

TENDER COVER PAGE

**YOU ARE HEREBY INVITED TO SUBMIT PROPOSAL FOR THE REQUIREMENTS OF
NATIONAL HEALTH LABORATORY SERVICE (NHLS)**

BID NUMBER:	RFB005/25/26	
BID DESCRIPTION:	UPGRADE OF EMERGENCY POWER DISTRIBUTION SYSTEM FOR SAVP PRODUCTION BLOCK 14 INCLUDING SERVICE AND MAINTENANCE FOR A PERIOD OF FIVE (5) YEARS.	
CLOSING DATE:	09 SEPTEMBER 2026	
CLOSING TIME:	11:00 AM	
PUBLIC TENDER OPENING:	DATE: 09 SEPTEMBER 2026 TIME: 11:30 AM VENUE: MAIN CONFERENCE BOARDROOM, NATIONAL HEALTH LABORATORY SERVICE 1 MODDERFONTEIN ROAD SANDRINGHAM PROCEDURE: TO OPEN ONLY ENVELOPE 1 AND ONLY READ OUT BIDDERS NAME	
BID VALIDITY PERIOD:	180 DAYS (COMMENCING FROM THE RFB CLOSING DATE)	
A COMPULSORY	BRIEFING SESSION WILL BE HELD: DATE: 21 AUGUST 2026 TIME: 11:00 VENUE: RECEPTION NATIONAL HEALTH LABORATORY SERVICE 1 MODDERFONTEIN ROAD SANDRINGHAM <u>PLEASE NOTE THAT A GRACE PERIOD OF 15 MINUTES ONLY WILL BE ALLOWED.</u> All questions must be sent per e-mail to Lesedi.manganye@nhls.ac.za on or before 28 AUGUST 2026.	
BID DOCUMENTS MUST BE MARKED WITH THE FOLLOWING:	AND	DEPOSITED IN THE BID BOX SITUATED AT:
NHLS PROCUREMENT TENDER OFFICE		
RFB005/25/26 Bidders Name: _____ Closing Date: 09 SEPTEMBER 2026	NHLS MAIN RECEPTION 1 Modderfontein Road, Sandringham, Johannesburg.	

UPGRADE OF EMERGENCY POWER DISTRIBUTION SYSTEM FOR SAVP PRODUCTION
BLOCK 14 INCLUDING SERVICE AND MAINTENANCE FOR A PERIOD OF FIVE (5)
YEARS.

Bidders should ensure that Bids are delivered in time to the correct address. If the bid is late, it shall not be accepted for consideration.

Bidders should ensure that Bids are delivered in time to the correct address. If the bid is late, it shall not be accepted for consideration.

ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS – **(Please note that no changes on the content of this document is allowed)**

THIS TENDER IS SUBJECT TO THE GENERAL CONDITIONS OF THE TENDER, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.

THE FOLLOWING PARTICULARS MUST BE FURNISHED (FAILURE TO DO SO SHALL RESULT IN YOUR BID BEING DISQUALIFIED)

INVITATION FOR BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/ PUBLIC ENTITY)					
BID NUMBER:	RFB005/25/26	CLOSING DATE:	09 SEPTEMBER 2026	CLOSING TIME:	11:00 AM
DESCRIPTION	UPGRADE OF EMERGENCY POWER DISTRIBUTION SYSTEM FOR SAVP PRODUCTION BLOCK 14 INCLUDING SERVICE AND MAINTENANCE FOR A PERIOD OF FIVE (5) YEARS.				
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)					
NATIONAL HEALTH LABORATORY SERVICES					
1 MODDERFONTEIN ROAD					
SANDRINGHAM					
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO			TECHNICAL ENQUIRIES MAY BE DIRECTED TO:		
CONTACT PERSON	Lesedi Manganye		CONTACT PERSON	Lesedi Manganye	
TELEPHONE NUMBER	011 386 6165		TELEPHONE NUMBER	011 386 6165	
FACSIMILE NUMBER			FACSIMILE NUMBER		
E-MAIL ADDRESS	Lesedi.manganye@nhls.ac.za		E-MAIL ADDRESS	Lesedi.manganye@nhls.ac.za	
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	TCS PIN:		OR	CSD No:	
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE	☐ Yes ☐ No [TICK APPLICABLE BOX]	B-BBEE STATUS LEVEL SWORN AFFIDAVIT		☐ Yes ☐ No [TICK APPLICABLE BOX]	
[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/SWORN AFFIDAVIT (FOR EMEs& QSEs) MUST BE SUBMITTED IN ORDER TO CLAIM POINTS FOR SPECIFIC GOALS WHERE APPLICABLE]					
SIGNATURE OF BIDDER				Date:	
CAPACITY UNDER WHICH THIS BID IS SIGNED (Attach proof of authority to sign this bid; e.g. resolution of directors, etc.)					

PART B TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:

- 1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
- 1.2. **ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED-(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.**
- 1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
- 1.4. BIDDERS ARE REQUIRED TO SUBMIT THEIR BIDS IN TWO SEPARATE SEALED ENVELOPES, CLEARLY MARKED "TECHNICAL PROPOSAL" AND "FINANCIAL PROPOSAL" RESPECTIVELY, WITH THE TECHNICAL PROPOSAL CONTAINING NO PRICING INFORMATION AND THE FINANCIAL PROPOSAL CONTAINING ONLY PRICING INFORMATION, FAILING WHICH THE BID MAY BE DISQUALIFIED.

2. TAX COMPLIANCE REQUIREMENTS

- 2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
- 2.2 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.
- 2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
- 2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
- 2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
- 2.6 WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
- 2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.

SIGNATURE OF BIDDER:

.....

CAPACITY UNDER WHICH THIS BID IS SIGNED:

.....

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

DATE:

.....

TENDER NOTICE AND INVITATION TO TENDER**1. TENDER NOTICE AND INVITATION TO TENDER**

NHLS invites the tenderer for the following:

**TENDER NO. RFB005/25/26: UPGRADE OF EMERGENCY POWER DISTRIBUTION SYSTEM FOR SAVP
PRODUCTION BLOCK 14 INCLUDING SERVICE AND MAINTENANCE FOR A PERIOD OF FIVE (5) YEARS.**

The tender document will be available in the form of a download from the NHLS website
(<https://www.nhls.ac.za>) starting from 14 August 2026.

The Employer is NHLS.

All tenders and supporting documents must be submitted in a sealed envelope and be placed in the Tender box on the ground floor of NHLS by no later than **11:00 am on 09 September 2026**.

Address is as follows:

NATIONAL HEALTH LABORATORY SERVICE, 1 MODDERFONTEIN ROAD, SANDRINGHAM, JOHANNESBURG

NHLS is not obliged to accept the lowest or any tender and NHLS reserves to appoint:

- a) in whole or in part.
- b) to more than one tenderer.
- c) to the highest points scoring bidder.
- d) to the lowest acceptable tender or highest acceptable tender in terms of the point scoring system.
- e) to a bidder not scoring the highest points (based on objective grounds in terms of section 2 (1) (f) of the PPPFA) (where applicable).
- f) not to consider any bid with justifiable reasons.

A valid and binding contract with the successful tender/s will be concluded once NHLS has awarded the contract. NHLS and the successful tenderer/s will sign the contract agreement forms.

NATIONAL HEALTH LABORATORY SERVICE (NHLS)



TENDER NO: RFB005/25/26

**UPGRADE OF EMERGENCY POWER
DISTRIBUTION SYSTEM FOR SAVP
PRODUCTION BLOCK 14 INCLUDING
SERVICE AND MAINTENANCE FOR A PERIOD
OF FIVE (5) YEARS.**

VOLUME 1

TENDER AND CONTRACT



The Tenderer is to indicate in the “Submitted (Yes/No)” column in the below table that they have completed the required section of the tender document. Completion of this checklist will assist the Tenderer in ensuring that they have attended to all the required items for submission with this tender. Additionally, it is an absolute requirement that tenderers comply with National Treasury’s CSD registration as well as SARS tax compliance requirements for contract award – refer T2.2.4. The below will form part of the tender document, the tenderers are therefore encouraged to submit the returnable and or documentation with their tender offer to avoid elimination especially with regards to what is stated in the Required for Tender Evaluation column or not obtaining points for Specific Goals. Tenderers are encouraged to ensure that their Tax status remains Tax Compliant on CSD throughout the process to avoid delaying the process or being eliminated at award stage. For infrastructure related projects. Tenderer must have a CIDB Active Status at the requested CIDB requirement at evaluation stage to avoid disqualification.

All documentation listed in the Checklist below shall form part of the Contract.

Table 1

Employer:		Contractor:	
Witness:		Witness:	

No	Description of Returnable/s or Documentation that will form Part of Contract and must therefore to be Completed and / or Submitted by the Tenderer	Required for Tender Evaluation	Required for Tender Award	Required After Tender Award	Submitted (Yes/No)
1.	Tender Cover:				
	Name of Tender	•			
	Contact Person	•			
	Telephone Number	•			
	Central Supplier Database Registration	•			
	CIDB Registration Number, minimum required CIDB grading for the tender and Active Status – if applicable	•			
	COIDA Registration Number	•			
	Tax SARS PIN No. or MAAA No. for Tax Compliant Status	•			
2.	Mandatory Documents at Particular Stage:				
	CIDB – Grading 4EB or Higher	•			
	Mandatory Briefing Meeting	•			
	Form of Offer Completed and Signed	•			
3.	Administrative Documentation:				
	Signed Certificate of Authority to Sign	•			
	Signed Acknowledgement of Tender Conditions	•			
	SBD 1 - Invitation to Bid - Completed and signed	•			
	SBD 4 - Declaration of interest - Completed and signed	•			
	SBD 6.1 - Preference Points Schedule – Specific Goals and Price Points - Completed and signed.	•			
	T 2.3.2 Returnable Annexure B: Acknowledgement of Tender Drawings			•	
	T 2.3.1 Returnable Annexure A: Acknowledgement of SHE Specification & Annexures	•			
	Joint Venture Consortium or equivalent Agreement signed by all parties if applicable	•			
	Any qualifications. If “Yes”, reference to such qualification/s must be indicated on a cover letter. Please be aware that alterations on the tender document may result in your tender being eliminated as the qualification may impede on the ability to evaluate like with like.	•			
	Occupational Health and Safety Declaration form	•			

Employer:		Contractor:	
Witness:		Witness:	

No	Description of Returnable/s or Documentation that will form Part of Contract and must therefore to be Completed and / or Submitted by the Tenderer	Required for Tender Evaluation	Required for Tender Award	Required After Tender Award	Submitted (Yes/No)
4.	Technical Functionality Documentation:				
	Documentary Evidence Required for Technical Criteria	n/a			
5.	Specific Goals:				
	Documentary Evidence Required for Criteria specific goals	•			
6.	Scope of Work				
	Scope of Work and or Specifications	•			
7.	Pricing Schedule:				
	Bill of quantities completed	•			
	Alterations authenticated	•			
8.	Terms and Conditions:				
	General Conditions of Contract	•			
	Special Conditions of Contract	•			

Tenderers will be notified of such missing and incomplete documents and will be offered a period of 3 days to complete or submit those pages i.e., Standard Bidding Documents (SBD) and other documents that require completion and signatures that do not have a bearing on functionality, price and preference points for specific goals.

Tenders that are received contrary to the above requirements will be disqualified after three (3) days have lapsed.

Signature: _____ Date _____

Employer:		Contractor:	
Witness:		Witness:	

NATIONAL HEALTH LABORATORY SERVICE (NHLS)



TENDER NO: RFB005/25/26

**UPGRADE OF EMERGENCY POWER
DISTRIBUTION SYSTEM FOR SAVP
PRODUCTION BLOCK 14 INCLUDING
SERVICE AND MAINTENANCE FOR A
PERIOD OF FIVE (5) YEARS.**

VOLUME 1

PART 1: TENDERING PROCEDURES



TENDERING DATA

Volume 1 Tender and Contract

Section T1 Tender and Contract

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Employer:		Contractor:	
Witness:		Witness:	



TENDERING DATA

Volume 1 Tender and Contract

Section T1 Tender and Contract

T1.1 TENDER DATA

T1.1.1 Conditions of Tender

The conditions of tender are the Standard Conditions of Tender as contained in Annex C of the CIDB Standard for Uniformity in Construction Procurement (August 2019). (See www.cidb.org.za).

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

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

T1.1.2 Tender Data

The clause numbers in the Tender Data refer to the corresponding clause numbers in the Conditions of Tender.

