded through this process.

8 DISCLAIMERS

8.1 Respondents are hereby advised that Transnet is not committed to any course of action as a result of its issuance of this RFI and/or its receipt of submissions in response to it. In particular, please note that Transnet reserves the right and at its sole and full discretion to:

a) utilise any information provided to it in response to this RFI to draft the scope of requirements for inclusion in an RFP;

b) take no further action whatsoever, if it so decides

c) withdraw from this process and the provisions of this project at any time;

d) select the RFI and RFP participants based on Transnet's criteria;

e) change the dates of adjudication and submission;

f) not invite RFI respondents for further participation in the RFP process;

g) not bind itself to accept any or all of the RFIs; or

h) increase or decrease the quantities/scope as indicated in the RFI.

8.2 Transnet's decisions will be final and no correspondence will be entered into after the selection process. You will be formally notified of your result.

8.3 An RFI will only be deemed accepted once written notice is given by Transnet to the successful Respondent(s) and after any amendments have been documented and agreed to.

8.4 Kindly note that Transnet will not reimburse any Respondent for any preparatory costs or other work performed in connection with this submission.

Respondents are to complete this section:

NAME OF RESPONDENT

.....

PHYSICAL ADDRESS

.....

.....

Respondent's contact person:

Name.....

Designation.....

Telephone.....

Cell Phone.....

Facsimile.....

Email.....

Website.....

Respondent's alternate contact person:

Name.....

Designation.....

Telephone.....

Cell

Phone.....

Facsimile.....

Email.....

Website.....

Transnet urges its clients, suppliers and the general public

to report any fraud or corruption on the part of Transnet employees to

TIP-OFFS ANONYMOUS: 0800 003 056

RFI: To Review and Evaluate Resilient Rail Pads for use in Tunnels with ultimate objection to approve products nationally.
For Transnet SOC Ltd operating as Transnet Freight Rail

Section 2: RFI SCOPE OF REQUIREMENTS

1 INTRODUCTION

RESILIENT RAIL PADS FOR USE IN TUNNELS:

SCOPE OF REQUIREMENTS:

1. 1 m*150 mm *10 mm flat pad
2. 1 m*140 mm * 10 mm flat pad
3. 245 mm*145 mm * 18 mm flat pad. See drawing TTC_A254_PanslabFootprint
4. 18mm thick profiled pad. See drawing TTC_A251_E3338Footprint
5. 18mm thick profiled pad. See drawing TTC_A252_E3282Footprint
6. 18mm thick profiled pad. See drawing TTC_A253_E3214Footprint
7. 250 mm*150mm * 6.5mm profiled pad. See drawing TTC_A250_1937Footprint

The products will be tested according to the pre-approval specification for rail fasteners. Latest version (BBF 9273-Ver2.1)

2 BACKGROUND

Resilient rail pads for use in tunnels will be required by Transnet Freight Rail. TFR would like to allow all suppliers a fair opportunity to offer their products for testing and approval as per attached specification for free.

Refer: Annexture A, Technical Specification (BBF9273-Ver2.1)

3 KEY OBJECTIVES OF THIS RFI PROCESS

This RFI is to Review and Evaluate Resilient Rail Pads for use in Tunnels with ultimate objection to approve products nationally.

3.1A technical questionnaire (Annexure B) must be completed by all respondents to be evaluated for compliance with specifications.

- Bidders proposing products must complete and comply with Annexure B with reference to A1 and A2 to be evaluated for the 100% Technical Threshold.
- The supplier should supply the Perway material, testing material and specialized tigs to Transnet Freight Rail at (TTC no 1 Hout street Jeppestown) at suppliers cost.

4 GENERAL RESPONDENT OBLIGATIONS

4.1 The Respondent(s) shall be fully responsible to Transnet for the acts and omissions of persons directly or indirectly employed by them.

4.2 The Respondent (s) must comply with the requirements stated in this RFI.

5 CONFIDENTIALITY AND COMPLIANCE

This RFI and information contained herein or provided for purposes thereof, remain the property of Transnet and may not be reproduced, sold or otherwise disposed of. All recipients of this document (whether a RFI is submitted or not) shall treat the details of this document as strictly private and confidential.

Information disclosed in this RFI is given in good faith and only for the purposes of providing sufficient information to the Respondent to enable submission of a well-informed and realistic RFI.

6 UNDERTAKINGS BY RESPONDENT

It will be accepted that the Respondent, on submitting the RFI response, has read, understood and accepted all the terms and conditions of the document. The submission of an RFI by any Respondent shall presume complete acceptance of the terms and conditions of the document. All qualifications and or exceptions should be noted in the RFI Response document.

7 COSTS TO RESPOND TO THE RFI

All Respondents wishing to submit a RFI response must be in possession of this document, the RFI. Transnet will not be responsible for or pay any expense or losses which may be incurred by any Respondent in the preparation and submission of the RFI and the costs of the RFI at all stages of the RFI process. Costs, if any, will be for each Respondent's own account.

Transnet reserves the right to invite certain Respondents to present or otherwise demonstrate their proposed solution as per their RFI, at the Respondent's own cost.

8 AUTHORITY OF SIGNATORY

8.1 If the RFI Respondent is a company, a certified copy of the resolution of the Board of Directors (i.e. personally signed by the Chairman or Secretary of the Board) authorising the person who signs this RFI to do so and any other documents and correspondence in connection with this RFI and/or agreement on behalf of the company, must be submitted with their RFI.

8.2 If the RFI Respondent is a partnership, a certified copy of the resolution of the partners (personally signed by all the partners) authorising the person who signs this RFI to do so and any other documents and correspondence in connection with this RFI and/or agreement on behalf of the partnership, must be submitted with this RFI.

8.3 If the RFI Respondent constitutes a "one-man business", certified proof must be submitted that the person signing this RFI and any other documents and correspondence in connection with this RFI and/or agreement is the sole owner of the one-man business.

Failure to comply with this clause may result in rejection of the RFI response.

9 OFFERING OF COMMISSION OR GRATUITY.

If a Respondent, or any person employed by him, is found to have either directly or indirectly offered, promised or given to any person in the employ of Transnet, any commission, gratuity, gift or other consideration, Transnet shall have the right and without prejudice to any other legal remedy which it may have in regard to any loss or additional cost or expenses, to disqualify the RFI Respondent from further participation in this process and any other subsequent processes in this regard. The RFI Respondent will be responsible for all and any loss that Transnet may suffer as a result thereof. In addition, Transnet reserves the right to exclude such a Respondent from future business with Transnet.

10 UNDERTAKING BY TRANSNET

In responding to this RFI, Transnet encourages all RFI Respondents to put their best effort into the construction and development of the proposal.

The RFI process will include due governance and the results of the adjudication process will be available to Respondents who are not successful under certain conditions. This will be allowed at the sole discretion of Transnet.

RFI: To Review and Evaluate Resilient Rail Pads for use in Tunnels with ultimate objection to approve products nationally

for Transnet SOC Ltd operating as Transnet Freight Rail

Section 3: TRANSNET'S RFI INFORMATION

1 REQUIREMENTS FOR RFI

Respondents expressing an interest to participate in this RFI stage must qualify in terms of the minimum predetermined requirements and have the capability to supply the full range of Product (s), as set out below:

2 TECHNICAL CAPABILITY

REFER TO ANNEXURE B - CLAUSE BY CLAUSE

3 EVALUATION METHODOLOGY AND CRITERIA

During this RFI process and the subsequent RFP process Transnet intends utilising the following methodology and criteria in selecting a preferred Supplier(s). Please note that the criteria listed may change at RFP stage.

RFI: To Review and Evaluate Resilient Rail Pads for use in Tunnels with ultimate objection to approve products nationally.

Section 4: EXPRESSION OF INTEREST

I/We_____

[name of company, close corporation or partnership]

of [full address]

_____

carrying on business under style or title of [trading as]

_____

represented

by_____

in my capacity as

_____

being duly authorised, hereby lodge an **RFI:** To Review and Evaluate Rail Pads for use in Tunnels with ultimate objection to approve products nationally

ADDRESS FOR NOTICES

Respondent to indicate its *domicilium citandi et executandi* hereunder:

Name of entity: _____

Facsimile: _____

Address:

_____

_____

_____

NAME(s) AND ADDRESS / ADDRESSES OF DIRECTOR(s) OR MEMBER(s)

The Respondent must disclose hereunder the full name(s) and address(s) of the director(s) or members of the company or close corporation [C.C.] on whose behalf the RFI is submitted.

(i) Registration number of company / C.C.

.....

(ii) Registered name of company / C.C.

.....

_____ _____

Respondent's Signature Date and Company Stamp

(iii) Full name(s) of director/member(s): Address/Addresses: ID Number/s:

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CONFIDENTIALITY

All information related to a subsequent contract, both during and after completion, is to be treated with strict confidence. Should the need however arise to divulge any information gleaned from provision of the Services, which is either directly or indirectly related to Transnet's business, written approval to divulge such information must be obtained from Transnet.

VENDOR APPLICATION FORM

Please complete this form, included herewith as Section 5, and return with your Returnable Documents.

