TRANSNET PIPELINES

an Operating Division of TRANSNET SOC LTD

[hereinafter referred to as Transnet]

[Registration No. 1990/000900/30]

REQUEST FOR PROPOSAL [RFP]

ENGINEERING, PROCUREMENT AND CONSTRUCTION OF THE HOWICK PUMP STATION FIRE SYSTEM UPGRADE

RFP NUMBER	**:**	**TPL/2026/08/0578/10542/RFP**
ISSUE DATE	**:**	**15 October 2026**
COMPULSORY TENDER CLARIFICATION MEETING	**:**	**23 October 2026**
CLOSING DATE	**:**	**20 November 2026**
CLOSING TIME	**:**	**16h00 (SAST/ UTC +2)**
TENDER VALIDITY PERIOD	**:**	**12 weeks from closing date**

Note to the bidders:

Bidders are required to ensure that electronic bid submissions are done at least a day before the closing date to prevent issues which they may encounter due to their internet speed, bandwidth or the size of the number of uploads they are submitting. Transnet will not be held liable for any challenges experienced by bidders as a result of the technical challenges. Please do not wait for the last hour to submit. A Bidder can upload 30mb per upload and multiple uploads are permitted.

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The Tender

Part T1: Tendering Procedures

T1.1 Tender Notice and Invitation to Tender

SECTION 1: SBD1 FORM

PART A : INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF REQUEST FOR INFORMATION, A DIVISION TRANSNET SOC LTD							
BID NUMBER:	**TPL/2026/08/0578/10542/RFP**	ISSUE DATE:	**15 October 2026**	CLOSING DATE:	**20 November 2026**	CLOSING TIME:	16h00
DESCRIPTION	**ENGINEERING, PROCUREMENT AND CONSTRUCTION OF THE HOWICK PUMP STATION FIRE SYSTEM UPGRADE**						
BID RESPONSE DOCUMENTS SUBMISSION							
RESPONDENTS ARE TO UPLOAD THEIR BID RESPONSE PROPOSALS ONTO THE TRANSNET SYSTEM AGAINST EACH BID/RFP SELECTED (*please refer to Section 2 for a detailed process on how to upload submissions*): https://transnetetenders.azurewebsites.net							
BIDDING PROCEDURE ENQUIRIES AND TECHNICAL ENQUIRIES MAY BE DIRECTED TO:							
CONTACT PERSON	**Rory Torr**						
TELEPHONE NUMBER	**+27 31 816 9770**						
E-MAIL ADDRESS	**rory.torr@transnet.net**						

SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE			NUMBER	
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE			NUMBER	
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		**AND**	CENTRAL SUPPLIER DATABASE	UNIQUE REGISTRATION REFERENCE NUMBER: MAAA

PART B : TERMS AND CONDITIONS FOR BIDDING

1. TAX COMPLIANCE REQUIREMENTS
1.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
1.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
1.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
1.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
1.5 IN BIDS WHERE UNINCORPORATED CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
1.6 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.

SIGNATURE OF BIDDER: _____

CAPACITY UNDER WHICH THIS BID IS SIGNED:

_____

(Proof of authority must be submitted e.g., company resolution)

DATE:

_____

SECTION 2: NOTICE TO TENDERERS

1 INVITATION TO TENDER

Responses to this Tender [hereinafter referred to as a **Tender**] are requested from companies hereinafter referred to as a **Tenderer**.

DESCRIPTION	Transnet Pipelines RFP No TPL/2026/08/0578/10542/RFP : Engineering, Procurement and Construction of the Howick Pump Station Fire System Upgrade
TENDER DOWNLOADING	**The Transnet Digital Procurement System (TDPS) Supplier Submission Portal can be accessed as follows:** **a) Log on to the Transnet eSupplier website/Portal (https://esupplierportal.transnet.net/portal/)** **b) Click on "SIGN IN/REGISTER –to register new bidder information and ensure that all (must fill in all mandatory information is completed) OR; to sign in if already registered;** **c) Click on "ADVERTISED TENDERS" to view advertised tenders; (please use Google Chrome to access Transnet link) FREE OF CHARGE.**
COMPULSORY TENDER CLARIFICATION MEETING WITH SITE VISIT	A compulsory Tender Clarification Meeting will be conducted at the **Transnet Pipelines Howick Pump Sation** located on Old Main Road, Howick, KwaZulu-Natal Province (approximate GPS co-ordinates 29°28'37.19"S, 30°11'41.05"E) on the **23 October 2026 at 10h00** for a period of ± 4 (four) hours. Respondents are 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. **A Site visit/walk will take place, tenderers are to note:** Tenderers will be required to undergo breathalyser testing and inductions by the Transnet Pipelines Health and Safety representatives at the Howick Pump Station prior to entry into the operational areas. For entry to the Howick Pump Station Tenderers are required to have the following PPE: ○ Dromex DW – D59 FA, 100% cotton, flame retardant and acid-resistant SABS approved Conti suit with long sleeves (Jacket and Trouser). Materials meeting the requirements of SANS 434, antistatic properties EN 1149 with silver reflective strip (50mm in width) on each sleeve around upper arm and each leg, meeting the requirements for EN471. ○ Safety footwear with steel toe protection, anti-static, slip resistant, hydrocarbon resistant and leather material. ○ Hard hat with chin straps meeting requirements of SANS 1397:2003 Taking of photographs at the Howick Pump Station will not be permitted. All forms of firearms are prohibited on Transnet properties and premises.

COMPULSORY TENDER CLARIFICATION MEETING WITH SITE VISIT	The relevant persons attending the meeting must ensure that their identity documents, passports or drivers' licences are on them for inspection at the access control gates. A Certificate of Attendance as set out under **Returnable Schedule T2.2-01** hereto must be completed and submitted with the RFP response as proof of attendance. **Tenderers are required to bring the Returnable Schedule to the Tender Clarification Meeting to be signed by the Employer's Representative.** **Tenderers failing to attend the compulsory tender clarification meeting will be disqualified.** The Transnet Pipelines contact person/Employer's Agent is as follows: • Rory Torr • Phone No: +27 31 816 9770 • e-mail: rory.torr@transnet.net
CLOSING DATE	**16:00pm on 20 November 2026** Tenderers must ensure that tenders are uploaded timeously onto the system. **If a tender is late, it will not be accepted for consideration.**

2 TENDER SUBMISSION

Transnet has implemented a new electronic tender submission system, the e-Tender Submission Portal, in line with the overall Transnet digitalization strategy where suppliers can view advertised tenders, register their information, log their intent to respond to bids and upload their bid proposals/responses on to the system.

The Transnet Digital Procurement System (TDPS) Supplier Submission Portal can be accessed as follows:

a) Log on to the Transnet eSupplier website/Portal (https://esupplierportal.transnet.net/portal/)

b) Click on "SIGN IN/REGISTER –to register new bidder information and ensure that all (must fill in all mandatory information is completed) OR; to sign in if already registered;

c) Click on "ADVERTISED TENDERS" to view advertised tenders;

d) Toggle (click to switch) the "Log an Intent" button in order to be able to activate the submission of a bid;

e) Respondents are to submit bid documents by uploading them onto the system against each tender selected. A Bidder can upload 30mb per upload and multiple uploads are permitted.

f) Bidders to note that all pricing must be completed in the eSupplier portal, electronic pricing. No paper pricing schedule should be accepted.

g)Bidders should ensure that electronic bid submissions are submitted at least a day before the closing date and bidders should not wait for the last hour before the deadline to submit. This is to enable them to timeously address issues which they may encounter due to internet speed, bandwidth or the size of the number of uploads being submitted. Transnet will not be held liable for any challenges experienced by bidders as a result of their own technical challenges.

h) No late submissions will be accepted.

i) Each company must register its own profile using its company details and use the corresponding registered profile to log an intent to bid as well as submitting any bid.

j)Transnet will not accept a bid or will disqualify a bidder who submits a bid in the Transnet e-tender submission through another bidders'/Company's profile. In other words, each bidder must register the intent to bid and submit its bid through its own profile under the same company name that will eventually bid for the tender. No company shall submit a bid on behalf of another company regardless of the company being a subsidiary or holding company.

k)In case of a Joint Venture, any of the parties/companies to the Joint Venture may use its registered profile to submit a bid on behalf of the Joint Venture.

L)A detailed bidder guide can be found on the Transnet Portal (https://transnetetenders.azurewebsites.net)

3 CONFIDENTIALITY

All information related to this RFP is to be treated with strict confidentiality. In this regard Tenderers are required to certify that they have acquainted themselves with the Non-Disclosure Agreement. All information related to a subsequent contract, both during and after completion thereof, will be treated with strict confidence. Should the need however arise to divulge any information gleaned from provision of the Works, which is either directly or indirectly related to Transnet's business, written approval to divulge such information must be obtained from Transnet.

4 DISCLAIMERS

Tenderers are hereby advised that Transnet is not committed to any course of action as a result of its issuance of this Tender and/or its receipt of a tender offer. In particular, please note that Transnet reserves the right to:

4.1 Award the business to the highest scoring Tenderer/s unless objective criteria justify the award to another Tenderer.

4.2 Not necessarily accept the lowest priced tender or an alternative Tender;

4.3 Go to the open market if the quoted rates (for award of work) are deemed unreasonable;

4.4 Should the Tenderers be awarded business on strength of information furnished by the Tenderer, which after conclusion of the contract is proved to have been incorrect, Transnet reserves the right to terminate the contract;

4.5 Request audited financial statements or other documentation for the purposes of a due diligence exercise;

4.6 Not accept any changes or purported changes by the Tenderer to the tender rates after the closing date;

4.7 Verify any information supplied by a Tenderer by submitting a tender, the Tenderer/s hereby irrevocably grant the necessary consent to Transnet to do so;

4.8 Conduct the evaluation process in parallel. The evaluation of Tenderers at any given stage must therefore not be interpreted to mean that Tenderers have necessarily passed any previous stage(s);

4.9 Unless otherwise expressly stated, each tender lodged in response to the invitation to tender shall be deemed to be an offer by the Tenderer. The *Employer* has the right in its sole and unfettered discretion not to accept any offer.

4.10 Not be held liable if Tenderers do not provide the correct contact details during the clarification session and do not receive the latest information regarding this RFP with the possible consequence of being disadvantaged or disqualified as a result thereof.

4.11 Transnet reserves the right to exclude any Tenderer from the tender process who has been convicted of a serious breach of law during the preceding 5 [five] years, including but not limited to breaches of the Competition Act 89 of 1998, as amended. Tenderers are required to indicate in tender returnable on **T2.2-23**, [Breach of Law] whether or not they have been found guilty of a serious breach of law during the past 5 [five] years.

4.12 Transnet reserves the right to perform a risk analysis on the preferred Tenderer to ascertain if any of the following might present an unacceptable commercial risk to the employer:

Unduly high or unduly low tendered rates or amounts in the tender offer;

Contract data provided by the Tenderer; or

The contents of the tender returnables, which are to be included in the contract.

5 Transnet will not reimburse any Tenderer for any preparatory costs or other work performed in connection with this Tender, whether or not the Tenderer is awarded a contract.

6 NATIONAL TREASURY'S CENTRAL SUPPLIER DATABASE

Tenderers are required to self-register on the National Treasury's Central Supplier Database (CSD) which has been established to centrally administer supplier information for all organs of state and facilitate the verification of certain key supplier information. The CSD can be accessed at https://secure.csd.gov.za/. Tenderer are required to provide the following to Transnet in order to enable it to verify information on the CSD:

Supplier Number…… and Unique registration reference number……(Tender Data)

Transnet urges its clients, suppliers and the general

public to report any fraud or corruption to

TIP-OFFS ANONYMOUS: 0800 003 056 OR Transnet@tip-offs.com

T1.2 TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in Annex C of the CIDB Standard for Uniformity in Engineering and Construction Works Contracts. The Standard for Uniformity in Construction Procurement was first published in Board Notice 62 of 2004 in Government Gazette No 26427 of 9 June 2004. It was subsequently amended in Board Notice 67 of 2005 in Government Gazette No 28127 of 14 October 2005, Board Notice 93 of 2006 in Government Gazette No 29138 of 18 August 2006, Board Notice No 9 of 2008 in Government Gazette No 31823 of 30 January 2009, Board Notice 86 of 2010 in Government Gazette No 33239 of 28 May 2010, Board Notice 136 of 2015 in Government Gazette 38960 of 10 July 2015 and Board Notice 423 of 2019 in Government Gazette No 42622 of 8 August 2019.

This edition incorporates the amendments made in Board Notice 423 of 2019 in Government Gazette 42622 of 8 August 2019. (see www.cidb.org.za).

The Standard Conditions of Tender make several references to Tender data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.

Each item of data given below is cross-referenced in the left-hand column to the clause in the Standard Conditions of Tender to which it mainly applies.

Clause		**Data**
C.1.1	The *Employer* is	**Transnet SOC Ltd** **(Reg No. 1990/000900/30)**
	The tender documents issued by the *Employer* comprise:	
	Part T: The Tender	
	Part Tl: Tendering procedures	T1.1 Tender notice and invitation to tender T1.2 Tender data
	Part T2: Returnable documents	T2.1 List of returnable documents T2.2 Returnable schedules
C.1.2	**Part C: The contract**	
	Part Cl: Agreements and contract data	C1.1 Form of offer and acceptance C1.2 Contract Data (Part 1 & 2) C1.3 Form of Guarantees / Securities
	Part C2: Pricing data	C2.1 Pricing instructions C2.2 Activity Schedule
	Part C3: Scope of work	C3.1 Works Information
	Part C4: Site information	C4.1 Site information
C.1.4	The *Employer's* agent is:	Rory Torr
	Address:	202 Anton Lembede Street (Smith)

	Durban
	4001
Tel No.	27 31 816 9770
E - mail	rory.torr@transnet.net

C2.1 Only those Tenderers who satisfy the following eligibility criteria are eligible to submit tenders:

Step 2 of Stage 1

1. Eligibility with regards to attendance at the compulsory clarification meeting (refer returnable T2.2-01):

An authorised representative of the tendering entity or a representative of a tendering entity that intends to form a Joint Venture (JV) must attend the compulsory clarification meeting in terms C2.7

2. Eligibility in terms of the Construction Industry Development Board (CIDB Registration or Application as per returnable T2.2-02) :

a) Only those Tenderers who are validly registered with the CIDB or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered or a value determined in accordance with Regulation 25 (IB) or 25(7A) of the Construction Industry Development Regulations, for a **7ME** or higher class of construction work, are eligible to have their tenders evaluated.

b) Joint Venture (JV)
Joint ventures are eligible to submit tenders subject to the following:
1. every member of the joint venture is registered with the CIDB;
2. the lead partner has a contractor grading designation of not lower than one level below the required class of construction works under consideration and possesses the required recognition status; and
3. the combined Contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a Contractor grading designation determined in accordance with the sum tendered for a **7ME** class of construction work or a value determined in accordance with Regulation 25(1B) or 25(7A) of the Construction Industry Development Regulations
The tenderer shall provide a certified copy of its signed joint venture agreement

3. Technical Pre-qualification criteria for Registration for Critical Resources

(as per returnable T2.2-03)

Position	Required Registration	Documents submitted with Professional Registration number for verification Yes/No
Lead Electrical Engineer	Pr.Eng. registered with ECSA (Electrical Engineering discipline)	
Lead Mechanical Engineer	Pr.Eng. registered with ECSA (Mechanical Engineering discipline)	

Lead Civil or Structural Engineer	Pr.Eng. registered with ECSA (Civil or Structural Engineering discipline)	
Lead Control and Instrumentation Engineer	Pr.Eng. registered with ECSA (Electronic/Electrical Engineering discipline)	
Health and Safety Officer	Valid SACPCMP registration as Construction Health & Safety Officer	

4. Stage 2 Step Three – Technical/Functional Evaluation

Only those tenderers who obtain the minimum qualifying score for Technical/Functional Evaluation will be evaluated further in terms of price and the applicable preference point system.

The minimum qualifying for score for Technical/ Functional Evaluation is a Total score of **60 points**. The evaluation criteria for measuring Technical/ Evaluation and the points for each criterion and, if any, each sub-criterion is as stated in C.3.11.4 below.

Any tenderer that fails to meet the stipulated eligibility criteria will be regarded as an unacceptable tender.

C.2.7	The arrangements for a compulsory clarification meeting are as stated in the Tender Notice and Invitation to Tender. **Tenderers must complete and sign the attendance register.** Addenda will be issued too, and tenders will only be received from those tendering entities including those entities that intends forming a joint venture appearing on the attendance register. Tenderers are also **required to bring their RFP document to the briefing session and have their returnable document T2.2-01 certificate of attendance** signed off by the Employer's authorised representative.
C.2.12	No alternative tender offers will be considered.
C.2.13.3	Each tender offer shall be in the **English Language.**
C.2.13.5 C2.15.1	The *Employer's* details and identification details that are to be shown on each tender offer are as follows: • Identification details: The tender documents must be uploaded with: • Name of Tenderer: • Contact person and details: • The Tender Number: **TPL/2026/08/0578/10542/RFP** • The Tender Description: **Engineering, Procurement and Construction of the Howick Pump Station Fire System Upgrade** Documents must be marked for the attention of: **Employer's Agent: Rory Torr (Procurement Officer)**
C.2.13.9	Telephonic, telegraphic, facsimile or e-mailed tender offers will not be accepted.

C.2.15 The closing time for submission of tender offers is:

Time: 16:00pm on the 20 November 2026

Location: The Transnet e-Tender Submission Portal: (https://transnetetenders.azurewebsites.net);

NO LATE TENDERS WILL BE ACCEPTED

C.2.16 The tender offer validity period is **12 weeks** after the closing date. Tenderers are to note that they may be requested to extend the validity period of their tender, on the same terms and conditions, if Transnet's internal evaluation and governance approval processes has not been finalised within the validity period.

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

1. A valid Tax Clearance Certificate issued by the South African Revenue Services. **Tenderers also to provide Transnet with a TCS PIN to verify Tenderers compliance status.**
2. A **valid B-BBEE Certificate** from a Verification Agency accredited by the South African Accreditation System [**SANAS**], or a sworn affidavit confirming annual turnover and level of black ownership, in line with the code of good practice, together with the tender;
3. A valid CIDB certificate in the correct designated grading;(Mandatory)
4. Proof of registration on the Central Supplier Database;
5. Letter of Good Standing with the Workmen's compensation fund by the tendering entity or separate Letters of Good Standing from all members of a newly constituted JV.

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

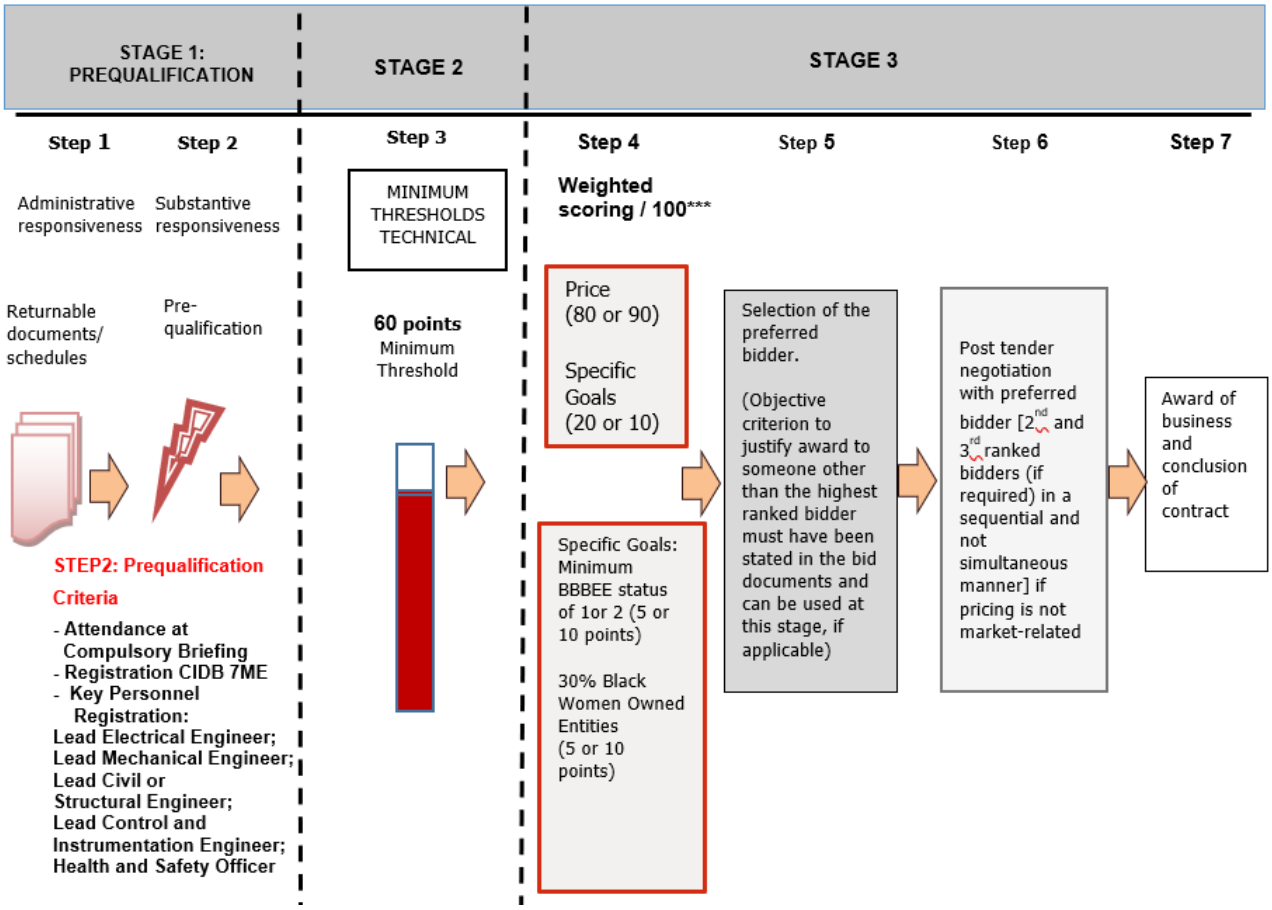
Returnable Documents means all the documents, Sections and Annexures, as listed in T2.1 for List of Returnable Documents. There are three types of returnable documents as indicated below and Respondents are urged to ensure that these documents are returned with their bids based on the consequences of non-submission as indicated below:

Mandatory Returnable Documents	***Failure to provide all these Mandatory Returnable Documents at the Closing Date and time of this RFP will result in a Respondent's disqualification.***
Returnable Documents Used for Scoring	***Failure to provide all Returnable Documents used for purposes of scoring a bid, by the closing date and time of this bid will not result in a Respondent's disqualification. However, Bidders will receive an automatic score of zero for the applicable evaluation criterion.***
Essential Returnable Documents	***Failure to provide essential Returnable Documents will result in Transnet affording Respondents a further opportunity to submit by a set deadline. Should a Respondent thereafter fail to submit the requested documents, this may result in a Respondent's disqualification.***

Agreement and Commitment by Tenderer	***Failure to provide Agreement and Commitment by Tenderer Returnable Documents will result in Transnet affording Respondents a further opportunity to submit by a set deadline. Should a Respondent thereafter fail to submit the requested documents, this may result in a Respondent's disqualification.***

C3.11.1 **EVALUATION METHODOLGY AND CRITERIA**

Transnet will utilise the following methodology and criteria in evaluating Tenders:



NB: Evaluation of the various stages will normally take place in a sequential manner. However, in order to expedite the process, Transnet reserves the right to conduct the different stages of the evaluation process in parallel. In such instances the evaluation of bidders at any given stage must not be interpreted to mean that bidders have necessarily passed any previous stage(s).

C.3.11.2 **Evaluation Criteria and Scoring Scale**

STEP ONE: Test for Administrative Responsiveness

The test for administrative responsiveness will include the following:

Administrative responsiveness check
Whether the Bid has been lodged on time
Whether all Returnable Documents and/or schedules [where applicable] were completed

and returned by the closing date and time
Verify the validity of all returnable documents
Verify if the Bid document has been duly signed by the authorised respondent

The test for administrative responsiveness [Step One] must be passed for a Respondent's Proposal to progress to Step Two for further prequalification

C.3.11.3 **STEP TWO: Test for Substantive Responsiveness to RFP**

The test for substantive responsiveness to this RFP will include the following:

Check for substantive responsiveness
• Whether any general pre-qualification criteria set by Transnet, have been met
• Whether the Bid contains a priced offer
• Whether the Bid materially complies with the scope and/or specification given
• Whether any prequalification criteria have been met as follows: ○ Attendance of Compulsory Tender Clarification Meeting as per returnable T2.2-01 ○ Construction Industry Development Regulations, designation of **7ME** class of construction work as per returnable T2.2-02 ○ Registration for critical resources as per returnable T2.2-03
The test for substantive responsiveness [Step Two] must be passed for a Respondent's Proposal to progress to Step Three for further evaluation

C3.11.4 **Step Three: Technical/ Functional Evaluation**

The minimum number of evaluation points for Technical/Functional Evaluation is a Total score of 60

Points. Minimum Threshold of **60 points** for Technical Criteria. Failure to achieve the 60-point threshold will lead to disqualification.

Technical/Functionality Criteria

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

Functionality criteria	**Sub-criteria**	**Sub-criteria points**	**Maximum number of points**
T2.2-04 Management and CV's	Project Manager	3	15
	Construction Manager	3	

	Quality Control Manager	3	
	Lead Mechanical Engineer	3	
	Lead Planner	3	
T2.2-05 Company's Previous Experience	Tenderer's are required to display experience in fabrication, construction and installation of piping systems in petrochemical process plants within the past 15 years that meet or exceed a present day value of R25 million (ex. VAT).		25
T2.2-06 Programme	Duration (overall project)	15	25
	Format & Visibility Requirements	10	
T2.2-07 Project Execution Strategy	The Project Execution Strategy should cover:		
	1.Detailed Installation and Construction Methodology		15
	2.Overall Construction Sequencing and Phasing Strategy		
	3.Engineering, Design Review, and Quality Assurance		
	4.Testing, Commissioning, Handover, and Close-Out		
	5. Programme, Risk Management, and Controls		
	6. Pre-fabrication, Modularisation and Off-Site Works Strategy		
	7. Understanding of the Works and Site Constraints		
	8. Safety, Health, Environmental and Operational Interface Management		
T2.2-08 Health and Safety Requirements	SHE Policy	2	10
	Roles & responsibilities of legal appointees	3	
	Task Risk Assessment	3	
	Health and Safety Questionnaire	2	
T2.2-09 Project Specific Organisational Chart	Organogram Completeness & Package Coverage (14 packages)		10
	The Tenderer must submit a high-level Project Specific Organisational Structure organogram showing the contractual and management relationship between the Main Contractor, all proposed subcontractors, key suppliers and specialists for the successful execution of the EPC Works Experience (shown on organogram)		

Maximum possible score for Functionality	**100**

Functionality shall be scored independently by not less than 3 (three) evaluators.

Each evaluation criteria will be assessed in terms of scores of 0, 20, 40, 60, 80 or 100. The scores of each of the evaluators will be averaged, weighted and then totalled to obtain the final score for technical/functional evaluation (Desktop), unless scored collectively. (See CIDB Inform Practice Note #9).

Note: Any tender not complying with the above-mentioned requirements, will be regarded as non-responsive and will therefore <u>not</u> be considered for further evaluation. This note must be read in conjunction with Clause C.2.1.

C.3.11.5 **STEP FOUR: Evaluation and Final Weighted Scoring**

Only tenders that achieve the minimum qualifying score for functionality will be evaluated further in accordance with the 80/20 or 90/10 preference points systems as described in Preferential Procurement Regulations.

80 where the financial value of one or more responsive tenders received have a value equal to or below R50 million, inclusive of all applicable taxes,

and/or

90 where the financial value of one or more responsive tenders received have a value equal to or above R50 million, inclusive of all applicable taxes.

Evaluation Criteria	Final Weighted Scores		Final Weighted Scores
Price	80	**or**	90
Specific Goals - Scorecard	20		10
TOTAL SCORE:	**100**		**100**

Up to 100 minus W_1 tender evaluation points will be awarded to Tenderers who complete the preferencing schedule and who are found to be eligible for the preference claimed. **Should the evidence required for any of the Specific Goals applicable in this tender not be provided, a Tenderer will score zero preference points for that particular "Specific Goal".**

In terms of Transnet Preferential Procurement Policy (TPPP) and Procurement Manuals, the following preference points must be awarded to a bidder who provides the relevant required evidence for claiming points

3.11.5.1 **Selected Specific Goals:**

Selected Specific Goal	Number of points allocated (80/20)		Number of points allocated (90/10)

B-BBEE Level of contributor (1 or 2)	10	**or**	5
30% Black Women Owned Entities	10		5
Non-Compliant and/or B-BBEE Level 3-8 contributors	0		0
<30% Black Women Owned Entities	0		0

The following Table represents the evidence to be submitted for claiming preference points for applicable specific goals in a particular tender:

Specific Goals	Acceptable Evidence
B-BBEE	B-BBEE Certificate / Sworn-Affidavit B-BBEE Certificate (in case of JV, a consolidate scorecard will be accept) as per DTIC guidelines
30% Black Women Owned Entities	B-BBEE Certificate / Sworn- Affidavit / B-BBEE CIPC Certificate (in case of JV, a consolidated scorecard will be accepted) as per DTIC guideline

C3.11.5.2 The maximum points for this bid are allocated as follows:

DISCRIPTION	POINTS		POINTS
PRICE	80		90
B-BBEE STATUS LEVEL OF CONTRIBUTION	5	**or**	10
30% BLACK WOMEN OWNED ENTITIES	5		10
Total points for Price and Specific Goals must not exceed	**100**		**100**

Note: Transnet reserves the right to carry out an independent audit of the Tenderers scorecard components at any stage from the date of close of the tenders until completion of the contract.

C.11.6 **STEP FOUR: Objective Criteria (if applicable)**

Transnet reserves the right to award the contract to the highest scoring bidder, **unless objective criteria justify an award to another bidder** in accordance with applicable legislation and procurement prescripts.

Where applicable, Transnet **may apply** the following objective **criteria after completion of all bid evaluation processes and prior to contract award**:

Due Diligence

Transnet will conduct a due diligence assessment on the preferred bidder(s) to verify the accuracy, completeness, and validity of information submitted in the bid, including but not limited to the following aspects:

- integrity, ethics, and reputational standing;
- corporate governance, ownership, and control structures;
- financial standing, sustainability, and solvency;
- legal, statutory, and regulatory compliance;
- declared and potential conflicts of interest

Should the due diligence process identify any **material misrepresentation, non-disclosure, conflict of interest, legal incapacity, or adverse finding** that renders the bidder **non-compliant, ineligible, or incapable of performing the contract or any other related negative report against the bidder**, Transnet **reserves the right to reject the bid** and **may consider** the next highest-ranked responsive and compliant bidder.

Due diligence outcomes **will not be used as scoring criteria**, nor will they result in a re-evaluation of price, functionality, or preference points.

C.11.7 **STEP FIVE: Post Tender Negotiations (PTN)**

Respondents are to note that Transnet may not award a contract if the price offered is not market related. In this regard, Transnet reserves the right to engage in PTN with the view to achieving a market-related price or to cancel the tender. Negotiations will be done in a sequential manner i.e.:

- first negotiate with the highest ranked bidder or cancel the bid, should such negotiations fail,
- negotiate with the 2nd and 3rd ranked bidders (if required) in a sequential manner.

In the event of any Respondent being notified of such short-listed/preferred bidder status, his/her bid, as well as any subsequent negotiated best and final offers (BAFO), will automatically be deemed to remain valid during the negotiation period and until the ultimate award of business.

Should Transnet conduct post tender negotiations, Tenderers will be requested to provide their best and final offers to Transnet based on such negotiations. Where a market related price has been achieved through negotiation, the contract will be awarded to the successful Respondent(s).

C.11.8 **STEP SIX: Award of Business and Conclusion of Contract**

Immediately after approval to award the contract has been received, the successful or preferred bidder(s) will be informed of the acceptance of his/their Bid by way of a Letter of Award. Thereafter the final contract will be concluded with the successful Respondent(s).

A final contract will be concluded and entered into with the successful Bidder at the acceptance of a letter of award by the Respondent.

C3.13 Tender offers will only be accepted if:

a) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement; the Tenderer or any of its directors/shareholders is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; the Tenderer does not appear on Transnet's list for restricted Tenderers and National Treasury's list of Tender Defaulters;

b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract, other than what has been evaluated under any prequalification, functionality or price and specific goals criteria.

c) has the legal capacity to enter into the contract;

d) is not; insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act No. 2008, bankrupt or being wound up, has his/her affairs administered by a court or a judicial officer, has suspended his/her business activities or is subject to legal proceedings in respect of any of the foregoing;

e) complies with the legal requirements, if any, stated in the tender data; and

f) is able, in the opinion of the employer, to perform the contract free of conflicts of interest; the Tenderer has fully and properly completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the Tenderer's ability to perform the contract in the best interests of the *Employer* or potentially compromise the tender process and persons in the employ of the state.

g)is an unacceptable commercial risk to the employer due to unduly high or unduly low tendered rates or amounts in the tender offer.

C3.17 The number of paper copies of the signed contract to be provided by the Employer is 1 (one).

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Annex C

Standard Conditions of Tender

C.1 General

C.1.1 Actions

C.1.1.1 The employer and each tenderer submitting a tender offer shall comply with these conditions of tender. In their dealings with each other, they shall discharge their duties and obligations as set out in C.2 and C.3, timeously and with integrity, and behave equitably, honestly and transparently, comply with all legal obligations and not engage in anticompetitive practices.

C.1.1.2 The employer and the tenderer and all their agents and employees involved in the tender process shall avoid conflicts of interest and where a conflict of interest is perceived or known, declare any such conflict of interest, indicating the nature of such conflict. Tenderers shall declare any potential conflict of interest in their tender submissions. Employees, agents and advisors of the employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.

Note: *1) A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result.*

2) Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decisions taken.

C.1.1.3 The employer shall not seek and a tenderer shall not submit a tender without having a firm intention and the capacity to proceed with the contract.

C.1.2 Tender Documents

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

C.1.3 Interpretation

C.1.3.1 The tender data and additional requirements contained in the tender schedules that are included in the returnable documents are deemed to be part of these conditions of tender.

C.1.3.2 These conditions of tender, the tender data and tender schedules which are required for tender evaluation purposes, shall form part of any contract arising from the invitation to tender.

C.1.3.3 For the purposes of these conditions of tender, the following definitions apply:

a) **conflict of interest** means any situation in which:

i) someone in a position of trust has competing professional or personal interests which make it difficult to fulfill his or her duties impartially;
ii) an individual or tenderer is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or
iii) incompatibility or contradictory interests exist between an employee and the tenderer who employs that employee.

b) **comparative offer** means the price after the factors of a non-firm price and all unconditional discounts it can be utilised to have been taken into consideration;

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c) **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process;

d) **fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels;

C.1.4 Communication and employer's agent

Each communication between the employer and a tenderer shall be to or from the employer's agent only, and in a form that can be readily read, copied and recorded. Communications shall be in the English language. The employer shall not take any responsibility for non-receipt of communications from or by a tenderer. The name and contact details of the employer's agent are stated in the tender data.

C.1.5 Cancellation and Re-Invitation of Tenders

C.1.5.1 An employer may, prior to the award of the tender, cancel a tender if-

a) due to changed circumstances, there is no longer a need for the engineering and construction works specified in the invitation;

b) funds are no longer available to cover the total envisaged expenditure; or

c) no acceptable tenders are received.

d) there is a material irregularity in the tender process.

C.1.5.2 The decision to cancel a tender invitation must be published in the same manner in which the original tender invitation was advertised

C.1.5.3 An employer may only with the prior approval of the relevant treasury cancel a tender invitation for the second time.

C.1.6 Procurement procedures

C.1.6.1 General

Unless otherwise stated in the tender data, a contract will, subject to C.3.13, be concluded with the tenderer who in terms of C.3.11 is the highest ranked or the tenderer scoring the highest number of tender evaluation points, as relevant, based on the tender submissions that are received at the closing time for tenders.

C.1.6.2 Competitive negotiation procedure

C.1.6.2.1 Where the tender data require that the competitive negotiation procedure is to be followed, tenderers shall submit tender offers in response to the proposed contract in the first round of submissions. Notwithstanding the requirements of C.3.4, the employer shall announce only the names of the tenderers who make a submission. The requirements of C.8 relating to the material deviations or qualifications which affect the competitive position of tenderers shall not apply.

C.1.6.2.2 All responsive tenderers or at least a minimum of not less than three responsive tenderers that are highest ranked in terms of the evaluation criteria stated in the tender data shall be invited to enter into competitive negotiations based on the principle of equal treatment, keeping confidential the proposed solutions and associated information.

Notwithstanding the provisions of C.2.17, the employer may request that tenders be clarified, specified and fine-tuned in order to improve a tenderer's competitive position provided that such clarification, specification, fine-tuning or additional information does not alter any fundamental aspects of the offers or impose substantial new requirements which restrict or distort competition or have a discriminatory effect.

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C.1.6.2.3 At the conclusion of each round of negotiations, tenderers shall be invited by the employer to revise their tender offer based on the same evaluation criteria, with or without adjusted weightings. Tenderers shall be advised when they are to submit their best and final offer.

C.1.6.2.4 The contract shall be awarded in accordance with the provisions of C.3.11 and C.3.13 after tenderers have been requested to submit their best and final offer.

C.1.6.3 Proposal procedure using the two stage-system

C.1.6.3.1 Option 1

Tenderers shall in the first stage submit technical proposals and, if required, cost parameters around which a contract may be negotiated. The employer shall evaluate each responsive submission in terms of the method of evaluation stated in the tender data, and in the second stage negotiate a contract with the tenderer scoring the highest number of evaluation points and award the contract in terms of these conditions of tender.

C.1.6.3.2 Option 2

C.1.6.3.2.1 Tenderers shall submit in the first stage only technical proposals. The employer shall invite all responsive tenderers to submit tender offers in the second stage, following the issuing of procurement documents.

C.1.6.3.2.2 The employer shall evaluate tenders received during the second stage in terms of the method of evaluation stated in the tender data, and award the contract in terms of these conditions of tender.

C.2 Tenderer's obligations

C.2.1 Eligibility

C.2.1.1 Submit a tender offer only if the tenderer satisfies the criteria stated in the tender data and the tenderer, or any of his principals, is not under any restriction to do business with employer.

C.2.1.2 Notify the employer of any proposed material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used by the employer as the basis in a prior process to invite the tenderer to submit a tender offer and obtain the employer's written approval to do so prior to the closing time for tenders.

C.2.2 Cost of tendering

C.2.2.1 Accept that, unless otherwise stated in the tender data, the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer complies with requirements.

C.2.2.2 The cost of the tender documents charged by the employer shall be limited to the actual cost incurred by the employer for printing the documents. Employers must attempt to make available the tender documents on its website so as not to incur any costs pertaining to the printing of the tender documents.

C.2.3 Check documents

Check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission.

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C.2.4 Confidentiality and copyright of documents

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

C.2.5 Reference documents

Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are not attached but which are incorporated into the tender documents by reference.

C.2.6 Acknowledge addenda

Acknowledge receipt of addenda to the tender documents, which the employer may issue, and if necessary apply for an extension to the closing time stated in the tender data, in order to take the addenda into account.

C.2.7 Clarification meeting

Attend, where required, a clarification meeting at which tenderers may familiarize themselves with aspects of the proposed work, services or supply and raise questions. Details of the meeting(s) are stated in the tender data.

C.2.8 Seek clarification

Request clarification of the tender documents, if necessary, by notifying the employer at least five (5) working days before the closing time stated in the tender data.

C.2.9 Insurance

Be aware that the extent of insurance to be provided by the employer (if any) might not be for the full cover required in terms of the conditions of contract identified in the contract data. The tenderer is advised to seek qualified advice regarding insurance.

C.2.10 Pricing the tender offer

C.2.10.1 Include in the rates, prices, and the tendered total of the prices (if any) all duties, taxes except Value Added Tax (VAT), and other levies payable by the successful tenderer, such duties, taxes and levies being those applicable fourteen (14) days before the closing time stated in the tender data.

C.2.10.2 Show VAT payable by the employer separately as an addition to the tendered total of the prices.

C.2.10.3 Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in the contract data.

C.2.10.4 State the rates and prices in Rand unless instructed otherwise in the tender data. The conditions of contract identified in the contract data may provide for part payment in other currencies.

C.2.11 Alterations to documents

Do not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the tenderer. All signatories to the tender offer shall initial all such alterations.

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C.2.12 Alternative tender offers

C.2.12.1 Unless otherwise stated in the tender data, submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted as well as a schedule that compares the requirements of the tender documents with the alternative requirements that are proposed.

C.2.12.2 Accept that an alternative tender offer must be based only on the criteria stated in the tender data or criteria otherwise acceptable to the employer.

C.2.12.3 An alternative tender offer must only be considered if the main tender offer is the winning tender.

C.2.13 Submitting a tender offer

C.2.13.1 Submit one tender offer only, either as a single tendering entity or as a member in a joint venture to provide the whole of the works identified in the contract data and described in the scope of works, unless stated otherwise in the tender data.

C.2.13.2 Return all returnable documents to the employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing legibly in non-erasable ink.

C.2.13.3 Submit the parts of the tender offer communicated on paper as an original plus the number of copies stated in the tender data, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the same format as they were issued by the employer.

C.2.13.4 Sign the original and all copies of the tender offer where required in terms of the tender data. The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the tender offer.

C.2.13.5 Seal the original and each copy of the tender offer as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.

C.2.13.6 Where a two-envelope system is required in terms of the tender data, place and seal the returnable documents listed in the tender data in an envelope marked “financial proposal” and place the remaining returnable documents in an envelope marked “technical proposal”. Each envelope shall state on the outside the employer’s address and identification details stated in the tender data, as well as the tenderer's name and contact address.

C.2.13.7 Seal the original tender offer and copy packages together in an outer package that states on the outside only the employer's address and identification details as stated in the tender data.

C.2.13.8 Accept that the employer will not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.

C.2.13.9 Accept that tender offers submitted by facsimile or e-mail will be rejected by the employer, unless stated otherwise in the tender data.

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

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

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C.2.15 Closing time

C.2.15.1 Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Accept that proof of posting shall not be accepted as proof of delivery.

C.2.15.2 Accept that, if the employer extends the closing time stated in the tender data for any reason, the requirements of these conditions of tender apply equally to the extended deadline.

C.2.16 Tender offer validity

C.2.16.1 Hold the tender offer(s) valid for acceptance by the employer at any time during the validity period stated in the tender data after the closing time stated in the tender data.

C.2.16.2 If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period with or without any conditions attached to such extension.

C.2.16.3 Accept that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer's agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted. If the validity period stated in C.2.16 lapses before the employer evaluating tender, the contractor reserves the right to review the price based on Consumer Price Index (CPI).

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

C.2.17 Clarification of tender offer after submission

Provide clarification of a tender offer in response to a request to do so from the employer during the evaluation of tender offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). No change in the competitive position of tenderers or substance of the tender offer is sought, offered, or permitted.

Note: *Sub-clause C.2.17 does not preclude the negotiation of the final terms of the contract with a preferred tenderer following a competitive selection process, should the Employer elect to do so.*

C.2.18 Provide other material

C.2.18.1 Provide, on request by the employer, any other material that has a bearing on the tender offer, the tenderer's commercial position (including notarized joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the employer for the purpose of a full and fair risk assessment.

Should the tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the employer's request, the employer may regard the tender offer as non-responsive.

C.2.18.2 Dispose of samples of materials provided for evaluation by the employer, where required.

C.2.19 Inspections, tests and analysis

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

C.2.20 Submit securities, bonds and policies

If requested, submit for the employer's acceptance before formation of the contract, all securities, bonds, guarantees, policies and certificates of insurance required in terms of the conditions of contract identified in the contract data.

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C.2.21 Check final draft

Check the final draft of the contract provided by the employer within the time available for the employer to issue the contract.

C.2.22 Return of other tender documents

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

C.2.23 Certificates

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

C.3 The employer's undertakings

C.3.1 Respond to requests from the tenderer

C.3.1.1 Unless otherwise stated in the tender Data, respond to a request for clarification received up to five (5) working days before the tender closing time stated in the Tender Data and notify all tenderers who collected tender documents.

C.3.1.2 Consider any request to make a material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used to prequalify a tenderer to submit a tender offer in terms of a previous procurement process and deny any such request if as a consequence:

a) an individual firm, or a joint venture as a whole, or any individual member of the joint venture fails to meet any of the collective or individual qualifying requirements;
b) the new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or
c) in the opinion of the Employer, acceptance of the material change would compromise the outcome of the prequalification process.

C.3.2 Issue Addenda

If necessary, issue addenda that may amend or amplify the tender documents to each tenderer during the period from the date that tender documents are available until three (3) working days before the tender closing time stated in the Tender Data. If, as a result a tenderer applies for an extension to the closing time stated in the Tender Data, the Employer may grant such extension and, shall then notify all tenderers who collected tender documents.

C.3.3 Return late tender offers

Return tender offers received after the closing time stated in the Tender Data, unopened, (unless it is necessary to open a tender submission to obtain a forwarding address), to the tenderer concerned.

C.3.4 Opening of tender submissions

C.3.4.1 Unless the two-envelope system is to be followed, open valid tender submissions in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data. Tender submissions for which acceptable reasons for withdrawal have been submitted will not be opened.

C.3.4.2 Announce at the meeting held immediately after the opening of tender submissions, at a venue indicated in the tender data, the name of each tenderer whose tender offer is opened and, where

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applicable, the total of his prices, number of points claimed for its BBBEE status level and time for completion for the main tender offer only.

C.3.4.3 Make available the record outlined in C.3.4.2 to all interested persons upon request.

C.3.5 Two-envelope system

C.3.5.1 Where stated in the tender data that a two-envelope system is to be followed, open only the technical proposal of valid tenders in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data and announce the name of each tenderer whose technical proposal is opened.

C.3.5.2 Evaluate functionality of the technical proposals offered by tenderers, then advise tenderers who remain in contention for the award of the contract of the time and place when the financial proposals will be opened. Open only the financial proposals of tenderers, who score in the functionality evaluation more than the minimum number of points for functionality stated in the tender data, and announce the score obtained for the technical proposals and the total price and any points claimed on BBBEE status level. Return unopened financial proposals to tenderers whose technical proposals failed to achieve the minimum number of points for functionality.

C.3.6 Non-disclosure

Not disclose to tenderers, or to any other person not officially concerned with such processes, information relating to the evaluation and comparison of tender offers, the final evaluation price and recommendations for the award of a contract, until after the award of the contract to the successful tenderer.

C.3.7 Grounds for rejection and disqualification

Determine whether there has been any effort by a tenderer to influence the processing of tender offers and instantly disqualify a tenderer (and his tender offer) if it is established that he engaged in corrupt or fraudulent practices.

C.3.8 Test for responsiveness

C.3.8.1 Determine, after opening and before detailed evaluation, whether each tender offer properly received:

a) complies with the requirements of these Conditions of Tender,
b) has been properly and fully completed and signed, and
c) is responsive to the other requirements of the tender documents.

C.3.8.2 A responsive tender is one that conforms to all the terms, conditions, and specifications of the tender documents without material deviation or qualification. A material deviation or qualification is one which, in the Employer's opinion, would:

a) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
b) significantly change the Employer's or the tenderer's risks and responsibilities under the contract, or
c) affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified.

Reject a non-responsive tender offer, and not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.

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C.3.9 Arithmetical errors, omissions and discrepancies

C.3.9.1 Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount in words shall govern.

C.3.9.2 Check the highest ranked tender or tenderer with the highest number of tender evaluation points after the evaluation of tender offers in accordance with C.3.11 for:

a) the gross misplacement of the decimal point in any unit rate;
b) omissions made in completing the pricing schedule or bills of quantities; or
c) arithmetic errors in:

(i) line item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices; or
(ii) the summation of the prices.

C.3.9.3 Notify the tenderer of all errors or omissions that are identified in the tender offer and either confirm the tender offer as tendered or accept the corrected total of prices.

C.3.9.4 Where the tenderer elects to confirm the tender offer as tendered, correct the errors as follows:

a) If bills of quantities or pricing schedules apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate shall be corrected.

b) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall govern and the tenderer will be asked to revise selected item prices (and their rates if bills of quantities apply) to achieve the tendered total of the prices.

C.3.10 Clarification of a tender offer

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

C.3.11 Evaluation of tender offers

The Standard Conditions of Tender standardize the procurement processes, methods and procedures from the time that tenders are invited to the time that a contract is awarded. They are generic in nature and are made project specific through choices that are made in developing the Tender Data associated with a specific project.

Conditions of tender are by definition the document that establishes a tenderer's obligations in submitting a tender and the employer's undertakings in soliciting and evaluating tender offers. Such conditions establish the rules from the time a tender is advertised to the time that a contract is awarded and require employers to conduct the process of offer and acceptance in terms of a set of standard procedures.

The CIDB Standard Conditions of Tender are based on a procurement system that satisfies the following system requirements:	
Requirement	**Qualitative interpretation of goal**
Fair	The process of offer and acceptance is conducted impartially without bias, providing simultaneous and timely access to participating parties to the same information.
Equitable	Terms and conditions for performing the work do not unfairly prejudice the interests of the parties.
Transparent	The only grounds for not awarding a contract to a tenderer who satisfies all requirements are restrictions from doing business with the employer, lack of capability or capacity, legal impediments and conflicts of interest.
Competitive	The system provides for appropriate levels of competition to ensure cost effective and best value outcomes.

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Cost effective	The processes, procedures and methods are standardized with sufficient flexibility to attain best value outcomes in respect of quality, timing and price, and least resources to effectively manage and control procurement processes.

The activities associated with evaluating tender offers are as follows:

a) Open and record tender offers received
b) Determine whether or not tender offers are complete
c) Determine whether or not tender offers are responsive
d) Evaluate tender offers
e) Determine if there are any grounds for disqualification
f) Determine acceptability of preferred tenderer
g) Prepare a tender evaluation report
h) Confirm the recommendation contained in the tender evaluation report

C.3.11.1 General

The employer must appoint an evaluation panel of not less than three persons conversant with the proposed scope of works to evaluate each responsive tender offer using the tender evaluation methods and associated evaluation criteria and weightings that are specified in the tender data.

C.3.12 Insurance provided by the employer

If requested by the proposed successful tenderer, submit for the tenderer's information the policies and / or certificates of insurance which the conditions of contract identified in the contract data, require the employer to provide.

C.3.13 Acceptance of tender offer

Accept the tender offer; if in the opinion of the employer, it does not present any risk and only if the tenderer:

a) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement;
b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract;
c) has the legal capacity to enter into the contract;
d) is not; insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act No. 2008, bankrupt or being wound up, has his/her affairs administered by a court or a judicial officer, has suspended his/her business activities or is subject to legal proceedings in respect of any of the foregoing;
e) complies with the legal requirements, if any, stated in the tender data; and
f) is able, in the opinion of the employer, to perform the contract free of conflicts of interest.

C.3.14 Prepare contract documents

C.3.14.1 If necessary, revise documents that shall form part of the contract and that were issued by the employer as part of the tender documents to take account of:

a) addenda issued during the tender period,
b) inclusion of some of the returnable documents and
c) other revisions agreed between the employer and the successful tenderer.

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

C.3.15 Complete adjudicator's contract

Unless alternative arrangements have been agreed or otherwise provided for in the contract, arrange for both parties to complete formalities for appointing the selected adjudicator at the same time as the main contract is signed.

C.3.16 Registration of the award

An employer must, within twenty-one (21) working days from the date on which a contractor's offer to perform a construction works contract is accepted in writing by the employer, register and publish the award on the cidb Register of Projects.

C.3.17 Provide copies of the contracts

Provide to the successful tenderer the number of copies stated in the Tender Data of the signed copy of the contract as soon as possible after completion and signing of the form of offer and acceptance.

C.3.18 Provide written reasons for actions taken

Provide upon request written reasons to tenderers for any action that is taken in applying these conditions of tender but withhold information which is not in the public interest to be divulged, which is considered to prejudice the legitimate commercial interests of tenderers or might prejudice fair competition between tenderers.

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Part T2: Returnable Documents

T2.1 List of Returnable Documents

2.1.1 These mandatory schedules are required for Eligibility Purposes :

T2.2-01 : Certificate of Attendance at Compulsory Tender Clarification Meeting

T2.2-02 : Construction Industry Development Board: CIDB Registration or Application

T2.2-03 : Registration and Experience for critical resources

2.1.2 Returnable Documents Used for Scoring :

T2.2-04 : Management and CV's

T2.2-05 : Company Previous Experience

T2.2-06 : Programme

T2.2-07 : Project Execution Strategy

T2.2-08 : Health and Safety Requirements

T2.2-09 : Project Specific Organisational Chart

2.1.3 Essential Returnables :

T2.2-10 : RFP clarification request form

T2.2-11 : Authority to Submit Tender

T2.2-12 : Record of Addenda to Tender Documents

T2.2-13 : Letter of Good Standing with the Workmen’s Compensation Fund

T2.2-14 : Risk Elements

T2.2-15 : Availability of Equipment and Other Resources

T2.2-16 : Site Establishment Requirements

T2.2-17 : Capacity and Ability to Meet Delivery Schedule

T2.2-18 : ANNEX G Compulsory Enterprise Questionnaire

- SBD 4 : Bidder's Disclosure
- SBD 6.1 : Preference Points Claim Form

2.1.4 Agreement and Commitment by Tenderer:

T2.2-19 : Job-Creation Schedule

T2.2-20 : Schedule of Proposed Subcontractors

T2.2-21 : Non-Disclosure Agreement [July 2023]

T2.2-22 : RFP Declaration Form

T2.2-23 : Breach of Law

T2.2-24 : Certificate of Acquaintance with Tender Documents

T2.2-25 : Service Provider Integrity Pact

T2.2-26 : Supplier Code of Conduct

T2.2-27 : Domestic Prominent Influential Persons (DPIP) or Foreign Prominent Public Officials (FPPO)

T2.2-28 : Agreement in terms of Protection of Personal Information Act (POPIA)

T2.2-29 : Declaration of Understanding – Obligations of Contractor

Bonds/ Guarantees / Financial / Insurance:

T2.2-30 : Insurance provided by the Contractor

T2.2-31 : Form of Intent to provide a Performance Guarantee

T2.2-32 : Forecast Rate of Invoicing

T2.2-33 : Three (3) years latest Audited Financial Statements

T2.2-34 : Foreign Exchange Requirements

2.1.5 Transnet Vendor Registration Form:

T2.2-35 : Transnet Supplier Declaration Form

2.1.6 Contractual Returnables

C1.1 Form of Offer & Acceptance (Mandatory)

C1.2 Contract Data (Part 1 and Part 2)

C1.3 Form of Guarantee

C2.1 Pricing Instructions

C2.2 Activity Schedule

T2.2-01: Certificate of Attendance at Compulsory Tender Clarification Meeting [Mandatory]

It is hereby certified that:

Company Name .....

Represented By .....Name and Surname

Attended the Compulsory Tender Clarification Meeting:

Meeting held at:	Howick Pump Station	
On Date:		Starting Time: **10h00**

Particulars of person(s) attending the meeting:

Name: .....

Capacity: .....

Signature: .....

Attendance of the above company at the meeting was confirmed:

Name: .....

Signature: .....

For and on Behalf of the *Employer's* Agent Date .....

NOTE:

This certificate of attendance must be filled in duplicate, one copy to be kept by Transnet and the other copy to be kept by the Respondent.

T2.2-02: Construction Industry Development Board:

CIDB Registration or Application [Mandatory]

Note to Tenderers:

Tenderers are to indicate their CIDB Grading by filling in the table below. **Attach a copy of the valid CIDB Grading Designation or evidence of being capable of being so registered.**

CRS Number	Status	Grading	Expiry Date

1. Only those Tenderers who are validly registered with the CIDB or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered or a value determined in accordance with Regulation 25 (IB) or 25(7A) of the Construction Industry Development Regulations, for a **7ME** or higher class of construction work, are eligible to have their tenders evaluated.

2. Joint Venture (JV)

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

2.1. every member of the joint venture is registered with the CIDB;

2.2. the lead partner has a contractor grading designation of not lower than one level below the required grading designation in the class of construction works under consideration and possesses the required recognition status; and

2.3. the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a **7ME** or higher class of construction work or a value determined in accordance with Regulation 25(1B) or 25(7A) of the Construction Industry Development Regulations.

2.4. the *Contractor* shall provide the *Employer* with a certified copy of its signed joint venture agreement;

2.5. and in the event that the joint venture is an 'Incorporated Joint Venture' the Memorandum of Incorporation to be provided within 4 (four) weeks of the Contract Date.

2.6 To register as a foreign contractor with the South African Construction Industry Development Board (CIDB), you must first apply for provisional registration, then complete the full registration process, and ensure you meet all requirements, including providing supporting documentation.

To register use the CIDB website portal **www.cidb.org.za**.

Signed ..... Date .....

Name .....Position .....

Tenderer .....

T2.2-03: Eligibility Criteria Schedule – Registration for Critical Resources

Note to Tenderers

NB: Any Tenderer that fails to submit the required documentation or fails to demonstrate that the proposed key personnel meet ALL the registration and qualification requirements listed below for any of the listed positions will be regarded as unacceptable and disqualified from further evaluation. All information submitted will be evaluated as one submission.

The Tenderer must propose dedicated, named individuals for each of the critical key personnel positions listed in the table below. Each proposed resource must fully meet the specified professional registration (or qualification) and include their CV demonstrating compliance with the specified requirements.

The minimum requirements for the identified critical key personnel shall be as indicated in the table below. The Tenderer must complete the table and attach:

- Verifiable proof of professional registration in good standing (ECSA Pr. Eng certificate, SACPCMP registration certificate)

The Employer will verify all professional registrations directly with ECSA and SACPCMP. It is a requirement that the resources nominated for these critical positions are not duplicated across any other key person roles in the tender submission. Failure to meet all of the eligibility requirements shall render the tender unacceptable and ineligible for further evaluation.

Table to be completed by the Tenderer:

Position	**Eligibility Criteria**	**Name of resource proposed**	**Registration Documents submitted with Professional Registration number (Yes/No)**
Lead Electrical Engineer	Pr.Eng. registered with ECSA (Electrical Engineering discipline)		
Lead Mechanical Engineer	Pr.Eng. registered with ECSA (Mechanical Engineering discipline)		
Lead Civil or Structural Engineer	Pr.Eng. registered with ECSA (Civil or Structural Engineering discipline)		
Lead Control and Instrumentation Engineer	Pr.Eng. registered with ECSA (Electronic/Electrical Engineering discipline)		
Health and Safety Officer	Valid SACPCMP registration as Construction Health & Safety Officer		

Index of documentation attached to this schedule:

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T2.2-04: Evaluation Schedule - Management & CV's of Key Personnel

Note to Tenderers

The Tenderer must demonstrate that the proposed key personnel have the necessary qualifications, professional registrations in good standing, and proven experience to successfully execute the Works.

Submit the following as a minimum with your tender:

i. Detailed CVs for each of the key persons listed below using the template provided within this document.
ii. Verifiable proof of professional registrations in good standing / qualifications (certificates, /SACPCMP/SACQSP/SAIW letters) clearly linked to each CV.

Key Persons required (total weighting 15 points):

No.	Key Person	Weighting
1	Project Manager	3
2	Construction Manager	3
3	Quality Control Manager	3
4	Lead Mechanical Engineer	3
5	Lead Planner	3

Table to be completed by the Tenderer:

Key Person Role	**Name and Surname**	**CV attached (Yes/No)**	**Proof of Registration / Qualification attached (Yes/No)**
Project Manager			
Construction Manager			
Quality Control Manager			
Lead Mechanical Engineer			
Lead Planner			

Evaluation and Scoring Criteria (15 points total)

Scoring will be carried out strictly in accordance with the bands below. The Tenderer must provide sufficient verifiable evidence to enable the Employer to award the stated score. Where insufficient information is provided, a score of **0** will be awarded for that person.

