



## C1.1: Form of Offer & Acceptance

### Offer

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

### **The Design, Supply and Installation of Concrete Block Valve Lids, External Locking Mechanism and 90° Output Gearboxes (Vertical Drive) as part of the modification of the existing Gearboxes**

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

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

The offered total of the Prices exclusive of VAT is	<b>R</b>
Value Added Tax @ 15% is	<b>R</b>
The offered total of the Prices inclusive of VAT is	<b>R</b>
(in words)	

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document including the Schedule of Deviations (if any) to the tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the tenderer becomes the party named as the *Contractor* in the *conditions of contract* identified in the Contract Data.

Signature(s)

Name(s)

Capacity

**For the  
Contractor:**

(Insert name and address of organisation)

Name &  
signature of  
witness

Date

Tenderer's CIDB registration number:

## Acceptance

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

The terms of the contract, are contained in:

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

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

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

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

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



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

Signature(s)

Name(s)

Capacity

**for the  
Employer**

Transnet SOC Ltd

*(Insert name and address of organisation)*

Name &  
signature of  
witness

Date



## Schedule of Deviations

Note:

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

No.	Subject	Details
1		
2		
3		
4		

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

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

	For the Contractor:	For the Employer
Signature	_____	_____
Name	_____	_____
Capacity	_____	_____
On behalf of	<i>(Insert name and address of organisation)</i>	Transnet SOC Ltd
Name & signature of witness	_____	_____
Date	_____	_____

## C1.2 Contract Data

### Part one - Data provided by the *Employer*

Clause	Statement	Data
<b>1</b>	<b>General</b>	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option	
		<b>Engineering and Construction Contract (ECC)</b>
		<b>Option A: Priced contract with activity schedule</b>
	dispute resolution Option and secondary Options	<b>W1: Dispute resolution procedure</b>
		<b>X2: Changes in the law</b>
		<b>X7: Delay damages</b>
		<b>X13: Performance bond</b>
		<b>X16: Retention</b>
		<b>X18: Limitation of liability</b>
		<b>Z: Additional conditions of contract</b>
		<b>Z1: Intellectual property</b>
		<b>Z2: Assignment and Waiver</b>
		<b>Z3: Right Reserved by Transnet to Conduct State Security Agency (SSA) Vetting</b>
		<b>Z4: Additional Clause Relating to Collusion</b>
		<b>Z5: Protection of Personal Information Act</b>
		<b>Z6: Additional clause relating to Performance Bonds and/or Guarantees</b>
		<b>Z7: Obligations in respect of Joint Venture Agreements</b>
		<b>Z8: Additional Obligations in Respect of Termination</b>
		<b>Z9: Compensation events</b>

		<b>Z10 Obligations In Respect Of The CSDG Goals</b>
	of the NEC3 Engineering and Construction Contract April 2013 <sup>1</sup>	
10.1	The <i>Employer</i> is:	<b>Transnet SOC Ltd (Reg no. 1990/000900/30)</b>
	Address	Registered address: <b>138 Eloff Street Braamfontein JOHANNESBURG 2000</b>
	Having elected its Contractual Address for the purposes of this contract as:	<b>Transnet Pipelines 202 Anton Lembede Street Durban, South Africa 4001</b>
10.1	The <i>Project Manager</i> is: (Name)	<b>TBC</b>
	Address	<b>Transnet Pipelines 202 Anton Lembede Street Durban, South Africa 4001</b>
	Tel No.	<b>TBC</b>
	e-mail	<b>TBC</b>
10.1	The <i>Supervisor</i> is: (Name)	<b>TBC</b>
	Address	<b>TBC</b>
	Tel No.	<b>TBC</b>
	e-mail	<b>TBC</b>
11.2(13)	The <i>works</i> are	<b>The Design, Supply and Installation of Concrete Block Valve Lids, External Locking Mechanism and 90-degree Output Gearboxes (Vertical Drive) as part of the modification of the existing Gearboxes</b>
11.2(14)	The following matters will be included in the Risk Register	<b>1. Community Unrest 2. Local Business Forums interruptions</b>
11.2(15)	The <i>boundaries of the site</i> are	<b>As stated in Part C4.1."Description of the Site and it surroundings"</b>

<sup>1</sup> Available from Engineering Contract Strategies Tel 011 803 3008, Fax 011 803 3009



Transnet Pipelines

Tender Number: TPL/2024/03/0004/59257/RFP

Description of the Works: The Design, Supply and Installation of Concrete Block Valve Lids, External Locking Mechanism and 90-degrees Output Gearboxes (Vertical Drive) as part of the modification of the existing Gearboxes

11.2(16)	The Site Information is	<b>As prescribed in Part C4</b>	
11.2(19)	The Works Information is in	<b>Part C3</b>	
12.2	The <i>law of the contract</i> is the law of	<b>The Republic of South Africa subject to the jurisdiction of the Courts of South Africa.</b>	
13.1	The <i>language of this contract</i> is	<b>English</b>	
13.3	The <i>period for reply</i> is	<b>2 weeks</b>	
<b>2</b>	<b>The Contractor's main responsibilities</b>	<b>No additional data is required for this section of the <i>conditions of contract</i>.</b>	
<b>3</b>	<b>Time</b>		
11.2(3)	The <i>completion date</i> for the whole of the works is	<b>30 April 2027</b>	
30.1	The <i>access dates</i> are	<b>Part of the Site</b> <b>1 Whole of the Site</b>	<b>Date</b> <b>on safety file approval</b>
31.1	The <i>Contractor</i> is to submit a first programme for acceptance within	<b>2 weeks of the Contract Date.</b>	
31.2	The <i>starting date</i> is	<b>03 November 2025</b>	
32.2	The <i>Contractor</i> submit a revised programme	<b>Every 4 weeks</b>	
<b>4</b>	<b>Testing and Defects</b>		
42.2	The <i>defects date</i> is	<b>52 weeks after Completion of the whole of the works.</b>	
43.2	The <i>defect correction period</i> is	<b>2 weeks</b>	
<b>5</b>	<b>Payment</b>		
50.1	The <i>assessment interval</i> is monthly on the	<b>15<sup>th</sup> (fifteenth) day of each successive month, and the final invoice to be submitted by the 20<sup>th</sup> (twentieth) day of each successive month</b>	
51.1	The <i>currency of this contract</i> is the	<b>South African Rand.</b>	
51.2	The period within which payments are made is	<b>30 days from date of receipt of valid Tax Invoice and month-end Statement.</b>	
51.4	The <i>interest rate</i> is	<b>Prime lending rate of the Rand Merchant Bank South Africa as determined from time to time.</b>	
<b>6</b>	<b>Compensation events</b>		
60.1(13)	The <i>weather measurements</i> to be recorded for each calendar month are,	<b>the cumulative rainfall (mm)</b>	

	the number of days with rainfall more than 10 mm
The place where weather is to be recorded (on the Site) is:	The site under execution
The <i>weather data</i> are the records of past <i>weather measurements</i> for each calendar month which were recorded at:	The closest weather station to the site under execution
and which are available from:	South African Weather Services 012 367 6000 or <a href="mailto:info4@weathersa.co.za">info4@weathersa.co.za</a> .

<b>7</b>	<b>Title</b>	No additional data is required for this section of the conditions of contract.
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<b>8</b>	<b>Risks and insurance</b>
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80.1	These are additional <i>Employer's</i> risks	None
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84.1	The <i>Employer</i> provides these insurances from the Insurance Table
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1	Insurance against:	Loss of or damage to the works, Plant and Materials is as stated in the Insurance policy for Contract Works/ Public Liability.
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	Cover / indemnity:	to the extent as stated in the insurance policy for Contract Works / Public Liability
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	The deductibles are:	as stated in the insurance policy for Contract Works / Public Liability
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2	Insurance against:	Loss of or damage to property (except the works, Plant and Materials & Equipment) and liability for bodily injury to or death of a person (not an employee of the Contractor) arising out of or in connection with the performance of the Contract as stated in the insurance policy for Contract Works / Public Liability
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	Cover / indemnity	Is to the extent as stated in the insurance policy for Contract Works / Public Liability
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	The deductibles are	as stated in the insurance policy for Contract Works / Public Liability
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3	Insurance against:	Loss of or damage to Equipment (Temporary Works only) as stated in the insurance policy for contract Works and Public Liability
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	Cover / indemnity	Is to the extent as stated in the insurance policy for Contract Works / Public Liability
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	The deductibles are:	<b>As stated in the insurance policy for Contract Works / Public Liability</b>
4	Insurance against:	<b>Contract Works SASRIA insurance subject to the terms, exceptions and conditions of the SASRIA coupon</b>
	Cover / indemnity	<b>Cover / indemnity is to the extent provided by the SASRIA coupon</b>
	The deductibles are	<b>The deductibles are, in respect of each and every theft claim, 0,1% of the contract value subject to a minimum of R2,500 and a maximum of R25,000.</b>
84.1	The minimum limit of indemnity for insurance in respect of death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract for any one event is	<b>The Contractor must comply at a minimum with the provisions of the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 as amended.</b>
	The <i>Contractor</i> provides these additional Insurances	<ol style="list-style-type: none"> <li><b>1 Where the contract requires that the design of any part of the works shall be provided by the Contractor the Contractor shall satisfy the Employer that professional indemnity insurance cover in connection therewith has been affected</b></li> <li><b>2 Where the contract involves manufacture, and/or fabrication of Plant &amp; Materials, components or other goods to be incorporated into the works at premises other than the site, the Contractor shall satisfy the Employer that such plant &amp; materials, components or other goods for incorporation in the works are adequately insured during manufacture and/or fabrication and transportation to the site.</b></li> <li><b>3 Should the Employer have an insurable interest in such items during manufacture, and/or fabrication, such interest shall be noted by endorsement to the Contractor's policies of insurance as well as those of any sub-contractor</b></li> <li><b>4 Motor Vehicle Liability Insurance comprising (as a minimum) "Balance of Third Party" Risks including Passenger and Unauthorised Passenger Liability indemnity with a minimum indemnity limit of R 5 000 000/R 10 000 000.</b></li> </ol>