RETURNABLE DOCUMENTS

*Respondents must submit with their responses to this RFI, **as a minimum requirement**, all the returnable documents indicated below with a [√]. All Sections must be signed and dated by the Respondent.*

a) *In addition to the requirements of section (a) above, Respondents are further requested to submit with their responses the following **Additional Returnable Documents** as detailed below.*

	Additional Returnable Documents	Submitted [√]
	SECTION 1 : Notice to Respondents	
	SECTION 5 : Vendor Application Form	
-	Original cancelled cheque or bank verification of banking details	
-	Certified copies of IDs of shareholder/directors/members [as applicable]	
-	Certified copy of Certificate of Incorporation [CM29/CM9 name change]	
-	Certified copy of share certificates [CK1/CK2 if C.C.]	
-	Entity's letterhead	
-	Original valid Tax Clearance Certificate [RSA entities only]. If a JV or subcontractor is involved, submit a Tax Clearance Certificate for each entity	
-	Certified copy of VAT Registration Certificate [RSA entities only]	
-	Certified copy of valid Company Registration Certificate [if applicable]	

By signing these RFI documents, the Respondent is deemed to acknowledge that he/she has made himself/herself thoroughly familiar with all the conditions governing this RFI, 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.

SIGNED at _____ on this _____ day of

_____2014.

SIGNATURE OF WITNESSES ADDRESS OF WITNESSES

1 _____

Name _____ _____

_____

2 _____

Name _____ _____

SIGNATURE OF RESPONDENT'S AUTHORISED REPRESENTATIVE:

_____

NAME: _____

DESIGNATION: _____

RFI: To Review and Evaluate Resilient Rail Pads use in Tunnels with ultimate objection to approve products nationally.

for Transnet SOC Ltd operating as Transnet Freight Rail

Section 5: 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. **Original** letterhead confirm physical and postal addresses
6. **Original** valid SARS Tax Clearance Certificate [RSA entities only]
7. **Certified** copy of VAT Registration Certificate [RSA entities only]
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]

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

Vendor Application Form

Entity's trading name						
Entity's registered name						
Entity's Registration Number or ID Number if a Sole Proprietor						
Form of entity [√]	CC	Trust	Pty Ltd	Limited	Partnership	Sole Proprietor
How many years has your entity been in business?						
VAT number [if registered]						
Entity's telephone number						
Entity's fax number						
Entity's email address						
Entity's website address						
Bank name		Branch & Branch code				
Account holder		Bank account number				
Postal address		Code				
Physical address		Code				
Contact person						
Designation						
Telephone						
Email						
Annual turnover range [last financial year]	< R5 m		R5 - 35 m		> R35 m	
Does your entity provide	Products		Services		Both	
Area of delivery	National		Provincial		Local	
Is your entity a public or private entity			Public		Private	
Does your entity have a Tax Directive or IRP30 Certificate			Yes		No	
Main product or services [e.g. Stationery/Consulting]						

Complete B-BBEE Ownership Details:

% Black		% Black women		% Disabled Black		% Youth	

Respondent's Signature

Date and Company Stamp

ownership	ownership	ownership	ownership
Does your entity have a B-BBEE certificate	Yes	No	
What is your B-BBEE status [Level 1 to 9 / Unknown]			
How many personnel 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 Entity / Organisation:

Name		Designation	
Signature		Date	

RFI: To Review and Evaluate Resilient Rail Pads use in Tunnels with ultimate objection to approve products nationally.

for Transnet SOC Ltd operating as Transnet Freight Rail

Section 6: NON-DISCLOSURE AGREEMENT [NDA]

Complete and sign the Non-Disclosure Agreement appended hereto as Annexure C

RFI: To Review and Evaluate Resilient Rail Pads use in Tunnels with ultimate objection to approve products nationally.

for Transnet SOC Ltd operating as Transnet Freight Rail

Section 7: RFI CLARIFICATION REQUEST FORM

RFI No: CRAC-13249

Deadline for RFI clarification submissions: Before **12:00 on 28 March 2014**

TO:	Transnet SOC Ltd
ATTENTION:	The Tender Administrator
EMAIL	Julias.Moeti@transnet.net
DATE:	.....
FROM:	.....

REQUEST FOR RFI CLARIFICATION:

.....

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Respondent's Signature

Date and Company Stamp

TRANSNET

ANNEXURE A

TECHNICAL SPECIFICATIONS

TO REVIEW AND EVALUATE RESILIENT RAIL PADS FOR USE IN TUNNELS WITH ULTIMATE OBJECTION TO APPROVED PRODUCTS.

TRANSNET

freight rail

A division of Transnet limited

TRACK TECHNOLOGY

SPECIFICATION FOR RAIL FASTENING SYSTEMS

Authors: Senior Engineer J Meyer
Technology Management

Approved: Principal Engineer K Mistry
Technology Management

Date: 18 February 2014

Circulation restricted to: Transnet Freight Rail

Transnet and Relevant Third Parties

Content

TECHNICAL SPECIFICATION FOR RAIL FASTENING SYSTEMS

1. Scope.

This specification covers all the technical requirements that are expected of a rail fastening system and/or its components. These technical requirements must be used by existing and new suppliers to get pre-approval of their products before tendering on the main contract. This document supersedes all previous rail fastening specifications. (System and components)

2. Definitions.

TFR.
Transnet Freight rail.

Clamping force.
The vertical force that the fastening system exerts on the rail.

Lateral load.
The component of the dynamic train force that will result in a lateral force being applied 14 mm below the crown of the rail. This force must be carried by a single rail seat.

Lateral deflection.
The amount of lateral rail movement due to the train wheels at the foot of the rail.

Assembly.
All the components that are required to fasten the rails onto the sleeper/ slab and include the fastenings bolted or cast into the sleeper/ slab.

3. General.

All specifications refer to the latest specifications that are available.

3.1 Training.

Brochures, training material and personnel must be available to do training on the depots on how to use the product and tools correctly.

3.2 Tools.

The suppliers must be able to supply the necessary tools required to install and remove the fastening system.

3.3 Pre-approval.
Pre-approval of product must be obtained from Technology Management (Track Technology) before the purchasing of any material for use on TFR lines will be considered. The supplier must supply all the necessary jigs, material, components, documentation, certificates, quality assurance tests, technical information and drawings necessary to TFR free of charge for all the tests required.

3.4 Experimental components.
The fastening system offered must be past the experimental phase. The supplier need to prove that the fastening system is performing well in more than one internationally recognized railway line on at least 100 000 sleepers with similar track conditions as those that they would be subjected to on the TFR lines.

3.5 Technical support.
The supplier must have a technical support team and equipment that can assist with any technical aspect required by TFR from time to time. This team must meet and inspect some lines with Technology Management (Track Technology) at least once a year to familiarize themselves with the conditions and problems. Proof of competency must be supplied.

3.6 Research and development.
The supplier must indicate if they have an active R&D program in place to improve their products or to reduce costs.

3.7 Component condition.
The general condition of the components must look good with no pit marks and smooth round curves.

The supplier must be able to supply the steel product in the following surface finishes:

- Anti-corrosive mineral based paint.
- Galvanized in accordance with BS EN ISO 1461.
- Sherardizing in accordance with EN13811 – Class 45.

Pins must have the appropriate plastic lining that will not absorb moisture, expand, or crack during handling or installation.

3.8 Markings.
Where possible the components must be marked with the appropriate markings with the following minimum requirement:

- Supplier name/logo.
- Transnet name/logo.
- Component identification.
- Manufacturing date.

The marking must be placed in such a position that it will not influence the performance of the component and that it is possible to see the information during track inspections. The size, position and detail of the markings must be approved by Transnet.

3.9 Safety and safe working procedure.

The supplier must supply the necessary documentation highlighting:

- the safe working procedure.
- the installation method.
- replacement method.
- the complete assembly with individual components.
- the type of maintenance and maintenance intervals required during the warranty period.
- Suppliers must give details of what documentation must kept during the warrantee period

3.10 Documentation.

The drawings for each of the components and systems must be approved and signed off by the Principal Engineer – Track Technology before manufacturing or changing and component or system.

3.11 Dimensions and tolerances.

The dimensions and tolerances of the components and system must comply with this specification. It is up to the supplier to make sure that the tolerances on the individual components will still result in the system being within the required tolerance set for the system. The overall tolerances in terms of gauge are ±1 mm and exclude the tolerances arising from installing the fastening into the concrete.

3.12 Packaging.

The supplier must indicate the stacking ability, packaging options, quantities he intend packing and marking of the packaging he intend to use for the various products. The following must be used as a guideline when offering the packaging:

- One person must be able to handle the package. Where it is not possible (size or weight) the supplier must offer alternative methods for handling.
- It must be possible to stack the components on top of each other.
- The components may be stored outside for a period of up to 6 months.
- The markings on the packaging must be such that it is easy to identify the product and the quantities in each package.

3.13 Guarantee

The supplier will be required to guarantee the components against all defects attributable to faulty manufacture, workmanship and quality of material for a period of two years after the fastenings have been laid in track with a maximum period of 3 years from the delivery date. Components that fail in service before the expiration of the guarantee period shall be replaced free of charge at the initial point of delivery.

3.14 Pre and Production samples.

Transnet may decide to select samples for random testing. These sample must be supplied free of charge and will be limited to 1 in 10000 samples.

3.15 Visual inspection

When inspected visually the component will be free of:

- defects and pit marks.
- flashing.
- sharp edges and corners.