Note on scoring: The evaluator will assess the submitted documents and select the single overall score (0%, 20%, 40%, 60%, 80% or 100%) from the table that best reflects the tenderer's performance across all criteria. This overall score is then multiplied by the points allocated to give the final points awarded.

Project Manager (Maximum 3 points):

Minimum Requirement

The Contractor's Project Manager is registered with SACPCMP as a Professional Construction Project Manager or as a Project Management Professional (PMP) with the Project Management Institute (PMI), and has at least 8 years' experience managing multi-disciplinary petrochemical / hydrocarbon process plant projects of which at least one had a construction value of at least R100 million, and holds an NQF Level 6 Built Environment qualification.

If the Contractor's Project Manager does not hold the required registration, does not hold the NQF Level 6 Built Environment qualification, or does not have the required experience managing multi-disciplinary petrochemical / hydrocarbon process plant projects of which at least one had a construction value of at least R100 million, a score of zero will be awarded.

Score	Criteria (multiplier applied to 3 points)
0	5 years or less experience managing multi-disciplinary petrochemical / hydrocarbon process plant projects at least one of which had a construction value of R100 million and professional registration PrCPM (SACPCMP) or PMP (PMI), and holds an NQF Level 6 Built Environment Qualification.
20%	More than 5 years but less than 6 years' experience managing multi-disciplinary petrochemical / hydrocarbon process projects at least one of which had a construction value of R100 million and professional registration PrCPM (SACPCMP) or PMP (PMI), and holds an NQF Level 6 Built Environment Qualification.
40%	6 years and more but less than 8 years' experience managing multi-disciplinary petrochemical / hydrocarbon process plant projects at least one of which had a construction value of R100 million and professional registration PrCPM (SACPCMP) or PMP (PMI), and holds an NQF Level 6 Built Environment Qualification.
60%	8 years and more but less than 10 years' experience managing multi-disciplinary petrochemical / hydrocarbon process plant projects at least one of which had a construction value of R100 million and professional registration PrCPM (SACPCMP) or PMP (PMI), and holds an NQF Level 6 Built Environment Qualification.
80%	10 years and more but less than 15 years' experience managing multi-disciplinary petrochemical / hydrocarbon process plant projects at least one of which had a construction value of R100 million and professional registration PrCPM (SACPCMP) or PMP (PMI), and holds an NQF Level 6 Built Environment Qualification.
100%	15 or more years' experience managing multi-disciplinary petrochemical / hydrocarbon process plant projects at least one of which had a construction value of R100 million and professional registration PrCPM (SACPCMP) or PMP (PMI), and holds an NQF Level 6 Built Environment Qualification.

Construction Manager (Maximum 3 points):

Minimum Requirement

The Construction Manager holds a minimum NQF Level 6 in the Built Environment and has at least 10 years' experience in multi-disciplinary construction management.

If the Construction Manager does not hold the required registration, does not hold the NQF Level 6 Built Environment qualification, or does not have the required experience in multi-disciplinary construction management, a score of zero will be awarded.

Score	Criteria (multiplier applied to 3 points)
0	5 years or less experience of multi-disciplinary construction management with minimum NQF Level 6 in Built Environment
20%	More than 5 years but less than 8 years' experience of multi-disciplinary construction management with minimum NQF Level 6 in Built Environment
40%	8 years and more but less than 10 years' experience of multi-disciplinary construction management with minimum NQF Level 6 in Built Environment
60%	10 years and more but less than 14 years' experience of multi-disciplinary construction management with minimum NQF Level 6 in Built Environment
80%	14 years and more but less than 18 years' experience of multi-disciplinary construction management with minimum NQF Level 6 in Built Environment
100%	18 or more years' experience of multi-disciplinary construction management with minimum NQF Level 6 in Built Environment.

Quality Control Manager (Maximum 3 points):

Minimum Requirement

The Quality Manager holds a certificate in SAIW Level 2 or equivalent, has at least 15 years' experience in multi-disciplinary petrochemical / hydrocarbon process plant projects, and is qualified in ISO 9001:2015 QMS Implementation and Auditing.

If the Quality Manager does not hold a certificate in SAIW Level 2 or equivalent, does not hold the ISO 9001:2015 QMS Implementation and Auditing qualification, or does not have the required experience in multi-disciplinary petrochemical / hydrocarbon process plant projects, a score of zero will be awarded.

Score	Criteria (multiplier applied to 3 points)
0	Less than 5 years' experience in multi-disciplinary petrochemical / hydrocarbon process plant projects post valid SAIW Welding and Fabrication Inspection Level II Certificate on ASME piping, as well as overseeing the quality control management activities of civil and structural works and is qualified in ISO 9001:2015 QMS Implementation and Auditing.
20%	5 years and more but less than 10 years' experience in multi-disciplinary petrochemical / hydrocarbon process plant projects post valid SAIW Welding and Fabrication Inspection Level II Certificate on ASME piping, as well as overseeing the quality control management activities of civil and structural works and is qualified in ISO 9001:2015 QMS Implementation and Auditing.
40%	10 years and more but less than 15 years' experience in multi-disciplinary petrochemical / hydrocarbon process plant projects post valid SAIW Welding and Fabrication Inspection Level II Certificate on ASME piping, as well as overseeing the quality control management activities of civil and structural works and is qualified in ISO 9001:2015 QMS Implementation and Auditing.
60%	15 years and more but less than 18 years' experience in multi-disciplinary petrochemical / hydrocarbon process plant projects post valid SAIW Welding and Fabrication Inspection Level II Certificate on ASME piping, as well as overseeing the quality control management activities of civil and structural works and is qualified in ISO 9001:2015 QMS Implementation and Auditing.
80%	18 years and more but less than 20 years' experience in multi-disciplinary petrochemical / hydrocarbon process plant projects post valid SAIW Welding and Fabrication Inspection Level II Certificate on ASME piping, as well as overseeing the quality control management activities of civil and structural works and is qualified in ISO 9001:2015 QMS Implementation and Auditing.

Score	Criteria (multiplier applied to 3 points)
100%	20 or more years' experience in multi-disciplinary petrochemical / hydrocarbon process plant projects post valid SAIW Welding and Fabrication Inspection Level II Certificate on ASME piping, as well as overseeing the quality control management activities of civil and structural works and is qualified in ISO 9001:2015 QMS Implementation and Auditing.

Lead Mechanical Engineer (Maximum 3 points):

Minimum Requirement

The Lead Mechanical Engineer has 10 years' experience post registration as a Pr. Eng, with proven experience in the detailed design, hydraulic analysis and construction oversight of fire-protection systems (water/foam deluge, pumps and foam proportioning) in live petrochemical / hydrocarbon process plants.

The CV of the same resource put forward as the Lead Mechanical Engineer in T.2.2-03: Eligibility Criteria - Registration for Critical Resources must be submitted in order to be considered for points eligibility. If not, a score of zero will be awarded.

If the Lead Mechanical Engineer does not have the required experience in the detailed design, hydraulic analysis and construction oversight of fire-protection systems (water/foam deluge, pumps and foam proportioning) in live petrochemical / hydrocarbon process plants, a score of zero will be awarded.

Score	Criteria (multiplier applied to 3 points)
0	Less than 5 years' experience post professional registration as a Pr. Eng with ECSA, with proven experience in the detailed design, hydraulic analysis and construction oversight of fire-protection systems (water/foam deluge, pumps and foam proportioning) in live petrochemical / hydrocarbon process plants.
20%	5 and more but less than 8 years' experience post professional registration as a Pr. Eng with ECSA, with proven experience in the detailed design, hydraulic analysis and construction oversight of fire-protection systems (water/foam deluge, pumps and foam proportioning) in live petrochemical / hydrocarbon process plants.
40%	8 and more but less than 10 years' experience post professional registration as a Pr. Eng with ECSA, with proven experience in the detailed design, hydraulic analysis and construction oversight of fire-protection systems (water/foam deluge, pumps and foam proportioning) in live petrochemical / hydrocarbon process plants.
60%	10 and more but less than 15 years' experience post professional registration as a Pr. Eng with ECSA, with proven experience in the detailed design, hydraulic analysis and construction oversight of fire-protection systems (water/foam deluge, pumps and foam proportioning) in live petrochemical / hydrocarbon process plants.
80%	15 and more but less than 18 years' experience post professional registration as a Pr. Eng with ECSA, with proven experience in the detailed design, hydraulic analysis and construction oversight of fire-protection systems (water/foam deluge, pumps and foam proportioning) in live petrochemical / hydrocarbon process plants.

Score	Criteria (multiplier applied to 3 points)
100%	18 or more years' experience post professional registration as a Pr. Eng with ECSA, with proven experience in the detailed design, hydraulic analysis and construction oversight of fire-protection systems (water/foam deluge, pumps and foam proportioning) in live petrochemical / hydrocarbon process plants.

Lead Planner (Maximum 3 points):

Minimum Requirement

The Lead Planner has 5 years or more experience in multi-disciplinary projects of which at least one had a construction value of at least R100 million and holds a certificate of completion in Microsoft Projects Advanced.

If the Lead Planner does not have the required experience in multi-disciplinary projects of which at least one had a construction value of at least R100 million, or does not hold a certificate of completion in Microsoft Projects Advanced, a score of zero will be awarded.

Score	Criteria (multiplier applied to 3 points)
0	Less than 3 years' experience in multi-disciplinary projects of which at least one had a construction value of at least R100 million and holds a certificate of completion in Microsoft Projects Advanced.
20%	3 and more but less than 4 years' experience in multi-disciplinary projects of which at least one had a construction value of at least R100 million and holds a certificate of completion in Microsoft Projects Advanced.
40%	4 and more but less than 5 years' experience in multi-disciplinary projects of which at least one had a construction value of at least R100 million and holds a certificate of completion in Microsoft Projects Advanced.
60%	5 and more but less than 8 years experience in multi-disciplinary projects of which at least one had a construction value of at least R100 million and holds a certificate of completion in Microsoft Projects Advanced.
80%	8 and more but less than 12 years' experience in multi-disciplinary projects of which at least one had a construction value of at least R100 million and holds a certificate of completion in Microsoft Projects Advanced.
100%	12 or more years' experience in multi-disciplinary projects of which at least one had a construction value of at least R100 million and holds a certificate of completion in Microsoft Projects Advanced.

1 CV Template – To Be Used as a Guide

1. PERSONAL PARTICULARS			
NAME & SURNAME		DATE & PLACE OF BIRTH	
ID/PASSPORT NO.		NATIONALITY	

2. EDUCATION AND QUALIFICATIONS			
FROM	TO	INSTITUTION	DEGREE OR DIPLOMA OBTAINED

3. MEMBERSHIP OF PROFESSIONAL SOCIETIES

4. PROFESSIONAL STATUS			
PROFESSIONAL BODY		PROFESSIONAL STATUS	
PROFESSIONAL REG. NO.		YEARS OF EXPERIENCE	
PROFESSIONAL BODY		YEAR OF REGISTRATION	
PROFESSIONAL REG. NO.		YEARS OF EXPERIENCE	

5. KNOWLEDGE SKILLS AND STRENGTHS (INCLUDING AWARDS IF ANY)

6. CURRENT EMPLOYER AND POSITION			
NAME OF EMPLOYER		YEARS WITH EMPLOYER	
POSITION IN COMPANY		TOTAL YEARS OF EXPERIENCE	

7. OVERVIEW OF POST GRADUATE EXPERIENCE			
YEAR	ORGANISATION/	POSITION	SUMMARY OF RESPONSIBILITIES IN

	PROJECT		PETROLEUM OR HYDROCARBON PROJECTS
YEAR	ORGANISATION/ PROJECT	POSITION	SUMMARY OF RESPONSIBILITIES IN PETROLEUM OR HYDROCARBON PROJECTS

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T2.2-05: Evaluation Schedule – Company Previous Experience

Note to Tenderers

Tenderer's are required to display experience in fabrication, construction and installation of piping systems in petrochemical/hydrocarbon process plants within the past 15 years that meet or exceed a present day value of R25 million (ex. VAT).

The Tenderer must submit a **List / table** of projects clearly indicating:

i. Name of project
ii. Client
iii. Project Value (Ex. VAT)
iv. Year completed
v. Brief summary of the scope of works

Evidence required (mandatory for scoring)

Points will be awarded to the bidders who submit signed appointment letters with associated signed Completion Certificate or reference letter on a client letterhead indicating project scope, value and confirmation that the project was completed by the tendering entity as verifiable proof of the projects claimed. The evidence provided of completed projects must be positively linked to the tendering entity. Project values must be escalated at a compounded annual rate of 6% from the project start year to the year 2026 to enable fair comparison with the present day R25 million ex. VAT threshold (mechanical equipment and piping value inclusive of Preliminary and General costs). *Example (for tenderer guidance): A project valued at R40 million ex. VAT completed 15 years ago would escalate to R95 million ex. VAT in 2026 at 6% p.a. compounded.*

Reference to Works Information

The experience must demonstrate capability relevant to the EPC scope described in the Works Information including (but not limited to) the construction of stainless steel and carbon steel piping systems installed within petrochemical / hydrocarbon facilities, pre-fabrication, installation, testing, corrosion protection, and execution of works inside live/operational hazardous-area fuel-depot / petrochemical / hydrocarbon facilities while maintaining 24/7 operations.

Previous Experience – Piping and Mechanical Projects in Petrochemical/Hydrocarbons Process Plants

The Tenderer must complete the table below (add additional rows/sheets if required):

No.	Project Name	Client	Year Completed	Original Contract Value (R) – Mechanical & Piping ex. VAT	Escalated Value to 2026 (R) ex. VAT	Brief Scope Summary (highlight piping / mechanical works) and the applicable piping design code that was used	Proof Attached (Yes/No) (Note 1)
1							
2							
3							
4							
5							
6							

Note 1: Signed appointment letter with associated signed Completion Certificate or reference letter on a client letterhead indicating project scope, value and completion confirmed. If any of the above required documents are not submitted, the project cannot be evaluated.

Evaluation and Scoring Criteria (25 points total)

Scoring will be carried out strictly in accordance with the bands below. The Tenderer must provide sufficient verifiable evidence to enable the Employer to award the stated score. Where insufficient information is provided, a score of **0** will be awarded for that project.

Note on scoring: The evaluator will assess the submitted documents and select the single overall score (0%, 20%, 40%, 60%, 80% or 100%) from the table that best reflects the tenderer's performance across all criteria. This overall score is then multiplied by the points allocated to give the final points awarded.

Score	Criteria (multiplier applied to 25 points)
0	The tenderer has submitted insufficient information to determine a score.
20%	The Tenderer has completed 1 piping project in a petrochemical / hydrocarbon process plant within the past 15 years with a mechanical equipment and piping value at least equal to R25 million (escalated).
40%	The Tenderer has completed 2 piping projects in a petrochemical / hydrocarbon process plant within the past 15 years with a mechanical equipment and piping value at least equal to R25 million (escalated).
60%	The Tenderer has completed 3 piping projects in a petrochemical / hydrocarbon process plant within the past 15 years with a mechanical equipment and piping value at least equal to R25 million (escalated).
80%	The Tenderer has completed 4 piping projects in a petrochemical / hydrocarbon process plant within the past 15 years with a mechanical equipment and piping value at least equal to R25 million (escalated).
100%	The Tenderer has completed 5 or more piping projects in a petrochemical l/ hydrocarbon process plant within the past 15 years with a mechanical equipment and piping value at least equal to R25 million (escalated).

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T2.2-06: Evaluation Schedule - Programme

Note to Tenderers

The Tenderer must provide a programme which provides the detail that would indicate the order and timing of activities to carry out the works in terms of the Employer's requirements and within the stipulated timeframes. The Tenderer must provide the proposed programme complying with, but not limited to, the minimum format requirements, as follows:

i. Programme Duration

The Contractor will be required to submit a programme that demonstrates his overall contract duration. The Tenderer is required to use a start date of 1st February 2027, with all construction breaks to run from 15 December to 15 January (for all years of the contract), and public holidays to be excluded. The programme must demonstrate the Contractor's ability to complete the Works while maintaining continuous 24/7 operations of the live fuel depot (including phased construction, minimal disruption to fuel-handling operations, and strict coordination with the Employer's operations team).

ii. Programme Quality

The following levels of programme detail will be used when assessing the Tenderers programme:

Level 3 – Project Control / Coordination Schedule (PCS) or Publication Schedule: An integrated critical path method (CPM) schedule showing interfaces between disciplines, trades, or workgroups. It provides the first meaningful critical path and is suitable for overall project monitoring and control. Purpose: Used by project managers, owner representatives, and superintendents for coordination and progress reporting.

Programme submissions will only be eligibile for point scoring if they are detailed as a Level 3 programme as defined above.

In addition, the programme must be complied in Microsoft Projects and comply with the requirements of the Works Information (Section 7 – Programming and Progress Reporting and Section 9.6.2 Special Construction Sequencing Activities) and the Health and Safety Specification (HO1436-SP-0002).

The Programme must demonstrate the following 8 Format & Visibility Requirements:

1. A Level 3 detailed schedule fully aligned to the Works Information.
2. Clear overall Project Timeline demonstrating the ability to meet the required Completion Date in line with the Works Information.
3. All Key Milestones clearly shown (e.g. Project start date, Site Access date, 30%/60%/90% model reviews, HAZOP, municipal approvals, FAT/SAT, commissioning, Ready-for-Operation Certificate, demolition, handover, etc.).
4. Required columns displayed for each activity (at minimum: Start date, Finish date, Duration, Float, Predecessors, Successors, and Calendar).

5. Critical Path clearly visible, with all activities properly linked (no open-end activities).
6. Comprehensive list of all Project Activities included (including SHERQ submissions, Time Risk Allowances, engineering, procurement, construction, testing, commissioning, demolition & relocation, project close-out, etc.).
7. Correct works sequencing clearly shown as described in Section 7 and Section 9.6.2 of the Works Information document.
8. Clear visibility of: design & engineering activities shown separately (off-site vs on-site), annual construction breaks (15 Dec – 15 Jan for all years), municipal plan approvals shown as discrete activities, and long-lead procurement items shown separately.

iii. Attachments required

- Attachment A: Hard Copy / PDF of Programme

Evaluation and Scoring Criteria (25 points total)

The final score is based on a combination of Duration and Format/Visibility Requirements. All claimed durations must be clearly shown in working days using the mandatory start date and calendar rules above.

Note on scoring: The evaluator will assess the submitted documents and select the single overall score (0%, 20%, 40%, 60%, 80% or 100%) from the table that best reflects the tenderer's performance across all criteria. This overall score is then multiplied by the points allocated to give the final points awarded.

Total Points (25)	**Duration (overall project)** **Max. 15 points**	**Format & Visibility Requirements** **Max. 10 points**
Score		
0	Equal to or more than 21 months or programme is not Level 3.	Doesn't meet any of the 8 requirements or programme is not Level 3.
20%	More than or equal to 18 months but less than 21 months	Meets 1 of the 8 requirements
40%	More than or equal to 15 months but less than 18 months	Meets 2–3 of the 8 requirements
60%	More than or equal to 12 months but less than 15 months	Meets 4–5 of the 8 requirements
80%	More than or equal to 9 months but	Meets 6–7 of the 8 requirements

Total Points (25)	**Duration (overall project)** **Max. 15 points**	**Format & Visibility Requirements** **Max. 10 points**
Score		
	less than 12 months	
100%	Less than 9 months	Fully meets **all 8** format/visibility requirements

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T2.2-07: Evaluation Schedule – Project Execution Strategy

Note to Tenderers

The Tenderer must produce and submit a Project Execution Strategy demonstrating their understanding of the works, proposed execution approach, team capabilities, and compliance with the Employer's requirements for the successful execution of the EPC Works in a live fuel-depot environment while maintaining 24/7 operations.

Tenderers must cover the following eight criteria within the Project Execution Strategy:

1. Detailed Installation and Construction Methodology

- Provide the pre-fabrication, installation, testing, corrosion protection, and integration strategy for the new water tanks, GRP foam concentrate tanks, fire pump-sets (duty/standby/jockey), balanced pressure foam proportioning plant and stainless steel and carbon steel piping systems (ASME B31.3).
- Detail the installation methodology for the new water tanks, GRP foam concentrate tanks, fire pump-sets, balanced pressure foam proportioning plant and stainless steel/carbon steel piping systems to ASME B31.

2. Overall Construction Sequencing and Phasing Strategy

- Present the overall construction sequencing and phasing strategy, including full integration of the first new water tank to the existing fire system, temporary connections and sequencing of foam tanks and containerised solutions, completion of all municipal plan approvals prior to any on-site construction, and commissioning of the new fire system before any decommissioning or demolition of the existing system.
- Detail the controlled demolition, decommissioning, and relocation of the existing fire system (pump house, tanks, piping, etc.), which shall only be executed after successful commissioning and issuance of the Ready-for-Operation Certificate for the new system.

3. Engineering, Design Review, and Quality Assurance

- Present the strategy for Factory Acceptance Testing (FAT), Site Acceptance Testing (SAT), independent laboratory testing, Non-Destructive Testing (NDT), and verification by the Approved Inspection Authority (AIA). Include the approach to design reviews, HAZOP studies, and compliance with the Contractor's Quality Management Plan (aligned with ISO 9001).

4. Testing, Commissioning, Handover, and Close-Out

- Describe the approach to non-conformance management, as-built documentation, Operating & Maintenance manuals, training workshops, and defect-free handover to ensure the fire system meets all performance criteria with minimal post-completion corrections.

5. Programme, Risk Management, and Controls

- Discuss the programme addressing key milestones, progress monitoring and reporting mechanisms, risk identification and mitigation strategies (including operational and safety risks), and overall project control measures in accordance with the Works Information.

6. Pre-fabrication, Modularisation and Off-Site Works Strategy

- Describe the pre-fabrication and modularisation strategy for piping systems and structural steel to minimise on-site exposure time and reduce risks in the live operational environment.

7. Understanding of the Works and Site Constraints

- Demonstrate a detailed understanding of the full EPC scope of work, the specific site conditions at the Howick Pump Station, and the operational constraints of a live fuel facility. Include identification of key risks, interfaces with ongoing operations, and how the proposed solution integrates with the existing infrastructure.

8. Safety, Health, Environmental and Operational Interface Management

- Describe the strategy for safe execution of the works while maintaining continuous 24/7 depot operations and minimising disruption to fuel handling activities.
- Detail the safe working methods and interface management protocols with Transnet operations to ensure uninterrupted 24/7 fuel depot operations with minimal disruption, including hot-work controls, emergency access, and coordination with ongoing tank activities.

Evaluation and Scoring Criteria (15 points total)

Scoring will be carried out strictly in accordance with the bands below. The Tenderer must provide sufficient detail to enable the Employer to award the stated score.

Note on scoring: The evaluator will assess the submitted documents and select the single overall score (0%, 20%, 40%, 60%, 80% or 100%) from the table that best reflects the tenderer's performance across all criteria. This overall score is then multiplied by the points allocated to give the final points awarded.

Score	Criteria (multiplier applied to 15 points)
0	The submission address the first three (3) or less criteria (criteria numbers 1, 2 and 3) of the eight (8) criteria listed above.
20%	The submission addresses the first four (4) criteria (criteria numbers 1, 2, 3 and 4) of the eight (8) criteria listed above.
40%	The submission addresses the first five (5) criteria (criteria numbers 1, 2, 3, 4 and 5) of the eight (8) criteria listed above.
60%	The submission addresses the first six (6) criteria (criteria numbers 1, 2, 3, 4, 5 and 6) of the eight (8) criteria listed above.
80%	The submission addresses the first seven (7) criteria (criteria numbers 1, 2, 3, 4, 5, 6 and 7) of the eight (8) criteria listed above.
100%	The submission addresses all eight (8) criteria listed above.

Index of documentation attached to this schedule:

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T2.2-08: Evaluation Schedule: Health and Safety Requirements

Note to Tenderers

The Tenderer shall as a minimum submit the following documents:

1. Safety, Health & Environmental Policy signed by the CEO, and includes the following five elements:
   - Commitment to health and safety including prevention of pollution,
   - Continual improvement including monitoring and review,
   - Compliance to legal requirements, appropriate to the nature of contractor's activities,
   - Hold management accountable for development of the health and safety management systems, and
   - Include health and safety objectives and targets.

2. Roles and Responsibilities of the following legal appointees:
   - CEO Designate – OHS Act Sec. 16(2),
   - Construction Manager – CR 8(1),
   - Health and Safety Manager – CR 8(5),
   - Health and Safety Officer – CR 8(5),
   - Construction Supervisor – CR 8(7), and
   - Risk Assessor – CR 9(1).

3. Overview of the project specific Task Risk Assessment (RA), indicating major activities of the project namely:
   - Construction of water storage tanks with appurtenances,
   - Lifting and rigging,
   - Working at heights,
   - Hot works (cutting, grinding & welding),
   - Excavations and civil works,
   - Structural,
   - Mechanical, piping, etc., as per scope of works.

4. Complete and return with tender documentation the Contractor Health and Safety Questionnaire included to this Evaluation Schedule as a returnable, attach all required

supporting documents and complete your company three-years synopsis of SHE incidents, description, type and action taken to prevent re-occurrence.

Evaluation and Scoring Criteria (10 points total)

The final score is based on a combination of SHE Policy, Roles and Responsibilities of Legal Appointments, Overview of the project specific Task Risk Assessment (RA), indicating major activities of the project and Contractor Health and Safety Questionnaire.

Note on scoring: The evaluator will assess the submitted documents and select the single overall score (0%, 20%, 40%, 60%, 80% or 100%) from the table that best reflects the tenderer's performance across all criteria. This overall score is then multiplied by the points allocated to give the final points awarded.

Index of documentation attached to this schedule:
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Total Points (10)	**Max. 2 Points**	**Max. 3 Points**	**Max. 3 Points**	**Max. 2 Points**
	SHE Policy: • Commitment to health and safety including prevention of pollution, • Continual improvement including monitoring and review, • Compliance to legal requirements, appropriate to the nature of contractor's activities, • Hold management accountable for development of the health and safety management systems, and • Include health and safety objectives and targets.	**Roles and Responsibilities of legal appointees:** • CEO Designate – OHS Act Sec. 16(2), • Construction Manager – CR 8(1), • Health and Safety Manager – CR 8(5) (SACPCMP registered as CHSM) • Health and Safety Officer – CR 8(5) (SACPCMP registered as CHSO) • Construction Supervisor – CR 8(7), • Risk Assessor – CR 9(1).	**Overview of the project specific Task Risk Assessment (RA), indicating major activities of the project:** • Construction of water storage tanks with appurtenances, • Lifting and rigging, • Working at heights, • Hot works (cutting, grinding & welding), • Excavations and civil works, • Structural, • Mechanical and Piping, etc., as per scope of works.	**Contractor Health and Safety Questionnaire:** • Complete and return with tender documentation the Contractor Health and Safety Questionnaire with all required supporting documentation included as an Annexure.
Score 0%	The Tenderer has submitted no information to determine a score.			

Score 20%	**1 of the 5** Key SHE Policy Elements are recognized and meets the *Employer's* requirements, and it is signed by the CEO.	**1 to 2 of the 6** Roles and Responsibilities of the legal appointees meet the requirements of the OHS Act, Construction Regulations and the Project Health and Safety Specification.	**1 to 2 of the 7** submitted Task Risk Assessments specific to the project and covers all the outlined sub-activities applicable to the task.	**1 to 2** elements within the questionnaire populated and contains correct information.
Score 40%	**2 of the 5** Key SHE Policy Elements are recognized and meets the Employer's requirements, and it is signed by the CEO.	**3 of the 6** Roles and Responsibilities of the legal appointees meet the requirements of the OHS Act, Construction Regulations and the Project Health and Safety Specification.	**3 to 4 of the 7** submitted Task Risk Assessments specific to the project and covers all the outlined sub-activities applicable to the task.	**3 to 5** elements within the questionnaire populated and contains correct information.
Score 60%	**3 of the 5** Key SHE Policy Elements are recognized and meet the Employer's requirements, and it is signed by the CEO.	**4 of the 6** Roles and Responsibilities of the legal appointees meet the requirements of the OHS Act, Construction Regulations and the Project Health and Safety Specification.	**5 of the 7** submitted Task Risk Assessments specific to the project and covers all the outlined sub-activities applicable to the task.	**6** elements within the questionnaire populated and contains correct information.

Score 80%	**4 of the 5** Key SHE Policy Elements are recognized and meets the Employer's requirements, and it is signed by the CEO.	**5 of the 6** Roles and Responsibilities of the legal appointees meet the requirements of the OHS Act, Construction Regulations and the Project Health and Safety Specification.	**6 of the 7** submitted Task Risk Assessments specific to the project and covers all the outline sub-activities applicable to the task.	**7 to 8** elements within the questionnaire populated and contains correct information.
Score 100%	**All 5** Key SHE Policy Elements are recognized and meets the Employer's requirements, and it is signed by the CEO.	**All 6** Roles and Responsibilities of the legal appointees meet the requirements of the OHS Act, Construction Regulations and the Project Health and Safety Specification.	**All 7** submitted Task Risk Assessments specific to the project and covers all the outlined sub-activities applicable to the task.	**All nine (9)** elements within the questionnaire populated and contains correct information.

T2.2-08A: Health and Safety Questionnaire

1. Safe Work Performance

1A	Injury Experience / Historical Performance – Alberta			
	Use the previous three years injury and illness records to complete the following:			
	Year	1	2	3
	Number of medical treatment cases			
	Number of restricted workday cases			
	Number of lost time injury cases			
	Number of fatal injuries			
	Total recordable frequency			
	Lost time injury frequency			
	Number of worker manhours			
	Action taken to prevent re-occurrence			

1	Medical Treatment Case	Any occupational injury or illness requiring treatment provided by a physician or treatment provided under the direction of a physician
2	Restricted Workday Case	Any occupational injury or illness that prevents a worker from performing any of his/her craft jurisdiction duties
3	Lost Time injury Cases	Any occupational injury that prevents the worker from performing any work for at least one day
4	Total Recordable Frequency	Total number of Medical Treatment, Restricted Work and Lost Time Injury cases multiplied by 200,000 then divided by total manhours
5	Lost Time Injury Frequency	Total number of Lost Time Injury cases multiplied by 200,000 then divide by total manhours

1B	Workers' Compensation Experience					
	Use the previous three years injury and illness records to complete the following (if applicable):					
	Industry Code:		Industry Classification:			
	Year					
	Industry Rate					
	Contractor Rate					
	% Discount or Surcharge					
	Is your Workers' Compensation account in good standing? (Please provide letter of confirmation)	Yes		No		1

2. Citations

2A	Has your company been cited, charged or prosecuted under Health, Safety and/or Environmental Legislation in the last 5 years? If yes, provide details:	Yes		No	
2B	Has your company been cited, charged or prosecuted under the above Legislation in another Country, Region or State? If yes, provide details:	Yes		No	

3. Citations

	Does your company have a Certificate of Recognition?				Yes		No
	If yes, what is the	Certificate No:		Issue Date:			

4. Safety Program

4A	Submit your company written health and safety plan? Submit for provide a copy for review	2
4C	Health and safety plan should contain the following elements	

		Yes	No		Yes	No
	Health and Safety Policy			Competence, Training and Awareness		
	Incident Management, reporting and			Emergency Preparedness/Response		
	Recordkeeping & Statistics/Manhours Reporting			Hazard Identification and Risk Assessment and Training		
	Reference to Legislation			Permit to Work		
	Site Establishment and Rehabilitation			Safe Work Procedures and Safe operating procedures		
	Roles and Responsibilities			Workplace Inspections		
	Alcohol, Drugs and Other Intoxicating Substances			Occupational Hygiene and Covid19		
	Personal Protective Equipment			Measuring and Monitoring		
	Working at Height			Communication, Participation and Consultation		
	Excavations			Signs and Notices		

4C	Submit your company pocket safety booklet for field distribution?	

5. Training Program

5A	Attach orientation program for new hire employees? include a course outline. Does it include any of the following:	1

		Yes	No		Yes	No
	General Rules & Regulations			Confined Space Entry		
	Emergency Reporting			Trenching & Excavation		
	Injury Reporting			Signs & Barricades		
	Legislation			Dangerous Holes & Openings		
	Right to Refuse Work			Rigging & Cranes		

	Personal Protective Equipment			Mobile Vehicles		
	Emergency Procedures			Preventative Maintenance		
	Project Safety Committee			Hand & Power Tools		
	Housekeeping			Fire Prevention & Protection		
	Ladders & Scaffolds			Electrical Safety		
	Fall Arrest Standards			Compressed Gas Cylinders		
	Aerial Work Platforms			Weather Extremes		
5B	Submit a program for training newly hired or promoted supervisors? Tenderer must submit an outline for evaluation which include instruction on the following:					
		Yes	No		Yes	No
	Employer Responsibilities			Safety Communication		
	Employee Responsibilities			First Aid/Medical Procedures		
	Due Diligence			New Worker Training		
	Safety Leadership			Environmental Requirements		
	Work Refusals			Hazard Assessment		
	Inspection Processes			Pre-Job Safety Instruction		
	Emergency Procedures			Drug & Alcohol Policy		
	Incident Investigation			Progressive Disciplinary Policy		
	Safe Work Procedures			Safe Work Practices		
	Safety Meetings			Notification Requirements		

6. Safety Activities

6A	Do you conduct safety inspections?	Yes	No	Weekly	Monthly	Quarterly
	Describe your safety inspection process (include participation, documentation requirements, follow-up, report distribution)					
	Who follows up on inspection action items?					
6B	Do you hold site safety meetings for field employees? If Yes, how often?	Yes	No	Daily	Weekly	Biweekly
6C	Do you hold site meetings where safety is addressed with management and field supervisors?	Yes	No	Weekly	Biweekly	Monthly

6D	Is pre-job safety instruction provided before each new task?	Yes		No	
	Is the process documented?	Yes		No	
	Who leads the discussion?				
6E	Do you have a hazard assessment process?	Yes		No	
	Are hazard assessments documented?	Yes		No	

	If yes, how are hazard assessments communicated and implemented on each project?	
	Who is responsible for leading the hazard assessment process?	
6F	Submit your company policies and procedures for environmental protection, spill clean-up, reporting, waste disposal, and recycling as part of the Health & Safety Program?	
6G	How does your company measure its H&S success? Attach separate sheet to explain	

7. Safety Stewardship

7A	Are incident reports and report summaries sent to the following and how often?	Yes	No	Monthly	Quarterly	Annually
	Project/Site Manager					
	Vice President/Managing Director					
	Safety Director/Manager					
	President/Chief Executive Officer					
7B	How are incident records and summaries kept? How often are they reported internally?	Yes	No	Monthly	Quarterly	Annually
	Incidents totaled for the entire company					
	Incidents totaled by project					
	Subtotaled by superintendent					
	Subtotaled by foreman					
7C	How are the costs of individual incidents kept? How often are they reported internally?	Yes	No	Monthly	Quarterly	Annually
	Costs totaled for the entire company					
	Costs totaled by project					
	Subtotaled by superintendent					
	Subtotaled by foreman/general foreman					
7D	Does your company track non-injury incidents?	Yes	No	Monthly	Quarterly	Annually
	Near Miss					
	Property Damage					
	Fire					
	Security					
	Environmental					

8. Personnel

List key health and safety officers/manager planned for this project. Attach resume (CV and qualification and proof of registration with SACPCMP).

Name	Position / Title	Designation	
		Category	SACPCMP Number

9. References

List the last three company's your form has worked for that could verify the quality and management commitment to your occupational Health & Safety program

Name and Company	Address	Telephone Number

T2.2-09: Evaluation Schedule – Project Specific Organisational Chart

Note to Tenderers

The Tenderer must submit a high-level Project Specific Organisational Structure organogram showing the contractual and management relationship between the Main Contractor, all proposed subcontractors, key suppliers and specialists for the successful execution of the EPC Works.

For **each** of the below packages identified in items 4-13, the organogram must show:

1. Whether the work will be executed **in-house by the Main Contractor** or **sub-contracted / supplied** (including the name of the proposed specialist/subcontractor/supplier).
2. The relevant experience in years (or, in the case of specialist equipment, the number of similar units produced – refer Section 3.8 of the Works Information) of the proposed subcontractor / supplier / specialist, and this experience must be directly applicable to the scope of this project.
3. Reporting lines, key interfaces and how the Main Contractor will retain overall responsibility, management, supervision and oversight of all subcontractors, suppliers and specialists.

The organogram **must clearly indicate** the following for **each** of the specialist / subcontractor / supplier packages listed below:

4. Detailed engineering and design (by discipline – civil/structural, mechanical/fire, electrical, instrumentation)
5. Containerised fire pump-sets (duty, standby and jockey), associated diesel engines and Engine Control Panels
6. Fire Control Panel (FCP), fire alarm/detection system and field instrumentation
7. Stainless steel and carbon steel piping systems – pre-fabrication, installation, testing and corrosion protection (ASME B31.3)
8. Balanced pressure foam proportioning plant
9. Water tanks – supply, fabrication, testing and installation
10. GRP foam concentrate tank – supply, fabrication, testing and installation
11. Low voltage electrical works including Distribution Boards (DBs), Motor Control Centres (MCCs) and site electrical installation
12. Civil and structural works (foundations, pipe bridges/supports, paved roadway, hardstands, etc.)
13. Demolition, decommissioning and relocation of the existing fire system (pump house, tanks etc.)

Reference to Works Information

14. The organisational structure must demonstrate capability relevant to the EPC scope described in the Works Information including (but not limited to) Clause 3.8 (Subcontracting), Section 8.4 (Contractor's Management, Supervision and Key Persons), Section 5.5 (Mechanical and Fire Engineering), Section 3.2 (Design Reviews and HAZOP), and the multi-disciplinary nature of the works.

Evaluation and Scoring Criteria (10 points total)

Scoring will be carried out strictly in accordance with the bands below. The Tenderer must provide sufficient detail to enable the Employer to award the stated score.

Note on scoring: The evaluator will assess the submitted documents and select the single overall score (0%, 20%, 40%, 60%, 80% or 100%) from the table that best reflects the tenderer's performance across all criteria. This overall score is then multiplied by the points allocated to give the final points awarded.

Score	Criteria (multiplier applied to 10 points)
0	The submission addresses the first nine (9) or less criteria (criteria numbers 1, 2, 3, 4, 5, 6, 7, 8 and 9) of the fourteen (14) criteria listed above.
20%	The submission addresses the first ten (10) criteria (criteria numbers 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10) of the fourteen (14) criteria listed above.
40%	The submission addresses the first eleven (11) criteria (criteria numbers 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and 11) of the fourteen (14) criteria listed above.
60%	The submission addresses the first twelve (12) criteria (criteria numbers 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12) of the fourteen (14) criteria listed above.
80%	The submission addresses the first thirteen (13) criteria (criteria numbers 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 13) of the fourteen (14) criteria listed above.
100%	The submission addresses all fourteen (14) criteria listed above.

Index of documentation attached to this schedule:

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T2.2-10 : RFP Clarification Request Form

RFP No: TPL/2026/08/0578/10542/RFP

Deadline for RFP clarification submissions: Before **12:00 pm on 6 November 2026**

TO: Transnet SOC Ltd

ATTENTION: Rory Torr

EMAIL rory.torr@ transnet.net

DATE: .....

FROM: .....

RFP Clarification No *[to be inserted by Transnet]* .....

REQUEST FOR RFP CLARIFICATION:

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T2.2-11: Authority to Submit Tender

Indicate the status of the Tenderer by ticking the appropriate box hereunder. The Tenderer must complete the certificate set out below for his category of organisation or alternatively attach a certified copy of a company / organisation document which provides the same information for the relevant category as requested here.

A - COMPANY	B - PARTNERSHIP	C- JOINT VENTURE	D - SOLE PROPRIETOR

A. Certificate for Company

I, chairperson of the board of directors

_____

hereby confirm that by resolution of the board taken on _____(date),

Mr/Ms , _____

acting in the capacity of _____

was authorised to sign all documents in connection with this tender offer and any contract resulting from it on behalf of the company.

Signed _____ Date _____

Name _____ Position Chairman of the Board of Directors

B. Certificate for Partnership

We, the undersigned, being the key partners in the business trading as

_____

hereby authorise Mr/Ms

_____

acting in the capacity of

_____

to sign all documents in connection with the tender offer for Contract

_____

and any contract resulting from it on our behalf.

Name	Address	Signature	Date

NOTE: This certificate is to be completed and signed by the full number of Partners necessary to commit the Partnership. Attach additional pages if more space is required.

C. Certificate for Joint Venture

We, the undersigned, are submitting this tender offer in Joint Venture and hereby authorise

Mr/Ms , an authorised signatory of the

_____ Company,

_____

acting in the capacity of lead partner, to sign all documents in connection with the tender offer for

Contract _____

and any contract resulting from it on our behalf.

This authorisation is evidenced by the attached power of attorney signed by legally authorised signatories of all the partners to the Joint Venture.

Furthermore we attach to this Schedule a copy of the joint venture agreement which incorporates a statement that all partners are liable jointly and severally for the execution of the contract and that the lead partner is authorised to incur liabilities, receive instructions and payments and be responsible for the entire execution of the contract for and on behalf of any and all the partners.

Name of firm	**Address**	**Authorising signature, name (in caps) and capacity**

D. Certificate for Sole Proprietor

I, _____ hereby confirm that I am the sole owner of the business

trading as, _____

Signed _____ Date _____

Name _____ Position _____

T2.2-12 : Record of Addenda to Tender Documents

We confirm that the following communications received from the *Employer* before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer:

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

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

T2.2-13 : Letter of Good Standing with the Workmen's Compensation Fund

Attached to this schedule is the Letter/s of Good Standing.

1.

2.

3.

4.

Name of Company/Members of Joint Venture:

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

T2.2-14 : Risk Elements

Tenderers to identify and evaluate the potential risk elements associated with the *works* and possible mitigation thereof. The risk elements and the mitigation as identified thereof by the Tenderer are to be submitted.

If No Risks are identified "No Risks" must be stated on this schedule.

Tenderers are also to evaluate any risk/s stated by the *Employer's* Contract Data Part C1,and provide possible mitigation thereof.

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

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

T2.2-15 : Availability of Equipment and Other Resources

The Tenderer to submit a list of all equipment and other resources that will be used to execute the *works* as described in the Works Information.

Equipment Type and Availability - Description	Hourly Rate	Number of Equipment	Details of Ownership

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

T2.2-16 : Site Establishment Requirements

Tenderers to indicate their Site establishment area requirements:

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

T2.2-17 : Capacity and Ability to meet Delivery Schedule

Note to Tenderers:

The Tenderer is required to demonstrate to the *Employer* that the Tenderer has sufficient current and future capacity to carry out the work as detailed in the Works Information and that the Tenderer has the capacity and plans in place to meet the required delivery schedule as required. To this end, the following must be provided by the Tenderer:

A schedule detailing the following:

- Maximum quantity of work concurrently performed by the Tenderer in the recent past in order to illustrate his potential capacity to design, fabricate and/or construct work of a similar nature;
- Current and future work on his order book, showing quantity and type of equipment;
- Quantity of work for which the Tenderer has tenders in the market or is currently tendering on;
- The work as covered in this Works Information, planned and scheduled as per the Tenderer's capacities and methods but meeting the required delivery schedule.

Index of documentation attached to this schedule:

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

T2.2-18 : ANNEX G : Compulsory Enterprise Questionnaire

The following particulars hereunder must be furnished.

In the case of a Joint Venture, separate enterprise questionnaires in respect of each partner/member must be completed and submitted.

Section 1: Name of enterprise:

Section 2: VAT registration number, if any:

Section 3: CIDB registration number, if any:

Section 4: CSD number:

Section 5: Particulars of sole proprietors and partners in partnerships

Name	Identity number	Personal income tax number

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

Section 6: Particulars of companies and close corporations

Company registration number _____

Close corporation number_____

Tax reference number: _____

Section 7: The attached SBD4 must be completed for each tender and be attached as a tender requirement.

Section 8: The attached SBD 6.1 must be completed for each tender and be attached as a requirement.

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

i. authorizes the *Employer* to obtain a tax clearance certificate from the South African Revenue Services that my/our tax matters are in order;

ii. confirms that neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004;

iii. confirms that no partner, member, director, or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;

iv. confirms that we are not associated, linked, or involved with any other tendering entities submitting tender offers and have no other relationship with any of the Tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest; and

v. confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

BIDDER'S DISCLOSURE : SBD 4

1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

2. Bidder's declaration

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest[1] in the enterprise, employed by the state? **YES/ NO**

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders /members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

2.2 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution **YES/NO**

2.2.1 If so, furnish particulars:

_____

_____

_____

_____

2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? **YES/NO**

[1] The power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

2.3.1 If so, furnish particulars:

_____

_____

_____

_____

3 DECLARATION

I, the undersigned, _____ (name) in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

3.1 I have read and I understand the contents of this disclosure;

3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;

3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortiums will not be construed as collusive bidding.

3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.

3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the 3 Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract drafting of the specifications or terms of reference for this bid.

3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

SBD 6.1

PREFERENCE POINTS CLAIM FORM

This preference form must form part of all bids invited. It contains general information and serves as a claim for preference points for Specific Goals contribution. Transnet will award preference points to companies who provide valid proof of evidence as per the table of evidence in Paragraph 4.1 below.

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to all bids:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 The value of this bid is estimated to exceed R50 000 000 (all applicable taxes included) and therefore the 90/10 preference point system shall be applicable. Despite the stipulated preference point system, Transnet shall use the lowest acceptable bid to determine the applicable preference point system in a situation where all received acceptable bids are received outside the stated preference point system.

OR

Either the 80/20 or 90/10 preference point system will apply

1.3 Preference points for this bid shall be awarded for:

(a) Price;

(b) B-BBEE Status Level of Contribution; and

(c) Any other specific goal determined in the Transnet preferential procurement policy

1.4 The maximum points for this bid are allocated as follows:

Specific Goals	Number of points (80/20 system)		Number of points (90/10 system)
B-BBEE Status Level of Contributor 1 or 2	5.00	**or**	10.00
30% Black Women Owned Entities	5.00		10.00

1.5 Failure on the part of a bidder to submit proof of evidence required for any of the specific goals together with the bid will be interpreted to mean that preference points for that specific goal are not claimed.

1.6 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

2. DEFINITIONS

(a) "**all applicable taxes**" includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies;

(b) "**B-BBEE**" means broad-based black economic empowerment as defined in Section 1 of the Broad-Based Black Economic Empowerment Act;

(c) "**B-BBEE status level of contributor**" means the B-BBEE status received by a measured entity based on its overall performance using the relevant scorecard contained in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;

(d) "**bid**" means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the supply/provision of services, works or goods, through price quotations, advertised competitive bidding processes or proposals;

(e) "**Broad-Based Black Economic Empowerment Act**" means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);

(f) "**EME**" means an Exempted Micro Enterprise as defines by Codes of Good Practice under section 9 (1) of the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);

(g) "**functionality**" means the ability of a bidder to provide goods or services in accordance with specification as set out in the bid documents

(h) "**Price**" includes all applicable taxes less all unconditional discounts.

(i) "**Proof of B-BBEE Status Level of Contributor**"

i) the B-BBBEE status level certificate issued by an authorised body or person;

ii) a sworn affidavit as prescribed by the B-BBEE Codes of Good Practice; or

iii) any other requirement prescribed in terms of the B-BBEE Act.

(j) "**QSE**" means a Qualifying Small Enterprise as defines by Codes of Good Practice under section 9 (1) of the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);

(k) "**rand value**" means the total estimated value of a contract in South African currency, calculated at the time of bid invitations, and includes all applicable taxes and excise duties.

(l) "**Specific goals**" means targeted advancement areas or categories of persons or groups either previously disadvantaged or falling within the scope of the Reconstruction and Development Programme identified by Transnet to be given preference in allocation of procurement contracts in line with section 2(1) of the PPPFA.

3. POINTS AWARDED FOR PRICE

3.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20 or 90/10

$$Ps = 80\left(1 - \frac{Pt - P\min}{P\min}\right) \quad \text{or} \quad Ps = 90\left(1 - \frac{Pt - P\min}{P\min}\right)$$

Where

Ps = Points scored for comparative price of bid under consideration

Pt = Comparative price of bid under consideration

Pmin = Comparative price of lowest acceptable bid

4. EVIDENCE REQUIRED FOR CLAIMING SPECIFIC GOALS

In terms of Transnet Preferential Procurement Policy (TPPP) and Procurement Manuals, preference points must be awarded to a bidder for providing evidence in accordance with the table below:

Specific Goals	Acceptable Evidence
B-BBEE Status contributor	B-BBEE Certificate / Sworn- Affidavit / B-BBEE CIPC Certificate (in case of JV, a consolidated scorecard will be accepted) as per DTIC guideline
30% Black Women Owned Entities	B-BBEE Certificate / Sworn- Affidavit / B-BBEE CIPC Certificate (in case of JV, a consolidated scorecard will be accepted) as per DTIC guideline

Green to be removed from specific goals evidence

4.2 The table below indicates the required proof of B-BBEE status depending on the category of enterprises:

Enterprise	B-BBEE Certificate & Sworn Affidavit
Large	Certificate issued by SANAS accredited verification agency
QSE	Certificate issued by SANAS accredited verification agency Sworn Affidavit signed by the authorised QSE representative and attested by a Commissioner of Oaths confirming annual turnover and black ownership (only black-owned QSEs - 51% to 100% Black owned) [Sworn affidavits must substantially comply with the format that can be obtained on the DTIC's website at www.thedtic.oov.za/economic empowerment/bee codes.isp.]
EME[2]	Sworn Affidavit signed by the authorised EME representative and attested by a Commissioner of Oaths confirming annual turnover and black ownership Certificate issued by CIPC (formerly CIPRO) confirming annual turnover and black ownership Certificate issued by SANAS accredited verification agency only if the EME is being measured on the QSE scorecard

4.3 A trust, consortium or joint venture (including unincorporated consortia and joint ventures) must submit a consolidated B-BBEE Status Level verification certificate for every separate bid.

4.4 Tertiary Institutions and Public Entities will be required to submit their B-BBEE status level certificates in terms of the specialized scorecard contained in the B-BBEE Codes of Good Practice.

4.5 A person will not be awarded points for B-BBEE status level if it is indicated in the bid documents that such a bidder intends sub-contracting more than 25% of the value of the contract to any other enterprise that does not qualify for at least the points that such a bidder qualifies for, unless the intended sub-contractor is an EME that has the capability and ability to execute the sub-contract.

4.6 A person awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.

4.7 Bidders are to note that the rules pertaining to B-BBEE verification and other B-BBEE requirements may be changed from time to time by regulatory bodies such as National Treasury or the DTIC. It is the Bidder's responsibility to ensure that his/her bid complies fully with all B-BBEE requirements at the time of the submission of the bid.

5. BID DECLARATION

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

6. B-BBEE STATUS LEVEL OF CONTRIBUTION CLAIMED IN TERMS OF PARAGRAPHS 1.4 AND 6.1

6.1 B-BBEE Status Level of Contribution: _____ = (maximum of 2 points)

Points claimed in respect of paragraph 6.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of contributor.

7. SUB-CONTRACTING

7.1 Will any portion of the contract be sub-contracted?

Proposed areas of sub-contracting to EMEs or QSEs that are at least 51% Black Owned

The following are considered as general sub-contracting opportunities	
I. Civil Works (Earthworks, Excavations)	**4.5%**
II. Structural Steel works (Pipe supports, and general building steel works)	**5.6%**
III. Demolitions for existing fire systems	**1.3%**
IV. Site clearing	**0.3%**

Total = 11,7%

(Tick applicable box)

YES		NO	

7.1.1 If yes, indicate:

i) What percentage of the contract will be subcontracted %

ii) The name/s of the sub-contractor/s

iii) The B-BBEE status level of the sub-contractor/s

iv) Whether the sub-contractor is an EMEs or QSE.

(Tick applicable box)

YES		NO	

8. DECLARATION WITH REGARD TO COMPANY/FIRM

8.1 Name of company/firm:

8.2 VAT registration number:

8.3 Company registration number:

8.4 TYPE OF COMPANY/ FIRM (Tick applicable box)

Partnership/Joint Venture/Consortium	
One person business/sole propriety	
Close corporation	
Company	
(Pty) Limited	

8.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

_____

_____

_____

8.6 COMPANY CLASSIFICATION(Tick applicable box)

Manufacturer	
Supplier	
Professional Service provider	
Other Service providers, e.g., transporter,	

8.7 Total number of years the company/firm has been in business:

_____

8.8 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contribution indicated in paragraphs 1.4 and 6.1 of the foregoing certificates, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

i) The information furnished is true and correct;

ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;

iii) In the event of a contract being awarded as a result of points claimed as shown in paragraph 1.4 and 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;

iv) If a bidder submitted false information regarding its B-BBEE status level of contributor, which will affect or has affected the evaluation of a bid, or where a bidder has failed to declare any subcontracting arrangements or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have

(a) disqualify the person from the bidding process;

(b) recover costs, losses, or damages it has incurred or suffered as a result of that person's conduct;

(c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;

(d) if the successful bidder subcontracted a portion of the bid to another person without disclosing it, Transnet reserves the right to penalise the bidder up to 10 percent of the value of the contract;

(e) recommend that the bidder or contractor, its shareholders, and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the audi alteram partem (hear the other side) rule has been applied; and

(f) forward the matter for criminal prosecution.

WITNESSES 1. ..... 2.	..... SIGNATURE OF BIDDERS DATE: .....

T2.2-19: Job-Creation Schedule

The Government has identified State Owned Enterprises sourcing activities as a key enabler to achieve the National Development Plan (NDP) objective of reducing unemployment from the current baseline of 28% to 6%.

In order to give effect to these job creation objectives, Tenderers are required to provide the following undertaking of new jobs that will be created (either by them or by their subcontractors) should they be awarded this tender.

Tenderers to note, that if successful, any deviations from the Job creation Schedule in the contract phase will be subject to acceptance by the Project Managers terms of the Conditions of Contract. Please also note the applicable Z clauses in Contract Data by Employer.

(a) Please indicate total number of new jobs that will be created over the term of the contract:

Total number and value of new jobs created	**Total number of new jobs**	**Total rand value of new jobs created**

(b) Of the total number of new jobs created, please indicate the number and value of new jobs to be created for the following designated groups:

	Total number of new jobs	**Total rand value of new jobs created**
Black men		
Black women		
Black Youth		
Black people living in rural or underdeveloped areas or townships		
Black People with Disabilities		

(c) Of the total number of new jobs created, please indicate the number of skilled, semi-skilled and unskilled new jobs that will be created over the term of the contract:

	Total number of Skilled jobs	**Total number of Semi-skilled jobs**	**Total number of Unskilled jobs**
Black men			
Black women			
Black Youth			

Black people living in rural or underdeveloped areas or townships			
Black People with Disabilities			
Other			

(d) Please indicate the number of new jobs to be created, broken down per quarter over the term of the contract.

Year 1	Q1	Q2	Q3	Q4
Total number of new jobs				
Number of new jobs for Black men				
Number of new jobs for black women				
Number of new jobs for black youth				
Number of new jobs for black people living in rural or underdeveloped areas or townships				
Number of new jobs for black People with Disabilities				
Number of new jobs for other categories				
Number of new skilled jobs				
Number of new semi-skilled jobs				
Number of new unskilled jobs				

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

T2.2-20: Schedule of Proposed Subcontractors

The tenderer is required to provide details of all the sub-contractors that will be utilised in the execution of the *works.*

Note to tenderers:

- In terms of PPPFA Regulation 6 (5), A tenderer may not be awarded points for B-BBEE status level of contributor if the tender documents indicate that the tenderer intends subcontracting more than 25% of the value of the contract to any other person not qualifying for at least the points that the tenderer qualifies for, unless the intended subcontractor is an EME that has the capability to execute the subcontract.

- In terms of PPPFA Regulation 12 (3), A person awarded a contract may not subcontract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBBEE status level of contributor that the person concerned, unless the contract is subcontracted to an EME that has the capability and ability to execute the contract.

Tenderer to note that after award, any deviations from this list of proposed sub-contractors will be subject to acceptance by the *Project Manager in consultation with the Supplier Development Manager* in terms of the Conditions of Contract. Please also note the applicable Z clauses in Contract Data by Employer.

Provide information of the Sub-contractors below:

Name of Proposed Subcontractor	Address (include area e.g. Howick)	Nature of work (area of work that will be sub-contracted)	Amount of Worked sub-contracted (ZAR)	Percentage of work sub-contracted as a % of total contract value

% Black Owned	EME	QSE	Youth	Women	Disabilities	Rural/ Underdeveloped areas/ Townships	Military Veterans
	☐	☐	☐	☐	☐	☐	☐

Name of Proposed Subcontractor	Address (include area e.g. Howick)	Nature of work (area of work that will be sub-contracted)	Amount of Worked sub-contracted (ZAR)	Percentage of work sub-contracted as a % of total contract value

% Black Owned	EME	QSE	Youth	Women	Disabilities	Rural/ Underdeveloped areas/ Townships	Military Veterans

	☐	☐	☐	☐	☐	☐	☐

Name of Proposed Subcontractor	Address (include area e.g. Howick)	Nature of work (area of work that will be sub-contracted)	Amount of Worked sub-contracted (ZAR)	Percentage of work sub-contracted as a % of total contract value

% Black Owned	EME	QSE	Youth	Women	Disabilities	Rural/ Underdeveloped areas/ Townships	Military Veterans
	☐	☐	☐	☐	☐	☐	☐

Name of Proposed Subcontractor	Address (include area e.g. Howick)	Nature of work (area of work that will be sub-contracted)	Amount of Worked sub-contracted (ZAR)	Percentage of work sub-contracted as a % of total contract value

% Black Owned	EME	QSE	Youth	Women	Disabilities	Rural/ Underdeveloped areas/ Townships	Military Veterans
	☐	☐	☐	☐	☐	☐	☐

Supplier Development Promotion	Acceptable Evidence
The promotion of supplier development through sub-contracting as identified for a minimum of **11.7 %** of the value of the contract to South African Companies which are: I. EMEs and/or QSEs who are 51% black-owned	Sub-contracting agreements / Declaration Agreement. Certified copy of ID Documents of the Owners and B-BBEE Certificate / Affidavit of the sub-contracted entities.
The promotion of enterprises located in a specific province/region/municipal area for work to be done or services to be rendered in that province/region/municipal area	CIP - Registered address of entity

T2.2-21 : Non-Disclosure Agreement [July 2023]

Note to Tenderers: This Non-Disclosure Agreement is to be completed and signed by an authorised signatory:

THIS AGREEMENT is made effective as of day .....of ..... 20 .....

by and between: **TRANSNET SOC LTD**

(Registration No. 1990/000900/30), a company incorporated and existing under the laws of South Africa, having its principal place of business at Transnet Corporate Centre 138 Eloff Street, Braamfontein, Johannesburg 2000

and.....

(Registration No) ..... a private company incorporated and existing under the laws of South Africa having its principal place of business at:

.....

.....

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 Tender 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 (hereinafter Tender) means Transnet's Request for Information [RFI] Request for Proposal [RFP] or Request for Quotation [RFP], 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 Tender or for the subsequent performance of any contract between the parties in relation to the Tender.

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 Tender 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 Tender and continue thereafter for a period of 10 [ten] 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 Tender 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 Tender 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 Tender 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.