Clause Number	Tender Data
C.1.1	The Employer is, National Health Laboratory Service (NHLS)
C.1.2	The tender document issued by the Employer comprise: Volume 1 Tender Part 1: Tendering Procedures T1.1: Tender Notice and Invitation to Tender T1.2: Tender Data Tender Part 2: Returnable Documents T2.1: List of Returnable Documents, including the Enterprise Declaration Affidavit which may be bound in a separate volume. T2.2: List of Other Returnable Documents T2.3: List of Other Returnable Schedules Contract Part 1: Agreement and Contract Data C1.1: Form of Offer and Acceptance C1.2: Contract Data C1.3: Forms of Securities

Employer:		Contractor:	
Witness:		Witness:	



TENDERING DATA

Volume 1 Tender and Contract

Section T1 Tender and Contract

Clause Number	Tender Data
	Contract Part 2: Pricing Data C2.1: Pricing Instructions C2.2: Bill of Quantities Volume 2A Contract Part 3: Scope of Work C3.1: Scope of Work C3.2: Particular Specifications Contract Part 4: Site Information C4: Site Information Volume 2B Generic Specifications Volume 3 Occupational Health, Safety and Environmental Specification Volume 4 Tender Drawings
C.1.4	The Employer's representative is: Contact Person: Lesedi Manganye Telephone: 011 386 6165 E-mail address: Lesedi.manganye@nhls.ac.za

Employer:		Contractor:	
Witness:		Witness:	

TENDERING DATA**Volume 1 Tender and Contract****Section T1 Tender and Contract**

Clause Number	Tender Data
C.2.1	Eligibility criteria and requirements CIDB registration and grading: 1) It is estimated that tenderers must have a CIDB contractor grading of 4EB or higher. 2) Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations, for an Electrical Engineering Works – Building class of construction work, are eligible to have their tenders evaluated. 3) Joint ventures are eligible to submit tenders provided that: i) every member of the joint venture is registered with the CIDB; ii) the lead partner has a contractor grading designation in the Electrical Engineering Works – Building class of construction work; or not lower than one level below the required grading designation in the class of works construction works under considerations and possess the required recognition status. iii) 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 Electrical Engineering Works – Building class of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations Failure to meet to Eligibility criteria and requirements will result in disqualification.
C.2.8	Replace the contents of the clause with the following: “Request clarification of the tender documents, if necessary, by notifying the Employer’s Officials indicated on the Tender Notice and Invitation to Tender in writing at least ten (10) working days before the closing time stated in the foregoing notice and clause C.2.15.1”
C.2.10.5	Add the following to the clause: “A price or rate is to be entered against each item in the Bill of Quantities, whether the quantities are stated or not. An item against which no price is entered will be considered to be covered by the other prices in the Schedule.”

Employer:		Contractor:	
Witness:		Witness:	

TENDERING DATA

Volume 1 Tender and Contract

Section T1 Tender and Contract

Clause Number	Tender Data
C.2.11	The evaluation on price alteration will be conducted as follows: Where the tender award strategy is to evaluate and award per item or category, the following must apply: a) If there is an alteration on the rate but no alteration on the total for the item or category, the bidder will not be disqualified. b) If there is an alteration on the total for the item/s without authentication, bidders will only be disqualified for alteration per item or category. Where the tender award strategy is to evaluate and award total bid offer, the following must apply: a) If there is an alteration on the rate, total for the line item, sub-total/ sum brought/carried forward for the section but no alteration on the total bid offer, the bidder will not be disqualified. b) If there is an alteration on the total bid offer on form of offer, then the amount in words must be considered or vice-versa. c) If there is an unauthenticated alteration on the total bid offer and the amount in words is not authenticated, the bidders will be disqualified for the entire tender. Where the tender pricing schedule or bill of quantities is requesting rates/price from bidder/s without providing a total, the following will apply: a) (i) If there is an unauthenticated alteration on the unit rate/price the bidder must be disqualified. Corrections may not be made using correction fluid, correction tape or the like, bid received contrary to this will be disqualified.
C.2.12.1	Replace Contents Alternative offers will not be permitted.
C.2.13.2	Tenderers who fail to complete and sign the Form of Offer will be eliminated.
C.2.13.3	Each tender offer shall be submitted as an original and to submit a soft copy in a USB (Tenderers who do not submit a document in a USB will be disqualified)

Employer:		Contractor:	
Witness:		Witness:	

TENDERING DATA**Volume 1 Tender and Contract****Section T1 Tender and Contract**

Clause Number	Tender Data										
C.2.13.5	The Employer's address for delivery of tender offers and identification details to be shown on the Tenderer's offer package are: Location of tender box: Main Reception Entrance Physical address: National Health Laboratory Service (NHLS) 1 Modderfontein road Sandringham Johannesburg 2001 Identification details: RFB005/25/26 Upgrade Of Emergency Power Distribution System for SAVP Production Block 14 Including Service and Maintenance for A Period of Five (5) Years. Closing date: 09 September 2026 at 11H00 Tenderer's name: _____ Authorised Representative's name: _____ Postal address: _____ Telephonic contact numbers: _____										
C.2.13.6 & C.3.5	A two-envelope procedure will be followed. <table border="1"> <thead> <tr> <th>Section</th><th>Description Contents & Order for RFP Submission</th></tr> </thead> <tbody> <tr> <td>1.</td><td><u>ENVELOPE 1</u></td></tr> <tr> <td>1.1</td><td> Volume 1 – Tender Part 1: Tendering Procedures Tender Part: Part 2: Returnable Documents Contract Part 1: C1.2 Contract Data C1.3: Forms of Securities Contract Part 2: Pricing Data C2.1: Pricing Instructions </td></tr> <tr> <td>1.2</td><td>Complete Volume 2A –</td></tr> <tr> <td></td><td> Contract Part 3: Scope of Work Contract Part 4: Site Information </td></tr> </tbody> </table>	Section	Description Contents & Order for RFP Submission	1.	<u>ENVELOPE 1</u>	1.1	Volume 1 – Tender Part 1: Tendering Procedures Tender Part: Part 2: Returnable Documents Contract Part 1: C1.2 Contract Data C1.3: Forms of Securities Contract Part 2: Pricing Data C2.1: Pricing Instructions	1.2	Complete Volume 2A –		Contract Part 3: Scope of Work Contract Part 4: Site Information
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	Contract Part 3: Scope of Work Contract Part 4: Site Information										

Employer:		Contractor:	
Witness:		Witness:	

TENDERING DATA**Volume 1 Tender and Contract****Section T1 Tender and Contract**

Clause Number	Tender Data										
	<table> <tr> <td>1.3</td><td>Complete Volume 2B</td></tr> <tr> <td></td><td>Generic Specifications</td></tr> <tr> <td>2.</td><td><u>ENVELOPE 2</u></td></tr> <tr> <td>2.1</td><td>C1.1: Form of Offer and Acceptance</td></tr> <tr> <td>2.2</td><td>C2.2: Bill of Quantities</td></tr> </table> NB: FAILURE TO SUBMIT IN THE FORMAT/ ORDER REQUIRED MAY RENDER THE BID INVALID (C.2.13.6)	1.3	Complete Volume 2B		Generic Specifications	2.	<u>ENVELOPE 2</u>	2.1	C1.1: Form of Offer and Acceptance	2.2	C2.2: Bill of Quantities
1.3	Complete Volume 2B										
	Generic Specifications										
2.	<u>ENVELOPE 2</u>										
2.1	C1.1: Form of Offer and Acceptance										
2.2	C2.2: Bill of Quantities										
C.2.15.1	The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender.										
C.2.16	The tender offer validity period is 180 days.										
C.2.16.1	Add the following to the clause: "If the tender validity expires on a Saturday, Sunday or public holiday, the Tender Offer shall remain valid and open for acceptance until the closure of business on the following working day."										
C.2.19	The Tenderer must provide access during working hours to his premises for inspections on request.										
C.2.23	The Tenderer is required to submit with his tender: 1) Valid SARS Compliance status Pin for Tenders issued by the South African Revenue Services. 2) Proof of CSD registration i.e. MAAA number 3) A Certificate of Contractor Registration issued by the CIDB. Where a tenderer satisfies CIDB contractor grading designation requirements through joint venture formation, such tenderers must submit the Certificates of Contractor Registration in respect of each partner.										
C.2.24	Add the following new clause: "Canvassing and obtaining of additional information by tenderers. Accept that: i) No Tenderer shall make any attempt either directly or indirectly to canvass any of the Employers officials or the Employer's agent in respect of his tender, after the opening of the tenders but prior to the Employer arriving at a decision thereon. ii) No Tenderer shall make any attempt to obtain particulars of any relevant information, other than that disclosed at the opening of tenders "										

Employer:		Contractor:	
Witness:		Witness:	

TENDERING DATA**Volume 1 Tender and Contract****Section T1 Tender and Contract**

Clause Number	Tender Data
C.2.25	Add the following new clause: If a supply chain management official or other role player, or any close family member, partner or associate of such official or other role player, has any private or business interest in any contract to be awarded, that official or other role player must – a) disclose that interest; b) withdraw from participating in any manner whatsoever in the process relating to that contract To give effect to the above, the questionnaire for the declaration of interests (SBD 4) with any person who is employed by the NHLS in part T2 – Returnable Documents must be completed in full and signed.”
C.2.26	Add the following new clause: Tax Compliance In the case of a Joint Venture/Consortium the tax Compliance status Pin must be submitted for each member of the Joint Venture/Consortium.
C.2.27	Add the following new clause: i) Tenderers will be notified of any omitted, outstanding, missing and/or incomplete administrative documents and will be offered a period of 3 days to complete or submit those pages i.e., Standard Bidding Documents (SBD) 1, authority to sign and other administrative documents that require submission or completion and signatures. These exclude documentation on functionality, price and preference points for specific goals. ii) Tenderers that do not comply with the above requirements will be disqualified after three (3) days' period has lapsed.

Employer:		Contractor:	
Witness:		Witness:	

TENDERING DATA**Volume 1 Tender and Contract****Section T1 Tender and Contract**

Clause Number	Tender Data
C.3.2	Replace the contents of the clause with the following: “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 ten (10) calendar 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.3.4.2	Tenders will be opened in public soon after closing time and recording of received documents but not later than 11:30 at the tender office located at 1 Modderfontein Road, Sandringham, Reception. Tenderers' names only will be read out.
C.3.9	Replace Existing Clause Arithmetic Errors NHLS undertakes to check the highest scoring bid for arithmetical errors and correcting them as follows: NHLS shall check for arithmetic errors using the following sequence: (i) Check the amount in words against the amount in figures on the <i>Form of Offer</i>, (ii) Check the Form of Offer against the Summary Schedule Total, (iii) Check the Section Sub-Totals per section against the Summary Total for summation errors, (iv) Check the Section Sub-Totals in the Summary Schedule against Section Sub-Totals in the Bill of Quantities. (v) Check the Section Sub-Totals against the Item Totals for summation errors. (vi) Check the Item Totals against the product of the Item Rate and the Quantity Provided. If a bill of quantities or price schedule applies NHLS will request the bidder to correct the arithmetic errors as follows: (i) In respect of the Form of Offer, where there is a discrepancy between the amounts in figures and the amount in words, the amount in words shall govern. The bidder must be requested to adjust the amount in figures to correspond with the amount in words. NHLS will notify the tenderer of all errors or omissions that are identified in the tender offer and either request the tenderer to confirm the offer as tendered or NHLS will accept the corrected total of prices. Where the tenderer elects to confirm the tender offer as tendered, correct the errors as follows: (i) 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

Employer:		Contractor:	
Witness:		Witness:	

TENDERING DATA**Volume 1 Tender and Contract****Section T1 Tender and Contract**

Clause Number	Tender Data
	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. (ii) 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 requested to revise selected item prices (and their rates if bills of quantities apply) to achieve the tendered total of the prices. Clarification session(s) shall be held with Tenderer where there is pricing discrepancies, errors are highlighted and identified corrections are explained. Tenderer is afforded an opportunity to provide clarification, accept or reject identified corrections in writing. (i) In the event that the Tenderer accepts identified corrections, NHLS will proceed with evaluation. (ii) In the event that the Tenderer rejects the identified correction(s), NHLS must review the Tenderer's motivation and risks associated with the proposed change. This is not an opportunity for Tenderers to change the bid offer. A bidder that does not agree to the above will be disqualified. Risk related to the Arithmetic Corrections shall be assessed. Where risks are identified, tenderers shall provide NHLS with any other material or information that has a bearing on the tender offer, the tenderer's commercial position (including joint venture agreements), quotations preferencing arrangements or samples of materials considered necessary by NHLS 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 NHLS request or fails to attend any meeting in which it has been formally invited to clarify any issue, the tender offer will be regarded as non-responsive.