4. Fastening system minimum requirement and technical performance.

4.1 Minimum design criteria.

The fastening system must comply with the following minimum design criteria:

- It must be able to carry, spread, transfer, absorb and distribute the longitudinal, vertical, lateral and other forces caused by the dynamic loading of the trains, the environment, maintenance activities and temperature.
- Allow for the adjustment of the track gauge.
- Accommodate different types of rails. SAR 40, SAR 48, SAR 57, S60, UIC 60 and 60E1.
- Keep the clamping force and creep force constant irrespective of the rail type and track gauge.
- Give resilience to the track.
- Give electrical insulation.
- Enable the ease of track maintenance activities.
- It must withstand the environmental effects.
- Ease with maintenance activities like de-stressing, rail replacement and gauge adjustment.
- A cost effective life cycle cost.
- If a design is used in the pads that could cause rail seat abrasion, then an appropriate shim must be used with a suitable method of holding it in place.
- Be installed on existing approved TFR concrete sleepers.

New and retrofitted fastening systems offered must be able to be used on the following TFR lines:

- Main line track.
- Yards.
- Branch lines.
- Tunnels.
- Turnouts.

The fastening system must also accommodate fastening that can:

- be cast into the concrete.
- be welded onto plates.
- bolted onto plates or slabs. (Special cases/ baseplates)

4.2 Type of fastening system.

If the fastening system is a retrofit system (Must be able to install it on the existing infrastructure E-clip & Fist) that can be used on the various types used by Transnet. This include amongst other:

- A fastenings system for concrete sleepers. (P2, F4, PY & FY)
- A fastening system for use in track and on concrete slabs.

- A fastening system for turnouts.
- A fastening system for check rails.
- A fastening system for tunnels.
- A fastening system for insulated and non-insulated track.
- A fastening system for use on steel and concrete bridges.
- A fastening system with a normal, anti-sabotage and anti-theft ability.
- Gauge Plate Insulators (GPI's) or pads to allow for gauge adjustment and to accommodate the different types of rails as set out in the Manual for Track maintenance.
- The fastening system used must accommodate a 5mm rail pad in its compressed state (Clip/s installed). A 10mm version must be available for use on concrete slabs.

If the fastening system is not a retrofitted system, the supplier must furnish all the necessary technical documentation as outlined in this specification.

4.3 Dynamic conditions and environmental conditions.

The fastening system must be able to function under the following dynamic conditions.

- Axle loads of 30 tons per axle.
- Speeds up to 100 km/h.
- Rail inclination of 1:20.
- Curves with radiuses as small as 110 m.
- Lateral loads of 60 kN continuous and 80 kN maximum.
- Vertical deflections of 1 mm for 6 million cycles. (Under resilient pad conditions).
- The clamping force system on the rail seat must be a 25kN ± 2 kN. (If two clips are used ½ of the value quoted must be carried by each clip) except for the F4-clip that will be 20 kN ± 10%.
- The loading points of the clip/s must be such that it transfers the clip force/s evenly to the other components.
- Lateral deflections of ± 0.5mm for 6 million cycles.
- The clip/s must still have a clamping force of 25kN ± 2kN after it has been installed and removed 5 times.
- The minimum component life expected from the fastening system must be 1500 MGT on axle's load of 30 tons.
- The system must perform equally well in rail temperatures between -15 and 70°C.
- It must also be able to resist the natural ultra violet radiation and ozone.
- Arid as well as sub-tropical conditions with high and low humidity levels.
- If components are installed within 15 km from the coast the applicable components must have the necessary corrosion protection.
- The extent to which the components and system can survive a derailment or broken axle will also be evaluated.

5. Test methods and test criteria for fastening assembly and component.

The components and system must be tested according to the Transnet Freight rail requirements and according to the BS EN specifications or equivalent. The specification as outline in the sections below will be used for the approval of individual components and the system and will consist of laboratory and field testing that will be adapted from time to time to represent the in track conditions.

5.1 General.

The assembly must comply with:

- the general requirements as set out in section 1 to 4.
- and pass the tests and material specification as outlined below and in section 6.

5.2 Tests to be performed on the assembly and components.

The assembly and components must pass the following tests:

a. Assembly test of the whole system – See Appendix A for the test procedure.
b. Electrical insulation test – See Appendix B for the test procedure.
c. In service tests – See Appendix C for the test procedure.
d. Slant test – See Appendix D for the test procedure.
e. Repeated load test – See Appendix E for the test procedure.
f. Longitudinal rail restraint test – See Appendix F for the test procedure.
g. Weathering test – See Appendix G for the test procedure.
h. Vertical stiffness test – See Appendix H for the test procedure.
i. Dynamic damping and stiffness – See Appendix I for the test procedure.
j. Shock attenuation test. – See Appendix J for the test procedure.
k. Impact and fracture toughness test – See Appendix K for the test procedure.
l. SN and dynamic fatigue test – See Appendix L for the test procedure.
m. Clamping force test – See Appendix M for the test procedure.
n. Visual inspection – See Appendix N for the test procedure.
o. Torsional resistance – See Appendix O for the test procedure.
p. Cast in component test – See Appendix P for the test procedure.
q. Special test – See Appendix Q for the test procedure

The number of test samples will be up to the discretion of Transnet and will vary based on the repeatability of tests.

5.3 Passing criteria.

The passing criteria for each of the tests are as follow:

a. *Assembly test of the whole system.*
The system should assemble as a unit that is within the required tolerances and disassemble at least 5 times without damages or wear on any component

b. *Electrical insulation test.*
Dry: The minimum electrical resistance shall be 1 M Ω
Wet: The minimum electrical resistance shall be 4000 Ω

c. *In service tests.*
In service test will only be conducted once the fastening system has passed the laboratory testing phase.

To pass the test section must stay and perform within the requirements of this specification with no component failure or the need for maintenance that fall outside the maintenance cycle of the component. The in service period for the testing of material will be a minimum of 1 year.

d. *Slant test.*
The fastening must pass the test without failure of any component.

e. *Repeated load test.*
The assembly must pass the sub tests without failure of any component and as per BS-EN 13481specification Table 3 the maximum change before and after the repeated load test 1 2, and or 3 must be:

- ≤ 20% for the longitudinal rail restraint.
- ≤ 25% for the vertical stiffness with a maximum deflection of 1 mm under a load of 150 kN.
- ≤ 20% for the clamping force.
- ≤ 20% for the shock attenuation test.
- The plastic deformation of the pad must be less than 0.75 mm

See relevant test criteria below for more detail on additional criteria for these tests. Depending on the situation test 1, 2 and or 3 will be selected.

f. *Longitudinal rail restraint test.*
The assembly must pass the tests without failure of any component and as per BS-EN 13481specification Table 3 the maximum change before and after the repeated load test 1 and 2 must be:

- ≤ 20% for the longitudinal rail restraint.

The system must have a minimum longitudinal stiffness of ± 9 kN. At a test load of 50% of the clamping force the initial creep must be less than 5 mm after 3 minute with no more than 0.25 mm during the next 3 minutes. These values may be adapted by TFR for specific applications.

g. *Weathering test.*
The assembly must pass the weathering test without signs of corrosion or weathering that will reduce the life of the component.

h. *Vertical stiffness test.*
The assembly must pass the tests without failure of any component and as per BS-EN 13481specification Table 3 the maximum change before and after the repeated load test 1, 2 and 3 must be:

- ≤ 25% for the vertical stiffness.

The stiffness of the clip/s combination on one rail seat should be 2 kN/mm ± 15 %.
The plastic deformation of the pad must be less than 0.75 mm.

i. *Dynamic damping and stiffness.*
This value is only applicable for the resilient pads. The pads must be able to achieve the correct properties through the design in the pad or through the use of an engineered plastic.

The resilient pad shall have a dynamic stiffness of between 100 and 120 MN/m and the dynamic damping shall be between 5 and 10 kNs/m when tested in a high frequency test rig at the Track Technology's lab to determine the effective stiffness and damping of the rail pads.

j. *Shock attenuation test.*
This test is only required for the resilient pads. The minimum shock attenuation value required is 45% for a new pad. It must also pass the tests without failure of any component and as per BS-EN 13481 specification Table 3 the maximum change before and after the repeated load test must be:
- ≤ 20% for the shock attenuation test with a minimum value of 38 % after the test.

The shock attenuation of the pad shall be tested in a Battelle type impact rig to determine the impact attenuation.

k. *Impact and fracture toughness test.*
This test is required on plastic components. The value must be recorded. There are currently no criteria for this test and a suitable method and value will be agreed on between TFR and the suppliers.

l. *SN and dynamic fatigue test.*
The value must be recorded. There are currently no criteria for the SN part of the test.
Clips must pass the dynamic fatigue test of 3 million cycles at a deflection of value of ± 0.5 mm at 1.1 * the design toe load without failure of the clip.

m. *Clamping force test.*
The clamping force of the assembly must be 25±2 kN when installed. This clamping force must remain within these tolerances for 5 consecutive installations.

The clip must be able to take a maximum load of 37.5 kN without failure.

The assembly must pass the tests without failure of any component and as per BS-EN 13481 specification Table 3 the maximum change before and after the repeated load test 1 and 2 must be:
- ≤ 20% for the clamping force test

n. *Visual inspection.*
The various components must be inspected before and after the test for any signs of fatigue or defects. In the case of the plastic products it would require the following additional inspections:
- Check for flashing. No flashing is allowed.
- Check for correct markings especially the date.
- Check that there are no inherent defects by cutting the component especially in the thicker part of the component. No defects are allowed.
- Check for the flatness of the component. As per this specification and approved drawings. If no value is specified the flatness of the pads must be within 2 mm on a flat extruded pad and within 1mm on a moulded pad.