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

T2.2-22 : RFP Declaration Form

NAME OF COMPANY: _____

We _____ do hereby certify that:

1. Transnet has supplied and we have received appropriate tender offers to any/all questions (as applicable) which were submitted by ourselves for tender clarification purposes;
2. we have received all information we deemed necessary for the completion of this Tender;
3. at no stage have we received additional information relating to the subject matter of this tender from Transnet sources, other than information formally received from the designated Transnet contact(s) as nominated in the tender documents;
4. we are satisfied, insofar as our company is concerned, that the processes and procedures adopted by Transnet in issuing this tender and the requirements requested from Tenderers in responding to this tender have been conducted in a fair and transparent manner; and
5. furthermore, we acknowledge that a direct relationship exists between a family member and/or an owner / member / director I partner / shareholder (unlisted companies) of our company and an employee or board member of the Transnet Group as indicated below:

   [Respondent to indicate if this section is not applicable]

FULL NAME OF OWNER/MEMBER/DIRECTOR/

PARTNER/SHAREHOLDER: ADDRESS:

_____

_____

_____

Indicate nature of relationship with Transnet:

_____

_____

_____

[Failure to furnish complete and accurate information in this regard may lead to the disqualification of your response and may preclude a Respondent from doing future business with Transnet]

We declare, to the extent that we are aware or become aware of any relationship between ourselves and Transnet (other than any existing and appropriate business relationship with Transnet) which could unfairly advantage our company in the forthcoming adjudication process, we shall notify Transnet immediately in writing of such circumstances.

6. We accept that any dispute pertaining to this tender will be resolved through the Ombudsman process and will be subject to the Terms of Reference of the Ombudsman.

   The Ombudsman process must first be exhausted before judicial review of a decision is sought. (Refer "Important Notice to respondents" below).

7. We further accept that Transnet reserves the right to reverse a tender award or decision based on the recommendations of the Ombudsman without having to follow a formal court process to have such award or decision set aside.

8. We have acquainted ourselves and agree with the content of T2.2-29 "Service Provider Integrity Pact".

For and on behalf of ..... Duly authorised thereto Name..... Signature ..... Date .....

IMPORTANT NOTICE TO TENDERERS

- Transnet has appointed a Procurement Ombudsman to investigate any material complaint in respect of tenders exceeding R5,000,000.00 (five million S.A. Rand) in value. Should a Tenderer have any material concern regarding a tender process which meets this value threshold, a complaint may be lodged with Transnet's Procurement Ombudsman for further investigation.
- It is incumbent on the Tenderer to familiarise himself/herself with the Terms of Reference for the Transnet Procurement Ombudsman, details of which are available for review at Transnet's website www.transnet.net.
- An official complaint form may be downloaded from this website and submitted, together with any supporting documentation, within the prescribed period, to procurement.ombud@transnet.net

  For transactions below the R5,000,000.00 (five million S.A. Rand) threshold, a complaint may be lodged with the Chief Procurement Officer of the relevant Transnet Operating Division.
- All Tenderers should note that a complaint must be made in good faith. If a complaint is made in bad faith, Transnet reserves the right to place such a Tenderer on its List of Excluded Bidders.

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

T2.2-23 : Request for Proposal – Breach of Law

NAME OF COMPANY: _____

I/We _____

do hereby certify that I/we have/ have not been found guilty during the preceding 5 (five) years of a serious breach of law, including but not limited to a breach of the Competition Act, 89 of 1998, by a court of law, tribunal or other administrative body. The type of breach that the Tenderer is required to disclose excludes relatively minor offences or misdemeanours, e.g. traffic offences.

Where found guilty of such a serious breach, please disclose:

NATURE OF BREACH:

_____

_____

_____

DATE OF BREACH:

_____

Furthermore, I/we acknowledge that Transnet SOC Ltd reserves the right to exclude any Tenderer from the tendering process, should that person or company have been found guilty of a serious breach of law, tribunal or regulatory obligation.

Signed on this _____ day of _____ 20 _____

_____

SIGNATURE OF TENDER

T2.2-24 : Certificate of Acquaintance with Tender Documents

NAME OF TENDERING ENTITY:

_____

1. By signing this certificate, I/we acknowledge that I/we have made myself/ourselves thoroughly familiar with, and agree with all the conditions governing this RFP. This includes those terms and conditions of the Contract, the Supplier Integrity Pact, Non-Disclosure Agreement etc. contained in any printed form stated to form part of the documents thereof, but not limited to those listed in this clause.
2. I/we furthermore agree that Transnet SOC Ltd shall recognise no claim from me/us for relief based on an allegation that I/we overlooked any tender/contract condition or failed to take it into account for the purpose of calculating my/our offered prices or otherwise.
3. I/we understand that the accompanying Tender will be disqualified if this Certificate is found not to be true and complete in every respect.
4. For the purposes of this Certificate and the accompanying Tender, I/we understand that the word "competitor" shall include any individual or organisation, other than the Tenderer, whether or not affiliated with the Tenderer, who:
   a) has been requested to submit a Tender in response to this Tender invitation;
   b) could potentially submit a Tender in response to this Tender invitation, based on their qualifications, abilities or experience; and
   c) provides the same Services as the Tenderer and/or is in the same line of business as the Tenderer
5. The Tenderer has arrived at the accompanying Tender independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium will not be construed as collusive Tendering.
6. In particular, without limiting the generality of paragraph 5 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
   a) prices;
   b) geographical area where Services will be rendered [market allocation]
   c) methods, factors or formulas used to calculate prices;
   d) the intention or decision to submit or not to submit, a Tender;
   e) the submission of a tender which does not meet the specifications and conditions of the tender; or
   f) Tendering with the intention not winning the tender.
7. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the Services to which this tender relates.
8. The terms of the accompanying tender have not been, and will not be, disclosed by the Tenderer, directly or indirectly, to any competitor, prior to the date and time of the official tender opening or of the awarding of the contract.

9. I/We am/are aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to tenders and contracts, tenders that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and/or may be reported to the National Prosecuting Authority [NPA] for criminal investigation. In addition, Tenderers that submit suspicious tenders may be restricted from conducting business with the public sector for a period not exceeding 10 [ten] years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

Signed on this _____ day of _____ 20_____

_____

SIGNATURE OF TENDER

T2.2-25 : Service Provider Integrity Pact

Important Note: All potential Tenderers must read this document and certify in the RFP Declaration Form that that have acquainted themselves with and agree with the content.

The contract with the successful Tenderer will automatically incorporate this Integrity Pact and shall be deemed as part of the final concluded contract.

INTEGRITY PACT

Between

TRANSNET SOC LTD

Registration Number: 1990/000900/30

("Transnet")

and_____

The *Contractor* (hereinafter referred to as the "Tenderer/Service Providers/*Contractor*")

PREAMBLE

Transnet values full compliance with all relevant laws and regulations, ethical standards and the principles of economical use of resources, fairness and transparency in its relations with its Tenderers/Service Providers/*Contractors.*

In order to achieve these goals, Transnet and the Tenderer/Service Provider/*Contractor* hereby enter into this agreement hereinafter referred to as the "Integrity Pact" which will form part of the Tenderer's/Service Provider's/*Contractor's* application for registration with Transnet as a vendor.

The general purpose of this Integrity Pact is to agree on avoiding all forms of dishonesty, fraud and corruption by following a system that is fair, transparent and free from any undue influence prior to, during and subsequent to the currency of any procurement and/or reverse logistics event and any further contract to be entered into between the Parties, relating to such event.

All Tenderers/Service Providers/*Contractor's* will be required to sign and comply with undertakings contained in this Integrity Pact, should they want to be registered as a Transnet vendor.

1 OBJECTIVES

1.1 Transnet and the Tenderer/Service Provider/*Contractor* agree to enter into this Integrity Pact, to avoid all forms of dishonesty, fraud and corruption including practices that are anti-competitive in nature, negotiations made in bad faith and under-pricing by following a system that is fair, transparent and free from any influence/unprejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:

a) Enable Transnet to obtain the desired contract at a reasonable and competitive price in conformity to the defined specifications of the works, goods and services; and

b) Enable Tenderers/Service Providers/*Contractors* to abstain from bribing or participating in any corrupt practice in order to secure the contract.

2 COMMITMENTS OF TRANSNET

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

2.1 Transnet hereby undertakes that no employee of Transnet connected directly or indirectly with the sourcing event and ensuing contract, will demand, take a promise for or accept directly or through intermediaries any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the Tenderer, either for themselves or for any person, organisation or third party related to the contract in exchange for an advantage in the tendering process, Tender evaluation, contracting or implementation process related to any contract.

2.2 Transnet will, during the registration and tendering process treat all Tenderers/ Service Providers/*Contractor* with equity, transparency and fairness. Transnet will in particular, before and during the registration process, provide to all Tenderers/ Service Providers/*Contractors* the same information and will not provide to any Tenderers/Service Providers/*Contractors* confidential/additional information through which the Tenderers/Service Providers/*Contractors* could obtain an advantage in relation to any tendering process.

2.3 Transnet further confirms that its employees will not favour any prospective Tenderers/Service Providers/*Contractors* in any form that could afford an undue advantage to a particular Tenderer during the tendering stage, and will further treat all Tenderers/Service Providers/*Contractors* participating in the tendering process in a fair manner.

2.4 Transnet will exclude from the tender process such employees who have any personal interest in the Tenderers/Service Providers/*Contractors* participating in the tendering process.

3 OBLIGATIONS OF THE TENDERER / SERVICE PROVIDER

3.1 Transnet has a 'Zero Gifts' Policy. No employee is allowed to accept gifts, favours or benefits.

a) Transnet officials and employees shall not solicit, give or accept, or from agreeing to solicit, give, accept or receive directly or indirectly, any gift, gratuity, favour, entertainment, loan, or anything of monetary value, from any person or juridical entities in the course of official duties or in connection with any operation being managed by, or any transaction which may be affected by the functions of their office.

b) Transnet officials and employees shall not solicit or accept gifts of any kind, from vendors, suppliers, customers, potential employees, potential vendors, and suppliers, or any other individual or organisation irrespective of the value.

c) Under no circumstances should gifts, business courtesies or hospitality packages be accepted from or given to prospective suppliers participating in a tender process at the respective employee's Operating Division, regardless of retail value.

d) Gratuities, bribes or kickbacks of any kind must never be solicited, accepted or offered, either directly or indirectly. This includes money, loans, equity, special privileges, personal favours, benefit or services. Such favours will be considered to constitute corruption.

3.2 The Tenderer/Service Provider/*Contractor* commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its Tender or during any ensuing contract stage in order to secure the contract or in furtherance to secure it and in particular the Tenderer/Service Provider/*Contractor* commits to the following:

a) The Tenderer/Service Provider/*Contractor* will not, directly or through any other person or firm, offer, promise or give to Transnet or to any of Transnet's employees involved in the tendering process or to any third person any material or other benefit or payment, in order to obtain in exchange an advantage during the tendering process; and

b) The Tenderer/Service Provider/*Contractor* will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any employee of Transnet, connected directly or indirectly with the tendering process, or to any person, organisation or third party related to the contract in exchange for any advantage in the tendering, evaluation, contracting and implementation of the contract.

3.3 The Tenderer/Service Provider/*Contractor* will not collude with other parties interested in the contract to preclude a competitive Tender price, impair the transparency, fairness and progress of the tendering process, Tender evaluation, contracting and implementation of the contract. The Tenderer / Service Provider further commits itself to delivering against all agreed upon conditions as stipulated within the contract.

3.4 The Tenderer/Service Provider/*Contractor* will not enter into any illegal or dishonest agreement or understanding, whether formal or informal with other Tenderers/Service Providers/*Contractors.* This applies in particular to certifications, submissions or non-submission of documents or actions that are restrictive or to introduce cartels into the tendering process.

3.5 The Tenderer/Service Provider/*Contractor* will not commit any criminal offence under the relevant anti-corruption laws of South Africa or any other country. Furthermore, the Tenderer/Service Provider/*Contractor* will not use for illegitimate purposes or for restrictive purposes or personal gain, or pass on to others, any information provided by Transnet as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

3.6 A Tenderer/Service Provider/*Contractor* of foreign origin shall disclose the name and address of its agents or representatives in South Africa, if any, involved directly or indirectly in the registration or tendering process. Similarly, the Tenderer / Service Provider / *Contractor* of South African nationality shall furnish the name and address of the foreign principals, if any, involved directly or indirectly in the registration or tendering process.

3.7 The Tenderer/Service Provider/*Contractor* will not misrepresent facts or furnish false or forged documents or information in order to influence the tendering process to the advantage of the Tenderer/Service Provider/*Contractor* or detriment of Transnet or other competitors.

3.8 Transnet may require the Tenderer/Service Provider/*Contractor* to furnish Transnet with a copy of its code of conduct. Such code of conduct must address the compliance programme for the implementation of the code of conduct and reject the use of bribes and other dishonest and unethical conduct.

3.9 The Tenderer/Service Provider/*Contractor* will not instigate third persons to commit offences outlined above or be an accessory to such offences.

3.10 The Tenderer/Service Provider/*Contractor* confirms that they will uphold the ten principles of the United Nations Global Compact (UNGC) in the fields of Human Rights, Labour, Anti-Corruption and the Environment when undertaking business with Transnet as follows:

a) Human Rights

- Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and
- Principle 2: make sure that they are not complicit in human rights abuses.

b) Labour

- Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
- Principle 4: the elimination of all forms of forced and compulsory labour;
- Principle 5: the effective abolition of child labour; and
- Principle 6: the elimination of discrimination in respect of employment and occupation.

c) Environment

- Principle 7: Businesses should support a precautionary approach to environmental challenges;
- Principle 8: undertake initiatives to promote greater environmental responsibility; and
- Principle 9: encourage the development and diffusion of environmentally friendly technologies.

d) Anti-Corruption

- Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

4 INDEPENDENT TENDERING

4.1 For the purposes of that Certificate in relation to any submitted Tender, the Tenderer declares to fully understand that the word "competitor" shall include any individual or organisation, other than the Tenderer, whether or not affiliated with the Tenderer, who:

a) has been requested to submit a Tender in response to this Tender invitation;

b) could potentially submit a Tender in response to this Tender invitation, based on their qualifications, abilities or experience; and

c) provides the same Goods and Services as the Tenderer and/or is in the same line of business as the Tenderer.

4.2 The Tenderer has arrived at his submitted Tender independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium will not be construed as collusive tendering.

4.3 In particular, without limiting the generality of paragraph 5 above, there has been no consultation, communication, agreement, or arrangement with any competitor regarding:

a) prices;

b) geographical area where Goods or Services will be rendered [market allocation];

c) methods, factors or formulas used to calculate prices;

d) the intention or decision to submit or not to submit, a Tender;

e) the submission of a Tender which does not meet the specifications and conditions of the RFP; or

f) tendering with the intention of not winning the Tender.

4.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the Goods or Services to which his/her tender relates.

4.5 The terms of the Tender as submitted have not been, and will not be, disclosed by the Tenderer, directly or indirectly, to any competitor, prior to the date and time of the official Tender opening or of the awarding of the contract.

4.6 Tenderers are aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to Tenders and contracts, Tenders that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and/or may be reported to the National Prosecuting Authority [NPA] for criminal investigation and/or may be restricted from conducting business with the public sector for a period not exceeding 10 [ten] years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

4.7 Should the Tenderer find any terms or conditions stipulated in any of the relevant documents quoted in the Tender unacceptable, it should indicate which conditions are unacceptable and offer alternatives by written submission on its company letterhead, attached to its submitted

Tender. Any such submission shall be subject to review by Transnet's Legal Counsel who shall determine whether the proposed alternative(s) are acceptable or otherwise, as the case may be.

5 DISQUALIFICATION FROM TENDERING PROCESS

5.1 If the Tenderer/Service Provider/*Contractor* has committed a transgression through a violation of section 3 of this Integrity Pact or in any other form such as to put its reliability or credibility as a Tenderer/Service Provider/*Contractor* into question, Transnet may reject the Tenderer's / Service Provider's / *Contractor's* application from the registration or tendering process and remove the Tenderer/Service Provider/*Contractor* from its database, if already registered.

5.2 If the Tenderer/Service Provider/*Contractor* has committed a transgression through a violation of section 3, or any material violation, such as to put its reliability or credibility into question. Transnet may after following due procedures and at its own discretion also exclude the Tenderer/Service Provider /*Contractor* from future tendering processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, which will include amongst others the number of transgressions, the position of the transgressors within the company hierarchy of the Tenderer/Service Provider/*Contractor* and the amount of the damage. The exclusion will be imposed for up to a maximum of 10 (ten) years. However, Transnet reserves the right to impose a longer period of exclusion, depending on the gravity of the misconduct.

5.3 If the Tenderer/Service Provider/*Contractor* can prove that it has restored the damage caused by it and has installed a suitable corruption prevention system or taken other remedial measures as the circumstances of the case may require, Transnet may at its own discretion revoke the exclusion or suspend the imposed penalty.

6 TRANSNET'S LIST OF EXCLUDED TENDERERS (BLACKLIST)

6.1 The process of restriction is used to exclude a company/person from conducting future business with Transnet and other organs of state for a specified period. No Tender shall be awarded to a Tenderer whose name (or any of its members, directors, partners or trustees) appear on the Register of Tender Defaulters kept by National Treasury, or who have been placed on National Treasury's List of Restricted Suppliers. Transnet reserves the right to withdraw an award, or cancel a contract concluded with a Tenderer should it be established, at any time, that a Tenderer has been restricted with National Treasury by another government institution.

6.2 All the stipulations on Transnet's restriction process as laid down in Transnet's Supply Chain Policy and Procurement Procedures Manual (CPM included) are included herein by way of reference. Below follows a condensed summary of this restriction procedure.

6.3 On completion of the restriction procedure, Transnet will submit the restricted entity's details (including the identity number of the individuals and registration number of the entity) to National Treasury for placement on National Treasury's Database of Restricted Suppliers for the specified period of exclusion. National Treasury will make the final decision on whether to restrict an entity from doing business with any organ of state for a period not exceeding 10 years and place the entity concerned on the Database of Restricted Suppliers published on its official website.

6.4 The decision to restrict is based on one of the grounds for restriction. The standard of proof to commence the restriction process is whether a "prima faci' (i.e., on the face of it) case has been established.

6.5 Depending on the seriousness of the misconduct and the strategic importance of the Goods/Services, in addition to restricting a company/person from future business, Transnet may decide to terminate some or all existing contracts with the company/person as well.

6.6 A Service Provider or *Contractor* to Transnet may not subcontract any portion of the contract to a blacklisted company.

6.7 Grounds for blacklisting include: If any person/Enterprise which has submitted a Tender, concluded a contract, or, in the capacity of agent or subcontractor, has been associated with such Tender or contract:

a) Has, in bad faith, withdrawn such Tender after the advertised closing date and time for the receipt of Tenders;

b) has, after being notified of the acceptance of his Tender, failed or refused to sign a contract when called upon to do so in terms of any condition forming part of the Tender documents;

c) has carried out any contract resulting from such Tender in an unsatisfactory manner or has breached any condition of the contract;

d) has offered, promised or given a bribe in relation to the obtaining or execution of the contract;

e) has acted in a fraudulent or improper manner or in bad faith towards Transnet or any Government Department or towards any public body, Enterprise or person;

f) has made any incorrect statement in a certificate or other communication with regard to the Local Content of his Goods or his B-BBEE status and is unable to prove to the satisfaction of Transnet that:

(i) he made the statement in good faith honestly believing it to be correct; and

(ii) before making such statement he took all reasonable steps to satisfy himself of its correctness;

g) caused Transnet damage, or to incur costs in order to meet the contractor's requirements and which could not be recovered from the contractor;

h) has litigated against Transnet in bad faith.

6.8 Grounds for blacklisting include a company/person recorded as being a company or person prohibited from doing business with the public sector on National Treasury's database of Restricted Service Providers or Register of Tender Defaulters.

6.9 Companies associated with the person/s guilty of misconduct (i.e. entities owned, controlled or managed by such persons), any companies subsequently formed by the person(s) guilty of the misconduct and/or an existing company where such person(s) acquires a controlling stake may be considered for blacklisting. The decision to extend the blacklist to associated companies will be at the sole discretion of Transnet.

7 PREVIOUS TRANSGRESSIONS

7.1 The Tenderer/Service Provider/*Contractor* hereby declares that no previous transgressions resulting in a serious breach of any law, including but not limited to, corruption, fraud, theft, extortion and contraventions of the Competition Act 89 of 1998, which occurred in the last 5 (five) years with any other public sector undertaking, government department or private sector company that could justify its exclusion from its registration on the Tenderer's/Service Provider's/*Contractor's* database or any tendering process.

7.2 If it is found to be that the Tenderer/Service Provider/*Contractor* made an incorrect statement on this subject, the Tenderer/Service Provider/*Contractor* can be rejected from the registration process or removed from the Tenderer/ Service Provider/*Contractor* database, if already registered, for such reason (refer to the Breach of Law Returnable Form contained in the document.)

8 SANCTIONS FOR VIOLATIONS

8.1 Transnet shall also take all or any one of the following actions, wherever required to:

a) Immediately exclude the Tenderer/Service Provider/*Contractor* from the tendering process or call off the pre-contract negotiations without giving any compensation the Tenderer/Service Provider/*Contractor*. However, the proceedings with the other Tenderer/ Service Provider/*Contractor* may continue;

b) Immediately cancel the contract, if already awarded or signed, without giving any compensation to the Tenderer/Service Provider/*Contractor*;

c) Recover all sums already paid by Transnet;

d) Encash the advance bank guarantee and performance bond or warranty bond, if furnished by the Tenderer/Service Provider/*Contractor*, in order to recover the payments, already made by Transnet, along with interest;

e) Cancel all or any other contracts with the Tenderer/Service Provider/*Contractor*; and

f) Exclude the Tenderer/ Service Provider/*Contractor* from entering into any Tender with Transnet in future.

9 CONFLICTS OF INTEREST

9.1 A conflict of interest includes, inter alia, a situation in which:

a) A Transnet employee has a personal financial interest in a tendering / supplying entity; and

b) A Transnet employee has private interests or personal considerations or has an affiliation or a relationship which affects, or may affect, or may be perceived to affect his / her judgment in action in the best interest of Transnet, or could affect the employee's motivations for acting in a particular manner, or which could result in, or be perceived as favouritism or nepotism.

9.2 A Transnet employee uses his / her position, or privileges or information obtained while acting in the capacity as an employee for:

a) Private gain or advancement; or

b) The expectation of private gain, or advancement, or any other advantage accruing to the employee must be declared in a prescribed form.

Thus, conflicts of interest of any Tender committee member or any person involved in the sourcing process must be declared in a prescribed form.

9.3 If a Tenderer/Service Provider/*Contractor* has or becomes aware of a conflict of interest i.e. a family, business and / or social relationship between its owner(s)/member(s)/director(s)/partner(s)/shareholder(s) and a Transnet employee/ member of Transnet's Board of Directors in respect of a Tender which will be considered for the Tender process, the Tenderer/Service Provider/ *Contractor*:

a) must disclose the interest and its general nature, in the Request for Proposal ("RFX") declaration form; or

b) must notify Transnet immediately in writing once the circumstances has arisen.

9.4 The Tenderer/Service Provider/*Contractor* shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any committee member or any person involved in the sourcing process, where this is done, Transnet shall be entitled forthwith to rescind the contract and all other contracts with the Tenderer/Service Provider/*Contractor*.

10 DISPUTE RESOLUTION

10.1 Transnet recognises that trust and good faith are pivotal to its relationship with its Tenderer / Service Provider / *Contractor*. When a dispute arises between Transnet and its Tenderer / Service Provider / *Contractor*, the parties should use their best endeavours to resolve the dispute in an amicable manner, whenever possible. Litigation in bad faith negates the principles of trust and good faith on which commercial relationships are based. Accordingly, following a blacklisting process as mentioned in paragraph 6 above, Transnet will not do business with a company that litigates against it in bad faith or is involved in any action that reflects bad faith on its part. Litigation in bad faith includes, but is not limited to the following instances:

a) Vexatious proceedings: these are frivolous proceedings which have been instituted without proper grounds;

b) Perjury: where a Tenderer / Service Provider / *Contractor* make a false statement either in giving evidence or on an affidavit;

c) Scurrilous allegations: where a Tenderer / Service Provider / *Contractor* makes allegations regarding a senior Transnet employee which are without proper foundation, scandalous, abusive or defamatory; and

d) Abuse of court process: when a Tenderer / Service Provider / *Contractor* abuses the court process in order to gain a competitive advantage during a Tender process.

11 GENERAL

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

11.2 The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the law relating to any civil or criminal proceedings.

11.3 The validity of this Integrity Pact shall cover all the tendering processes and will be valid for an indefinite period unless cancelled by either Party.

11.4 Should one or several provisions of this Integrity Pact turn out to be invalid the remainder of this Integrity Pact remains valid.

11.5 Should a Tenderer/Service Provider/*Contractor* be confronted with dishonest, fraudulent or corruptive behaviour of one or more Transnet employees, Transnet expects its Tenderer/Service Provider/*Contractor* to report this behaviour directly to a senior Transnet official/employee or alternatively by using Transnet's "Tip-Off Anonymous" hotline number 0800 003 056, whereby your confidentiality is guaranteed.

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

I ..... duly authorised by the tendering entity, hereby certify that the tendering entity are fully acquainted with the contents of the Integrity Pact and further agree to abide by it in full.

Signature .....

Date .....

T2.2-26 : Supplier Code of Conduct

Transnet SOC Limited aims to achieve the best value for money when buying or selling goods and obtaining services. This however must be done in an open and fair manner that supports and drives a competitive economy. Underpinning our process are several acts and policies that any supplier dealing with Transnet must understand and support. These are:

- The Transnet Procurement Policy - A guide for Tenderers.
- Section 217 of the Constitution - the five pillars of Public PSCM (Procurement and Supply Chain Management): fair, equitable, transparent, competitive and cost effective;
- The Public Finance Management Act (PFMA);
- The Broad Based Black Economic Empowerment Act (BBBEE)
- The Prevention and Combating of Corrupt Activities Act (PRECCA); and
- The Construction Industry Development Board Act (CIDB Act).

This code of conduct has been included in this contract to formally appraise Transnet Suppliers of Transnet's expectations regarding behaviour and conduct of its Suppliers.

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

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

1. **Transnet SOC Limited will not participate in corrupt practices. Therefore, it expects its suppliers to act in a similar manner.**
    - Transnet and its employees will follow the laws of this country and keep accurate business records that reflect actual transactions with, and payments to, our suppliers.
    - Employees must not accept or request money or anything of value, directly or indirectly, from suppliers.
    - Employees may not receive anything that is calculated to:
        - Illegally influence their judgement or conduct or to ensure the desired outcome of a sourcing activity;
        - Win or retain business or to influence any act or decision of any person involved in sourcing decisions; or
        - Gain an improper advantage.
    - There may be times when a supplier is confronted with fraudulent or corrupt behaviour of Transnet employees. We expect our Suppliers to use our "Tip-offs Anonymous" Hot line to report these acts. (0800 003 056).
2. **Transnet SOC Limited is firmly committed to the ideas of free and competitive enterprise.**
    - Suppliers are expected to comply with all applicable laws and regulations regarding fair competition and antitrust practices.

- Transnet does not engage with non-value adding agents or representatives solely for the purpose of increasing BBBEE spend (fronting).

3. Transnet's relationship with suppliers requires us to clearly define requirements, to exchange information and share mutual benefits.

- Generally, suppliers have their own business standards and regulations. Although Transnet cannot control the actions of our suppliers, we will not tolerate any illegal activities. These include, but are not limited to:
  - Misrepresentation of their product (origin of manufacture, specifications, intellectual property rights, etc);
  - Collusion;
  - Failure to disclose accurate information required during the sourcing activity (ownership, financial situation, BBBEE status, etc.);
  - Corrupt activities listed above; and Harassment, intimidation or other aggressive actions towards Transnet employees.
- Suppliers must be evaluated and approved before any materials, components, products or services are purchased from them. Rigorous due diligence is conducted and the supplier is expected to participate in an honest and straight forward manner.
- Suppliers must record and report facts accurately, honestly and objectively.
- Financial records must be accurate in all material respects.

4. Conflicts of Interest

A conflict of interest arises when personal interests or activities influence (or appear to influence) the ability to act in the best interests of Transnet SOC Limited.

- Doing business with family members.
- Having a financial interest in another company in our industry

Where possible, contracts will be negotiated to include the above in the terms of such contracts. To the extent such terms are not included in contractual obligations and any of the above code is breached, then Transnet reserves its right to review doing business with these suppliers.

I	.....
(insert name of Director or as per Authority Resolution from Board of Directors)	*(insert name of Company)*

hereby acknowledge having read, understood and agree to the terms and conditions set out in the "Transnet Supplier Code of Conduct."

Signed on this _____ day of _____ 20 _____

_____

SIGNATURE OF TENDER

T2.2-27 : Domestic Prominent Influential Persons (DPIP) or Foreign Prominent Public Officials (FPPO)

Transnet is free to procure the services of any person within or outside the Republic of South Africa in accordance with applicable legislation. Transnet shall not conduct or conclude business transactions, with any Respondents without having:

- Considered relevant governance protocols;
- Determined the DPIP or FPPO status of that counterparty; and
- Conducted a risk assessment and due diligence to assess the potential risks that may be posed by the business relationship.

As per the Transnet Domestic Prominent Influential Persons (DPIP) and Foreign Prominent Public Officials (FPPO) and Related Individuals Policy available on Transnet website https://www.transnet.net/search/paqes/results.aspx?k=FPIDP#k=DPIP, Respondents are required to disclose any commercial relationship with a DPIP or FPPO (as defined in the Policy) by completing the following section:

The below form contains personal information as defined in the Protection of Personal Information Act, 2013 (the "Act"). By completing the form, the signatory consents to the processing of her/his personal information in accordance with the requirements of the Act. Consent cannot unreasonably be withheld.					
Is the Respondent (Complete with a "Yes" or "No"					
A DPIP/ FPPO		**Closely Related to a DPIP/FPPO**		**Closely Associated to a DPIP/FPPO**	

List all known business interest in which a DPIP/FPPO may have a direct/indirect interest or significant participation or involvement.

No	**Name of Entity / Business**	**Entity /Business** (Nature of interest/ Participation)	**Shareholding %**	**Registration Number**	**Status** (Mark the applicable option with an X)	
					Active	Non-Active
1						
2						
3						
4						

Respondents declaring a commercial relationship with a DPIP or FPPO are to note that Transnet is required to annually publish on its website a list of all business contracts entered into with DPIP or FPPO. This list will include successful Respondents, if applicable.

Signed _____ Date _____

Name _____ Position _____

Tenderer _____

T2.2-28 : Agreement in terms of Protection of Personal Information Act (POPIA)

1. PREAMBLE AND INTRODUCTION

1.1. The rights and obligation of the Parties in terms of the Protection of Personal Information Act, 4 of 2013 ("POPIA") are included as forming part of the terms and conditions of this contract.

2. PROTECTION OF PERSONAL INFORMATION

2.1. The following terms shall bear the same meaning as contemplated in Section 1 of the Protection of Person information act, No.4 of 2013. ("POPIA"):

consent; data subject; electronic communication; information officer; operator; person; personal information; processing; record; Regulator; responsible party; special information; as well as any terms derived from these terms.

2.2 Transnet will process all information by the Respondent in terms of the requirements contemplated in Section 4(1) of the POPIA:

Accountability; Processing limitation; Purpose specification; Further processing limitation; Information quality; Openness; Security safeguards and Data subject participation.

2.3 The Parties acknowledge and agree that, in relation to personal information that will be processed pursuant to this RFP the Responsible party is "Transnet" and the Data subject is the "Tenderer". Transnet will process personal information only with the knowledge and authorisation of the Tenderer and will treat personal information which comes to its knowledge as confidential and will not disclose it, unless so required by law or subject to the exceptions contained in the POPIA.

2.4 Transnet reserves all the rights afforded to it by the POPIA in the processing of any of its information as contained in this RFP and the Tenderer is required to comply with all prescripts as detailed in the POPIA relating to all information concerning Transnet.

2.5 In responding to this bid, Transnet acknowledges that it will obtain and have access to personal information of the Tenderer. Transnet agrees that it shall only process the information disclosed by Tenderer in their response to this bid for the purpose of evaluating and subsequent award of business and in accordance with any applicable law.

2.6 Transnet further agrees that in submitting any information or documentation requested in this RFP, the Tenderer is consenting to the further processing of their personal information for the purpose of, but not limited to, risk assessment, assurances, contract award, contract management, auditing, legal opinions/litigations, investigations (if applicable), document storage for the legislatively required period, destruction, de-identification and publishing of personal information by Transnet and/or its authorised appointed third parties.

2.7 Furthermore, Transnet will not otherwise modify, amend or alter any personal data submitted by the Tenderer or disclose or permit the disclosure of any personal data to any third party without the prior written consent from the Tenderer. Similarly, Transnet requires the Tenderer to process any personal information disclosed by Transnet in the bidding process in the same manner.

2.8 Transnet shall, at all times, ensure compliance with any applicable laws put in place and maintain sufficient measures, policies and systems to manage and secure against all forms of

risks to any information that may be shared or accessed pursuant to this RFP (physically, through a computer or any other form of electronic communication).

2.9 Transnet shall notify the Tenderer in writing of any unauthorised access to information, cybercrimes or suspected cybercrimes, in its knowledge and report such crimes or suspected crimes to the relevant authorities in accordance with applicable laws, after becoming aware of such crimes or suspected crime. The Tenderer must take all necessary remedial steps to mitigate the extent of the loss or compromise of personal information and to restore the integrity of the affected personal information as quickly as is possible.

2.10 The Tenderer may, in writing, request Transnet to confirm and/or make available any personal information in its possession in relation to the Tenderer and if such personal information has been accessed by third parties and the identity thereof in terms of the POPIA. The Tenderer may further request that Transnet correct (excluding critical/mandatory or evaluation information), delete, destroy, withdraw consent or object to the processing of any personal information relating to the Tenderer in Transnet's possession in terms of the provision of the POPIA and utilizing Form 2 of the POPIA Regulations.

2.11 In submitting any information or documentation requested in this RFP, the Tenderer is hereby consenting to the processing of their personal information for the purpose of this RFP and further confirming that they are aware of their rights in terms of Section 5 of POPIA.

Tenderer s are required to provide consent below:

YES			**NO**	

2.10 Further, the Tenderer declares that they have obtained all consents pertaining to other data subject's personal information included in its submission and thereby indemnifying Transnet against any civil or criminal action, administrative fines or other penalty or loss that may arise as a result of the processing of any personal information that the Tenderer submitted.

2.13. Further, the Tenderer acknowledges that it will be held liable by Transnet should it fail to process personal information in line with the requirements of the POPIA. The Tenderer will be subject to any civil or criminal action, administrative fines or other penalty or loss that may arise as a result of the processing of any personal information that Transnet submitted to it.

2.14. Should a Tenderer have any complaints or objections to processing of its personal information, by Transnet, the Tenderer can submit a complaint to the Information Regulator on https://www.justice.gov.za/inforeg/, click on contact us, click on complaints.IR@justice.gov.za

3. SOLE AGREEMENT

3.1. The Agreement, constitute the sole agreement between the parties relating to the subject matter referred to in paragraph 1.1 of this and no amendment/variation/change shall be of any force and effect unless reduced to writing and signed by or on behalf of both parties.

Signed on this _____ day of _____ 20 _____

Name: _____

Title: _____

Signature: _____

(Tenderer)

Authorised signatory for and on behalf of _____ who warrants that he/she is duly authorised to sign this Agreement.

AS WITNESSES:

1. Name: _____ Signature: _____

2. Name: _____ Signature: _____

T2.2-29 : Declaration of Understanding – Obligations of Contractor

(Name) *(Designation)*

(Representing)

THE IMPLEMENTATION OF THE STANDARD FOR DEVELOPING SKILLS THROUGH INFRASTRUCTURE CONTRACTS

It will be a condition of contract that the Contractor shall, in the performance of the contract, achieve the Contract Skills Development Goal (CSDG) established in the CIDB Standard for Developing Skills through Infrastructure Contracts, published in Gazette Notice No.48491 of April 2023.

Key Notes:

1. Implementation of the Skills Standard

Implementation of the Skills Standards is applicable to a contract, or an order issued in terms of a Framework Agreement that has a duration of 12 months or more, and:

a) a contract of R5 million or more, in the case of a Professional Service or Service Contract or an order issued in terms of such a contract; or
b) a CIDB grading designation of grade 7 or higher, in case of an Engineering and Construction works, or design and build contract or an order issued in terms of such a contract.

2. Procurement

Based on the agreed skills methods the contractor may employ part/full Work Integrated Learners and/or Candidates directly or through a Skills Development Agency (SDA), training provider or skills development facilitator (Form A1 - List of CIDB accredited SDAs). The contractor shall ensure that no more than one Method shall be applied to any individual concurrently in the calculation of the CSDG for the contract.

The contractor may only place 33% employees employed by him or that of his subcontractors contributing to the CSDG.

3. Management

The contractor shall achieve the measurable CSDG by providing opportunities to learners requiring structured workplace learning using one or a combination of any of the Skills Methods as agreed: Part/Full Occupational Qualification Learners (Method 1) and/or Trade Qualification Learners (Method 2) as per the Standard in relation to work directly related to the contract or order as indicated under clause 4.2 and 4.3 in the Standard.

The contractor must ensure all beneficiaries of the Standard are registered with CIDB Skills Development Agency (SDA).

The contractor shall, within 30 days of award of the Order and in the specific format (Form A2 Baseline Training Plan), submit to the Employer's representative a baseline training plan.

The contractor shall submit to the Employers Representative:

- an interim contract compliance training report in the specific format (Form A3 Project Interim Report) at intervals which do not exceed 3 months; and
- a final contract compliance training report, in the specific format (Form A5 Project Completion Report). This report shall, respectively, be submitted within 15 days of; reaching completion, end of the service, the delivery date for all work required or practical completion (in the case of professional service), service, design and construct contracts, and engineering and construction works contracts.

4. Contract skills development goal

In the case of engineering and construction works contracts, design and build contracts and services contracts the contract skills participation goals, expressed in Rand, shall be no less than the sub-total multiplied by a percentage (%) factor given in the Table below for the applicable class of construction works used in the application of the Construction Industry Development Regulations, issued in terms of the Construction Industry Development Board Act of 2000.

Contract skills development goals for different classes of engineering and construction works contracts:

Class of construction works as identified in terms of Regulation 25(3) of the Construction Industry Regulations 2004		**Construction skills development goal (CSDG) Designation Description (%)**
Designation	**Description**	
CE	Civil engineering	0.25
CE or GB	Civil engineering or General Building	0.375
EE	Electrical Engineering works (buildings)	0.25
EP	Electrical Engineering works (Infrastructure)	0.25
GB	General Building	0.50
ME	Mechanical Engineering works	0.25
SW	Specialist Works	0.25

Example: The sub-total of the tender sum for an engineering and construction works contract in the GB class of construction works is R65,7m. The contract skills development goal in Rands is R65,7m x 0.5% = R328 500.

5. Compliance with requirements

The employer's representative shall undertake suitable random audits on records to confirm compliance with requirements.

It is the responsibility of the Contractor to ensure that all CSDG goals and compliance requirements are satisfied.

6. Records

The employer's representative shall certify the value of the credits counted towards the contract skills development goal, if any, whenever a claim for payment is issued to the employer and shall notify the contractor of this amount.

7. Contractor Non-Compliance to CSDG

- Opportunities provided could not be linked to contract;

- Failure to register beneficiaries on CIDB SDA LMS;
- Reporting criteria not adhered to;
- Conditions of employment and allowances not in accordance with legislative provisions;
- Contractor not maintaining training records;
- Contractor claims for learners funded from other sources.

8. Sanctions

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.

It is the responsibility of the Contractor to notify the Employer of any changes agreed upon on CSDG goals.

Declare that I have read and understood the contents above and I also declare that I understand my responsibilities in terms of enforcing and implementing the above.

SIGNED at _____ on this _____ day of _____ 20___

SIGNATURE OF WITNESSES	ADDRESS OF WITNESSES
1 _____	_____
Name _____	_____
2 _____	_____
Name _____	_____

SIGNATURE OF RESPONDENT'S AUTHORISED REPRESENTATIVE: _____

NAME: _____

DESIGNATION: _____

T2.2-30 : Insurance provided by the Contractor

Clause 84.1 in NEC3 Engineering & Construction Contract (June 2005) (amended June 2006 and April 2013) requires that the *Contractor* provides the insurance stated in the insurance table except any insurance which the *Employer* is to provide as stated in the Contract Data.

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

Insurance against **(See clause 84.2 of the ECC)**	**Name of Insurance Company**	**Cover**	**Premium**

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

T2.2-31 : Form of Intent to Provide a Performance Guarantee

It is hereby agreed by the Tenderer that a Performance Guarantee drafted **exactly** as provided in the tender documents will be provided by the Guarantor named below, which is a **bank or insurer registered in South Africa:**

Name of Guarantor _____

(Bank/Insurer)_____

Address _____

_____

_____

The Performance Guarantee shall be provided within 4 (Four) weeks after the Contract Date defined in the contract unless otherwise agreed to by the parties.

Signed _____

Name _____

Capacity _____

On behalf of (name of Tenderer) _____

Date _____

Confirmed by Guarantor's Authorised Representative

Signature(s)_____

Name (print) _____

Capacity _____

On behalf of Guarantor _____

(Bank/insurer) _____

Date _____

T2.2-32 : Forecast Rate of Invoicing

Tenderer to submit the forecast rate of invoicing (cash-flow) based on the Tender Price and Tender Programme.

Index of documentation attached to this schedule:

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

T2.2-33: Three (3) Years latest Audited Financial Statements

Attached to this schedule are the last three (3) years audited financial statements of the single Tenderer/members of the Joint Venture.

NAME OF COMPANY/IES and INDEX OF ATTACHMENTS:

.....

.....

.....

.....

.....

.....

.....

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

T2.2-34 : Foreign Exchange Requirements

The Tenderer to provide detailed breakdown of items that will have a foreign exchange implication. Justification and full details supporting foreign currency requirements to be appended to this Schedule.

Items & activities	Currency	Bank	Maximum payment

The exchange rates to be used must be the exchange rate published by South African Reserve Bank (SARB) on the date of advertisement of the bid.

It is expected that the percentages of foreign currency or currencies quoted are realistic and that they adequately reflect the overall foreign component of cost.

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

T2.2-35 : Supplier Declaration Form

Please Note: This Supplier Declaration Form is only to be completed by the successful bidder who is awarded the contract.

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

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

General Terms and Conditions:

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

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

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

Transnet expects its suppliers to timeously renew their Tax Clearance and B-BBEE certificates (where applicable), as EMEs and QSEs (QSE's with more than 51% ownership) are only expected to supply an affidavit as per Appendix D and E. These affidavits must be resubmitted on an annual basis as failure to do so may result in the supplier's account being temporarily suspended.

In addition, please note of the following very important information:

1. If your annual turnover is less than R10 million, then in terms of the DTI codes, you are classified as an Exempted Micro Enterprise (EME). If your company is classified as an EME, please include in your submission, a certified signed letter from your Auditor / Accountant confirming your company's most recent annual turnover is less than R10 million and percentage of black ownership and black female ownership in the company AND / OR B-BBEE certificate and detailed scorecard from an accredited rating agency (e.g. permanent SANAS Member), or a sworn Affidavit should you feel you will be able to attain a better B-BBEE score. (Appendix D).

2. If your annual turnover is between R10 million and R50 million , then in terms of the DTI codes, you are classified as a Qualifying Small Enterprise (QSE) and you claim a specific B-BBEE level based on any 4 of the 7 elements of the B-BBEE score-card, please include your B-BBEE certificate in your

submission as confirmation of your status. Or if the Supplier is a QSE with More than 51% black owned, they can submit a sworn affidavit (Appendix E).

Please Note: B-BBEE certificate and detailed scorecard should be obtained from an accredited rating agency (e.g. permanent SANAS Member).

3. If your annual turnover exceeds R50 million , then in terms of the DTI codes, you are classified as a Large Enterprise and you claim a specific B-BBEE level based on all seven elements of the B-BBEE generic score-card. Please include your B-BBEE certificate in your submission as confirmation of your status.

   Please Note: B-BBEE certificate and detailed scorecard should be obtained from an accredited rating agency (e.g. permanent SANAS Member).

4. The supplier to furnish proof to the procurement department as required in the Fourth Schedule of the Income Tax Act. 58 of 1962 whether a supplier of service is to be classified as an "employee", "personal service provider" or "labour broker". Failure to do so will result in the supplier being subject to employee's tax.

5. No payments can be made to a vendor until the vendor has been registered / updated, and no vendor can be registered / updated until the vendor application form, together with its supporting documentation, has been received and processed. No payments can be made to a vendor until the vendor has met / comply with the procurement requirements.

6. From 01 May 2015 only B-BBEE certificates issued by SANAS accredited verification agencies will be valid.

Appendix A

Supplier Declaration Form

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

Company Trading Name						
Company Registered Name						
Company Registration No Or ID No If a Sole Proprietor						
Company Income Tax Number						
Form of Entity	CC	Trust	Pty Ltd	Limited	Partnership	Sole Proprietor
	Non-profit (NPO's or NPC)	Personal Liability Co	State Owned Co	National Govt	Provincial Govt	Local Govt
	Educational Institution	Specialised Profession	Financial Institution	Foreign International	Foreign Branch Office	

Did your company previously operate under another name?	Yes		No	
If **YES** state the previous details below:				
Trading Name				
Registered Name				
Company Registration No Or ID No If a Sole Proprietor				

Form of Entity	CC	Trust	Pty Ltd	Limited	Partnership	Sole Proprietor
	Non-profit	Personal Liability Co	State Owned Co	National Govt	Provincial Govt	Local Govt
	Educational Institution	Specialised Profession	Financial Institution	Foreign International	Foreign Branch Office	

Your Current Company's VAT Registration Status	
VAT Registration Number	
If **Exempted from VAT registration,** state reason and submit proof from SARS in confirming the exemption status	
If your business entity is not VAT Registered, please submit a current original sworn affidavit (see example in Appendix I). Your Non VAT Registration must be confirmed annually.	

Company Banking Details		Bank Name	
Universal Branch Code		Bank Account Number	

Company Physical Address			
		Code	
Company Postal Address			
		Code	
Company Telephone number			
Company Fax Number			
Company E-Mail Address			
Company Website Address			

Company Contact Person Name	
Designation	
Telephone	
Email	

Is your company a Labour Broker?		Yes		No	
Main Product / Service Supplied e.g. Stationery / Consulting / Labour etc.				
How many personnel does the business employ?	Full Time		Part Time	
Please Note: Should your business employ more than 2 full time employees who are not connected persons as defined in the Income Tax Act, please submit a sworn affidavit, as per Appendix II.				

Most recent Financial Year's Annual Turnover	<R10Million		>R10Million <R50Million		>R50Million	

Does your company have a valid B-BBEE certificate?				Yes		No	
What is your Broad Based BEE status (Level 1 to 9)							
Majority Race of Ownership							
% Black Ownership		% Black Women ownership		% Black Disabled person(s) ownership		% Black Youth ownership	
Please Note: Please provide proof of B-BBEE status as per Appendix V. If you qualify as an EME or QSE then provide an affidavit following the examples provided in Appendix III and IV respectively. If you have indicated Black Disabled person(s) ownership, then provide a **certified** letter signed by a physician, on the physician's letterhead, confirming the disability.							

By signing below, I hereby verify that I am duly authorised to sign for and on behalf of firm / organisation and that all information contained herein and attached herewith are true and correct			
Name		Designation	
Signature		Date	

Stamp And Signature Of Commissioner Of Oaths			
Name		Date	
Signature		Telephone No	

Appendix B

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

Affidavit or Solemn Declaration

I, _____solemnly swear/declare that _____ is not a registered VAT vendor and is not required to register as a VAT vendor because the combined value of taxable supplies made by the provider in any 12 month period has not exceeded or is not expected to exceed R1million threshold, as required in terms of the Value Added Tax Act.

Signature: _____

Designation: _____

Date: _____

Commissioner of Oaths

Thus signed and sworn to before me at _____ on this the _____day of _____20_____,

the Deponent having knowledge that he/she knows and understands the contents of this Affidavit, and that he/she has no objection to taking the prescribed oath, which he/she regards binding on his/her conscience and that the allegations herein contained are all true and correct.

_____

Commissioner of Oaths

Appendix C

Example of an Affidavit or Solemn Declaration as to number of employees

Affidavit or Solemn Declaration

I, _____ solemnly swear/declare

that _____ employs three or more full time employees, which employees are engaged in the business of rendering the services of the organisation and are not connected persons as defined in the Income Tax Act.

Signature: _____

Designation: _____

Date: _____

Commissioner of Oaths

Thus signed and sworn to before me at _____ on this the _____ day of _____20_____,

the Deponent having knowledge that he/she knows and understands the contents of this Affidavit, and that he/she has no objection to taking the prescribed oath, which he/she regards binding on his/her conscience and that the allegations herein contained are all true and correct.

_____

Commissioner of Oaths

Appendix D

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

SWORN AFFIDAVIT – B-BBEE EXEMPTED MICRO ENTERPRISE

I, the undersigned,

Full Name & Surname	
Identity Number	

Hereby declare under oath as follows:

1. The contents of this statement are to the best of my knowledge a true reflection of the facts.

2. I am a member / director / owner of the following enterprise and am duly authorised to act on its behalf.

Enterprise Name	
Trading Name	
Registration Number	
Enterprise Address	

3. I hereby declare under oath that:

- The enterprise is _____% black owned;
- The enterprise is _____% black woman owned;
- The enterprise is _____% black youth owned;
- The enterprise is _____% black disabled owned;
- Based on the management accounts and other information available for the _____ financial year, the income did not exceed R10,000,000.00 (ten million rand).

Please confirm on the table below the B-BBEE level contributor, **by ticking the applicable box.**

100% black owned	**Level One** (135% B-BBEE procurement recognition)	

More than 51% black owned	**Level Two** (125% B-BBEE procurement recognition)	
Less than 51% black owned	**Level Four** (100% B-BBEE procurement recognition)	

4. The entity is an empowering supplier in terms of the **DTI** Codes of Good Practice.

5. I know and understand the contents of this affidavit and I have no objection to take the prescribed oath and consider the oath binding on my conscience and on the owners of the enterprise which I represent in this matter.

6. The sworn affidavit will be valid for a period of 12 months from the date signed by commissioner.

Deponent Signature: _____

_____ **Date:** _____

Commissioner of Oaths

Signature & stamp

Appendix E

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

SWORN AFFIDAVIT – B-BBEE QUALIFYING SMALL ENTERPRISE

I, the undersigned,

Full Name & Surname	
Identity Number	

Hereby declare under oath as follows:

1. The contents of this statement are to the best of my knowledge a true reflection of the facts.

2. I am a member / director / owner of the following enterprise and am duly authorised to act on its behalf.

Enterprise Name	
Trading Name	
Registration Number	
Enterprise Address	

3. I hereby declare under oath that:

- The enterprise is _____% black owned;
- The enterprise is _____% black woman owned;
- The enterprise is _____% black youth owned;
- The enterprise is _____% black disabled owned;
- Based on the management accounts and other information available for the _____ financial year, the income did not exceed R50,000,000.00 (fifty million rand);
- The entity is an empowering supplier in terms of Clause 3.3 (a) or (b) or (c) or (d) or as amended 3.3 (e) of **the DTI** Codes of Good Practice. **(Tick appropriate box in table below).**

(a) At least 25% of cost of sales, (excluding labour costs and depreciation) must be procurement from local producers or suppliers in South Africa; for the services industry include labour costs but capped at 15%		(b) Job Creation – 50% of jobs created are for black people, provided that the number of black employees in the immediate prior verified B-BBEE measurement is maintained	

(c) At least 25% transformation of raw material / beneficiation which include local manufacturing, production and /or assembly, and / or packaging		(d) At least 12 days per annum of productivity deployed in assisting QSE and EME beneficiaries to increase their operation or financial capacity	
(e) At least 85% of labour costs should be paid to South African employees by service industry entities			

Please confirm on the table below the B-BBEE level contributor, **by ticking the applicable box.**

100% black owned	**Level One** (135% B-BBEE procurement recognition)	
More than 51% black owned	**Level Two** (125% B-BBEE procurement recognition)	

5. I know and understand the contents of this affidavit and I have no objection to take the prescribed oath and consider the oath binding on my conscience and on the owners of the enterprise which I represent in this matter.

6. The sworn affidavit will be valid for a period of 12 months from the date signed by commissioner.

Deponent Signature: _____

_____ **Date:** _____

Commissioner of Oaths

Signature & stamp

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:

Engineering, Procurement and Construction of the Howick Pump Station Fire System Upgrade

The tenderer, identified in the Offer signature block, has

either	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.
or	examined the draft contract as listed in the Acceptance section and agreed to provide this Offer.

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	**R**
Value Added Tax @ 15% is	**R**
The offered total of the Prices inclusive of VAT is	**R**
(in words)	

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

Signature(s) .....

Name(s) .....

Capacity .....

For the tenderer: .....

(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*	202 Anton Lembede Street Durban 4001	202 Anton Lembede Street Durban 4001
Name & signature of witness		Date

Schedule of Deviations

No.	Subject	Details
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

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 *tenderer:*	**For the *Employer***	**For the *Employer***
Signature	.....	.....	.....
Name	.....	.....	.....
Capacity	.....	.....	.....
		202 Anton Lembede Street Durban 4001	202 Anton Lembede Street Durban 4001
Name & signature of witness	.....	.....	.....
Date	.....	.....	.....