		<p><b>5 The insurance coverage referred to in 1, 2, 3, and 4 above shall be obtained from an insurer(s) in terms of an insurance policy approved by the Employer. The Contractor shall arrange with the insurer to submit to the Project Manager the original and the duplicate original of the policy or policies of insurance and the receipts for payment of current premiums, together with a certificate from the insurer or insurance broker concerned, confirming that the policy or policies provide the full coverage as required. The original policy will be returned to the Contractor.</b></p>
84.2	The minimum limit of indemnity for insurance in respect of loss of or damage to property (except the works, Plant, Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i> ) caused by activity in connection with this contract for any one event is	<p><b>Whatever the Contractor requires in addition to the amount of insurance taken out by the Employer for the same risk.</b></p>
84.2	The insurance against loss of or damage to the works, Plant and Materials as stated in the insurance policy for contract works and public liability selected from:	<p><b>Principal Controlled Insurance policy for Contract</b></p>
<b>9</b>	<b>Termination</b>	<p><b>There is no additional Contract Data required for this section of the conditions of contract.</b></p>
<b>10</b>	<b>Data for main Option clause</b>	
<b>A</b>	<b>Priced contract with Activity Schedule</b>	<p><b>No additional data is required for this Option.</b></p>
60.6	The <i>method of measurement</i> is	<p><b>Standard system of measuring builders work 7th edition and As per Pricing instruction of the works.</b></p>
<b>11</b>	<b>Data for Option W1</b>	

W1.1	The <i>Adjudicator</i> is	Both parties will agree as and when a dispute arises. If the parties cannot reach an agreement on the <i>Adjudicator</i> , the chairman of the Association of Arbitrators will appoint an <i>Adjudicator</i> .
W1.2(3)	The <i>Adjudicator nominating body</i> is:	The Chairman of the Association of Arbitrators (Southern Africa)
	If no <i>Adjudicator nominating body</i> is entered, it is:	the Association of Arbitrators (Southern Africa)
W1.4(2)	The <i>tribunal</i> is:	Arbitration
W1.4(5)	The <i>arbitration procedure</i> is	The Rules for the Conduct of Arbitrations of the Association of Arbitrators (Southern Africa)
	The place where arbitration is to be held is	Durban, KwaZulu Natal
	The person or organisation who will choose an arbitrator if the Parties cannot agree a choice or if the arbitration procedure does not state who selects an arbitrator, is	The Chairman of the Association of Arbitrators (Southern Africa)
X2	Changes in the law	No additional data is required for this Option
X7	Delay Damages	
X7.1	Delay damages for Completion of the whole of the <i>works</i> are	R 25 000 per day excl. VAT  The parties agree that this constitutes a genuine pre-estimate of the damages.
X13	Performance Bond	
X13.1	The amount of the Performance Bond is	5% of the total of the Price at the contract date (excluding V.A.T.)  By an issuer reasonably acceptable to Transnet SOC Ltd
X16	Retention	
X16.1	The <i>retention free amount</i> is	Nil
	The <i>retention percentage</i> is	10% on all payments certified
X18	Limitation of liability	



Transnet Pipelines

Tender Number: TPL/2024/03/0004/59257/RFP

Description of the Works: The Design, Supply and Installation of Concrete Block Valve Lids, External Locking Mechanism and 90-degrees Output Gearboxes (Vertical Drive) as part of the modification of the existing Gearboxes

X18.1	The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited to:	<b>Value to be proven at the time</b>
X18.2	For any one event, the Contractor's liability to the Employer for loss of or damage to the Employer's property is limited to:	<b>The deductible of the relevant insurance policy</b>
X18.3	The Contractor's liability for Defects due to his design which are not listed on the Defects Certificate is limited to:	<b>The cost of correcting the Defect</b>
X18.4	The <i>Contractor's</i> liability to the <i>Employer</i> for Defects that are not found until after the <i>defects date</i> is limited to:	<b>The Total of the Prices</b>
X18.5	The <i>end of liability date</i> is	<b>5 (Five) years after Completion of the whole of the services</b>

<b>Z</b>	<b><i>Additional conditions of contract</i></b>
	The <i>additional conditions of contract</i> are:
<b>Z 1</b>	<b>INTELLECTUAL PROPERTY</b>
<b>Z 1.1</b>	Intellectual property rights (including patents, copyright, trademarks etc.) rest with the party owning them.
<b>Z 1.2</b>	<p>The Employer indemnifies the Contractor against any claim or action (including costs) caused by or arising from the failure as the Employer to obtain such consent and the contractor indemnifies the Employer against any claim or action (including costs) caused by or arising from the failure of the Contractor to obtain such consent.</p> <p><i>The Employer owns the Contractor rights over material prepared for this contract by the Contractor except as stated otherwise in the Scope. The Contractor obtains other rights for the Employer as stated in the Scope and obtains from a Subcontractor/Subconsultant equivalent rights for the Employer over the material prepared by the Subcontractor/Subconsultant. The Contractor provides to the Employer the documents which transfer these rights to the Employer.</i></p>
<b>Z 2</b>	<b>ASSIGNMENT AND WAIVER</b>
<b>Z 2.1</b>	No rights, duties or liabilities under this contract may be ceded, assigned, transferred, conveyed or otherwise disposed of by either Party ( <i>Employer or Contractor</i> ) without the prior written consent of the other Party ( <i>Employer or Contractor</i> ), which consent shall not be unreasonably withheld.
<b>Z 2.2</b>	No grant by the <i>Contractor</i> or the <i>Employer</i> to the other of any concession, waiver, condonation or allowance is, in respect of any specific event or circumstance other than of which the grant was made, to constitute a waiver of the rights of the grantor in terms of the Contract or an <i>estoppel</i> of the grantor's right to enforce the provisions of the Contract.
<b>Z 3</b>	<p><b>RIGHT RESERVED BY TRANSNET TO CONDUCT VETTING THROUGH STATE SECURITY AGENCY (SSA):</b></p> <p>Transnet reserves the right to conduct vetting through State Security Agency (SSA) for security clearances of any Contractor who has access to National Key Points for the following without limitations:</p> <ol style="list-style-type: none"> <li>1. Confidential – this clearance is based on any information which may be used by malicious, opposing or hostile elements to harm the objectives and functions of an organ of state.</li> <li>2. Secret – clearance is based on any information which may be used by malicious, opposing or hostile elements to disrupt the objectives and functions of an organ of state.</li> <li>3. Top Secret – this clearance is based on information which may be used by malicious, opposing or hostile elements to neutralise the objectives and functions of an organ of state.</li> </ol>
<b>Z 4</b>	<p><b>ADDITIONAL CLAUSE RELATING TO COLLUSION IN THE CONSTRUCTION INDUSTRY</b></p> <p>The Contract award is made without prejudice to any rights Transnet may have to take appropriate action later with regard to any declared bid rigging including blacklisting</p>

<b>Z 5</b>	<p><b>PROTECTION OF PERSONAL INFORMATION ACT:</b></p> <p>The <i>Employer</i> and the <i>Contractor</i> are required to process information obtained for the duration of the Agreement in a manner that is aligned to the Protection of Personal Information Act</p>
<b>Z 6</b>	<p><b>ADDITIONAL CLAUSE RELATING TO PERFORMANCE BONDS AND/OR GUARANTEES</b></p> <p>The Performance Guarantee under X13 above shall be an irrevocable, on-demand performance guarantee, to be issued in the same form of the Pro Forma document provided for this purpose under C1.3 (Forms of Securities), in favour of the <i>Employer</i> by a financial institution reasonably acceptable to the <i>Employer</i></p> <p>Failure to comply with this obligation by the <i>Contractor</i> will entitle the <i>Employer</i> to terminate the <i>Contractor's</i> obligation to Provide the remainder of the Works without any further entitlement to the <i>Contractor</i> for any payment or consideration with regards to the provision of the remainder of the work contracted for.</p>
<b>Z 7</b>	<p><b>OBLIGATIONS IN RESPECT OF JOINT VENTURE AGREEMENTS:</b></p> <p>In the instance that the <i>Contractor</i> is a joint venture, the <i>Contractor</i> shall provide the <i>Employer</i> with a certified copy of its signed joint venture agreement, and in the instance that the joint venture is an 'Incorporated Joint Venture,' the Memorandum of Incorporation, within 4 (four) weeks of the Contract starting date</p> <p>The Joint Venture agreement shall contain but not be limited to the following:</p> <ul style="list-style-type: none"> <li>• A brief description of the Contract and the Deliverables.</li> <li>• The name, physical address, communications addresses and domicilium citandi et executandi of each of the constituents and of the Joint Venture.</li> <li>• The constituents' interests.</li> <li>• A schedule of the insurance policies, sureties, indemnities and guarantees which must be taken out by the Joint Venture and by the individual constituents.</li> <li>• Details of an internal dispute resolution procedure.</li> </ul> <p>Written confirmation by all of the constituents:</p> <ol style="list-style-type: none"> <li>i. of their joint and several liability to the <i>Employer</i> to Provide the <i>works</i>.</li> <li>ii. proof of separate bank account/s in the name of the joint venture.</li> <li>iii. identification of the lead in the joint venture confirming the authority of the lead to bind the joint venture through the <i>Contractor's</i> representative.</li> <li>iv. Identification of the roles and responsibilities of the constituents to provide the <i>works</i>.</li> </ol> <p>Financial requirements for the Joint Venture:</p> <ol style="list-style-type: none"> <li>i. the working capital requirements for the Joint Venture and the extent to which and manner whereby this will be provided and/or guaranteed by the constituents from time to time.</li> </ol> <p>the names of the auditors and others, if any, who will provide auditing and accounting services to the Joint Venture</p>
<b>Z8</b>	<p><b>ADDITIONAL OBLIGATIONS IN RESPECT OF TERMINATION</b></p>