- Check for shrinkage. No shrinkage that affects the overall dimensions of the product is allowed.

o. *Torsional resistance.*
There are currently no criteria for this test and a suitable method and value will be agreed on between TFR and the suppliers.

p. *Cast in component test.*
The assembly must pass the tests without failure of any component.

q. *Special test.*
Special test will be conducted on an as and when basis to simulate special conditions where the fastening system will be used. Some of these tests include:

- Test on tunnel fastening system.
- Tests on check rail fastening system.
- Test on fastenings used in turnouts.
- Under sleeper pads.
- Test on new fastenings that are not covered under the paragraphs a to p methods

6 Material and manufacturing specification.

The material used for the manufacture of the plastic components must be virgin material. The maximum amount of re-grind that may be used are 10 % by weight except in the case of GRN which is limited to 5 % by weight provided the re-grind material is in all cases from the same batch.

6.1 Clips.

The clips shall be manufactured to the supplier's drawings by hot forming and shall be subsequently oil quenched and tempered in accordance with the manufacturer's product specification.
The e-clip shall be manufactured from 20 mm diameter as rolled round bar from approved suppliers of alloy spring steel to BS EN 10089: grade 56SiCr7 (modified).
The FY and F4 clips shall be manufactured from 16 mm and 15mm diameter round bar respectively. The material will be as rolled from alloy spring steel to BS EN 10089: grade 56SiCr7 (modified).

The sample clips shall be tested for Hardness in accordance with BS EN ISO 6508 part 1, 2 and 3. An area on the surface of the underside of the clip shall be ground flat and 3 indentations shall be made on each clip inspected and the mean of these readings shall be used to determine its hardness.

Decarburization: The maximum depth of surface decarburization must not exceed 1.5% of the actual bar diameter.
The clips must be free of manufacturing defects like seams, inclusions and laps that may adversely affect the performance or life of the clips.
Sample clips must be checked to ensure they are free from excessive burrs which may be considered harmful when handled or affect the efficient assembly of the clip in the rail fastening assembly. Any marks caused by the forming tools shall be smooth and free from sharp indentations.

6.2 Pads.

The pads must be made for high-density polyethylene (HDPE) or an engineering plastic applicable for the application as set out in section 1 to 5. The material must have the appropriate UV and heat stabilization and must be preferably black with a nominal thickness of 5 mm/ 10 mm. The pads shall be free from evidence of gassing, shrinkage or burning. The sprue and any flash shall be cleanly removed.

Pads may be manufactured using an extrusion technique or by injection moulding with re-grid as specified and must be available in a resilient and non-resilient version.

If HDPE is used it must have the following properties:

- Mean density: 0.945-0.970 g/cm3.
- Min average tensile strength: 20 N/mm2 to DIN 53455-5-4.
- Minimum average elongation: 250 % to DIN 53455-5-4.
- A hardness of between 60 and 70 by type D Durometer when tested according to ASTM D 2240.
- The finished product must contain a minimum of 1% (by weight) of carbon black for UV stabilization.

Rubber will not be considered as a suitable material for use in pads on Transnet lines.

Pads must have a suitable shoulder and/or down stand that will be able to withstand the longitudinal forces in the track and ease with installation.

If the pads consist of multiple parts it must have a suitable locking method to hold the pads together.

In the case of pads TFR may consider buying special pads that are not part of a system

6.3 Shoulders.
Cast shoulder must comply with the BS 2389 for grade 500-7. Pressed steel shoulder may be used provided they are manufactured from round edged mild steel flat bar. The micro cleanliness of the steel must be in accordance with ASTM E45-87. The inclusion content for Type A, B, C, D must be less than 3.0 for both the thin and thick series.

The shoulders must be free of manufacturing defects like seams, inclusions and laps that may adversely affect the performance or life of the component.

Samples must be free from excessive burrs or flashing that may be considered harmful when handled or affect the efficient assembly of the component in the rail fastening assembly. Any marks caused by the forming tools shall be smooth and free from sharp indentations.

6.4 Base plates/ saddles. (Fist)
The pads must be made for high-density polyethylene (HDPE) or an engineering plastic applicable for the application as set out in section 1 to 5. The material must have the appropriate UV and heat stabilization and must be preferably black. The pads shall be free from evidence of gassing, shrinkage or burning. The sprue and any flash shall be cleanly removed.

Base plates must be manufactured using an injection moulding technique with re-grid as specified and must be available in a resilient and non-resilient version.

Base plates must have a suitable shoulder or down stand that will be able to withstand the longitudinal forces in the track.

If the pads consist of multiple parts it must have a suitable locking method to hold the pads together.

The finished product must contain a minimum of 1% (by weight) of carbon black for UV stabilization.

6.5 Gauge plate insulators (GPI's).
The GPI'S must be made from GRN, HVN or engineering plastics applicable for the application as set out in section 1 to 5 with a maximum of 10% re-grind from the same batch. The material must have the appropriate UV and heat stabilization and

must be preferably black. The insulators shall be free from evidence of gassing, shrinkage or burning. The sprue and any flash shall be cleanly removed.

If GRN are used it must have the following properties:

- The raw material shall be an approved grade of heat stabilised 30 to 35% glass reinforced nylon 66 having the following properties:
  - Density: 1.3 to 1.45 g/cm³ to ISO 1183.
  - Melt point: 250°C – 260°C to ISO 3146.
  - Water absorption: 0.9% @23°C and @equilibrium 50%RH to ASTM D-570.
  - Regrind material allowed: Max 10%.

The finished product shall conform to the following:

- Ultimate tensile strength: greater than 4.41 kN in tensile.
- Water absorption: Minimum 0.8% after 5 hours water conditioning at min 95°C, measured at least 24 hours after removal from the water.

GPI's must have a suitable shoulder that will be able to withstand the longitudinal forces in the track.

6.6 Pins.

The pins shall be manufactured to the suppliers drawing by hot rolling and shall be subsequently oil quenched and tempered in accordance with this specification and to the manufacturer's product specification.

After heat treatment and any necessary corrosion protective coating, the pins shall be over-moulded using injection moulding techniques, in accordance with the manufacturer's product specification.

Both the FY and F4 Pins shall be manufactured from 18.5mm diameter round bar. The material will be as rolled from alloy spring steel to BS EN 10089: 2002 grade 56SiCr7 (modified).

The over-moulding shall be produced using a Natural Polypropylene Copolymer Resin that attains the following requirements:-

- Mean density: 0.91 g/cm³.
- Min average Tensile strength: 26 MPa in accordance with ISO 527.
- Elongation at Yield: 7% in accordance with ISO 527.
- Melt flow rate: 230°C/2.16kg to ISO1133, test specimen granules or powder maximum 14 g/10 min.

6.7 Other

Suppliers whose components do not fit into the above criteria will have to provide details of the:

- Material specification.
- Manufacturing process.

Mutual agreement must be reached between TFR and the supplier over the acceptance criteria before evaluation.

7. Quality Assurance.

7.1 Quality Plans.
The supplier shall provide the customer a quality plan covering material specification, reference documents for manufacturing, inspection frequencies, measurement techniques and reaction plan for each component under the rail fastening scope of supply.

7.2 Quality Accreditation.
The supplier shall be accredited to an international standard. E.g. ISO 9001.

7.3 Certificates.
The manufacturer shall issue certificates of conformance stating that the components meet the requirements of this specification.

7.4 Traceability.
All products and packaging must be marked to allow for the tracing of problems back to the manufacturing date while still packed in its original packaging and back to a year if installed in track.

7.5 Fatigue testing.
The supplier must do a fatigue test as per specification on a randomly selected clips from every 40 000 clips produced.

7.6 Test Documentation / Inspection.
The manufacturer shall carry out the inspection and testing internally in accordance with the submitted specifications and this specification and shall maintain the records of test results methodically.

7.7 Access to Manufacturing records.
The TFR representative/ Inspecting Officer shall have free access to the works of the manufacturer at all reasonable times and shall be at liberty to inspect the manufacture at any stage and to call for any records, pertaining to manufacture, which shall be made available within a reasonable time frame.

7.8 Production quality.
Product quality shall be based on a continuous monitoring process that monitors and records the production processes. Where measurements are not taken continuously it must be recorded 8 times per production shift. The manufacturer must supply details on what continuous and non-continuous measurements they intend taking.

7.9 Further Testing.
TFR reserves the right to arrange further testing of any components at the Track Testing Laboratory. The components must be supplied to TFR at the manufacturer's expense.

8. Information to be supplied by the supplier.

The following information must be supplied:

- Drawings of each component and system offered.
- Technical properties E.g. Clamping force, material info and hardness.
- Details of the markings offered.
- Detail on where the component and system comply and do not comply with the specification.
- Details and specification of the material to be used.
- Proposed packaging.
- Evidence of where the product is used in other railway lines.
- All other relevant information as asked for in this specification.

APPENDIX
Tests methods are available on request

TRANSNET

ANNEXURE B

CLAUSE BY CLAUSE

TO REVIEW AND EVALUATE RESILIENT RAIL PADS FOR USE IN TUNNELS WITH ULTIMATE OBJECTION TO APPROVED PRODUCTS.