C1.2 Contract Data

Part one - Data provided by the *Employer*

Clause	Statement	Data	
1	**General**		
	The *conditions of contract* are the core clauses and the clauses for main Option		
		A:	**Priced contract with activity schedule**
	dispute resolution Option	**W1:**	**Dispute resolution procedure**
	and secondary Options and secondary Options of the NEC3 Engineering and Construction Contract June 2005 (amended June 2006 and April 2013)	**X1:**	**Price adjustment for inflation**
		X2:	**Changes in the law**
		X5:	**Sectional completions**
		X7:	**Delay damages**
		X13:	**Performance Bond**
		X16:	**Retention**
		X18:	**Limitation of liability**
		Z:	***Additional conditions of contract***
		Z1	**Additional clauses relating to Identified and Defined Terms – Refer to Core Clause 11.**
		Z2	**Additional clause relating to Interpretation of Law – Refer to Core Clause 12**
		Z3	**Additional clause relating to Communications – Refer to Core Clause 13**
		Z4	**Additional clause relating to Anti-Corruption Act**
		Z5	**Additional clauses relating to Key Dates – Refer to Core Clause 25**
		Z6	**Additional clauses relating to other responsibilities – Refer to Core Clause 27**
		Z7	**Additional clause relating to access and use of the Site – Refer to Core Clauses 31 and 33**

Z8 Additional clauses relating to correcting Defects – Refer to Core Clause 43

Z9 Additional clauses relating to payment – Refer to Core Clause 50, 51 and 52

Z10 Additional clauses relating to compensation events – Refer to Core Clause 60

Z11 Additional clauses relating to the *Project Manager's* time periods for responding to compensation events – Refer to Core Clause 61.4, 62.6 and 64.4

Z12 Additional clauses relating to risks and insurance – Refer to Core Clause 83

Z13 Additional clause relating to termination – Refer to Core Clause 90

Z14 Additional clauses relating to reasons for termination – Refer to Core Clause 91

Z15 Additional clause relating to Secondary Option X13 – Performance bond

Z16 Additional clauses relating to Secondary Option X18 Limitation of liability

Z17 Right to conduct screening through SSA

Z18 Additional Clause Relating to Collusion in the Construction Industry

Z19 Protection of Personal Information Act

Z20 Intellectual Property

Z21 Assignment

Z22 *Employer's* right to take appropriate action

Z23 *Employer's* step-in rights

Z24 Design Review by the *Employer*

Z25 Waiver of Lien

Z26 Proposed Contractor's key persons

Z27 Obligations in respect of Job Creation

Z28 Obligations in respect of the Sub Contracting

Z29 Additional clauses relating to the Shorter Schedule of Cost Components (SSCC)

		Z30 Obligations in respect of the CSDG goals **Z31 Provisional Activities in the Activity Schedule**
10.1	The *Employer* is:	**Transnet SOC Ltd** **(Registration No. 1990/000900/30)**
	Address	Registered address: **Transnet Corporate Centre** **138 Eloff Street** **Braamfontein** **Johannesburg** **2000**
	Having elected its Contractual Address for the purposes of this contract as:	**Transnet Pipelines** **202 Anton Lembede Street** **Durban** **4001**
10.1	The *Project Manager* is: (Name)	**To be confirmed**
	Address	**202 Anton Lembede Street** **Durban** **4001**
	Tel	**To be confirmed**
	e-mail	**To be confirmed**
10.1	The *Supervisor* is: (Name)	**To be confirmed**
	Address	**202 Anton Lembede Street** **Durban** **4001**
	Tel No.	**To be confirmed**
	e-mail	**To be confirmed**
11.2(13)	The *works* are	**Engineering, Procurement and Construction of the Howick Pump Station Fire System Upgrade**
11.2(14)	The following matters will be included in the Risk Register	**All those matters recorded in accordance with Clause 16.1 of the Contract.**
11.2(15)	The *boundaries of the site* are	**As stated in Part C4.1. "Description of the Site"**
11.2(16)	The Site Information is in	**Part C4**
11.2(19)	The Works Information is in	**Part C3**
12.2	The *law of the contract* is the law of	**the Republic of South Africa subject to the jurisdiction of the Courts of South Africa.**
13.1	The *language of this contract* is	**English**

13.3	The *period for reply* is	**2 (two) weeks for all project communications.**
2	**The *Contractor*'s main responsibilities**	**No additional data is required for this section of the *conditions of contract*.**
3	**Time**	
11.2(3)	The *completion date* for the whole of the *works* is	**Fifteen (15) Months from contract award**
11.2(9)	The *key dates* and the *conditions* to be met are:	

Key Date	Key Date Condition	Date Condition to be Achieved
Key Date 1	The *Contractor* has obtained all required municipal plan approvals in accordance with Works Information and the *Project Manager* has given written confirmation that on-site construction activities may commence.	To be confirmed
Key Date 2	FEED Stage Complete	To be confirmed

30.1	The *access dates* are	**1**	**Access to the Site for visual surveys, investigations and testing that does not involve demolition, modification or construction related activities is To be confirmed, but no earlier than compliance with the *Employers* Health, Safety, Environmental and Security Requirements prior to accessing the Site.**
		2	**Access to the Site to commence construction activities will be provided when:**
		2.1	**The Contractor has provided the necessary information to the *Employer* for the Construction Permit and the permit has been issued by the Department of Labour and Employment in accordance with the Construction Regulations (latest revision).**
		2.2	**The Contractor has submitted the Health and Safety File and this has been accepted by the *Project Manager*.**
		2.3	**The *Contractor* has complied with Section 3.3 of the Works Information relating to Plan Approvals.**

31.1	The *Contractor* is to submit a first programme for acceptance within	**4 weeks of the Contract Date.**
31.2	The *starting date* is	**To be confirmed**
32.2	The *Contractor* submits revised programmes at intervals no longer than	**4 weeks.**
4	**Testing and Defects**	
42.2	The *defects date* is	**52 (fifty two) weeks after Completion of the whole of the *works*.**
43.2	The *defect correction period* is	**2 weeks**
5	**Payment**	
50.1	The *assessment interval* is monthly on the	**15th (fifteenth) day of each successive month.**
51.1	The *currency of this contract* is the	**South African Rand.**
51.2	The period within which payments are made is	**Payment will be effected on or before the last day of the month following the month during which a valid Tax Invoice and Statement were received.**
51.4	The *interest rate* is	**the prime lending rate of Rand Merchant Bank of South Africa.**
6	**Compensation events**	
60.1(13)	The *weather measurements* to be recorded for each calendar month are,	**The number of days with rainfall more than 10 mm.** **The number of days with minimum air temperature less than 0 degrees Celsius.** **The number of hours wind speed measurements exceeded 30 km/h.** **The number of days with snow lying at 08:00 hours South African Time.**
	The place where weather is to be recorded (on the Site) is:	**The *Contractor* is required to install a weather gauge on his Site establishment area.**
	The *weather data* are the records of past *weather measurements* for each calendar month which were recorded at:	**Howick South African weather service station with co-ordinates: Lat -25.8323 and Long 29.1921**
	and which are available from:	**South African Weather Service 012 367 6023 or info3@weathersa.co.za / salesdbn@weathersa.co.za**

7	**Title**	**No additional data is required for this section of the *conditions of contract*.**
8	**Risks and insurance**	
80.1	These are additional *Employer*'s risks	**None**
84.1	The *Employer* provides these insurances from the Insurance Table	
	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.**
	Cover / indemnity:	**to the extent as stated in the insurance policy for Contract Works / Public Liability**
	The deductibles are:	**as stated in the insurance policy for Contract Works / Public Liability and which is payable by the Contractor for each insurance claim**
	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**
	Cover / indemnity	**Is to the extent as stated in the insurance policy for Contract Works / Public Liability**
	The deductibles are	**as stated in the insurance policy for Contract Works / Public Liability and which is payable by the Contractor for each insurance claim**
	3 Insurance against:	**Loss of or damage to Equipment (Temporary Works only) as stated in the insurance policy for contract Works and Public Liability**
	Cover / indemnity	**Is to the extent as stated in the insurance policy for Contract Works / Public Liability**
	The deductibles are:	**As stated in the insurance policy for Contract Works / Public Liability and which is payable by the Contractor for each insurance claim**
	4 Insurance against:	**Contract Works SASRIA insurance subject to the terms, exceptions and conditions of the SASRIA coupon**
	Cover / indemnity	**Cover / indemnity is to the extent provided by the SASRIA coupon**

	The deductibles are	**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.**
	Note:	**The deductibles for the insurance as stated above are listed in the document titled "Certificate of Insurance: Transnet (SOC) Limited Principal Controlled Insurance."**
84.1	The minimum limit of indemnity for insurance in respect of death of or bodily injury to employees of the *Contractor* arising out of and in the course of their employment in connection with this contract for any one event is	**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.**
	The *Contractor* provides these additional Insurances	**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** **2 Where the contract involves manufacture, and/or fabrication of Plant & Materials, components or other goods to be incorporated into the *works* at premises other than the site, the *Contractor* shall satisfy the *Employer* that such plant & materials, components or other goods for incorporation in the *works* are adequately insured during manufacture and/or fabrication and transportation to the site.** **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** **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 R5 000 000.**

		5 The insurance coverage referred to in 1, 2, 3, 4 and 5 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.*
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 *Contractor*) caused by activity in connection with this contract for any one event is	**Whatever the *Contractor* requires in addition to the amount of insurance taken out by the *Employer* for the same risk.**
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:	**Principal Controlled Insurance policy for Contract**
9	**Termination**	**Refer to Clauses Z13 and Z14**
10	**Data for main Option clause**	
A	**Priced contract with Activity Schedule**	**No additional data is required for this Option.**
11	**Data for Option W1**	
W1.1	The *Adjudicator* is	**Both parties will agree as and when a dispute arises. If the parties cannot reach an agreement on the *Adjudicator*, the Chairman of the Association of Arbitrators will appoint an *Adjudicator.***
W1.2(3)	The *Adjudicator nominating body* is: If no *Adjudicator nominating body* is entered, it is:	**The Chairman of the Association of Arbitrators (Southern Africa)** **the Association of Arbitrators (Southern Africa)**

W1.4(2)	The *tribunal* is:	**Arbitration**
W1.4(5)	The *arbitration procedure* 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, South Africa**
	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)**
12	**Data for secondary Option clauses**	
X1	**Price adjustment for inflation**	
X1.1	**The proportions used to calculate the Price Adjustment Factor are:**	

Pro-portion	**linked to index for**	**Index prepared by**
0.12	**Labour (People)**	**The Consumer Price Index (CPI) for "All Items" in Table 1 (Consumer price indices for the total country) of the Statistical Release P0141 "Consumer Price Index - Additional Tables" published by Statistics South Africa**
0.05	**Plant (Equipment)**	**The "Plant and Equipment" index in Table 4 (Mining and construction plant and equipment price index) of the Statistical Release P0151.1 "Construction Materials Price Indices" published by Statistics South Africa.**
0.1	**Material (Civil)**	**The "Civil Engineering Material - Total" index in Table 6 (Civil engineering material price indices) of the Statistical Release P0151.1 "Construction Materials Price Indices" published by Statistics South Africa.**
0.07	**Material (Electrical)**	**The "Electrical Engineering" index in Table 5 (Mechanical and Electrical Engineering Input Price Indices) of the Statistical Release P0151.1 "Construction Materials Price Indices" published by Statistics South Africa**
0.5	**Material (Mechanical)**	**The "Mechanical Engineering" index in Table 5 (Mechanical and Electrical Engineering Input Price Indices) of the Statistical Release P0151.1 "Construction Materials Price Indices" published by Statistics South Africa**

	0.01	**Fuel**	**The "Fuel" index in Table E (Consumer price indices for all urban areas (concluded) of the Statistical Release P0141 CPI Index" published by Statistics South Africa.**
	0.15	**Non-adjustable**	
	1	**Total**	
X2	**Changes in the law**	**No additional data is required for this Option**	
X5	**Sectional Completions**		

		Section	**Description**	***Completion date***
X5.1	The completion date for each section of the works is:	1. Section 1	Ready for Operation Certificate of the new fire water storage tank and temporary tie-in to the existing fire system Accepted by the *Project Manager.*	To be confirmed
		2. Completion of the new fire system	Ready for Operation Certificate of the Complete New Fire System Accepted by the *Project Manager.'*	To be confirmed

X5 & X7	**Sectional Completion and delay damages used together**	
X5.1 X7.1	Delay damages for late Completion of the sections of the *works* and whole of the *works* are:	• **1% per day of the total of the Prices at the Completion Date, for the first 20 days of delay.** • **2% per day of the total of the Prices at the Completion Date, for the 21st to the 40th day of delay,** • **3% per day of the total of the Prices at the Completion Date, for the 41st to the 50th day of delay,** • **4% per day of the total of the Prices at the Completion Date, for the 51st to the 60th day of delay,** **With the total of Delay Damages under this clause limited to 10% of the Prices at the Completion Date**
X13	**Performance bond**	
X13.1	The amount of the performance bond is	**10% of the total of the Prices**
X16	**Retention**	
X16.1	The retention free amount is	**Nil**
	The retention percentage is	**5% on all payments certified.**

X18	**Limitation of liability**	
X18.1	The *Contractor*'s liability to the *Employer* for indirect or consequential loss is limited to:	**10% of the total of the Prices at the Contract Date**
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:	**The deductible of the relevant insurance policy**
X18.3	The *Contractor's* liability for Defects due to his design which are not listed on the Defects Certificate is limited to:	**The cost of correcting the Defect**
X18.4	The *Contractor's* total liability to the *Employer* for all matters arising under or in connection with this contract, other than excluded matters, is limited to	**The Total of the Prices**
X18.5	The *end of liability date* is	**5 years after Completion of the whole of the *works***

Z ***Additional conditions of contract* are*:***

Z1 **Additional clauses relating to Identified and Defined Terms – Refer to Core Clause 11.2**

Z1.1 Clause 11.2(17) Subcontractors is deleted and replaced with:
A Subcontractor is a person or organisation who has a contract with the Contractor to

- construct or install part of the works or supply any purpose-made part of the works,
- design all or part of the works, except the design of Plant and Materials that are not purpose-made for the works, or
- provide a service in the Working Areas, which is necessary to provide the *works*, except for the
  - hire of Equipment or
  - supply of people paid for by the Contractor according to the time they work

Z1.2 Add a new clause 11.2(33) Corrupt Acts:
A Corrupt Act is

- the offering, promising, giving, accepting or soliciting of an advantage as an inducement for an action which is illegal, unethical or a breach of trust or
- abusing any entrusted power for private gain
- Any other conduct classified as such in terms of the relevant piece of legislation in this regard namely the Prevention and Combating of Corrupt Activities Act of South Africa, Act 12 of 2004.

in connection with this contract or any other contract with the *Employer.* This includes any commission paid as an inducement which was not declared to the *Employer* before the Contract Date

Z1.3	Add a new clause 11.2(34) People Rates: The People Rates are the *people rates* unless later changed in accordance with the contract.
Z1.4	Amend Clause 11.2(8): The Fee is the sum of the amounts calculated by applying the *subcontracted fee percentage* to the Defined Cost of subcontracted work and the *direct fee percentage* to the Defined Cost of Cost Component 3 Plant and Materials, Cost Component 4 Charges, Cost Component 5 Manufacture and Fabrication and Cost Component 6 Design of the Shorter Schedule of Cost Components.
Z2	**Additional clause relating to Interpretation of Law – Refer to Core Clause 12**
Z2.1	Additional Clause 12.5: Any extension, concession, waiver or relaxation of any action by the Parties, the *Project Manager, Supervisor* or the *Adjudicator* does not constitute a waiver of rights and does not give rise to an estoppel or lien unless the Parties agree otherwise and confirm such an agreement in writing.
Z3	**Additional clause relating to Communications – Refer to Core Clause 13**
Z3.1	Clause 13.2 is deleted and replaced with: If the Works Information specifies the use of a communication system, a communication has effect when it is communicated through the communication system specified in the Works Information. If the Works Information does not specify a communication system, a communication has effect when it is received at the last address notified by the recipient for receiving communications or, if none is notified, at the e-mail address of the recipient stated in the Contract Data.
Z4	**Additional clause relating to Anti-Corruption Act**
Z4.1	Add a new clause 28 '**Anti-Corruption Act** ': 28.1 The *Contractor* declares and warrants that, in performing its obligations under this Agreement, it shall comply with all applicable anti-bribery and anti-corruption laws, including, but not limited to, the South African Prevention and Combating of Corrupt Activities Act 12 of 2004 (PRECCA). 28.2 The *Contractor* undertakes that it, its directors, employees, agents, sub-contractors, or any other person acting on its behalf, will not, directly or indirectly, offer, give, solicit, or accept any "gratification" (as broadly defined in PRECCA, including money, gifts, loans, fees, or any other advantage of favour) intended to influence improperly any person's action or decisions to obtain or retain business, or an advantage in the conduct of business related to this Agreement.
Z5	**Additional clauses relating to Key Dates – Refer to Core Clause 25**
Z5.1	The last sentence of Core Clause 25.3 is deleted.

Z5.2 Additional Clause 25.4:

If the *Project Manager* decides that the *works* do not meet the Condition stated for a Key Date by the date stated and, in lieu of the *Employer* recovering any additional costs it may have incurred for any reason, including costs incurred in either

- in carrying out *works* or
- by paying an additional amount to Others in carrying out *works* on the same project,

the *Contractor* pays delay damages at the rate stated in Secondary Option Z5.3 from the date stated for the *works* to meet the Condition stated for the Key Date until the date the *works* meet the Condition for the Key Date.

Z5.3 Additional Clause 25.5:

The *Project Manager* certifies Sectional Completion of completed Works that meet the Condition required for a Key Date.

Z5.3 Additional Clause 25.6:

The delay damages for failing to meet the Condition required for a Key Date are:

- 1% per day of 50% of the total of the Prices at the Key Date, for the first 20 days of delay in meeting all the conditions for meeting the stated Key Date.
- 2% per day of 50% of total of the Prices at the Key Date, for the 21st to the 40th day of delay in meeting all the conditions for meeting the stated Key Date,
- 3% per day of 50% of the total of the Prices at the Key Date, for the 41st to the 50th day of delay in meeting all the conditions for meeting the stated Key Date,
- 4% per day of 50% of the total of the Prices at the Key Date, for the 51st to the 60th day of delay in meeting all the conditions for meeting the stated Key Date,

With the total of Key Date Delay Damages under this clause limited to 10% of the total of the Prices at the Contract Date

Z6 Additional clauses relating to other responsibilities – Refer to Core Clause 27

Z6.1 Additional Clause 27.5

In the instance that the *Contractor* is a joint venture, consortium or a partnership, the *Contractor* provides the *Employer* with a certified copy of its signed joint venture, consortium or a partnership agreement, and in the instance that the joint venture, consortium or a partnership is an incorporated Entity, the Memorandum of Incorporation, within 4 (four) weeks of the Contract Date.

The Joint Venture, consortium or a partnership agreement shall contain but not be limited to the following:

- A brief description of the Contract and the Deliverables;
- The name, physical address, communications addresses and domicilium citandi et executandi of each of the partners and the Joint Venture;
- The partner's interests;
- A schedule of the insurance policies, sureties, indemnities and guarantees which are to be taken out by the joint venture consortium or a partnership and by the individual partners;
- Details of the internal dispute resolution procedure;• Written confirmation by all of the partners:
  i. of their joint and several liabilities to the *Employer* to provide the *works*, notwithstanding any liabilities between the parties to the joint venture or consortium;
  ii. identification of the lead partner in the joint venture or consortium or a partnership, confirming the authority of the lead partner to bind the joint venture consortium or a partnership through the *Contractor's* representative;
  iii. identification of the roles and responsibilities of the partners to provide the works.
- Financial requirements for the Joint Venture:
  i. the working capital requirements for the joint venture consortium or a partnership and the extent to which and manner whereby this will be provided and/or guaranteed by the partners from time to time;
  ii. the names of the auditors and others, if any, who will provide auditing and accounting services to the joint venture consortium or a partnership.

Z6.2 Additional Clause 27.6:

The *Contractor* shall not alter the composition or legal status of the joint venture or consortium or partnership without the prior written approval of the *Employer*.

Z7 Additional clauses relating to programme, access to the Site and suspension of the *works* – Refer to Core Clauses 31 and 33

Z7.1 Add bullet item in clause 31.2:

- in addition to the statement of the *Contractor* plans to do work, each operation or activity on the programme submitted for acceptance, and each revised programme, shall be fully resource loaded indicating all detailed resources i.e. all categories of People, Equipment and Material.

Z7.2 Additional Clause 33.2:

Access to the Site will be provided once the *Contractor* has fulfilled the requirements as set forth under the Contract Data Part 1 for clause 30.1

Z7.3 Additional Clause 33.3:

The *Employer* may at any time suspend part or all of the *works.* As a consequence, if the *Contractor* is required to demobilise and then remobilise its staff and equipment, the *Contractor* will be entitled to a compensation event. The *Contractor* will be required to reduce and actively mitigate all its costs during the period of suspension and will be entitled to a compensation event only to the extent that it can demonstrate it has incurred costs which were not capable of being mitigated.

Z8 Additional clauses relating to correcting Defects – Refer to Core Clause 43

Z8.1 Add to clause 43.2:

Except that the *Employer* may correct a Defect after take over if there is a threat to safety which justifies immediate action to correct the Defect. The *Project Manager* assesses the cost incurred by the *Employer* in correcting the Defect and the *Contractor* pays the amount assessed

Z8.2 Additional Clause 43.5:

The *Contractor* corrects a Defect notified before Completion within 2 (two) weeks of the notification of the Defect.

Z8.3 Additional Clause 43.6:

The *Contractor* corrects a Defect that creates a danger to health and safety as soon as possible and does not work in the affected area until the Defect is corrected.

Z8.4 Additional Clause 43.7:

A latent Defect is a Defect which would not have been discovered on reasonable inspection by the *Employer* or the *Supervisor* before the defects date, without requiring any inspection not ordinarily carried out by the *Employer* or the *Supervisor* during that period.

Z9 Additional clauses relating to payment – Refer to Core Clause 50, 51 and 52

Z9.1 Add the following to clause 50.3:

5% of the Price for Work Done to Date is retained in each assessment of the amount due until the *Contractor* has submitted a programme for acceptance for the particular assessment period to the *Project Manager* showing the information that this contract requires as set out under Clause 31.2 and the Works Information.

5% of the Price for Work Done to Date is retained in each assessment of the amount due until the *Contractor* has provided evidence of its compliance with the *Contractor's* Local Production and Content, Job Creation and CSDG commitments for the particular assessment period to the *Project Manager* showing the information that this contract requires as set out in the *Contractor's* Local Production and Content, Job Creation and CSDG commitments, relevant Z clauses and the Works Information

Z9.2 Additional Clause 51.5:

In the event that the total of the Prices at the date of the award of the Contract is based on any price in a foreign currency being converted to South African Rand at an exchange rate recorded in the Tender, the *Contractor* is, at its cost, to obtain forward cover for such currency amount within 30 (thirty) working days of the award of the Contract.

Z9.3 Any contract of forward cover is to be acceptable to the *Employer*.

Z9.4 The total of the Prices at the Contract award is to be adjusted to reflect the exchange rates in the approved contracts of forward cover. This adjustment will be the only adjustment for fluctuations in the rate of exchange, save for any foreign exchange in compensation events, which is to be handled in the same manner.

Z9.5 If there are no rates of exchange specified in the *Contractor's* Tender, no adjustment of the total of the Prices is to be made.

Z9.6 "Add a new clause 52.2 :

The *Contractor* keeps these records

• accounts of payments of Defined Cost,

• proof that the payments in respect of Defined Cost have been made,

• communications about and assessments of compensation events for Subcontractors and

• other records as stated in the Works Information.

The *Contractor* allows the *Project Manager* to inspect at any time within working hours the accounts and records which it is required to keep."

Z10 Additional clauses relating to compensation events – Refer to Core Clause 60

Z10.1 Amend Core Clause 60.1(2) to read:

(2) The *Employer* does not allow access to and use of a part of the Site by the later of its access date and the date shown on the Accepted Programme provided the *Contractor* indicated such access on the Accepted Programme and notified the *Project Manager* of the date when he planned to establish the work area at least 10 (ten) days before the planned date for establishment.

Z10.2 Amend the provisions of Clause 60.1(4) to read as follows:

(4) The *Project Manager* gives an instruction to stop or not to start any *works* or to change a Key Date. Any instructions issued by the *Project Manager* or the *Employer* which require the *Contractor* to stop the *works* 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, will not constitute a compensation event and will not result in a change to the Prices or a change to the Key and Completion Dates.

Z10.3 Add to the following at the end of Core Clauses 60.1(13) and 60.1(19):

Only the effect of time is considered in assessing this compensation event. The Prices are not to be changed.

Z11 Additional clauses relating to the *Project Manager's* time periods for responding to compensation events – Refer to Core Clause 61.4, 62.6 and 64.4

Z11.1 The first bullet point of Core Clause 61.4 is amended to read as follows:

- arises from the fault, error, negligence or default of the *Contractor*.

Add a fifth bullet point of Core Clause 61.4 which read as follows:

has not been notified within the timescales set out in these conditions of contract

Z11.2 Delete and replace the last paragraph of Clauses 61.4 with:

If the *Project Manager* fails to reply to the *Contractor's* notification of a compensation event within the time allowed, the *Contractor* may notify the *Project Manager* of that failure. If the failure continues for a further eight weeks after the *Contractor's* notification it is treated as acceptance by the *Project Manager* that the event is a compensation event and an instruction to submit quotations except if the *Project Manager* notifies the *Contractor* that the *Employer's* authority is required and includes in his notification any extension to the period within which he is required to reply to the *Contractor*

Z11.3 Clause 62.6 is deleted and replaced with:

If the *Project Manager* does not reply to a quotation within the time allowed, the *Contractor* may notify the *Project Manager* of that failure. If the *Contractor* submitted more than one quotation for the compensation event, the notification states which quotation the *Contractor* proposes is to be used.

If the failure continues for a further eight weeks after the *Contractor's* notification it is treated as acceptance by the *Project Manager* of the quotation, except *if the Project Manager* notifies the *Contractor* that the *Employer's* authority is required and includes in his notification any extension to the period within which he is required to reply to the *Contractor*.

Z11.4 Clause 63.3 is deleted and replaced with:

A delay to the Completion Date is assessed as the length of time that, due to the compensation event, planned Completion is later than planned Completion as shown on the Accepted Programme current at the dividing date.

A delay to a Key Date is assessed as the length of time that, due to the compensation event, the planned date when the Condition stated for a Key Date will be met is later than the date shown on the Accepted Programme current at the dividing date.

The assessment takes into account:

• any delay caused by the compensation event already in the Accepted Programme and

• events which have happened between the date of the Accepted Programme and the dividing date.

Z11.5	Clause 64.4 is deleted and replaced with: If the *Project Manager* does not assess a compensation event within the time allowed, the *Contractor* may notify the *Project Manager* of that failure. If the *Contractor* submitted more than one quotation for the compensation event, the notification states which quotation the *Contractor* proposes is to be used. If the failure continues for a further eight weeks after the *Contractor's* notification it is treated as acceptance by the *Project Manager* of the quotation, except *if the Project Manager* notifies the *Contractor* that the *Employer's* authority is required and includes in his notification any extension to the period within which he is required to reply to the *Contractor*.
Z12	**Additional clauses relating to risks and insurance – Refer to Core Clause 83**
Z12.1	Add the following to Clause 81.1: The following are not *Employer's* risks: • a global pandemic or epidemic • global and local financial or political events; • electricity outages, blackouts and load-shedding • Construction Mafia or similar bodies, community activists or other unlawful activities relating to the *works*, and the *Contractor's* ability to Provide the Works. However, if a delay resulting from any of these risks results in a delay longer than seven (7) continuous days, the *Contractor* is entitled to a compensation event for the time (but not the cost) impact of the risk, subject to the *Contractor* complying with the relevant provisions of the contract.
Z12.2	Additional Clause 83.3: For the avoidance of doubt, the *Employer* and the *Contractor* expressly agree that the total liability of the *Contractor* to the *Employer* applies jointly and severally across all organisations comprising the *Contractor*.
Z13	**Additional clause relating to termination – Refer to Core Clause 90**
Z13.1	Termination Table The following are included under Core Clause 90.2 Termination Table as follows: Amend "A reason other than R1 - R21" to "A reason other than R1 - R24" Amend "R1 - R15 or R18" to "R1 - R15, R18, R22 or R23 or R24 ."
Z14	**Additional clauses relating to reasons for termination – Refer to Core Clause 91**

Z14.1 The following are included under Core Clause 91.1:

Amend the second main bullet to read:

If the other party is a company or partnership, joint venture, or consortium, or partnership, whether incorporated or otherwise (including any partner of the joint venture or consortium or partnership) and has Under the second main bullet, insert the following additional sub-bullets after the last sub-bullet:

- commenced business rescue proceedings (R22)
- repudiated this Contract (R23)
- the delay damages have reached the total amount specified in the contract (R24)

Z14.2 Add a second bullet under Clause 91.2 to read:

Failure to comply with all the criteria set out under Z28.1 (Design Review by the Employer)(R11.1).

Z14.3 Add to Clause 90.2 if the *Employer* terminates for Reason 11.1 under Clause 91.2 (R11.1) the *Employer* may terminate the *Contractor's* obligation to provide the remainder of the *works* without any further entitlement to the *Contractor* for any payment under Clause 93.2, or consideration for the provision of the remainder of the *works*

Z14.4 Clause 93.2 A4 is deleted and replaced with:

'2.5% applied to:

- for Options A, B, C and D, any excess of the total of the Prices at the Contract Date over the Price for Work Done to Date'

Z15 Additional clause relating to Secondary Option X13 – Performance bond

Z15.1 Additional Clause X13.2:

The Performance Guarantee is an irrevocable, on-demand performance guarantee, issued exactly in the form of the pro forma documents provided for this purpose under C1.3 (Forms of Securities), in favour of the *Employer* by a financial institution reasonably acceptable to the *Employer*.

Z16 Additional clauses relating to Secondary Option X18 Limitation of liability

Z16.1 Amend the bullet points in Clause X18.4 to read:

- loss or damage to the *Employer's* property,
- any amount payable under any indemnity,
- delay damages under Option X7,
- delay damages under Clause Z5.

Z16.2 Additional Clause X18.6:

For the avoidance of doubt, the *Employer* and the *Contractor* expressly agree that the total liability of the *Contractor* to the *Employer* applies jointly and severally across all organisations comprising the *Contractor*.

Z17	**Right to conduct screening through SSA**
Z17.1	The *Employer* will conduct screening through State Security Agency (SSA) for security clearances of any *Contractor* who has access to National Key Points. The following documents are needed from the *Contractor*: 1. Company registration number. 2. CIPC registration. 3. Company TAX clearance TCS Pin. 4. Copies of ID of directors. 5. Fingerprints of directors (Use SAP 91) to be found at local SAPS. Original fingerprints must be submitted. 6. Copies of ID of employees who will be working on site. 7. Fingerprint of employees who will be working on site (Use SAP 91) to be found at local SAPS. Original fingerprints must be submitted. 8. The contractor must make a copy of the extra Departmental documents and take it to SAPS which prevents them from paying. 9. In the event the *Contractor* is not cleared by SSA, the *Employer* will terminate the contract forthwith. Note: Please take note that SSA takes four (4) weeks for screening to take place once all required documentation has been submitted.
Z18	**Additional Clause Relating to Collusion in the Construction Industry**
Z18.1	The Contract award is made without prejudice to any rights the *Employer* may have to take appropriate action later with regard to any declared tender rigging, including blacklisting.
Z19	**Protection of Personal Information Act**
Z19.1	The *Employer* and the *Contractor* are required to process information obtained for the duration of the Agreement in a manner that complies with the requirements of the Protection of Personal Information Act.
Z20	**Intellectual Property**
Z20.1	Intellectual property rights (including, without limitation, patents, copyright, and trademarks) rest with the party owning the intellectual property right.

Z20.2 ***Works* Related Design Documentation**

The *Contractor* grants the *Employer* the irrevocable right in accordance with the provisions of Section 22 of the Copyright Act 1978:

- To copy any plan, diagram, drawing, document, specification, bill of quantities, design, calculation, or any other similar document made by the *Contractor* in connection with the *works*; and,
- To make free and unrestricted use thereof for its own purposes, modify same or have it modified by Others for any reasons, without obtaining permission from the *Contractor*; and,

To provide copies thereof to Others to be used by them for purposes of tendering, consultancy or service delivery.

Z20.3 **Using the *Contractor's* Design**

The *Employer* shall have the right to use and copy all, or any part, of the *Contractor's* design for any purpose connected with construction, use, maintenance, alteration, demolition, expansion to the *Works*, or for integration of the *Works* with other systems, plant and equipment.

Z20.4 Save as stated above, the *Employer* and the *Contractor* may not use any intellectual property of the other party without that party's written consent. The *Employer* indemnifies the *Contractor* against any claim or action (including costs) caused by or arising from the failure of 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.

Z21	**Assignment**
Z21.1	No rights, duties or liabilities under this Contract may be ceded, assigned, transferred, conveyed, or otherwise disposed of by either the *Employer* or the *Contractor* without the prior written consent of the other party, which consent shall not be unreasonably withheld.

Z22	***Employer's* right to take appropriate action**	
Z22.1	The Contract award is made without prejudice to any rights the *Employer* may have to take appropriate action later with regard to:	Any declared, exposed or confirmed tender rigging
Z22.2	The *Contractor* undertakes:	not to give or cause any offer, payment, consideration, or benefit of any kind, which constitutes or could be construed as an illegal or corrupt practice, either directly or indirectly, as an inducement or reward for the award or in the execution of this Contract.
Z22.3	The *Contractor* further undertakes:	to comply with all laws, regulations or policies relating to the prevention and combating of bribery, corruption, and money laundering to which it or the *Employer* is subject, including but not limited to the Prevention and Combating of Corrupt Activities Act, 12 of 2004.

Z22.4 The *Contractor's* breach of this Clause constitutes grounds for terminating the Contract or taking any other action as appropriate against the *Contractor* (including civil or criminal action). However, lawful inducements and rewards shall not constitute grounds for termination

Z22.5 If the *Contractor* is found guilty by a competent court, administrative or regulatory body of participating in illegal or corrupt practices, including but not limited to the making of offers (directly or indirectly), payments, gifts, gratuity, commission or benefits of any kind, which are in any way whatsoever in connection with the Contract, the *Employer* shall be entitled to terminate the Contract forthwith and take any other action as appropriate against the *Contractor* (including civil or criminal action).

Z22.6	The Contract award is made without prejudice to any rights the *Employer* may have to take appropriate action later with regard to:	politically exposed persons, including any allegations with regard to state capture.
Z22.7	The Contract award is made without prejudice to any rights the *Employer* may have to take appropriate action later with regard to:	blacklisting by any state entity on the national treasury database.

Z23 *Employer's* step-in rights

Z23.1 If the *Contractor* defaults by failing to comply with his obligations and fails to remedy such default within 4 (four) weeks of the notification of the default by the *Project Manager*, the *Employer*, without prejudice to his other rights, powers and remedies under the Contract, may remedy the default either himself or procure an Other (including any Subcontractor or supplier of the *Contractor*) to do so on his behalf. The *Contractor* bears the reasonable costs of such remedial works.

Z23.2 The *Contractor* co-operates with the *Employer* and facilitates and permits the use of all required information, materials and other matters, including but not limited to documents and all other drawings, CAD materials, data, software, models, plans, designs, programs, diagrams, evaluations, materials, specifications, schedules, reports, calculations, manuals or other documents or recorded information (electronic or otherwise) which have been or are at any time prepared by or on behalf of the *Contractor* under the Contract or otherwise for and/or in connection with any subsequent works) and generally does all things required by the *Project Manager* to achieve this end.

Z24 Design Review by the *Employer*

Z24.1 Upon completion of each batch of design deliverables, a formal design review shall be conducted. At the design review, the *Project Manager* and the *Employer* shall, based on the presented deliverables:

- Assess if the technical requirements have been complied with; and
- Assess if the technical solution can be practically operated, maintained and adequately supported in the *Employer's* South African operating and maintenance environment;
- Assess, based on the Contractor's development and execution performance, if the risks associated with the remainder of the works is acceptable; and
- Assess if the Contractor has sufficient competent resources to complete multiple work streams for execution of the construction and commissioning works.

Z25 Waiver of Lien

Z25.1	The *Contractor* waives and abandons his *Contractor's* lien or any other right of retention which he now has or may in future have in respect of the *works* and shall under no circumstances be entitled to withhold delivery of the same to the *Employer.*
Z26	**Proposed *Contractor's key persons***
Z26.1	The *Contractor's* key persons and other stated resources submitted as part of its original RFP tender (offer) as submitted at the time is deemed included in this contract, and become a material obligation on how the *Contractor* do the works. Any proposed change to the resources, will be subject to the formal acceptance of the *Employer*, in addition to the requirements of replacing a key person as per Core Clause 24.1.
Z27	**Obligations in respect of Job Creation**
Z27.1	The *Contractor* contributes to the *Employer's* job-creation objectives as set out in Returnable Schedule T2.2-19.
Z27.2	The *Contractor's* undertaking as to the number of new jobs created due to the award of this Contract as set out in Returnable Schedule T.2.2-19 will constitute a binding agreement throughout the duration of the Contract until Completion, if not, it will be deemed that the *Contractor* has failed in full to meet this specific material term of the Contract, which after due process has been followed will constitute a reason for termination.
Z27.3	The *Contractor* shall provide to the *Employer*, on a monthly basis or upon receiving an instruction to do so by the *Project Manager*, any documentation and/or evidence required by the *Employer*, which in the *Employer's* opinion, would be necessary to verify whether the *Contractor* has maintained the job-creation undertaking as stipulated in Returnable Schedule T.2.2-19. The *Contractor* shall provide the said documentation and/or evidence within the period stated or as instructed. The provision of the documentation and/or evidence shall not constitute a compensation event.
Z27.4	If at any time the *Project Manager* decides that the *Contractor* is not maintaining the required rate of job creation, the *Project Manager* may reduce any amount that is due or may become due to the *Contractor* by an amount of R100,000 for every new job that the *Contractor* failed to create, until the required rate of job creation is achieved. Such withholding of payment will not entitle the *Contractor* to interest for late payment.
Z28	**Obligations in respect of the Sub Contracting**
Z28.1	The Contractor must sub-contract the amount specified in their submission to one or more EME or QSEs that must be at least 51% black owned and from the Howick community as set out in Returnable Schedule T2.2-20
Z28.2	The *Contractor* shall develop and present for acceptance to the *Project Manager* in writing within 30 (thirty) calendar days from the Contract Date, detailed sub-contracting agreement/s that clearly defines: • the work that will be subcontracted (as per bid); • the value of the contract that will be subcontracted (as per bid) ; • the expected time lines that the sub-contractor/s will execute the work; • the expected timelines of payment to the sub-contractor/s; • BBBEE affidavit/s of the sub-contractor/s must be provided; • Proof of ownership of the sub-contractor/s must be provided; • Financial statements of the sub-contractor must be provided; • Proof of geographical business location and ownership of the sub-contractor (must be from Howick)
Z28.3	It is the responsibility of the *Contractor* to ensure that the sub-contractor/s meets the requirements as stated in Z28.2 above for the duration of the sub-contracting agreement.

Z28.4	It is the responsibility of the *Contractor* to notify the *Employer* of any changes to the sub-contractor/s or changes to the sub-contracting agreement. Any changes to the sub-contractor/s or the sub-contracting agreement must still meet the requirements as stated in Z28.1.
Z28.5	The *Contractor* must provide proof of payments made to the sub-contractor in line with the payment timelines as defined in Z28.2 to the Employer.
Z28.6	The *Employer* has the right to withhold payment in respect of the main offer, should the contractor default on the implementation of the sub-contracting agreement. In such an instance the value of the payment withheld, shall be no less than the value of the sub-contracting requirement in terms of which non-performance has occurred.
Z28.7	The contract will be conditional on the sub-contracting requirement being met as the bidder has committed to in the RFP Returnable Schedule T2.2-20 Therefore, failure to submit or thereafter to agree to the sub-contracting requirements (ref Z28.2) within the stipulated timelines may results in contractual penalties being imposed.
Z28.8	The *Employer* has the right to terminate the contract should the *Contractor* default on the sub-contracting requirements.
Z29	**Additional clauses relating to the Shorter Schedule of Cost Components (SSCC)**
Z29.1	People: Replace Sub Clause 11 of the SSCC under the People Cost Component with Amounts calculated by multiplying each of the People Rates by the total time appropriate to that rate spent on work in the contract.
Z29.2	Equipment: Replace Clause 21 of the SSCC with: Amounts for Equipment listed in the Contract Data which is not in the published list stated in the Contract Data. These amounts are the rates stated in the Contract Data multiplied by the time for which the Equipment is required.
Z29.3	Charges: Replace the first paragraph of Sub Clause 41 of the SSCC with: The proven Defined Cost to cover the costs of,
Z30	**Obligations in respect of Contract Skills Development Goal (CSDG) goals**
Z30.1	It is a material condition of the Contract that the Contractor meet the required CSDG goals.
Z30.2	Compliance with requirements The *Contractor* shall: 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. b) at intervals not exceeding three (3) months, submit to the employer's representative interim contract compliance training reports; and 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.
Z30.3	The *Contractor* ensures that all CSDG goals and compliance requirements are satisfied.

Z30.4	The *Contractor* notifies the *Project Manager* of any changes to the approved CSDG plan due to delays beyond the *Contractor's* control and compensation events. The *Contractor* does not change the CSDG goals without the *Project Manager's* written approval.
Z30.5	If at any time the *Project Manager* decides that the *Contractor* is not maintaining the achieving the CSDG goals at the required rate, the *Project Manager* may reduce any amount that is due or may become due to the *Contractor* by an amount of R100,000 for every CSDG that the *Contractor* failed to achieve until the required CSDG is achieved. Such withholding of payment will not entitle the *Contractor* to interest for late payment.
Z30.6	If it becomes evident to the *Project Manager* that the *Contractor* will fail to meet the full CSDG goals, this breach of the Contract will constitute a reason for termination of the Contract.
Z31	**Provisional Activities in the Activity Schedule**
Z31.1	The *Employer* has included Provisional Activities in the Option A – Activity Contract Pricing Schedule. These activities are identified as "Provisional "in the activity schedule and have a nominal value set at the tender stage.
Z31.2	Provisional activities contained in the Option A - Activity Contract Pricing Schedule are owned by the *Employer* and may only be used at the sole discretion of the *Employer.*
Z31.3	The *Contractor* is not entitled to payment for a Provisional Activity unless the *Project Manager* has: • approved an amount for Price adjustment for inflation, in which case such amount is offset against the Provision Activity amount for Price adjustment for inflation.
Z31.4.	If the *Project Manager* instructs the Provisional Activity it becomes part of the *works*, and the *Contractor* submits a quotation under Clause 62.1.
Z31.5	The quotation for a Provisional Activity shall include adjustments for defined cost and time impacts subject to assessment under Clause 63.

C1.2 Contract Data

Part two - Data provided by the *Contractor*

The tendering *Contractor* is advised to read both the NEC3 Engineering and Construction Contract - June 2005 (with amendments June 2006 and April 2013) and the relevant parts of its Guidance Notes (ECC3-GN) in order to understand the implications of this Data which the tenderer is required to complete. An example of the completed Data is provided on pages 156 to 158 of the ECC3 Guidance Notes.

Completion of the data in full, according to Options chosen, is essential to create a complete contract.

Clause	**Statement**	**Data**
10.1	The *Contractor* is (Name):	
	Address	
	Tel No.	
	Fax No.	
11.2(8)	The *direct fee percentage* is	**%**
	The *subcontracted fee percentage* is	**%**
11.2(18)	The *working areas* are the Site and	
24.1	The *Contractor's* key persons are:	All *key persons* identified in the Works Information with relevant qualifications, registrations and experience including all resources identified in its tender submission
		The *key personnel*, organisational structure, and resource strategy submitted in our offer remain substantially the same as previously submitted and evaluated. Any adjustments to personnel or resourcing levels reflected below: • Are made to align with the refined Scope; • Maintain or improve the capability, capacity and experience profile previously evaluated; and • Do not diminish the overall technical strength of our proposal.
	1 Name:	
	Job:	*Contractor* Project Manager
	Responsibilities:	

	Qualifications:	
	Experience:	
	2 Name:	
	Job	Engineering Manager
	Responsibilities:	
	Qualifications:	
	Experience:	
	3 Name:	
	Job	Lead Civils Engineer
	Responsibilities:	
	Qualifications:	
	Experience:	
	4 Name:	
	Job	Lead Process Engineer
	Responsibilities:	
	Qualifications:	
	Experience:	
	5 Name:	
	Job	Lead Mechanical Engineer
	Responsibilities:	
	Qualifications:	
	Experience:	
	6 Name:	
	Job	Lead Electrical Engineer
	Responsibilities:	
	Qualifications:	
	Experience:	
	7 Name:	
	Job	Lead Instrumentation Engineer
	Responsibilities:	

	Qualifications:	
	Experience:	
	8 Name:	
	Job	Lead Structural Engineer
	Responsibilities:	
	Qualifications:	
	Experience:	
	9 Name:	
	Job	Construction Manager
	Responsibilities:	
	Qualifications:	
	Experience:	
	10 Name:	
	Job	Health and Safety Manager
	Responsibilities:	
	Qualifications:	
	Experience:	
	11 Name:	
	Job	Health and Safety Officer
	Responsibilities:	
	Qualifications:	
	Experience:	
	12 Name:	
	Job	Senior Quantity Surveyor
	Responsibilities:	
	Qualifications:	
	Experience:	
	13 Name:	
	Job	Lead Planner
	Responsibilities:	

	Qualifications:		
	Experience:		
	14 Name:		
	Job	Quality Manager	
	Responsibilities:		
	Qualifications:		
	Experience:		
		CV's (and further key persons data including CVs) are appended to Tender Schedule entitled .	
11.2(14)	The following matters will be included in the Risk Register		
31.1	The programme identified in the Contract Data is		
A	**Priced contract with activity schedule**		
11.2(20)	The *activity schedule* is in		
11.2(30)	The tendered total of the Prices is	**(in figures)** **(in words), excluding VAT**	
	Data for Schedules of Cost Components	*Note "SCC" means Schedule of Cost Components starting on page 60 of ECC, and "SSCC" means Shorter Schedule of Cost Components starting on page 63 of ECC.*	
A	**Priced contract with activity schedule**	**Data for the Shorter Schedule of Cost Components**	
11 in SSCC	The *people rates* are	Annexure A to the Pricing Data Part C2.3	
21 in SSCC	The list of Equipment is	Annexure B to the Pricing Data Part C2.4	
22 in SSCC	The rates of other Equipment are:	Not applicable	
41 in SSCC	The percentage for people overheads is:	0% and not applicable refer to Z31	
61 in SSCC	The hourly rates for Defined Cost of design outside the Working Areas are	**Category of employee**	**Hourly rate**
Contractor people rates includes for Engineering/design of the works outside of the Working Areas			
62 in SSCC	The percentage for design overheads is	Not applicable as the *people rates* are used	

63 in SSCC	The categories of design employees whose travelling expenses to and from the Working Areas are included in the hourly rates for Defined Cost are:	**All employees**

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Web www.maksure.co.za

maksure RISK SOLUTIONS

1April 2026

To Whom It May Concern,

CERTIFICATE OF INSURANCE: TRANSNET (SOC) LIMITED–PRINCIPAL CONTROLLED INSURANCE

In our capacity as Insurance Brokers to the Transnet Group of Companies, we hereby certify that the undermentioned insurances are currently in place:

INSURED:	Transnet (SOC) Limited
PERIOD:	1 April 2026 to 31 March 2027 (Both days inclusive) DIVISION: Transnet Freight Rail, Transnet Engineering, Transnet Properties, Transnet Pipelines, Transnet National Ports Authority, Transnet Port Terminals and Transnet Rail Infrastructure Manager
THE INSURED'S VAT NO:	4720103177 THE INSURED'S
COMPANY REGISTRATION NO:	1990/000900/30
POSTAL ADDRESS (Head Office):	96 Rissik Street, Braamfontein, Johannesburg, PO Box 72501, Parkview 2122

CONTRACT WORKS INSURANCE

Cover Provided	Contract Works - Physical loss or damage to the Property Insured which being materials, plant and other things for incorporation into the permanent works.
Insurer(s)	Santam, Consort and Hollard Insurance
Lead Insurer's Policy Number	MZAR35023-CAR
The Contract Site	Any location within the Territorial Limits upon which The Insured Contract is to be executed or carried out as more fully defined in The Insured Contract documents together with so much of the surrounding area as may be required or designated for the performance of The Insured Contract.
Territorial Limits	The Republic of South Africa.
The Contractor	All Contractors undertaking work in connection with The Insured Contract including the Employer to the extent that the Employer undertakes work in connection with The Insured Contract;
Sub-Contractors	All Sub-Contractors employed by the Contractor and all other Sub-Contractors (whether nominated or otherwise) engaged in fulfilment of The Insured Contract; and to the extent required by any contract or agreement; transporters, suppliers, manufacturers, vendors, other persons, persons providing storage facilities, plant owners and/or operators in respect of liability loss or damage arising out of The Insured Contract; project

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Cnr Waterfall & Woodmead Drive
Waterfall City, 2090
Johannesburg South Africa
Tel +27 11 805 0086
Fax 086 762 7356
Email info@maksure.co.za
Web www.maksure.co.za

managers, architects, land surveyors, quantity surveyors, engineers and other advisors or consultants or sub-consultants appointed in the performance of the Insured Contract activities arising at the Contract Site provided always that any such person shall not be insured hereunder in respect of liability loss or damage arising out of such person's error or omission in the performance of the professional services for which he was appointed;

Provincial & Government: any Local Provincial or Government Department with which the Insured enters into any contract or agreement for the performance of The Insured Contract; all for their respective rights and interests.

Insured Contracts All Contracts (including any undertaking awarded or commenced prior to Inception of the Period of Insurance) involving design, construction, Performance Testing and Commissioning in respect of the Works and shall Include capital expenditure, upgrade, modification, maintenance or overhaul, refurbishment, renovation, retrofitting or alterations and additions to existing facilities undertaken by the Insured or other Insured Parties acting on their behalf but excluding;

a) contracts which at award stage have a value in excess of R 1,000,000,000;
b) contracts with an estimated construction period exceeding 48 months but increasing to 60 months in respect of rail maintenance contracts and Transnet Freight and Rail contracts for logistical support for inline inspections and identification of defects over a 5 year period in respect of Transnet's pipeline assets (excluding Defects Liability/Maintenance period);
c) contracts involving construction or erection of petrochemical manufacturing plant(s) but this exclusion shall not apply to pipelines and other associated works undertaken by or on behalf of the Insured;
d) contracts in or on any aircraft;
e) Off-shore contracts;
f) Wet Risk Contracts which at award exceeds R500,000,000;
g) Dam Contracts
h) Tunnel contracts which at award exceeds R50,000,000;
i) Tunnel contracts using tunnel boring machines;
j) Underground Mining Contracts;
k) Horizontal Directional Drilling Contracts which at award exceeds R50,000,000;
l) Horizontal Directional Drilling Contracts where total drilling exceeds 1 km;
m) Horizontal Directional Drilling Contracts for pipe diameters greater than 76cm.

Definitions

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1) "Off-shore contracts" means all works and installations in the sea or on the seabed including dredging which are accessible only by ship boat barge or helicopter and do not constitute normal wet works like harbours moles bridges wharves or sewage or cooling water intake or outlet facilities. "OffShore Contracts" shall include oilrigs and oil platforms (but not including oil platforms when connected to the land on completion). The term shall not apply to pre-fabrication works on land associated with an Off-Shore Contract.
2) *"Wet Risk Contracts" shall mean any Contract and/or Works where more than thirty-five (35) percentile of its value is in a permanent body of water or is below the high water mark of any tidal body of water. The term shall include contracts for the construction of wharves, piers, marinas, causeways, breakwaters, jetties, dry docks and offshore pipelines when connected directly to on-shore facilities and canal developments. Wet Risks shall exclude Off- Shore Contracts;*
3) "Dam Contracts", which term shall include weirs and hydroelectric projects involving the construction of dams or weirs;
4) *"Horizontal Directional Drilling Contracts", means micro-tunnelling work for the construction of tunnels utilising surface based horizontal directional drilling equipment.*
5) *Tunnels" means Tunnels (Including declines) involving all of the following;*
   a) *Works below ground level; and*
   b) *Tunnelling machinery below ground level; and*
   c) *A tunnelling crew operating the machinery below ground level;*
   d) *But shall not include Horizontal Directional Drilling Contracts*
6) *"Horizontal Directional Drilling Contracts", means micro-tunnelling work for the construction of tunnels utilising surface based horizontal directional drilling equipment.*
7) *"Underground Mining Contracts", which shall mean any contract involving underground mining.*

Testing Period	120 Days not consecutive.
Maintenance Period	24 Months
Main Policy Extensions	• Costs & Expenses - Limited to a maximum of R50,000,000. • Expediting Measures–Limited to a maximum of R50,000,000. • Professional Fees In Reinstatement Of Property Insured - Limited to a maximum of R50,000,000.

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- Costs & Expenses For Removal Of Debris No Damage - Limited to a maximum of R50,000,000.
- Surrounding Property in care custody or control of the contractor– Limited to a maximum of R55,000,000.
- Fire Brigade & Public Authorities - Limited to a maximum of R10,000,000.
- Public Authority Reinstatement Costs - Limited to a maximum of R20,000,000
- Public Relationship Costs - Limited to a maximum of R1,000,000. Records - Limited to a maximum of R2,000,000.
- Removal to Gain Access - Limited to a maximum of R20,000,000
- Road Reserve and Servitude Extensions - Limited to a maximum of R10,000,000
- Search & Locate Costs - Limited to a maximum of R20,000,000.
- Borrowing Of Plant For Commissioning Purposes - Limited to a maximum of R10,000,000
- Escalation during Construction–30%
- Marine Contribution Clause
- Claim Preparation Costs–Limited to a maximum of R10,000,000

Main Policy Exclusions

- War
- Nuclear Energy Risks
- Terrorism
- Computer Loss General Exception
- DE4 (All types of Works) for defective material workmanship design plan or specification.
- LEG 3 (Mechanical or Electrical Engineering Works only) for defective material workmanship design plan or specification. Limited to maximum of 10% of the total estimated contract value in the aggregate.
- Loss or damage arising during air transit or any ocean voyage or whilst in storage thereafter.
- Occurring during any defects/maintenance period unless cause occurred prior to such defects/maintenance period
- Disappearance or by shortage revealed during routine inventory or periodic stocktaking.
- Consequential loss of whatsoever nature.
- Normal wear and tear, normal atmospheric conditions, rust, erosion, corrosion or oxidisation.
- Due to its own explosion breakdown or derangement occurring after the Testing Period which has operated under load conditions.
- Second hand property due to its own electrical or mechanical breakdown or explosion.
- Cyber and Data

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- Beneficial Occupation–12 months
- Risk Mitigation–Safety Measures with Respect to Precipitation, Flood and Inundation–10 years return period

Deductibles

In respect of loss or damage:
Major Perils shall mean damage caused by storm, rain, tempest, wind, flood, theft, malicious damage, subsidence, collapse, earthquake, testing or commissioning and the consequences of defective design, specification, materials or workmanship (DE4).
Minor Perils shall mean damage caused by a peril not defined as Major Perils defined above.

Contracts with a contract value	**Major perils**	**Minor perils**
0 to R100,000,000	R25,000	R15,000
R100,000,001 to R250,000,000	R50,000	R15,000
R250,000,001 to R500,000,000	R100,000	R25,000
R500,000,001 to R1,000,000,000	R150,000	R25,000
Minimum wet risk deductible	R100,000 per occurrence to apply	
Electrical Cables, Wiring and Accessories	10% of claim minimum R100,000	

LEG 3 Deductible (Only in respect of Mechanical and Electrical contracts);

Contracts with a contract value	**Deductible**
0 to R500,000,000	R1,000,000 per occurrence
R500,000,001 to R1,000,000,000	R1,500,000 per occurrence

PUBLIC LIABILITY

Cover Provided	Contract Works Public Liability–cover the Insured's legal liability in respect of loss or damage or injury to third parties arising out of work performed in respect of the Insured Contracts.
Insurer	Santam
Policy Number	6000/132335
Territorial Limits	The Republic of South Africa.
Insured Contracts	All contracts (including any undertaking awarded or commenced prior to inception of the period of Insurance) involving design, construction, performance testing and commissioning in respect of the works and shall include capital expenditure, upgrade, modification, maintenance or overhaul, refurbishment, renovation, retrofitting or alterations and additions to existing facilities undertaken by the Insured or other Insured Parties acting on their behalf but Excluding: a) Contracts which at award stage have a value in excess of R 1,000,000,000. b) Contracts with an estimated construction period at award exceeding 48 months but 60 months in respect of contracts awarded prior to 1 April 2020 for rail maintenance contracts For

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Transnet Freight & Rail and for Transnet Pipeline's logistical support for inline inspections and identification of defects in respect of Transnet's pipeline assets (all excluding Defects Liability/Maintenance period).

c) Contracts with a Contractual Defects Liability Maintenance Period exceeding 24 months.
d) Contracts involving construction or erection of petrochemical manufacturing plant(s) but this exclusion shall not apply to pipelines and other associated works undertaken by or on behalf of the Insured.
e) Contracts in or on any aircraft.
f) Off-shore contracts - "Off-shore contracts" means all works and installations in the sea or on the seabed and do not constitute normal Wet Risk Contracts like harbours, moles, bridges, wharves or sewage or cooling water intake or outlet facilities, piers, marinas, causeways, breakwaters, jetties, dry docks and offshore pipelines when connected directly to onshore facilities and canal developments. "Off-Shore contracts" shall include oilrigs and oil platforms.

Policy Limits	Contractors Public Liability	R100,000,000 any one occurrence / unlimited during the Period of Insurance
	Contractors Negligent Removal or weakening of Support	R100 000 000 any one occurrence and R100,000,000 per site in the aggregate during the Period of Insurance.
	Statutory Legal Defence Costs	*R5 000 000 in the aggregate during the Period of Insurance.
	Arrest / Assault / Defamation	*R5 000 000 in the aggregate during the Period of Insurance.
	Prevention of Access	*R5 000 000 in the aggregate during the Period of Insurance.
	Trespass / Nuisance	*R5 000 000 in the aggregate during the Period of Insurance.
	Claims Preparation Costs	R5 000 000 any one occurrence
	*Where the limits are noted as in the aggregate during the policy period of insurance, that such aggregated limit is applicable to all Transnet Insured Contracts collectively and in total and does not apply to each contract separately.	
Deductible(s)	R50,000 per occurrence but increased to R5,000,000 in respect of Spread of Fire and/or Hot Works and R250,000 in respect of Sudden and	

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Accidental Pollution and/or Goods on the Hook and/or R150,000 in respect of Developers Removal of Support.

General Policy Exclusions

The policy does not cover:-

- deliberate, conscious and intentional disregard to take reasonable precautions. fines, penalties, punitive and exemplary damages.
- Pollution unless caused by a sudden, unintended and unexpected occurrence.
- cost of removing, nullifying or cleaning up the effects of pollution unless caused by a sudden, unintended and unexpected occurrence.
- the hazardous nature of asbestos.
- War And Terrorism Risks.
- Nuclear Risks.
- Actual or alleged unlawful competition, unfair practices, abuse of monopoly power, cartel activities
- Compulsory Insurance
- Loss or damage and any consequence therefrom to any Data
- Sanctions Exclusion Grid Failure

PROFESSIONAL INDEMNITY

Cover Provided

Professional Indemnity

a) In respect of damages which the Insured shall become legally liable to pay in consequence of neglect, error or omission by or on behalf of the Insured in the conduct or execution of their Professional Activities and Duties as defined.
b) Prior To Handover/Rectification - against loss arising out of any defect in the works discovered prior to the issue of any practical completion or take-over certificate provided that any such defects are caused by a negligent breach of a Professional Activity or Duty by the Insured in consequence of neglect, error or omission by or on behalf of the Insured.

Insurer: Santam

Policy Number: 6000/132337

Jurisdiction: Worldwide excluding North America

Insured Contracts: All contracts (including any undertaking awarded or commenced prior to inception of the period of Insurance) involving design, construction, performance testing and commissioning in respect of the works and shall include capital expenditure, upgrade, modification, maintenance or overhaul, refurbishment, renovation, retrofitting or alterations and additions to existing facilities undertaken by the Insured or other Insured Parties acting on their behalf but **Excluding:**

a) Contracts which at award stage have a value in excess of R 1,000,000,000.
b) Contracts with an estimated construction period at award exceeding 48 months (excluding Defects Liability/Maintenance period).
c) Contracts with a Contractual Defects Liability Maintenance Period exceeding 24 months.
d) Contracts involving construction or erection of petrochemical manufacturing plant(s) but this exclusion shall not apply to pipelines and other associated works undertaken by or on behalf of the Insured.

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e) Contracts in or on any aircraft.
f) Off-shore contracts - "Off-shore contracts" means all works and installations in the sea or on the seabed and do not constitute normal Wet Risk Contracts like harbours, moles, bridges, wharves or sewage or cooling water intake or outlet facilities, piers, marinas, causeways, breakwaters, jetties, dry docks and offshore pipelines when connected directly to onshore facilities and canal developments. "Off-Shore contracts" shall include oilrigs and oil platforms.

Limit Of Indemnity	Professional Indemnity - *R100,000,000 in the aggregate during the policy period of insurance. *Where the limit is noted as in the aggregate during the policy period of insurance, that such aggregated limit is applicable to all Transnet Insured Contracts collectively and in total and does not apply to each contract separately.

Policy Extension Limits Of Indemnity

Claims Preparation Costs	*R7,500,000 in the aggregate during the policy period of insurance.
Loss of Documents	*R2,000,000 in the aggregate during the policy period of insurance.
Statutory Defence Costs	*R5,000,000 in the aggregate during the policy period of insurance.
Defamation	*R5,000,000 in the aggregate during the policy period of insurance.
Infringement of Copyright	*R5,000,000 in the aggregate during the policy period of insurance.

*Where the limits are noted as in the aggregate during the policy period of insurance, that such aggregated limit is applicable to all Transnet Insured Contracts collectively and in total and does not apply to each contract separately.

Deductibles	R5,000,000 each and every but R10,000 in respect of Claims Preparation Costs, Loss of Documents, Statutory Defence Costs, Defamation and Infringement Of Copyright.
Policy Special Conditions	Condition precedent to liability that the Insured is fully qualified and registered with the relevant Industry Body/Association in terms of legislation as applicable. Prior to hand over/rectification–the insured must give prior written notice to the Insurers of the intention to take remedial action to rectify such defect and obtain the Insurers' written agreement to such action being taken and the costs and expenses expected to be expended.
Policy Main Exclusions	• Excludes all consequential loss other than cost of re-design, rectification and replacement because of the defect. • Excludes Supervision. • Excludes liability arising out of environmental impairment / pollution Excludes the cost of removing, nullifying or cleaning-up the effects of environmental impairment/ pollution.

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- Excludes war, invasion, acts of foreign enemies, hostilities or warlike operations (whether war be declared or not), civil war, rebellion, revolution, insurrection, civil commotion assuming the proportions of or amounting to an uprising, military or usurped power, any act of terrorism and nuclear risks.
- Excludes fines, penalties, punitive and exemplary damages, multiplication of compensatory damages and/or any other non-compensating damages of any kind.
- Excludes liability from the hazardous nature of asbestos.
- Excludes medical malpractice.
- Excludes failure to meetcontractual requirements relating to efficiency,
- output or durability.
- Excludes failure to meet completion dates
- Excludes the estimation of probable costs other than cost advice and cost planning services normally provided by a Quantity Surveyor or Project manager.
- Excludes incorrect authorisation of payment.
- Excludes breach of any statutory regulation.
- Excludes liability from the insolvency, liquidation or judicial management of the Insured.
- Excludes the certification of value of work executed by any contractor where the Insured has an equity interest in such contractor.
- Excludes liability due to unlawful competition, unfair practices, abuse of monopoly power, cartel activities or breach of a competitions ac
- Sanctions Exclusion
- Grid Failure

This certificate of the insurance cover arranged is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policies issued by Insurers.

Langa Sigodi

Account Executive: Corporate and Global Markets

C1.3 Forms of Securities

Pro forma Performance Guarantee

For use with the NEC3 Engineering & Construction Contract - June 2005 (with amendments June 2006 and April 2013)

The *conditions of contract* stated in the Contract Data Part 1 include the following Secondary Option:

Option X13: Performance bond

The pro forma document for this Guarantee is provided here for convenience but is to be treated as part of the *Works Information*.

The organisation providing the Guarantee does so by copying the pro forma document onto its letterhead without any change to the text or format and completing the required details. The completed document is then given to the *Employer* within the time stated in the contract.

The Performance Bond needs to be issued by an institution that are reasonably acceptable to the *Employer*.

Transnet may choose to not to accept an Issuer. Should the issuer not being accepted, the performance bond needs to be replaced by an issuer that are acceptable to Transnet. Issuers need to be verified for acceptance by Transnet before a performance bond is issued.

Pro-forma Performance Bond (for use with Option X13)

(to be reproduced exactly as shown below on the letterhead of the Surety)

Transnet SOC Ltd
C/o Transnet Pipelines
Transnet Corporate Centre
138 Eloff Street
Braamfontein
Johannesburg
2000

Date:

Dear Sirs,

Performance Bond for Contract No. TPL/2026/08/0578/10542/RFP - Engineering, Procurement and Construction of the Howick Pump Station Fire System Upgrade

With reference to the above numbered contract made or to be made between

Transnet SOC Limited, Registration No. 1990/000900/30 (the *Employer*) and

{Insert registered name and address of the *Contractor*} (the *Contractor*), for

Engineering, Procurement and Construction of the Witbank Depot Fire System Upgrade (the *works*).