<b>Z8.1</b>	<p>The following will be included under core clause 91.1: In the second main bullet, after the word 'partnership' add 'joint venture whether incorporate or otherwise (including any constituent of the joint venture)' and</p> <p>Under the second main bullet, insert the following additional bullets after the last sub-bullet:</p> <ul style="list-style-type: none"> <li>• commenced business rescue proceedings (R22)</li> <li>• repudiated this Contract (R23)</li> </ul>
<b>Z8.2</b>	<p><b>Termination Table</b> The following will be included under core clause 90.2 Termination Table as follows:</p> <p>Amend "A reason other than R1 – R21" to "A reason other than R1 – R23"</p>
<b>Z8.3</b>	Amend "R1 – R15 or R18" to "R1 – R15, R18, R22 or R23."
<b>Z9</b>	<b>COMPENSATION EVENTS</b>
<b>Z9.1</b>	<p>Add to clause 60.1(13) and clause 60.1(19):</p> <p>Only the effect of time is taken into account in assessing this compensation event. The Prices are not to be changed.</p>
<b>Z9.2</b>	<p>Amend the provisions of Clause 60.1(4) to read as follows:</p> <p>(4) The <i>Employer</i> gives an Instruction to stop or not to start any work or to change a Key Date. Any instructions issued by the <i>Employer</i> in terms whereof the <i>Contractor</i> will be required to stop work and comply with any Health and Safety requirement, policy, specification, or regulation, including conducting of Emergency exercises or any safety stand downs, or safety related matters shall not constitute a compensation event and will not result in a change to the Prices.</p>
<b>Z9.3</b>	<p>Add to clause 60.1(3):</p> <p>The <i>Contractor</i> indicates on his Programme when he plans to establish as each work area. The <i>Employer</i> requires at least 10 days notification prior to establishment to arrange access.</p>
<b>Z10</b>	<b>OBLIGATIONS IN RESPECT OF THE CSDG GOALS</b>
<b>Z10.1</b>	It is a fundamental condition of contract that the tenderer meet the required CSDG goals as stated in the RFP
<b>Z10.2</b>	<p>Compliance with requirements The contractor shall:</p> <p>a) within 30 days of the contract coming into effect or the issuing of an order, submit to the employer's representative a contract compliance baseline training plan, taking into account the skills mix and type of workers that are to be engaged.</p> <p>b) at intervals not exceeding three (3) months, submit to the employer's representative interim contract compliance training reports; and</p> <p>c) shall within 30 days of reaching completion, end of the service, the delivery date for all work required or practical completion in the case of professional service, design and construct contracts, and engineering and construction works contracts, respectively, submit to the employer's representative a final contract compliance training report</p>

<b>Z10.3</b>	It is the responsibility of the Contractor to ensure that all CSDG goals and compliance requirements are satisfied.
<b>Z10.4</b>	In the event that the contractor fails to provide reasonable explanation to the employer for any failure to achieve the contract participation goal, the sanctions as agreed in the contract shall apply
<b>Z10.5</b>	The employer has the right to withhold payment in respect of the main offer, should the contractor default on the implementation of achieving the CSDG goals. In such an instance the value of the payment withheld, shall be no less than the value of the CSDG requirement where non-performance has occurred.
<b>Z10.6</b>	The Employer has the right to terminate the contract should the Contractor default on the CSDG condition of tender



## C1.2 Contract Data

### Part two - Data provided by the *Contractor*

Clause	Statement	Data
10.1	The <i>Contractor</i> is:	.....
	Address	.....
	Tel No.	.....
	Fax No.	.....
11.2(8)	The <i>direct fee percentage</i> is	.....
	The <i>subcontracted fee percentage</i> is	.....
11.2(18)	The <i>working areas</i> are the Site and	.....
24.1	The <i>Contractor's</i> key persons are:	
	1 Name:	.....
	Job:	.....
	Responsibilities:	.....
	Qualifications:	.....
	2 Name:	.....
	Job:	.....
	Responsibilities:	.....
	Qualifications:	.....
	3 Name:	.....
	Job:	.....
	Responsibilities:	.....
	Qualifications:	.....
	4 Name:	.....
	Job:	.....
	Responsibilities:	.....
	Qualifications:	.....



Transnet Pipelines

Tender Number: TPL/2024/03/0004/59257/RFP

Description of the Works: The Design, Supply and Installation of Concrete Block Valve Lids, External Locking Mechanism and 90-degrees Output Gearboxes (Vertical Drive) as part of the modification of the existing Gearboxes

<b>A</b>	<b>Priced contract with Activity Schedule</b>			
11.2(21)	The Activity Schedule is in	<b>Part C2 Pricing Data</b>		
11.2(31)	The tendered total of the Prices is	(in figures)		
		(in words), excluding VAT		
	<b>Data for Schedules of Cost Components</b>	<i>Note "SCC" means Schedule of Cost Components starting on page 56 of ECC, and "SSCC" means Shorter Schedule of Cost Components starting on page 59 of ECC.</i>		
<b>A</b>	<b>Priced contract with Activity Schedule</b>	<b>Data for the Shorter Schedule of Cost Components</b>		
41 in SSCC	The percentage for people overheads is:	.....		
21 in SSCC	The published list of Equipment is the last edition of the list published by	.....		
	The percentage for adjustment for Equipment in the published list is	.....		
22 in SSCC	The rates of other Equipment are:	<b>Equipment</b>	<b>Size capacity or</b>	<b>Rate</b>
61 in SSCC	The hourly rates for Defined Cost of design outside the Working Areas are	<b>Category of employee</b>	<b>Hourly rate</b>	
62 in SSCC	The percentage for design overheads is	.....		



**PART 2: PRICING DATA**

Document reference	Title	No of pages
C2.1	Pricing instructions: Option A	4
C2.2	Activity Schedule	1

## C2.1 Pricing Instructions: Option A

### 1. The conditions of contract

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

Clause 11 in NEC3 Engineering and Construction Contract, June 2005, (with amendments June 2006 and April 2013) (ECC) Option A states:

**Identified and defined terms**

- 11.2 (20) The Activity Schedule is the *activity schedule* unless later changed in accordance with this contract.
- (22) Defined Cost is the cost of the components in the Shorter Schedule of Cost Components whether work is subcontracted or not excluding the cost of preparing quotations for compensation events.
- (27) The Price for Work Done to Date is the total of the Prices for
- each group of completed activities and
  - each completed activity which is not in a group
- A completed activity is one which is without Defects which would either delay or be covered by immediately following work.
- (30) The Prices are the lump sums for each of the activities on the Activity Schedule unless later changed in accordance with this contract.

#### 1.2. Measurement and Payment

- 1.2.1 The Activity Schedule provides the basis of all valuations of the Price for Work Done to Date, payments in multiple currencies, price adjustments for inflation and general progress monitoring.
- 1.2.2 The amount due at each assessment date is based on **completed activities and/or milestones** as indicated on the Activity Schedule.
- 1.2.3 The Activity Schedule work breakdown structure provided by the *Contractor* is based on the Activity Schedule provided by the *Employer*. The activities listed by the *Employer* are the minimum activities acceptable and identify the specific activities which are required to achieve Completion. The activity schedule work breakdown structure is compiled to the satisfaction of the *Project Manager* with any additions and/or amendments deemed necessary.
- 1.2.4 The *Contractor's* detailed Activity Schedule summates back to the Activity Schedule provided by the *Employer* and is in sufficient detail to monitor completion of activities related to the Accepted Programme in order that payment of completed activities may be assessed.




- 
- 1.2.5 The short descriptions in the Activity Schedule are for identification purposes only. All work described in the Works Information is deemed included in the activities.
  - 1.2.6 The Activity Schedule is integrated with the Prices, Accepted Programme and where required the forecast rate of payment schedule.
  - 1.2.7 Activities in multiple currencies are separately identified on both the Activity Schedule and the Accepted Programme for each currency.
  - 1.2.8 The tendered total of the prices as stated in the Contract Data is obtained from the Activity Schedule summary. The tendered total of the prices includes for all direct and indirect costs, overheads, profits, risks, liabilities and obligations relative to the Contract.



## C2.2 Activity Schedule

The Tenderer details his Activity Schedule below or makes reference to his Activity Schedule and attaches it to this schedule.