Evaluation criteria for Rail Fastening System

Please note that the questions are an abreviation of the full clauses as set out in the specification and Please awnser each question with a Yes or No

No:		Technical approval questions	Spec clause	Answer	Annexure fastening system	Annexure RFP for pads only
1		Is the system offered approved by TFR?			A2	A2
2		Are there training material available on how to use the product and tools correctly?	3.1		A2	A2
3		Do the supplier have the necessary technical personnel to do training on how to use the product and tools correctly?	3.1		A2	A2
4		Is the necessary tools available to install and remove the fastening system?	3.2		A1	Not required
5		Are the system/ components approved by Technology management?	3.3		A2	A2
6		Is the fastening system performing well in more than one internationally recognized railway line on at least 100 000 sleepers with similar track conditions as those that they would be subjected to on the TFR lines?	3.4		A1	Not required
7		Is there a technical support team and equipment that can assist with any technical aspect required by TFR from time to time and are there proof of this competency?	3.5		A2	A2
8		Did the samples pass the visual inspection?	3.7		A2	A2
9		Are the steel product available in all the surfaces finishes required?	3.7, 3.15		A2	Not required
10		Are all the components marked with the appropriate markings?	3.8		A2	A2
11		Are the following documentation available for each of the components?			A2	A2
	11.1	the safe working procedure.	3.9		A2	A2
	11.2	the installation method.	3.9		A2	A2
	11.3	replacement method.	3.9		A2	A2
	11.4	the complete assembly with individual components.	3.9		A1	A2
	11.5	the type of maintenance and maintenance intervals required during the warranty period.	3.9		A2	A2
12		Are the drawings for each of the components and systems approved and signed off by the Principal Engineer - Track Technology?	3.10		A2	A2
13		Does the dimensions and tolerances of the components and system comply with the specification? (Gauge are ±1 mm)	3.11		A1	A2
14		Is the stacking ability, packaging options, quantities in packing and marking of the packaging as per specification?	3.12		A2	A2
15		Does the supplier guarantee the components for a period of two/Three years?	3.13		A1	A1
16		Does the components and system comply with the minimum design criteria as set out in section 4 and summarized below?			A2	A2
	16.1	It must be able to carry, spread, transfer, absorb and distribute the longitudinal, vertical, lateral and other forces caused by the dynamic loading of the trains, the environment, maintenance activities and temperature.	4.1		A1	A1
	16.2	Allow for the adjustment of the track gauge.	4.1		A1	A1
	16.3	Accommodate different types of rails. SAR 40, SAR 48, SAR 57, S60, UIC 60 and 60E1.	4.1		A2	A2
	16.4	Keep the clamping force and creep force constant irrespective of the rail type and track gauge.	4.1		A1	A1
	16.5	Give resilience to the track.	4.1		A1	A1
	16.6	Give electrical insulation.	4.1		A1	A2
	16.7	Enable the ease of track maintenance activities.	4.1		A1	A1
	16.8	It must withstand the environmental effects.	4.1		A1	A1

	16.9	Ease with maintenance activities like de-stressing, rail replacement and gauge adjustment.	4.1		A1	A1
	16.10	A cost effective life cycle cost.	4.1		A2	A2
	16.11	If a design is used in the pads that could cause rail seat abrasion, then an appropriate shim must be used with a suitable method of holding it in place.	4.1		A1	A1
17	Does the fastening system range allow for a cast into the concrete and a welded on version		4.1		A2	Not required
18	If the system is a E clip system, can the fastening system offered be retro fitted onto the existing fastening systems?		4.1, 4.2		A1	A1
19	Does the fastening system offered cover all the various types used by Transnet?		4.2		A2	A2
20	Is the fastening system designed to function under the following dynamic en environmental conditions as outlined in the tender document?					
	20.1	Axle loads of 30 tons per axle.	4.3		A1	A1
	20.2	Speeds up to 100 km/h.	4.3		A1	A1
	20.3	Rail inclination of 1:20.	4.3		A1	A1
	20.4	Curves with radiuses as small as 110 m.	4.3		A1	A1
	20.5	Lateral loads of 60 kN continuous and 80 kN maximum.	4.3		A1	A1
	20.6	Vertical deflections of 1 mm for 6 million cycles. (Under resilient pad conditions).	4.3		A1	A1
	20.7	The clamping force system on the rail seat must be a 25kN ± 2 kN. (If two clips are used ½ of the value quoted must be carried by each clip) except for the F4 clip that will be 20 kN ± 10%.	4.3		A1	A1
	20.8	The loading points of the clip/s must be such that it transfers the clip force/s evenly to the other components.	4.3		A1	Not required
	20.9	Lateral deflections of ± 0.5mm for 6 million cycles.	4.3		A1	A1
	20.10	The clip/s must still have a clamping force of 25kN ± 2kN after it has been installed and removed 5 times.	4.3		A1	Not required
	20.11	The minimum component life expected from the fastening system must be 1500 MGT on axle's load of 30 tons.	4.3		A1	A1
	20.12	The system must perform equally well in rail temperatures between -15 and 70°C.	4.3		A1	A1
	20.13	It must also be able to resist the natural ultra violet radiation and ozone.	4.3		A1	A1
	20.14	Arid as well as sub-tropical conditions with high and low humidity levels.	4.3		A1	A1
	20.15	If components are installed within 15 km from the coast the applicable components must have the necessary corrosion protection.	4.3		A1	Not required
21	Did the components and system pass all the required tests?				A2	A2
	21.1	Assembly test of the whole system – Assemble as a unit that is within the required tolerances and disassemble at least 5 times without damages or wear on any component	5		A2	A2
	21.2	Electrical insulation test – The minimum electrical resistance shall be 1 M Ω (Dry) The minimum electrical resistance shall be 4000 Ω (Wet)	5		A2	A2
	21.3	In service tests – The test section must stay and perform within the requirements of this specification with no component failure or the need for maintenance that fall outside the maintenance cycle of the component.	5		A2	A2
	21.4	Slant test – The fastening must pass the test without failure of any component.	5		A2	A2
	21.5	Repeated load test – See spec for passing criteria	5		A2	A2
	21.6	Longitudinal rail restraint test - See spec for passing criteria	5		A2	A2

	21.7	Weathering test – No signs of corrosion or weathering that will reduce the life of the component	5		A2	A2
	21.8	Vertical stiffness test - See spec for passing criteria	5		A2	A2
	21.9	Dynamic damping and stiffness– See spec for passing criteria	5		A2	A2
	21.10	Shock attenuation test. – See spec for passing criteria	5		A2	A2
	21.11	Impact and fracture toughness test – Currently not a requirement but test result must be recorded	5	NA	A2	A2
	21.12	SN and dynamic fatigue test – See spec for passing criteria.	5		A2	A2
	21.13	Clamping force test – See spec for passing criteria.	5		A2	A2
	21.14	Visual inspection – See spec for passing criteria.	5		A2	A2
	21.15	Special test – See Appendix O for the test procedure.	5	NA	A2	A2
	21.16	Torsional resistance – Currently not a requirement but test result must be recorded.	5	NA	A2	A2
	21.17	Cast in component test – The assembly must pass the tests without failure of any component.	5		A2	A2
22	DO the components and system comply with the material and manufacturing specification		6		A2	A2
23	Is a quality plan supplied covering material specification, reference documents for manufacturing, inspection frequencies, measurement techniques and reaction plan for each component under the rail fastening scope of supply?		7.1		A1	A2
24	Is the supplier using an internationally regognized quality process. E.g. ISO 9001?		7.2		A2	A2
25	Did the manufacturer issue certificates of conformance stating that the components meet the requirements of this specification?		7.3			A2
26	Did the manufacturer indicate how all products and packaging will be marked to allow for the tracing of problems back to the manufacturing date while still packed in its original packaging and back to a year if installed in track?		7.4		A2	A2
27	Can the supplier do a fatigue tests as per specification on a randomly selected clips from every 40 000 clips produced?		7.5		A2	Not required
28	Does the manufacturer have the ability to carry out the inspection and testing internally in accordance with the submitted specifications and this specification?		7.6		A2	A2
29	Does the supplier agree that a TFR representative/ Inspecting Officer shall have free access to the works of the manufacturer at all reasonable times and shall be at liberty to inspect the manufacture at any stage and to call for any records, pertaining to manufacture, which shall be made available within a reasonable time frame?		7.7		A2	A2
30	Is the product quality based on a continuous monitoring process that monitors and records the production processes?		7.8		A2	A2
31	Did the manufacturer supply details on what continuous and non continuous measurements they intend taking?		7.8		A2	A2
32	Where production/ quality measurements are not taken continuously is it recorded 8 times per production shift?		7.8		A2	A2
33	Does the supplier recognize that TFR reserves the right to arrange further testing of any components at the Track Testing Laboratory?		7.9		A1	A1
34	Does the supplier recognize that the components for testing must be supplied to TFR at the manufacturer's expense?		7.9		A1	A1
35	In addition to the information supplied above is the following information supplied?					
	35.1	Drawings of each component and system offered.	8		A1	A1
	35.2	Technical properties E.g. Clamping force, material info and hardness.	8		A1	A1
	35.3	Details of the markings offered.	8		A2	A2
	35.4	Details and specification of the material to be used.	8		A1	A1
	35.5	Proposed packaging.	8		A2	A2
	35.6	Evidence of where the product is used in other railway lines.	8		A1	Not required

36	Did the supplier indicate what the local content of the components would be?			A1	A1

TRANSNET

ANNEXURE C

NON DISCLOSURE AGREEMENT – GOODS

TO REVIEW AND EVALUATE RESILIENT RAIL PADS FOR USE IN TUNNELS WITH ULTIMATE OBJECTION TO APPROVED PRODUCTS.

TRANSNET

Annexure C

NON DISCLOSURE AGREEMENT – GOODS

TO REVIEW AND EVALUATE RESILIENT RAIL PADS FOR USE IN TUNNELS WITH ULTIMATE OBJECTION TO APPROVED PRODUCTS.