I/We the undersigned .....

on behalf of the Guarantor .....

of physical address .....

.....

and duly authorised thereto do hereby bind ourselves as Guarantor and co-principal debtors in solidum for the due and faithful performance of all the terms and conditions of the Contract by the *Contractor* and for all losses, damages and expenses that may be suffered or incurred by the *Employer* as a result of non-performance of the Contract by the *Contractor*, subject to the following conditions:

1. The terms *Employer*, *Contractor*, *Project Manager*, *works* and Completion Certificate have the meaning as assigned to them by the *conditions of contract* stated in the Contract Data for the aforesaid Contract.

2. We renounce all benefits from the legal exceptions "Benefit of Excussion and Division", "No value received" and all other exceptions which might or could be pleaded against the validity of this bond, with the meaning and effect of which exceptions we declare ourselves to be fully acquainted.

3. The *Employer* has the absolute right to arrange his affairs with the *Contractor* in any manner which the *Employer* deems fit and without being advised thereof the Guarantor shall not have the right to claim his release on account of any conduct alleged to be prejudicial to the Guarantor. Without derogating from the foregoing compromise, extension of the construction period, indulgence,

release or variation of the *Contractor's* obligation shall not affect the validity of this performance bond.

4. This bond will lapse on the earlier of

- the date that the Guarantor receives a notice from the *Project Manager* stating that the Completion Certificate for the whole of the *works* has been issued, that all amounts due from the *Contractor* as certified in terms of the contract have been received by the *Employer* and that the *Contractor* has fulfilled all his obligations under the Contract, or

- the date that the Surety issues a replacement Performance Bond for such lesser or higher amount as may be required by the *Project Manager*.

5. Always provided that this bond will not lapse in the event the Guarantor is notified by the *Project Manager*, (before the dates above), of the *Employer's* intention to institute claims and the particulars thereof, in which event this bond shall remain in force until all such claims are paid and settled.

6. The amount of the bond shall be payable to the *Employer* upon the *Employer's* demand and no later than 7 days following the submission to the Guarantor of a certificate signed by the *Project Manager* stating the amount of the *Employer's* losses, damages and expenses incurred as a result of the non-performance aforesaid. The signed certificate shall be deemed to be conclusive proof of the extent of the *Employer's* loss, damage and expense.

7. Our total liability hereunder shall not exceed the sum of:

(say) _____

R _____

8. This Performance Bond is neither negotiable nor transferable and is governed by the laws of the Republic of South Africa, subject to the jurisdiction of the courts of the Republic of South Africa

Signed at _____ on this _____ day of _____ 201_

Signature(s)		
Name(s) (printed)		
Position in Guarantor company		
Signature of Witness(s)		
Name(s) (printed)		

APPROVED GUARANTEE ISSUERS

ABSA BANK LIMITED GROUP
FIRSTRAND BANK LIMITED GROUP
INVESTEC BANK LTD
NEDBANK LTD
STANDARD BANK GROUP
AFRICAN IMPORT-EXPORT BANK
BANK OF AMERICA, N.A
BANK OF CHINA LIMITED GROUP
BARCLAYS BANK PLC GROUP
BNP PARIBAS GROUP
CHINA CONSTRUCTION BANK GROUP
CHINA DEVELOPMENT BANK
CITIBANK GROUP
CREDIT SUISSE GROUP
DEUTSCHE BANK GROUP
GOLDMAN SACHS INTERNATIONAL
HSBC HOLDINGS GROUP
JPMORGAN CHASE BANK GROUP
MACQUARIE BANK LIMITED
MORGAN STANLEY
SOCIETE GENERALE BANK GROUP
STANDARD CHARTERED BANK GROUP
ABN AMRO Bank N.V.
BANCO BILBAO VIZCAYA ARGENTARIA S.A
Coöperative Rabobank U.A.
CREDIT AGRICOLE CORPORATE AND INVESTMENT BANK
DANSKE BANK
INDUSTRIAL DEVELOPMENT CORPORATION
ING Bank N.V.
KBC BANK
LANDESBANK BADEN-WUERTTEMBERG
MIZUHO BANK, LTD
NATIONAL AUSTRALIA BANK LIMITED
SKANDINAVISKA ENSKILDA BANKEN
SUMITOMO MITSUI BANKING CORPORATION
SVENSKA HANDELSBANKEN AB
BRYTE INSURANCE COMPANY LTD
CENTRIQ INSURANCE COMPANY
CREDIT GUARANTEE INSURANCE CORPORATION
GUARDRISK INSURANCE
HOLLARD INSURANCE COMPANY
INFINITY INSURANCE
LOMBARD INSURANCE GROUP
MUTUAL & FEDERAL

RENASA INSURANCE COMPANY
SANTAM
YARD INSURANCE LIMITED

PART 2: PRICING DATA

Document reference	Title	No of pages
C2.1	Pricing Instructions: Option A	6
C2.2	Table 1 : Summary Activity Schedule	2
C2.3	Annexure A : People Rates for the Shorter Schedule of Cost Components	3
C2.4	Annexure B : Equipment Rates for the Shorter Schedule of Cost Components	2
C2.5	Annexure C : Preliminary and General Items	2
	Total number of Pages	15

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 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 (30) The Prices are the lump sums for each of the activities on the Activity Schedule unless later changed in accordance with this contract.

The contract is an NEC3 Option A priced contract with activity schedule. The *Project Manager* assesses payment on the basis of the Price for Work Done to Date, which is the total of the Prices for each group of completed activities and each completed activity which is not in a group (Clause 11.2(27)). A completed activity is one which the *Contractor* carries out in accordance with the Works Information, which is free of Defects that would delay or be covered by immediately following work, and whose completion the *Project Manager verifies* by reference to the Accepted Programme.

1.2. Measurement and Payment

1.2.1. The Activity Schedule provides the basis of all valuations of the Price for *works* done to date, price adjustments for inflation (where applicable) and progress monitoring. The *Project Manager* assesses payment only for completed activities at each assessment date. No part payment is made if the activity is not completed by the assessment date.

1.2.2. The amount due at each assessment date is the total of the Prices for **completed activities and/or milestones** shown on the Activity Schedule.

1.2.3. The *Contractor* bases its detailed Activity Schedule on the *Employer's* Summary Activity Schedule included in Table 1. The Summary Activity Schedule identifies the minimum set of activities required for tender evaluation and like-for-like comparison of bids. It does not constitute Works Information. The *Contractor* expands the Summary Activity Schedule into a detailed Activity Schedule that:

a) summates exactly to the Summary Activity Schedule totals;

b) links each activity or group of activities to operations shown on the Accepted Programme (Clause 31.4); and

c) defines activities with sufficient clarity that the *Project Manager* verifies completion without dispute.

The *Contractor* submits the detailed Activity Schedule for acceptance by the *Project Manager*. The accepted detailed Activity Schedule forms the basis for all payment assessments.

1.2.4. The descriptions in the Summary Activity Schedule are for identification purposes only. The Activity Schedule is integrated with the Prices, Accepted Programme and where required the forecast rate of payment schedule.

1.2.5. The tendered total of the Prices stated in the Contract Data is obtained from the grand total of the Activity Schedule.

1.3. Pre-amble to the Activity Schedule

General

1.3.1. This preamble assists the *Contractor* in pricing the Activity Schedule and in understanding the principles of measurement contained therein.

1.3.2. The Activity Schedule forms part of the contract. The *Contractor* reads it in conjunction with the conditions of contract, Contract Data Part 1, Works Information, Site Information, project specifications, and drawings, which contain the full description of the *works* to be done and the Plant and Materials and Equipment to be used.

1.3.3. Where reference is made to standardised specifications, the *Contractor* uses the latest revision in force at the time of tender and prices the *works* accordingly.

1.3.4. In the event of any contradiction or ambiguity between the Activity Schedule and any other part of the contract, the Activity Schedule governs only the pricing and payment of completed activities. The Works Information governs the scope of the *works*.

1.3.5. The *Contractor* does not use the descriptions, dimensions or quantities set forth in the Summary Activity Schedule or the *Contractor's* detailed Activity Schedule for ordering

Plant and Materials or for the execution of the *works*. The *Contractor* executes the *works* in accordance with the Works Information, the detail drawings supplied for the *works*, the instructions of the *Project Manager* and measurements taken and agreed on Site. No compensation event arising from the use of quantities included in the Activity Schedule is entertained.

1.3.6. Where the *Contractor* includes specific measurement items in its detailed Activity Schedule, the price for such items is deemed to be all-inclusive. No additional measurement items pertaining to the *works* described in the Works Information are entertained by the *Project Manager.*

Structure of the Summary Activity Schedule

1.3.7. The Summary Activity Schedule appended in Part C2.2 is structured to align with the sections of the Works Information. Sub-sections of the Summary Activity Schedule are provided for engineering and the *Contractor's* design, programming and progress reporting, management and start-up, construction, quality assurance, and testing and completion. The sub-sections are further broken down, where reasonably practical, to align with the relevant sections of the Works Information. The *Contractor* prices all sections in full and takes note of items 1.3.22 and 1.3.23 below.

1.3.8. The Shorter Schedule of Cost Components (SSCC) for people and Equipment as appended in Annexures A and B respectively, incudes the cost components comprising of various hourly staff, labour and equipment rates, to be utilised in the event of a change in scope / compensation event.

1.3.9. The *Contractor* takes note of items 1.3.24 and 1.3.25 below for the CSDG allowance.

Function of the Activity Schedule:

1.3.10. Clause 54.1 states that information in the Activity Schedule is not Works Information or Site Information. The *Contractor* therefore provides the *works* in accordance with the Works Information. The Activity Schedule is a pricing document only.

Link to the Programme

1.3.11. The *Contractor* ensures that each activity or group of activities on the detailed Activity Schedule corresponds to operations on the Accepted Programme (Clause 31.4). The *Contractor* develops the programme first and then resources each activity to arrive at the lump-sum price included in the Activity Schedule.

Preparing the Activity Schedule

1.3.12. The *Contractor* prepares the Activity Schedule by breaking down the work described in the Works Information into suitable activities which are well defined, shown on the programme and priced as lump sums.

1.3.13. In preparing the Activity Schedule the *Contractor:*

a) has taken account of the guidance given in the ECC3 Guidance Notes pages 19 and 20;

b) understands the function of the Activity Schedule and how the *works* are priced and paid for;

c) links the Activity Schedule to the operations shown on the Accepted Programme;

d) lists and prices activities which are inclusive of everything necessary and incidental to providing the *works* in accordance with the Works Information;

e) prices within other listed activities any *works* the *Contractor* decides not to show as a separate activity; and,

f) understands that there is no adjustment to the lump-sum price if the amount or quantity of work within an activity later differs from the *Contractor's* estimate at tender. The only basis for a change to the Prices is a compensation event.

Rates and Prices

1.3.14. All prices are in South African Rand and are lump sums.

1.3.15. Items which the *Contractor* is required to price in the Activity Schedule and which the *Contractor* does not price are deemed to be covered by other rates or prices in the Activity Schedule.

1.3.16. The rates and prices in the Activity Schedule:

a) allow for normal working hours as determined by the Department of Labour and/or stated in the Contract;

b) allow for overtime hours necessary to complete the *works* within the Completion Date;

c) allow for inclement weather other than abnormal weather conditions reflected in the weather data; and

d) are shown to two decimal places.

1.3.17. The rates and prices fully reflect the *Contractor's* proposed method of working. Unless otherwise stated, the rates and prices include all duties, taxes and all other obligations arising from the conditions of contract, excluding Value Added Tax. Value Added Tax is calculated and included separately in the grand total.

1.3.18. The rates and prices are the fully inclusive value of the *works* as described under the individual items, including all costs and expenses required for the speedy, efficient, and safe execution of the *works* together with all general risks, liabilities and obligations set forth or implied in the contract.

1.3.19. The rates and prices inserted in the Activity Schedule are deemed to be the fully inclusive value of the *works* as described under the individual items, including all costs and expenses which may be required for the speedy, efficient and safe execution of the *works* together with all general risks, liabilities and obligations set forth or implied in this document.

1.3.20. The rates and prices include (but are not limited to) the following: -

a) all potential inefficiencies arising from the complexity of the *works* and the congested nature of the Site;

b) the provision of all consumables pertinent to the *works*;

c) overhead charges and profit, including provision of all insurances and guarantees;

d) all labour costs;

e) provision and implementation of quality management and control systems and resources;

f) all quality control and acceptance testing;

g) inspection of the *works* by the *Project Manager*, *Supervisor*, Authorised Inspection Authority or Others;

h) protection of all *Employer* and third-party existing services;

i) all temporary services;

j) site establishment and de-establishment;

k) establishment and maintenance of facilities for the *Project Manager;*

l) repair of roadways, walkways and fencing and restoration of the Site;

m) provision of vehicular and pedestrian traffic accommodation;

n) temporary protection measures on private or public properties;

o) provision and maintenance of all Equipment;

p) all survey costs including setting out, baseline surveys and maintenance of benchmarks;

q) integration/interface of Site *works* with Others;

r) management of stormwater run-off and removal of water;

s) compliance with waiver of lien requirements (if applicable); and

t) compliance with health and safety and environmental requirements.

1.3.21. The *Contractor* has the right to payment for compensation events. The *Project Manager* assesses compensation events on the basis of the Shorter Schedule of Cost Components.

Preliminary and General Costs

1.3.22. The *Contractor* incorporates all Preliminary and General costs within the amounts included in the Activity Schedule. No separate claims for Preliminary and General costs are entertained.

1.3.23. The *Contactor* provides details covering the allowances made for Preliminary and General cost items, as detailed in Annexure C appended hereto. These costs are to be provided for information purposes only and do not from part of the Activity Schedule to be used for the evaluation of payments. The *Contractor* is deemed to have incorporated all Preliminary and General costs within the amounts included in the Activity Schedule as described in Table 1.

Contract Skills Development Goal (CSDG)

1.3.24. The *Contractor* includes the Contract Skills Development Goal obligation as a separate, priced activity within the Activity Schedule. Payment for this activity follows the same completion and verification rules that apply to all other activities.

1.3.25. The *Contractor* shall include a 0.25% allowance in the total price for attainment of the Contract Skills Development Goals (CSDG).

Provisional Sum – Contract Price Adjustment

1.3.26. The provisional sum included in the Activity Schedule for escalation is an allowance only. The amount due in respect of escalation shall be determined by applying the Contract Price Adjustment provisions of the Contract, including the applicable indices, formula and adjustment dates. The provisional sum shall be utilised only to the extent required to accommodate the Contract Price Adjustment calculated in accordance with the Contract. Any difference between the provisional sum allowance and the amount so determined shall be adjusted in the Prices.

C2.2 Activity Schedule: Option A

The Employer's Summary Activity Schedule is shown in Table 1 below.

TABLE 1 : SUMMARY ACTIVITY SCHEDULE

Item No	Description	Price
1.	**Engineering**	
1.1	Survey Updates, Investigations and Testing	
1.2	Front-end Engineering Design (FEED) Stage	
1.3	Municipal Submissions	
2.	**Construction**	
2.1	Water Tanks	
2.2	Pump House	
2.3	Access Roadway to New Pump House and Retaining Structures	
2.4	Piping System and Supports	
2.5	New Fire Protection System Complete, Tested and Operable	
2.6	Demolition and Removal of Existing Firefighting System	
2.7	Approved Quality Assurance and Testing Procedures	
2.8	Handover Documentation	
	SUB-TOTAL 1	

	Contract Skills Development Goal (0,25% of the Sub-Total)	
	SUB-TOTAL 2	
	Provide an amount of R2 600 000.00 (Two Million and Six Hundred Thousand Rand) for Cost Price Adjustment	R2 600 000,00
	CARRIED TO FORM OF OFFER	
	VAT @ 15%	
	GRAND TOTAL CARRIED TO FORM OF OFFER	

C2.3 Annexure A : Option A

The people rates in the Shorter Schedule of Cost Components provides the cost components comprising of various hourly staff, labour and equipment rates, that is utilised in the event of a change in scope/ compensation event, to include all people, profit and overheads. The following items are not exhaustive, and should the respondent identify any other resources that may be required for the execution of the *works*, these must be appended to this schedule.

ANNEXURE A : PEOPLE RATES FOR THE SHORTER SCHEDULE OF COST COMPONENTS

Item	Position	Rate per Hour (ZAR) (Ex VAT)
1	**MANAGEMENT**	
1.1	*Contractors* Project Manager	
1.2	Health and Safety Manager	
1.3	Health and Safety Officer	
1.4	Senior Quantity Surveyor	
1.5	Lead Planner	
1.6	Environmental Officer	
1.7	Stakeholder Management and Social Facilitation Officer (SMSFO)	
1.8	Quality Control Manager	
1.90	Senior Document Controller	
2	**ENGINEERING**	
2.1	Engineering Manager	
2.2	Lead Civil Engineer	
2.3	Junior Civil Engineer	

Item	Position	Rate per Hour (ZAR) (Ex VAT)
2.4	Civil Technician	
2.5	Lead Process Engineer	
2.6	Junior Process Engineer	
2.7	Lead Mechanical Engineer	
2.8	Junior Mechanical Engineer	
2.9	Lead Electrical Engineer	
2.10	Junior Electrical Engineer	
2.11	Lead Instrumentation Engineer	
2.12	Junior Instrumentation Engineer	
2.13	Lead Structural Engineer	
2.14	Junior Structural Engineer	
2.15	Surveyor	
2.16	Survey Assistant	
3	**CONSTRUCTION**	
3.1	Construction Manager	
3.2	Senior Foreman	
3.3	Junior Foreman	
3.4	Plant Operator	
3.5	Inspector	

Item	Position	Rate per Hour (ZAR) (Ex VAT)
3.6	Welder	
3.7	Semi-Skilled Labourer	
3.8	Unskilled Labourer	

C2.4 Annexure B: Option A

The equipment rates in the Shorter Schedule of Cost Components detailed below incudes the cost components comprising of equipment rates, to be utilised in the event of a change in scope/ compensation event, to include all equipment profit and overheads. The following items are not exhaustive, and should the respondent identify any other resources that may be required for the execution of the *works,* these must be appended to this schedule.

ANNEXURE B: EQUIPMENT RATES FOR THE SHORTER SCHEDULE OF COST COMPONENTS

Item	Item	Hourly Rate (Wet) (ZAR) (Ex VAT)
1	**VEHICLES**	
1.1	Staff Transport : Type / Capacity :	
1.2	Staff Transport : Type / Capacity :	
1.3	1 Tonne Light Delivery Vehicle	
1.4	3 Tonne Delivery Vehicle	
1.5	5 Tonne Delivery Vehicle	
1.6	8 Tonne Delivery Vehicle	
1.7	Lowbed : Capacity	
1.8	6 m³ Tipper	
1.9	10 m³ Tipper	
1.10	20 m³ Tipper	
1.11	Water Tanker : Capacity :	
2	**CONSTRUCTION MACHINERY**	
2.1	Sideboom : Make / Model :	
2.2	Crane : Capacity	

Item	Item	Hourly Rate (Wet) (ZAR) (Ex VAT)
2.3	Bulldozer : Make / Model:	
2.4	Grader : Make / Model :	
2.5	Excavator : Make / Model :	
2.6	TLB : Make / Model :	
2.7	Bobcat : Make / Model :	
2.8	Mobile Screening Plant : Make / Model :	
2.9	Vibratory Roller : Make / Model :	
2.10	Tandem Roller : Make / Model:	
3	**OTHER EQUIPMENT**	
3.1	Welding Plant : Make / Model :	
3.2	Plate Compactor : Make / Model :	
3.3	Generator : Make / Model :	
3.4	Compressor : Make / Model :	

C2.5 Annexure C : PRELIMINARY AND GENERAL ITEMS

The *Contractor* provides details covering the allowances made for Preliminary and General cost items, as detailed below, in Annexure C. **These costs are to be provided for information purposes only and do not from part of the Activity Schedule and is used for the evaluation of compensation events only**. The *Contractor* is deemed to have incorporated all Preliminary and General costs within the amounts included in the Activity Schedule as described in Table 1.

The *Contractor* indicates the estimated number of months required to complete the *works* as detailed in the *Contractor's* programme, to be inserted in the relevant column for Time-Related Items as listed below.

Item No	Item	Unit	Qty.	Rate	Amount (ZAR) (Ex VAT)
1	**FIXED CHARGE ITEMS**				
1.1	Contractual Requirements	Sum			
1.2	Establishment of Facilities on Site	Sum			
1.3	Facilities for *Supervisor* and *Employers Agent*	Sum			
1.4	Facilities for *Contractor*:				
1.4.1	Offices and Storage Sheds	Sum			
1.4.2	Workshops	Sum			
1.4.3	Laboratories	Sum			
1.4.4	Living Accommodation	Sum			
1.4.5	Ablution and Latrine Facilities	Sum			
1.5	Equipment	Sum			
1.6	Traffic Accommodation	Sum			
1.7	Dewatering and Dealing with Water on the Works	Sum			
1.8	Other Fixed Charge Obligations	Sum			
1.9	Removal of site establishment	Sum			

Item No	**Item**	**Unit**	**Qty.**	**Rate**	**Amount (ZAR) (Ex VAT)**
2	**TIME RELATED ITEMS**				
2.1	Contractual Requirements	Month			
2.2	Operation and Maintenance of Facilities on Site	Month			
2.3	Facilities for *Supervisor* and *Employers Agent*	Month			
2.4	Facilities for *Contractor*:				
2.4.1	Offices and Storage Sheds	Month			
2.4.2	Workshops	Month			
2.4.3	Laboratories	Month			
2.4.4	Living Accommodation	Month			
2.4.5	Ablution and Latrine Facilities	Month			
2.5	Water Supplies, Electric Power, Communications	Month			
2.6	Equipment	Month			
2.7	Staff Transport	Month			
2.8	Supervision for Duration of Construction	Month			
2.9	Company and Head Office Overhead Costs for Duration of Construction	Month			
2.10	Traffic Accommodation	Month			
2.11	Dewatering and Dealing with Water on the Works	Month			
2.12	Other Time Related Obligations	Month			

PART C3: SCOPE OF WORK

Document reference	Title	No of page
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1 ABBREVIATIONS

Abbreviation	Meaning given to the abbreviation
2D	2-Dimensional
3D	3-Dimensional
AFC	Approved For Construction
AFT	Applied Flow Technology
AIA	Authorised Inspection Authority
ANSI	American National Standards Institute
API	American Petroleum Institute
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
BS	British Standards
CEMP	Construction Environmental Management Plan
CFLC	Cold Formed Lip Channels
CHSM	Construction Health and Safety Manager
CHSO	Construction Health and Safety Officer
CIRP	Contractor's Industrial Relations Practitioner
CM	Construction Manager
COC	Certificate of Conformity/Compliance
dB	Decibel
DB	Distribution Board
DCP	Dynamic Cone Penetrometer
DIN	Deutsches Institut für Normung
DOC	Document
DWS	Department of Water and Sanitation
ECC	Engineering and Construction Contract
ECP	Engine Control Panel
EN	European Norm
EO	Environmental Officer
Ex	Explosion-Proof/ Explosion-Protected Certification
FIC	Field Inspection Checklists
FCP	Fire Control Panel

Abbreviation	Meaning given to the abbreviation
FEED	Front End Engineering Design
FM	Factory Mutual (FM Global)
FMSS	Field Mounted Start Stations
GA	General Arrangement
GPS	Global Positioning System
GRP	Glass Reinforced Plastic
H&S	Health and Safety
HAZOP	Hazard and Operability Study
HDG	Hot-Dip Galvanized
HDPE	High-Density Polyethylene
IA	Intrinsically Safe Approval/ Certification
IBC	Inter-mediate Bulk Container
ID	Identity Document
IMO	International Maritime Organization
IR	Infrared
IRCC	Industrial Relations Co-ordinating Committee
ISO	International Organization for Standardization
IT	Information Technology
ITP	Inspection and Test Plans
JPCP	Jockey Pump Control Panel
JPEG	Joint Photographic Experts Group
MB	Megabyte
MCC	Motor Control Center
mm	Millimetre
MPa	Megapascal
MSS	Manufacturers Standardization Society of the Valve and Fittings Industry
NACE	National Association of Corrosion Engineers
Native	Original electronic file format of documentation
NEBOSH	National Examination Board in Occupational Safety and Health
NCR	Non-conformance Report
NDT	Non-Destructive Testing

Abbreviation	Meaning given to the abbreviation
NEC3	New Engineering Contract, Third Edition
NFPA	National Fire Protection Association
NRS	National Rationalisation of Standards
OEM	Original Equipment Manufacturer
OHS	Occupational Health and Safety
OHSAct	Occupational Health and Safety Act, No. 85 of 1993
P&IDs	Process and Instrumentation Diagrams
PDF	Portable Document Format
PES	Project Environmental Specifications
PHA	Preliminary Hazard Assessment
PIRM	Project Industrial Relations Manager
PIRPMP	Project Industrial Relations Policy and Management Plan
PLA	Project Labour Agreements
PLC	Project Liaison Committee
PQP	Project Quality Plan
PSIRM	Project Site Industrial Relations Manager
PTFE	Polytetrafluoroethylene
QA	Quality Assurance
QC	Quality Control
QCP	Quality Control Plan
QMP	Quality Management Plan
QMS	Quality Management System
RFI	Request for Information
RGB	Red, Green, Blue
SA	South Africa/ South African
SABS	South African Bureau of Standards
SAIW	South African Institute of Welding
SANAS	South African National Accreditation System
SANS	South African National Standards
SMSFO	Stakeholder Management and Social Facilitation Officer
SHE	Safety, Health and Environment

Abbreviation	Meaning given to the abbreviation
SHEQ	Safety, Health and Environment and Quality
SOC	State Owend Company
SSPC	The Society for Protective Coatings
STD	Standard
SWL	Safe Working Load
TQ	Technical Queries
TIMS	Transnet Integrated Management System
UL	Underwriters Laboratories
uPVC	Unplasticized Polyvinyl Chloride
UV	Ultraviolet
VAT	Value-Added Tax
VDE	Verband der Elektrotechnik, Elektronik und Informationstechnik
WPS	Welding Procedure Specification
WPQR/PQR	Welding Procedure Qualification Records

2 DESCRIPTION OF THE WORKS

2.1 Executive Overview

The Howick Pump Station Fire System Upgrade project, commissioned by Transnet Pipelines, is a multi-disciplinary engineering, procurement, and construction initiative aimed at delivering a fully functional, modern fire protection system for fuel handling areas at the Howick Pump Station.

The *works* encompasses the detailed design, supply, installation, commissioning, and handover of new fire protection infrastructure, including water storage tanks, a fire pump house, fire pumps within containerised solutions and foam systems, fire alarm and control systems and piping network. The *works* also require the demolition of parts of the existing fire protection system, with the site remaining operational 24/7 throughout the project. The *Contractor* coordinates activities to minimize disruption and ensure safety, quality, and compliance with all statutory and operational requirements.

To clearly define the scope and requirements, the *Employer* provides a comprehensive set of documents and drawings. These include general arrangement and location drawings, detailed specifications, models, and other descriptive means. The *Employer's* conceptual engineering solution, referred to as the *Employer's* Design, establishes the minimum acceptable requirements for the *Contractor's* design and forms the baseline for acceptance. This design is supported by discipline-specific documents for civil, structural, mechanical, fire, electrical, and instrumentation engineering, as well as process and instrumentation diagrams (P&IDs), site layout plans, and technical specifications. The *Contractor* documents and submits final construction details and as-built records as part of the project deliverables. The *Employer's* Design sets the minimum requirements and is issued as the basis only and any deviations must be reviewed and accepted by the *Project Manager*.

The execution of the *works* is subject to several important constraints. These include restrictions on site access, the need to coordinate construction activities with ongoing depot operations, and adherence to specified sequences of construction. The *Contractor* complies with operational constraints such as maintaining safe access routes, minimizing disruption to existing operations, and ensuring that hazardous areas are made safe before work begins. Additional requirements include verifying and protecting survey benchmarks, managing temporary works, and coordinating with other contractors and *Employer* staff. All activities are planned to accommodate regulatory, safety, and environmental requirements, with any inconsistencies or conflicts in standards resolved by applying the most stringent and safety-oriented approach. The *Contractor* proactively identifies and addresses any constraints or conflicts, ensuring that the project objectives are met without compromising safety or operational continuity.

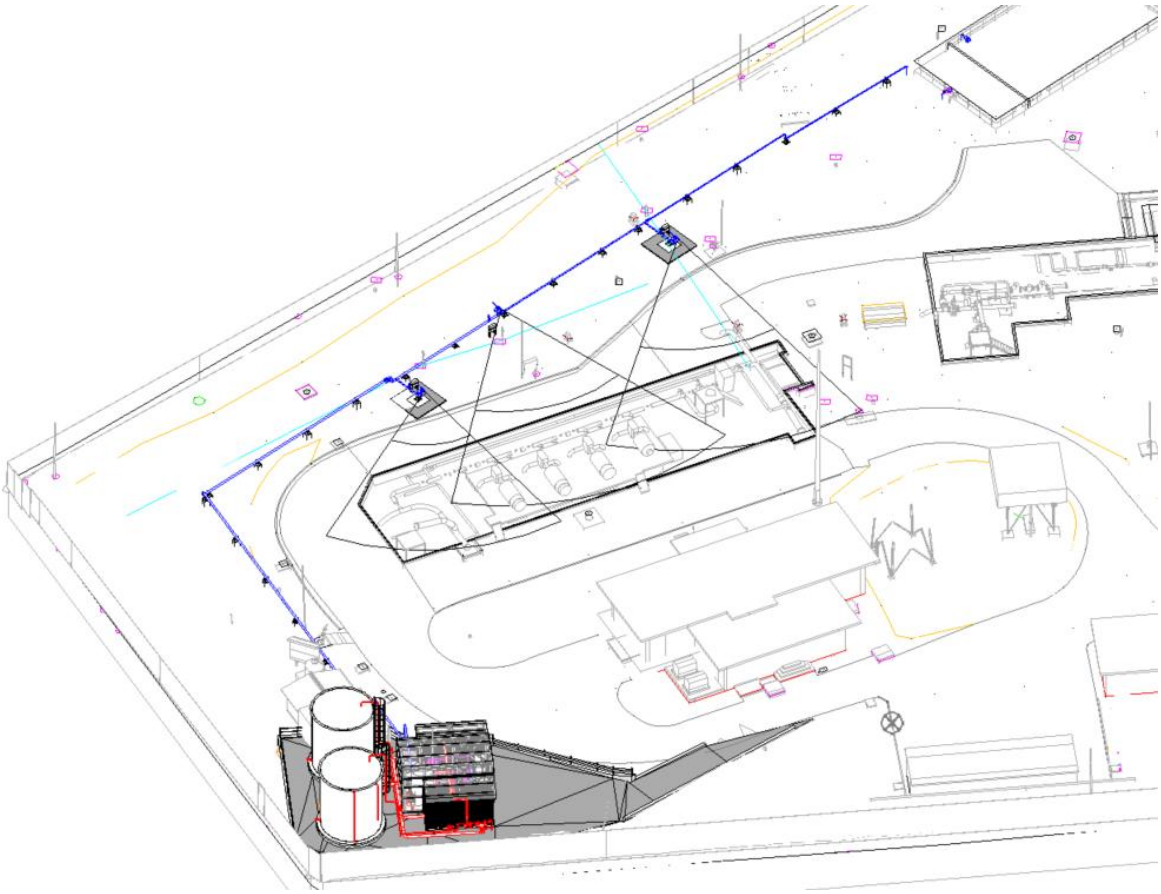

Figure 1: Conceptual Design of New Fire System

2.2 Employers Objectives

The existing firefighting system at the Howick Pump Station has reached the end of its useful life and no longer provides adequate mitigation for the current risk profile of the Site. The *works* requires an upgrade of the existing fire system to align with the *Employers* current and industry accepted norms, standards and specifications for fire systems.

The *Employer* aims to appoint a qualified *Contractor* to execute the *works* in strict accordance with all relevant specifications, codes and standards. This *works* encompasses engineering, detailed design, procurement, construction, and commissioning of the new firefighting system by the contractual Completion Date.

A key focus is placed on the *Employer's* commitment to achieving Zero Harm, with no Lost Time or Occupational Health and Safety (OHS) incidents, as well as zero breaches of environmental legislation during project execution.

It is imperative that ongoing operations at the Howick Pump Station remain unaffected by construction and commissioning activities. The *Contractor* coordinates closely with the *Employer's* operations division and assumes responsibility for all risks associated with this requirement.

Compliance with Transnet Environmental Specifications, Transnet's Standard Health, Safety, Security and Environmental Specifications, and all terms and conditions of permits and licenses granted by relevant authorities, and utility owners is also mandatory.

By successfully completing this project, the *Employer's* assets will meet the most recent SANS Codes and Standards, ensuring that the business has sufficient firefighting capabilities to mitigate possible fire hazards and related safety and operational risks.

2.3 Works Overview

The *works* comprise all activities necessary for the successful delivery of the project in accordance with the Works Information.

This includes engineering and detailed design development, procurement of required Plant and Materials, and construction activities to achieve completion by the Completion Date.

The *Contractor* provides all labour, Plant, Materials and resources required, and coordinates tasks under the headings of General, Engineering and Design, Procurement, Construction, Commissioning and Handover and Demolition, ensuring compliance with performance criteria, statutory requirements, and health and safety obligations, as described hereunder:

2.3.1 General

- Acts as the principal contractor as defined by the Construction Regulations
- Establishes site facilities, Plant, Material, Equipment and people as necessary for the complete and successful execution of the *works*.
- Visits site to inspect, gather and verify all necessary information required to successfully carry out the *works*.
- Provides a site storage facility for Plant, Material and Equipment.
- Designs temporary works
- Develops, implements and complies with the Health, Safety, Security and Environmental requirements of the Works Information
- Provides the necessary insurances and guarantees
- Complies with the document transmittal and receipt procedures outlined in the Works Information
- Removes the *Contractors* site facilities, waste and final tidying up of the Site prior to final site demobilisation.

2.3.2 Engineering and Design

- Verifies and updates *Employer* surveys and information as necessary
- Performs any additional engineering surveys, investigations and testing as required or deemed necessary prior to commencement of engineering and design activities
- Establishes the performance specifications of the new firefighting system that meet or exceed the minimum performance specifications set by the Employers Design

- Accepts full professional liability for the engineering and design
- Produces a detailed engineering package, that complies at least with the minimum design parameters of the Works Information, and submits the proposed engineering and design to the *Employer* for review and acceptance
- Produces detailed design and engineering of new firefighting pump-sets as part of a containerised solution, foam and water tanks, fire control systems and associated electrical infrastructure.
- Selects appropriate Plant and Materials to ensure the performance objectives of the *works* are met
- Prepares documentation and submits to the relevant authorisation bodies for approval

2.3.3 Procurement

- Procures all Plant and Materials in accordance with the engineering design accepted by the *Employer* and in accordance with the Works Information
- Provides the necessary insurances during storage off-site and during delivery to site
- Delivers Plant and Materials to Site, and receives, stores and preserves them on Site

2.3.4 Construction

- Pre-fabricates, delivers to site, installs, constructs and tests stainless steel and carbon steel piping systems to ASME B31.3
- Constructs new foundations for new water tanks, the new pump house, containerised solutions, pipe supports and retaining walls
- Constructs additional draw-boxes and installs cable sleeves
- Constructs new stormwater headwalls and installs new pipeline
- Constructs the new pump house and pipe supports
- Manufactures and provides electrical distribution boards (DB's) and motor control centres (MCC's)
- Manufactures and provides a fire control system to initiate and control the new firefighting system
- Constructs miscellaneous hardstand surface slabs, roadworks and paving
- Installs and tests Plant and Materials for the mechanical, fire, electrical and instrumentation disciplines

- Prepares surfaces and applies corrosion protection systems for piping, tanks and structural steel
- Provides scaffolding, cranage and other means of access as necessary for the execution of the *works*
- Develops quality assurance (QA) and testing procedures in accordance with the Works Information

2.3.5 Commissioning and Handover

- Provides all the Equipment, Plant, Materials and expertise required to commission the new fire system to the accepted performance criteria
- Prepares as built and other handover documentation for submission to the *Employer*

2.3.6 Demolition and Relocation

- Decommissions, demolishes, dismantles, disposes of and relocates Plant and Materials of the existing fire system inclusive of the pump house building, fire shelter, water tank and miscellaneous concrete structures and other identified items from the Site to the nominated locations
- Restores and rehabilitates affected Site areas to their pre-*works* condition.
- Relocates existing Plant and Materials removed from the existing fire system to the *Employers* stores and workshops

2.4 Statutory Requirements

The *Contractor* carries out the *works* according to the technical, health and safety, environmental, quality, industrial relations, and scheduling requirements detailed in the Works Information.

At a minimum, the *Contractor* complies with the latest edition of the following statutory requirements during execution:

- Occupational Health and Safety Act (Act 85 of 1993, as amended), including related legislation and regulations
- Project and Construction Management Professions Act 2000 (Act No. 48 of 2000)
- Engineering Professions Act 46 of 2000
- Identification of Engineering Work Rules, as amended, issued under the Engineering Professions Act

- Overarching Code of Practice for the Performance of Engineering Work, as amended, issued under the Engineering Professions Act
- Construction Regulations, as amended, issued under the Occupational Health and Safety Act
- Pressure Equipment Regulations, as amended, issued under the Occupational Health and Safety Act
- Critical Infrastructure Protection Act (Act No. 8 of 2019), together with the National Key Points Act (Act No. 102 of 1980)
- National Building Regulations and Standards Act 103 of 1977
- Hazardous Substances Act (Act No. 15 of 1973)
- National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended (NEMA)
- National Water Act, 1998 (Act No. 36 of 1998) (NWA)
- National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004)
- National Environmental Management: Waste Act, 2004 (Act No. 59 of 2004)
- National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004).
- National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003).
- Petroleum Pipeline Act (Act No. 60 of 2003).
- Road Traffic Act (Act No. 93 of 1996)
- Construction Industry Development Board Act (Act No. 38 of 2000).
- Electricity Act 1984 (Act 41 of 1984)

2.5 Order of Precedence

The sequential order of precedence for this *works* is as follows:

- Statutory requirements and permits as set out above.
- Additional specified requirements detailed in the Works Information.
- *Employer's* specific standards

Should any inconsistency, conflict, or discrepancy arise among standards, specifications, or regulations, the most stringent and safety-oriented requirement applicable to the *works* shall take precedence. Any such inconsistencies must be promptly reported to the *Project Manager* for resolution prior to construction, in accordance with NEC3 ECC Clause 17.1.

3 GENERAL OBLIGATIONS OF THE *CONTRACTOR*

The *Contractor* provides and maintains Equipment, provides design and engineering expertise, Plant and Materials, construction utilities, facilities, offices, employees, services, security and access to execute the *works*. Offices for the *Supervisor* are provided by the *Contractor* throughout the *works*.

The *Contractor* provides temporary roads and accessways to minimize disruption to the *Employer's* existing operations.

3.1 Documentation and Meetings

The *Contractor* sends out meeting requests and attends online meetings using the Microsoft Teams platform, records all meetings and makes meeting recordings available to the *Project Manager* when requested.

The *Contractor* has the necessary licences to access the Microsoft SharePoint, Teams and Office environment when submitting and retrieving documents, and when attending online meetings.

The *Contractor* complies with the Document Management Plan, document 11364-A1073.

3.2 Design Reviews

The *Contractor* prepares 3D models, documentation and submissions in accordance with the Standard Operating Procedure Model 3D Review Procedure document 009-TPL-TECH-OPS-20259 and the Document Management Plan, document 11364-A1073.

The *Contractor* schedules and hosts as a minimum the following design reviews with the *Employer:*

- Plot plan review
- P&ID Review
- Fire Control Panel Design and Drawing Review
- Electrical distribution boards (DB's) and motor control centres (MCC's) design and drawing review
- Electrical and Instrumentation site and building primary and secondary reticulation layout design review
- Building internal electrical layout design review
- Earthing, bonding and lightning protection design review
- HAZOP (Detailed Design / Pre-Construction)
- 30% Model Review

- 60% Model Review
- 90% Model Review
- Approved for Construction (AFC) Drawings
- Shop-fabrication Drawing Review
- Reinforcing Schedule Review

The *Contractor* arranges a 100% Model Review with the *Project Manager* between the completion of commissioning and the handover of as-built documentation to the *Employer.*

The *Project Manager* makes the final determination for attendance and the quorum requirements.

The Contractor facilitates a Hazards and Operability (HAZOP) Study of his proposed design at the Employers offices at 202 Anton Lembede Street (or another suitable address determined by the *Project Manager* within a 10 km radius), eThekwini, with the Employers people and the *Project Manager*. The Contractor appoints the HAZOP facilitator that is a registered Professional Chemical Engineer with at least 15 years of experience, with proof of having facilitated at least twenty HAZOP's and produced accompanying reports for projects within the petrochemical industry.

The *Contractor* provides suitably qualified, competent and authorised representation during the documentation reviews.

The *Contractor* conducts design safety reviews with the *Employers* people whenever requested by the *Project Manager*.

3.3 Plan Approvals

The *Contractor* gathers all information necessary, prepares the municipal submission and application documentation, submits and obtains approval from the local municipality prior to the commencement of any construction activities on site. The *Contractor* allows the duration specified in Section 7.5 for approval of their municipal submissions.

The *Contractor* undertakes on-site activities related to *works* that may not necessitate municipal approval, assuming full responsibility for any associated risks.

3.4 Engineering, Plant and Materials

The *Contractor* completes the *works* in accordance with national legislation, national standards and industry standards and codes of practice accepted by the *Project Manager*.

The *Contractor* completes the *works* in compliance with the basic engineering drawings and specifications issued by the *Employer*.

The *Contractor* does not use the proposed conceptual engineering design and documents as described in Section 4.2 for construction.

The *Contractor* has licences and access to the latest published version of all relevant national and third-party engineering standards and specifications to be used during the execution of the *works.*

3.5 Investigations and Surveys

The *Employer* provides reports referenced in Section 6 and the Site Information for information only.

The *Contractor* uses the findings and or data in full, in part, or not at all, and makes allowance for any additional investigations, surveys and assessments necessary to support their design. The *Contractor* makes his own assessment on the suitability of the available Site Information prior to submitting his offer and conducts additional surveys and investigations as deemed necessary by the *Contractor.*

The *Contractor* reviews the as-built 3D model and point cloud and identifies any gaps, inconsistencies, or areas requiring further detail. Where necessary, the *Contractor* uses the point cloud data to supplement and complete the model. The *Contractor* provides additional 3D point cloud scans to capture critical aspects of the Site and infrastructure that are deemed necessary to support their design and construction activities.

In addition, the *Contractor* carries out the following Site investigations for the affected *works*, if deemed necessary, and submits reports to the *Project Manager*:

- Carefully excavates and exposes the existing underground municipal water supply to the existing water tank, and identifies a suitable tie-in location
- Carefully excavates and exposes the existing underground hydrant supply to the existing hydrant that is to be temporarily relocated, and identifies a suitable tie-in location
- Verifies as-built drawings provided by the *Employer,* prior to procurement, fabrication and construction
- Surveys and records the location and depth of the existing underground fuel station incomer and delivery pipelines
- Conducts additional topographical and engineering surveys
- Conducts additional geotechnical investigations

- Determines the suitability of water for hydro-testing and construction purposes
- Surveys and inspects all relevant light pole and mast positions, including fall or hinge direction and operational status, near the new Pump House and Water Tanks construction and the demolition of the existing Fire Pump House and firefighting infrastructure on site.
- Surveys and inspects all existing electrical and instrumentation draw boxes throughout the entire Site.
- Surveys and inspects all existing electrical and instrumentation underground cable sleeves (include diameter, quantity and direction / linking) throughout the entire Site.
- Surveys, records and investigates the main normal electrical supply of the Site.
- Surveys, records and investigates the main essential (generator) back-up electrical supply of the Site.
- Inspects, investigates and verifies the respective electrical distribution boards (DB's) and motor control centres (MCC's) associated with the construction of the new Pump House and Water Tanks as well as the demolition of the existing Fire Pump House building and associated firefighting infrastructure within the Site.
- Conducts soil resistivity tests for all earthing, bonding and lightning protection system designs.
- Surveys and records any redundant electrical and instrumentation services and infrastructure within proximity of and effected by the construction of the new Pump House and Water Tanks as well as the demolition of the existing Fire Pump House Building and associated firefighting infrastructure within the Site.
- Conducts exterior lighting level surveys within proximity of and effected by the construction of the new Pump House and Water Tanks as well as the demolition of the existing Fire Pump House Building and associated firefighting infrastructure within the Site.

3.6 Site Clearance

The *Contractor* clears and prepares the area for the *Contractor's* site establishment area. The *Contractor* clears the Site as required to execute the *works.*

3.7 Construction Management

The *Contractor* supplies both the quantity and competency of resources necessary to carry out the *works*. At a minimum, this includes assigning full-time dedicated people for construction management, supervision, planning, quality control, quality assurance, and health and safety, in accordance with the Health and Safety Specification.

The *Contractor* appoints additional construction supervisors as required.

3.8 Subcontracting

The *Contractor* identifies and appoints Subcontractors to execute the *works.*

The *Contractor* appoints Subcontractors under the NEC3 Engineering and Construction Subcontract, unless otherwise accepted by the *Project Manager*.

The *Contractor* complies with the following additional Subcontracting requirements when making appointments and provides contactable references to the *Project Manager*:

- Electrical distribution board (DB) and motor control centre (MCC) manufacturers have successfully completed a minimum of 5 OFF similar projects in the petrochemical industry
- Earthing and lightning protection specialists have successfully completed a minimum of 5 OFF similar projects in the petrochemical industry
- The pump-set supplier has manufactured and commissioned at least 2 OFF pump-sets that included a foam pump and water pump combination powered by a single diesel engine via a mechanically driven pulley system.
- The pump-set supplier has manufactured and commissioned at least 5 OFF containerised solutions for firefighting pump-sets.
- The foam tank design and manufacturer has proven experience in designing, constructing and testing GRP tanks and has manufactured at least 2 OFF GRP tanks specifically for foam concentrate.
- The fire control panel (FCP) design and manufacturer has successfully completed a minimum of 5 OFF projects of similar magnitude and complexity that included a full relay-based control system.

3.9 Setting Out

The *Employer* has established survey benchmarks for the site, that can be identified on the As-built Site Layout drawing 11364-A1035 that can be used by the *Contractor* at their own discretion.

The location, co-ordinates and elevations for all existing and additional survey benchmarks, including local control stations, are identified and verified by the *Contractor* prior to commencing setting out of the *works*. The list of benchmarks and control points are issued to the *Supervisor* and the *Project Manager* for information, who use such data during inspections and monitoring during the construction of the *works* by the *Contractor.*

The *Contractor* protects all such benchmarks and control stations for the duration of the *works*. The *Contractor* restores permanent survey benchmarks that are disturbed or destroyed during the execution of the *works*.

3.10 Pre-fabrication

The *Contractor* prefabricates all *works* that can be prefabricated offsite at the *Contractors* premises and minimises the amount of on-site fabrication *works*. The *Project Manager, Supervisor* and the *Employers* employees are entitled to inspect the *works* at the *Contractors* premises without notice.

The *Contractor* pre-fabricates structural steel for the pump house and pipe supports as applicable.

The *Contractor* pre-fabricates all electrical distribution boards (DB's), motor control centres (MCC's), Fire Control Panels (FCP's), First Responder Panels (FRP's) and mimic panel(s).

3.11 Daily Site Records

The *Contractor* maintains daily records of all construction activities and submits them to the *Supervisor* daily for signature. The *Contractor* uploads the daily site records to the SharePoint Team Site after they have been signed by the *Supervisor* in accordance with the Document Management Plan.

Matters to be recorded include, but are not limited to the following:

- Name of *Contractor*, Site name and date.
- Any health, safety or environmental incidents and actions taken because of such incidents.
- Description of *works* performed, including start and completion of major activities.
- Schedule of people on Site, by category.
- Major equipment on Site, including mobilisation or demobilisation of equipment.
- Schedule of Subcontractors on Site.
- Major plant and materials deliveries to Site.
- Schedule of electrical and instrumentation lock-out procedures.
- Site visitors' registration.
- Any electrical outage and / or electrical load-shedding conditions inclusive of the negative impacts thereof. Details to be included are the start-time-date and end-time-date of each electrical outage and / or electrical load-shedding condition to be recorded.
- Monthly electricity and water usage recording in the presence of the *Employer*. Details to be included are the month-start and month-end readings accompanied by photographic evidence.

- Work delays, hot-work stoppages or other stoppages itemising causes, timing, duration, impact on labour and Equipment.
- Weather conditions, including daily rainfall (rain gauge), windspeed and temperature.
- Any significant events or areas of concern.

3.12 Publicity and Photographs

The *Contractor* does not advertise the contract or the project to any third party, nor communicate directly with the media (in any jurisdiction) whatsoever without the express written notification and consent of the *Project Manager*.

The *Contractor* does not take any photographs of the Site and *works* without proper prior authorisation from the *Project Manager* or publish any photographs unless these have been scrutinised and accepted by the *Project Manager*.

The Contractor does not make any public statements on any matter relating to this project, without the express written consent of the *Project Manager*.

3.12.1 Contract Notice Boards

The *Contractor* provides, erects, and maintains one standard contract noticeboard in a location determined by the *Project Manager*.

The board complies with the South African Association of Consulting Engineers' standards for size, painting, decorating, and detail, and includes the construction work permit site-specific number. The *Contractor* submits the layout to the *Project Manager* for acceptance. The board is made of 12mm tempered hardboard, braced to prevent warping, and mounted securely. Painting complies with SANS 1519 and colours match SANS 1091. The board is maintained for the duration of the *works* and removed upon completion.

3.12.2 Progress Photographs

The *Contractor* provides progress photographs every Friday at 14:00 using a device accepted the *Employer*, and additionally when instructed by the *Project Manager,* and submits the photographs in accordance with the Document Management Plan.

Focus Areas

The *Contractor* takes sufficient photographs and submits and categorises the images as specified below. The *Contractor* captures additional photographs of the areas as directed by the *Project Manager.*

- Water Tanks
- Pump House
- New Road to Pump House
- Route to Spill Basin
- Spill Basin

Image Specifications

File format: JPEG (.jpg)/ PNG (.png)
Approximate file size: *2 MB per image* (± 20%)
Minimum resolution: *12 megapixels* (approximately 4000 × 3000 pixels)
Colour space: Standard RGB
Compression: Medium compression (image must remain clear and legible with no visible pixelation)

Photographic Quality Requirements

- Images are in focus, correctly exposed, and free of motion blur.
- Photographs are taken in adequate lighting such that details are clearly visible.
- Each image shows sufficient context of the surrounding area to identify the location.
- Close-up photographs are provided where required to show specific details, defects, or items of work.
- No filters, enhancements, or edits are applied, except basic brightness or contrast adjustments to improve clarity.

Metadata

Each photograph includes the following metadata embedded automatically to the image by the device:

- Date and time taken
- Device model
- GPS location (where permitted by site rules)

Orientation and Composition

- Images are taken in landscape orientation unless the subject requires portrait.
- Includes a fixed reference object or marker to assist with scale.
- Photographs of repetitive work areas are taken from consistent positions each reporting period.

3.13 Equipment

The *Contractor* provides and maintains all Equipment required to execute the *works*. The *Contractor* only uses explosion proof electrical equipment if required by the risk assessment.

The use of petrol or electrically powered Equipment is used after acceptance by the *Employer* and the issue of the relevant permit.

The *Contractor* maintains all Equipment in a safe and acceptable operating condition and provides evidence of maintenance registers and licenses when requested by the *Project Manager.*

3.13.1 Temporary Works

The *Contractor* supplies all temporary *works* needed to carry out the *works*. The *Contractor* provides and maintains the following non-exhaustive list of temporary *works:*

- Fire water suction water supply from the new water tank to the existing firefighting pump-set
- Temporary water supply to the new water tank
- Temporary relocation of existing hydrant
- Access Roads
- External parking for *Employers* staff and vehicles
- Welfare and ablutions facilities
- Security arrangements
- Storage and laydown area
- Electrical power and water supplies
- Compressed air, data and telephone services

3.13.2 Scaffolding and Temporary Support Works

The *Contractor* provides, designs, inspects, maintains and approves the temporary *works* and compatibility of the temporary *works* with the permanent *works* as well as the design, inspection and approval of the following non-exhaustive list of items of the temporary *works*;

- Scaffolding
- Shoring
- Falsework

- Formwork
- Support work
- Cranage, haulage and lifting equipment
- Other temporary structures designed to provide support or means of access during construction work

The *Contractor* acts as the designer, inspector and approver of temporary *works* as defined in the Construction Regulations and shall comply with regulation 6(2) and regulation 12 of the Construction Regulations.

3.14 Marking Plant and Materials outside the Working Areas

The *Contractor* clearly marks, labels and identifies all Plant and Materials provided for the *works* that are outside the Working Areas, including items stored outdoors, using durable weather-resistant tags, paint markers, cable ties, or printed labels suitable for the environmental conditions.

Storage areas are cordoned off or demarcated using visible methods such as barrier tape, safety netting, steel crowd-control fencing, or painted boundary lines on hard surfaces. Each item and storage zone displays the contract number, description of the Plant or Materials, and the *Contractors* name in clear English, with isiZulu or isiXhosa supplementary wording where appropriate for site people. The *Contractor* maintains these markings for the duration of the project, ensures they remain legible despite sun and rain exposure, and updates or replaces any damaged or missing identification immediately.

The *Contractor* provides records of the demarcated area and tagged Plant and Materials as proof of marking with digital photographs that are shared with the *Project Manager* in accordance with the Document Management Plan.

3.15 Deliveries to Site and Offloading

The *Contractor* has adequate representation and competencies on Site to supervise, receive and arrange offloading of Plant and Materials. The *Contractor* supplies labour and Equipment necessary for the offloading and arranges storage, preservation and safekeeping.

3.16 Giving Notice of Work to be Covered Up

The *Contractor* informs the *Supervisor* two working days in advance in writing before covering or restricting access to any completed work and gives at least one working day for inspection. This applies to buried pipelines, tank internals, cables, ducts, draw boxes, manholes, layerworks, foundations, and concrete works.

3.17 Redundant Plant and Material and Title

The *Contractor* removes and handles redundant Plant and Material to an area designated by the *Project Manger* on Site until such time as it is removed from Site by the *Contractor*. The *Contractor* removes excess and contaminated excavated material from Site.

The *Contractor* has Title to all Plant and Materials arising from excavation and demolition in the performance of the *works* with the exception of the Plant and Material items that are to be relocated to the *Employers* facilities as identified in the Fire System Demolition Scope of Work document, document 11364-A1147, as well as covered items of value or of historical or other interest found within the Site, with Title to such Plant and Materials (as referenced above) remaining with the *Employer*.

The *Contractor* labels, marks, sets aside and/or disposes of such Plant and Materials for the benefit of the *Employer* in accordance with the Fire System Demolition Scope of Work, document 11364-A1147 and ECC Clause 73.1. The *Contractor* complies with the Fixed Assets Procedure, 2024 Fixed Assets SOP v1.

3.18 Contaminated Soil

The *Contractor* identifies soil contaminated with hydrocarbons at locations of the Site where excavation is due to take place and presents the results to the *Supervisor* for inspection prior to removal from Site.

The *Contractor* removes from Site and disposes of all contaminated soil in accordance with the applicable regulations and imports a suitable replacement soil.

4 ENGINEERING AND THE CONTRACTORS DESIGN

4.1 General

The *Contractor* provides the engineering and design for the following engineering disciplines:

- Process
- Mechanical
- Fire
- Civil
- Structural
- Electrical
- Earthing, bonding and lightning protection
- Instrumentation

All references to 'engineering' is deemed to be the *Contractor's* obligation of 'design' as per NEC3 ECC Clause 21.

All residual and overall design responsibility and professional accountability of the design solution for the *works* rests solely with the *Contractor*.

4.2 Employers Design

The *Employer* has developed a conceptual engineering solution presented herein as the *Employers* Design, generally as depicted in the conceptual 3D model, document 11364-A1038.

The *Employers* Design has been developed and reviewed by the *Employers* internal engineering team as far as reasonably practicable, and the updates have already been integrated to align with their operational and functional requirements, and therefore the *Employers* Design sets the *Employers* minimum acceptable requirements for the *Contractors* design.

The *Employers* Design is issued to the *Contractor* for information and without warrant. Any engineering, design or performance deviations that do not meet or exceed the parameters or principles of the *Employers* Design during the execution of the *works* will be rejected. The *Contractor* reviews the *Employers* Design and includes any additions or alterations that will improve the safety, integrity, performance, operability, or to suit the *Contractors* own requirements, prior to submitting their offer. The

Contractor ultimately accepts full and unconditional professional liability of the performance and compliance of the *works*.

The *Contractor* submits all conceptual, preliminary and final designs to the *Project Manager* for acceptance.

The *Employer* grants the *Contractor* licence to use the copyright of the *Employers* Design presented to the *Contractor* for the purpose of the *works* only, and the *Contractor*'s obligation under section 4.4 of the Works Information.

4.2.1 Building Works

The *Employer* has developed and issues the following conceptual designs to the *Contractor* for the Building *works*:

- Pump house as shown on drawing 11364-A1192 & 11364-A1193

4.2.2 Civil Engineering

The *Employer* develops and issues the following conceptual designs to the *Contractor* for the Structural Concrete and Civil Engineering *works*:

- Structural concrete foundations for the following:
    - Pump house as shown on drawing 11364-A1192 & 11364-A1193
    - Water tanks as shown on drawing 11364-A1190 & 11364-A1191
    - Miscellaneous pipe supports, bridges and access platforms (refer to drawing 11364-A1189 for further details)
- Paving and roadways as shown on drawing 11364-A1189
- Electrical and instrumentation draw boxes and sleeves as shown on drawing 11364-A1186 and 11364-1214
- Standard drawings and typical details as shown on the drawings included under Section 6.1

4.2.3 Structural Engineering

The *Employer* has developed and issues the following conceptual designs to the *Contractor* for the Structural Engineering *works*:

- Pump house structural steel frame as shown on drawing 11364-A1192 to 11364-A1193
- Miscellaneous pipe supports, bridges and access platforms (refer to drawing 11364-A1189 for further details)

- Standard drawings and typical details as shown on the drawings included under Section 6.1

4.2.4 Mechanical and Fire Engineering

The *Employer* has developed and issues the following conceptual designs to the *Contractor* for the Mechanical and Fire Engineering *works*:

- Pump House and Water Tanks as shown on drawing 11364-A1199, 11364-A1196 and 11364-A1202.
- Piping to Spill Basin as shown on drawing 11364-A1200, 11364-A1197 and 11364-A1221.
- Piping to Manifold as shown on drawing 11364-A1197, 11364-A1198, 11364-A1200 and 11364-A1221.
- The firefighting scenario preliminary calculation as described in 11364-A1021
- Proposed Site Plan of the New Fire System as shown on drawing 11364-A1195
- Process and Instrumentation Diagram for the Fire Water Reticulation as shown on drawing 11364-A1005
- Process and Instrumentation Diagram for the Pump House as shown on drawing 11364-A1006
- Process and Instrumentation Diagram for the Zone Piping as shown on drawing 11364-A1007
- Process and Instrumentation Legend as shown on drawing 11364-A1008
- Standard drawings and typical details as shown on the drawings included under Section 6.1

4.2.5 Electrical Engineering

The *Employer* has developed and issues the following conceptual designs to the *Contractor* for the Electrical Engineering *works*:

- Lighting layout for the Pump House as shown on drawing 11364-A1211
- Small power layout for the Pump House as shown on drawing 11364-A1212
- Lightning protection layout for the Pump House as shown on drawing 11364-A1213
- Electrical cable routing as shown on drawing 11364-A1186
- Electrical cable sleeve layout as shown on drawing 11364-A1214
- Typical lightning protection system installation details as shown on drawings 11364-A1030, 11364-A1031, 11364-A1032, 11364-A1033 and 11364-A1034
- Typical earthmat system installation details as shown on drawing 11364-A1029
- Standard drawings and typical details as shown on the drawings included under Section 6.1

- Electrical and Instrumentation Schematic as shown on drawing 11364-A1185.