Block Valve Lids Replacement - Activity Schedule									
Item No.	Scope Reference	Slab Type	No. of Slabs	Activity	Unit		Quantities	Price	Activity Price
1 Compliance Documents									
1.1.1	5			The Contractor to prepare all Health and Safety documents for acceptance by the Employer (Refer to scope of works)	Sum		1	- R	-
Project Meeting									
1.1.3	7.1			Meetings	No		36	- R	-
Phase 1A									
Item No.	Scope Reference	Slab Type		Activity	Unit		Quantities	Price	Activity Price
2 Conduct site visits to block valves									
2.1.1	6 & 8.2	Panel 3	67	Conduct site visits to block valves - (Durban to Jameson Park ) Approximate distance 556 km's	Sum		1	- R	-
2.1.2	6 & 8.2	Panel 3	8	Conduct site visits to block valves - (Jemosan Park to Alrode) Approximate distance 42km's	Sum		1	- R	-
2.1.3	6 & 8.2	Panel 3	11	Conduct site visits to block valves - ( Alrode to langlaagte) Approximate distance 31km's	Sum		1	- R	-
2.1.4	6 & 8.2	Panel 3	19	Conduct site visits to block valves - ( Kendal to Watloo) Approximate distance 90km's	Sum		1	- R	-
2.1.5	6 & 8.2	Panel 3	3	Conduct site visits to block valves- ( Jameson Park to Kendal ) Approximate distance 90km's	Sum		1	- R	-
2.1.6	6 & 8.2	Panel 3	5	Conduct site visits to block valves- ( Secunda to Kendal ) Approximate distance 72km's	Sum		1	- R	-
2.1.7	6 & 8.2	Panel 3	3	Conduct site visits to block valves- ( Kendal to Witbank ) Approximate distance 30km's	Sum		1	- R	-
Design of reinforced concrete slab that will fit in the middle of existing concrete lids including testing samples.									
2.1.8	4.1	Panel 3	116	Design of reinforced concrete slab that will fit in the middle of existing concrete lids including testing samples.	Sum		1	- R	-
Design of an external locking mechanism to block Valve, Chambe Lid ( removable key) including testing sample.									
2.1.9	4.1	Panel 3	116	Design of reinforced concrete slab that will fit in the middle of existing concrete lids including testing samples.	Sum		1	- R	-
Fabrication, Supply and installation of reinforced concrete slab as per accepted design.									
2.1.10	4.1	Panel 3	67	Fabrication, Supply and installation of reinforced concrete slabs - (Durban to Jameson Park ) Approximate distance 556 km's	Sum		1	- R	-
2.1.11	4.1	Panel 3	8	Fabrication, Supply and installation of reinforced concrete slab - (Jemosan Park to Alrode) Approximate distance 42km's	Sum		1	- R	-
2.1.12	4.1	Panel 3	11	Fabrication, Supply and installation of reinforced concrete slab - ( Alrode to langlaagte) Approximate distance 31km's	Sum		1	- R	-
2.1.13	4.1	Panel 3	19	Fabrication, Supply and installation of reinforced concrete slabs - ( Kendal to Watloo) Approximate distance 90km's	Sum		1	- R	-
2.1.14	4.1	Panel 3	3	Fabrication, Supply and installation of reinforced concrete slab - ( Jameson Park to Kendal ) Approximate distance 90km's	Sum		1	- R	-
2.1.15	4.1	Panel 3	5	Fabrication, Supply and installation of reinforced concrete slab- ( Secunda to Kendal ) Approximate distance 72km's	Sum		1	- R	-
2.1.16	4.1	Panel 3	3	Fabrication, Supply and installation of reinforced concrete slab- ( Kendal to Witbank ) Approximate distance 30km's	Sum		1	- R	-
Fabrication, Supply and installation of external locking mechanism to Block Valve - Chamber Lids as per design:									
2.1.17	4.1	Panel 3	67	Fabrication, Supply and installation of external locking mechanism to block Valve chamber Lids - (Durban to Jameson Park ) Approximate distance 556 km's	Sum		1	- R	-
2.1.18	4.1	Panel 3	8	Fabrication, Supply and installation of external locking mechanism to block Valve chamber Lids - (Jemosan Park to Alrode) Approximate distance 42km's	Sum		1	- R	-
2.1.19	4.1	Panel 3	11	Fabrication, Supply and installation of external locking mechanism to block Valve chamber Lids- ( Alrode to langlaagte) Approximate distance 31km's	Sum		1	- R	-
2.1.20	4.1	Panel 3	19	Fabrication, Supply and installation of external locking mechanism to block Valve chamber Lids - ( Kendal to Watloo) Approximate distance 90km's	Sum		1	- R	-
2.1.21	4.1	Panel 3	3	Fabrication, Supply and installation of external locking mechanism to block Valve chamber Lids - ( Jameson Park to Kendal ) Approximate distance 90km's	Sum		1	- R	-
2.1.22	4.1	Panel 3	5	Fabrication, Supply and installation of external locking mechanism to block Valve chamber Lids- ( Secunda to Kendal ) Approximate distance 72km's	Sum		1	- R	-
2.1.23	4.1	Panel 3	3	Fabrication, Supply and installation of external locking mechanism to block Valve chamber Lids- ( Kendal to Witbank ) Approximate distance 30km's	Sum		1	- R	-
Phase 1B									
Item No.	Scope Reference	Slab Type		Activity	Unit		Quantities	Price	Activity Price
3 Conduct site visits to block valves									
3.1.1	6 & 8.2	Type 9 & 13	14	Conduct site visits to block valves - (Sasolburg - Klerksdorp) Approximate distance 138 km's	Sum		1	- R	-
3.1.2	6 & 8.2	Type 9 & 13	4	Conduct site visits to block valves - (Langlaagte to Tarlton) Approximate distance 42km's	Sum		1	- R	-
3.1.3	6 & 8.2	Type 9 & 13	5	Conduct site visits to block valves - ( Tarlton to Rustenburg) Approximate distance 63km's	Sum		1	- R	-
3.1.4	6 & 8.2	Type 3, 4, 5, 6 & 7	12	Conduct site visits to block valves - ( Coalbrook to Jameson Park ) Approximate distance 71km's	Sum		1	- R	-
3.1.5	6 & 8.2	Type 8	1	Conduct site visits to block valves - (Secunda to Kendal ) Approximate distance 72km's	Sum		1	- R	-
3.1.6	6 & 8.2	Type 1 & 2	5	Conduct site visits to block valves - (Secunda to Jameson Park) Approximate distance 75km's	Sum		1	- R	-
3.1.7	6 & 8.2	Type 9	7	Conduct site visits to block valves - (Coalbrook to Meyerton ) Approximate distance 39km's	Sum		1	- R	-
3.1.8	6 & 8.2	Type 9	3	Conduct site visits to block valves - (Meyerton to Alrode ) Approximate distance 39km's	Sum		1	- R	-
3.1.9	6 & 8.2	Type 10	4	Conduct site visits to block valves - (Alrode to Airport) Approximate distance 22km's	Sum		1	- R	-
Design an external locking mechanism to Block Valve chambers (removable key) including testing of sample.									
3.1.10	4.2	Type 1/2/3/4/5/6/7/8 /9/10/11/12 & 13	55	Design of reinforced concrete slab that will fit in the middle of existing concrete lids including testing samples - (Sasolburg - Klerksdorp)	Sum		1	- R	-
Fabrication, Supply and installation of external locking mechanism to Block Valve - Chamber Lids as per design:									
3.1.11	4.2	Type 9 & 13	14	Design of reinforced concrete slab that will fit in the middle of existing concrete lids including testing samples - (Sasolburg - Klerksdorp) Approximate distance 138 km's	Sum		1	- R	-
3.1.12	4.2	Type 9 & 13	4	Design of reinforced concrete slab that will fit in the middle of existing concrete lids including testing samples - ( Langlaagte to Tarlton) Approximate distance 42km's	Sum		1	- R	-
3.1.13	4.2	Type 9 & 13	5	Design of reinforced concrete slab that will fit in the middle of existing concrete lids including testing samples - ( Tarlton to Rustenburg) Approximate distance 63km's	Sum		1	- R	-
3.1.14	4.2	Type 3, 4, 5, 6 & 7	12	Design of reinforced concrete slab that will fit in the middle of existing concrete lids including testing samples - ( Coalbrook to Jameson Park ) Approximate distance 71km's	Sum		1	- R	-
3.1.15	4.2	Type 8	1	Design of reinforced concrete slab that will fit in the middle of existing concrete lids including testing samples - (Secunda to Kendal ) Approximate distance 72km's	Sum		1	- R	-
3.1.16	4.2	Type 1 & 2	5	Design of reinforced concrete slab that will fit in the middle of existing concrete lids including testing samples - (Secunda to Jameson Park) Approximate distance 75km's	Sum		1	- R	-