THIS AGREEMENT is made between

Transnet SOC Ltd [Transnet] [Registration No. 1990/000900/30]
whose registered office is at 49th Floor, Carlton Centre, 150 Commissioner Street, Johannesburg 2001,

and

the Company as indicated in the RFI bid response hereto

WHEREAS

Transnet and the Company wish to exchange Information [as defined below] and it is envisaged that each party may from time to time receive Information relating to the other in respect thereof. In consideration of each party making available to the other such Information, the parties jointly agree that any dealings between them shall be subject to the terms and conditions of this Agreement which themselves will be subject to the parameters of the Bid Document.

IT IS HEREBY AGREED

1. INTERPRETATION

In this Agreement:

1.1 **Agents** mean directors, officers, employees, agents, professional advisers, contractors or sub-contractors, or any Group member;

1.2 **Bid** or **Bid Document** means Transnet's Request for Information [**RFI**] Request for Proposal or as the case may be;

1.3 **Confidential Information** means any information or other data relating to one party [the **Disclosing Party**] and/or the business carried on or proposed or intended to be carried on by that party and which is made available for the purposes of the Bid to the other party [the **Receiving Party**] or its Agents by the Disclosing Party or its Agents or recorded in agreed minutes following oral disclosure and any other information otherwise made available by the Disclosing Party or its Agents to the Receiving Party or its Agents, whether before, on or after the date of this Agreement, and whether in writing or otherwise, including any information, analysis or specifications derived from, containing or reflecting such information but excluding information which:

1.3.1 is publicly available at the time of its disclosure or becomes publicly available [other than as a result of disclosure by the Receiving Party or any of its Agents contrary to the terms of this Agreement]; or

1.3.2 was lawfully in the possession of the Receiving Party or its Agents [as can be demonstrated by its written records or other reasonable evidence] free of any restriction as to its use or disclosure prior to its being so disclosed; or

1.3.3 following such disclosure, becomes available to the Receiving Party or its Agents [as can be demonstrated by its written records or other reasonable evidence] from a source other than the Disclosing Party or its Agents, which source is not bound by any duty of confidentiality owed, directly or indirectly, to the Disclosing Party in relation to such information;

1.4 **Group** means any subsidiary, any holding company and any subsidiary of any holding company of either party; and

1.5 **Information** means all information in whatever form including, without limitation, any information relating to systems, operations, plans, intentions, market opportunities, know-how, trade secrets and business affairs whether in writing, conveyed orally or by machine-readable medium.

2. CONFIDENTIAL INFORMATION

2.1 All Confidential Information given by one party to this Agreement [the **Disclosing Party**] to the other party [the **Receiving Party**] will be treated by the Receiving Party as secret and confidential and will not, without the Disclosing Party's written consent, directly or indirectly communicate or disclose [whether in writing or orally or in any other manner] Confidential Information to any other person other than in accordance with the terms of this Agreement.

2.2 The Receiving Party will only use the Confidential Information for the sole purpose of technical and commercial discussions between the parties in relation to the Bid or for the subsequent performance of any contract between the parties in relation to the Bid.

2.3 Notwithstanding clause 2.1 above, the Receiving Party may disclose Confidential Information:

2.3.1 to those of its Agents who strictly need to know the Confidential Information for the sole purpose set out in clause 2.2 above, provided that the Receiving Party shall ensure that such Agents are made aware prior to the disclosure of any part of the Confidential Information that the same is confidential and that they owe a duty of confidence to the Disclosing Party. The Receiving Party shall at all times remain liable for any actions of such Agents that would constitute a breach of this Agreement; or

2.3.2 to the extent required by law or the rules of any applicable regulatory authority, subject to clause 2.4 below.

2.4 In the event that the Receiving Party is required to disclose any Confidential Information in accordance with clause 2.3.2 above, it shall promptly notify the Disclosing Party and cooperate with the Disclosing Party regarding the form, nature, content and purpose of such disclosure or any action which the Disclosing Party may reasonably take to challenge the validity of such requirement.

2.5 In the event that any Confidential Information shall be copied, disclosed or used otherwise than as permitted under this Agreement then, upon becoming aware of the same, without prejudice to any rights or remedies of the Disclosing Party, the Receiving Party shall as soon as practicable notify the Disclosing Party of such event and if requested take such steps [including the institution of legal proceedings] as shall be necessary to remedy [if capable of remedy] the default and/or to prevent further unauthorised copying, disclosure or use.

2.6 All Confidential Information shall remain the property of the Disclosing Party and its disclosure shall not confer on the Receiving Party any rights, including intellectual property rights over the Confidential Information whatsoever, beyond those contained in this Agreement.

3. RECORDS AND RETURN OF INFORMATION

3.1 The Receiving Party agrees to ensure proper and secure storage of all Information and any copies thereof.

3.2 The Receiving Party shall keep a written record, to be supplied to the Disclosing Party upon request, of the Confidential Information provided and any copies made thereof and, so far as is reasonably practicable, of the location of such Confidential Information and any copies thereof.

3.3 The Company shall, within 7 [seven] days of receipt of a written demand from Transnet:

3.3.1 return all written Confidential Information [including all copies]; and

3.3.2 expunge or destroy any Confidential Information from any computer, word processor or other device whatsoever into which it was copied, read or programmed by the Company or on its behalf.

3.4 The Company shall on request supply a certificate signed by a director as to its full compliance with the requirements of clause 3.3.2 above.

4. ANNOUNCEMENTS

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

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

5. DURATION

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

6. PRINCIPAL

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

7. ADEQUACY OF DAMAGES

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

8. PRIVACY AND DATA PROTECTION

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

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

9. GENERAL

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

9.2 No failure or delay in exercising any right, power or privilege under this Agreement will operate as a waiver of it, nor will any single or partial exercise of it preclude any further exercise or the exercise of any right, power or privilege under this Agreement or otherwise.

9.3 The provisions of this Agreement shall be severable in the event that any of its provisions are held by a court of competent jurisdiction or other applicable authority to be invalid, void or otherwise unenforceable, and the remaining provisions shall remain enforceable to the fullest extent permitted by law.

9.4 This Agreement may only be modified by a written agreement duly signed by persons authorised on behalf of each party.

9.5 Nothing in this Agreement shall constitute the creation of a partnership, joint venture or agency between the parties.

9.6 This Agreement will be governed by and construed in accordance with South African law and the parties irrevocably submit to the exclusive jurisdiction of the South African courts.

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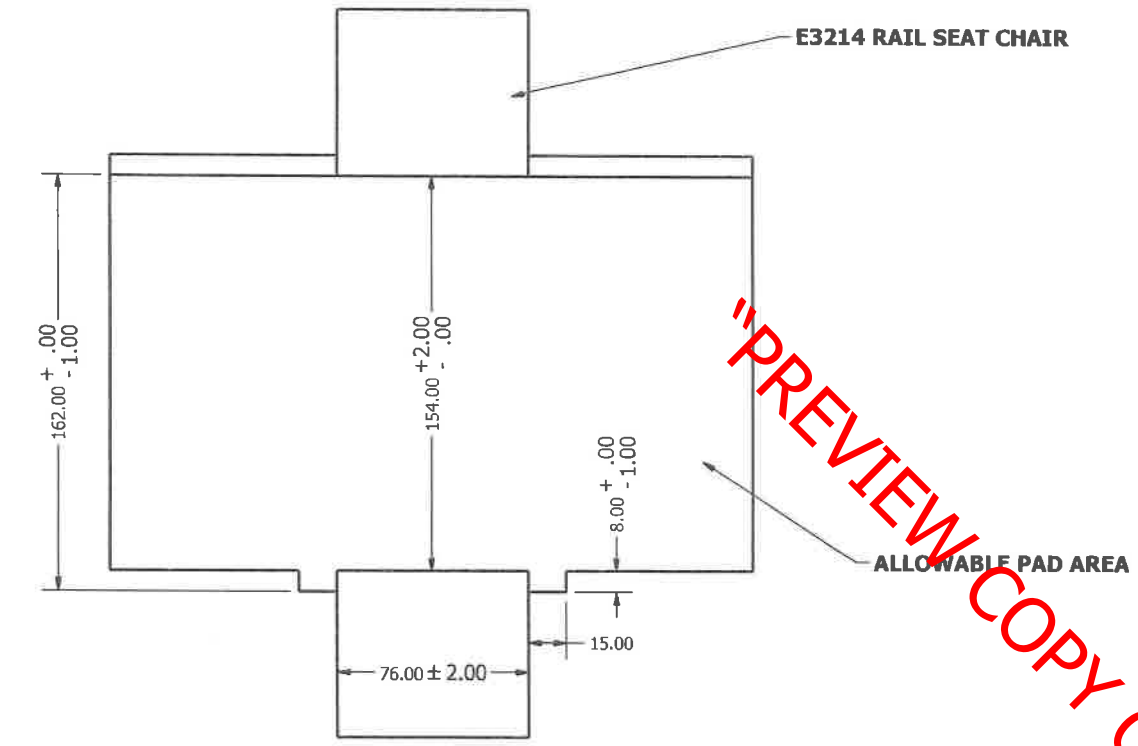
TRANSNET