4.2.6 Instrumentation Engineering

The *Employer* has developed and issues the following conceptual designs to the *Contractor* for the Instrumentation *works*:

- Fire Control System and Instrumentation Design, Supply and Installation Specification and Scope of Works as described in document TPL-TECH-PL 913.
- ECP FCP Control Narrative as per document TPL-TECH-PL 916
- The Cause-and-Effect Matrix as described in document 11364-A1169.
- Electrical and Instrumentation Schematic as shown on drawing 11364-A1185.
- Fire Control Panel general arrangement layout drawing as shown on drawing 11364-A1171.
- First Responder Panel general arrangement layout drawing as shown on drawing 11364-A1170.
- Mimic Panel general arrangement layout drawing as shown on drawing 11364-A1175.
- Instrumentation cable sleeve layout as shown on drawing 11364-A1215.

4.3 Submission of *Contractors* documentation

The *Contractor* submits documentation as the Works Information requires to the *Project Manager* for review and acceptance in accordance with the accepted programme and the Document Management Plan, document 11364-A1073.

Acceptance of the *Contractor's* design by the *Employer* does not relieve the *Contractor* of responsibility for the accuracy, completeness, or contractual compliance of the design.

The *Contractor* allows a reply period of two weeks (14 calendar days) for the review of documentation by the *Project Manager*.

Within the first 5 working days after submitting the documentation for review, the *Contractor* presents documentation to the *Project Manager* in-person or online if required by the *Project Manager*.

When coordinating documentation reviews, the *Contractor* notifies the *Project Manager* of meetings in advance in accordance with the durations set forth below:

- In-person documentation reviews: 10 working days

- Online meetings 5 working days

The *Project Manager* reviews the availability of the *Employers* team and advises on a suitable meeting date. The *Project Manager* decides the date of documentation reviews and if they will be held online or in-person.

4.4 *Contractors* Design

4.4.1 General

The *Contractor* develops the detailed design necessary to deliver a fully functional fire protection system that meets or exceeds the minimum requirements established by the *Employer's* Design. This includes, but is not limited to, the design of all civil, structural, mechanical, fire, electrical, and instrumentation systems, as well as the integration of these systems into the existing operational environment. The *Contractor's* design is comprehensive, addressing all technical, operational, and safety requirements specified in the Works Information, and is fully coordinated with ongoing site operations to minimize disruption and ensure compliance with all statutory and regulatory obligations.

The *Contractor* reviews the *Employer's* Design and incorporates any necessary additions or enhancements that improve safety, integrity, performance, or operability, or that are required to suit the *Contractor's* own methodologies and construction techniques. Any proposed deviations from the *Employer's* Design must be clearly identified, justified, and submitted for review and *Employer* acceptance prior to implementation.

All aspects of the *Contractor's* design are prepared by suitably qualified and experienced professionals, and the *Contractor* assumes full and unconditional professional liability for the performance, safety, and compliance of the completed *works*.

Basis of Design Documents

The *Contractor* reviews the *Employers* Design and submits proposed deviations from the *Employers* Design through a formalised process. The *Project Manager* accepts the proposed deviation if the *Contractor* demonstrates that:

- There are scope omissions or oversights in the *Employers* Design
- There are areas of technical or engineering non-compliance, with strong conclusive references to engineering technical standards, that will prevent the *Contractor* from assuming professional liability of the design
- There are health and safety concerns with the *Employers* Design
- There are opportunities to optimise the *Employers* Design that will benefit the *Employer* with respect to quality, cost and schedule

The *Contractor* maintains a register of queries and deviations and the status thereof and provides progress reports to the *Project Manager.* The *Contractor* identifies the proposed deviations from the *Employers* Design prior to submitting his offer and makes the necessary provision for the proposed changes in their offer.

The *Employers* Design along with the accepted deviations form the *Contractors* accepted Basis of Design. The *Contractor* produces the final detailed engineering in accordance with the accepted Basis of Design.

The *Contractor* identifies and prioritises long-lead items of Plant and Materials and expedites the procurement thereof.

Front-end Engineering Design

The *Contractor* commences with the Front-end Engineering Design (FEED) stage upon acceptance of the Basis of Design by the *Project Manager*.

The *Contractor* develops their detailed design, engineering, Approved for Construction drawings, datasheets and specifications of the Plant and Materials in accordance with the accepted Basis of Design.

The *Contractor* produces a detailed 3D model of the design and progresses through the design reviews as specified in Section 3.2.

The FEED stage is deemed to be complete once the findings from the 90% Model Review have been incorporated into the design and accepted by the *Project Manager*.

4.4.2 Building Works

The *Contractor* develops detailed designs for construction of the following Building *works*:

General

- Architectural design including drawing for municipal submission and approval.
- Architectural design of building features and positioning and layout of buildings on site with respect to site boundaries and building lines.
- Rainwater management and discharge
- Gutters and downpipes

Pump House

- Roof sheeting and cladding system with all flashings and fixings
- Gutters and downpipes
- Access doors and ventilation

- Internal finishes
- Bird/rodent proofing

4.4.3 Civil Engineering

The *Contractor* develops detailed designs for construction of the following Civil Engineering *works*:

General

- Ground improvements and levelling of the area around the Pump House and Water tanks to maintain a minimum 1:100 fall.
- New stormwater pipe and headwalls on Western boundary to cover over existing earth drain.
- Ground improvements and construction of new paved roadways to match existing to serve new pumphouse
- Dry stack retaining walls including reinforced concrete strip footings and all required drainage and soil geotextile filtration.
- Protective tubular handrails
- All civil levels are coordinated to respect the overall Site drainage strategy and the permanent *works* leave the Site free-draining with no ponding under the design storm.
- The system is designed for a minimum 1:50-year storm event (or the higher standard required by the local municipality, whichever is more stringent) with falls not flatter than 1:100 on all new surfaces.

Concrete Foundations

- Water tanks
- Pump house
- Retaining Walls
- Pipe reticulation supports
- Concrete hardstand areas with 1.0m wide g-block paving surrounds to foam pourers and hose reels.
- Under pipe apron slabs to min 1:100 falls

Pump House

- Pump house foundation design in accordance with the findings and recommendations from the geotechnical investigation and report adopted by the *Contractor*.

- Containerised pump-set solution plinth foundation design accounts for machinery loads, specifically vibration machinery as deemed necessary by the *Contractor*.
- Foam tank foundations and drainage channels. To avoid damage to Equipment in the Pump House or egress during catastrophic failure, the floor slope and drainage channel is sized to contain the maximum capacity of the foam concentrate tank determined by the *Contractor*.
- Bund floor is sloped to falls and includes a valved outlet pipe.
- External paving to serve door openings, with a minimum width of 1.0 m surrounding the building, sloped at a minimum of 1:100 falls.
- Civil levels are coordinated to respect drainage requirements.

Roadway

- Earthworks to form new roadway access.
- Approach, incline and platform designed to accommodate traffic loads 10t high-up crane truck and container delivery or future removal.
- Surface finish consists of g-block interlocking paving on river sand layer on engineered layer works.
- Dry stack retaining walls including reinforced concrete strip footings and all required drainage and soil geotextile filtration.
- HDG Armco barrier rails and support posts to ramp and platform edge.

Water Storage Tanks

- Foundations are designed in accordance with the findings and recommendations from the geotechnical investigation and report adopted by the *Contractor*.
- Earthworks layer works are designed by the *Contractor* in accordance with the geotechnical Investigation requirements.
- Water tanks foundations are designed to account for wind and hydrostatic loads.
- Design of reinforced concrete ring beams and raft slabs for the water tanks in accordance with the tank supplier's requirements and tolerances
- Paved areas consist of g-block interlocking paving on engineered layer works.

Electrical and Instrumentation Draw Boxes, Sleeves, Cable and Underground Service Markers

The *Contractor* designs cable routes, draw boxes, trenches, sleeves, cable and underground pipe markers required for the electrical and instrumentation reticulation and below ground piping. All cable routes, draw boxes, trenches, sleeves, cable and underground pipe markers comply with the latest

editions of PL 666 and PL 727. The *Contractor* submits design documentation and technical data sheets to the *Project Manager* for review, comments and acceptance.

4.4.4 Structural Engineering

The *Contractor* develops detailed designs for construction of the following Structural Engineering *works*:

General

- Structural steelwork for the new pump house including all columns, beams, bracing, removable roofs over containers and flooring.
- Structural steelwork for pipe supports

The *Contractor* uses structural steel sections that conform to British Standard proportions. The *Project Manager* only accepts alternative sections if there is no reduction in strength, stiffness or where the aesthetic appearance of the structure is not compromised.

The *Contractors* designs all neutral axes of structural steel members to intersect at a single point.

The *Contractor* submits all shop drawings to the *Project Manager* for review and acceptance prior to manufacturing.

Pump House

- Structural steel frame situated in between the new containerised pump solutions, supported off reinforced concrete bund raft.
- Structural steel frame floor with open grating, Mentis RS40 40x3.5 (or equivalent accepted)
- Structural steel frames are fully braced, ensuring overall stability and resistance to lateral loads.
- Roof sheeting and cladding is supported by semi-continuous, hot-dip galvanised (HDG), cold formed lipped channels (CFLC) used as purlins and girts.
- Cleats are a minimum of 8mm thick and secured using four M16 bolts per cleat.

Pipe Supports

- Pipe supports designed to accommodate mechanical, static and thermal loading.
- Design of supports allows a 10mm PTFE (Teflon) pad, securely fastened to the top flanges of the support using 316 stainless steel countersunk bolts.

4.4.5 Mechanical and Fire Engineering

The *Contractor* develops detailed designs for construction, manufacture and /or supply of the following parts of the Mechanical and Fire Engineering *works*:

Design Credible Event

The *Contractor* identifies possible firefighting scenarios and calculates the design credible event in accordance with SANS 10089-1 and the Transnet Pipelines Technical Fire Protection Design Standard, document TPL-TECH-F-STD-001.

System Design

The *Contractor* designs the firefighting system for the spill basin and manifold, that includes the interface between the fire department, municipal water supply, and integrates the foam concentrate proportioning system into the system design.

The *Contractor* uses the underlying design principles as depicted in the process and instrumentation diagrams listed in Section 6.1 when preparing his system design for submission to the *Project Manager* for acceptance, as well as the Piping System Specification, document TPL-TECH-PL 912 and the Technical Fire Protection Design Standard, document TPL-TECH-F-STD-001.

Water Tanks

The *Contractor* determines the design volume, diameter, height, operating, design and vacuum pressure and temperature conditions of the fire water storage tanks to suit the design credible event.

The *Contractor* designs the fire water storage tanks in accordance with the Water Tank Specification, document number TPL-TECH-PL 902.

The *Contractor* determines the volume of fire water required to successfully commission the system when demonstrating to the *Project Manager* that the system design performance criteria have been met.

Foam Concentrate and Foam Concentrate Storage Tank

The *Contractor* determines the design volume, diameter, height, operating, design and vacuum pressure and temperature conditions of the foam concentrate storage tank to suit the design credible event.

The *Contractor* designs the foam concentrate tank in accordance with the Foam Concentrate Specification, document number TPL-TECH-PL 915, the Foam Concentrate Tank Specification, document number TPL-TECH-PL 911 and the following standard drawing:

- Foam Concentrate Tank Typical Drawing, document 11364-A1078

The *Contractor* determines the volume of foam concentrate required to successfully commission the system when demonstrating to the *Project Manager* that the system design performance criteria have been met.

Hydraulic Analysis

The *Contractor* conducts a detailed steady-state hydraulic analysis of the accepted design using AFT Fathom 13 to demonstrate that the system design will meet the performance specifications. The *Contractor* provides the native files of the calculations, together with a hydraulic analysis report in the specified format to the *Project Manager* for acceptance. The *Contractor* designs the system hydraulics to prevent water-hammer from occurring during system start-up and shut-down.

Piping Design

The *Contractor* complies with the Pressure Equipment Regulations and SANS 347 during the design of all piping systems. The *Contractor* categorises all water, foam pre-mix, foam concentrate and diesel piping systems in accordance with SANS 347.

The *Contractor* develops detailed designs for the piping *works* in accordance with the Piping Supply and Installation Specification document number TPL-TECH-PL 912 and the following typical drawings:

- U-Bolt Detail Typical Drawing, document 11364-A1085
- PTFE Pad Detail Typical Drawing, document 11364-A1086

The *Contractor* designs the municipal water reticulation system between the existing below-ground pipeline to the new pump house and water tanks.

The *Contractor* designs the fire water suction and discharge system, and the reticulation system between the new water tanks, containerised solution and the pump house.

The *Contractor* designs the foam concentrate suction and discharge system, and the reticulation system between the new foam concentrate tank, foam pumps and fire water reticulation system within the pump

house. The *Contractor* designs the foam pre-mix reticulation system within the pump house and the reticulation system from the pump house to the manifold and spill basin.

The *Contractor* designs the fuel supply and return lines from the diesel storage tanks and diesel engines in accordance with the Containerised Fire Pump-set Specification, document TPL-TECH-PL 919 and ASME B31.3.

Unless otherwise indicated, the *Contractor* maintains the elevation of valve handles between 1.2 m to 1.6 m above the natural grade level (NGL), and applies the following general rules of clearance for the *Employers* operators, and the clearances as depicted on the drawings of the *Employers* Design listed in Section 6.1:

- Minimum of 0.75 m in the horizontal plane
- Minimum of 2.1 m in the vertical plane

Piping Stress Analysis

The *Contractor* conducts piping stress analysis of the piping system in accordance with ASME B31.3 and ensures that the piping stress limitations specified therein and those specified by the Original Equipment Manufacturers are not exceeded.

Pump-sets

The *Contractor* determines the system design pressure and flow rate of the duty and stand-by fire and foam concentrate pump-sets to suit the design credible event. The *Contractor* designs the duty and stand-by fire pump-sets and other miscellaneous Plant and Materials in accordance with the Containerised Fire Pump-set Specification, document TPL-TECH-PL 919, and designs the integration of the pump-sets to the fire control system as specified in Section 4.4.7.

The *Contractor* determines the volume of diesel required to successfully commission the system when demonstrating to the *Project Manager* that the system design performance criteria have been met.

The *Contractor* designs the jockey pump-set and control system in accordance with the Jockey Pump-set Specification, document TPL-TECH-PL 908.

The *Contractor* designs the foam concentrate loading pump-set to receive and empty foam concentrate in accordance with the following specifications:

- Positive displacement pump with electric motor
- Suitable for foam concentrate
- Flow rate 50 L/min

- Mechanical seal
- Integral pressure relief valve
- Galvanised mild steel baseplate

Valves and Pressure Gauges

The *Contractor* designs, selects and sizes valves and pressure gauges in accordance with the following:

- Ball Valve Specification, document TPL-TECH-PL 897
- Butterfly Valve Specification, document TPL-TECH-PL 898
- Control Valve Specification, document TPL-TECH-PL 899
- Gate Valve Specification, document TPL-TECH-PL 900
- Actuating Expanding Plug Valve Specification, document TPL-TECH-PL 903
- Non-Return Valves Specification, document TPL-TECH-PL 906
- Back Flow Preventer Valve Specification, document TPL-TECH-PL 907
- Pressure Gauge Specification, document TPL-TECH-PL 909

Fire Department Interface Connections

The *Contractor* designs the interface connections between the new fire system and the fire department in accordance with the Fire Department Interface Equipment Specification, document TPL-TECH-PL 910 and the following standard drawings:

- Fire Ring Main Booster Connection Typical Drawing, document 11364-A1166
- Fire Service Suction Typical Drawing, document 11364-A1076
- Fire Water Tank Refill Connection, document 11364-A1233
- Fire Hydrant Typical Drawing, document 11364-A1172

Spill Basin

The *Contractor* uses bund pourers in his design during the design of the spill basin fire systems. The *Contractor* provides bund pourers at the primary chamber and secondary chamber of the spill basin.

The bund pourers are sized and selected by the *Contractor* in accordance with the Transnet Pipelines Technical Fire Protection Design Standard, document TPL-TECH-F-STD-001, the Foam Generating Equipment Specification, document TPL-TECH-PL 904, and the following standard drawing:

- Bund Pourers to Bund Wall Standard Installation Typical Drawing, document 11364-A1080
- Bund Pourer Connection Typical Drawing, document 11364-A1087

Manifold

The *Contractor* uses manifold monitors in their design during the design of the manifold area fire systems. The monitors are sized and selected by the *Contractor* in accordance with the Transnet Pipelines Technical Fire Protection Design Standard, document TPL-TECH-F-STD-001, the Foam Generating Equipment Specification, document TPL-TECH-PL 904, and the following standard drawing:

- Foam Monitor Typical Drawing, document 11364-A1083

Pump House

The *Contractor* determines the firefighting requirements of the pump house in accordance with SANS 10400-T.

The *Contractor* does not design the sprinkler protection system for the pump house but provides a connection for future implementation.

Design and Interface

The *Contractor* develops detailed designs for the interface and connection of the following parts of the Mechanical and Fire Engineering *works*:

- Temporary connections between the new water tank and the existing fire pump-set
- Temporary connection between the relocation of the existing hydrant and underground hydrant supply header
- Interface to the existing municipal supply line

The *Contractor* develops the following detailed design documents for the Mechanical and Fire Engineering *works*:

- Calculation sheets for each of the following fire risk areas:
  - Spill Basin
  - Manifold
- Design credible event, scenario calculations and scenario summary sheets for each identified scenario
- Detailed water tank sizing calculations
- Detailed foam concentrate tank sizing calculations

- Process and Instrumentation Diagrams
- HAZOP Reports
- Hydraulic analysis report and AFT output files
- Piping stress analysis reports
- Line lists
- Equipment lists
- Engineering datasheets and calculations as required by the specifications listed in Section 6.2
- Approved for Construction isometrics, piping layout and general arrangement drawings and sections

4.4.6 Electrical Engineering

Normal Electrical Supply

The *Contractor* performs electrical load recording for a minimum period of nine (9) consecutive days to verify and confirm the electrical load connected to the main low voltage electrical distribution board (DB) / motor control centre (MCC) and includes recording of all other necessary electrical parameters, i.e. voltage, frequency, harmonics, etc. Any concerns identified by the *Contractor* with regards to the normal electrical supply are communicated to the *Project Manager* immediately. The *Contractor* submits a detailed electrical load recording report inclusive of all electrical load recording data to the *Project Manager*.

Essential Electrical Supply

Any new / additional electrical load connected to the essential back-up diesel generator by the *Contractor* is balanced over the three (3) electrical phases. The *Contractor* liaises with the *Project Manager* to improve the electrical load balancing of the existing essential electrical loads connected to the essential back-up diesel generator.

Electrical load balancing over the three (3) phases of the essential back-up diesel generator is implemented to ensure that the essential back-up diesel generator is not overloaded during start-up or normal operating conditions.

The *Contractor* performs electrical load recording for a minimum period of nine (9) consecutive days to verify and confirm the electrical load connected to the essential back-up diesel generator and includes recording of all other necessary electrical parameters, i.e. voltage, frequency, harmonics, etc. Concerns identified by the *Contractor* with the essential back-up diesel generator are communicated to the *Project Manager* immediately. The *Contractor* submits a detailed electrical load recording report inclusive of the electrical load recording data to the *Project Manager*.

Electrical and Instrumentation Draw Boxes and Cable Sleeves

The *Contractor* inspects every electrical and instrumentation draw box and associated cable sleeves for damages, blockages and non-compliance during the initial site establishment process and immediately reports all concerns to the *Project Manager*.

Low Voltage Electrical Distribution Board (DB) Designs

The *Contractor* develops detail designs for the electrical single line diagrams and general arrangement drawings for manufacture and / or supply of the following low voltage electrical distribution boards (DB's):

- Normal electrical supply distribution board (DB) for the Pump House.

- Essential (back-up diesel generator) electrical supply distribution board (DB) for the Pump House.

All low voltage electrical distribution boards (DB's) designs comply with SANS 10142-1, PL 631, PL 666 and PL 711. The *Contractor* submits all design documentation and technical data sheets to the *Project Manager* for review, comments and acceptance.

The electrical heaters of each pump set are individually supplied from the normal electrical supply distribution board (DB) of the Pump House.

Low Voltage Electrical Motor Control Centres (MCC's) Designs

The *Contractor* develops detail designs for electrical single line diagrams and general arrangement drawings for manufacture and / or supply of the following low voltage electrical motor control centres (MCC's):

- Motor control centre (MCC) for the Jockey Pump and Foam Loading Pump of the Pump House.

The low voltage electrical motor control centres (MCC's) designs comply with SANS 10142-1, PL 631, PL 666 and PL 711. The *Contractor* submits all design documentation and technical data sheets to the *Project Manager* for review, comments and acceptance.

Primary Low Voltage Electrical Cable Distribution and Reticulation Designs

The *Contractor* develops detail designs, cable reticulation layouts and cable block diagrams for all primary low voltage electrical power supply cables and the reticulation thereof (i.e. draw boxes, cable sleeves, etc.) to the following building and / or electrical installations:

- Normal and essential (back-up diesel generator) electrical supply distribution boards (DB's) of the Pump House.
- Normal electrical supply motor control centre (MCC) for the Jockey Pump and Foam Loading Pump of the Pump House.

The primary low voltage electrical power supply cable distribution and reticulation designs comply with the latest editions of SANS 10142-1, PL 666 and PL 727. The *Contractor* submits design documentation and technical data sheets to the *Project Manager* for review, comments and acceptance.

Secondary Low Voltage Electrical Cable / Wiring Distribution and Reticulation Designs

The *Contractor* develops detail designs, cable / wiring reticulation layouts and cable / wiring block diagrams for all secondary low voltage electrical power supply cables / wiring and the reticulation thereof (i.e. cable ladders, cable ladder mounting and support systems, conduits, round-boxes, etc.) to and of the following building and / or electrical installations but not limited to:

- Internal building electrical supply distribution (i.e. light switches and light fittings, single-phase socket outlets, three-phase socket outlets, etc.).
- Electrical motors with emergency stop stations.
- Electrical operated valves.
- Electrical control panels.

The secondary low voltage electrical power supply cable / wiring distribution and reticulation follows the following philosophy within the Pump House:

- Cable rack is installed and supported within the bunded area of the Pump House.
- Cable rack risers are installed from the bunded area cable rack up to floor level or Plant.
- Cable rack risers are installed within the bunded area from the cable rack to the underside of electrical and control panels.
- The use of cable rack takes precedence, so the lengths of cable sleeves are minimized.
- Electrical and instrumentation cables are permitted to share the same cable rack provided that electrical and instrumentation cables are installed on opposite sides of the cable rack with a minimum 150mm gap in between.
- Electrical and instrumentation cables are installed in separate cable sleeves.

The secondary low voltage electrical power supply cable / wiring distribution and reticulation designs comply with the latest editions of SANS 10142-1, PL 666 and PL 727. The *Contractor* submits design documentation and technical data sheets to the *Project Manager* for review, comments and acceptance.

Internal Building Lighting Layout Designs

The *Contractor* develops detail designs for the internal building lighting inclusive of light fitting selections and lighting layouts for the following buildings and / or electrical installations:

- Pump House inclusive of the two (2) Fire Pump Containers

The internal lighting layout designs comply with the latest editions of SANS 10142-1, SANS 10114-1 and PL 666. The *Contractor* submits design documentation and technical data sheets to the *Project Manager* for review, comments and acceptance.

External Lighting Layout Designs

The *Contractor* develops detail designs for the external lighting inclusive of light fitting selection and lighting layouts of the following external installations:

- Pump House inclusive of the two (2) Fire Pump Containers
- Driveway leading to the Pump House inclusive of walk-ways around the Pump House

- Two (2) Water Storage Tanks

The external lighting layout designs comply with the latest editions of SANS 10142-1, SANS 10389-1 and PL 666. The *Contractor* submits all supportive design documentation and technical data sheets to the *Project Manager* for review, comments and acceptance.

Internal Building Small Power Layout Designs

The *Contractor* develops detail designs for the internal building small power layouts (i.e. single-phase socket outlets, three-phase socket outlets, electrical isolators, etc.) inclusive of equipment selections and layouts of the following buildings and / or electrical installations:

- Pump House inclusive of the two (2) Fire Pump Containers

The internal building small power layout designs comply with the latest editions of SANS 10142-1 and PL 666. The *Contractor* submits design documentation and technical data sheets to the *Project Manager* for review, comments and acceptance.

Earthing, Bonding and Lightning Protection Designs

The *Contractor* develops detail designs inclusive of risk assessment reports, soil resistivity tests and reports, and layouts for the following earthing, bonding and lightning protection installations:

- Pump House inclusive of the two (2) Fire Pump Containers
- 2 x Water Storage Tanks
- Exposed and extraneous conducting parts, e.g. cable ladders, instruments, field control stations, instrument stands, light poles, cable racking, piping, piping support structures and systems, etc.

The earthing, bonding and lightning protection designs comply with the latest editions of SANS 10142-1, SANS 10086-1, SANS 10089-2, SANS 60079-14, PL 666 and PL 727. The *Contractor* submits design documentation, tests and technical data sheets to the *Project Manager* for review, comments and acceptance.

4.4.7 Instrumentation Engineering

The *Contractor* develops detailed designs for the Instrumentation *works* in accordance with the Fire Control System and Instrumentation Design, Supply and Installation Specification and Scope of Works, document TPL-TECH-PL 913.

The *Contractor* develops detailed designs for manufacture and /or supply of the following parts of the Instrumentation *works*:

- Fire Control Panel (FCP), including controller, main operator interface and indicator mimic
- Battery backup power supply (dual redundant)
- First Responder Panel in the Pump House
- First Responder Repeater Panels in the operations control room and First Responder Repeater Panel in the Security Office
- Field instruments such as fire alarm beacons, sirens and level switches for water and diesel tanks

The *Contractor* develops detailed designs for the interface and connection of the following parts of the Instrumentation *Works*:

- FCP, first responder panels and battery backup power system
- Field instruments such as fire alarm beacons, sirens and level switches for water and diesel tanks
- Interface to control valves
- Interface to Engine Control Panels (ECP's)
- Interface to jockey pump control panel (JPCP)
- Interface to the existing site process control system
- Interface to the NOC (National Operating Centre)

The *Contractor* develops the following detailed design documents for the Instrumentation *works*:

- Instrument index
- Cause-and-Effect Matrix
- Schematic diagrams for FCP (controller, main operator interface, indicator mimic), first responder panels and battery backup power system
- Termination diagrams for FCP (controller, main operator interface, indicator mimic), first responder panels and battery backup power system

- Panel layouts for FCP (controller, main operator interface, indicator mimic), first responder panels and battery backup power system, drawn to scale, indicating all buttons, labels, gauges, indicators and all text sizes.
- Panel general arrangement drawings for FCP (controller, main operator interface, indicator mimic), first responder panels and battery backup power system, indicating size, doors, base, lifting points etc.
- Termination diagrams for interface to ECP
- Termination diagrams for interface to jockey pump control panel
- Cable block / interconnection diagrams
- Cable route layouts indicating cable racks, cable sleeves and draw boxes
- Instrument equipment layout drawings
- Cable schedule
- Equipment and instrument data sheets
- Certification such as explosion protected equipment (Ex and IA certificates) and intrinsically safe loop diagrams (if applicable)

The *Contactor* complies with the secondary low voltage electrical power supply cable / wiring distribution and reticulation philosophy within the pump house as described in section 4.4.6.

4.5 Other requirements of the *Contractor's* Design

The *Contractor* complies with the requirements and obtains acceptance and approvals from the Approved Inspection Authority that is appointed by the *Employer,* for the *Contractors* piping system.

All designs and documents that are submitted by the *Contractor* to the *Project Manager* for acceptance are signed by a Professional Engineer registered with the Engineering Council of South Africa. The *Employer* rejects designs and documents that are not signed by a Professional Engineer.

The *Contractor* obtains approval from the local municipality on his design.

The *Contractor* provides all signage within and external to the pump house as required by the OSHAct. The *Contractor* only provides signage that is UV resistant and provides documentation demonstrating that UV resistance materials were used when requested to do so by the *Project Manager*.

The *Contractor* provides an A1 sized sealed aluminium frame with a laminated plan behind a 6mm clear polycarbonate sheet that is fixed to the wall of the Pump House using stainless steel fasteners for each of the following documents:

- Site Plan
- Process Flow Diagram

The *Contractor* submits the signage design to the *Project Manager* for acceptance.

4.6 Use of *Contractor's* Design

The *Contractor* grants the *Employer* a licence to use the copyright in all design data presented to the *Employer* in relation to the *works* for any purpose, including but not limited to construction, reconstruction, refurbishment, repair, maintenance, extension, and decommissioning of the *works*. This licence may be transferred to any third party without seeking further consent from the *Contractor*.

Additionally, the *Contractor* assigns to the *Employer* full title in the intellectual property and copyright associated with all design data created in connection with the *works*, regardless of the location or nature of the *works*.

5 PLANT, MATERIALS STANDARDS AND WORKMANSHIP

5.1 Plant and Materials supplied by the *Employer*

The *Employer* free-issues to the *Contractor* the following Plant and or Materials;

- Water for hydro-testing
- Water (non-potable) and electricity for offices

5.2 Building works

5.2.1 Doors

Doors include all hinges, allowing for full 180deg opening, locks, dead bolts.

Ventilation louvres are equipped filter mats of nonwoven material graded to minimum G4 EN779 efficiency.

The *Contractor* installs a HDG single steel access door and frame complete with all hinges and hardware.

5.2.2 Roof Sheeting and Cladding

The *Contractor* installs roof sheeting and cladding to suit Safintra Saflok 700 Aluminium sheeting or accepted equivalent, pre-painted in Forest Green, with thickness as follows:

Location	Thickness
Roofs & cladding	0.80 mm
Flashing	0.80 mm

Translucent sheeting matches the Saflok 700 Profile, with sheets 1.25mm thick and a mass of 1.60 kg/m2. Sheets are supplied in single lengths as specified.

The *Contractor* installs all roof sheeting in full lengths with no overlapping of sheets. All sheets are to be fixed to purlins typically set at 1800mm centres, using stainless steel double-bonded fasteners and manufacturer-recommended fixing methods.

Vertical cladding is to be installed in full lengths to match roof sheets and fixed to girts with stainless steel double-bonded fasteners as per manufacturer's recommendations. End laps with a minimum of 100mm are to be positively fixed to cladding girts. Isolation tape is to be used between aluminium and hot-dip galvanised purlins.

5.3 Civil Engineering

5.3.1 Underground Cable and Piping Infrastructure

The *Contractor* excavates trenches, supplies and installs sleeves and constructs cable draw boxes as per the *Contractor's* design and the Specification for Cable, Racking, Trenching & Earthing Reticulation Codes of Practice, document PL 727.

The *Contractor* saw cuts, barricades, handles material, compacts and reinstates the original surface.

The *Contractor* supplies and installs cable trench warning tape.

The *Contractor* supplies and installs underground piping and cable route markers to indicate the routing of underground cables and underground pipes.

The Contractor constructs all required draw boxes complete with vastrap cover lids which are to be sealed and strapped down.

All trench work complies with the latest editions of the specifications SANS 10142-1, PL 666 and PL 727.

5.3.2 Earthworks

General Requirements

The *Contractor* carries out all earthworks in accordance with PL 889.

Excavation to Waste and Disposal

The *Contractor* arranges the disposal of all surplus and waste materials.

Inspection and Safety

The *Contractor* excavates foundations. Where excavations exceed a depth of 1.2 metres, the *Contractor* provides suitable shoring. All foundation depths are confirmed by the *Supervisor* prior to casting.

The *Contractor* does not permit the edges of excavations to be surcharged with loads, such as vehicles or material stockpiles, while workmen are working nearby or inside the excavations.

5.3.3 Retaining walls

The *Contractor* constructs all required dry stack retaining walls with L300 retaining blocks (or equivalent accepted), including 30MPa reinforced concrete strip footings and installs all required agricultural sub-soil drainage and soil geotextile filtration.

5.3.4 Backfilling and Layerworks

The *Contractor* complies with PL889 and SANS 2001 BE1 specifications for all backfilling and layerworks.

5.3.5 Concrete Works

Materials

The *Contractor* complies with the relevant requirements of SANS 471 for provision of all cement used in all concrete works. The maximum water-to-cement ratio allowed for all concrete works is 0.5.

Concrete Finish

The *Contractor* produces a mock-up of the concrete finish to establish the standard for all subsequent finishes. All concrete finishes are to be measured against the accepted mock-up.

Reinforced concrete construction complies with the standardized specification SANS 2001-CC1 for ordinary buildings.

The degree of accuracy for foundations is grade III, and for all other concrete works, grade II.

A minimum grade or slope of 2% is to be maintained on all floors to ensure proper drainage. All concrete edges and corners are to be finished with a 20mm chamfer.

Concrete Strength Requirements

The characteristic cube strength for reinforced concrete at 28 days is as follows:

- Foundations: 25 MPa
- Columns: 40 MPa
- Beams, slabs & stairs: 35 MPa
- Retaining walls: 30 MPa
- Pump plinths: 25 MPa

The *Contractor* submits concrete mix designs, including for all materials and admixtures, to the *Project Manager* for acceptance.

Concrete Cover to Reinforcement

Concrete cover to reinforcement is to be maintained by the *Contractor* using either nylon spacers or precast concrete blocks with galvanised binding wires cast in. The specified covers are:

- Foundations (without shutters): 75mm
- Foundations (with shutters): 50mm
- Sides of columns: 40mm
- Beams, slabs & stairs: 30mm

Concrete Reinforcing

The *Contractor* provides all reinforcing layouts and schedules, in accordance with SANS 920 and SANS 10144, and submits to the *Project Manager* for acceptance.

Welded steel fabric for concrete reinforcement is produced in accordance with SABS 1024.

All reinforcement work is inspected and accepted in writing by the *Supervisor* prior to commencement of concrete casting.

Inspections are conducted by the *Supervisor* if all steel is properly fixed, spacer blocks are positioned, shuttering is cleaned, cable positions are marked, and the reinforcement is checked by the *Contractor*.

Defects to Concrete Finish

The requirements of SANS 2001-CC1 apply to all concrete finishes. The *Contractor* informs the *Supervisor* of any defects and remediates the defects in accordance with the repair specification.

The *Contractor* does not attempt to mask or repair defects independently. The *Supervisor* assesses the extent, depth, and location of any defect and determines whether repair is permissible or if demolition and recasting is required.

Costs associated with investigation, repair, remediation, and reconstruction of defective work are borne by the *Contractor*, and all such work meet the satisfaction of the *Supervisor*.

Curing

The *Contractor* submits proposed curing methods to the *Supervisor* for review and acceptance. All concrete is to be continuously cured by the *Contractor* for seven days using an accepted method.

Formwork

The *Contractor* provides and removes all formwork required for the *works*. Removal of formwork aligns with specifications for warm to hot conditions:

- Beam sides, wall sides & unloaded columns: 1 day
- Beam and coffer soffits (props remaining): 7 days
- Slab props: 10 days
- Beam and cantilever props: 14 days

Construction, Movement, and Floor Joints

Construction, isolation, and saw cut joints are installed as per SANS 2001-CC1. Sawcut joints in surface beds are made within 24 hours of casting the concrete.

Joint Sealing

All joints are reamed, cleaned, and sealed with ABE Durakol GHM Polysulphide joint sealant (or an accepted equivalent) and ABE Dura.Cord joint backing material (or an accepted equivalent), applied strictly according to manufacturer's instructions.

The *Contractor* adheres to requirements for joint preparation, priming, and sealant mixing, and ensures that concrete moisture content before primer application does not exceed manufacturer recommendations.

Non-Shrink Grout

ABE Dura.Grout non-shrink grout (or accepted equivalent) is applied strictly according to manufacturer's instructions, especially regarding surface preparation, mixing, and application.

Anchors

All new holding down bolts are to be Grade 4.8 M24 and M20 bolts. Chemical anchors are to be M20 and M24 Hilti HIT-HY 200 with HIT-V rod or accepted equivalents.

Staircase holding down bolts should be set out and drilled in place with the stair base plate.

Bollards

All new protection bollards are 1.0m high above NGL and are HDG 200NB Schedule 40 carbon steel pipe filled with 15mPa mass concrete and painted black & yellow.

5.3.6 Technical Specifications

Document Number	Description
SANS 10144	Detailing of steel reinforcement for concrete
SANS 282	Bending dimensions and scheduling of steel reinforcement for concrete
SANS 10164	Masonry code: Part 1 - 2
SANS 10160	Loading codes: Part 1 - 8
SANS10100 (51992-1-1)	The structural use of concrete: Part 1 - 2
SANS 1200A (1986)	General
SANS 2001-BS1	Site Clearance
SANS 2001-BE1	Earthworks
SANS 2001-CC1	Concrete works (structural)
SANS 2001-CM1	Masonry walling
SANS 2001-CM2	Strip footing, pad footings, and slab on the ground foundation for masonry walling
SANS 2001-DP1	Earthworks for buried pipelines and prefabricated culverts
SANS 2001-DP5	Stormwater drainage
SANS 2001-EJ	Joinery
SANS 2001-CG1	Installation of glazing in window and door frames
SANS 2001-EM1	Cement plasters
PL 889	Earthworks Specification
PL 890	Bedding and Padding Specification

5.4 Structural Engineering

5.4.1 Structural Works

The *Contractor* provides all workmanship and finishes in structural works of the highest quality, with every individual part accurately manufactured to precise dimensions and form to ensure exact fit during erection.

Steelwork complies with the recommendations of SANS 10162 and SANS 2001 CS1.

Steel components are cut by shearing, cropping, or sawing, with all sheared or cropped edges dressed to a neat, workmanlike finish, free from distortion.

Holes for turned and fitted bolts are accurately drilled or reamed, with the diameter not exceeding the finished bolt diameter by more than 0.25 mm.

Any steelwork that is partially heated is to be properly annealed except for minor details.

All spliced connections achieve 100% capacity of the spliced member.

Burrs and sharp edges are ground smooth. All items are clearly hard-marked with respective mark numbers.

The *Contractor* verifies the accuracy of position, level, and projection of all anchor bolts as soon as possible after casting into the concrete and reports discrepancies to the *Supervisor* prior to steelwork erection.

The *Contractor* submits a safe erection method statement to the *Project Manager* before commencing any steelwork erection.

5.4.2 Materials

The *Contractor* ensures that all materials, welding, and fabrication complies with current and relevant British or South African Standards.

5.4.3 Steelwork

The *Contractor* provides hot rolled structural steelwork that conforms to EN10025-2-S355JR.

Fabrication and erection of structural steel complies with SANS 10162-1 and SANS 2001-CS1. Cold formed steel is fabricated and erected according to SANS 10162-2 and has a minimum yield stress of 200 MPa.

5.4.4 Fasteners

The *Contractor* manufacturers all erection bolts to SABS 136, with Bolt Grade 8.8.

Where main frame joints are bolted, shop detailing allows for slip at these joints to maintain intended alignment.

Pump assembly nuts are to be welded beneath the flange of supporting steel beams.

5.4.5 Holding Down Bolts

The *Contractor* provides Grade 4.8 anchor bolts.

All holding down bolts, nuts, and washers are hot-dip galvanised, with nuts tapped oversized following galvanising.

5.4.6 Flooring

The *Contractor* provides all flooring and landings consisting of Mentis RS40 40x4.5 (or equivalent accepted) bearer bars galvanised panels, complete with 140x10mm kick flat plates and all necessary connections and fastenings.

Panels are fully banded and equipped with HDG 140x6 kick flats around the perimeter and all openings, including stair landings.

All stair landings feature Mentis RS40 40x4.5 open grid flooring (or equivalent accepted), with stair treads of standard size (900 RS40) and anti-slip nosing.

5.4.7 Handrailing

The *Contractor* installs handrailing that complies to PL892, of rigid construction and projecting 1000mm above the top of flooring, complete with knee rails and stanchions, all securely bolted onto steel members through pre-drilled holes.

The *Contractor* ensures that all handrailing is properly contoured around stairs and landings, is hot-dip galvanised to SANS 121 and painted, with stanchions in black and knee and handrails in golden yellow.

5.4.8 Connections

The *Contractor* ensures that all site connections are designed to be bolted to accommodate both axial loads and moments. A minimum of M20 Grade 8.8 hot-dip galvanised bolts are used.

All edge distances and bolt dimensions comply with SANS 10162 standards except where deviations are expressly indicated.

5.4.9 Welding

The *Contractor* provides 6mm continuous fillet welds conforming to SANS 10044/SABS 044, the *Contractor* provides clean, smooth surfaces and full strength of joined sections.

Welding is performed by suitably qualified welders. Site welding is prohibited without prior acceptance of the *Supervisor*. Ends of hollow sections are moisture-sealed with suitable welding.

All modifications requiring welding are to occur within workshops with proper quality control procedures in place.

5.4.10 Corrosion Protection of Structural Steelwork

All structural steel and cold rolled sections are hot-dip galvanised to SANS 121 ISO 1461.

5.4.11 Technical Specifications

Document Number	**Description**
SANS 10162	Steel Design Codes: Part 1 - 4
SANS 10160	Loading codes: Part 1 - 8
SANS 1200A (1986)	General
SANS 2001-CS1	Structural steelwork
SANS 121:2024 ISO 1461:2022	Hot dip galvanized coatings on fabricated iron and steel articles — Specifications and test methods
SANS 10094	Use of high strength friction grip bolts
SANS 10237	Roof and side cladding
SANS 50025 / EN 10025	Hot rolled products of structural steels
PL 892	Structural Steel Specification for Walkways, Platforms, Cat ladders and Stairways

5.5 Mechanical and Fire Engineering

5.5.1 Piping System

The *Contractor* provides and tests all Plant and Materials for the new piping system in accordance with the Piping Specification, document TPL-TECH-PL 912 and the Fire Pump Specification TPL-TECH-PL 901.

The *Contractor* uses the corrosion specification identified as System 1 within Annexure A of PL407 Specification for Painting of Manifold Piping and Ancillary Equipment.

5.5.2 Foam Concentrate Tank

The *Contractor* provides and tests the new foam concentrate tank in accordance with the Foam Concentrate Tank Specification, document TPL-TECH-PL 911.

5.5.3 Foam Concentrate

The *Contractor* provides and tests foam concentrate in accordance with the Foam Concentrate Specification, document TPL-TECH-PL 915.

The *Contractor* provides and fills the foam concentrate into the foam concentrate storage tank and provides foam concentrate required to successfully commission the fire system. The *Contractor* fills the foam concentrate tank to 110% after final commissioning is complete.

The *Contractor* removes and relocates the foam concentrate from the existing fire system foam concentrate tank as described in the Fire System Demolition Scope of Work document, 11364-A1147.

5.5.4 Water Tanks

The *Contractor* provides and tests the new fire water tanks in accordance with the Water Tank Specification, document TPL-TECH-PL 902.

The *Employer* makes available free of charge, the water for the first fill of the water tanks. The *Contractor* fills the new water tanks with water provided by the *Employer.* The *Contractor* provides all water required for commissioning of the new fire system.

The *Contractor* relocates the water from the existing fire water tank into the new water tank.

5.5.5 Pump-sets and Diesel Tanks

The *Contractor* provides and tests the new pump-sets in accordance with the following specifications:

- Duty and stand-by fire pump-sets and other miscellaneous Plant and Materials in accordance with TPL-TECH-PL 919
- Hand drum pump in accordance with TPL-TECH-PL 919
- Jockey pump-set in accordance with TPL-TECH-PL 908
- Foam offloading pump-sets in accordance with:
    - Mechanical seal
    - Integral pressure relief valve
    - Galvanised mild steel baseplate

The *Contractor* provides and fills diesel into the diesel storage tanks and provides diesel required to successfully commission the fire system. The *Contractor* provides and fills each diesel tank to provide 150 minutes of firefighting during the design credible event after final commissioning is complete.

5.5.6 Valves and Pressure Gauges

The *Contractor* provides and tests valves and other Plant and Materials in accordance with the following specifications:

- Ball valves in accordance with TPL-TECH-PL 897
- Butterfly valves in accordance with TPL-TECH-PL 898
- Control valves in accordance with TPL-TECH PL 899
- Gate valves in accordance with TPL-TECH-PL 900
- Actuated expanding plug valve in accordance with TPL-TECH-PL 903
- Pressure gauges in accordance with TPL-TECH-PL-909

The *Contractor* provides polyethylene valve and equipment lock-out tags for the Plant and Material identified during the HAZOP.

5.5.7 Firefighting Equipment

The *Contractor* provides and tests bund pourers, foam monitors, balanced pressure proportioners, balance valves, hydrant valves, hose reel boxes and other Plant and Materials in accordance with the following specifications:

- Foam generating equipment in accordance with TPL-TECH-PL 904
- Fire department interface connections in accordance with TPL-TECH PL 910

5.5.8 Miscellaneous Fire Equipment

General

Where fasteners (coach screws, sleeve and nail anchors etc.) are required for mounting of fire equipment or fire equipment brackets to masonry, concrete or dry walls, they are stainless steel.

Fire hose reels, fire extinguishers and signage is only purchased from original equipment manufacturers (OEM's) with a valid ISO 9001 certificate.

Fire Hose Reels

Fire hose reels are 19mm in diameter unless otherwise specified, and supplied and installed in accordance with SANS 543, SANS 10105-2 and SANS 10400-W.

Fire hose reels that are located outdoors (i.e. not enclosed by four walls and a roof), are provided with an accepted purpose made UV resistant red cover or box enclosure.

Fire hose reels are supplied with the appropriate signage in accordance with SANS 1186-1 and in accordance with this specification.

Fire Extinguishers

Water type, foam type and dry chemical powder (DCP) type fire extinguishers are supplied in accordance with SANS 1910.

The carrying handle is not more than 1.5 m above the natural ground level, and the bottom of the extinguisher is not less than 3 cm from the natural ground level.

Fire extinguishers are wall mounted and installed in accordance with SANS 10105-1.

Brackets for wall mounting of fire extinguishers are mild steel and hot-dipped galvanised to SANS 121. The brackets are in accordance with Annexure E of SANS 1910 or another design accepted by the *Project Manager*.

Fire extinguishers that are located outdoors (i.e. not enclosed by four walls and a roof), have a heavy-duty corrosion resistant coating and are fitted with an accepted purpose made UV resistant red cover or box enclosure. Light duty coatings are acceptable for fire extinguishers that are located indoors.

5.5.9 Signage

The *Contractor* provides aluminium signs for fire extinguishers, fire hose reels and for escape routes that is photoluminescent in accordance with SANS 1186. Signage within offices and rooms of similar usage shall be 190mm in height. Signage within open spaces such as the pump house and placed outdoors shall be minimum 290mm in height. Signage shall be supplied and installed in accordance with SANS 1186 and installed in accordance with SANS 10114-2, SANS 10400-T. Escape route, fire hose reel, and fire extinguisher signage shall be housed within an extruded 20mm aluminium frame with a recess for insertion of the sign. The aluminium frame shall be permanently attached to surfaces using fasteners, or if hung from ceilings, stainless steel wire shall be used.

The *Contractor* provides signage mounted to the pipework immediately downstream of each control valve supplying fire water or foam pre-mix to the fire areas for *Employer* identification. The *Contractor* provides the suitably sized signage, easily readable from at least 5 m away, made from hot-dipped galvanised steel plate, uni-strut and u-bolts, appropriately sized to include text of the fire area (e.g. “Spill Basin”) and the control valve tag (e.g. XV-184A). Signage text is either embossed or engraved. Stickers will not be accepted. The *Contractor* also provides the signage to identify the “Fire Ring Main Booster Connection”, “Fire Service Suction”, and “Fire Water Tank Refill Connection” and the associated operating pressure limitations. The *Contractor* submits the signage designs to the *Project Manager* for acceptance.

5.5.10 Technical Specifications

***Employer* Specifications**

Document Number	Description
TPL-TECH-PL 897	Ball Valve Specification
TPL-TECH-PL 898	Butterfly Valve Specification
TPL-TECH-PL 899	Control Valve Specification
TPL-TECH-PL 900	Gate Valve Specification
TPL-TECH-PL 919	Containerised Fire Pump-set Specification
TPL-TECH-PL 902	Water Tank Specification

Document Number	Description
TPL-TECH-PL 903	Actuating Expanding Plug Valve
TPL-TECH-PL 904	Foam Generating Equipment
TPL-TECH-PL 906	Non-Return Valves
TPL-TECH-PL 907	Back Flow Preventer
TPL-TECH-PL 908	Jockey Pump-set Specification
TPL-TECH-PL 909	Pressure Gauge Specification
TPL-TECH-PL 910	Fire Department Interface Equipment Specification
TPL-TECH-PL 911	Foam Concentrate Tank Specification
TPL-TECH-PL 912	Piping Specification
TPL-TECH-PL 913	Control System Specification
TPL-TECH-PL 915	Foam Concentrate
TPL-TECH-PL 917	Equipment Document Handover Procedure
TPL-TECH-PL 918	Commissioning and Handover Procedure
TPL-TECH-F-STD-001	Transnet Pipelines Technical Fire Protection Design Standard
TPL-TECH-DO-WI-001	Transnet Pipelines Handover of As-built and Other Documents from Technical Projects to Drawing Office Work Instruction
XPS/1015/13013	Hazardous area classification guidelines report for Transnet Pipelines (TPL) infrastructure
TPL-TECH-PL 203B	Specification Thermal Relief Valve, Screwed type for Petroleum Product Service
TPL-TECH-PL 407	Specification Painting of Manifold Piping and Ancillary equipment
TPL-TECH-PL 415E	Specification Requirements for Steel Flange Insulating Gasket Kit
TPL-TECH-PL 804A	Specification General Welding
TPL-TECH-PL 805A	Specification General Non-destructive Testing
TPL-TECH-PL 877	Specification Colour Coding Requirement of Pipelines & Ancillary Equipment

ANSI Standards

Document Number	Description
ANSI B16.34	Valves—Flanged, Threaded, and Welding End
ANSI B16.5	Pipe Flanges and Flanged Fittings

API Standards

Document Number	Description
API 5L	Specification Line Pipe
API 6D	Pipeline Valves
API 6FA	Standard for Fire Test of Valves
API 607	Fire Test for Quarter-turn Valves and Valves Equipped with Non-metallic Seats
API 1104	Welding of Pipelines and Related Facilities.

ASME Standards

Document Number	Description
ASME VIII	ASME Boiler and Pressure Vessel Code (BPVC), Section VIII, Rules for Construction of Pressure Vessels.
ASME B1.20.1	Pipe Threads, General Purpose (Inch)
ASME B16.10	Face-to-Face and End-to-End Dimensions of Valves
ASME B16.5	Pipe Flanges and Flanged Fittings

ASTM Standards

Document Number	Description
ASTM A123	Standard Specification for Zinc (Hot–Dipped Galvanized). Coatings on Iron and Steel Products
ASTM A193	Standard Specification for Alloy-Steel and Stainless Steel Bolting for High-Temperature or High-Pressure Service and Other Special Purpose Applications
ASTM A194	Standard Specification for Carbon Steel, Alloy Steel, and Stainless Steel Nuts for Bolts for High Pressure or High Temperature Service, or Both
ASTM D610	Standard Practice for Evaluating Degree of Rusting on Painted Steel Surfaces.
ASTM D1293	Standard Test Methods for PH of Water.
ASTM D3359	Standard Test Method for Measuring Adhesion by Tape Test.
ASTM D4285	Standard Test Method for Indicating Oil or Water in Compressed Air.
ASTM D4541	Standard Test Method for Pull–Off Strength of Coatings Using Portable Adhesion Testers.
ASTM D4572	Standard Test Method for Measuring MEK Resistance of Ethyl Silicate (Inorganic) Zinc–Rich Primers by solvent Rub.
ASTM E337	Standard Test Method for Measuring Humidity with a Psychomotor

BS Standards

Document Number	Description
BS EN 1074-1	Valves for water supply. Fitness for purpose requirements and appropriate verification tests
BS EN 1074-2	Valves for water supply. Fitness for purpose requirements and appropriate verification tests
BS 6464	Specification for reinforced plastic pipes, fittings and joints for process plants
BS EN 12756	Mechanical seals. Principal dimensions, designation and material codes

EN Standards

Document Number	Description
EN 1568 – Part 4	Fire extinguishing media – Foam concentrates – Part 4: Specification for low expansion foam concentrates for surface application to water-miscible liquids
EN 1717	Protection against pollution of potable water in water installations and general requirements of devices to prevent pollution by backflow
EN 10204	Metallic products – Types of inspection documents
EN 12729	Devices to prevent pollution by backflow of potable water – Controllable backflow preventer with reduced pressure zone – Family B – Type A
EN 13121	GRP Tanks and vessels for use above ground

FM Standards

Document Number	Description
FM 1041	Backflow Preventers for Fire Protection Systems
FM1110	Automatic Control Valves for Fire Protection Systems
FM1112	Indicating Valves (Butterfly or Ball Type) (Threaded)
FM 1130	Gate valves for Fire Protection Services
FM1210	Check Valves for Fire Protection Service
FM 5511	Firefighting Nozzles for Use with Hose, Monitor Assemblies and Other Firefighting Equipment
FM 5560	Water Spray nozzles

IMO Standards

Document Number	Description
IMO MSC - 1312	Revised Guidelines for the Performance and Testing Criteria, and Surveys of Foam Concentrates for Fixed Fire-Extinguishing Systems

ISO Standards

Document Number	Description
ISO 1940-1	Mechanical Vibration – Balance Quality Requirements for Rotors in a Constant (Rigid) State – Part 1: Specifications and Verification of Balance Tolerances
ISO 5211	Industrial valves — Part-turn actuator attachments
ISO 9001	Quality Management
ISO 9906	Rotodynamic Pumps – Hydraulic Performance Acceptance Tests – Grades 1, 2 and 3
ISO 14001	Environmental Management standards

Document Number	Description
ISO 145	Hot dip galvanised coatings on fabricated iron and steel articles Specification and test methods
ISO 2808	Paints and varnishes – Determination of film thickness
ISO 4624	Paints and varnishes – Pull-off test for adhesion
ISO 4268 -3	Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance
ISO 8501 -1	Preparation of steel substrates before application of paints and related products - Visual assessment of surface cleanliness
ISO 8502 -3	Preparation of steel substrates before application of paint and related products – Tests for the assessment of surface cleanliness -Part 3: Assessment of dust on steel surfaces prepared for painting (pressure sensitive tape method
ISO 8503 -4	Preparation of steel substrates before application of paint and related products – Surface roughness characteristics of blast cleaned steel substrates – Part 4: Method for the calibration of ISO surface profile comparators and for the determination of surface profile – stylus instrument procedure
ISO 8501	Preparation of steel substrates before application of paints and related products — Visual assessment of surface cleanliness
ISO 8504	Preparation of steel substrates before application of paint and related products – Surface preparation methods
ISO 8501 -1	Preparation of steel substrates before application of paints and related products - Visual assessment of surface cleanliness
ISO 8502 -3	Preparation of steel substrates before application of paint and related products – Tests for the assessment of surface cleanliness -Part 3: Assessment of dust on steel surfaces prepared for painting (pressure sensitive tape method
ISO 12944	Paint and varnishes – Corrosion protection of steel structures by protective paint systems. Parts 1 to 8
ISO 14713	Protection against corrosion of iron and steel structures – Zinc and aluminium coatings – Guidelines

LAST Fire Standards

Document Number	Description
LAST Fire	Foam Test

MSS Standards

Document Number	Description
MSS-SP-67	Manufacturers Standardization Society for Butterfly Valves
MSS-SP-97	Integrally Reinforced Branch Outlet Fittings

NFPA Standards

Document Number	Description
NFPA 15	Standard for Water Spray Fixed Systems for Fire Protection
NFPA 16	Installation of Foam-Water Sprinkler and Foam-Water Spray Systems
NFPA 20	Standard for the Installation of Stationary Pumps for Fire Protection
NFPA 25	Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems

NACE Standards

Document Number	Description
NACE 5	Surface Preparation and Cleaning of Metals by Water Jetting Prior to Recoating.
NACE 6A192	Dehumidification and Temperature Control During Surface Preparation, Application and Curing for Coatings / Linings of Steel Tanks, Vessels and Other Enclosed Spaces.
NACE 6G198	Wet Abrasive Blast Cleaning
NACE MR-01-75	Control of External Corrosion on Underground or Submerged Metallic Piping Systems.
NACE RP0169	Control of External Corrosion on Underground or Submerged Metallic Piping Systems
NACE SP0169	Control of External Corrosion on Underground or Submerged Metallic Piping Systems
NACE SP0178	Design, Fabrication, and Surface Finish Practices for Tanks and Vessels to Be Lined for Immersion Service
NACE SP0188	Discontinuity (Holiday) Testing of New Coatings on Conductive Substrates
NACE SP0198	Control of Corrosion under Thermal Insulation and Fireproofing Materials – A Systems Approach

OHS Standards

Document Number	Description
OHS Act	Occupational Health and Safety Act No. 85 of 1993 as amended

SABS Standards

Document Number	Description
SABS 1200 A	General
SABS 1200 L	Medium Pressure Pipelines
SABS 299	Leaded Petrol
SABS 342	Automotive Diesel Fuel
SABS 455	Covered electrodes for the manual arc welding of carbon and carbon-manganese steels

Document Number	Description
SABS 1431	Weldable structural steels
SABS 1598	Unleaded Petrol

SANS Standards

Document Number	Description
SANS 543	Fire hose reels (with semi-rigid hose)
SANS 1151	Portable rechargeable fire extinguishers - Halogenated hydrocarbon type extinguishers
SANS 1186-1	Symbolic Safety Signs Part 1: Standard signs and general requirements
SANS 1186-2	Symbolic Safety Signs Part 2: Self-luminous (radioluminescent) signs
SANS 1186-3	Symbolic Safety Signs Part 3: Internally illuminated signs
SANS 1186-4	Symbolic Safety Signs Part 4: Retro-reflective signs
SANS 1186-5	Symbolic Safety Signs Part 5: Photoluminescent signs
SANS 10105-2	The use and control of fire-fighting equipment Part 2: Fire hose reels, hydrants and booster connections
SANS 10108	The classification of hazardous locations and the selection of apparatus for use in such locations
SANS 10139	Fire Detection and Alarm Systems for Buildings – System Design, Installation and Servicing
SANS 10140	Identification Colour Marking
SANS 10140-2	Identification Colour Marking Part 2: Identification of Hazards and Equipment in Work.
SANS 10400	The application of National Building Regulations
SANS 10400-T	The application of the National Building Regulations - Part T: Fire protection
SANS 10400-W	The application of the National Building Regulations - Part W: Fire Installation
SANS 10114-2	Interior Lighting Part 2: Emergency Lighting
SANS 10086-1	The installation, inspection and maintenance of equipment used in explosive atmospheres
SANS 10089-1	The Petroleum Industry Part 1: Storage and distribution of petroleum products in above-ground bulk installations
SANS 10089-2	The Petroleum Industry Part 2: Electrical and other installations in the distribution and marketing sector
SANS 10228	The identification and classification of dangerous goods for transport
SANS 32	Internal and/or external protective coatings for steel tubes — Specification for hot dip galvanized coatings applied in automatic plants
SANS 121	Hot Dip Galvanised Coatings on Fabricated Iron and Steel Articles – Specifications and Test Methods
SANS 1091	National colour standard
SANS 1128-1	Firefighting Equipment: Components of underground and above-ground hydrant systems

Document Number	Description
SANS 1128-2	Firefighting Equipment: Hose couplings, connectors, and branch pipe and nozzle connections
SANS 1445	Thermal insulation materials for Industrial Application
SANS 1700	Fasteners
SANS 7203	Fire extinguishing media — Foam concentrate
SANS 9288	Thermal Insulation – Heat Transfer by Radiation – Physical Quantities and definitions
SANS 9364	Continuous hot-dip aluminium/zinc coated steel sheet
SANS 9906	Rotodynamic Pumps – Hydraulic Performance Tests – Grades 1,2 and 3
SANS 50054-3	Fire detection and fire alarm systems - Part 3: Fire alarm devices - Sounders
SANS 50054-4	Fire detection and fire alarm systems - Part 4: Power supply equipment
SANS 50054-11	Fire detection and fire alarm systems - Part 11: Manual call points
SANS 53121	GRP Tanks and vessels for use above ground
SANS 60079-14	Explosive atmospheres - Part 14: Electrical installations design, selection and erection
SANS 121	Hot-dip galvanized coatings on fabricated iron and steel articles – Specifications and test methods
SANS 1217	Internal and external organic coating protection for buried steel pipelines
SANS 1274	Coatings applied by the powder coating process.
SANS 5769	Cleanliness of blast cleaned surfaces for painting
SANS 5772	Profile of blast cleaned surfaces for painting
SANS 60079	The classification of explosive atmospheres for flammable gases and vapours.
SANS 10064	The preparation of steel surfaces for coating

SSPC Standards

Document Number	Description
SSPC - PA	Shop, field and Maintenance Painting of Steel
SSPC - PA2	Measurement of Dry Paint Thickness with Magnetic Gauges
SSPC – SP1	Solvent Cleaning
SSPC - Vis3	Guide and Reference Photographs for Steel Surfaces Prepared by Hand and Power Tool Cleaning

UL Standards

Document Number	Description
UL 162	Standard for Foam Equipment and Liquid Concentrates
UL260	Dry Pipe and Deluge Valves for Fire-Protection Service
UL312	Check Valves for Fire Protection Service
UL 262	Gate valves for Fire Protection Services
UL1091	Butterfly Valves for Fire-Protection Service

Document Number	Description
UL1469	Standard for Strength of Body and Hydraulic Pressure Loss Testing of Backflow Special Check Valves
UL 2351- VNIV	Spray Nozzles for Fire-Protection Service.