3.1.17	4.2	Type 9	7	Design of reinforced concrete slab that will fit in the middle of existing concrete lids including testing samples - (Coalbrook to Meyerton ) Approximate distance 39km's	Sum	1	-	R	-
3.1.18	4.2	Type 9	3	Design of reinforced concrete slab that will fit in the middle of existing concrete lids including testing samples - (Meyerton to Alrode ) Approximate distance 39km's	Sum	1	-	R	-
3.1.19	4.2	Type 10	4	Design of reinforced concrete slab that will fit in the middle of existing concrete lids including testing samples - (Alrode to Airport ) Approximate distance 22km's	Sum	1	-	R	-
Phase 2A									
Item No.	Scope Reference	Slab Type		Activity	Unit	Quantities	Price	Activity Price	
4									
Conduct site visits to block valves									
4.1.1	6 & 8.2	Type 7	5	Conduct site visits to block valves. - (Durban to Hillcrest) Approximatley 35 km's	Sum	1	-	R	-
4.1.2	6 & 8.2	Type 7	9	Conduct site visits to block valves - (Hillcrest to Howick) Approximatley 75 km's	Sum	1	-	R	-
4.1.3	6 & 8.2	Type 7	11	Conduct site visits to block valves - (Howick to Ladysmith) Approximatley 118 km's	Sum	1	-	R	-
4.1.4	6 & 8.2	Type 7	10	Conduct site visits to block valves - (Ladysmith to Newcastle) Approximatley 100 km's	Sum	1	-	R	-
4.1.5	6 & 8.2	Type 7	4	Conduct site visits to block valves - (New Castle "Ingogo") to Quagga) Approximatley 41 km's	Sum	1	-	R	-
4.1.6	6 & 8.2	Type 7	24	Conduct site visits to block valves - (Quagga to Coalbrook) Approximatley 35 km's	Sum	1	-	R	-
Design of a reinforced concrete lid to replace existing steel lids including testing samples.									
4.1.7	4.3	Type 7	63	Design of a reinforced concrete lid to replace existing steel lids including testing samples. - (Durban to Hillcrest) Approximatley 35 km's	Sum	1	-	R	-
Design of an external locking mechanism to Block Valve Chambers (removable key) including testing of a sample.									
4.1.8	4.3	Type 7	63	Design of an external locking mechanism to Block Valve Chambers (removable key) including testing of a sample. - (Durban to Hillcrest) Approximatley 35 km's	Sum	1	-	R	-
Removal and Transportation of the old steel Block Valve Lids to nearest depot for disposal									
4.1.9	4.3	Type 7	5	Removal and Transportation of the old steel Block Valve Lids to nearest depot for disposal. - (Durban to Hillcrest) Approximatley 35 km's	Sum	1	-	R	-
4.1.10	4.3	Type 7	9	Removal and Transportation of the old steel Block Valve Lids to nearest depot for disposal. - (Hillcrest to Howick) Approximatley 75 km's	Sum	1	-	R	-
4.1.11	4.3	Type 7	11	Removal and Transportation of the old steel Block Valve Lids to nearest depot for disposal. - (Howick to Ladysmith) Approximatley 118 km's	Sum	1	-	R	-
4.1.12	4.3	Type 7	10	Removal and Transportation of the old steel Block Valve Lids to nearest depot for disposal. - (Ladysmith to Newcastle) Approximatley 100 km's	Sum	1	-	R	-
4.1.13	4.3	Type 7	4	Removal and Transportation of the old steel Block Valve Lids to nearest depot for disposal. - (New Castle "Ingogo") to Quagga) Approximatley 41 km's	Sum	1	-	R	-
4.1.14	4.3	Type 7	24	Removal and Transportation of the old steel Block Valve Lids to nearest depot for disposal. - (Quagga to Coalbrook) Approximatley 35 km's	Sum	1	-	R	-
Fabrication, Supply and installation of reinforced concrete slab as per accepted design									
4.1.15	4.3	Type 7	5	Fabrication, Supply and installation of reinforced concrete slab as per accepted design. - (Durban to Hillcrest) Approximatley 35 km's	Sum	1	-	R	-
4.1.16	4.3	Type 7	9	Fabrication, Supply and installation of reinforced concrete slab as per accepted design. - (Hillcrest to Howick) Approximatley 75 km's	Sum	1	-	R	-
4.1.17	4.3	Type 7	11	Fabrication, Supply and installation of reinforced concrete slab as per accepted design. - (Howick to Ladysmith) Approximatley 118 km's	Sum	1	-	R	-
4.1.18	4.3	Type 7	10	Fabrication, Supply and installation of reinforced concrete slab as per accepted design. - (Ladysmith to Newcastle) Approximatley 100 km's	Sum	1	-	R	-
4.1.19	4.3	Type 7	4	Fabrication, Supply and installation of reinforced concrete slab as per accepted design. - (New Castle "Ingogo") to Quagga) Approximatley 41 km's	Sum	1	-	R	-
4.1.20	4.3	Type 7	24	Fabrication, Supply and installation of reinforced concrete slab as per accepted design. - (Quagga to Coalbrook) Approximatley 35 km's	Sum	1	-	R	-
Fabrication, Supply and installation of external locking mechanism to Block Valve - Chamber Lids as per design									
4.1.21	4.3	Type 7	5	Fabrication, Supply and installation of external locking mechanism to Block Valve - Chamber Lids as per design. - (Durban to Hillcrest) Approximatley 35 km's	Sum	1	-	R	-
4.1.22	4.3	Type 7	9	Fabrication, Supply and installation of external locking mechanism to Block Valve - Chamber Lids as per design. - (Hillcrest to Howick) Approximatley 75 km's	Sum	1	-	R	-
4.1.23	4.3	Type 7	11	Fabrication, Supply and installation of external locking mechanism to Block Valve - Chamber Lids as per design. - (Howick to Ladysmith) Approximatley 118 km's	Sum	1	-	R	-
4.1.24	4.3	Type 7	10	Fabrication, Supply and installation of external locking mechanism to Block Valve - Chamber Lids as per design. - (Ladysmith to Newcastle) Approximatley 100 km's	Sum	1	-	R	-
4.1.25	4.3	Type 7	4	Fabrication, Supply and installation of external locking mechanism to Block Valve - Chamber Lids as per design. - (New Castle "Ingogo") to Quagga) Approximatley 41 km's	Sum	1	-	R	-
4.1.26	4.3	Type 7	24	Fabrication, Supply and installation of external locking mechanism to Block Valve - Chamber Lids as per design - (Quagga to Coalbrook) Approximatley 35 km's	Sum	1	-	R	-
Modification of existing gearbox to allow the Valve to be operated externally.									
4.1.27	4.3	Type 7	5	Modification of existing gearbox to allow the Valve to be operated externally - (Durban to Hillcrest) Approximatley 35 km's	Sum	1	-	R	-
4.1.28	4.3	Type 7	9	Modification of existing gearbox to allow the Valve to be operated externally. - (Hillcrest to Howick) Approximatley 75 km's	Sum	1	-	R	-
4.1.29	4.3	Type 7	11	Modification of existing gearbox to allow the Valve to be operated externally. - (Howick to Ladysmith) Approximatley 118 km's	Sum	1	-	R	-
4.1.30	4.3	Type 7	10	Modification of existing gearbox to allow the Valve to be operated externally. - (Ladysmith to Newcastle) Approximatley 100 km's	Sum	1	-	R	-
4.1.31	4.3	Type 7	4	Modification of existing gearbox to allow the Valve to be operated externally. - (New Castle "Ingogo") to Quagga) Approximatley 41 km's	Sum	1	-	R	-
4.1.32	4.3	Type 7	24	Modification of existing gearbox to allow the Valve to be operated externally - (Quagga to Coalbrook) Approximatley 35 km's	Sum	1	-	R	-
Core drill 110mm diam. Hole in concrete lid									
4.1.33	4.3	Type 7	5	Core drill 110mm diam. Hole in concrete lid - (Durban to Hillcrest) Approximatley 35 km's	Sum	1	-	R	-
4.1.34	4.3	Type 7	9	Core drill 110mm diam. Hole in concrete lid. - (Hillcrest to Howick) Approximatley 75 km's	Sum	1	-	R	-
4.1.35	4.3	Type 7	11	Core drill 110mm diam. Hole in concrete lid. - (Howick to Ladysmith) Approximatley 118 km's	Sum	1	-	R	-
4.1.36	4.3	Type 7	10	Core drill 110mm diam. Hole in concrete lid. - (Ladysmith to Newcastle) Approximatley 100 km's	Sum	1	-	R	-
4.1.37	4.3	Type 7	4	Core drill 110mm diam. Hole in concrete lid. - (New Castle "Ingogo") to Quagga) Approximatley 41 km's	Sum	1	-	R	-
4.1.38	4.3	Type 7	24	Core drill 110mm diam. Hole in concrete lid. - (Quagga to Coalbrook) Approximatley 35 km's	Sum	1	-	R	-
Supply and Install Plastic Caps to cover the 110mm diam. Core drilled hole									
4.1.39	4.3	Type 7	5	Core drill 110mm diam. Hole in concrete lid - (Durban to Hillcrest) Approximatley 35 km's	Sum	1	-	R	-
4.1.40	4.3	Type 7	9	Core drill 110mm diam. Hole in concrete lid. - (Hillcrest to Howick) Approximatley 75 km's	Sum	1	-	R	-
4.1.41	4.3	Type 7	11	Core drill 110mm diam. Hole in concrete lid. - (Howick to Ladysmith) Approximatley 118 km's	Sum	1	-	R	-
4.1.42	4.3	Type 7	10	Core drill 110mm diam. Hole in concrete lid. - (Ladysmith to Newcastle) Approximatley 100 km's	Sum	1	-	R	-
4.1.43	4.3	Type 7	4	Core drill 110mm diam. Hole in concrete lid. - (New Castle "Ingogo") to Quagga) Approximatley 41 km's	Sum	1	-	R	-
4.1.44	4.3	Type 7	24	Core drill 110mm diam. Hole in concrete lid. - (Quagga to Coalbrook) Approximatley 35 km's	Sum	1	-	R	-
4.1.45	4.3	Type 7	15	Supply 15 Universal T - Piece key to fit the extended shafts	Sum	1	-	R	-
Phase 2B									
Item No.	Scope Reference	Slab Type		Activity	Unit	Quantities	Price	Activity Price	
5									
Conduct site visits to block valves									
5.1.1	4.3	Type 7	16	Conduct site visits to block valves. - (Durban to Empangeni) Approximatley 179 km's	Sum	1	-	R	-
5.1.2	4.3	Type 7	22	Conduct site visits to block valves. - (Empangeni to Ingogo) Approximatley 250 km's	Sum	1	-	R	-
5.1.3	4.3	Type 7	10	Conduct site visits to block valves - (Ingogo to Secunda) Approximatley 153 km's	Sum	1	-	R	-
Design of a reinforced concrete lid to replace existing steel lids including testing samples.									
5.1.4	4.3	Type 7	48	Design of a reinforced concrete lid to replace existing steel lids including testing samples. - (Durban to Empangeni) Approximatley 179 km's	Sum	1	-	R	-



<b><u>Design of an external locking mechanism to Block Valve Chambers (removable key) including testing of a sample.</u></b>									
5.1.5	4.3	Type 7	48	Design of an external locking mechanism to Block Valve Chambers (removable key) including testing of a sample.. - (Durban to Empangeni) Approximatley 179 km's	Sum	1	-	R	-
<b><u>Removal and Transportation of the old steel Block Valve Lids to nearest depot for disposal</u></b>									
5.1.6	4.3	Type 7	16	Removal and Transportation of the old steel Block Valve Lids to nearest depot for disposal. - (Durban to Empangeni) Approximatley 179 km's	Sum	1	-	R	-
5.1.7	4.3	Type 7	22	Removal and Transportation of the old steel Block Valve Lids to nearest depot for disposal. - (Empangeni to Ingogo) Approximatley 250 km's	Sum	1	-	R	-
5.1.8	4.3	Type 7	10	Removal and Transportation of the old steel Block Valve Lids to nearest depot for disposal. - (Ingogo to Secunda) Approximatley 153 km's	Sum	1	-	R	-
<b><u>Fabrication, Supply and installation of reinforced concrete slab as per accepted design</u></b>									
5.1.9	4.3	Type 7	16	Fabrication, Supply and installation of reinforced concrete slab as per accepted designl. - (Durban to Empangeni) Approximatley 179 km's	Sum	1	-	R	-
5.1.10	4.3	Type 7	22	Fabrication, Supply and installation of reinforced concrete slab as per accepted designl. - (Empangeni to Ingogo) Approximatley 250 km's	Sum	1	-	R	-
5.1.11	4.3	Type 7	10	Fabrication, Supply and installation of reinforced concrete slab as per accepted design. - (Ingogo to Secunda) Approximatley 153 km's	Sum	1	-	R	-
<b><u>Modification of existing gearbox to allow the Valve to be operated externally:</u></b>									
5.1.12	4.3	Type 7	16	Modification of existing gearbox to allow the Valve to be operated externally. - (Durban to Empangeni) Approximatley 179 km's	Sum	1	-	R	-
5.1.13	4.3	Type 7	22	Modification of existing gearbox to allow the Valve to be operated externally. - (Empangeni to Ingogo) Approximatley 250 km's	Sum	1	-	R	-
5.1.14	4.3	Type 7	10	Modification of existing gearbox to allow the Valve to be operated externally. - (Ingogo to Secunda) Approximatley 153 km's	Sum	1	-	R	-
<b><u>Core drill 110mm diam. Hole in concrete lid</u></b>									
5.1.15	4.3	Type 7	16	Core drill 110mm diam. Hole in concrete lid. - (Durban to Empangeni) Approximatley 179 km's	Sum	1	-	R	-
5.1.16	4.3	Type 7	22	Core drill 110mm diam. Hole in concrete lid - (Empangeni to Ingogo) Approximatley 250 km's	Sum	1	-	R	-
5.1.17	4.3	Type 7	10	Core drill 110mm diam. Hole in concrete lid. - (Ingogo to Secunda) Approximatley 153 km's	Sum	1	-	R	-
<b><u>Supply and Install Plastic Caps to cover the 110mm diam. Core drilled hole.</u></b>									
5.1.18	4.3	Type 7	16	Supply and Install Plastic Caps to cover the 110mm diam. Core drilled hole. - (Durban to Empangeni) Approximatley 179 km's	Sum	1	-	R	-
5.1.19	4.3	Type 7	22	Supply and Install Plastic Caps to cover the 110mm diam. Core drilled hole. (Empangeni to Ingogo) Approximatley 250 km's	Sum	1	-	R	-
5.1.20	4.3	Type 7	10	Supply and Install Plastic Caps to cover the 110mm diam. Core drilled hole. - (Ingogo to Secunda) Approximatley 153 km's	Sum	1	-	R	-
5.1.21	4.3	Type 7	9	Supply 9 Universal T - Piece key to fit the extended shafts	Sum	1	-	R	-
Total ( 1+2+3+4+5)								R	-
Civil Engineering (CE) Skills Development Goal (CSDG) (0.25% factor)								R	-
Vat (15%)								R	-
Total Sum Carried Forward to Form of Offer								R	-

**Transnet SOC Limited**

**TENDER No. TPL/2024/01/0005/55265/RFP**

**PROJECT No: HO/1433/05**

**PROVISION OF THE DESIGN, SUPPLY AND INSTALLATION OF CONCRETE  
BLOCK VALVE CHAMBER LIDS, EXTERNAL LOCKING MECHANISM AND 90  
DEGREE OUTPUT GEARBOXES (VERTICAL DRIVE) AS PART OF THE  
MODIFICATION OF THE EXISTING GEARBOXES**