Employer:		Contractor:	
Witness:		Witness:	

TENDERING DATA**Volume 1 Tender and Contract****Section T1 Tender and Contract**

Clause Number	Tender Data																																																
C.3.11	<u>The tender will be evaluated as follows:</u> <table><tr><th>Stage</th><th>Description</th></tr><tr><td>Stage 1</td><td>Technical Mandatory Evaluation</td></tr><tr><td>Stage 2</td><td>Administrative Evaluation</td></tr><tr><td>Stage 3</td><td>Specific Goals and Pricing Evaluation</td></tr></table> <u>Stage 1: Mandatory Evaluation</u> <table><tr><th colspan="2">Description</th><th colspan="2">Complied</th></tr><tr><th>No</th><th>Description</th><th>Yes</th><th>No</th></tr><tr><td>1.</td><td>It is estimated that tenderers must have a CIDB contractor grading of 4EB or higher.in terms of C.2.1 of the tender data</td><td></td><td></td></tr><tr><td>2.</td><td>Attendance of Mandatory Tender Briefing Meeting</td><td></td><td></td></tr><tr><td>3.</td><td>Proof of Central Supplier Database (CSD) Registration / MAAA Number</td><td></td><td></td></tr><tr><td>4.</td><td>The Service Providers have to agree with Special Conditions of Contract.</td><td></td><td></td></tr><tr><td>5.</td><td>Key Personnel Submit CVs, qualifications and professional registration for Each personnel reflecting a minimum of 5 years' post qualification experience: • Master Electrician with an Electrical wireman's license • Project Manager with National Diploma or higher in Built Environment qualification registered with SACPCMP • 2 x Electrical artisans with Electrical Trade tests • Safety Officer with a National Diploma in Safety Management, Environmental Health, Environmental Science, Environmental Management, SAMTRAC, SHEOMTRAC, SHEMTRAC, MESHTRAC, NEBOSH or an equivalent qualification of NQF 5 or more shall be accepted. Bidders must submit certified (not older than 3 months from the tender closing date) copies of qualifications and professional registrations</td><td></td><td></td></tr><tr><td>6.</td><td>The bidding entity must submit a valid copy of its registration as an electrical contractor with the Department of Labour, issued in the name of the company.</td><td></td><td></td></tr><tr><td>7.</td><td>Provide letter of good standing for COIDA from an authorised issuing entity.</td><td></td><td></td></tr><tr><td>8.</td><td>The bidder must provide written confirmation from each proposed resource under key personnel that they have granted consent for the use of their personal information for the purpose of responding to this tender, in compliance with the Protection of Personal Information Act 4 of 2013.</td><td></td><td></td></tr></table>	Stage	Description	Stage 1	Technical Mandatory Evaluation	Stage 2	Administrative Evaluation	Stage 3	Specific Goals and Pricing Evaluation	Description		Complied		No	Description	Yes	No	1.	It is estimated that tenderers must have a CIDB contractor grading of 4EB or higher.in terms of C.2.1 of the tender data			2.	Attendance of Mandatory Tender Briefing Meeting			3.	Proof of Central Supplier Database (CSD) Registration / MAAA Number			4.	The Service Providers have to agree with Special Conditions of Contract.			5.	Key Personnel Submit CVs, qualifications and professional registration for Each personnel reflecting a minimum of 5 years' post qualification experience: • Master Electrician with an Electrical wireman's license • Project Manager with National Diploma or higher in Built Environment qualification registered with SACPCMP • 2 x Electrical artisans with Electrical Trade tests • Safety Officer with a National Diploma in Safety Management, Environmental Health, Environmental Science, Environmental Management, SAMTRAC, SHEOMTRAC, SHEMTRAC, MESHTRAC, NEBOSH or an equivalent qualification of NQF 5 or more shall be accepted. Bidders must submit certified (not older than 3 months from the tender closing date) copies of qualifications and professional registrations			6.	The bidding entity must submit a valid copy of its registration as an electrical contractor with the Department of Labour, issued in the name of the company.			7.	Provide letter of good standing for COIDA from an authorised issuing entity.			8.	The bidder must provide written confirmation from each proposed resource under key personnel that they have granted consent for the use of their personal information for the purpose of responding to this tender, in compliance with the Protection of Personal Information Act 4 of 2013.		
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Employer:		Contractor:	
Witness:		Witness:	

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Clause Number	Tender Data			
	9.	Provide a signed commitment letter for public liability to cover the tender amount for the duration of the project on the company letterhead.		
	10.	EXPERIENCE OF THE BIDDING COMPANY/ ENTITY: Bidder must provide at least 3 signed reference letters with a minimum value of R5 000 000.00 not older than 5 years where the project was delivered successfully ; accompanied by a Purchase Order/appointment letters & completion certificates of similar work done detailing the following: (1) type of project, (2) period of the project, (3) scope of work, and (4) the outcome of the bidders performance (5) value of the project Template checklist for reference letter is attached and must be complied with.		
	No.	SUBJECT		
	1	STANDARD LETTER LAYOUT	Comply	Do Not Comply
	1.1	Company letterhead		
	1.2	Physical Address		
	1.3	Contactable Person Full Names		
	1.4	Contact Details: Work number/Cell phone number/Email address		
	2	PROJECT DETAILS		
	2.1	Description of the Project.		
	2.2	Value of the Project.		
	2.3	Project Duration.		
	2.4	Date of Completion.		
	3	RECOMMENDATION		

Employer:		Contractor:	
Witness:		Witness:	



**UPGRADE OF EMERGENCY POWER DISTRIBUTION SYSTEM FOR SAVP PRODUCTION BLOCK
14 INCLUDING SERVICE AND MAINTENANCE FOR A PERIOD OF FIVE (5) YEARS.**

TENDERING DATA

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Clause Number	Tender Data										
	3.1	Attach Appointment letter/Purchase Order & Completion Certificate.									
	3.2	Did the Quality of work and services meet the minimum requirements?									
	3.3	Recommendation comments by Project owner/end user.									
	Tenderers who FAIL to meet the technical mandatory criteria or requirements of tender will result in disqualification. Special Conditions of Contract: <table border="1"> <thead> <tr> <th>No</th> <th>Description</th> <th>Accept</th> <th>Do not accept</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>The Appointed bidder will be expected to submit a Safety file, Project Plan and Cash Flow projection within 14 days of Site handover.</td> <td></td> <td></td> </tr> </tbody> </table>				No	Description	Accept	Do not accept	1	The Appointed bidder will be expected to submit a Safety file, Project Plan and Cash Flow projection within 14 days of Site handover.	
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Employer:		Contractor:	
Witness:		Witness:	

TENDERING DATA

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Clause number	Tender Data																												
C.3.11.2	Stage 2: Administrative Evaluation <table border="1"> <thead> <tr> <th colspan="2">Description</th><th colspan="2">Complied</th></tr> <tr> <th>No</th><th>Description</th><th>Yes</th><th>No</th></tr> </thead> <tbody> <tr> <td>1.</td><td>SBD 1 Invitation for bid</td><td></td><td></td></tr> <tr> <td>2.</td><td>SBD 6.1 Preference Points Claim Form in Terms of the Preferential Procurement Regulations 2022</td><td></td><td></td></tr> <tr> <td>3.</td><td>SBD 4 Fully completed and signed Bidder's Disclosure</td><td></td><td></td></tr> <tr> <td>4.</td><td>Preferential Procurement Claim form and copy of the B-BBEE Verification Certificate(s) issued by an authorised body or person or a sworn affidavit prescribed by the B-BBEE Codes of Good Practice.</td><td></td><td></td></tr> <tr> <td>5.</td><td>Submission of valid Tax Clearance Certificate or a Tax Compliance Status letter (with pin) issued by the South African Revenue Services, or a CSD Report reflecting active Tax Clearance Compliance status.</td><td></td><td></td></tr> </tbody> </table>	Description		Complied		No	Description	Yes	No	1.	SBD 1 Invitation for bid			2.	SBD 6.1 Preference Points Claim Form in Terms of the Preferential Procurement Regulations 2022			3.	SBD 4 Fully completed and signed Bidder's Disclosure			4.	Preferential Procurement Claim form and copy of the B-BBEE Verification Certificate(s) issued by an authorised body or person or a sworn affidavit prescribed by the B-BBEE Codes of Good Practice.			5.	Submission of valid Tax Clearance Certificate or a Tax Compliance Status letter (with pin) issued by the South African Revenue Services, or a CSD Report reflecting active Tax Clearance Compliance status.		
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C.3.11.3	Stage 3: The procedure for the evaluation of responsive tenders is Method 2 (Financial Offer and Specific Goals): <table border="1"> <thead> <tr> <th rowspan="2">No</th><th rowspan="2">Description</th><th colspan="2">Complied</th></tr> <tr> <th>Yes</th><th>No</th></tr> </thead> <tbody> <tr> <td>1</td><td>Form of Offer Completed and Signed. (Failure to complete in full will lead to a disqualification)</td><td></td><td></td></tr> </tbody> </table> 1. APPLICATION OF THE PREFERENCE POINTS SCORING SYSTEM The following preference point systems are applicable to all bids: - The applicable preference point system for this tender is the 80/20 preference point system. - The 80/20 preference point system will be applicable in this tender. The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received. (a) Preference points for this bid shall be awarded for: Price; and Specific Goals. (b) The maximum points for this bid are allocated as follows: <table border="1"> <thead> <tr> <th>Description</th><th>Points</th></tr> </thead> <tbody> <tr> <td>Price</td><td>80</td></tr> <tr> <td>Specific goals</td><td>20</td></tr> <tr> <td>Total points for Price and Specific Goals must not exceed</td><td>100</td></tr> </tbody> </table>	No	Description	Complied		Yes	No	1	Form of Offer Completed and Signed. (Failure to complete in full will lead to a disqualification)			Description	Points	Price	80	Specific goals	20	Total points for Price and Specific Goals must not exceed	100										
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Employer:		Contractor:	
Witness:		Witness:	

TENDERING DATA

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Clause number	Tender Data																																
	Specific Goals In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations 2022, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as must be supported by proof/ documentation stated in the conditions of this tender. Specific goals may include contracting with persons, or categories of persons, historically disadvantaged by unfair discrimination on the basis of race, gender or disability. Table 1: Specific goals for the tender and points claimed are indicated per the table below. <i>(Note to organs of state: The 80/20 preference point system is applicable, corresponding points must also be indicated as such.)</i> <table><tr><th>No.</th><th>The specific goals allocated points in terms of this tender</th><th>Number of points allocated (80/20 system) (To be completed by the organ of state)</th><th>Number of points Claimed by bidder</th></tr><tr><td>1.</td><td>51% Owned by black people</td><td>4</td><td></td></tr><tr><td>2.</td><td>51% Owned by Black people who are women</td><td>4</td><td></td></tr><tr><td>3.</td><td>51% owned by Black people with disabilities</td><td>2</td><td></td></tr><tr><td>4.</td><td>51% Owned by Black people who are youth</td><td>4</td><td></td></tr><tr><td>5.</td><td>51% Owned by black people living in rural areas or underdeveloped areas or townships</td><td>2</td><td></td></tr><tr><td>6.</td><td>Exempted Micro Enterprise (EME) and/or qualifying small enterprise (QSE)</td><td>4</td><td></td></tr><tr><td></td><td>TOTAL</td><td>20</td><td></td></tr></table> Table 2: The following verification documents must be submitted with the Request for quotation or tender document in order to be awarded points for specific goals:	No.	The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points Claimed by bidder	1.	51% Owned by black people	4		2.	51% Owned by Black people who are women	4		3.	51% owned by Black people with disabilities	2		4.	51% Owned by Black people who are youth	4		5.	51% Owned by black people living in rural areas or underdeveloped areas or townships	2		6.	Exempted Micro Enterprise (EME) and/or qualifying small enterprise (QSE)	4			TOTAL	20	
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	TOTAL	20																															

Employer:		Contractor:	
Witness:		Witness:	

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Clause number	Tender Data		
	No	The specific goals allocated points in terms of this tender	Means of verification
	1.	51% Owned by black people	Valid BBBEE Certificate issued by SANAS accredited verification agency or DTI /CIPC BBBEE Certificate for Exempted Micro Enterprises or Affidavit sworn under oath
	2.	51% Owned by Black people who are women	
	3.	51% owned by Black people with disabilities	
	4.	51% Owned by Black people who are youth	
	5.	51% Owned by black people living in rural areas or underdeveloped areas or townships	Valid lease agreement or municipal statement or letter from councilor or letter from traditional council confirming address of the owner of the company and a Valid BBBEE Certificate issued by SANAS accredited verification agency or DTI /CIPC BBBEE Certificate for Exempted Micro Enterprises or Affidavit sworn under oath
	6.	Exempted Micro Enterprise (EME) and/or qualifying small enterprise (QSE)	Valid BBBEE Certificate issued by SANAS accredited verification agency or DTI /CIPC BBBEE Certificate for Exempted Micro Enterprises or Affidavit sworn under oath
JOINT VENTURE, CONSORTIUM: For Joint Venture or Consortiums agreement must show percentages of ownership and work to be completed by each party. This agreement must form part of the tender submission. To determine the Joint Venture or Consortium score for specific goals, NHLS will evaluate at the consolidated B-BBEE certificate issued by a SANAS accredited verification agency and Joint Venture or Consortiums agreement to determine the proportional points for specific goals that will be awarded to the tenderer for black people living in rural areas or underdeveloped areas or townships and Exempted Micro Enterprise (EME) and/or qualifying small enterprise (QSE). Example, If there are two parties in a Joint Venture with a 50:50 ownership of the Joint Venture. In a Joint Venture where one party is living within the township and one is living in the suburbs, if one of the specific goals is ownership by black people living in rural areas or			

Employer:		Contractor:	
Witness:		Witness:	

TENDERING DATA

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Clause number	Tender Data															
	underdeveloped areas or township with a total points of 2, the Joint Venture will only be entitled the proportional points of 1 point. Table 3: The following are the requirements for a valid Sworn Affidavit in terms of the BBEE Sector Codes of Good Practise: Abbreviations BEP = Built Environment Professional <table><tr><th>Affidavit Prescribed Formats</th><th>Category</th><th>Financial Threshold</th></tr><tr><td colspan="3">Construction Sector Code</td></tr><tr><td></td><td>BEP</td><td>Less than R1.8 million</td></tr><tr><td></td><td>Contractor</td><td>Less than R3 million</td></tr><tr><td></td><td>Supplier</td><td>Less than R3 million</td></tr></table> Note 1: A sworn affidavit received from a tenderer that does not meet the above requirement will not be considered for the allocation of points for specific goals. Requirements for a valid B-BBEE Certificate and are as follows: a) A valid copy of a B-BBEE certificate must be issued by a SANAS B-BBEE agency and the expiry date of the certificate must be after the closing date of the request for quotation or tender to be deemed valid. b) The B-BBEE certificate contents must contain accurate information about the company to be deed valid. Requirements for a valid sworn affidavit are as follows: a) Valid Sworn Affidavits must comply with the requirements outlined in the Justices of the Peace and Commissioners of Oaths Act, no 16 of 1963 and its Regulations promulgated in Government Notice GNR 1258 of 21 July 1972 Justices of the Peace and Commissioners of Oaths Act, No. 16 of 1963. i.e. (i) The deponent shall sign the declaration in the presence of the commissioner of oaths (COA). (ii) Below the deponent’s signature the COA shall certify that the deponent has acknowledged that he knows and understands the contents of the declaration and the COA shall state the manner, place, and date of taking the declaration. (iii) The COA shall sign the declaration and print his full name and business address below his signature; and state his designation and the area for	Affidavit Prescribed Formats	Category	Financial Threshold	Construction Sector Code				BEP	Less than R1.8 million		Contractor	Less than R3 million		Supplier	Less than R3 million
Affidavit Prescribed Formats	Category	Financial Threshold														
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Employer:		Contractor:	
Witness:		Witness:	