5.6 Electrical Engineering

5.6.1 Cable Rack

The *Contractor* designs, supplies and installs aboveground electrical cable racking and other cable support systems as per the *Contractor's* design and the Specification for Cable, Racking, Trenching & Earthing Reticulation Codes of Practice, document PL 727.

The minimum bending radius of electrical cables are maintained and all electrical cables are protected against the adverse effects of direct sunlight.

The *Contractor* provides cable racks, covers, bends, tees, splices, reducers, cable rack supports and fixing brackets, fasteners, accessories as well as all earthing and bonding conductors.

The *Contractor* designs general cable rack supports and fixing brackets for the design weight of the cable racks.

The *Contractor* attaches cable rack supports and fixing brackets to concrete and steel structures.

The Contractor attaches cable rack supports and fixing brackets to steel structures using non-welded, self-sealing threaded studs.

The *Contractor* provides hot dip galvanised or stainless-steel cable rack accessories and fasteners.

The *Contractor* does not use electroplated components.

The *Contractor* implements and maintains measures to prevent galvanic corrosion.

5.6.2 Cabling

The *Contractor* supplies, installs and tests all primary electrical distribution and reticulation cables as per the *Contractor's* design for the following buildings and / or electrical installations:

- Normal and essential (back-up diesel generator) electrical supply for the Pump House respective electrical distribution boards (DB's) supplied from the Main Electrical Plantroom.
- Normal electrical supply for the Pump House motor control centre (MCC) supplied from the Pump House normal electrical supply distribution board (DB).
- Normal electrical supply for the engine heaters of the two (2) Fire Pumps from the Pump House normal electrical supply distribution board (DB).

- Normal electrical supply for the Jockey Pump from the Pump House normal electrical supply motor control centre (MCC).
- Normal electrical supply for the Foam Loading Pump from the Pump House normal electrical supply motor control centre (MCC).

The *Contractor* supplies, installs and tests all secondary electrical distribution and reticulation cables as per the *Contractor's* design (i.e. internal building electrical supply distribution, electrical supply to electrical equipment and infrastructure, electrical supply to electrical motors, electrical supply to valves, electrical supply to control panels, etc.) and the Specification for Cable, Racking, Trenching & Earthing Reticulation Codes of Practice, document PL 727.

The *Contractor* supplies, installs, glands, tests and terminates electrical cables as per the cable schedules and engineering drawings developed by the *Contractor*.

The *Contractor* verifies cut lengths prior to procurement and installs actual site measurements taken by the *Contractor*.

The *Contractor* manages cable drum assignments and cable cut lengths to prevent cable joints or short runs and to minimise off-cuts.

The *Contractor* supplies and installs cable straps, cable identification tags, fasteners and all associated consumables.

The *Contractor* provides all equipment for the cable installation such as cable drum jacks, cable rollers and other tools required to complete the *works*.

The *Contractor* supplies and installs suitable glands, shrouds, termination kits, wire marking, wire-end ferrules and associated consumables required for glanding and terminating cables.

The *Contractor* conducts tests for all cables before and after installation.

5.6.3 Earthing, Bonding and Lightning Protection

The *Contractor* provides and tests earthing, bonding and lightning protection systems in accordance with the *Contractor's* design for the following buildings and structures:

- Pump House inclusive of the two (2) Fire Pump Containers
- Two (2) Water Storage Tanks
- Pipes and pipe support structures.

The *Contractor* provides and tests earthing and bonding conductors to earth and bond all exposed and extraneous conducting parts, e.g. instruments, field control stations, instrument stands, light poles, cable racking, pipes, pipe support structures, etc. in accordance with SANS standards SANS 10142-1, SANS 10086-1, SANS 10089-2 and SANS 60079-14 and TPL specifications PL 666 and PL 727.

The *Contractor* provides lugs, branch connectors, fasteners, cable straps and all associated accessories.

5.6.4 Electrical Plant and Materials

The *Contractor* designs, supplies, factory acceptance tests, packages, delivers to site, off-loads, rigs into position, installs, site acceptance tests and commissions the following electrical Plant and Materials included in the *works:*

- Low voltage normal electrical distribution board (DB) for the Pump House.
- Low voltage essential electrical distribution board (DB) for the Pump House.
- Low voltage motor control centre (MCC) for the Foam Loading Pump and Jockey Pump for the Pump House.

The *Contractor* provides mounting brackets and associated fixing accessories.

The *Contractor* provides labels engraved with equipment tag numbers for electrical equipment compliant with PL 666 and PL 727.

The *Contractor* conducts functional testing to prove the operation and control of each piece of electrical Plant and / or Material included in the *works*.

The *Contractor* conducts system functional testing to prove the operation and control of each system included in the *works*.

5.6.5 Building Electrical Installation

The *Contractor* supplies, installs and tests lighting and small power fixtures in the following buildings as per the Contractor's design:

- Pump House inclusive of the two (2) Fire Pump Containers

The *Contractor* supplies and installs HDG conduit, wiring, mounting brackets and associated accessories.

5.6.6 Certification

The *Contractor* provides IA certificates as per the requirements of ARP0108 Annex A for all explosion protected equipment supplied by the *Contractor*.

The *Contractor* submits electrical Certificates of Compliance (COC) for low voltage installations included within the *works* in accordance with the latest revision of SANS 10142-1.

5.6.7 Technical Specifications

***Employer* Specifications**

Document Number	Description
PL 100	Drawing Standards Document
PL 619	Specification For Three Phase Electric Actuators
PL 631	Specification for Low Voltage Switchgear and Distribution Boards
PL 647	Requirements for the Supply of 110VDC Battery Charger
PL 648	Requirements for the Supply of 50VDC Battery Charger
PL 666	Electrical Design Criteria
PL 675	Specification for Electric Fences
PL 711	Specification for Equipment Cabinets to House Electronic Equipment
PL 727	Cable, Racking and Trenching & Earthing Installation Codes of Practice
XPS/1015/13013	Hazardous area classification guidelines report for Transnet Pipelines (TPL) infrastructure

SANS Standards

Document Number	Description
SANS 97	Electric cables-Impregnated paper-insulated metal-sheathed cables for rated voltages 3.3/3.3 kV to 19/33 kV
SANS 121	Hot-dip galvanized coatings on fabricated iron and steel articles
SANS 156	Moulded Case Circuit Breakers
SANS 214-1	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus Part 1: Emission
SANS 342	Automotive diesel fuel
SANS 767-1	Earth leakage protection units Part 1: Fixed earth leakage protection circuit-breakers
SANS 780	Distribution transformers
SANS 808	Cable glands for use on flameproof enclosures (Ex ‘d’)
SANS 950	Unplasticised polyvinyl chloride rigid conduit and fittings for use in electrical installations
SANS 1019	Standard voltages, currents and insulation levels for electricity supply
SANS 1063	Earth rods, couplers and connections
SANS 1091	National colour standards

Document Number	Description
SANS 1195	Busbars
SANS 1213	Mechanical cable glands
SANS 1274	Coatings applied by the powder-coating process
SANS 1339	Electric cables-Cross-linked polyethylene (XLPE) insulated cables for rated voltages 3.8/6.6 kV to 19/33 kV
SANS 1411	Materials of insulated electric cables and flexible cords
SANS 1473	Low-voltage switchgear and controlgear assemblies
SANS 1474	Uninterruptible power systems
SANS 1507	Electric cables with extruded solid dielectric insulation for fixed installations
SANS 1574	Electric flexible cables with solid extruded dielectric insulation
SANS 1632	Batteries
SANS 1652	Battery Chargers – Industrial Type
SANS 1700	ISO metric black bolts, screws and nuts (hexagon and square)

EN and BS Standards

Document Number	Description
EN 15714-2	Industrial valves - actuators part 2: electric actuators for industrial valves - basic requirements
BS 89	Direct acting indicating analogue electrical measuring instruments and their accessories
BS 115	Metalic Resistance Materials for Electrical Purposes
BS 142	Electrical protection relays
BS 159	Busbars and busbar connections
BS 229	Flameproof enclosures for electrical apparatus
BS 381C	Specification for Colours for Identification, Coding and Special Purposes
BS 1259	Intrinsically safe electrical apparatus and circuits for use in explosive atmospheres
BS 1433	Copper for electrical purposes. Rod and bar
BS 3693	Design of scales and indexes. Part 1
BS 3938	Current transformers
BS 3941	Voltage Transformers
BS 4683	Electrical apparatus for explosive atmospheres
BS 4794	Control switches. (Switching devices, including contractor relays, for control and auxiliary circuits, for voltages up to and including 1000 V AC and 1200 V DC.) Part 2.20
BS 4999	General requirements for rotating electrical machinery
BS 5472	Low voltage switchgear and control gear for industrial use. Terminal marking and distinctive numbering. General rules.
BS 5486	Low voltage switchgear and controlgear assemblies
BS 5490	Classification of degrees of protection provided by enclosures
BS 5514	Part 4: Speed Governing

Document Number	Description
BS 5514	Part 4: Speed Governing
BS 5514	Part 5: Specification for Over Speed
BS 6133	Safe Operation of Lead-Acid Stationary Cells and Batteries
BS 6351	Electric Surface Heating Part 1 Specification for Electric Surface Heating
BS 6351	Electric Surface Heating Part 2 Guide to the Design of Electric Surface Heating Systems
BS 6351	Electric Surface Heating Part 3 Code of practice for the Installation, Testing and maintenance of Electric Surface Heating Systems
BS 6387	Performance Requirements for Cables required to Maintain Circuit Integrity Under Fire Conditions
BS 7361	Cathodic Protection Part 1: Code of Practice for Land and Marine Applications
BS 5514	Part 4: Speed Governing
BS 5514	Part 5: Specification for Over Speed
BS 6133	Safe Operation of Lead-Acid Stationary Cells and Batteries
BS 6351	Electric Surface Heating Part 1 Specification for Electric Surface Heating
BS 6351	Electric Surface Heating Part 2 Guide to the Design of Electric Surface Heating Systems
BS 6351	Electric Surface Heating Part 3 Code of practice for the Installation, Testing and maintenance of Electric Surface Heating Systems
BS 6387	Performance Requirements for Cables required to Maintain Circuit Integrity Under Fire Conditions
BS 7361	Cathodic Protection Part 1: Code of Practice for Land and Marine Applications

NRS (National Rationalisation of Standards)

Document Number	Description
NRS 002	Graphical symbols for electrical diagrams

VDE (Verband der Elektrotechnik, Elektronik und Informationstechnik - Germany) Standards

Document Number	Description
VDE 0660	Regulations for low voltage power fuses (NH fuses) Part 4

DIN (Deutsches Institut fur Normung - Germany) Standards

Document Number	Description
DIN 24185	Specification for Air Filters used in General Ventilation
DIN 41494	Specification for Panel Mounting Racks
DIN43620	Low voltage high rupturing capacity fuses with blade contacts

5.7 Instrumentation Engineering

5.7.1 Cable Rack

The *Contractor* provides aboveground instrument cable racking and other cable support systems in accordance with the *Contractor's* design and the Specification for Cable, Racking, Trenching & Earthing Reticulation Codes of Practice, document PL 727.

The *Contractor* provides cable racks, bends, tees, splices, reducers, cable rack supports and fixing brackets, fasteners, accessories and bonding conductors.

The *Contractor* designs general cable rack supports and fixing brackets for the design weight of the cable racks.

The *Contractor* attaches cable rack supports and fixing brackets to concrete and steel structures.

The *Contractor* attaches cable rack supports and fixing brackets to steel structures using non-welded, self-sealing threaded studs.

The *Contractor* provides hot dip galvanised or stainless-steel cable rack accessories and fasteners.

The *Contractor* does not use electroplated components.

The *Contractor* implements and maintains measures to prevent galvanic corrosion.

5.7.2 Cabling

The *Contractor* provides glands, tests and terminates instrument cables in accordance the cable schedules and engineering drawings developed by the *Contractor* and the Specification for Cable, Racking, Trenching & Earthing Reticulation Codes of Practice, document PL 727.

The *Contractor* verifies cut lengths prior to procurement and installation based on actual site measurements taken by the *Contractor*.

The *Contractor* manages cable drum assignments and cable cut lengths to ensure that there are no cable joints or short runs and to minimise off-cuts.

The *Contractor* provides cable straps, cable identification tags, fasteners and associated consumables.

The *Contractor* provides all equipment required for cable installation such as cable drum jacks, cable rollers and other tools required to complete the activity.

The *Contractor* provides suitable glands, shrouds, termination kits, wire marking, wire-end ferrules and associated consumables required for glanding and terminating cables.

The *Contractor* conducts tests on all cables before and after installation.

5.7.3 Instrument Plant and Materials

The *Contractor* provides, factory acceptance tests, packages, delivers to site, off-loads, rigs into position, installs, site acceptance tests and commissions the following instrumentation Plant and Materials included in the *works.*

- Fire Control Panel (FCP), including controller, main operator interface and indicator mimic
- Battery backup power supply (dual redundant)
- First Responder Panel in the pump house
- First responder repeater panels in the operations control room and first responder repeater panel in the security office
- Field instruments such as fire alarm beacons, sirens and level switches for water and diesel tanks

The *Contractor* provides all cranage, haulage and rigging Equipment required to handle and manoeuvre electrical Plant and Materials included in the *works*.

The *Contractor* provides mounting brackets and associated fixing accessories.

The *Contractor* provides labels engraved with equipment tag numbers for electrical Plant.

5.7.4 Certification

The *Contractor* provides IA certificates as per the requirements of ARP0108 Annex A for all explosion protected equipment supplied by the *Contractor*.

5.7.5 Technical Specifications

Employer Specifications

Document Number	Description
PL 631	Specification for Low Voltage Switchgear & Distribution Boards
PL 711	Specification for Equipment Cabinets to House Electronic Equipment
PL 723	Automation Standard
PL 727	Specification for Cable, Racking, Trenching & Earthing Reticulation Codes of Practice
PL 889	Earthworks specification
PL 890	Bedding and Padding Specification
PL 892	Structural Steel Specification for Walkways , Platforms , Cat ladders and Stairways

SANS Standards

Document Number	Description
SANS 97	Electric cables - Impregnated paper-insulated metal-sheathed cables for rated voltages 3,3/3,3 kV to 19/33 kV (excluding pressure assisted cables)
SANS 1274	Coatings applied by the powder-coating process
SANS 1507-1	Electric cables with extruded solid dielectric insulation for fixed installations (300/500 V to 1 900/3 300 V) Part 1: General
SANS 1507-3	Electric cables with extruded solid dielectric insulation for fixed installations (300/500 V to 1 900/3 300 V) Part 3: PVC Distribution cables
SANS 1507-4	Electric cables with extruded solid dielectric insulation for fixed installations (300/500 V to 1 900/3 300 V) Part 4: XLPE Distribution cables
SANS 10086-1	The installation, inspection and maintenance of equipment used in explosive atmospheres Part 1: Installations including surface installations on mines
SANS 10089-2	The petroleum industry Part 2: Electrical and other installations in the distribution and marketing sector
SANS 10108	The classification of hazardous locations and the selection of equipment for use in such locations
SANS 10114-1	Interior lighting Part 1: Artificial Lighting of Interiors
SANS 10142-1	The wiring of premises Part 1: Low-voltage installations
SANS 10313	Protection against lightning - Physical damage to structures and life hazard

Document Number	Description
SANS 10198	The selection, handling and installation of electric power cables of rating not exceeding 33 kV
SANS 60079-14	Explosive atmospheres Part 14: Electrical installations design, selection and erection
SANS 60079-17	Explosive atmospheres Part 17: Electrical installations inspection and maintenance
SANS 62305-1	Protection against lightning - Part 1: General principles
SANS 62305-2	Protection against lightning - Part 2: Risk management
SANS 62305-3	Protection against lightning - Part 3: Physical damage to structures and life hazard
SANS 62305-4	Protection against lightning - Part 4: Electrical and electronic systems within structures

DIN (Deutsches Institut fur Normung - Germany) Standards

Document Number	Description
DIN 41494	Specification for Panel Mounting Racks
DIN 24185	Specification for Air Filters used in General Ventilation

API (American Petroleum Institute) Standards

Document Number	Description
API RP 2003	Protection against ignitions arising out of static, lightning and stray currents

6 LIST OF DOCUMENTS AND DRAWINGS

The *Employer* does not possess comprehensive and accurate records of below-ground infrastructure and services throughout the Site.

6.1 Drawings issued by the Employer

Item	Document Number	Document Title
Civil & Structural Engineering Typical Detail Drawings		
1	11364-A1047	Typical Details - Piping Demolition Capping Details
2	11364-A1091	Typical Details - T Posts Sheet 1
3	11364-A1092	Typical Details - T Posts Sheet 2
4	11364-A1093	Typical Details - Goal Posts
5	11364-A1094	Typical Details - Wall Mounted Supports - Sheet 1
6	11364-A1095	Typical Details - Wall Mounted Supports - Sheet 2
7	11364-A1096	Typical Details - Base Plates
8	11364-A1097	Typical Details - Connections
9	11364-A1098	Typical Details - Sleeper Supports
10	11364-A1099	Typical Details - Teflon Pad
11	11364-A1101	Typical Details - Plinths
12	11364-A1102	Typical Details - Holding Down Bolts
13	11364-A1104	Typical Details - Layerworks
14	11364-A1106	Typical Details - Trench Bedding
15	11364-A1107	Typical Details - Joints & Sealant
16	11364-A1109	Typical Details - Storm Water Cut Off Drain
17	11364-A1111	Typical Details - Cable Draw Box
18	11364-A1194	Typical details – Dry Stack retaining wall
Civil Engineering		
19	Transnet Howick Wg31_Howick July 2025	Transnet Howick Detail survey WG31
20	WS0000-0	Howick Pump Station
21	PL112878	Howick Site Layout
22	11364-A1189	Site Layout - Part Plan of Pump House and Water tanks
23	TPL-HWR-CI-DE-170424	Howick Pump Station (Spill Basin As-built)

Item	Document Number	Document Title
Structural Engineering		
24	11364-A1192	Pump House - Foundation Layout
25	11364-A1193	Pump House - Typical Sections
26	11364-A1190	Water Tank - Typical Foundation Layouts
27	11364-A1191	Water Tank - Typical Section & Details
Fire Engineering		
28	11364-A1195	Site Plan of New Fire Protection System
29	11364-A1035	As-Built Site Layout
30	11364-A1038	Conceptual Model
Fire Engineering Process and Instrumentation Drawings		
31	11364-A1005	Process and Instrumentation Diagram – Fire Water Reservoir
32	11364-A1006	Process and Instrumentation Diagram – Pump House
33	11364-A1007	Process and Instrumentation Diagram – Zone Piping
34	11364-A1008	Process and Instrumentation Diagram - Legend
Fire Engineering Typical Detail Drawings		
35	11364-A1166	Fire Ring Main Booster Connection – Typical Drawing
36	11364-A1076	Fire Service Suction – Typical Drawing
37	11364-A1080	Bund Pourers to Bund Wall Standard Installation – Typical Drawing
38	11364-A1233	Fire Water Tank Refill Connection – Typical Drawing
39	11364-A1078	Foam Concentrate Tank – Typical Drawing
40	11364-A1083	Foam Monitor – Typical Drawing
41	11364-A1085	U-Bolt Detail – Typical Drawing
42	11364-A1086	PTFE Pad Detail Typical Drawing
43	11364-A1087	Bund Pourer Connection – Typical Drawing
44	11364-A1165	Fire Service Suction – Alternative Typical Drawing
45	11364-A1172	Fire Hydrant Single Connection – Typical Drawing
Fire Engineering Section Views		
46	11364-A1196	Section Views of Pump House
47	11364-A1197	Section View of Spill Basin and Manifold Monitors
48	11364-A1198	Section Views of Piping to Manifold Monitors
Fire Engineering General Arrangements		

Item	Document Number	Document Title
49	11364-A1199	General Arrangement of Pump House and Water Tanks
50	11364-A1200	General Arrangement of Manifold and Spill Basin
Fire Engineering Three-Dimensional Views		
51	11364-A1202	3D Views and Plan View of Pump House
52	11364-A1203	3D View on New Fire Protection System
53	11364-A1220	3D Northern View on the New Fire Protection System
54	11364-A1221	3D Views on Manifold Monitors and Spill Basin
Electrical Engineering		
55	11364-A1029	Typical Earth Mat System Joints, Welding and Earth Spike Connection Detail
56	11364-A1030	Typical Lightning Protection Installation Details - Detail 1 - Metallic Roofs (New Buildings)
57	11364-A1031	Typical Lightning Protection Installation Details - Detail 2 - Non-metallic Roofs (New Buildings)
58	11364-A1032	Typical Lightning Protection Installation Details - Detail 3 - Metal Structures (New Buildings)
59	11364-A1033	Typical Lightning Protection Installation Details - Detail 4 - Metal Structures (New Buildings)
60	11364-A1034	Typical Lightning Protection Installation Details - Detail 5 - Parapet Walls (New Buildings)
61	11364-A1185	Electrical and Instrumentation Schematic
62	11364-A1186	Proposed Primary Electrical Cable Reticulation Routing Layout
63	11364-A1211	Pump House – Proposed Lighting Layout
64	11364-A1212	Pump House – Proposed Small Power Layout
65	11364-A1213	Pump House – Proposed Lightning Protection Layout
66	11364-A1214	Proposed Primary Electrical Cable Sleeve Layout
67	727/001/cblmrk	Cable Marker Specification
68	727/002/Instand	Typical for Instrument Stands - Double
69	727/003/Instand	Typical for Instrument Stands - Single
70	727/004/Earth_Instr	Instrument Earthing Schematic
71	727/005/InstrLoop	Typical Instrument Loop Drawing
72	727/006/VlvLoop	Typical Valve Loop Drawing
73	727/007/Rack_Droppers	Typical for Angle Iron Droppers
74	727/008/Earth_Concept	Earthing Concept Drawing
75	727/009/Rack_Typical	Typical for Racking Layouts incl. over Bund Walls

Item	Document Number	Document Title
76	727/010/Junction Box Stand	Typical for Junction Box Stands
Instrumentation Engineering		
77	11364-A1171	Fire Control Panel Layout
78	11364-A1170	First Responder Panel Layout
79	11364-A1175	Mimic Panel Layout
80	11364-A1185	Electrical and Instrumentation Schematic
81	11364-A1215	Proposed Primary Instrumentation Cable Sleeve Layout

6.2 Documents issued by the Employer

Item	Document Number	Document Title
Surveys and Investigations		
1	GA1063R1/2025	New Fire Water Installation for Howick TPL Depot - Geotechnical Report
2	XPS/1015/13013	Hazardous area classification guidelines report for Transnet Pipelines (TPL) infrastructure
Document Management and Planning		
3	009-TPL-TECH-OPS-20259	Standard Operating Procedure Model 3D review Procedure
4	DOC-STD-0001	Contractor Documentation Submittal Requirements
5	TPL-DM-P-0001	Transnet Pipelines Document Management Procedure
6	TPL-TECH-DO-STD-001	Drawing Standard PL100
7	TPL-TECH-DO-STD-002	Drawings Office Standard PL101
8	TPL-TECH-DO-STD-003	Drawings Office Standard PL102
9	TPL-TECH-DO-STD-004	General Drawing Standard PL103
10	TPL-TECH-DO-WI-001	Handover of As-built and Other Documents to Drawings Office Work Instruction
11	PL117653	P&ID Legend Typical Sheet 1 of 3
12	PL117653	P&ID Legend Typical Sheet 2 of 3
13	PL117653	P&ID Legend Typical Sheet 3 of 3
14	11364-A1073	Document Management Plan
15	N/A	Sample Equipment Asset Register
16	N/A	2024 Fixed Assets SOP v1 – Fixed Assets Procedure

Item	Document Number	Document Title
Health, Safety and Environment		
17	HO1436-SP-0002	Howick Health and Safety Specification
18	ENV-SOP-002	Generic Environmental Management Plan for TPL Maintenance and Minor Projects
19	TRN-IMS-GRP-PROC-014	Integrated Management Procedure Contractor Management Procedure
20	TRN-IMS-GRP-POL-002	Transnet Integrated Management System Policy Commitment Statement
21	TPL-TECH-STD-002	Standard for Spill Basin Design
22	TRN-IMS-GRP-POL-002.1	TIMS Policy Commitment Statement
23	TRN-GRPM-GSP-001	Transnet SOC Ltd. Group Safety Policy
24	1 August 2023	Transnet Safety Policy Statement
Fire Engineering		
25	11364-A1147	Fire System Demolition Scope of Work
26	11364-A1146	Howick Spill Containment Capacity Report
27	11364-A1021	Scenario Calculation
28	TPL-TECH-PL 897	Ball Valve Specification
29	TPL-TECH-PL 898	Butterfly Valve Specification
30	TPL-TECH-PL 899	Control Valve Specification
31	TPL-TECH-PL 900	Gate Valve Specification
32	TPL-TECH-PL-901	Fire Pump Specification
33	TPL-TECH-PL 902	Water Tank Specification
34	TPL-TECH-PL 903	Actuating Expanding Plug Valve
35	TPL-TECH-PL 904	Foam Generating Equipment
36	TPL-TECH-PL 905	Tank Cooling Protection
37	TPL-TECH-PL 906	Non-Return Valves
38	TPL-TECH-PL 907	Back Flow Preventer
39	TPL-TECH-PL 908	Jockey Pump-set Specification
40	TPL-TECH-PL 909	Pressure Gauge Specification
41	TPL-TECH-PL 910	Fire Department Interface Equipment Specification
42	TPL-TECH-PL 911	Foam Concentrate Tank Specification
43	TPL-TECH-PL 912	Piping Specification
44	TPL-TECH-PL 915	Foam Concentrate

Item	Document Number	Document Title
45	TPL-TECH-PL 917	Equipment Document Handover Procedure
46	TPL-TECH-PL 918	Commissioning and Handover Procedure
47	TPL-TECH-PL 919	Containerised Fire Pump-Set
48	TPL-TECH-F-STD-001	Transnet Pipelines Technical Fire Protection Design Standard
49	TPL-TECH-PL 203B	Specification Thermal Relief Valve, Screwed type for Petroleum Product Service
50	TPL-TECH-PL 407 / PL407	Specification Painting of Manifold Piping and Ancillary Equipment (Annexure A, System 1 is also cited for corrosion)
51	TPL-TECH-PL 415E	Specification Requirements for Steel Flange Insulating Gasket Kit
52	TPL-TECH-PL 804A	Specification General Welding
53	TPL-TECH-PL 805A	Specification General Non-destructive Testing
54	TPL-TECH-PL 877	Specification Colour Coding Requirement of Pipelines & Ancillary Equipment
Electrical Engineering		
55	PL 619	Specification For Three Phase Electric Actuators
56	PL 631	Specification for Low Voltage Switchgear and Distribution Boards
57	PL 647	Requirements for the Supply of 110VDC Battery Charger
58	PL 648	Requirements for the Supply of 50VDC Battery Charger
59	PL 666	Electrical Design Criteria
60	PL 675	Specification for Electric Fences
61	PL 711	Specification for Equipment Cabinets to House Electronic Equipment
62	PL 727	Cable, Racking and Trenching & Earthing Installation Codes of Practice
Instrumentation Engineering		
63	TPL-TECH-PL 913	Fire Control System and Instrumentation Design, Supply and Installation Specification and Scope of Works
64	TPL-TECH-PL 916	ECP FCP Control Narrative
65	11364-A1169	Cause and Effect Matrix
66	PL 723	Automation Standard
Structural Engineering		
67	PL 892	Structural Steel Specification for Walkways , Platforms , Cat ladders and Stairways
Civil Engineering		
68	PL 889	Earthworks Specification

Item	Document Number	Document Title
69	PL 890	Bedding and Padding Specification

7 PROGRAMMING AND PROGRESS REPORTING

7.1 General

The *Contractor* prepares his programme using Microsoft Projects 2021 or a more recent version for the programme submissions to the *Project Manager*.

The *Contractor* appoints a full-time Lead Planner dedicated to the project and the planner is based on Site during the on-site construction *works*. The *Contractors* planner has five (5) years or more experience in multi-disciplinary projects, preferably with NEC experience, with a certificate of completion in Microsoft Projects Advanced.

7.2 Programme Requirements

The *Contractor* shows on his Accepted Programme and all subsequently revised programmes, the critical path or paths and all necessary logic diagrams demonstrating sequence of operations.

The *Contractor's* programme shows duration of operations in working days.

The *Contractor* does not Provide the *works* on Site or off Site (or any part or interface of the Site or *works* requiring the *Employer's* presence or availability) between 15 December and 15 January (inclusive) in any year during the contract. The *Employer* is unavailable during this period and provides no access, instructions, responses or supervision.

The *Contractor* carries out no work on Site on Public Holidays.

The *Contractor* shows all non-working periods, including the annual shutdown from 15 December to 15 January and Public Holidays, on the programme that he submits for acceptance. Any work during the annual shutdown requires the prior written instruction of the *Project Manager*.

The *Contractor* makes an allowance of 30 calendar days within their programme for the *Employer* to obtain the construction work permit.

The *Contractor* constructs and commissions one of the water storage tanks first and connects to the existing fire water pump, to enable decommissioning of the existing water tank.

The *Contractor* allows two weeks to receive results from the *Employer's* lab when testing spill basin effluent before releasing any effluent from the spill basin to the municipality and complies with the *Employers* Industrial Effluent Discharge Permit when doing so. The *Contractor* ensures the spill basin is kept free of water used during hydro-testing, as well as any discharge that may result during other tests and commissioning activities that the *Contractor* performs.

The *Employer* grants the *Contractor* access to the Site once the *Project Manager* has accepted the required documentation. This documentation, to be prepared and submitted by the *Contractor*, includes:

- Health and Safety Management Plan
- Environmental Method Statements
- Quality Management Plan

The *Contractor* aligns the programme Work Breakdown Structure (WBS) with the accepted Activity Schedule. The *Contractors* programme shows as a minimum the following WBS elements:

- Site establishment
- Preparation, submission, and *Project Manager* acceptance of all health and safety, environmental, and quality control documents specified in this Works Information
- Quality assurance and control measures
- Consideration of foreseeable constraints, assumptions, and conditions as per the overall scope outlined in the Works Information
- Contractor's design submissions, reviews and *Project Manager* acceptance
- Procurement and delivery of all long-lead items necessary to complete the *works* according to the Works Information, including, but not limited to:
    - Plant and Materials
    - Equipment
    - Fabrication, manufacturing, testing, and any other resources required for both temporary and permanent works
- Installation or construction activities
- Correction of defects, testing, commissioning, preparation of as-built records, handover, and close-out procedures in accordance with the Works Information

The *Contractor* indicates in the programme the sequence of commissioning of the new fire system prior to the decommissioning and demolition of the existing fire system.

The *Contractor's* programme does not contain and reflect any negative lags, and/or any lags. The *Contractor* reflects all lags by activities.

The *Contractor's* programme is a Level 4 detailed project programme. The *Contractors* programme offers an in-depth, discipline-specific schedule that breaks activities down to the necessary level of

detail for accurately defining their scope and estimating durations. Developed and maintained by the *Contractor*, this programme covers daily activities for each discipline, with operations decomposed as needed to accurately reflect the required effort and ensure precise duration estimates. The Level 4 programme must be fully resource-loaded, including all people, Equipment, Plant and Materials linked to each scheduled activity, and must be supported by detailed resource histograms.

7.3 Submission of Programmes

The *Contractor* presents his first programme and all subsequently revised programmes in soft copy format in accordance with the Document Management Plan. The *Contractor* submits his programme in .pdf and in native format.

The *Contractors* titles the document of his first accepted programme as Rev 1. The *Contractor* submits revised programmes for submission with the date of the submission appended to the end of the programme revision. The *Contractor* only updates the programme revision number after the *Project Manager* accepts a Compensation Event.

7.4 Monitoring and Reporting

The *Contractor* provides progress reports to the *Project Manager* every two weeks, as well as at intervals specified in the Contract Data.

To show actual progress and forecasted completion of the *works*, the *Contractor* updates and submits the latest accepted programme and progress report to the *Project Manager* every two weeks or as otherwise instructed by the *Project Manager*.

The *Contractor* includes the following in the progress reports:

- A Level 4 programme representing current forecast dates the latest accepted baseline programme.
- A 2-week look-ahead programme.
- A manpower histogram detailing actual, forecasted, and planned resources.
- S-curves illustrating actual percentage complete versus planned completion for the whole contract, using earned values from the detailed progress report.
- A detailed progress report, calculated on a spreadsheet, to measure earned progress based on installed quantities and weighted by man-hours. The report must show both 'progress this period' and 'progress to date.'
- A synopsis covering ongoing works and the top 10 critical action items.

The *Contractor* submits a Basis of Schedule with each monthly programme report no later than 3 working days ahead of the monthly progress meeting that includes the following information:

- A Level 4 programme representing current forecast dates the latest accepted baseline programme.
- A 2-week look-ahead programme.
- Programme Version Control Log showing the programme document number, date of the programme revision, reason for the revision, status and comments.
- Narrative status report including summary of progress achieved during the reporting period
- The basis of the schedule (non-working days, structural overview)
- Key assumptions and constraints
- Key dates
- Manpower histograms
- S-curve of overall progress
- The top 10 critical action items
- Deviations from the accepted programme and the action plan to rectify
- Key risks affecting execution and completion date of the works
- Other information required by the *Project Manager*

7.5 Co-ordination

The *Contractor* makes provision of 30 working days in the programme for submission and approval of plan submissions by the local municipality. The *Contractor* is not entitled to additional extensions of the 30-working day period if the municipal application is rejected due to errors or omissions in the *Contractors* submission.

8 MANAGEMENT AND START UP

8.1 Management meetings

Regular meetings to be convened and chaired by the *Project Manager* or Others as follows:

Title and purpose	Interval	Venue	Attendance
Kick-off Meeting	At Contract Award	*Employers* Offices and/or via Teams	*Employers* people, *Contractor*, *Supervisor*, *Project Manager*
Engineering Meetings	Fortnightly, until all engineering deliverables have been completed and accepted		*Employers* people, *Contractor*, *Supervisor*, *Project Manager*
Contract Progress Meeting Prior to Site Establishment by the *Contractor*	Fortnightly		*Employers* people, *Contractor*, *Supervisor*, *Project Manager*
Contract Progress Meeting After Site Establishment	Fortnightly	On Site/Teams	*Employers* people, *Contractor*, *Supervisor*, *Project Manager* and Others
Risk Reduction/Register Meetings	Weekly or as and when required	*Employers* Offices and/or via Teams	*Employers* people, *Contractor*, *Supervisor*, *Project Manager*
SHE Meeting	Monthly	On Site	*Employers* people, *Contractor*, *Supervisor*, *Project Manager*

The appropriate people from the *Contractor* and if necessary, the Subcontractors attend all meetings.

Attendees can advise on progress, challenges and planned solutions as well as make appropriate decisions where necessary.

Meetings of a specialist nature are convened as specified elsewhere in this Works Information or at times and locations to suit the nature and the progress of the *works*. Records of these meetings are to be submitted to the *Project Manager* by the person convening the meeting within five days of the meeting.

All meetings are to be recorded using minutes or a register prepared and circulated by the person who convened the meeting.

8.2 Documentation Control

The *Contractor* complies with the Document Management Plan, document 11364-A1073, when submitting and receiving documents.

The *Contractor* provides a full time, suitably qualified and experienced, resident document controller with adequate resources to manage and execute the documentation control function.

The nominated person is fully conversant with document control systems and procedures on major projects and is suitably qualified and experienced to provide an acceptable interface with the *Project Manager* and *Employer's* document control people.

8.3 External Quality Inspections

The *Employer* appoints an Approved Inspection Authority (AIA) as external quality inspectors to conduct oversight during implementation by the *Contractor* of its Quality Management Plan for the mechanical and firefighting *works.*

The *Contractor* co-ordinates inspections with the *Supervisor* and Others for inspections and acceptance. The external quality inspectors are not allocated full time for the Contract and the *Contractor* considers the availability of the inspectors when scheduling inspections and issuing notifications of required inspections. The *Contractor* provides notice of inspections within the agreed timeframes to allow the inspectors to make the necessary arrangements.

The *Contractor* remains responsible and accountable for testing, verification and certification as necessary. The *Employers* appointed AIA acts in a supervisory role to be implemented at the *Employers* discretion.

8.4 *Contractors* Management, Supervision and Key Persons

8.4.1 General

The *Contractor* maintains a competent, experienced, and consistent project team available for the entire contract period. Efforts are made to minimise resource changes to ensure effective and continuous management of the contract.

The *Contractor* provides an organogram listing all key people involved in the project. The organogram illustrates how his people communicate with the *Project Manager* and the *Supervisor*.

The *Contractor* appoints a responsible person on Site for the *Project Manager* to contact regarding project matters.

Key people are provided with mobile phones with messaging capabilities, ensuring communication is always possible during the execution of the *works*.

The *Contractor* provides the *Project Manager* and *Supervisor* with an up-to-date list of names and contact numbers for all key *Contractor* and Subcontractor staff on site, updating this list as new employees begin work.

Records of all employees—including induction dates, relevant skills, and licenses—are maintained by the *Contractor*.

8.4.2 Key Persons

The *Contractor* appoints qualified, experienced Key Persons with delegated authority to manage the *works* effectively on Site throughout the project. Key Persons include among others:

- *Contractors* Project Manager
- Engineering Manager
- Lead Mechanical Engineer
- Lead Civil Engineer
- Lead Structural Engineer
- Lead Electrical Engineer
- Lead Instrumentation Engineer
- Construction Manager

- Health and Safety Manager
- Health and Safety Officers
- Quality Control Manager
- Lead Planner
- Environmental Officer
- Senior Document Controller
- Stakeholder Management and Social Facilitation Officer (SMSFO)

***Contractors* Project Manager**

The *Contractor's* Project Manager is registered with SACPCMP as a Professional Construction Project Manager or as a Project Management Professional (PMP) with the Project Management Institute (PMI), and has at least 8 years' experience managing multi-disciplinary petrochemical / hydrocarbon process plant projects of which at least one had a construction value of at least R100 million, and holds an NQF Level 6 Built Environment qualification.

Engineering Manager

The Engineering Manager is registered as Pr. Eng with ECSA or an ECSA-accredited international council, and has at least 15 years' experience on multi-disciplinary petrochemical / hydrocarbon process plant projects.

Lead Mechanical Engineer

The Lead Mechanical Engineer is a registered Pr. Eng with ECSA (Mechanical Engineering discipline) with 10 years' experience post registration as a Pr. Eng, with proven experience in the detailed design, hydraulic analysis and construction oversight of fire-protection systems (water/foam deluge, pumps and foam proportioning) in live petrochemical / hydrocarbon process plants.

Lead Electrical Engineer

The Lead Electrical Engineer is a registered Pr.Eng. with ECSA (Electrical Engineering discipline) with 10 years' experience post registration as a Pr. Eng, with proven experience in the design, installation and commissioning of explosion-protected (Ex-rated) electrical systems in live petrochemical / hydrocarbon process plants.

Lead Engineers

Lead Engineers are registered as Pr. Eng with ECSA and has a minimum of 10 years' experience post registration as a Pr. Eng.

Construction Manager

The Construction Manager holds a minimum NQF Level 6 in the Built Environment and has at least 10 years' experience in multi-disciplinary construction management.

Health and Safety Manager

The Health and Safety Manager holds a minimum National Diploma or Advanced Diploma/BTech in Safety Management or Bachelor's degree in Environmental Health or NEBOSH International Diploma or an equivalent qualification. The Health and Safety Manager has a minimum of 10 years' experience in development, implementation and maintenance of Health and Safety Management Systems in civil or mechanical construction. The Contractor's Health and Safety Manager shall be duly registered with the SACPCMP as CHSM.

Health and Safety Officers

The *Contractor* appoints full-time Health and Safety Officers registered with the SACPCMP as a Construction Health and Safety Officer (CHSO) with proven experience as the appointed CHSO on at least one project of similar scale and complexity. The Health and Safety Officers have at least 5 years' experience in developing, implementing, and maintaining Health and Safety Management Systems in civil or mechanical construction. They hold a Certificate in Safety Management (NQF Level 5) or have completed equivalent accredited training such as Environmental Health, SAMTRAC, or NEBOSH IGC/ICC.

Quality Control Manager

The Quality Manager holds a certificate in SAIW Level 2 or equivalent, has at least 15 years' experience in multi-disciplinary petrochemical / hydrocarbon process plant projects, and is qualified in ISO 9001:2015 QMS Implementation and Auditing.

Lead Planner

The Lead Planner has 5 years or more experience in multi-disciplinary projects of which at least one had a construction value of at least R100 million and holds a certificate of completion in Microsoft Projects Advanced.

Environmental Officer

The Environmental Officer has a degree in environmental management or environmental science, and a minimum of five years of professional experience in a civil or mechanical construction environment.

Senior Document Controller

The Senior Document Controller has over 5 years of experience as the lead document controller on multi-disciplinary projects.

Stakeholder Management and Social Facilitation Officer (SMSFO)

The SFSHO has completed five (5) multi-disciplinary projects and is experienced working as a Community Liaison Officer (CLO) or SMSFO in KwaZulu-Natal. Refer to Section 12.3 for additional information.

8.5 Safety Management

8.5.1 General

The *Contractor* complies with the following health and safety requirements:

- Occupational Health and Safety Act (No. 85 of 1993 as amended).
- Construction Regulations (latest revision).
- Howick Pump Station Fire Protection System Upgrade Project Health and Safety Specification, document HO1436-SP-0002.
- The Project Baseline Risk Assessment developed by the *Employer*
- Transnet Safety Policy Statement
- Transnet Integrated Management System (TIMS Policy Commitment Statement TRN-IMS-GRP-POL-002.1)
- Transnet SOC Ltd. Group Safety Policy (TRN-GRPM-GSP-001)

8.5.2 Health and Safety Management Plan

The *Contractor* develops and maintains a comprehensive Health and Safety Management Plan as specified in the Health and Safety Specification, document HO1436-SP-0002, and all relevant health and safety legislation.

The *Contractor* does not commence with any site activities before the *Project Manager* accepts the *Contractors* Health and Safety Management Plan.

8.5.3 Construction Work Permit

The *Employer* applies for the Construction Work Permit. The *Contractor* indicates on their Programme the date the Construction Work Permit is required. The *Contractor* complies with the Construction Work Permit.

The *Contractor* does not commence with any work until a valid construction work permit is available. The *Contractor* includes the construction work permit number on the Contractors Nameboard.

8.5.4 Costs for Safety

The *Contractor* makes adequate provision in their offer to comply with the Occupational Health and Safety Act, Construction Regulations and the *Employers* Health and Safety specification, and to appoint people for the full duration of the *works* to implement and manage health and safety.

8.5.5 Hazardous Site

The Site is a hazardous area and special precautions regarding hot work, smoking and the use of naked flames are described in the Health and Safety specification.

The *Contractors* people are subject to all safety procedures, inductions, training and attendance at safety meetings and training as required by the *Employer*.

Hot-Work may be stopped periodically due to the transfer of flammable products. If noxious or flammable vapours are present, people may be asked to leave the Site until safe conditions prevail again.

The *Contractor* keeps a record of all hot-work stoppages in the Daily Site Records.

8.5.6 Emergency access

The *Contractors* construction activities may at times involve temporarily restricting access of exits or walkways from or between the operational areas and emergency access routes. The *Contractor* assesses the impact of the *works* on the operational access and emergency routes and provides suitable alternative temporary access and exits from the operational area.

The temporary exit and access routes are safe and suitably designed to provide a rapid evacuation of the *Contractors* staff from the operational area in the event of an emergency.

The *Contractor* also provides temporary safe access across open trenches leading to emergency exits. The *Contractor* maintains all exits free from Equipment, Plant and Materials and other obstructions.

8.5.7 Safety Representatives and Fire Watches

The *Contractor* provides fire watches. The *Contractor* determines the number of fire watches using a risk-based approach. The risk based approach requires that:

- A fire watch is stationed wherever the Risk Assessment determines it is necessary, especially during hot work like welding, cutting, or grinding.
- The *Contractor* assesses high-risk areas and ensures that firefighting equipment and fire watches are in place accordingly.
- A competent certified fire officer is available during hot work, with appropriate firefighting equipment. The *Contractor* provides firefighting equipment and the resource.

Safety representatives and fire watches can also be workers, provided the following conditions are met:

- Fire watch people must not be assigned other duties while performing fire watch functions.
- Safety Representatives must be elected and trained by accredited providers but can be assigned other duties

8.5.8 Hot-work

The *Contractor* provides explosimeters and continuously monitors and conducts flammable vapour tests. The *Contractor* ceases work if the explosimeter readings fall out of the expected range.

The *Employer,* before issuing the hot-work permit, will assess the area and do their own testing prior to issuing the hot-work permit.

8.5.9 PPE

In addition to the Personal Protection Equipment (PPE) requirements specified in Section 40 of the Howick Depot Fire Protection System Upgrade Project Health and Safety Specification, document HO1436-SP-0002, the *Contractor* issues employees with overalls that are branded with the company name and company logo. The *Contractor* brands the overalls of Subcontractors with the company name and company logo of the Subcontractor.

8.5.10 Wind

The *Contractor* monitors the wind speed and stops work at heights when the wind speed measurement exceeds 30 km/h.

8.6 Environmental Management

8.6.1 *General*

The *Contractor* complies to the Environmental Requirements mandated by the applicable legislation.

The *Contractor* complies with the following during the execution of the *works*:

- National Environmental Management Act 107 of 1998
- National Water Act 36 of 1998
- National Environmental Management: Waste Act 59 of 2008
- Hazardous Substances Act (Act No. 15 of 1973)
- Generic Environmental Management Plan for TPL Maintenance and Minor Projects, document ENV-SOP-002
- Transnet Contractor Management Procedure, document TRN-IMS-GRP-PROC-014
- Other relevant environmental laws.

The *Contractor* assumes the responsibilities of the *Employer* and complies with the provisions of the Acts.

The *Contractor* implements environmental directives specified by the *Employer*.

The *Contractor* compiles and submits a site-specific Environmental Compliance file to the *Project Manager* for acceptance. The file includes a project-specific Environmental Management Plan (EMP) that identifies potential environmental impacts and corresponding mitigation measures for the *works*.

The *Contractor* does not commence any site activities before the *Project Manager* accepts the *Contractors* Environmental Compliance file.

The *Contractor* undertakes *works* within the Site with due consideration for the environment.

The *Contractor* implements effective waste management strategies as set out in the accepted Environmental Management Plan.

8.6.2 Waste Management

The *Contractor* collects, removes and dispose waste, wastewater and effluent from ablution facilities generated from the Site at the permitted landfill site.

The *Contractor* is familiar with the waste management requirements as outlined in the accepted EMP.

The *Contractor* provides waste disposal certificates from the appropriate facility and includes the certificates in the *Contractors* Environmental Compliance file. The *Contractor* maintains a waste manifest for record purposes for each load of waste disposed.

8.6.3 Hazardous Substances

The *Contractor* observes all applicable legislation, including specific requirements of the EMP relating to the handling, storage and transportation of hazardous substances as defined in the Hazardous Substances Act (Act No. 15 of 1973), the Occupational Health and Safety Act (No. 85 of 1993), the EMP, the local by-laws, and any other applicable legislation.

The *Contractor* complies with the following minimum requirements:

- Storage and use of hazardous materials are strictly controlled to prevent environmental contamination, in accordance with the materials safety data sheets (MSDS's).
- Accidental spillage of any fuel or hazardous substances are cleaned up immediately using the most appropriate methodologies, equipment and material.
- Equipment is not serviced or refuelled on Site except at designated servicing or refuelling locations.

8.6.4 Management of Ablution Facilities

The *Contractor* complies with the National Environmental Management Waste Act (Act 59 of 2008) and the EMP.

The *Contractor* provides sufficient ablution facilities for the number of people working on Site and complies with the relevant health and safety standards and codes.

8.6.5 Incident and Non-compliance Reporting

The *Contractor* immediately notifies the *Project Manager* of any environmental incidents on Site.

The *Contractor* investigate all environmental incidents, instituting the required remedial measures and issuing of close-out reports. The *Contractor* makes provisions to prevent, control, clean and remediate environmental incidents, spills or releases that result from the *Contractor* executing the *works*.

The *Contractor* maintains a register of all environmental incidents and submits close-out reports to the *Project Manager* within 14 calendar days of occurrence of the incident unless otherwise directed by the *Project Manager.*

8.6.6 Dewatering

The *Contractor* provides and maintains adequate surface drainage and dewatering measures to prevent water ponding within the *works* area. The *Contractor's* ensures that adequate measures are implemented to allow for dewatering throughout the duration of the *works*. Methods of drainage and removal of water are submitted to the *Project Manager* for acceptance.

The *Contractor* uses and operates dewatering equipment for the duration of cable trench excavation activities.

8.6.7 Rehabilitation

The *Contractor* reinstates and rehabilitates all areas affected by the *works* to the original state for acceptance by the *Project Manager*.

9 CONSTRUCTION

9.1 Parking

No parking is available within the Site. The *Contractors* vehicles are not permitted access to the Site, only the *Contractors* Equipment is permitted access to the Site.

The *Contractor* parks all vehicles on the grassed verge area along the southern perimeter of the depot.

9.2 Security and Access

The roads and accessway leading to the Site and through the Site will be used by the *Employer* and by others for the duration of the *works*.

9.2.1 Vehicles and People

The *Contractor* is not required to obtain police clearance for each of their employees.

The *Employer* will conduct state security screening of the *Contractors* employees. The *Contractor* submits ID documents for each employee to the *Employer* that will conduct state security screening.

The *Contractor* submits to the *Project Manager* a complete list of employees that must be screened within 10 working days of the *Contract* award date. Access requests from the *Contractor* for additional resources to be screened will only be considered on the 25th of each successive month.

The *Contractor* allows the *Employer* 10 working days to respond with the results of the screening process prior to accessing the Site.

The *Contractor's* employees wear identification tags for access control that are visible whilst on Site. The identification tags are a plastic card clearly indicating the resources full name, SA ID number and photograph.

The *Contractor* keeps daily records of his people engaged on the Site with access to such daily records available for inspection by the *Project Manager* at all times.

All vehicles entering the depot are liable to be searched.

9.2.2 Security Access

Security Access through the main access gate to the Site will be controlled by the *Employer.*

9.2.3 Protection of Vehicles

The *Contractor* provides security as deemed necessary by the *Contractor* for vehicles parked outside the Site and for the arrival and departure of *Contractors* people.

9.3 Work Hours

The *Contractor* complies with the hours of work for his people and Subcontractors employed on the Site. The Site working hours for normal working days are 07:00 to 17:00 Monday to Friday.

Works that are to be conducted outside of the Sites normal works hours must be formally requested and motivated in writing by the *Contractor* to the *Project Manager* at least forty-eight (48) hours prior to the *Contractors* requirement for acceptance by the *Project Manager*.

The *Project Manager* is not obliged to permit any *works* outside of the normal work hours.

9.4 Services and Facilities Provided by the *Employer*

9.4.1 Area for *Contractor's* Site Establishment

An area will be designated and made available to the *Contractor* for use as a site establishment area. The *Contractor* will have use of this area, free of charge, for the full duration of the *works*.

Prior to setting up any facilities on site, the *Contractor* prepares a dimensioned drawing showing the proposed site establishment area on a site layout and submit this information to the *Employer* for acceptance.

This area may only be used for the erection of the *Contractor's* site offices, workshops, stores, and other facilities necessary for executing the *works*.

The *Contractor* is prohibited from using, or permitting the use of, this area for any purposes not directly related to the execution of the *works*.

The *Contractor* is responsible for arranging, at their own expense, the provision of all services required in the designated area and elsewhere on the Site.

If the *Contractor* finds the allocated area to be inadequate or unsuitable for their requirements, they may make alternative arrangements with other site owners, subject to the prior written acceptance of the *Project Manager*. Such acceptance will not be unreasonably withheld. The *Contractor* shall not have any claim against the *Employer* for costs incurred, either directly or indirectly, from using an area other than the one provided by the *Employer*.

9.4.2 Water Supply

The *Employer* will supply water for the *Contractor's* offices and construction; however, all costs related to the water connection is for the *Contractor* account. The *Contractor* provides and installs a water meter and provides monthly readings to the *Employer*.

Water will be made available free-of charge for flushing and hydrotesting and the first fill of the water tanks as applicable.

The *Contractor* plans the *works* such that water used for hydro-testing is transferred and reused. The *Contractor* directs all hydrotest water through the primary chamber of the spill basin on Site prior to discharging to the municipality. The *Contractor* notifies the *Project Manager* in writing at least 30 calendar days prior to hydrotesting activities to allow the *Employer* sufficient time to obtain the necessary approvals before emptying the spill basin.

The *Contractor* is responsible for supplying their own connections, hoses, or other distribution methods. The use of the *Employer's* hoses is strictly prohibited.

The *Employer* does not guarantee that the existing reticulated water supply will be adequate for the *Contractor's* needs, including flow, pressure, availability, or water quality required for construction and hydrotesting. No warranty of adequacy or reliability is provided by the *Employer*.

9.4.3 Electricity Supply

The *Employer* supplies electrical power for the *Contractor's* offices only; however, all costs related to the connection, distribution and use of electrical power is for the *Contractor's* account. The *Contractor* provides and installs an electricity meter and provides monthly readings to the *Employer*.

The *Employer* does not warrant the adequacy or reliability of the existing reticulated electrical power supply for the *Contractor's* purposes.

The *Contractor* is responsible for arranging and financing their own construction electrical power supply as necessary to meet project requirements.

The *Contractor* provides an electrical certificate of compliance (COC) for each electrical installation which is required for the *Contractor's* electrical power supply on *Site*. The *Contractor* only proceeds to use the relevant electrical power supply once the electrical certificate of compliance (COC) is reviewed and accepted by the *Employer*. All electrical certificate of compliance (COC) tests to be performed in the presence of the *Employer*.

9.4.4 Communications

The *Contractor* is responsible for making necessary arrangements for telephone and data services. All costs associated with these services shall be borne by the *Contractor*.

9.4.5 Ablution Facilities

The *Contractor* may not use the *Employer's* ablution facilities under any circumstances.

9.5 Equipment Provided by the *Contractor*

9.5.1 Facilities for the *Employer*

The *Contractor* provides, for the duration of the *works* and exclusively for the use of the *Supervisor* and the *Employers* Site Agent, the facilities as described below that must be made available promptly at the commencement of the *works*.

The *Employers* team are entitled to the free use of all site facilities provided by the *Contractor*.

9.5.2 Office Accommodation for the *Supervisor* and *Employers* Site Agent

The *Contractor* provides a separate office for exclusive use by the *Supervisor* and the *Employers* Site Agent. The office provided must be a minimum of 2.4m wide by 6.0m long. The office must be insulated, lockable and equipped with blinds two openable windows (minimum glazed area of 6 m²), two sturdy desks, four chairs, and two steel lockable cabinets (each 1.5m wide by 1.8m high). An adequately sized air conditioning unit must also be installed and serviced bi-annually or as required.

9.5.3 Site Meeting Venue

The *Contractor* provides a meeting venue within the site establishment facilities. The *Employers* representatives must be allowed free use of this venue for meetings related to the *works*. The venue must be at least 2.4m wide by 12.0m long, with two openable windows (minimum glazed area of 6 m²) fitted with blinds. The room must contain at least twelve chairs and a conference table with a minimum surface area of 12 m². The meeting venue is not to serve as a mess facility for *Contractor's* staff. Adequate air conditioning must be installed and serviced bi-annually or as required.

9.5.4 IT Equipment

A photocopying machine capable of handling up to A3 size and reducing to A4 size must be supplied for joint use by the *Project Manager, Supervisor* and *Employers* employees. The *Contractor* is

responsible for supplying consumables to permit the production of up to 1,000 prints or photocopies per month by the *Supervisor*.

The *Contractor* provides a scanner that is connectable via USB cable and capable of scanning A3 and A4 in colour.

All equipment is placed in the *Supervisors* office and maintained, serviced, and replaced as necessary.

The *Contractor* may use these machines for their own purposes provided this does not inconvenience the *Supervisor*.

9.5.5 Survey Equipment and Assistants

The *Supervisor* is to have free use of surveying Equipment and the *Contractors* assistants for inspection of control work as required.

The *Contractor* provides all necessary equipment, pegs, concrete, tools, and labour for survey and setting out activities. The following survey equipment must be provided as a minimum:

- 1 upright reading automatic level with tripod
- 1 metric levelling staff with protective cover bag
- 6 ranging rods
- One 100-metre Stilon tape measure
- Two 30-metre steel tape measures
- Two 5-metre steel tape measures
- Two 1-metre builders levels
- One hammer (approximately 2 kg)

Two survey assistants must be made available to the *Supervisor* when required. All Equipment must be serviced, maintained, and insured by the *Contractor*, who will indemnify the *Supervisor* against loss, damage, breakage, or theft.

9.5.6 Electricity Supply

The *Contractor* regulates all electricity power supply to the *Supervisors* offices and ensures it remains within safe limits to prevent equipment damage. Any costs incurred by the *Employer* to repair or replace electrical equipment due to electrical power supply issues will be recovered from the *Contractor*. The *Contractor* cannot rely solely on the supplier's regulation or generator regulators and installs additional regulating equipment at their own cost if necessary.

The *Contractor* obtains and distributes all electricity required for the execution of the W*orks*, including both construction and domestic use. Electrical distribution comply with all applicable laws and regulations.

9.5.7 Water Supply

The *Contractor* obtains and distributes all water required for both construction and domestic purposes and makes all necessary arrangements. This includes procuring, storing, transporting, and applying water, as well as providing all related infrastructure such as piping, valves, tanks, pumps, meters, and other equipment, plus any required supervision.