### **PART C3: SCOPE OF SERVICES**

	<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>
<b>Prepared by:</b>	(TPL: Project Manager)		
<b>Recommended by:</b>	(TPL: National Security Manager)		
<b>Recommended by:</b>	(TPL: Mechanical Engineer)		
<b>Recommended by:</b>	(TPL: Snr Manager Projects Portfolio)		
<b>Approved by:</b>	(GM: Capital and Strategic Projects, R&D, CI)		

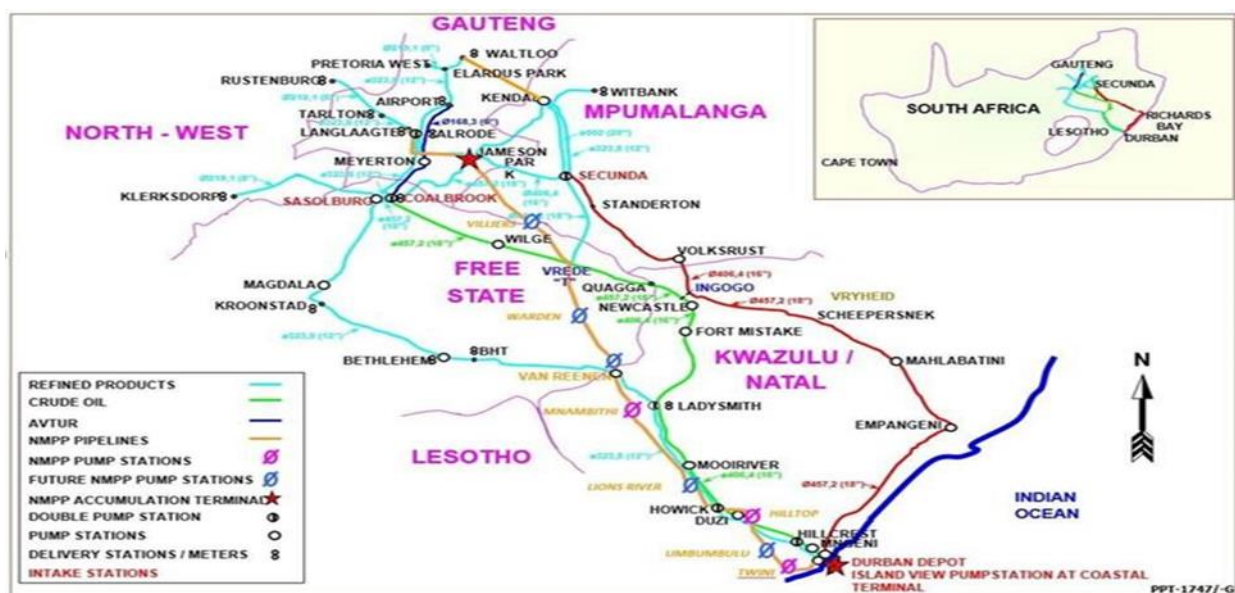
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## 1 BACKGROUND

Transnet Pipelines (TPL) owns and operates a network of pipelines transporting gas and petroleum products from Durban to inland points.

Transnet Pipelines is the largest multi-product operator in Southern Africa, transporting hydrocarbons and methane-rich gas through a network of 3100 km of petroleum and gas pipeline infrastructure. The pipeline network runs across 5 different provinces in South Africa (KwaZulu-Natal, Free State, Gauteng, North-west, and Mpumalanga) ensuring security of supply to the inland market. The pipeline network consists of different pipelines of different dimensions and traveling on various routes. Along the pipeline are pump stations located on route and block valve chambers used to allow sections to be isolated during emergencies or for pressure testing.



*Figure 1 – Pipeline Network*

Pipelines operate in a regulated environment and are regulated by the National Energy Regulator of South Africa (NERSA) and governed by the Petroleum Pipelines Act, No 60 of 2003, and the Gas Act, No 48 of 2001. Almost all critical areas of the Pipeline business require regulatory sanction through the issuing of licenses.

## 2 PROBLEM STATEMENT

Transnet Pipelines has reported numerous cases of attempted and confirmed product thefts from its Pipeline Network over the past five years. The thieves have been gaining illegal access to the Block Valve Chambers located across the network.

This has been posing a significant security threat to the supply of products to the inland market. The thefts have resulted in operational disruptions, and the products involved are highly flammable, putting the public at risk. Since these products are transported through the pipeline network, it is crucial to address this issue immediately.

### **3 PURPOSE AND OBJECTIVE**

The purpose of this document is to outline the requirements of the *Employer* for a comprehensive solution to safeguard the current block valve chambers that are situated along the underground pipeline network. At present, the chambers are covered with steel and concrete lids.

The primary objective is to prevent unauthorized access to the block valve chamber. For this, the *Employer* intends to modify the current block valve chamber concrete lids on all refined product pipelines through design, supply, and installation of new reinforced concrete slab within MPP type concrete lids and externally locking both the existing MPP type and flat type chamber concrete lids. Additionally, the *Employer* requires a modification of the existing gearboxes on block valves inside the chambers with flat type concrete lids so that the valve can be operated externally without entering the chamber in case of an emergency.

The *Employer* also intends to replace the block valve chamber steel lids on both gas and crude pipelines with concrete lids that are externally lockable and also modify the existing gearboxes to be externally operable.

## 4 SCOPE OF WORK

This project will be executed in four phases, namely:

### 4.1 Phase 1A – Design, Supply and Installation of a Concrete slab and external locking mechanism for Block Valve Lids - MPP Chambers

- 4.1.1 This solution requires the design, fabrication, and installation of a reinforced concrete slab that will fit in the middle of the existing concrete lids (as shown in **Annexure A**). Refer to **Annexure B** for the approximate dimensions of the concrete slab that will fit in the middle of the existing concrete MPP lids.
- 4.1.2 The concrete slab needs to be strong enough to withstand chisel and jackhammer attacks.
- 4.1.3 The concrete slab must have concrete that is at least 35 MPa strong.
- 4.1.4 The concrete slab design must be approved by a Pr Eng Civil or Pr Tech Eng Civil before it is submitted to the *Employer* for acceptance.
- 4.1.5 The complete concrete lid requires modification to accommodate an external locking mechanism. Refer to **Annexure A** for a typical existing MPP block valve lid as a guide when designing Phase 1A solution for the external lock.
- 4.1.6 The *Contractor* must supply and install a locking mechanism that allows it to be locked and unlocked from the outside without needing to enter the chamber. If hot-work is needed to install the locking mechanism, the *Contractor* must provide fire standby as described in item 5.2.
- 4.1.7 The concrete lid locking mechanism must be designed to protect itself from any deliberate external force such as sledgehammers, grinders, and crowbars.
- 4.1.8 The external locking mechanism must be damage proof and galvanized to withstand harsh and corrosive conditions.
- 4.1.9 The locking mechanism must ensure that the concrete lids remain in contact with the top surface of the chamber walls, preventing them from being lifted or pushed aside.
- 4.1.10 The external locking mechanism must prevent unauthorized individuals from gaining access to the chamber.
- 4.1.11 The locking mechanism designs must be certified or approved by a Pr Eng Mechanical or Pr Tech Eng Mechanical before it is submitted to the *Employer* for acceptance.
- 4.1.12 The combination of the external locking mechanisms and the concrete lids is to prevent access to the chamber by the intruders for a minimum period of 30 minutes.
- 4.1.13 The Pr Eng Civil or Pr Tech Eng Civil must certify the installed and finished civil products and the Pr Eng Mechanical or Pr Tech Eng Mechanical must certify the installed and finished mechanical products after the installation is complete.

- 4.1.14 The *Contractor* shall make provision of all necessary resources, lifting equipment to lift the existing reinforced block valve concrete lid to fit the new slab. The existing lids are to be lifted using at least 13.5-ton truck-mounted crane operated by a competent code 14 driver. The Truck-Mounted Crane Operator shall be certified by Lifting Machinery Inspector (LMI).

**Deliverables:**

- 4.1.15 The *Contractor* must present detailed engineering design drawings, including a built-in safeguard locking mechanism and reinforced concrete slab, for acceptance by the *Employer*.
- 4.1.16 The *Contractor* must manufacture, supply, install and handover of a complete product including as-built drawings.
- 4.1.17 The *Contractor* must provide a Health and Safety report.

**4.2 Phase 1B – Design, Supply and Installation of External Locking Mechanism (Refined Product Chambers – Flat type lid)**

- 4.2.1 This solution requires the design, fabrication, and installation of an external locking mechanism to the flat type of concrete lids (Refer to **Annexure C**).
- 4.2.2 The *Contractor* shall design an external locking mechanism based on the latest technology in the market.
- 4.2.3 The *Contractor* must supply and install a locking mechanism that allows it to be locked and unlocked from the outside without needing to enter the chamber. If hot-work is needed to install the locking mechanism, the *Contractor* must provide fire standby as described in item 5.2.
- 4.2.4 The concrete lids must be externally locked with a locking mechanism designed to protect itself from any deliberate external force such as sledgehammers, grinders, and crowbars.
- 4.2.5 The block valve chamber must be equipped with a locking mechanism that allows it to be locked and unlocked from the outside without needing to enter the chamber.
- 4.2.6 The external locking mechanism must prevent unauthorized individuals from gaining access to the chamber.
- 4.2.7 The locking mechanism must ensure that the concrete lids remain in contact with the top surface of the chamber walls, preventing them from being lifted or pushed aside.
- 4.2.8 The external locking mechanism must be damage proof and galvanized to withstand harsh and corrosive conditions.
- 4.2.9 The combination of the external locking mechanisms and the concrete lids is to prevent access to the chamber by the intruders for a minimum period of 30 minutes.



- 4.2.10 The engineering locking designs must be approved by a Pr Eng Mechanical or Pr Tech Eng Mechanical before it is submitted to the *Employer* for acceptance.
- 4.2.11 The *Contractor* shall make provision of all necessary resources, lifting equipment to lift the existing reinforced block valve concrete lid slab for installation of the locking mechanism where required. The existing lids are to be lifted using a 13.5-ton truck-mounted crane operated by a competent code 14 driver. The Truck-Mounted Crain Operator shall be certified by Lifting Machinery Inspector (LMI).
- 4.2.12 The Pr Eng Civil or Pr Tech Eng Civil must certify the installed and finished civil products and the Pr Eng Mechanical or Pr Tech Eng Mechanical must certify the installed and finished mechanical products after the installation is complete.