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Clause number	Tender Data
	which he holds his appointment, or the office held by him if he holds his appointment ex officio. (iv) The contents of the sworn affidavit must contain accurate information about the company to be deed valid. Note 2: A tenderer failing to submit valid proof of specific goals claimed as per indicated above bidders will not be disqualified but will be allocated zero points for specific goals and will be allocated points for pricing. 2. ADJUDICATION USING A POINT SYSTEM a) The bidder obtaining the highest number of total points will be awarded the contract. b) Preference points shall be calculated after prices have been brought to a comparative basis taking into account all factors of non-firm prices and all unconditional discounts. c) Points scored must be rounded off to the nearest 2 decimal places. d) In the event that two or more bids have scored equal total points, the successful bid must be the one scoring the highest number of points for specific goals. e) However, when functionality is part of the evaluation process and two or more bids have scored equal points including equal preference points for specific goals, the successful bid must be the one scoring the highest score for functionality. f) Should two or more bids be equal in all respects, the award shall be decided by the drawing of lots. 3. POINTS AWARDED FOR PRICE THE 80/20 PREFERENCE POINT SYSTEMS POINTS AWARDED FOR PRICE THE 90/10 PREFERENCE POINT SYSTEMS A maximum of 90 points is allocated for price on the following basis: 80/20 $Ps = 80 \left(1 - \frac{Pt - Pmin}{Pmin} \right)$ Where Ps = Points scored for comparative price of bid under consideration

Employer:		Contractor:	
Witness:		Witness:	

TENDERING DATA

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Clause number	Tender Data
	Pt = Comparative price of bid under consideration Pmin = Comparative price of lowest acceptable bid
C.3.12	Add the following to the clause: “Accept that the submission of a Tender shall be construed as an acknowledgement by the Tenderer that they will provide the necessary insurance cover, the Employer will require under the contract.”
C.3.13.1	Add to the existing clause: Tender offers will only be accepted if: a) the tenderer is tax Compliance or has made arrangements to meet outstanding tax obligations with South African Revenue Services; b) Proof of CSD registration i.e., MAAA number; c) the tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation; d) 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; e) the tenderer has not: i) abused the Employer's Supply Chain Management System; or ii) failed to perform on any previous contract and has been given a written notice to this effect; f) the tenderer has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the Employer or potentially compromise the tender process and persons in the employ of the state are permitted to submit tenders or participate in the contract;
C.3.17	The number of paper copies of the signed contract to be provided by the Employer is one.
	There are no additional conditions of tender.

-- END OF PART ---

Employer:		Contractor:	
Witness:		Witness:	

NATIONAL HEALTH LABORATORY SERVICE (NHLS)



CONTRACT NO: RFB005/25/26

**UPGRADE OF EMERGENCY POWER
DISTRIBUTION SYSTEM FOR SAVP
PRODUCTION BLOCK 14 INCLUDING SERVICE
AND MAINTENANCE FOR A PERIOD OF FIVE (5)
YEARS.**

VOLUME 1

**RETURNABLE DOCUMENTS
AND
SCHEDULES**

Employer:		Contractor:	
Witness:		Witness:	

The tenderer must complete the following returnable documents:

T2.1 LIST OF RETURNABLE DOCUMENTS

Returnable Schedules required for tender evaluation purposes

<u>Document</u>	<u>Page No.</u>
T2.1.1 Record of Addenda to Tender Documents	RD.4
T2.1.2 Certificate of Authority	RD.5
T2.1.3 Compulsory Enterprise Questionnaire	RD.10
T2.1.4 Preferential Procurement	RD.13
Error! Reference source not found. Error! Reference source not found.	RD.Error! Bookmark not defined.
Error! Reference source not found. Bidder's disclosure	RD.Error! Bookmark not defined.
T2.1.5 Proposed Amendments and Qualifications	RD.24
T2.1.6 Schedule of the Tenderer's Experience	RD.26

T2.2 LIST OF OTHER RETURNABLE DOCUMENTS

Other documents required only for tender evaluation purposes

<u>Document</u>	<u>Page No.</u>
T2.2.1 Contractor's Certificate of Registration With CIDB	RD.28
T2.2.2 SARS Tax Compliance Status Pin and Proof of CSD registration	RD.29

T2.3 LIST OF RETURNABLE SCHEDULES

Other documents that will be incorporated into the contract

<u>Document</u>	<u>Page No.</u>
T2.3.1 Returnable Annexure A: Acknowledgement of SHE Specification &	RD.31
T2.3.2 Returnable Annexure B: Acknowledgment of Tender Drawings	RD.32
T2.3.3 Minutes of the Mandatory Tender Briefing	RD.34

NOTE: *The Tenderer is required to complete each and every schedule listed above to the best of his ability as the evaluation of tenders and the eventual contract will be based on the information provided by the tenderer.*

Employer:		Contractor:	
Witness:		Witness:	

T2.1 LIST OF RETURNABLE DOCUMENTS

Returnable Schedules required for tender evaluation purposes:

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T2.1.6 Schedule of the Tenderer's Experience	RD.26

Employer:		Contractor:	
Witness:		Witness:	



RFB005/25/26
UPGRADE OF EMERGENCY POWER DISTRIBUTION SYSTEM
FOR SAVP PRODUCTION BLOCK 14 INCLUDING SERVICE AND
MAINTENANCE FOR A PERIOD OF FIVE (5) YEARS.

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T2.1.1 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.		

Attach additional pages if more space is required.

Signed: Date:

Name: Position:

Tenderer:

Employer:		Contractor:	
Witness:		Witness:	



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T2.1.2 CERTIFICATE OF AUTHORITY

Indicate the status of the Tenderer by ticking the appropriate box hereunder. The Tenderer must complete the certificate set out below for the relevant category.

(I) COMPANY	(II) CLOSE CORPORATION	(III) PARTNERSHIP	(IV) JOINT VENTURE	(V) SOLE PROPRIETOR

(I) Certificate For Company

I,, chairperson of the Board of Directors of, hereby confirm that by resolution of the Board (copy attached) taken on, Mr/Ms, acting in the capacity of, was authorized to sign all documents in connection with the tender for Contract No. JW14508 and any contract resulting from it on behalf of the company.

Chairman:

As Witnesses: 1

2

Date:

Employer:		Contractor:	
Witness:		Witness:	



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(II) **Certificate For Close Corporation**

We, the undersigned, being the key members in the business trading as
..... hereby authorize Mr/Ms , acting in the capacity of
....., to sign all documents in connection with the tender and any
contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

Note: *This certificate is to be completed and signed by all of the key members upon whom rests the direction of the affairs of the Close Corporation as a whole.*

Employer:		Contractor:	
Witness:		Witness:	

(III) Certificate For Partnership

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

....., hereby authorize Mr/Ms,

acting in the capacity of, to sign all documents in connection with the tender and any contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

Note : *This certificate is to be completed and signed by all of the key partners upon whom rests the direction of the affairs of the Partnership as a whole.*

Employer:		Contractor:	
Witness:		Witness:	

(IV) Certificate For Joint Venture

This Returnable Schedule is to be completed by joint ventures.

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

Mr/Ms, authorised signatory of the company

....., acting in the capacity of lead partner, to sign

all documents in connection with the tender offer and any contract resulting from it on our behalf.

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
Lead partner		Signature: Name: Designation:
		Signature: Name: Designation:
		Signature: Name: Designation:
		Signature: Name: Designation:

Note : *This certificate is to be completed and signed by all of the key partners upon whom rests the direction of the affairs of the Joint Venture as a whole.*

Employer:		Contractor:	
Witness:		Witness:	



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(V) Certificate For Sole Proprietor

I,, hereby confirm that I am the sole owner of the Business
trading as

Signature of Sole Owner:

As Witnesses: 1

2

Date:

Employer:		Contractor:	
Witness:		Witness:	

T2.1.3 COMPULSORY ENTERPRISE QUESTIONNAIRE

The following particulars must be furnished. In the case of a joint venture, **separate** enterprise questionnaires in respect of each partner must be completed and submitted.

Section 1: Name of enterprise:

Section 2: VAT registration number, if any:

Section 3: CIDB registration number, if any:

Section 4: Particulars of sole proprietors and partners in partnerships

Name*	Identity number*	Personal income tax number*

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

Section 5: Particulars of companies and close corporations

Company registration number

Close corporation number

Proof of CSD registration i.e. MA xxxxxxxxx number.

SARS Tax Compliance status Pin number

Section 6: Record in the service of the state

Indicate by marking the relevant boxes with a cross, if any sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months in the service of any of the following:

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

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

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

Employer:		Contractor:	
Witness:		Witness:	

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*insert separate page if necessary

Section 7: Record of spouses, children, and parents in the service of the state

Indicate by marking the relevant boxes with a cross, if any spouse, child or parent of a sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months been in the service of any of the following:

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

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

*insert separate page if necessary

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

- i) authorizes the Employer to verify the tax compliance status from the South African Revenue Services that my / our tax matters are in order.
- ii) confirms that the neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004.
- 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 I / we are not associated, linked, or involved with any other tendering entities submitting tender offers and have no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest; and
- 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.

Employer:		Contractor:	
Witness:		Witness:	

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Signed: Date: _____

Name: Position: _____

Enterprise name:

Employer:		Contractor:	
Witness:		Witness:	

T2.1.4 PREFERENTIAL PROCUREMENT

Forms for Completion by the Tenderer included in this section are:

Form No.	Form Title	Description	Page No.
Error! Reference source not found.	Error! Reference source not found.	Procedures and adjudication criteria for the information of the Tenderer	RD.Error! Bookmark not defined.
Error! Reference source not found.	Error! Reference source not found.	Form to be completed by the Tenderer	RD.Error! Bookmark not defined.

Note: All information supplied must be current and valid. Proposed or imminent changes to a Tenderer's status may be mentioned but the declarations must reflect current circumstances.

Employer:		Contractor:	
Witness:		Witness:	

SBD 6.1

**PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT
REGULATIONS 2022**

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

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

1.2 To be completed by the organ of state

(delete whichever is not applicable for this tender).

- a) The applicable preference point system for this tender is the 80/20 preference point system.
- b) The 80/20 preference point system will be applicable in this tender. The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Price; and
- (b) Specific Goals.

1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	100

1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

Employer:		Contractor:	
Witness:		Witness:	

- 1.6** The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

- (a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) **“price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) **“the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

3.1.1 THE 80/20 PREFERENCE POINT SYSTEMS

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

80/20

$$Ps = 80 \left(1 - \frac{Pt - Pmin}{Pmin} \right)$$

Where

- Ps = Points scored for price of tender under consideration
- Pt = Price of tender under consideration
- Pmin = Price of lowest acceptable tender

Employer:		Contractor:	
Witness:		Witness:	

3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

3.2.1. POINTS AWARDED FOR PRICE

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

80/20

$$Ps = 80 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right)$$

Where

Ps = Points scored for price of tender under consideration
Pt = Price of tender under consideration
Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:
- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
- (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
 - (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system, then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

Employer:		Contractor:	
Witness:		Witness:	

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Table 1: Specific goals for the tender and points claimed are indicated per the table below.

(Note to organs of state: The 80/20 preference point system is applicable, corresponding points must also be indicated as such.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

No.	The specific goals allocated points in terms of this tender	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)
1.	51% Owned by black people	4	
2.	51% Owned by Black people who are women	4	
3.	51% owned by Black people with disabilities	2	
4.	51% Owned by Black people who are youth	4	
5.	51% Owned by black people living in rural areas or underdeveloped areas or townships	2	
6.	Exempted Micro Enterprise (EME) and/or qualifying small enterprise (QSE)	4	
	TOTAL	20	

Table 2: The following verification documents must be submitted with the Request for quotation or tender document in order to be awarded points for specific goals:

No	The specific goals allocated points in terms of this tender	Means of verification
1.	51% Owned by black people	Valid BBBEE Certificate issued by SANAS accredited verification agency or DTI /CIPC BBBEE Certificate for Exempted Micro Enterprises or Affidavit sworn under oath
2.	51% Owned by Black people who are women	
3.	51% owned by Black people with disabilities	
4.	51% Owned by Black people who are youth	
5.	51% Owned by black people living in rural areas or underdeveloped areas or townships	Valid lease agreement or municipal statement or letter from councilor or letter from traditional council confirming address of the owner of the company and a Valid BBBEE Certificate issued by SANAS accredited verification agency or DTI /CIPC BBBEE Certificate for Exempted Micro Enterprises or Affidavit sworn under oath
6.	Exempted Micro Enterprise (EME) and/or qualifying small enterprise (QSE)	Valid BBBEE Certificate issued by SANAS accredited verification agency or DTI /CIPC BBBEE Certificate for Exempted Micro Enterprises or Affidavit sworn under oath

Employer:		Contractor:	
Witness:		Witness:	

JOINT VENTURE, CONSORTIUM:

For Joint Venture or Consortiums agreement must show percentages of ownership and work to be completed by each party. This agreement must form part of the tender submission.