All water for construction must be clean, free from harmful contaminants, and be in accordance with the Works Information.

The *Contractors* provides water for human consumption that is potable and meets the standards of local health authorities.

9.5.8 Excrement Disposal

The *Contractor* provides adequate chemical toilets and changing facilities. The *Employer's* ablution facilities are not available for use by the *Contractor*.

The *Contractor* is responsible for providing and maintaining all necessary toilet, changing, and washing facilities, ensuring they are suitable and hygienically maintained. Human waste must be removed from site and disposed of in accordance with the requirements of health authorities and the *Project Manager*.

9.5.9 Mess Facilities

The *Contractor* provides a mess facility within their site establishment area and clearly demarcates the mess facility and always keeps it clean and tidy. With the exception of a plastic water bottle for personal consumption, the storage or consumption of liquid containers, food parcels, packets, and bottles is prohibited outside of the mess facility.

9.6 Temporary works, Site services & construction constraints

9.6.1 Excavation and Existing Underground Services

The *Contractor* conducts all initial excavation *works* by hand. The *Contractor* liaises with the *Supervisor* prior to commencing with the *works* in any area of the Site that requires excavation and locates the

exact position and depth of the underground services by use of non-intrusive equipment designed to locate underground services.

Once the identification of underground services is known using non-intrusive equipment, the *Contractor* shall continue to locate and expose the services by means of hand excavated trial holes. The onus is on the *Contractor* to ensure that all known and unknown services are not damaged. The *Contractor* bears all costs for the repair of damages to any services.

The identification of existing underground services shall be an ongoing process and shall take place at least 10 working days ahead of the planned construction activity for the respective work area, to allow the *Project Manager* time to agree on any necessary alterations to the design or services.

9.6.2 Special construction sequencing activities to be noted by the Contractor

The *Contractors* is aware of the following patent construction sequencing activities. This list is not intended to provide all construction sequencing activities for the *works* that an experienced contractor will be aware of.

- The *Contractor* constructs one of the new water tanks prior to demolition of the existing water tank
- The *Contractor* routes temporary connections between the existing municipal water supply and the water tank
- The *Contractor* routes temporary connections between the new water tank and the existing fire water pump-set
- The second water tank is only constructed after the existing water tank is demolished.
- The *Contractor* relocates the existing hydrant and hose-reel box to make way for the installation of the new pump house.
- The *Contractor* installs the containerised solutions prior to final installation of the pump house roof
- The *Contractor* installs the foam concentrate tank before installation of the final roof structure and sheeting
- The new fire system is commissioned and a Ready for Operation Certificate has been signed by the *Project Manager* prior to decommissioning and demolition of the existing fire system

The *Contractors* only commences with construction after:

- Municipal approval is obtained

- The *Contractors* Front-end Engineering Design has been accepted.

9.7 Working with the *Employer* and Others

The *Employers* normal operations and maintenance continues concurrently during the execution of the *works* by the *Contractor*.

The *Contractor* liaises with the *Employer's* site electrical team for all items relating to electrical as well as arranging all electrical lock-out and electrical shut-down requirements.

All electrical switching procedures are performed by the *Employer's* site electrical team in the presence of the *Contractor*.

The *Contractor* performs their own electrical tests to ensure the successful shut-down or restoration of electrical power supply in the presence of the *Employer* prior to performing any electrical *works*.

10 QUALITY ASSURANCE

10.1 General Requirements

The *Contractor* compiles, maintains and implements a documented Quality Management Plan (QMP) for the execution of the *works*, aligned with the requirements of ISO 9001:2015.

The *Contractor* submits a project-specific QMP to the *Supervisor* for acceptance prior to commencing the works. The QMP describes the *Contractor's* Quality Management System (QMS) that will be applied to achieve compliance with the requirements of the Works Information.

The QMP includes the *Contractor's* Quality Policy together with the quality strategy, methodology, organisational structure, allocation of resources, and the Quality Assurance (QA) and Quality Control (QC) activities necessary to ensure compliance with the Works Information.

The *Contractor* submits the relevant QMS documentation to the *Supervisor* for review. The submission includes, but is not limited to, the following:

- Quality Management Plan (QMP) for the contract.
- Quality Policy
- Index of Procedures to be used; and
- A schedule of internal and external audits during the contract

Where welding repairs form part of the *works*, the *Contractor* holds valid certification to ISO 3834 – Quality requirements for fusion welding of metallic materials. Evidence of ISO 3834 certification is submitted to the *Supervisor* prior to commencement of welding activities.

The *Contractor* develops and maintains a comprehensive register of all quality-related documents that is generated during execution of the *works* as part of the QMP. The register indicates the dates of issue and sign-off of documents by the *Supervisor*.

10.2 Roles and Responsibilities

Quality management is governed by the roles defined in the *conditions of contract* and this Works Information.

10.2.1 The *Project Manager*

In relation to quality the *Project Manager*:

- Ensures that appropriate resources are allocated to support quality activities
- Deals with any compensation events that arise from quality-related instructions, searches, or changes to the Works Information.

10.2.2 The *Supervisor*

Acts on behalf of the *Employer* to check that the *works* are constructed in accordance with the Works Information. The *Supervisor's* main functions are:

- Accepts (or does not accept, with reasons) the *Contractor's* Quality Management Plan and subsequent revisions.
- To carry out or observe tests and inspections stated in the Works Information.
- To notify Defects.
- To issue the Defects Certificate.
- To mark Equipment, Plant and Materials outside the Working Areas when required.

The *Supervisor* reviews quality documentation, surveys site activities, attends hold and witness points, conducts or participates in audits, and verifies that the *Contractor's* work complies with the accepted Quality Management Plan and the Works Information.

<u>Key Responsibilities:</u>

- Reviews and accepts the *Contractor's* deliverables (QMP, ITPs, QCPs, Method Statements, Designs)
- Supports implementation of the Quality Management Plan (QMP)
- Participates in and conducts audits, inspections, surveillance and key hold/witness points
- Verifies compliance with codes, standards, and specifications
- Monitors *Contractor* quality performance and QMS effectiveness
- Reviews and assists with close-out of non-conformances and corrective actions

- Provides technical assurance for FAT, SAT, testing, and commissioning
- Advises the *Project Manager* on quality risks, deviations, and required actions

10.2.3 The *Contractor*

The *Contractor* develops, establishes, submits to the *Supervisor* for acceptance, and thereafter implements a formal QMP aligned to the Works Information. The *Contractor* is fully responsible for implementation of the QMP during execution of the *works*. The QMP clearly defines the quality management interfaces between the *Employer,* the *Supervisor* and the *Contractor* across the design, procurement, construction, and commissioning phases.

Key Responsibilities:

- Develops, implements, and maintains the QMP during execution of the *works* in accordance with the Works Information
- Ensures quality compliance across design, procurement, construction, and commissioning
- Ensures Subcontractors comply with the accepted QMP and Works Information
- Prepares and submits quality documentation to the *Supervisor* for acceptance
- Perform inspections, testing, and verification in accordance with ITPs/QCPs
- Manages non-conformances and implements corrective actions
- Provides comprehensive, complete and compliant handover documentation (data books)

10.3 Quality Management Plan

The QMP is in narrative form and details the project specific QA and QC systems and controls required for the *Contractor* to complete the works:

The QMP includes, but is not limited to the following:

- Includes a description of the *Contractor's* project organization, with key positions and responsibilities identified and individuals named. The organization structure indicates the resources committed to the management and coordination of QA/QC activities both within the *Contractor's* organization and that of any Subcontractors.
- The organisation structure identifies lines of communication and authority between the *Contractor's* personnel, the *Project Manager*, the *Supervisor* and their delegates for the coordination and control of quality-related activities.

- The QMP includes all quality activities relevant to the Works Information and identifies the procedures, reviews, audits, controls and records used to control and verify compliance with the specified contractual requirements.

- Subcontractor plans are reviewed and accepted by the *Contractor* prior to forwarding to the *Supervisor* for acceptance.

- A list of special processes (e.g. welding and NDT, coating, cube testing, soil testing etc) envisaged for use, and includes confirmation of personnel certification required

- The QMP includes the proposed method statements for the execution of the *works*.

- Includes a list of applicable Quality Control Plans (QCPs), Inspection and Test Plans (ITPs) and Field Inspection Checklists (FICs).

- Identifies the inspections, tests, hold points and witness points necessary to verify compliance with the Works Information and are defined and accepted by the *Supervisor*.

- Provision is made for witness and hold points for the *Supervisor* and Others.

- Includes a schedule of proposed quality records, data packs, inspection records, test certificates and supporting documentation to demonstrate compliance with the Works Information

The *Contractor* implements the QMP for the duration of the *works*. The *Contractor* only commences the *works* after the QMP has been accepted by the *Supervisor*. The QMP is controlled and revised as necessary during the *works* and resubmitted for acceptance to ensure that it remains an effective control throughout the *works.*

10.4 Quality Policy

The Quality Policy is a concise document, accepted by the *Contractors* executive management that defines organisational goals and objectives regarding quality, a commitment to meeting stated requirements and an undertaking to drive continuous improvement throughout the organisations activities. It is suitable for the organisation and provide a framework for establishing, communicating and monitoring performance against agreed quality objectives.

10.5 Design Control

The *Contractor* is responsible for the detailed design of the *works* and develops, implements and maintains a design control process as part of the QMP, that describes the *Contractor's* methods and procedures for the control of design activities, and includes the preparation, review, verification and acceptance of design documentation for compliance with the Works Information.

10.6 Procurement

The QMP describes the methods and procedures for the control of procurement activities to ensure that Plant and Materials comply with the Works Information. The *Contractor's* Subcontractors comply with the quality requirements of the Works Information and the *Contractor's* accepted QMP.

The *Contractor* establishes and implements processes for the selection, evaluation, approval and ongoing performance monitoring of Subcontractors. The *Contractor* monitors Subcontractor performance throughout the duration of the *works* and implements appropriate corrective actions where quality deficiencies are identified. The use of Subcontractors does not relieve the *Contractor* of responsibility for the quality and compliance to the Works Information.

10.7 Contractor Audits

The *Contractor* carries out internal quality audits in accordance with its QMS and the accepted QMP and verifies compliance with the Works Information and the effective implementation of the accepted QMP.

The audit programme includes the activities of the *Contractor* and Subcontractors engaged in the execution of the *works*.

The *Contractor* includes a QA audit schedule in the QMP prior to commencement of the *works*. The audit schedule identifies all audits to be undertaken by the *Contractor* and its Subcontractors during execution of the *works*.

10.8 *Supervisor* Audits

The *Supervisor* performs quality audits or participates as an observer in *Contractor* audits to verify compliance with the Works Information.

The *Contractor* provides access to facilities, work locations, records, documentation and personnel required to facilitate such audits.

The *Contractor* corrects adverse audit findings identified by the *Supervisor* within the time frame agreed with the *Project Manager* and implements the necessary corrective actions to prevent recurrence.

10.9 Non-Conforming Works / Non-Conformance Report (NCR)

The *Contractor* establishes, implements, and maintains a documented procedure for the identification, control, reporting, and disposition of non-conforming works in accordance with the QMP. Plant, Materials and designs that do not comply with the Works Information is:

- Clearly identified and recorded
- Segregated or controlled to prevent unintended use or installation
- Reported through a formal Non-Conformance Report (NCR) system

The *Contractor* records and maintains an NCR register for the duration of the *works*. Each NCR includes as a minimum, a description of the non-conformance, the affected work, the proposed disposition, the root cause, corrective action, responsible person and close out status

10.9.1 NCR Review and Disposition

All NCRs are submitted to the *Supervisor* for technical review, recommendation, and final acceptance of disposition. Disposition of NCRs are categorised as one of the following:

- Accept as-is (subject to technical justification and acceptance)
- Repair
- Rework
- Reject and replace

10.9.2 Corrective Actions and Closure

The *Contractor* implements corrective and preventive actions to address the root cause of the non-conformance, discontinues the *works* until the disposition is accepted by the *Supervisor.* The *Contractor* re-submits the *works* for inspection and verification following corrective action.

The *Supervisor* verifies corrective actions have been implemented and the non-conformance has been resolved. NCRs are considered closed when corrective actions have been implemented, verification and re-inspection have been completed, and closure has been reviewed and accepted by the *Supervisor*.

10.9.3 Escalation and Reporting

The *Contractor* analyses trends in NCR's and submits reports to the *Project Manager* to identify systemic issues and drive improvement.

10.10 Concession Request

The *Contractor* submits Concession Requests of proposed deviations from the Works Information for technical review and acceptance by the *Supervisor* prior to implementation.

Concession Requests clearly identify:

- The specific requirement from which a deviation is requested
- The reason for the proposed deviation
- The technical justification supporting the proposed deviation
- The impact of the proposed deviation on safety, functionality, operability, maintainability, quality, cost, programme and statutory compliance
- Any proposed mitigation measures necessary to maintain compliance with the Works Information

10.11 Technical Queries (TQ's) and Request for Information (RFI's)

The *Contractor* submits Technical Queries (TQ's) to the *Project Manager* for clarification of the Works Information. The *Contractor* submits Request for Information (RFI's) to the *Project Manager* when additional information from the *Employer* is required to supplement the Works Information. The *Contractor* uses the *Employer's* RFI and TQ template for these submissions.

Each TQ or RFI identifies the matter requiring clarification or information and includes all information necessary for the *Project Managers* evaluation, and includes supporting calculations, sketches, drawings or other relevant documentation as necessary.

The *Project Manager* reviews the TQ or RFI and submits his decision or response accordingly. The *Contractor* does not proceed with the affected work until a decision has been communicated.

The *Contractor* maintains a TQ and RFI Register for the duration of the *works* and includes the status of all TQ's and RFI's in the monthly Quality Report.

All TQ's and corresponding responses form part of the final project handover documentation.

10.12 Quality Reporting and Performance Monitoring

The *Contractor* monitors the implementation and effectiveness of the QMP throughout the *works* and submits Quality Reports monthly or as instructed by the *Project Manager*.

Quality Reports provide sufficient information to demonstrate compliance with the Works Information and as a minimum include the status of inspections and testing, NCRs, corrective actions, audits, quality deliverables, significant quality issues and the overall quality performance of the *works*.

10.13 Quality People

The *Contractor* appoints a full-time, on-site Quality Control Manager to oversee implementation of the QMP and maintain relevant documentation.

The CV of the proposed Quality Control Manager is submitted and accepted by the *Project Manager* before any procurement or site work begins.

The *Contractor* nominates experienced quality representatives and inspectors for all works, with sufficient staff for QMP requirements.

10.14 Inspection and Testing

The *Contractor* carries out inspections and tests as specified in the Works Information and the accepted ITPs and QCPs.

The *Supervisor* and Others inspects, witnesses or undertakes surveillance of the *works* at the *Contractor's* premises, Subcontractor premises or Site to verify compliance with the Works Information.

The *Contractor* provides access to facilities, work locations, documentation, records and personnel required to facilitate inspections and tests.

10.15 Quality Control Plans (QCP's) and Inspection and Test Plans (ITP's)

The *Contractor* prepares and submits ITP's and QCP's for the execution of the *works*.

The ITP's and QCP's are submitted to the *Supervisor* for review and acceptance prior to the commencement of the applicable work activities.

The ITPs and QCPs identify the inspection, testing and verification activities necessary to demonstrate compliance with the requirements of the Works Information and define the applicable acceptance criteria, inspection and test methods, responsibilities, inspection records, and Hold, Witness, Review and Surveillance Points.

The *Contractor* ensures that the ITP's and QCP's are appropriate to the scope, complexity and risks associated with the *works* and are updated where changes to the scope or execution methodology occur.

Additionally, the *Contractor* prepares and submits for acceptance to the *Supervisor* and Others, a QCP inclusive of all relevant checklists for the following.

- Each individual piping isometric
- Piping corrosion protection systems
- Each major item of engineered equipment (pump-sets, control panels, tanks etc.)
- Repair and remedial works
- Corrosion protection systems for Plant and Materials
- Electrical and instrumentation installation systems (i.e. lighting, small power, cable routing, etc.)
- Earthing, bonding and lightning protection installations
- Low voltage electrical distribution boards (DB's) / panels / motor control centres (MCC's)
- Low voltage electrical cable installations complete with associated routing infrastructure (i.e. draw boxes, cables sleeves, etc.)

The *Contractor* updates the QCP's with the received comments and re-submits for final acceptance.

10.16 Special Processes

The *Contractor* performs special processes such as welding, non-destructive testing, cube testing, soil testing, surface preparation, coating, heat treatment and leak testing in accordance with the Works Information.

Where required by the Works Information, the *Contractor* submits procedures for special processes to the *Supervisor* review or acceptance prior to commencement of the *works*.

The *Contractor* qualifies and tests all procedures and work methods requiring qualification prior to commencement of the *works*.

People performing special processes are suitably qualified and certified as required by the Works Information.

Records of procedure qualifications and personnel certifications are maintained by the *Contractor* and made available to the *Supervisor* when requested.

10.17 Welding Requirements

The *Contractor* performs welding activities in accordance with the applicable code of construction specified in the Works Information and accepted welding procedures.

The *Contractor* submits the applicable Welding Procedure Specifications (WPSs), Welding Procedure Qualification Records (WPQRs/PQRs), welder qualification records and any supporting welding

documentation specified in the Works Information to the *Supervisor* and Others for review acceptance prior to the commencement of welding activities.

The *Contractor's* welding people are suitably qualified and maintains the welding procedures for compliance to the Works Information throughout the *works*.

10.18 Material Traceability and Certification

The *Contractor* establishes and maintains material identification and traceability throughout the execution of the *works* for all Plant and Materials incorporated into the *works.*

All Plant and Materials specified in the Works Information are traceable through the applicable material certifications, inspection records and quality documentation.

The *Contractor* maintains material certificates, certificates of conformity and other quality records required by the Works Information, makes documentation available for reviews during execution of the *works* and includes within the handover documentation.

10.19 Inspection Records

The *Contractor* establishes and maintains inspection and test records throughout the execution of the *works* that demonstrates compliance with the Works Information.

Inspection and test records are complete, accurate, traceable and maintained in accordance with the accepted QMP. The *Contractor* makes the records available for review by the *Supervisor* when requested to do so.

The *Contractor* compiles and maintains the project quality records progressively throughout the execution of the *works* that, together with the inspection records, form part of the final handover documentation.

10.20 Control of Measuring and Test Equipment

The *Contractor* provides measuring and test Equipment that is used for the inspection, testing and verification of the *works.* The Equipment is suitable for the intended purpose and is calibrated and maintained in accordance with the applicable standards and manufacturers recommendations.

Calibration records are made available to the *Supervisor* for review when requested.

10.21 Preservation and Storage

The *Contractor* develops and implements procedures for the receipt, identification, handling, storage, preservation and protection of Plant and Materials to prevent damage, deterioration, contamination or loss prior to installation and handover.

The *Contractor* provides storage conditions, environmental controls and preservation methods appropriate for the type of Plant and Materials being stored and complies with the manufacturer's recommendations and the Works Information.

Plant and Materials that are damaged, deteriorated or unsuitable for installation are identified, controlled and managed in accordance with the *Contractor's* NCR procedure.

10.22 Lessons Learned and Continuous Improvement

The *Contractor* establishes, implements, and maintains a formal Lessons Learned process as part of the QMP. The Lessons Learned process captures, evaluates, and implements improvements during execution of the *works*.

Lessons Learned include inputs from quality issues, NCRs, audits, technical queries, deviations, and reviews.

The *Contractor* identifies Lessons Learned from:

- Non-conformances (NCR trends and recurring issues)
- Audit findings and surveillance activities
- Design reviews, HAZOPs, and technical deviations
- Inspection and testing results (including rework and failures)
- Subcontractor performance including defects, delays, and non-compliance

The *Contractor* records all Lessons Learned in a Lessons Learned Register that includes:

- Description of the issue or observation
- Root cause analysis
- Impact (cost, schedule, quality, safety, performance)
- Corrective and preventive actions
- Responsible person and target completion date

- Status and closure evidence

Lessons Learned are submitted by the *Contractor* and reviewed by the *Project Manager* during monthly quality meetings and reports and includes trend analysis to identify recurring or systemic issues.

The *Contractor* submits consolidated Lessons Learned report prior to project close-out that provides a summary of key findings, actions taken, and recommendations for future projects.

11 TESTING AND COMPLETION

11.1 Testing and Quality Control

11.1.1 Laboratories

The *Contractor* appoints an independent SANAS accredited laboratory to undertake all testing of materials, the results of which are specified in, or may reasonably be inferred from, the Works Information.

The *Contractor* arranges with the independent testing laboratory for the timeous carrying out of all such testing specified in the Works Information.

An "independent laboratory" is a laboratory which is not under the management or control of the *Contractor* and in which the *Contractor* has no financial interest, nor which has any control or financial interest in the *Contractor*.

11.1.2 Civil Works Testing

The *Contractor* provides laboratory testing for the following and includes test results in the quality assurance file:

- Layerworks density testing
- Piling integrity tests
- Concrete cube tests

11.1.3 Structural Works

The *Contractor* conducts non-destructive testing (NDT) on 10% of all welds and includes the results in the quality assurance file.

The *Contractor* submits workshop drawings to the *Project Manager* for acceptance.

11.1.4 Civil Works Quality Control

The *Contractor* submits concrete mix designs, reinforcing drawings, pre-concrete checklists and a Quality Assurance plan to the *Supervisor* for acceptance.

11.1.5 Factory Acceptance Tests

The *Contractor* does not bring to the Working Areas the Plant and Materials listed herein until the *Project Manager* instructs the *Contractor* to do so.

Fire and Mechanical

The *Contractor* conducts factory acceptance tests for the following fire and mechanical Plant included in the *works* prior to delivery to site:

- Duty and stand-by fire pump-sets, including the Engine Control Panel
- Foam concentrate tank

Electrical

The *Contractor* designs, prepares, reviews and submits signed-off shop-drawings for the following electrical Plant included in the *works* to the *Project Manager* for review, input, comments and acceptance prior to manufacturing:

- Low voltage normal electrical distribution board (DB) for the Pump House.
- Low voltage essential electrical distribution board (DB) for the Pump House.
- Low voltage motor control centre (MCC) for the Foam Loading Pump and Jockey Pump for the Pump House.

The *Contractor* conducts factory acceptance tests for the following electrical Plant included in the *works* prior to delivery to site:

- Low voltage normal electrical distribution board (DB) for the Pump House.
- Low voltage essential electrical distribution board (DB) for the Pump House.
- Low voltage motor control centre (MCC) for the Foam Loading Pump and Jockey Pump for the Pump House.

Instrumentation

The *Contractor* conducts factory acceptance testing of the following instrumentation Plant included in the *works.*

- Fire Control Panel (FCP), including controller, main operator interface and indicator mimic
- Battery backup power supply (dual redundant)
- First Responder Panel in the pump house

- First responder repeater panels in the operations control room and first responder repeater panel in the security office

11.1.6 Site Acceptance Tests

Fire and Mechanical

The *Contractor* conducts site acceptance tests for the following fire and mechanical Plant included in the *works* in the presence of the *Project Manager* and *Supervisor*:

- Duty and stand-by fire pump-sets, including the Engine Control Panel
- Jockey pump-set
- The balanced pressure proportioning equipment

Electrical

The *Contractor* conducts site acceptance tests for the following building electrical installations (lighting installations, small power installations, etc.) included in the *works* in the presence of the *Project Manager* and *Supervisor*:

- Pump House inclusive of the two (2) Fire Pump Containers

The *Contractor* issues electrical certificate of compliances (COC's) in compliance with the latest edition of SANS 10142-1 for each low voltage electrical installation (include low voltage building electrical installations, low voltage electrical distribution boards (DB's), low voltage electrical distribution panels, low voltage electrical motor control centres (MCC's), etc.) forming part of the *works* individually and immediately after the specific low voltage electrical installation has been successfully completed.

The *Contractor* conducts site acceptance tests for the following electrical Plant included in the *works* in the presence of the *Project Manager* and *Supervisor*:

- Low voltage normal electrical distribution board (DB) for the Pump House.
- Low voltage essential electrical distribution board (DB) for the Pump House.
- Low voltage motor control centre (MCC) for the Foam Loading Pump and Jockey Pump for the Pump House.

The *Contractor* conducts site acceptance tests for the following earthing, bonding and lightning protection installations included in the *works* in the presence of the *Project Manager* and *Supervisor*:

- Pump House inclusive of the two (2) Fire Pump Containers
- 2 x Water Storage Tanks
- All piping, all piping support systems, cable support systems, instrument support systems, etc.

The *Contractor* issues an earthing, bonding and lightning protection certificate of compliance for each earthing, bonding and lightning protection installation (include building lightning protection installations, structural systems lightning protection installations, equipment earthing installations, cable routing infrastructure earthing installations, earthmat installations, earthing of piping systems, etc) forming part of the *Works* individually and immediately after the specific earthing, bonding and lightning protection installation has been successfully completed.

Instrumentation

The *Contractor* conducts site acceptance testing of the following instrumentation Plant and systems included in the *works* to prove the functionality, operation and control of each piece of instrument equipment and each system included in the *works*.

- Fire Control Panel (FCP), including controller, main operator interface and indicator mimic
- Battery backup power supply (dual redundant)
- First Responder Panel in the pump house
- First responder repeater panels in the operations control room and first responder repeater panel in the security office
- Field instruments such as field mounted start stations (FMSS), fire alarm beacons, sirens and level switches for water and diesel tanks

Electrical Tests and Certificates

The *Contractor* provides all testing Equipment and facilities to perform the necessary electrical tests.

All testing Equipment is accompanied with a calibration certificate issued by an accepted and accredited authority, the *Contractor* ensures that all calibration certificates are valid. The testing equipment calibration certificates are included in the *Contractors* hand over file.

11.1.7 Samples of Plant and Materials

Fire

The *Contractor* provides samples and tests foam concentrate as specified in the Foam Concentrate Specification, document TPL-TECH-PL 911.

The *Contractor* provides samples and tests the foam pre-mix during commissioning and verifies that the foam concentrate dosing ratio meets the performance specification across the minimum and maximum flow ranges of the foam proportion device. Samples are taken by the *Contractor* at the foam proportioning device and from a bund pourer at the Spill Basin.

Electrical

The *Contractor* submits technical data sheets and material samples for each of the following electrical Plant and Materials as proposed by the *Contractor* to the *Project Manager* for review, inspection, comments and acceptance:

- All light fittings inclusive of all associated infrastructure (i.e. mounting brackets, fixing brackets, glands, etc.).
- All light switches.
- All socket outlets (single-phase and three-phase).
- All electrical cables inclusive of associated infrastructure (i.e. cable termination kits, cable glands, cable shrouds, cable ties, etc.).
- All electrical cable routing infrastructure and support systems (i.e. cable sleeves, cable ladders, cable ladder covers, pedestals, etc.).
- All earthing, bonding and lightning protection cables inclusive of associated infrastructure (i.e. cable termination kits, cable glands, cable ties, etc.).
- All earthing, bonding and lightning protection infrastructure (i.e. cable termination boxes, earth rods, bolts, nuts, washers, etc.).
- All labels for the electrical as well as earthing, bonding and lighting protection systems (i.e. cables, light switches, socket outlets, etc.).

The accepted samples are labelled by the *Contractor* for ease of reference and always kept on Site for viewing, comparison and verification purposes.

Instrumentation

The *Contractor* submits technical data sheets and material samples for each of the following instrumentation Plant and Materials as proposed by the *Contractor* to the *Project Manager* for review, inspection, comments and acceptance:

- Beacons
- Sirens
- Level instruments

The accepted samples are labelled by the *Contractor* for ease of reference and always kept on Site for viewing, comparison and verification purposes.

11.2 As-built Documentation

The *Contractor* compiles and maintains comprehensive records of as-built information and issues the as-built information to the *Project Manager* and *Supervisor* prior to completion of the *works*.

The handover documents include:

- Records of all purchased Plant and Materials, detailing vendors, suppliers, specifications, data sheets, test reports, and certificates.
- Design calculations and as-built drawings in native and PDF formats.
- Updated as-built drawings and data sheets.
- Reports and method statements on installation, testing, calibration, commissioning, inspections, and monitoring.
- Quality management plans, inspection and test records, welding documentation (PQR, WPS, QA/QC, Welders' Qualification Certificate), heat treatment procedures, and coating records.
- Copies of vendor and supplier guarantees for installed Plant.
- All as-built and handover documents formatted per Document Management Plan 11364-A1073.
- Final 3D models in native and Navisworks format

The *Contractor* maintains accurate as-built records of all Plant and Materials installed or relocated during the *works*. A marked-up set of drawings are kept and updated by the *Contractor* and made available to the *Supervisor* when requested.

11.3 Operating Manuals and Maintenance Schedules

The *Contractor* includes items on the Spare-parts and interchangeability register (SPIR) list for Plant and Materials that are required to be replaced or maintained within the two-year period after commissioning. The *Contractor* includes the following individual items on the SPIR list:

- Part number
- Vendor name
- Vendor Address
- Vendor Contact number
- Estimated cost

The *Contractor* develops the SPIR list and submits to the SPIR to the *Project Manager* for acceptance. The *Contractor* produces SPIR lists for the following Plant and Materials:

- Fire-water pump-sets
- Foam concentrate pump-sets
- Diesel engine
- Foam loading pump
- Jockey pump
- Radiator
- Gear-box (pump-set)
- Fire control system
- Monitors
- Water tanks
- Control valves
- Valves
- Gaskets
- Electrical and Instrumentation systems

The spare parts provisioning is further detailed in each of the fire specifications listed in Section 6.2.

In addition to the SPIR list, the *Contractor* provides any spare parts for Plant and Materials that are required as part of the items 2-year maintenance plan. The *Contractor* delivers all spare parts to the *Project Manager* on Site.

The *Contractor* performs the 12-months maintenance schedule on the duty and stand-by diesel engines after the commissioning date.

11.4 SAP Master Data List

The *Contractor* populates the SAP Master Data List template and submits the SAP Master Data List with the contract handover documentation.

The SAP Master Data List includes the following data, amongst others:

- The Plant type

- The size of the Plant
- The make and model of the Plant

The *Employer* uses the SAP Master Data List to procure replacement Plant and Materials in the future.

11.5 Commissioning and Handover

The *Contractor* commissions the new fire system in accordance with the Commissioning and Handover Procedure, document TPL-TECH-PL 918.

The *Contractor* provides all Equipment, Plant and Materials and resources to demonstrate to the *Project Manager, Supervisor* and the *Employers* team that the system performance meets the accepted design and performance criteria.

The *Contractor* commences with demolition and decommissioning of the existing fire system as describe in 11364-A1147 once the Ready for Operation Certificate has been signed by the *Project Manager*.

11.6 Training Workshops and Technology Transfer

The *Contractor* develops the Operating and Maintenance (O&M) manual for the new fire system and submits the manual to the *Project Manager* for acceptance.

The *Contractor* hands over the new fire system to the *Employer* for beneficial use after the O&M manual has been accepted by the *Project Manager*, and the *Contractor*, together with the *Employers* team, has conducted training of the new fire system with the *Employers* on-site operational team.

The *Employer* co-ordinates an inspection of the new fire system with the local fire department.

11.7 Completion

On or before the *completion date* the *Contractor* does everything required to Provide the Works including the work listed below which is to be done before the *completion date*:

- The new fire protection system is complete, tested, commissioned and operable.
- The works in the areas affecting the new fire protection system are in a condition that allows the system to be safely operated and for the Site's primary fire protection to be transferred from the existing system to the new system. This includes completion of all work and correction of all notified Defects that would prevent the safe operation or transfer of the system.
- The existing fire protection system has been decommissioned and demolished, and the Site has been reinstated to the condition stated in the Works Information.

The *Contractor* meets the *key dates* as specified in the Contract Data when:

- The *Contractor* has obtained all required municipal plan approvals in accordance with Section 3.3 of the Works Information and the *Project Manager* has given written confirmation that on-site construction activities may commence.
- The *Project Manager* has accepted the Front-end Engineering Design (FEED) stage as described in Section 4.4.1 of the Works Information.

The *Contractor* achieves Completion of the *section* as identified in the Contract Data when:

- The *Project Manager* has accepted the Ready for Operations Certificate of the complete new fire protection system, and the Site's primary fire protection system has transferred from the existing system to the new system.

12 INDUSTRIAL RELATIONS

12.1 Contractor Liability

The *Contractor* warrants that it will be liable to the *Employer* for any loss or damage caused by strikes, riots, lockouts or any labour disputes by the *Contractor's* employees, which loss may include any indirect or consequential damages.

The *Contractor* warrants that no negotiations or feedback meetings by the *Contractor's* employees take place on the *Employer's* premises, whether owned or rented by the *Employer*.

The *Contractor* gives notice to the *Employer* of any industrial action by the *Contractor's* employees immediately upon becoming aware of any actual or contemplated action that is or may be carried out on the *Employer's* premises, whether owned or rented, and notifies the *Employer* of all matters associated with such action that may potentially affect the *Employer*.

The *Contractor* is responsible for educating its employees on relevant provisions of the Labour Relations Act which deal with industrial action processes and the risks of non-compliance.

The *Contractor* develops a Contingency Strike Handling Plan, which the *Contractor* updates on a three-monthly basis. The *Contractor* provides the *Project Manager* and *Employer* with this plan and all updates to the plan. The *Contractor* communicates with its employees on Site the details of the plan.

12.2 Industrial Action by *Contractor* Employees

In the event of any industrial action by the *Contractor's* employees, the *Contractor* provides competent contingency resources permitted in law to carry out any of the duties that are, or could potentially be, interrupted by industrial action in delivering the *works*.

The *Contractor* warrants that the *Contractor* will compensate the *Employer* for any costs the *Employer* incurs in providing additional security to deal with any industrial action by the *Contractor's* employees.

In the event of any industrial action by the *Contractor's* employees, the *Contractor* prepares and delivers an Industrial Action Report to the *Project Manager* and *Employer*, within two (2) hours of the commencement of industrial action.

If the industrial action persists, the *Contractor* delivers the report at 8h30 each day.

The Industrial Action Report provides at least the following information:

- Industrial incident report.

- Attendance registers.
- Productivity / progress to schedule reports.
- Operational contingency plan.
- Site security report.
- Industrial action intelligence gathered

The final Industrial Action Report is delivered 24 hours after finalization of the industrial action.

The management of the *Contractor* holds a daily industrial action teleconference with people identified by the *Employer* to discuss the industrial action, settlement of the industrial action, security issues and the impact on delivery under the Contract.

The resolution of any disputes or industrial action by the *Contractor's* employees is the sole responsibility of the *Contractor*.

Access to the *Employer's* premises by the *Contractor* and its employees is only provided for purposes of the *Contractor* delivering the *works*. Should the *Contractor* and its employees not, for any reason, be capable of delivering the *works*, the *Employer* is entitled to restrict or deny access onto its premises, with all such risk being a *Contractor's* risk and, unless otherwise authorized, such person will be deemed to be trespassing.

12.3 Local Community Intervention

The *Contractor* appoints a suitably qualified Stakeholder Management and Social Facilitation Officer (SMSFO) to coordinate stakeholder engagement, social facilitation and community liaison activities for the duration of the *works*.

The *Contractor* identifies elements of the *works* and subcontracts those parts of the *works* to the local community through engagements facilitated by the SMSFO to determine local capabilities and expectations for inclusion in the *works*.

The SMSFO serves as the primary day-to-day liaison between the *Contractor*, project stakeholders and affected communities.

The *Contractor* has the following general responsibilities in the Stakeholder and Community Liaison process:

- Stakeholder and Community engagement.

- The *Contractor*, through the appointed SMSFO, acts as the official communication channel with the *Employer*, project stakeholders and affected communities and facilitates harmonious relationships throughout the duration of the *works*.
- The *Contractor* facilitates and coordinates formation of a Project Liaison Committee (PLC).
- The PLC disseminates project information discussed at the meetings to the entities and constituencies they represent.
- The *Contractor* provides the PLC, the SMSFO with the assistance and information required to execute their duties.

The *Contractor* provides a suitable meeting venue on Site for the PLC, stakeholder engagement sessions and community liaison meetings.

13 INVOICING AND PAYMENTS

The *Contractor* complies with the *Employers* procedure for invoice submission after the *Project Manager* certifies payment.

The *Contractor* submits invoices before the 25th of each month, or the last Friday preceding if the 25th falls on a weekend or public holiday.

The *Contractor* includes the following on the invoice:

- The invoice amount that matches the payment certificate amount.
- Transnet SOC Ltd and include:
    - Transnet SOC Limited VAT No: 4720103177
    - Invoice number
    - *Contractors* VAT number
    - Contract number

The *Contractors* includes the following supporting details with the invoice submission:

- Amount for payment (excluding VAT).
- VAT amount.
- Amount for payment (including VAT).
- Full copy of the payment certificate accepted the *Project Manager* indicating the amount certified and amounts previously certified
- Any retention monies to be deducted from the invoice.
- Any interest payable
- Escalation formula used where applicable
- Settlement discount
- Proof of ownership of any materials supplied
- Statement to accompany each invoice
- A signed and dated statement on the letterhead of each Subcontractor that the payment terms of their credit account with the *Contractor* is in good standing with no overdue and outstanding amounts

The *Contractor* addresses invoices to:

- Transnet Pipelines

- 202 Anton Lembede Street
- Durban
- 4001

For the attention of *Project Manager.*

The *Contractor* ensures the *Employer* has the correct banking information to make the electronic payment transfer.

All payments are provisional and subject to audit. The *Contractor* shall preserve all invoice and payment records as required by legislation but not less than five (5) years.

The *Employer* will deduct any amount owed by the *Contractor* to the *Employer* from any amount payable by the *Employer* to the *Contractor*.

ANNEXURE A – DRAWINGS ISSUED BY THE EMPLOYER

Annexure A.1 Civil and Structural Engineering Typical Drawings

Item	Document Number	Document Title
1	11364-A1047	Typical Details - Piping Demolition Capping Details
2	11364-A1091	Typical Details - T Posts Sheet 1
3	11364-A1092	Typical Details - T Posts Sheet 2
4	11364-A1093	Typical Details - Goal Posts
5	11364-A1094	Typical Details - Wall Mounted Supports - Sheet 1
6	11364-A1095	Typical Details - Wall Mounted Supports - Sheet 2
7	11364-A1096	Typical Details - Base Plates
8	11364-A1097	Typical Details - Connections
9	11364-A1098	Typical Details - Sleeper Supports
10	11364-A1099	Typical Details - Teflon Pad
11	11364-A1101	Typical Details - Plinths
12	11364-A1102	Typical Details - Holding Down Bolts
13	11364-A1104	Typical Details - Layerworks
14	11364-A1106	Typical Details - Trench Bedding
15	11364-A1107	Typical Details - Joints & Sealant
16	11364-A1109	Typical Details - Storm Water Cut Off Drain
17	11364-A1111	Typical Details - Cable Draw Box
18	11364-A1194	Typical details – Dry Stack retaining wall
19	11364-A1047	Typical Details - Piping Demolition Capping Details

Annexure A.2 Civil Engineering Drawings

Item	Document Number	Document Title
1	Transnet Howick Wg31_Howick July 2025	Transnet Howick Detail survey WG31
2	WS0000-00	Howick Pump Station
3	PL-112878	Howick Site Layout
4	11364-A1189	Site Layout - Part Plan of Pump House and Water tanks
5	TPL-HWR-CI-DE-170424	Howick Pump Station (Spill Basin As-built)

Annexure A.3 Structural Engineering Drawings

Item	Document Number	Document Title
1	11364-A1192	Pump House - Foundation Layout
2	11364-A1193	Pump House - Typical Sections
3	11364-A1190	Water Tank - Typical Foundation Layouts
4	11364-A1191	Water Tank - Typical Section & Details

Annexure A.4.1 Fire Engineering – Site Plans and As-built Site Layout

Item	Document Number	Document Title
1	11364-A1195	Site Plan of New Fire Protection System
2	11364-A1035	As-Built Site Layout

Annexure A.4.2 Fire Engineering – Conceptual Model

Item	Document Number	Document Title
3	11364-1038.ifc	Conceptual Model (Navisworks Format)

Annexure A.5 Fire Engineering P&IDs

Item	Document Number	Document Title
1	11364-A1005	Process and Instrumentation Diagram – Fire Water Reservoir
2	11364-A1006	Process and Instrumentation Diagram – Pump House
3	11364-A1007	Process and Instrumentation Diagram – Zone Piping
4	11364-A1008	Process and Instrumentation Diagram - Legend

Annexure A.6 Fire Engineering Typical Detail Drawings

Item	Document Number	Document Title
1	11364-A1166	Fire Ring Main Booster Connection – Typical Drawing
2	11364-A1076	Fire Service Suction – Typical Drawing
3	11364-A1080	Bund Pourers to Bund Wall Standard Installation – Typical Drawing
4	11364-A1233	Fire Water Tank Refill Connection – Typical Drawing
5	11364-A1078	Foam Concentrate Tank – Typical Drawing
6	11364-A1083	Foam Monitor – Typical Drawing
7	11364-A1085	U-Bolt Detail – Typical Drawing
8	11364-A1087	Bund Pourer Connection – Typical Drawing
9	11364-A1165	Fire Service Suction – Alternative Typical Drawing
10	11364-A1172	Fire Hydrant Single Connection – Typical Drawing

Annexure A.7 Fire Engineering Section Views

Item	Document Number	Document Title
1	11364-A1196	Section Views of Pump House
2	11364-A1197	Section View of Spill Basin and Manifold Monitors
3	11364-A1198	Section Views of Piping to Manifold Monitors

Annexure A.8 Fire Engineering General Arrangements

Item	Document Number	Document Title
1	11364-A1199	General Arrangement of Pump House and Water Tanks
2	11364-A1200	General Arrangement of Manifold and Spill Basin

Annexure A.9 Fire Engineering Three-Dimensional Views

Item	Document Number	Document Title
1	11364-A1202	3D Views and Plan View of Pump House
2	11364-A1203	3D View on New Fire Protection System
3	11364-A1220	3D Northern View on the New Fire Protection System
4	11364-A1221	3D Views on Manifold Monitors and Spill Basin

Annexure A.10 Electrical Engineering

Item	Document Number	Document Title
1	11364-A1029	Typical Earth Mat System Joints, Welding and Earth Spike Connection Detail
2	11364-A1030	Typical Lightning Protection Installation Details - Detail 1 - Metallic Roofs (New Buildings)
3	11364-A1031	Typical Lightning Protection Installation Details - Detail 2 - Non-metallic Roofs (New Buildings)
4	11364-A1032	Typical Lightning Protection Installation Details - Detail 3 - Metal Structures (New Buildings)
5	11364-A1033	Typical Lightning Protection Installation Details - Detail 4 - Metal Structures (New Buildings)
6	11364-A1034	Typical Lightning Protection Installation Details - Detail 5 - Parapet Walls (New Buildings)
7	11364-A1185	Electrical and Instrumentation Schematic
8	11364-A1186	Proposed Primary Electrical Cable Reticulation Routing Layout
9	11364-A1211	Pump House – Proposed Lighting Layout
10	11364-A1212	Pump House – Proposed Small Power Layout
11	11364-A1213	Pump House – Proposed Lightning Protection Layout
12	11364-A1214	Proposed Primary Electrical Cable Sleeve Layout
13	727/001/cblmrk	Cable Marker Specification
14	727/002/Instand	Typical for Instrument Stands - Double
15	727/003/Instand	Typical for Instrument Stands - Single
16	727/004/Earth_Instr	Instrument Earthing Schematic
17	727/005/InstrLoop	Typical Instrument Loop Drawing
18	727/006/VlvLoop	Typical Valve Loop Drawing
19	727/007/Rack_Droppers	Typical for Angle Iron Droppers
20	727/008/Earth_Concept	Earthing Concept Drawing
21	727/009/Rack_Typical	Typical for Racking Layouts incl. over Bund Walls
22	727/010/Junction Box Stand	Typical for Junction Box Stands

Annexure A.11 Instrumentation Engineering

Item	Document Number	Document Title
1	11364-A1171	Fire Control Panel Layout
2	11364-A1170	First Responder Panel Layout
3	11364-A1175	Mimic Panel Layout
4	11364-A1185	Electrical and Instrumentation Schematic
5	11364-A1215	Proposed Primary Instrumentation Cable Sleeve Layout

ANNEXURE B – DOCUMENTS ISSUED BY THE EMPLOYER

Annexure B.1.1 Surveys and Investigations – Geotechnical, Hazardous Area and Groundwater

Item	Document Number	Document Title
1	GA1063R1/2025	New Fire Water Installation for Howick TPL Depot - Geotechnical Report
2	XPS/1015/13013	Hazardous area classification guidelines report for Transnet Pipelines (TPL) infrastructure

Annexure B.1.2 Surveys and Investigations - As-built Point Cloud

Item	Document Number	Document Title
3	Transnet Howick_Area 1.rcp	As-built Black and White Point Cloud Scanned August 2025 – Area 1: North-eastern corner
4	Transnet Howick_Area 1 Support.zip	As-built Black and White Point Cloud Scanned August 2025 – Area 1: North-eastern corner
5	Transnet Howick_Area 2.rcp	As-built Black and White Point Cloud Scanned August 2025 – Area 2: Northern Boundary Line and Western Area with Existing Pump House
6	Transnet Howick_Area 2 Support.zip	As-built Black and White Point Cloud Scanned August 2025 – Area 2: Northern Boundary Line and Western Area with Existing Pump House
7	Transnet Howick_Area 3.rcp	As-built Black and White Point Cloud Scanned August 2025 – Area 3: Balance of Site: Manifold, Control Room, DJP Pump House and Eastern Areas
8	Transnet Howick_Area 3 Support.zip	As-built Black and White Point Cloud Scanned August 2025 – Area 3: Balance of Site: Manifold, Control Room, DJP Pump House and Eastern Areas

Annexure B.2 Document Management and Planning

Item	Document Number	Document Title
1	009-TPL-TECH-OPS-20259	Standard Operating Procedure Model 3D review Procedure
2	DOC-STD-0001	Contractor Documentation Submittal Requirements
3	TPL-DM-P-0001	Transnet Pipelines Document Management Procedure
4	TPL-TECH-DO-STD-001 / PL 100	Drawing Standard PL100
5	TPL-TECH-DO-STD-002 / PL 101	Drawings Office Standard PL101
6	TPL-TECH-DO-STD-003 / PL 102	Drawings Office Standard PL102
7	TPL-TECH-DO-STD-004 / PL 103	General Drawing Standard PL103
8	TPL-TECH-DO-WI-001	Handover of As-built and Other Documents to Drawings Office Work Instruction
9	PL117653	P&ID Legend Typical Sheet 1 of 3
10	PL117653	P&ID Legend Typical Sheet 2 of 3
11	PL117653	P&ID Legend Typical Sheet 3 of 3
12	11364-A1073	Document Management Plan
13	N/A	Sample Equipment Asset Register
14	N/A	2024 Fixed Assets SOP v1 – Fixed Assets Procedure

Annexure B.3 Health, Safety and Environment

Item	Document Number	Document Title
1	HO1436-SP-0002	Howick Health and Safety Specification
2	ENV-SOP-002	Generic Environmental Management Plan for TPL Maintenance and Minor Projects
3	TRN-IMS-GRP-PROC-014	Integrated Management Procedure Contractor Management Procedure
4	TRN-IMS-GRP-POL-002	Transnet Integrated Management System Policy Commitment Statement
5	TPL-TECH-STD-002	Standard for Spill Basin Design
6	TRN-IMS-GRP-POL-002.1	TIMS Policy Commitment Statement
7	TRN-GRPM-GSP-001	Transnet SOC Ltd. Group Safety Policy
8	Transnet Safety Policy Statement	Transnet Safety Policy statement

Annexure B.4 Fire Engineering Documents

Item	Document Number	Document Title
1	11364-A1147	Fire System Demolition Scope of Work
2	11364-A1146	Howick Spill Containment Capacity Report
3	11364-A1021	Scenario Calculation
4	TPL-TECH-PL 897	Ball Valve Specification
5	TPL-TECH-PL 898	Butterfly Valve Specification
6	TPL-TECH-PL 899	Control Valve Specification
7	TPL-TECH-PL 900	Gate Valve Specification
8	TPL-TECH-PL 901	Fire Pump Specification
9	TPL-TECH-PL 902	Water Tank Specification
10	TPL-TECH-PL 903	Actuating Expanding Plug Valve
11	TPL-TECH-PL 904	Foam Generating Equipment
12	TPL-TECH-PL 905	Tank Cooling Protection
13	TPL-TECH-PL 906	Non-Return Valves
14	TPL-TECH-PL 907	Back Flow Preventer
15	TPL-TECH-PL 908	Jockey Pump-set Specification
16	TPL-TECH-PL 909	Pressure Gauge Specification
17	TPL-TECH-PL 910	Fire Department Interface Equipment Specification
18	TPL-TECH-PL 911	Foam Concentrate Tank Specification
19	TPL-TECH-PL 912	Piping Specification
20	TPL-TECH-PL 915	Foam Concentrate
21	TPL-TECH-PL 917	Equipment Document Handover Procedure
22	TPL-TECH-PL 918	Commissioning and Handover Procedure
23	TPL-TECH-PL 919	Containerised Fire Pump-Set
24	TPL-TECH-F-STD-001	Transnet Pipelines Technical Fire Protection Design Standard
25	TPL-TECH-PL 203B	Specification Thermal Relief Valve, Screwed type for Petroleum Product Service
26	TPL-TECH-PL 407 / PL407	Specification Painting of Manifold Piping and Ancillary Equipment

Item	Document Number	Document Title
27	TPL-TECH-PL 415E	Specification Requirements for Steel Flange Insulating Gasket Kit
28	TPL-TECH-PL 804A	Specification General Welding
29	TPL-TECH-PL 805A	Specification General Non-destructive Testing
30	TPL-TECH-PL 877	Specification Colour Coding Requirement of Pipelines & Ancillary Equipment

Annexure B.5 Electrical Engineering Documents

Item	Document Number	Document Title
1	PL 619	Specification For Three Phase Electric Actuators
2	PL 631	Specification for Low Voltage Switchgear and Distribution Boards
3	PL 647	Requirements for the Supply of 110VDC Battery Charger
4	PL 648	Requirements for the Supply of 50VDC Battery Charger
5	PL 666	Electrical Design Criteria
6	PL 675	Specification for Electric Fences
7	PL 711	Specification for Equipment Cabinets to House Electronic Equipment
8	PL 727	Cable, Racking and Trenching & Earthing Installation Codes of Practice

Annexure B.6 Instrumentation Engineering Documents

Item	Document Number	Document Title
1	TPL-TECH-PL 913	Fire Control System and Instrumentation Design, Supply and Installation Specification and Scope of Works
2	TPL-TECH-PL 916	ECP FCP Control Narrative
3	11364-A1169	Cause and Effect Matrix
4	PL 723	Automation Standard

Annexure B.7 Structural Engineering Documents

Item	Document Number	Document Title
1	PL 892	Structural Steel Specification for Walkways, Platforms, Cat ladders and Stairways

Annexure B.8 Civil Engineering Documents

Item	Document Number	Document Title
1	PL 889	Earthworks Specification
2	PL 890	Bedding and Padding Specification

PART 4: SITE INFORMATION

4.1 DESCRIPTION OF THE SITE AND ITS SURROUNDINGS

4.1.1 General description

The Site is enclosed by the red line indicated on the aerial photograph insert below. The boundary encompasses the operational areas of the Transnet Pipelines Howick Pump Station located on Main Road, Howick, KwaZulu-Natal Province (approximate GPS co-ordinates 29°28'37.19"S, 30°11'41.05"E), including the manifold for the distribution of crude oil and petroleum products through the *Employers* pipeline network.

Insert: Google Earth Image - Site Enclosed by the Boundary Shown in Red

The Site is designated as critical infrastructure in terms of the Critical Infrastructure Protection Act 8 of 2019 and therefore the *Contractor* access shall be subjected to the Act and restricted accordingly.

All vehicles and personnel entering and leaving the Site are liable to be searched and subject to the *Employers* security and other entry conditions.

Insert: As-built Site Layout

The *Contractor* undertakes an alcohol breathalyser test prior to gaining Site entry. The *Contractor* is denied entry to the site for a failed alcohol breathalyser test.

The *Contractors* staff will enter through the main gate, the southern access gate to the Site nearest the security guard house.

There are two main security areas, the Primary and the Secondary Areas within the Site that are separated by a security fence. Access is first granted to the Secondary Area through the main gate.

Access to the Primary Area is controlled by an additional access gate located near the security guard house.

4.1.2 Existing buildings, structures, and plant & machinery on the Site

4.1.2.1 Fire Water Tank

The fire water tank is estimated to contain 65 000L of water. The tank is constructed of carbon steel panels and is elevated on reinforced concrete strip footing foundations and has various piping ancillaries.

The water tank comprises of six (6) panels by five (5) panels, by two (2) panels high that are each 1.2m x 1.2m.

Figure 1: The fire water tank with existing attachments and tank ancillaries.

4.1.2.2 Main Normal Electrical Power Supply

The Site is equipped with a main low voltage electrical distribution board / motor control centre installed in the Main Electrical Plantroom located within the control room building.

The main low voltage electrical distribution board (DB) / motor control centre (MCC) is rated at 400V three-phase, 50Hz.

4.1.2.3 Essential (Back-Up Diesel Generator) Electrical Power Supply

The Site is equipped with an essential back-up diesel generator (open-set) which is rated at 35kVA 380/230V 50Hz (approximately 53.2 Amps at 100% full load rating).

4.1.2.4 Site Process Control System

The site process control system is in a dedicated room within the control room building.

4.1.2.5 Cable Sleeves and Draw Boxes

The Site is equipped with electrical and instrumentation draw boxes and associated under-ground cable sleeves. The as-built underground cable sleeves and draw boxes are shown on 11364-A1214 and 11364-A1215.

4.1.2.6 Pump House

The pump house is made of structural steel frame with galvanised metal panels and IBR roof sheeting. The floor of the pump house is constructed of reinforced concrete and concrete paving slabs. The pump house contains a diesel engine, a 300L diesel tank, a foam tank with approximately 5 000 L of foam concentrate on reinforced concrete foundation, the fire water and foam pumps and a FCP.

The dimensions of the existing pump house is 4.5m in length, 5.5m in width and 3.5m in height.

The pump house is equipped with a low voltage electrical distribution board. The pump house is equipped with:

- Light fittings (internal and external).
- Socket outlets.
- Electrical, control and instrumentation cables and cable reticulation systems (i.e. cable trays, round-boxes, weather-proof boxes, etc.).
- Earthing, bonding and lightning protection

Figure 2: The existing pump house, foam tank and water tank

Figure 3: The pump house with existing features and equipment

4.1.2.7 Fire Shelter

The fire shelter is made of a structural steel frame and IBR rood sheeting, with approximate dimension of 3.0 m by 1.5 m, and a height of 3.0 m.

Figure 4: The white fire shelter is featured between the foam monitor and the foam tank

4.1.2.8 Product Manifold

The Durban Witwatersrand Pipeline (DWP) manifold contains high pressure fuel piping systems that receive and distribute fuel externally to the site. There is an underground 400NB fuel pipeline that enters the manifold from the east and exits underground towards the north.

The existing Durban-Johannesburg Pipeline (DJP) and associated infrastructure and underground fuel lines are decommissioned; however the infrastructure is to be treated as live unless otherwise instructed by the *Project Manager*.

4.1.2.9 Spill Basin

Drainage from the manifolds are directed towards the primary chamber of the spill basin. The primary chamber of the spill basin spills over into the secondary chamber of the spill basin via an underflow overflow weir. Further details of the existing spill basin are shown on the drawing TPL-HWR-CI-DE-170424_A.

4.1.3 Subsoil Information

A geotechnical investigation was undertaken by Ground Africa Consulting Geotechnical Engineers for the proposed fire water infrastructure at the Howick TPL Depot (Project GA1063R1/2025).

The investigation involved six trial holes (TH1–TH6) and dynamic cone penetrometer (DCP) tests conducted in October 2025 to assess soil profiles, bearing capacities, and founding recommendations for a new pumphouse, water tanks, valve banks, and elevated pipe network. The site, a 2.4 ha National Key Point with a gentle southeast slope, is underlain by Volksrust Formation shales, resulting in clay- and silt-rich residual soils overlain by variable fill and pedogenic layers. Overall, the report deems the site geotechnically suitable, emphasizing founding on weathered shale at depths of 1.7–2.5 m to minimize differential settlement, with imported granular material for backfill and groundwater management via cut-off trenches.

Since the investigation was commissioned, the proposed location for the primary infrastructure (pumphouse and tanks) has shifted from the originally earmarked south-eastern corner near the main entrance and existing v-drain to an area near TH5, which was excavated as a representative point across the broader site. The original focus concentrated on TH1–TH4 in the south-eastern zone, providing a more detailed cross-section of that area, including a geological profile depicting layered fill, colluvium, residual soils, pedogenic gravel, and perched groundwater at 0.8–1.3 m. In contrast, TH5, located further from this zone (likely toward the central or northern site based on the aerial overview), offers a single-point snapshot but aligns with the site's generalized geology. This change introduces minor variability, as the south-eastern area featured thicker fill (up to 1.3 m in TH4) and more pronounced perched water tables, potentially complicating excavations compared to TH5's conditions. Results from TH5 indicate a soil profile broadly consistent with the site average but with notable differences that enhance suitability for the relocated development. At TH5, fill is thinner (0.3 m), with no upper residual horizon, pedogenic layer at 0.7 m, lower residual at 1.3 m, and the deepest rock intersection at 2.5 m, deeper than the 1.7–2.3 m in TH1–TH4. No groundwater was encountered, unlike in TH1, TH3, and TH4, reducing risks of inundation during construction. DCP testing at TH5 showed firm to stiff consistencies, with refusal at 3.1 m (deeper than most others at 1.8–2.2 m), suggesting stronger underlying support. While the south-eastern investigations provided denser data for localized variability (e.g., reworked fill and cemented ferricrete zones), TH5's profile implies lower permeability and better drainage, aligning well with the report's recommendations for raft foundations on granular mattresses over shale.

Despite the location change, the findings at TH5 remain suitable and do not necessitate major deviations from the original recommendations, as the underlying Volksrust shale provides reliable founding across the site. However, the shift from a more intensively sampled area means TH5's data is less detailed, potentially overlooking micro-variations like the rubble or ferricrete observed elsewhere. Earthworks will still involve fill removal and imported G5 gravel compaction to 98% MOD AASHTO, with

stormwater redirection critical given the site's slope. Minimal differential settlement (<5 mm) is anticipated if protocols are followed, though a supplementary targeted investigation near the new TH5 adjacent location could confirm consistency and address any dolerite influences from the nearby south-western dyke.

In conclusion, the report supports proceeding with the fire protection upgrade, with the relocated site near TH5 offering comparable or improved geotechnical conditions compared to the original south-eastern focus. Adhering to the outlined measures, excavation to shale, engineer inspections, and material imports, will ensure structural integrity, while the location change underscores the need for adaptive planning in sensitive infrastructure projects.

4.1.4 Engineering Surveys

The *Employer* has undertaken a 2D engineering survey, a full 3D point cloud scan, and developed an as-built 3D model of the Howick TPL Depot infrastructure.

4.1.5 Hidden Services

The Site contains several underground services that remain undocumented. All known underground services are shown on drawings Howick Pump Station, drawing WS0000-0, Howick Site Layout, drawing PL-112878_A, and 11364-A1035.

4.1.6 Hazardous Area Classification

The site zoning and hazardous area classification is presented in the Hazardous Area Classification Guidelines report for Transnet Pipelines infrastructure document number XPS/1015/13013.

4.1.7 Groundwater Contamination

Groundwater contamination reports are not available.