#### **Deliverables:**

- 4.2.13 The *Contractor* must present detailed engineering design drawings for a built-in safeguard locking mechanism for acceptance by the *Employer*.
- 4.2.14 The *Contractor* must manufacture, supply, install and handover of a complete product including as-built drawings.
- 4.2.15 The *Contractor* must provide a Health and Safety report.

### **4.3 Phase 2 – Replace Existing Steel Lids with a New Reinforced Concrete Lid and Modify Gearboxes: 2A – Crude Chambers & 2B – Gas Chambers**

- 4.3.1 This solution requires the replacement of existing steel lids as shown in **Annexure D**. The *Contractor* is to design, supply, and install new concrete lids (as per **Annexure C**), and external locking mechanisms (to be designed with a removable key based on the latest technology in the market) and to modify the existing gearboxes to allow for external operation of the valves. The modification of the gearbox shall allow for the valve to be operated externally without requiring personnel to enter the chamber in case of an emergency (as per **Annexure F** typical layout modification of the gearbox)
- 4.3.2 The *Contractor* must remove existing steel lids from block valve chambers and install new reinforced concrete lids equipped with built-in locking mechanisms that use removable keys and incorporate the latest market technology. If hot-work is needed to install the locking mechanism, the *Contractor* must provide fire standby as described in item 5.2.
- 4.3.3 The concrete lids with access hatch need to be strong enough to withstand any external tampering and unauthorized entry. The access hatch should be secured, and lockable, and its position on the concrete lid must be in line with the access step ladders inside the block valve chambers. The concrete lids must have concrete that is at least 35 MPa strong.
- 4.3.4 The concrete lid must have a hatch that serves as an entry point or access to the chamber. Below are the specifications of the hatch:
  - A. The size of the hatch on the chamber concrete lid must be 608mm long x 608mm wide on the top surface whilst the bottom surface is 660mm long x 560mm wide.

- B. The opening sides of the concrete chamber lid and the external sides of the hatch should both slope inwardly to leave no gap between the hatch and the chamber concrete lid.
  - C. The hatch should be cast out with 60MPa concrete dense reinforced that make it a vandal-resistant chamber concrete lid hatch.
  - D. The hatch must have at least two specialized independent locking mechanisms, not padlocks, made of corrosion-resistant steel.
  - E. The locking mechanisms should have a set of keys. The key set is portable for both storage in TPL premises and transportability purposes.
  - F. All locking mechanisms on the chamber concrete lids of one pipeline are to use one identical key that is different from a key of the next different pipeline, thus each pipeline should have its own identical key.
  - G. The hatch should have underneath stainless-steel flat bars which locks the hatch against the inside opening sides of the concrete chamber lid
  - H. The weight of the hatch should be less than 100Kg so that two TPL maintenance personnel may be able to lift it from position with a lifting-tool when unlocked for access into the chamber. A tool is required to lift the hatch.
  - I. Each pipeline must have a set of 15-off keys, i.e. 3-off keys per TPL workshop (Pinetown, Ladysmith, Jameson Park, Coalbrook & Alrode) per pipeline.
- 4.3.5 The concrete lids must be externally locked with a locking mechanism designed to protect itself from any deliberate external force such as sledgehammers, grinders, and crowbars.
- 4.3.6 The block valve chamber must be equipped with a locking mechanism that allows it to be locked and unlocked from the outside without needing to enter the chamber.
- 4.3.7 The external locking mechanism must prevent unauthorized individuals from gaining access to the chamber.
- 4.3.8 The locking mechanism must ensure that the concrete lids remain in contact with the top surface of the chamber walls, preventing them from being lifted or pushed aside.
- 4.3.9 The external locking mechanism must be damage proof and galvanized to withstand harsh and corrosive conditions.
- 4.3.10 The combination of the external locking mechanisms and the concrete lids is to prevent access to the chamber by the intruders for a minimum period of 30 minutes.
- 4.3.11 The *Contractor* shall make provision of all necessary resources, and mobile crane to install the new reinforced block valve concrete slab. The new slabs are to be lifted using at least 13.5-ton truck-mounted crane operated by a competent code 14 driver. The Truck-Mounted Crain Operator shall be certified by Lifting Machinery Inspector (LMI).
- 4.3.12 The *Contractor* shall supply and install 90-degree output gearboxes (vertical drive) as part of the modification of the existing gearboxes including a handwheel with extended spindle and a universal T-piece key to fit the extended shafts on the mechanical adaption 18" 600# and 16" 600# ball valves.

The gearbox allows the valve to be operated externally without requiring personnel to enter the chamber in case of an emergency. Refer to table 2 for the number of block valves impacted by this requirement.

- A. 500mm hand wheel with extended spindle.
- B. 1:1 gearbox ratio with 90-degree output.
- C. Mechanical adaption to be supplied between the new gearbox and existing gearbox.
- D. Universal T piece key.
- E. API 6D rating is required.

4.3.13 Refer to drawing no. TPL-TYP-ME-GA-169155 (**Annexure F**) for the general assembly of the required mechanical adaption, 90-degree gearbox and a handwheel with extended spindle installation.

4.3.14 The *Contractor* shall core drill  $\varnothing 110$  mm through-hole on top of the installed concrete lid in line with the center of the installed spindle gearbox shaft inside the block valve chamber.

4.3.15 The *Contractor* is responsible for making sure that the hole on the concrete lid of the chamber is aligned with the centre position of the hand wheel with an extended shaft while measuring on site.

4.3.16 The *Contractor* must provide plastic caps to cover the core-drilled through-holes on the concrete lids. This is to prevent water, snakes, spiders from entering the block valve chambers, and the caps must be secured against theft.

4.3.17 The *Contractor* shall comply with all permit and risk assessment requirements for entering confined space not limited to:

- A. Inform the *Employer* of any hazards that may be created by the work being performed within the confined space.
- B. Obtain permission from the Employer prior to entering a confined space and to work within the scope of the permit.
- C. "Sign in" or "sign out" as appropriate on the confined space, complete Entry Log Sheet to be provided by the Employer.

4.3.18 The *Contractor* shall provide a method statement and quality control plan to the *Employer* for acceptance; the plan shall describe how the solution will be implemented.

4.3.19 For the *Employer's* information, the *Contractor* shall produce evidence that the solution conforms with a South African National Standard (SANS) including, but not limited to:

- A. SANS 10100
- B. SANS 10160
- C. SANS 10144
- D. SANS 2001-CC1:2007

- 4.3.20 The concrete design must be approved by a Pr Eng Civil or Pr Tech Eng Civil before it is submitted to the *Employer* for acceptance.
- 4.3.21 The *Contractor* shall submit all engineering design drawings to the *Employer* for acceptance.
- 4.3.22 The *Contractor* shall give a formal presentation to the Employer to demonstrate the proposed designed solution functionality.
- 4.3.23 The *Contractor* shall submit all engineering design drawings for the built-in safeguard locking mechanism and reinforced concrete slab to demonstrate the design functionality as a sample to the *Employer* for acceptance before casting and manufacture.
- 4.3.24 The *Contractor* must commence the production process after the *Employer* accepts the design.
- 4.3.25 The *Contractor* shall ensure Health and Safety compliance during the project Phase 2 implementation.
- 4.3.26 Following the completion of the production process, the *Contractor* shall supply and install a complete product at each site.
- 4.3.27 The *Contractor* must notify the *Employer* at least two days in advance of the installation to allow the Employer to prepare, witness the installation, and provide security.
- 4.3.28 The engineering locking designs must be approved by a Pr Eng Mechanical or Pr Tech Eng Mechanical before it is submitted to the *Employer* for acceptance.
- 4.3.29 For the *Employers'* acceptance, the *Contractor* shall deliver a comprehensive handover pack, including but not limited to as-built drawings, pertinent test records, and SANS certificates.
- 4.3.30 The *Contractor* shall provide both hard and soft copy formats in line with PL 103 of all documents for acceptance by the Employer (i.e., DWG, PDF).

**Deliverables:**

- 4.3.31 The *Contractor* must present detailed engineering design drawings for a built-in safeguard locking mechanism, concrete slab and gearbox configuration for acceptance by the Employer.
- 4.3.32 The *Contractor* must manufacture, supply, install and handover of a complete product including as-built drawings.
- 4.3.33 The *Contractor* must provide a Health and Safety report.

The following Table 1 below, consists of the total number of block valve chamber lids required.

*Table 1 - Number of Block Valves*

<b>Description</b>	<b>Total Number of Block Valve Chamber Lids</b>
Phase 1A	116
Phase 1B	55
Phase 2A	63
Phase 2B	48

**Note: The Employer reserves the right to amend the number of block valve lids that are required to be deployed.**

Table 2 - Block Valve Distances

No.	Pipeline Section	No Block Valve	From (Depot)	To (Depot)	Approximate Distance
	<b>Phase 1A Approximate Block valve dimensions</b>	<b>116</b>			
1.	Panel 3	67	Durban	Jameson Park	556km
2.		8	Jameson Park	Alrode	42km
3.		11	Alrode	Langlaagte	31km
4.		19	Kendal	Waltloo	90km
5.	Panel 3	3	Jameson Park	Kendal	81km
6.	Panel 3	5	Secunda	Kendal	72km
7.	Panel 3	3	Kendal	Witbank	30km
	<b>Phase 1B</b>	<b>55</b>			
8.	Type 9 & 13	14	Sasolburg	Klerksdorp	138km
9.		4	Langlaagte	Tarlton	42 km
10.		5	Tarlton	Rustenburg	63 km
11.	Type 3, 4, 5, 6 & 7	12	Coalbrook	Jameson Park	71km
12.	Type 4	4	Jameson Park	Kendal	81 km
13.	Type 8	1	Secunda	Kendal	72km
14.	Type 1 & 2	5	Secunda	Jameson Park	75km
15.	Type 1 & 2	5	Jameson Park	Alrode	46km
16.	Type 9	7	Coalbrook	Meyerton	39km
17.	Type 9	3	Meyerton	Alrode	34km
18.	Type 10	4	Alrode	Airport	22km
	<b>Phase 2A</b>	<b>63</b>			
19.	Type 7	5	Durban	Hillcrest	35km
20.	Type 7	9	Hillcrest	Howick	75km
21.	Type 7	11	Howick	Ladysmith	118 km
22.	Type 7	10	Ladysmith	Newcastle	100km
23.	Type 7	4	Newcastle "Ingogo"	Quagga	41km
24.	Type 7	24	Quagga	Coalbrook	221 km
	<b>Phase 2B</b>	<b>48</b>			
25.	Type 7	16	Durban	Empangeni	179km
26.	Type 7	22	Empangeni	Ingogo	250km
27.	Type 7	10	Ingogo	Secunda	153km

## 5 Safety, Health and Environmental Requirements

The *Contractor* must prepare all Health & Safety documents for acceptance by the *Employer*.