To determine the Joint Venture or Consortium score for specific goals, NHLS will evaluate at the consolidated B-BBEE certificate issued by a SANAS accredited verification agency and Joint Venture or Consortiums agreement to determine the proportional points for specific goals that will be awarded to the tenderer for black people living in rural areas or underdeveloped areas or townships and Exempted Micro Enterprise (EME) and/or qualifying small enterprise (QSE).

Example, If there are two parties in a Joint Venture with a 50:50 ownership of the Joint Venture.

In a Joint Venture where one party is living within the township and one is living in the suburbs, if one of the specific goals is ownership by black people living in rural areas or underdeveloped areas or township with a total points of 2, the Joint Venture will only be entitled the proportional points of 1 point.

Table 3: The following are the requirements for a valid Sworn Affidavit in terms of the BBEE Sector Codes of Good Practise:

Abbreviations

BEP = Built Environment Professional

Affidavit Prescribed Formats	Category	Financial Threshold
Construction Sector Code		
	BEP	Less than R1.8 million
	Contractor	Less than R3 million
	Supplier	Less than R3 million

Note 1: A sworn affidavit received from a tenderer that does not meet the above requirement will not be considered for the allocation of points for specific goals.

Requirements for a valid B-BBEE Certificate and are as follows:

- a) A valid copy of a B-BBEE certificate must be issued by a SANAS B-BBEE agency and the expiry date of the certificate must be after the closing date of the request for quotation or tender to be deemed valid.
- b) The B-BBBEE certificate contents must contain accurate information about the company.

Requirements for a valid sworn affidavit are as follows:

Employer:		Contractor:	
Witness:		Witness:	

- a) Valid Sworn Affidavits must comply with the requirements outlined in the Justices of the Peace and Commissioners of Oaths Act, no 16 of 1963 and its Regulations promulgated in Government Notice GNR 1258 of 21 July 1972 Justices of the Peace and Commissioners of Oaths Act, No. 16 of 1963. i.e.
- (i) The deponent shall sign the declaration in the presence of the commissioner of oaths (COA).
 - (ii) Below the deponent's signature the COA shall certify that the deponent has acknowledged that he knows and understands the contents of the declaration and the COA shall state the manner, place, and date of taking the declaration.
 - (iii) The COA shall sign the declaration and print his full name and business address below his signature; and state his designation and the area for which he holds his appointment, or the office held by him if he holds his appointment ex officio.

Note 2: A tenderer failing to submit valid proof of specific goals claimed as per indicated above bidders will not be disqualified but will be allocated zero points for specific goals and will be allocated points for pricing.

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3. Name of company/firm.....

4.4. Company registration number:

4.5. TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
- ☐ One-person business/sole propriety
- ☐ Close corporation
- ☐ Public Company
- ☐ Personal Liability Company
- ☐ (Pty) Limited
- ☐ Non-Profit Company
- ☐ State Owned Company

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I 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 paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –

Employer:		Contractor:	
Witness:		Witness:	



- (a) disqualify the person from the tendering 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) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted 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
- (e) forward the matter for criminal prosecution, if deemed necessary.

SIGNATURE(S) OF TENDERER(S)

SURNAME AND NAME: DATE: ADDRESS:

Employer:		Contractor:	
Witness:		Witness:	

BIDDER'S DISCLOSURE

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 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:

.....
.....

Employer:		Contractor:	
Witness:		Witness:	

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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**

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 consortium¹ 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 drafting of the specifications or terms of reference for this bid.

¹ 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.

Employer:		Contractor:	
Witness:		Witness:	



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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.

.....
Signature

.....
Date

.....
Position

.....
Name of bidder

Employer:		Contractor:	
Witness:		Witness:	



T2.1.5 PROPOSED AMENDMENTS AND QUALIFICATIONS

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

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

Page	Clause or item	Proposal

Signed: _____ Date: _____

Name: _____ Position: _____

Tenderer: _____

Employer:		Contractor:	
Witness:		Witness:	

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T2.1.6 SCHEDULE OF THE TENDERER'S EXPERIENCE

[illegible]

Signed: _____ Date: _____

Name: _____ Position: _____

Tenderer:

Employer:		Contractor:	
Witness:		Witness:	



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T2.2 LIST OF RETURNABLE DOCUMENTS

Other documents required only for tender evaluation purposes:

<u>Document</u>	<u>Page No.</u>
T2.2.1 Contractor's Certificate of Registration With CIDB	RD.27
T2.2.2 SARS Tax Compliance Status Pin and Proof of CSD registration	RD.28

Employer:		Contractor:	
Witness:		Witness:	



T2.2.1 CONTRACTOR'S CERTIFICATE OF REGISTRATION WITH CIDB

NB: The Tenderer shall attach hereto the Contractor's Certificate of Registration with CIDB OR provide the CIDB registration number that NHLS can use to verify CIDB requirements for this tender. Failure to submit the certificate or CIDB registration number with the tender document will lead to the conclusion that the Tenderer is not registered with the CIDB and therefore not eligible to tender.

Tenderers who have made application to CIDB for registration and are capable of being so registered prior to the evaluation of submissions must attach a notification from CIDB that their application is being considered.

CIDB status to be active at the required CIDB grading at time of evaluation to avoid disqualification.

SIGNATURE:.....

DATE:

(of person authorized to sign on behalf of the Tenderer)

Employer:		Contractor:	
Witness:		Witness:	



T2.2.2 SARS TAX COMPLIANCE STATUS PIN AND PROOF OF CSD REGISTRATION

The Tenderer must attach hereto a copy SARS Tax Compliance Status Pin and Proof of CSD registration i.e. MA xxxxxxxxxxxx number.

SIGNATURE:.....

DATE:

(of person authorized to sign on behalf of the Tenderer)

Employer:		Contractor:	
Witness:		Witness:	



T2.3 LIST OF RETURNABLE SCHEDULES

3. Other documents that will be incorporated into the contract

<u>Document</u>	<u>Page No.</u>
T2.3.1 Returnable Annexure A: Acknowledgement of SHE Specification &	RD.30
T2.3.2 Returnable Annexure B: Acknowledgment of Tender Drawings	RD.31
T2.3.3 Minutes of the Mandatory Tender Briefing	RD.32

Employer:		Contractor:	
Witness:		Witness:	

T2.3.1 RETURNABLE ANNEXURE A: ACKNOWLEDGEMENT OF SHE SPECIFICATION & ANNEXURES

DECLARATION BY CONTRACTOR

I, the undersigned, and representing the tenderer as indicated hereby acknowledge that I have obtained copies of the following listed documentation and confirm that I fully understand the contents thereof and confirm compliance thereto in the event of being successful:

- OHS Specification (Volume 3)

We furthermore commit to:

- Comply with all applicable SHE related legal and other requirements.
- Inform all staff of their role in managing environmental impacts and safety hazards on site.

Signed at on this Day of 20.....

Name of tenderer	
Name of Authorized person	
Authorized Signature*	

*Signature must be as per form T2.1.2 as applicable

Employer:		Contractor:	
Witness:		Witness:	



T2.3.2 RETURNABLE ANNEXURE B: ACKNOWLEDGMENT OF TENDER DRAWINGS

DECLARATION BY CONTRACTOR

I, the undersigned, and representing the tenderer as indicated hereby acknowledge that I have obtained copies of the following listed documentation and confirm that I fully understand the contents thereof and confirm compliance thereto in the event of being successful:

The drawings that are issued for **TENDER PURPOSES** are as per drawing list:

Example is as follows:

WBS Code/ ID	Drawing Description	Drawing No.
1	DISTRIBUTION BOARDS SCHEMATICS	
1.1	Compressor distribution board schematic	PEP/NHLS/CMPDB
1.2	ES distribution board E schematic	PEP/NHLS/ESDB-E
1.3	ES distribution board C schematic	PEP/NHLS/ESDB-C
1.4	ES distribution board CN schematic	PEP/NHLS/ESDB-CN
1.5	ES distribution board E1 schematic	PEP/NHLS/ESDB-E1
1.6	ES distribution board E2 schematic	PEP/NHLS/ESDB-E2
1.7	ES distribution board E4 schematic	PEP/NHLS/ESDB-E4
1.8	S distribution board C1/1 schematic	PEP/NHLS/SDB-C1/1
1.9	S distribution board C schematic	PEP/NHLS/SDB-C
1.6	S distribution board C1 schematic	PEP/NHLS/SDB-C1
1.7	STEAM distribution board schematic	PEP/NHLS/STDB
1.8	UPS distribution board schematic	PEP/NHLS/UPSDB

Signed at on this Day of 20.....

Name of tenderer	
Name of Authorized person	
Authorized Signature*	

*Signature must be as per form T2.1.2 as applicable

Employer:		Contractor:	
Witness:		Witness:	

**TENDERING DATA**

**Volume 1 Tender and Contract
Section T1 Tender and Contract**

T2.3.3 MINUTES OF THE MANDATORY TENDER BRIEFING MEETING

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.		Minutes of the Mandatory Tender Briefing Meeting

Attach additional pages if more space is required.

Signed:

Date:

Name:

Position:

Tenderer:

Employer:		Contractor:	
Witness:		Witness:	



CONTRACT RFB005/25/26
UPGRADE OF EMERGENCY POWER
DISTRIBUTION SYSTEM FOR SAVP
PRODUCTION BLOCK 14 INCLUDING SERVICE
AND MAINTENANCE FOR A PERIOD OF FIVE (5)
YEARS.

VOLUME 1

PART C1: AGREEMENT AND CONTRACT DATA

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Employer:		Contractor:	
Witness:		Witness:	



C1.1 FORM OF OFFER (AGREEMENT)

C1.1.1 FORM OF OFFER

THE TENDERER IS TO COMPLETE AND SIGN THE FORM OF OFFER

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract in respect of the following works:

RFB005/25/26 – UPGRADE OF EMERGENCY POWER DISTRIBUTION SYSTEM FOR SAVP PRODUCTION BLOCK 14 INCLUDING SERVICE AND MAINTENANCE FOR A PERIOD OF FIVE (5) YEARS.

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

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

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS

_____ Rand (in words); R _____ (in figures),

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 to the Tenderer before the end of the period of validity stated in the Tender Data, 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

(Name and address of organisation)

**Name and
signature of
witness**

_____ **Date** _____

Employer:		Contractor:	
Witness:		Witness:	

C1.1.2 FORM OF ACCEPTANCE

THE EMPLOYER IS TO COMPLETE AND SIGN THE FORM OF ACCEPTANCE

By signing this part of the 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 1 Agreement and Contract Data, (which includes this Agreement)
- Part 2 Pricing Data
- Part 3 Scope of Work
- Part 4 Site Information

and drawings and documents or parts thereof, which may be incorporated by reference into Parts 1 to 4 above.

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 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 Agreement. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be duly signed by the authorised representative(s) of both parties.

The Tenderer shall within 28 days after receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), contact the Principal Agent (whose details are given in the Contact Data) to arrange the delivery of any 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 of 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 copy of this document, including the Schedule of Deviations (if any). Unless the Tenderer (now the Contractor) within five days after 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 binding contract between the parties.

FOR EMPLOYER OFFICIAL USE ONLY

Signature(s)

Name(s)

Capacity

**For the
Employer**

***National Health Laboratory Service, 1 Modderfontein Road, Sandringham,
Johannesburg***

(Name and address of organisation)

**Name and
signature of
witness**

_____ **Date** _____

Employer:		Contractor:	
Witness:		Witness:	

C1.1.3 SCHEDULE OF DEVIATIONS

Notes:

1. The extent of deviations from the tender documents issued by the employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender;
2. A Tenderer's covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid become the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here;
3. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the Parties becomes an obligation of the contract shall also be recorded here; and
4. Any change or addition to the tender documents arising from the above arrangements and recorded here shall also be incorporated into the final draft of the Contract.

1	Subject	
	Details	
2	Subject	
	Details	
3	Subject	
	Details	
4	Subject	
	Details	
5	Subject	
	Details	
6	Subject	
	Details	
7	Subject	
	Details	
8	Subject	
	Details	

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

Employer:		Contractor:	
Witness:		Witness:	



RFB005/25/26
UPGRADE OF EMERGENCY POWER DISTRIBUTION SYSTEM FOR SAVP
PRODUCTION BLOCK 14 INCLUDING SERVICE AND MAINTENANCE FOR A
PERIOD OF FIVE (5) YEARS.
TENDERING DATA
Volume 1 Tender and Contract
Section T1 Tender and Contract

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 and signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this Agreement.

For the Tenderer:

Signature(s)

Name(s)

Capacity

(Name and address of organisation)

**Name and
signature of
witness**

Date

For the Employer:

Signature(s)

Name(s)

Capacity

*National Health Laboratory Service, 1 Modderfontein Road, Sandringham,
Johannesburg*

(Name and address of organisation)

**Name and
signature of
witness**

Date

Employer:		Contractor:	
Witness:		Witness:	

C1.2 CONTRACT DATA

C1.2.1 PART 1: DATA PROVIDED BY THE EMPLOYER

CONDITIONS OF CONTRACT

The Conditions of Contract are the **JBCC® Series Principal Building Agreement (2018 Edition 6.2)** published by the Joint Building Contract Committee. Copies of these documents may be obtained from the **Association of South African Quantity Surveyors** (011-315 4140), the **Master Builders Association** (011-205 9000), the **South African Association of Consulting Engineers** (011-463 2022) or the **South African Institute of Architects** (011-486 0684).

The **JBCC® Principal Building Agreement Contract Data EC** and the **JBCC® Principal Building Agreement Contract Data CE** form an integral part of this agreement.