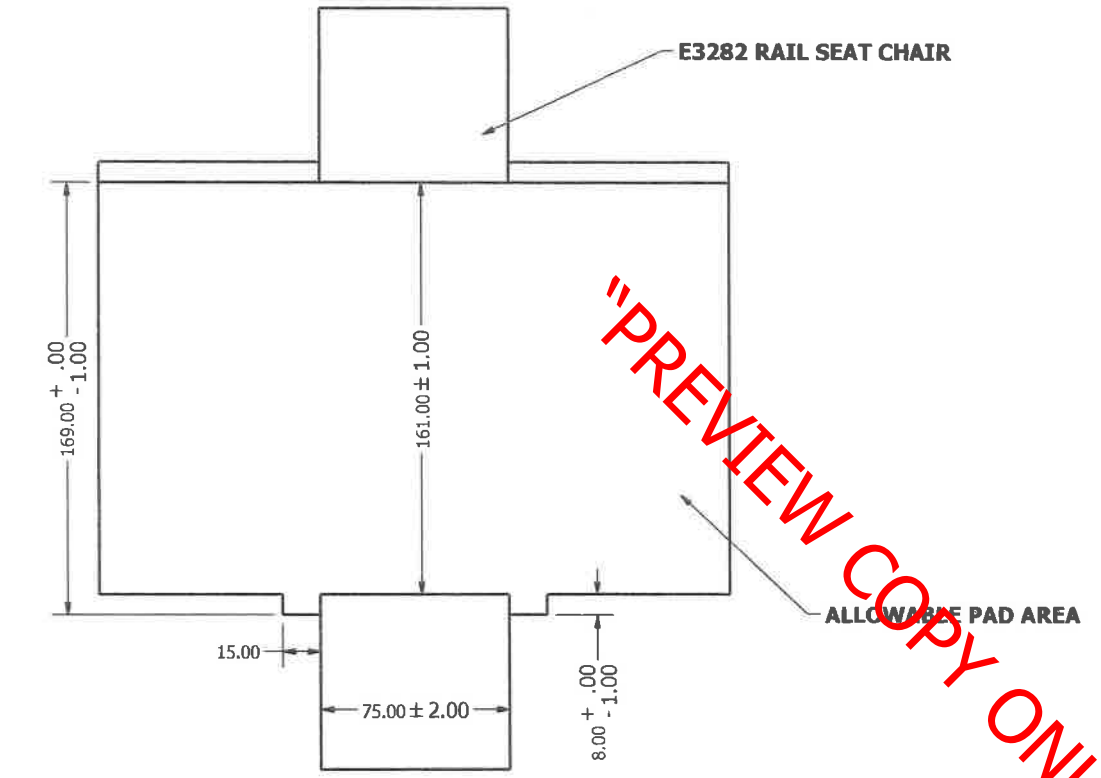
ANNEXURE D

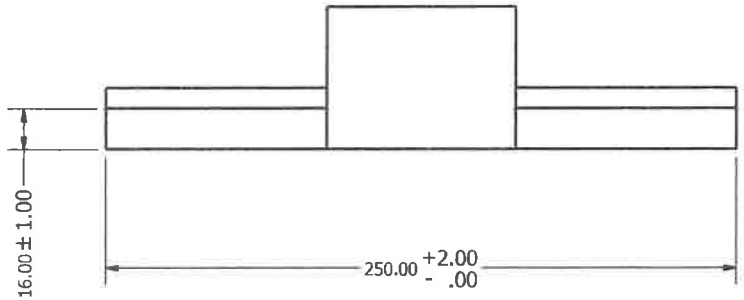
DRAWINGS

TO REVIEW AND EVALUATE RESILIENT RAIL PADS FOR USE IN TUNNELS WITH ULTIMATE OBJECTION TO APPROVED PRODUCTS.



DRAWN C.PILLAY	DATE 23/08/2013	TRANSNET FREIGHT RAIL	TRACK TECHNOLOGY 1 HOUT STREET JEPPESTOWN JOHANNESBURG 2094
CHECKED J.MEYER	DATE 23/08/2013	TITLE E3214 RAIL SEAT PAD FOOTPRINT	
APPROVED J.MEYER	DATE 23/08/2013		
PR REG NO.	SIGNATURE		
COPYRIGHT THIS DRAWING IS THE PROPERTY OF TRANSNET FREIGHT RAIL AND MAY NOT BE REPRODUCED OR GIVEN TO A THIRD PARTY WITHOUT WRITTEN PERMISSION OF TRANSNET FREIGHT RAIL		SCALE 1:2	DWG NO TTC_A253_E3214FOOTPRINT / REV 00





DRAWN C.PILLAY	DATE 23/08/2013	TRANSNET FREIGHT RAIL	TRACK TECHNOLOGY 1 HOUT STREET JEPPESTOWN JOHANNESBURG 2094
CHECKED J.MEYER	DATE 23/08/2013	TITLE E3282 RAIL SEAT PAD FOOTPRINT	
APPROVED J.MEYER	DATE 23/08/2013		
PR REG NO.	SIGNATURE		

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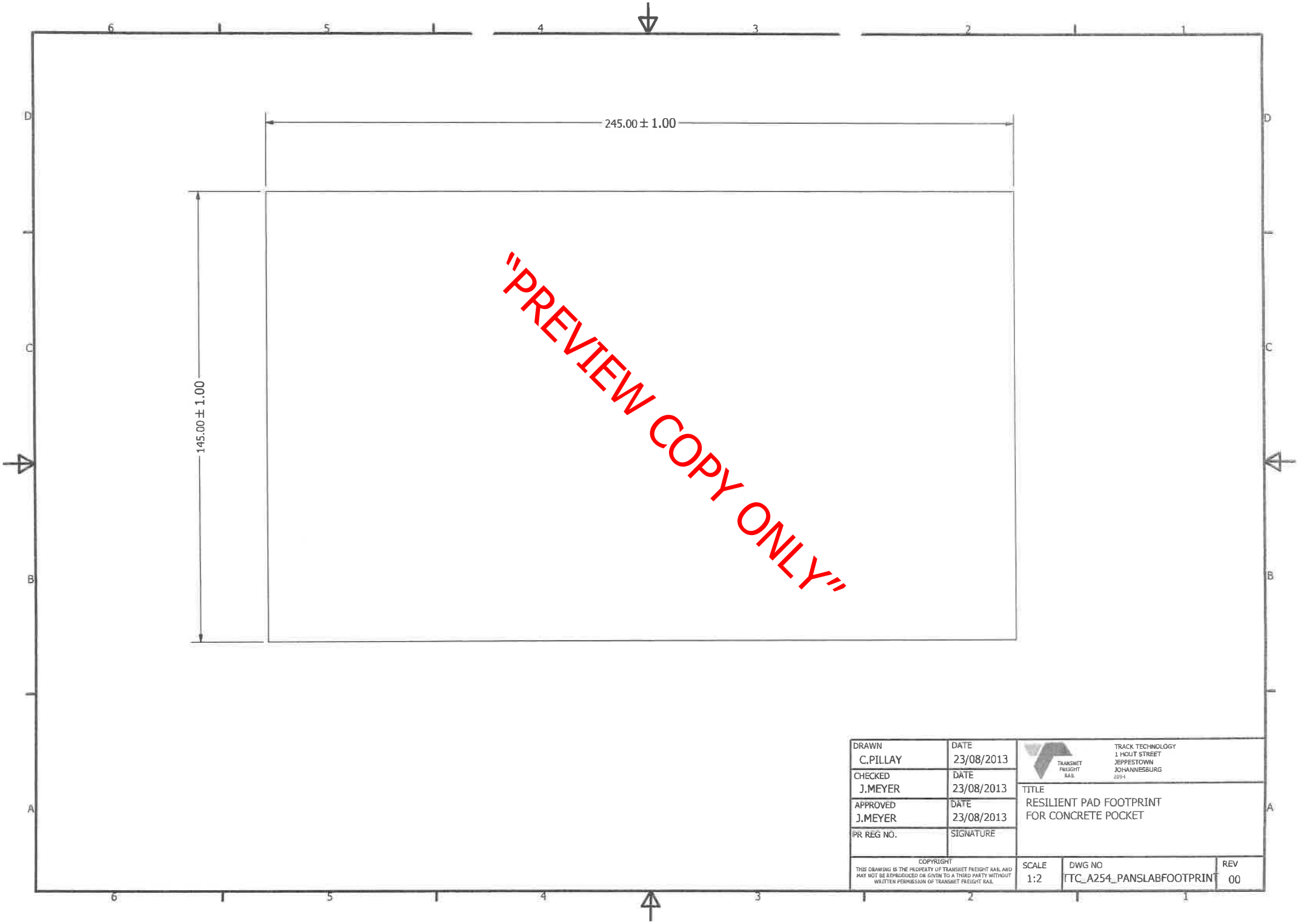