The *Contractor* shall conduct site visits for all project phases to confirm the dimensions of block valve lids. The site visits shall include, at a minimum, the following:

The *Contractor* shall appoint a construction health & safety officer (CHSO) to assist in the control of all health and safety related aspects on the project.

These documents must comply with the following requirements:

- A. The Occupational Health and Safety Act, 85 of 1993, and relevant regulations.
- B. The provisions of the Act and for implementing any Safety, Health, and Environmental rules required by the *Employer*. Additionally, the *Contractor* must ensure that all employees or persons working on their behalf have undergone safety, health, and environmental induction specific to the site hazards before entering any *Employer* site.
- C. The *Contractor* must always adhere to Safety, Health, and Environmental requirements as per relevant legislation and the *Employer Contractor Management Procedure* (TIMS-GRP-PROC-014) for the scope of services.
- D. It is also the *Contractor's* responsibility to ensure that all on-site employees have valid medical certificates issued by an occupational health practitioner.
- E. Furthermore, before establishing or entering any *Employer* site, the *Contractor* must submit a Safety, Health, and Environmental Compliance file for review and approval by the *Employer*. The site's access will only be provided to the *Contractor* once the safety file has been approved by the *Employer*.

The submission requirements must be aligned to the scope of services provided by the *Employer*.

### **The SHE Compliance File should contain the following as a minimum:**

- A. Valid Letter of Good Standing with the Compensation Fund,
- B. Signed Section 37(2) Mandatory Agreement,
- C. Risk Assessment,
- D. Method Statement,
- E. Environmental Management Plan.

**Note:** The *Contractor* will be expected to go through security screening prior to be given access to Transnet premises. The following documents are needed from the company:

- A. Company registration number.
- B. CIPC registration.

- C. Company TAX clearance TCS Pin.
- D. Copies of ID of directors.
- E. Fingerprints of directors (Use SAP 91) to be found at local SAPS. Original fingerprints must be submitted.
- F. Copies of ID of employees who will be working on site.
- G. Fingerprint of employees who will be working on site (Use SAP 91) to be found at local SAPS. Original fingerprints must be submitted.

## **5.1 Environmental Requirements**

The *Contractor* shall always comply with Environmental Requirements prescribed by law as they may apply to the services/project. The *Contractor* shall comply with the provisions of the National Environmental Management Act 107 of 1998 (NEMA), National Water Act 36 of 1998 (NWA), National Environmental Management: Waste Act 59 of 2008 (NEM: WA) and any other applicable environmental legislation. The *Contractor* performs duties of the *Employer* and is in every respect responsible for compliance with the provisions of the Acts. The *Contractor* will be responsible for environmental rules that TPL may require to be implemented and shall comply with the Transnet *Contractor* Management Procedure (TRN-IMS-GRP-PROC-014). The *Contractor* is required to compile and submit a SHE Compliance File to TPL, that will include but not limited to Environmental Management Plan (EMP) that is specific to the service/ project. Site access and commencement of execution of the scope of work will be subject to the review and approval of the SHE Compliance File.

The *Contractor* shall implement sound waste management practices as defined in the EMP. All waste generated by the *Contractor* on site to be disposed by the *Contractor* at the permitted landfill site and/ or recycled in a permitted recycling facility. The *Contractor* shall ensure that no work is undertaken in watercourses, including, but not limited to rivers, streams, wetlands, etc., to impede or divert the flow of water in a watercourse or alter the bed, banks. course or characteristics of a watercourse. The *Contractor* shall also ensure that no activity is undertaken that requires a permit, licence or authorization in terms of the National Water Act 36 of 1998, National Environmental Management Act of 1998, municipal bylaws or any other environmental legislation without the required permit, licence or authorization to undertake the activity

### **Deliverables:**

Health and Safety compliance file approved.



## 5.2 Fire Standby

The *Contractor* shall provide their own fire standby services (3 personnel in total) to provide fire standby and confined space support while work is being carried out at each block valve. It must be noted that this is a petrochemical environment. The following is required as a minimum:

### Fire Personnel Competency Requirements:

#### Fire Officers

- Fire Fighter 1 and 2 (Qualification issued by SAESI).
- Hazmat Awareness and Operations (Qualification issued by SAESI).
- Hazard Identification/Risk assessment Qualification, from any accredited institution by SAQA- South African Qualifications Authority.
- Rope rescue (High angle or confined space rescue from an accredited SAQA institution.)
- Valid First Aid level 3, issued by a SAQA-accredited institution.

#### Fire Fighters

- Fire Fighter 1(Qualification issued by SAESI).
- Hazmat Awareness (Qualification issued by SAESI).
- Rope rescue (High angle or confined space rescue) Accredited by SAQA.
- First Aid level 3, issued by a SAQA-accredited institution.

### Resources

Resource guidelines: For all confined space entry requests, where deemed necessary by permit requirements.

Response Level: All hot work activities off-site

Response Classification and Resource List	
Classification	Required Resource and Equipment
Confined Space Rescue	X1 Senior Fire Officer
	X2 Fire Fighters
	Rescue Ropes, Anchors & Ancillary Rescue Equipment
	X1 Rescue Tripod
	X4 Self-Containing Breathing Apparatus
	Air Supply Equipment (Minimum of 4 Mask and 40 Litres combined)
	X5 Safety Harness
	X2 Gas Monitor
	First Aid Equipment (First Aid Kit)
Fire Response Level 2	X1 Senior Fire Officer with Full Fire Fighting Kit
	X2 Fire Fighters with Full Fire Fighting Kit
	X1 50 kg DCP Fire Extinguisher
	50 Litres Fire Fighting Foam
	X1 Foam Branch Inductor
	Minimum 2500 Litres Portable water Tanker

## 6 Site Visits

The *Contractor* shall conduct a site visit for all project phases, which will entail the following:

- 6.1 The *Contractor* must notify the *Employer* two days in advance for the site visits to be approved.
- 6.2 A signed/approved site access certificate will be issued to the *Contractor* to gain access to the TPL block valves for inspections.
- 6.3 Conduct inspection, confirm the dimensions and the state of each block valve chamber lid. The approximate traveling distances to the block valves is stipulated in **Table 2** above. Start and end travel points must be taken into account when planning the schedule for inspection.
- 6.4 Produce correct measurements of each block valve chamber lid and/or correct position of gearboxes for vertical drive. The measuring tools must be intrinsically safe as the workspace is a confined petrochemical environment. A detailed report must be issued to the *Employer* for acceptance.
- 6.5 The *Contractor* shall make provision of all necessary resources, and mobile crane to lift the existing reinforced block valve concrete chamber lids for access to the chamber to take the required measurements. The existing concrete lids are to be lifted using an 13.5-ton truck-mounted crane, operated by a competent code 14 driver. The Truck-Mounted Crain Operator shall be certified by Lifting Machinery Inspector (LMI).
- 6.6 Provision for a Health and Safety Officer to manage all health and safety activities.
- 6.7 The *Contractor* shall provide a method statement and quality control plan to the *Employer* one week after the visit, the plan shall describe how the solution will be implemented.
- 6.8 The *Contractor* shall comply with the following South African National Standard (SANS) including, but not limited to:
  - 6.8.1 SANS 10100 & SANS 10160
  - 6.8.2 ANS 10144
  - 6.8.3 SANS 2001-CC1:2007

### Note:

- A. Refer to **Annexures A, B, C and D** for the typical block valve lid measurements.
- B. The *Employer* will not take any responsibility for incorrect measures taken by the *Contractor*.

### Deliverables:

- 6.9 Submit a detailed site inspection report to the *Employer* for acceptance.
- 6.10 Project baseline schedule accepted by the *Employer*.
- 6.11 Project execution plan accepted by the *Employer*.

## 7 MEETINGS

- 7.1 To ensure continuous oversight and effective communication throughout the project lifecycle:

### Frequency & Format

- Progress meetings shall be held twice per month (bi-monthly), either on site, via Microsoft Teams, or at 202 Anton Lembede Street, Durban, unless otherwise notified.
- The project kick-off meeting will be held via Microsoft Teams, with subsequent meetings scheduled at predetermined intervals to maintain consistent momentum.

### Attendance & Representation

- The *Contractor* shall attend all progress meetings as defined in the Contract Program Management Plan.
- Key resource personnel representing each technical discipline shall be present at every meeting and must provide discipline-specific status updates.
- If key personnel are unavailable, the *Contractor* must obtain prior written approval from the *Employer*. Any substitute shall have equivalent expertise and decision-making authority.
- Meetings are expected to last no more than three hours.

### Purpose & Coverage

Each session will not be limited to:

- Review project status, deliverables, and milestone achievements.
- Identify potential issues, early warnings, notifications, and instructions.
- Facilitate collaborative decision-making among stakeholders and subject matter experts.

### Transparency & Accountability

- The *Employer* shall circulate a comprehensive agenda in advance. Agendas must be purposeful, focused, and structured.
- The *Contractor* shall prepare and distribute meeting minutes, to include at minimum: progress, schedule updates, scope deviations, quality issues, and record any action items.

## 8 GENERAL

### 8.1 Project Scheduling and Timeline

- Entire solution installation (all phases) must be completed within **18 months**.
- Provide a detailed project schedule in **PDF and MS Project** formats.

## **8.2 Site Access and Logistics**

- Site is in difficult terrain – only 4x4/off-road vehicles can access.
- Normal working hours are Mon–Fri, 07:30 to 16:00.
- Visits to TPL chambers require 2-day advance notice for TPL escort/security.
- Work outside normal hours must be requested in advance; 24-hour notice required.
- Plan for permit issuance/receiving during installation.

## **8.3 Production and Installation**

- Production starts immediately after design approval.
- *Contractor* must cast and manufacture the product; submit method statement and QC plan, including locking mechanism principles.
- Provide 2-day advance notice before installation for *Employer* to witness.
- Must appoint a Professional Construction Manager (Pr CM) for site and H&S Officer.

## **8.4 Handover and Documentation**

- Notify *Employer* 2 days before installation acceptance.
- Provide handover package within 2 weeks of acceptance – including as-built drawings, test records, SANS certificates, etc.
- Deliver all documents per PL 103 standards (e.g., DWG, PDF).
- Deliver a formal presentation to demonstrate the solution's functionality.
- Submit detailed engineering drawings for the locking mechanism for approval.

**END**