The **ASAQS Preliminaries** published by the Association of South African Quantity Surveyors for use with the said JBCC Principal Building Agreement shall be deemed to be incorporated in the bills of quantities.

The **Model Preambles for Trades** as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in the bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained.

The **SANS 1200 Standardised Specification for Civil Engineering Construction**, and specific amendments and additions shall be deemed to be incorporated in the Civil bill of Quantities.

Electrical specification shall be deemed to be incorporated in the **Electrical Bill of Quantities**.

Employer:		Contractor:	
Witness:		Witness:	



RFB005/25/26
UPGRADE OF EMERGENCY POWER DISTRIBUTION SYSTEM FOR SAVP
PRODUCTION BLOCK 14 INCLUDING SERVICE AND MAINTENANCE FOR A
PERIOD OF FIVE (5) YEARS.
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C1.2.2 CONTRACT DATA EC (Employer to Contractor)

Employer Addendum Code 2101-EC

FOR INFORMATION ONLY, TO BE SIGNED ON APPOINTMENT

Introduction

This addendum contains all variables referred to in the JBCC® Principal Building Agreement that are the responsibility of the Contractor to provide the appropriate information that is necessary for the Contractor to complete his tender. The Addendum must be completed in full and included in the tender documents. The Addendums “Contract Data – EC”, “Contract Data – CE”, “Contract Data – ES” and “Contract Data – SE” form part of the contract between the parties.

Definitions

The definitions used in this document and the interpretation thereof are as listed in the JBCC® Principal Building Agreement. The work or phrase of a definition is in **bold text** and shall bear the meaning assigned to it in the JBCC® Principal Building Agreement. Where such word or phrase is not highlighted it shall bear the meaning consistent with the context of its use. The listed defined word or phrase does not qualify as a definition where information required to be stated in the **contract data** has not been provided.

Provision of Contract Data

Spaces requiring information must be filled in, shown as “not applicable” or deleted and not left blank. Where choices are offered, the non-applicable items are to be clearly struck out. Where insufficient space is provided, the additional information should be annexed hereto and cross referenced to the applicable clause of the **contract data**.

Reference Clauses

Where relevant, the JBCC® Principal Building Agreement clause applicable to the required information is printed in italics under the Contract Data clause number i.e. [27.4.2]

Employer:		Contractor:	
Witness:		Witness:	

Section No.	Description
1.0	CONTRACTING AND OTHER PARTIES
2.0	CONTRACT AND SITE INFORMATION
3.0	INSURANCES AND SECURITIES
4.0	PRACTICAL COMPLETION DATES AND PENALTIES
5.0	DOCUMENTS AND GENERAL
6.0	CHANGES MADE TO THE STANDARD JBCC DOCUMENT
7.0	DECLARATION BY THE PRINCIPAL AGENT

CONTRACT DATA – EMPLOYER

1.0 CONTRACTING AND OTHER PARTIES

1.1 [1.2]	Employer:	National Health Laboratory Service		
	Postal Address:	Private Bag X8, Sandringham	Code:	2131
	Physical Address:	1 Modderfontein Road, Sandringham, Johannesburg	Code:	2192
	Tel no.:	+27 11 386 6000	E-mail:	lesedi.manganye@nhls.ac.za
	Fax no.:		Person:	Lesedi Manganye
	VAT no.:	4330306053		
1.2 [5.1]	Principal Agent:	Potent Engineering Projects	Person:	Maurice Bokabo
	Postal Address:	14 14 th Avenue, Edenvale	Code:	14 14 th Avenue, Edenvale
	Tel no.:	+27 74 569 4277	E-mail:	info@potenteng.co.za
	Fax no.:	N/A		
1.3 [5.2]	Agent (1):	Potent Engineering Projects	Person:	Maurice Bokabo
	Agent's Service:			
	Postal Address:	14 14 th Avenue, Edenvale	Code:	14 14 th Avenue, Edenvale
	Tel no.:	+27 74 569 4277	E-mail:	info@potenteng.co.za
	Fax no.:	N/A		
1.4 [5.5]	Interest of principal agent or another agent in the project.	(yes/no)	No	
	<i>Details where "yes":</i>	N/A		
1.5	The principal agent named in 1.2 above is responsible for the preparation of the contract data schedule and must be contacted should the contractor be uncertain of the information provided or to be provided. Failure to complete the contract data schedule in full may result in the tender being disqualified.			

Employer:		Contractor:	
Witness:		Witness:	

2.0 CONTRACT AND SITE INFORMATION

2.1 [1.7] The **law** applicable to this **agreement**: (Country / State) **RSA**

2.2 [1.1] **Works** identification: **Refer to Part 3. Scope of Works**

2.3 [1.1] **Site** description: 1 Modderfontein rRad, Sandringham, Johannesburg

2.4 [1.5.2.1] Possession of the **site** is to be given on: (Date) **Within 5 (five) working days after receipt of documentary evidence that:**

- Insurances have been effected [12.2];
- Security has been provided to the Employer [14.1];
- Contractor's Lien has been signed;
- Safety Plan has been approved by the Employer.

2.5 [15.3] Period for the commencement of the **works** after the contractor takes (working days) **7 (Seven)** possession of the **site**:

2.5A [15.3] **Key Personnel Requirements**
The Contractor shall, within fourteen (14) calendar days of receipt of the Letter of Acceptance and prior to commencement of the Works, submit the curriculum vitae, qualifications, professional registrations and supporting documentation of the proposed key personnel to the Principal Agent for approval. The minimum requirements shall be as follows:

Submit CVs, qualifications and professional registration for Each personnel reflecting a minimum of 5 years' post qualification experience:

- Master Electrician with an Electrical wireman's license
- Project Manager with National Diploma or higher in Built Environment qualification registered with SACPCMP
- 2 x Electrical artisans with Electrical Trade tests
- Safety Officer with National Diploma in Safety Management, Environmental Health, Environmental Science, Environmental Management, SAMTRAC, SHEOMTRAC, SHEMTRAC, MESHTRAC, NEBOSH or an equivalent qualification of NQF 5 or more shall be accepted.

Project Manager

Only a Project Manager with a National Diploma or higher Built Environment qualification shall be accepted.

The Project Manager shall be registered with one of the following professional bodies:
SACPCMP as a Professional Construction Manager or Professional Construction Project Manager

The Project Manager shall have a minimum of ten (5) years post-qualification experience in the construction industry.

Master Electrician

Only a Master Electrician with an Electrical wireman's licence shall be accepted.

The Master Electrician shall have a minimum of ten (5) years post-qualification experience in the construction industry.

Construction Health and Safety Officer

Only a Safety Officer with a National Diploma in Safety Management, Environmental Health, Environmental Science, Environmental Management, SAMTRAC, SHEOMTRAC, SHEMTRAC, MESHTRAC, NEBOSH or an equivalent qualification of NQF 5 or more shall be accepted.

The Safety Officer shall have a minimum of three (5) years post-qualification experience on construction projects.

Employer:		Contractor:	
Witness:		Witness:	

General

No work shall commence until the Principal Agent has approved the proposed key personnel in writing.

Any replacement of approved personnel shall be subject to the prior written approval of the Principal Agent and shall possess qualifications, registrations and experience equal to or better than those of the personnel being replaced.

2.6 [15.4], [28.0]	Completion of the works in sections is required.	(yes/no)	No	(No. of sections)	N/A
2.7 [3.3], [31.16.2]	Waiver of the contractor's lien or right of continuing possession is required.	(yes/no)	Yes		
2.8 [16.1]	Defined restrictions to the site area. Where "yes" the specific requirements are described below or detailed in the contract documents .	(yes/no)	No		
2.9 [16.4]	Geotechnical investigation of the site has been undertaken. Where "yes" the results are included in the contract documents .	(yes/no)	Yes (Addendum A)		
2.10 [16.6]	Existing premises will be occupied. Where "yes" the specific requirements are described below or detailed in the contract documents .	(yes/no)	No		
2.11 [16.7]	Provision of temporary services is required. Where "yes" the specific requirements are described below or detailed in the contract documents .	(yes/no)	Yes		
2.11.1	Water	Option A Option B Option C	Contractor – his cost Employer – free of charge Contractor – metered (contractor cost)	(A, B or C)	A
2.11.2	Electricity	Option A Option B Option C	Contractor – his cost Employer – free of charge Contractor – metered (contractor cost)	(A, B or C)	A
2.11.3	Telecom	Option A Option B Option C	Contractor – his cost Employer – free of charge Contractor – metered (contractor cost)	(A, B or C)	A
2.11.4	Ablutions	Option A Option B Option C	Contractor – his cost Employer – free of charge Contractor – metered (contractor cost)	(A, B or C)	A
2.12 [16.8]	Protection of existing trees and shrubs is required. Where "yes" the specific requirements are described below or detailed in the contract documents .	(yes/no)	Yes		

3.0 INSURANCE AND SECURITIES

3.1	Contract works insurance to be effected by:	(Employer / Contractor)	Contractor
-----	---	-------------------------	-------------------

Employer:		Contractor:	
Witness:		Witness:	

[10.1.1],
[12.6]

For the sum of: (% of Contract Amount)

10%

With a deductible of: (Amount)

Minimum of R10,000-00

3.2
[10.1.2],
[11.1-3],
[12.6]

Supplementary / Special insurance to be effected by:

(Employer / Contractor)

Contractor

For the sum of: (Amount)

Per Contractor's insurance

With a deductible of: (Amount)

N/A

3.3
[10.1.3],
[12.6]

Public liability insurance to be effected by:

(Employer / Contractor)

Contractor

For the sum of no less than each event: (Amount)

R1,000,000-00

With a deductible of: (Amount)

Minimum of R10,000-00

3.4
[11.1.1]

Support insurance to be effected by:

(Employer / Contractor)

Contractor

For the sum of: (Amount)

N/A

With a deductible of: (Amount)

N/A

3.5
[11.1.2-3],
[12.1]

Special insurance to be effected by:

(Employer / Contractor)

Contractor

Type:

N/A

For the sum of: (Amount)

N/A

With a deductible of: (Amount)

N/A

4.0 PRACTICAL COMPLETION DATES AND PENALTIES

4.1
[24.3.1],
[30.1-36]

For the **works** as a whole:
The date for **practical completion** and the **penalty** per **calendar day** is:

Date

9 months from the date of site handover excluding all statutory holidays and

Penalty Amount

R 7 500 / day

Employer:		Contractor:	
Witness:		Witness:	

building holiday
period

Or

4.2
[24.3.1],
[28.1]

For the **works** in **sections**:
The date for **practical completion** and the
penalty per **calendar day** is:

Date
N/A

Penalty Amount
N/A

5.0 DOCUMENTS AND GENERAL

5.1
[3.7]

Construction document copies to be supplied to the **contractor** free of
charge.

(No. of copies)

3

5.2
[3.9]

The **priced document** may be used as a specification of **materials and
goods** and work methods.

(yes / no)

No

5.3
[3.10]

The **contractor** shall provide a schedule of rates. (yes/no)

Yes

(Addendum No.)

N/A

5.4
[3.11]

Changes made to **JBCC** standard documents. (yes/no)

Yes

(Addendum No.)

Item 6

5.5
[15.1.1]

On acceptance of the tender the **priced document** is to be submitted
within the stated **working days**.

(No. of days)

7

5.6
[22.2]

Work to be undertaken by **direct contractors**. (yes/no)

Yes

(Addendum No.)

N/A

5.7
[24.9]

On achievement of **practical completion**, the **contractor** is to hand over manuals etc. related to **all the works**
including as listed below:

- | | |
|---|--|
| (1) <u>Electrical Certificate of Compliance</u> | (2) <u>Plumbing and drainage Certificate of Compliance</u> |
| (3) <u>Health and Safety Plan</u> | (4) <u>All documentation to comply with Statutory and
Legislative requirements</u> |
| (5) <u>Maintenance manuals</u> | (6) <u>As built drawings</u> |
| (7) <u>Occupational Certificate</u> | (8) <u>Engineer structural certificate</u> |
| (9) <u>Glazing certificate</u> | (10) <u>All engineering certificates of compliance</u> |
| (11) _____ | (12) _____ |

5.8
[31.1]

Interim **payment certificate** to be issued by:

(Date of Month)

25th

5.9
[4.1]

The following items of works shall be designed, supplied and installed by the Contractor:

- | | |
|--|------------------------------------|
| (1) <u>Temporary fencing around the site</u> | (2) <u>Traffic management Plan</u> |
|--|------------------------------------|

6.0 CHANGES MADE TO THE STANDARD JBCC DOCUMENT

Note: All changes in detail must be listed below or provided in:

(Addendum No.)