DRAWN	C.PILLAY	DATE	23/08/2013
CHECKED	J.MEYER	DATE	23/08/2013
APPROVED	J.MEYER	DATE	23/08/2013
PR REG NO.		SIGNATURE	

TRANSNET FREIGHT RAIL
TRACK TECHNOLOGY
1 HOUT STREET
JEPPESTOWN
JOHANNESBURG
2094

TITLE
RESILIENT PAD FOOTPRINT
FOR CONCRETE POCKET

SCALE	DWG NO	REV
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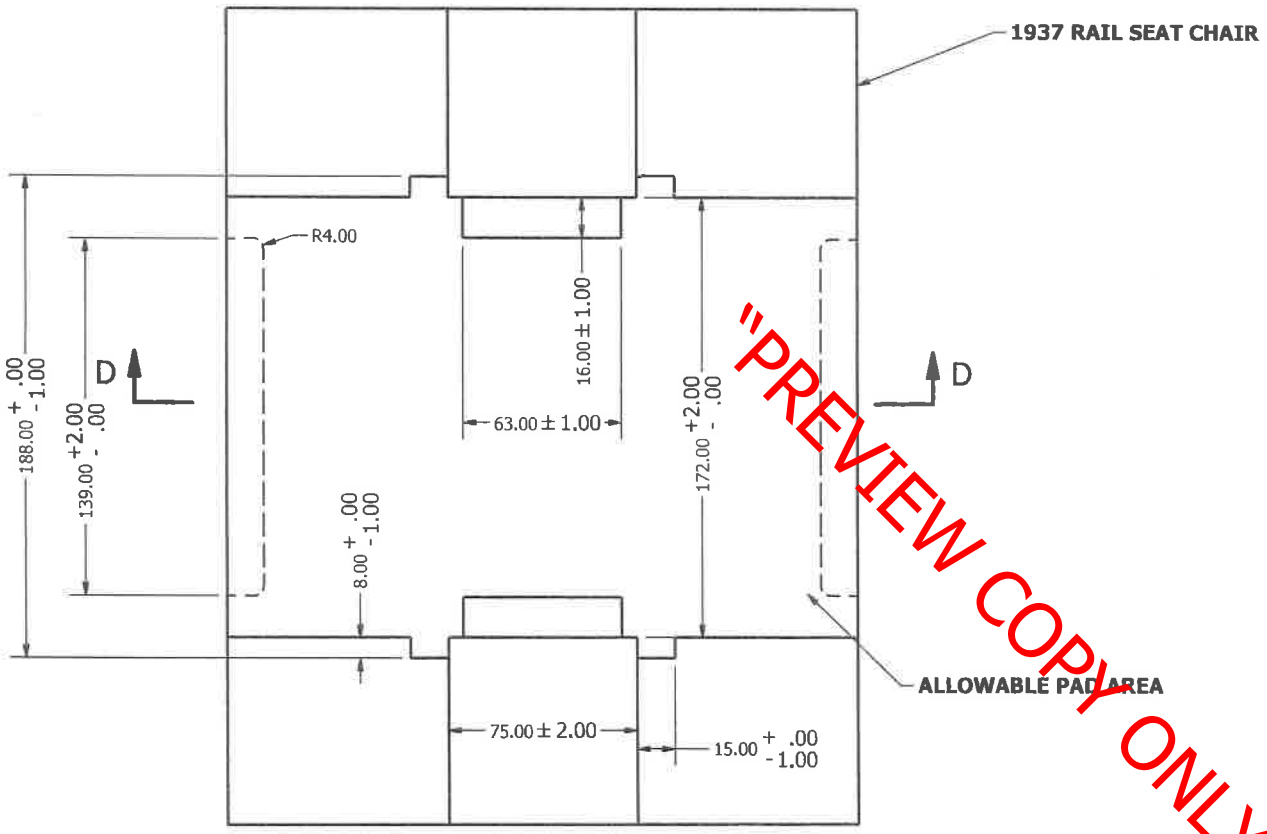

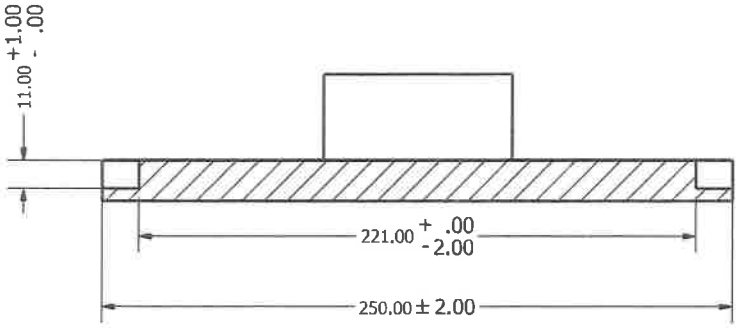

SECTION D-D

DRAWN C.PILLAY	DATE 23/08/2013	TRANSNET FREIGHT RAIL	TRACK TECHNOLOGY 1 HOUT STREET JEPPESTOWN JOHANNESBURG 2094
CHECKED J.MEYER	DATE 23/08/2013	TITLE	1937 RAIL SEAT PAD FOOTPRINT
APPROVED J.MEYER	DATE 23/08/2013		
PR REG NO.	SIGNATURE		

SCALE	DWG NO	REV
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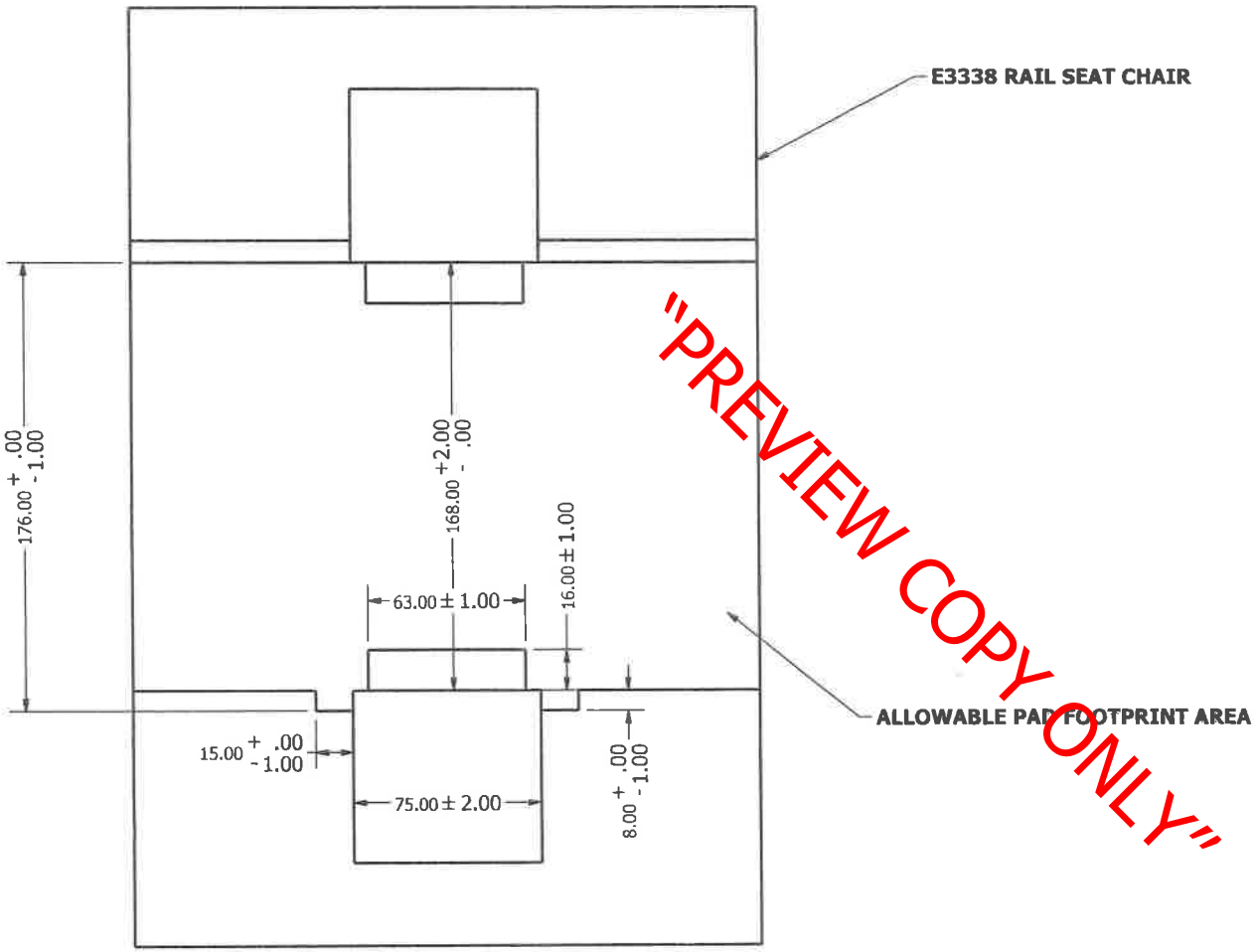

DRAWN C.PILLAY	DATE 23/08/2013	TRANSNET FREIGHT RAIL	TRACK TECHNOLOGY 1 HOUT STREET JEPPESTOWN JOHANNESBURG 2094
CHECKED J.MEYER	DATE 23/08/2013	TITLE	E3338 RAIL SEAT PAD FOOTPRINT
APPROVED J.MEYER	DATE 23/08/2013		
PR REG NO.	SIGNATURE		
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TRANSNET

ANNEXURE E

CERTIFICATE OF BRIEFING ATTENDANCE

TO REVIEW AND EVALUATE RESILIENT RAIL PADS FOR USE IN TUNNELS WITH ULTIMATE OBJECTION TO APPROVED PRODUCTS.

TO REVIEW AND EVALUATE RESILIENT RAIL PADS FOR USE IN TUNNELS WITH ULTIMATE OBJECTION TO APPROVE NATIONALLY.

ANNEXURE 5 : CERTIFICATE OF ATTENDANCE OF SITE MEETING / RFI BRIEFING

It is hereby certified that –

1. _____

2. _____

Representative(s) of _____ *[name of entity]*

attended the RFI briefing in respect of the proposed Goods to be supplied in terms of this RFI on

_____20___

_____ _____

TRANSNET'S REPRESENTATIVE RESPONDENT'S REPRESENTATIVE

DATE _____ DATE _____

EMAIL _____