Refer to
Item
C1.2.3

Employer:		Contractor:	
Witness:		Witness:	

C1.2.3 CHANGES TO JBCC PBA

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Section No.	Description
1.0 – 7.0	INTERPRETATION
8.0 – 11.0	INSURANCE AND SECURITIES
12.0 – 17.0	EXECUTION
18.0 – 24.0	COMPLETION
25.0 – 27.0	PAYMENT
28.0 – 29.0	SUSPENSION AND TERMINATION
30.0	DISPUTE RESOLUTION CONTRACT AGREEMENT

INTERPRETATION

Clause 1.0: Definitions and Interpretation

Clause	Data
	Replace CONSTRUCTION PERIOD with the following: The period commencing on the date on which the possession of the site was handed over to the contractor as recorded on the site possession certificate and ending on the date for practical completion and excluding all statutory holidays and recognized annual building holiday periods. Replace CONTRACT MINUTES with the following: A comprehensive set of minutes prepared by the Principal Agent in which all pertinent contractual information that arises at meetings is progressively recorded. Replace CONTRACT PERIOD with the following: The period commencing on the date of acceptance in terms of C1.1 and ending on the date of practical completion as stated in the programme. Replace CONTRACT SUM with the following: The accepted amount provided for in the agreement made in terms of the Form of Offer and Acceptance. Replace DATE FOR PRACTICAL COMPLETION with the following: The contractual completion date or dates stated in the contract data or revision thereof [29.0] on or before which the contractor agrees to bring the works or sections thereof to practical completion. The contractor will be liable for the determined penalty in failure of such. Replace DATE OF PRACTICAL COMPLETION with the following: The construction completion date or dates, which is initially the intended or planned date or dates to bring the works or sections thereof to practical completion and subsequently the actual or deemed date or dates on which the contractor achieves practical completion. Replace PROGRAMME with the following: A diagrammatic representation, made available electronically and in hard copy, of the planned execution sequence of the works indicating the dates for commencement and completion thereof and accepted by the Principal Agent, and shall be used by the contractor to plan and execute the works and by the Principal Agent to monitor progress and shall be the sole basis for the assessment of any claims [29.0].

Employer:		Contractor:	
Witness:		Witness:	

Clause 2.0: Law, regulations and notices

	<i>No change from Principal Building Agreement</i>
--	--

Clause 3.0: Offer and acceptance

	<i>No change from Principal Building Agreement</i>
--	--

Clause 4.0: Cession and assignment

	<i>No change from Principal Building Agreement</i>
--	--

Clause 5.0: Documents

Clause	Data
5.2	<i>The original signed set of contract documents is to be held by the Employer</i>

Clause 6.0: Employer's agents

	<i>No change from Principal Building Agreement</i>
--	--

Clause 7.0: Design Responsibility

	<i>No change from Principal Building Agreement</i>
--	--

INSURANCES AND SECURITIES

Clause 8.0: Works Risk

	<i>No change from Principal Building Agreement</i>
--	--

Clause 9.0: Indemnities

	<i>No change from Principal Building Agreement</i>
--	--

Clause 10.0: Insurances

	<i>Insurance to be taken out by the Contractor</i>
--	--

Clause 11.0: Securities

	<i>The Performance Guarantee shall be irrevocable, On-Demand Performance Guarantee, to be issued exactly in the form of the proforma document provided in favour of the client by a Bank or Recognised Financial Institution or Cash in lieu of bond will apply.</i>
--	--

EXECUTION

Clause 12.0: Obligations of the parties

Employer:		Contractor:	
Witness:		Witness:	

	No change from Principal Building Agreement
--	---

Clause 13.0: Setting out

	No change from Principal Building Agreement
--	---

Clause 14.0: Nominated Sub-contractors

	<i>The Service Provider shall in addition to clause 20 for monitoring purposes, keep monthly records and transmit to the Client data on the following indicators on a date set by the Employer with regard to all projects implemented:</i> • <i>Project budget and planned output according to EPWP requirements</i> • <i>Actual Project Expenditure and actual output according to EPWP requirements</i> • <i>Planned and achieved labour intensity</i> • <i>Number of work opportunities created</i> • <i>Demographics of workers employed (disaggregated by women, youth and persons with disabilities)</i> • <i>Wage rate earned on project</i> • <i>Number of person-days of employment created</i> • <i>Copies of Certified Identity documents of workers</i> • <i>Attendance Register in the format provided for by the Employer,</i> • <i>Proof of Payment for all qualifying EPWP Labour.</i> • <i>Signed contracts between contractors and Labourers.</i> • <i>Proof of (Unemployment Insurance Fund) UIF deductions.</i> • <i>Proof of good standing with the Compensation for Occupational Injuries and Diseases ACT (COIDA)</i> • <i>Number of persons who have attended training including the nature and duration of training provided</i> • <i>Assets created, rehabilitated or maintained in accordance with indicators in the EPWP M & E Framework</i> • <i>Services provided or delivered in accordance with indicators in the EPWP M & E Framework</i> <i>In addition to reporting requirements for the purpose of Work Opportunities created. The service provider shall structure all construction contracts to allow for the development of EME designated Contractors (which will be procured in line with the Employer's Supply Chain Management Policies) and keep monthly records and transmit to the Client data on the following indicators on a date set by the Employer with regard to all projects implemented:</i> • <i>Project budget and planned output in terms of work packages set aside for subcontracting.</i> • <i>Actual Project Expenditure and actual output according as pare templates issued by the Employer.</i> • <i>Keep Record of EPWP job opportunities created through Targeted Enterprise engagement.</i> • <i>BEE certification of EMEs</i> • <i>CIDB Registration of EME's</i> • <i>Letter of Good Standing with Department of Labour,</i> • <i>Company Registration of EME.s</i> • <i>Appointment Letter and Contract with Lead Contractor.</i>
--	--

Employer:		Contractor:	
Witness:		Witness:	

Clause 15.0: Selected Sub-contractors

	<i>No change from Principal Building Agreement</i>
--	--

Clause 16.0: Direct Contractors

	<i>No change from Principal Building Agreement</i>
--	--

Clause 17.0: Contract instructions

	<i>No change from Principal Building Agreement</i>
--	--

COMPLETION

Clause 18.0: Interim Completion = n/s subcontract agreement

	<i>No change from Principal Building Agreement</i>
--	--

Clause 19.0: Practical Completion

	<i>No change from Principal Building Agreement</i>
--	--

Clause 20.0: Completion in sections

	<i>No change from Principal Building Agreement</i>
--	--

Clause 21.0: Defects liability and final Completion

	<i>No change from Principal Building Agreement</i>
--	--

Clause 22.0: Latent Defects Liability Period

	<i>No change from Principal Building Agreement</i>
--	--

Clause 23.0: Revision of Date for Practical Completion

Clause	Data
	Add the following to sub-clause 29.1.1: <i>The adverse effect of weather conditions will exclude for normal weather conditions in the region of the work of this contract.</i>

Clause 24.0: Penalty for Late or completion

	<i>In addition to clause 30, during the Contract Period should the Contractor:</i> a) Fail to report
--	---

Employer:		Contractor:	
Witness:		Witness:	

- The Employer shall levy a penalty on Contractor, should the latter fail to provide reporting as required in C1.2.1.2.6, C1.2.1.2.14 and the specification highlighted in the Scope of Work, with regard to content and frequency, whilst as per the Pricing Data section no payment for work completed shall be processed.
- The penalty value shall be R5,000.00 per report per occasion; and
- If the Contractor fails to complete the aforementioned more than three incidents and should the Employer or his duly authorised representative find that the Contractor is hindering his (the Employer's) deliverables to JW Senior Management, he shall reserve the right to:
 - i. perform the Works internally or through another Contractor; and
 - ii. deduct additional costs incurred by the Employer from monies owed to the Contractor or from the Contractor's Guarantee. Additional costs incurred by the Employer shall include all claims from Contract affected parties, claims such as but not be limited to claims from customers, any costs associated with the loss of water, and all costs associated with the procurement of an alternative Contractor.
 - iii. terminate the Contract.

No liability in terms of this clause shall be attached to the Contractor if he can prove to the satisfaction of the Employer that the nature of the failure is due to fire, war, riot, strikes, act of God, lockout, accident or other unforeseen occurrences or circumstances beyond the Contractor's control, provided, however, that in all cases the Contractor has notified the Employer in writing within 24 hours of it first coming to his notice, that delivery shall be delayed or become impossible for the above-mentioned reasons.

b) Fail to pay any labour or SMME

- The Employer shall levy a penalty on the Contractor, should the latter fail to provide payment to any labourer or SMME as required in the specification highlighted in the Scope of Work and specified in the appointment agreements with the Contractor and the labourer or SMME.
- The penalty value shall be R 50,000.00 per incident per occasion; and
- If the Contractor fails to complete the aforementioned more than three incidents and should the Employer or his duly authorised representative find that the Contractor is hindering his (the Employer's) deliverables to JW Senior Management, he shall reserve the right to:
 - i. perform the Works internally or through another Contractor; and
 - ii. deduct additional costs incurred by the Employer from monies owed to the Contractor or from the Contractor's Guarantee. Additional costs incurred by the Employer shall include all claims from Contract affected parties, claims such as but not be limited to claims from customers, any costs associated with the loss of water, and all costs associated with the procurement of an alternative Contractor.
 - iii. terminate the Contract.

No liability in terms of this clause shall be attached to the Contractor if he can prove to the satisfaction of the Employer that the nature of the failure is due to fire, war, riot, strikes, act of God, lockout, accident or other unforeseen occurrences or circumstances beyond the Contractor's control, provided, however, that in all cases the Contractor has notified the Employer in writing within 24 hours of it first coming to his notice, that delivery shall be delayed or become impossible for the above-mentioned reasons.

c) Failure to meet target participation by local SMME

If the Contractor fails to achieve the monetary value of the target set by the Employer for contract participation by local SMME Contractors in terms of C1.2.1.2.14, the Contractor shall be liable to the Employer for a sum calculated in accordance with the Contract Data and the aforementioned Scope as a penalty for such underachievement.

Employer:		Contractor:	
Witness:		Witness:	



The penalty for failing to achieve the monetary value of the target set by the Employer for contract participation by Targeted Enterprises and local SMME Contractors in terms of the Scope of Works is 50% of the monetary value by which the achieved monetary value falls short of the target monetary value.

d) Failure to meet the occupational health and safety compliance target.

Monthly compliance rating will be calculated for each Contractor as per a formula determined by the Employer focusing on or incorporating outcomes of assurance (e.g. monthly audit), operational (e.g. behavioural based safety inspection) assessments and other requirements, as necessary.

The Employer will impose a penalty value of R10 000,00 per audit report where a Contractor scores below 85%.

The Employer will impose a penalty value of R10 000,00 per occasion where the Contractor scores above 85% but below 93% for two successive months.

e) Failure to meet the Environmental compliance target.

Monthly compliance rating will be calculated for each Contractor as per a formula determined by the Employer focusing on or incorporating outcomes of assurance (e.g. monthly audit), operational assessments and other requirements, as necessary.

The Employer will impose a penalty value of R10 000,00 per audit report where a Contractor scores below 85%.

The Employer will impose a penalty value of R10 000,00 per occasion where the Contractor scores above 85% but below 93% for two successive months.

f) Penalties payable

If penalties are payable, they will be processed through a credit note issued by the Contractor.

g) Penalties irreversible

The Contractor shall note that all penalties once imposed shall be non-recoverable or reversible, even if the default is remedied.

PAYMENT

Clause 25.0: Payment

Clause	Data
25.2 & 25.10	Add / amend the contract data as follows: Payment shall be made upon: <i>The Contractor will provide a payment certificate with quantities to the Principal Agent before or on the 20th of every month.</i> <i>After the payment certificate has been approved by Principal Agent, the Contractor must issue an Original Tax Invoice compliant with SARS requirements for Valid Tax Invoice. The date of the Original Tax Invoice must be the date the Principal Agent approved the Payment Certificate. The certificate will then be ready for handing in to the Employer.</i>

Employer:		Contractor:	
Witness:		Witness:	

	• <i>Payment will be made within 30 days of approved invoice date.</i> <i>Payment shall be subject to the Contractor submitting an Original Tax Invoice compliant with SARS requirements for Valid Tax Invoice to the Employer for the amount due.</i> • <i>The maximum percentage retention on the amounts due to the Contractor is 10% of the Contract Sum</i> <i>Amendment to interest provision</i> <i>The provisions of JBCC 6.2 relating to default interest and/or compensatory interest under the payment clause shall not apply, and no interest for late payment shall be payable by the Employer.</i>
--	---

Clause 26.0: Adjustment of the contract value and final account

	<i>No change from Principal Building Agreement</i>
--	--

Clause 27.0: Recovery of Expense and/or Loss

	<i>No change from Principal Building Agreement</i>
--	--

SUSPENSION AND TERMINATION

Clause 28.0: Suspension by the contractor

Clause	Data
28.1.3	<i>Add / amend the contract data as follows:</i> <i>Notwithstanding the provisions of Clause 28.1.3 and any related provisions of the agreement, the Contractor shall not be entitled to suspend the Works due to delayed or non-payment by the Employer.</i>

Clause 29.0: Termination

	<i>No change from Principal building Agreement</i>
--	--

DISPUTE RESOLUTION

Clause 30.0: Settlement of Disputes

	<i>Add the following:</i>
--	---------------------------

Employer:		Contractor:	
Witness:		Witness:	

	<i>Notwithstanding any other provision of this Contract, the Contractor agrees that there shall be no suspension of the Works due to non-payment by the Client. The Contractor shall continue to perform the Works as scheduled, regardless of any delays or failures by the Client to make payments when due.</i>
--	--

AGREEMENT

Clause 41.0: Post Tender Provisions

41.3	The dispute resolution body [40.2.2] selected by the parties is	Association of Arbitrators
41.4	The employer shall provide a Payment Guarantee (Amount)	N/A
41.5	An annual building industry holiday period is applicable (Yes / No)	Yes
41.6	Further provisions and information agreed by the parties. None	

Clause 42.0: Contractual Agreement

- 42.1 This **Agreement** is the entire contract between the **parties** regarding the matters addressed herein. NO representations, terms, conditions or warranties not contained in this **agreement** shall be binding on the **parties**. No **agreement** or addendum varying, adding to, deleting or terminating this **agreement** including this clause shall be effective unless reduced to writing and signed by the **parties**.

Employer:		Contractor:	
Witness:		Witness:	

42.2 **Contracting Parties** *(To be completed on signing of the Contract)*

(1) **Employer:**

Physical Address:

Tel No: Fax No:

E-mail:

Tax/VAT No.:

(2) **Contractor:**

Physical Address:

Tel No: Fax No:

E-mail:

Tax/VAT No.:

42.3 The accepted **contract sum** (inclusive of **tax**) (Amount) R

In words:

.....

43.4 Signature of the contracting **parties**:

FOR THE EMPLOYER:

THUS, DONE AND SIGNED AT ON THISDAY

OF 202.....

.....
Name of signatory

.....
for and on behalf of the **employer** who by
signature hereof warrants authorisation hereto

.....
Capacity of signatory

.....
as Witness (1)

Employer:		Contractor:	
Witness:		Witness:	



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Details of Witness (1)

Name:

Address:

.....

FOR THE CONTRACTOR:

THUS, DONE AND SIGNED AT ON THISDAY

OF 202.....

.....
Name of signatory

.....
for and on behalf of the **contractor** who by
signature hereof warrants authorisation hereto

.....
Capacity of signatory

.....
as Witness (2)

Details of Witness (2)

Name:

Address:

.....

DECLARATION BY THE PRINCIPAL AGENT

I, the principal agent named in 1.2 above, declare that the information provided above is complete and accurate at the time of calling for tenders. Where necessary, should any of the above information need to be varied, tenderers will be informed thereof in writing

Principal Agent:

Date:

Employer:		Contractor:	
Witness:		Witness:	



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C1.2.4 CONTRACT DATA CE (Contractor to Employer)

Contractor Addendum Code 2101-CE

FOR INFORMATION ONLY AND FORMS PART OF THE TENDER DOCUMENT TO BE SIGNED ON APPOINTMENT

Introduction

This addendum contains all variables referred to in the Principal Building Agreement that are the responsibility of the Contractor to provide the appropriate information that is necessary for the Contractor to complete his tender. The Addendum must be completed in full and included in the tender documents. The Addendums “Contract Data – EC”, “Contract Data – CE”, “Contract Data – ES” and “Contract Data – SE” form part of the contract between the parties.

Definitions

The definitions used in this document and the interpretation thereof are as listed in the Principal Building Agreement. The work or phrase of a definition is in **bold text** and shall bear the meaning assigned to it in the Principal Building Agreement. Where such word or phrase is not highlighted, it shall bear the meaning consistent with the context of its use. The listed defined word or phrase does not qualify as a definition where information required to be stated in the **contract data** has not been provided.

Provision of Contract Data

Spaces requiring information must be filled in, shown as “not applicable” or deleted and not left blank. Where choices are offered, the non-applicable items are to be clearly struck out. Where insufficient space is provided, the additional information should be annexed hereto and cross referenced to the applicable clause of the **contract data**.

Reference Clauses

Where relevant, the Principal Building Agreement clause applicable to the required information is printed in italics under the Contract Data clause number i.e. *[27.4.2]*

Employer:		Contractor:	
Witness:		Witness:	



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2.0	SECURITIES
3.0	PAYMENT AND ADJUSTMENT OF PRELIMINARIES
4.0	EMPLOYER CHANGES TO JBCC STANDARD DOCUMENTS
5.0	THE TENDER

CONTRACT DATA – CONTRACTOR

1.0 CONTRACTING PARTY

1.1 **Contractor:** _____

[1.2] **Postal Address:** _____ **Code:** _____

Physical Address: _____ **Code:** _____

_____ **E-mail:** _____

Tel no.: _____ **Fax no.:** _____

VAT no.: _____

2.0 SECURITIES

2.1 The security provisions selected are:

2.1.1 Variable Construction Guarantee (yes/no)

[14.3]

2.1.2 Fixed Construction Guarantee and Payment Reduction (yes/no)

[14.4]

2.1.3 Advanced Payment is required. Where "Yes" Amount

[14.5]

2.1.4 An Advance Payment Guarantee to be provided (yes/no)

[14.5]

Employer:		Contractor:	
Witness:		Witness:	

3.0 PAYMENT AND ADJUSTMENT OF PRELIMINARIES

3.1 Payment of preliminaries

The payment of preliminaries shall be according to the option selected by the **contractor**. The amount included in each monthly **payment certificate** in respect of preliminaries as stated in the **contract data** shall be:

3.1.1 Option A

Assessed by the **principal agent** as an amount prorated to the value of the work duly executed in the same ratio as the preliminaries, bears to the **contract sum**, excluding:

- The amount for preliminaries
- Any contingency sum
- Any amount in respect of **CPAP**

All inclusive of **tax**

3.1.2 Option B

Calculated from the priced items in the **bills of quantities / lump sum document**. The **contractor** and the **principal agent** shall agree on dividing the priced preliminary items into:

- An initial or establishment charge
- A monthly charge
- A final or disestablishment charge

All inclusive of **tax**

In arriving at such a division, cognizance shall be taken of such factors as:

- Premiums for annually renewable insurance policies
- Plant, scaffolding and the like remaining the property of the **contractor** or the hiring company and the capital costs thereof not treated as part of the initial charge

Where the initial **construction period** is extended the monthly charge shall be recalculated on the same basis as was originally applied but taking into account the revised **construction period** and the amounts already paid to the **contractor**.

Should the **contractor** and the **principal agent** be unable to agree such division, then the **principal agent** shall make a division of the amount of preliminaries to be incorporated in the valuations of each monthly **payment certificate**.

3.2 Adjustment of preliminaries

The amount of items of preliminaries shall be adjusted to take account of the theoretical financial effect which changes in time and/or have value on preliminaries. Such an adjustment shall be based on the particulars provided by the **contractor** for this purpose in terms of Option A or B and shall preclude any further adjustment of preliminaries.

Adjustment of preliminaries in terms of Options A or B shall apply notwithstanding the actual employment of resources by the **contractor** in the execution of the **works**. The adjustment of preliminaries shall be based on the options as selected in the **contractor's tender**.

For the adjustment of the preliminaries, both the **contract sum** and the **contract value** shall exclude:

Employer:		Contractor:	
Witness:		Witness:	

- The amount of preliminaries
- Any contingency sum
- Any amount in respect of **CPAP**

All inclusive of **tax**

3.2.1 **Option A**

The amount of preliminaries shall be adjusted in the following categories:

- An amount which shall not be varied
- An amount which shall be varied in proportion to the **contract value** as compared with the **contract sum**
- An amount which shall be varied in proportion to the **construction period** as compared to the initial **construction period** excluding revisions to the **construction period** for which the **contractor** is not entitled to adjustment of the **contract value** in terms of the **agreement**

The **contractor** shall, within fifteen (15) working days of taking possession of the **site**, give the **principal agent** a breakdown, subdivided into the above categories, of the amount for preliminaries in tabulated form, all to the satisfaction of the **principal agent**.

Should the **contractor** fail to provide such information within the period stipulated, then the amount for preliminaries shall be deemed to be subdivided into the following proportions:

- 10% (ten percent) which amount shall not be varied
- 15% (fifteen percent) which amount shall be varied in proportion to the **contract value** as compared with the **contract sum**
- 75% (seventy-five percent) which amount shall be varied in proportion to the **construction period** as compared with the initial **construction period**

For a lump sum document, should the contractor fail to identify the amount for preliminaries, then such an amount shall be deemed to be 7,5% (seven and a half percent) of the contract sum excluding:

- Any contingency sum
- Any amount in respect of **CPAP**

All inclusive of **tax**

Where sectional completion is required in terms of the agreement, the contractor shall provide the **principal agent** with the division of the above categorised amounts into sections. Should the **contractor** fail to provide such information within the period stipulated, the categorised amounts shall be prorated to the value of each section.

3.2.2 **Option B**

The **contractor** shall, within fifteen (15) **working days** of taking possession of the site, provide the **principal agent** with a detailed breakdown of the amount for preliminaries. This breakdown shall set out, among others, full particulars of administrative, supervisory and other personnel, plant, transport and other resources and charges included in the amount for preliminaries.

Where sectional completion is required in terms of the **agreement**, the **contractor** shall provide the **principal agent** with details of the resources required for each section and those that are

Employer:		Contractor:	
Witness:		Witness:	

common to sections. Should the **contractor** fail to provide such information within the period stipulated, Option A shall apply.

3.2.3 **Payment certificate cash flow**

The **contractor** shall provide all reasonable assistance to the **principal agent** in the preparation of cash flow projections of claims for **payment certificates** where required by the **employer**. The projections shall be based on the **programme** and shall be updated as and when the **programme** requires updating. The cooperation of the **contractor** in terms of this item shall not prejudice his right to receive payment in terms of the **agreement**.

3.2.4 The **contract value** shall be adjusted according **CPAP** [3.1] (Yes / No) YES

3.2.5 Payment of preliminaries [3.1.1-2] (A or B)

3.2.6 Adjustment of preliminaries [3.2.1-2] (A or B)

4.0 **EMPLOYER CHANGES TO JBCC STANDARD DOCUMENTS**

4.1 Changes (if any) in terms of the Employer's Contract Data are accepted [3.11]. Where "no" an addendum referenced to this clause is to be attached (Yes / No) Yes

5.0 **THE TENDER**

5.1 This tender is to be submitted to the principal agent at the street address provided in the invitation to tender before the tender closing date and time stated herein.

5.2 By the submission of this tender to the **employer**, the tenderer offers and agrees to contract for, execute and complete the **works** for the tender sum as stated below.

5.3 Tenders will be opened in public directly after the stated closing time. Only the total tender sum as stated in each tender will be announced.

5.4 The lowest or any tender will not necessarily be accepted.

5.5 This tender shall remain in full legal force for **one hundred and eighty (180) calendar days**. The tenderer accepts liability for damages as may be suffered by the **employer** should the tender validity period not be honoured.

5.6 This tender takes into account all listed items [4.0] for the purpose of preparing and submitting this tender.

5.7 The successful tenderer will be appointed in terms of the JBCC Principal Building Agreement.

Employer:		Contractor:	
Witness:		Witness:	



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5.8	TENDER SUM COMPILATION	Amount
5.8.1	Tenderer's work including prime cost amounts	R
5.8.2	Employer allowances stated by the principal agent	R
5.8.3	SUBTOTAL	R
5.8.4	Add tax on 5.8.3	R
5.8.5	TOTAL TENDER SUM inclusive of tax	R
5.8.6	Tender Sum in words	

Thus, done and signed at _____ on _____

Name of Signatory

Capacity of authorised signatory

As witness

for and on behalf of the tenderer who warrants
authorisation hereto

Employer:		Contractor:	
Witness:		Witness:	



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VOLUME 1

PART 1.3: FORMS AND SECURITIES

Employer:		Contractor:	
Witness:		Witness:	



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Witness:		Witness:	



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C1.3 FORMS AND SECURITIES

FORMS FOR COMPLETION BY THE CONTRACTOR

THE FOLLOWING FORMS ARE TO BE COMPLETED BY THE CONTRACTOR AFTER THE TENDER HAS BEEN AWARDED TO THE SUCCESSFUL TENDERER

- a) Form of Guarantee
- b) Blasting Indemnity
- c) Agreement in terms of the Occupational Health and Safety Act
- d) Occupational Health and Safety Indemnity Undertaking

The forms will be completed by the Contractor who will be instructed to do so in the Form of Acceptance. The completed forms will become part of the Contract.

The Form of Guarantee is a pro forma document. The Contractor will provide an original document, from a financial institution, with the same text within the time stated in the Contract Data. Only a Bank or approved Insurance Company or Guarantee Corporation is acceptable as Guarantor.

Employer:		Contractor:	
Witness:		Witness:	



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C1.3.1 Form of Guarantee

**TO BE PRINTED ON THE OFFICIAL LETTERHEAD OF THE GUARANTOR.
FORM OF DEMAND GUARANTEE IN RESPECT OF PERFORMANCE**

GUARANTEE REFERENCE NUMBER: [*]**

FORM OF ON DEMAND PERFORMANCE GUARANTEE

Whereas [insert the full name of the *Employer*], registration number: [insert registration number], of [insert full physical address] (the "*Employer*") has awarded a contract for [insert a detailed description of the contract], under contract number: [insert details] (the "*Contract*"), to [insert full names of the *Contractor*], registration number [insert details], of [insert full physical address] (the "*Contractor*").

And whereas the Contract requires the *Contractor* to provide to the *Employer* an on-demand performance guarantee for the due and proper performance by the *Contractor* of its obligations in terms of the Contract.

Now therefore: [insert full names of the *Guarantor*], registration number [Insert details], of [insert the full physical address] (the "*Guarantor*"), duly represented by the undersigned: [insert the full names of the signatory], and [insert the full names of the signatory], acting herein in their respective capacities as: [insert full title] and [insert full title] respectively, of the *Guarantor*, and being duly authorized to sign this on demand performance guarantee (this "*Guarantee*") and to incur obligations in relation thereto, in the name, and on behalf, of the *Guarantor* under, and in terms of, a Resolution of the Board of Directors or other written authority of the *Guarantor*, hereby irrevocably and unconditionally guarantees and undertakes that:

1. The *Guarantor* shall pay to the *Employer* on demand any sum or sums not exceeding the following aggregate amount: R [insert the amount] (the "*Guaranteed Amount*") on presentation of a written demand signed by the *Employer* (the "*Demand*"), supported by a written statement signed by the *Employer* certifying that the *Contractor*, in the opinion of the *Employer* as at the date of issue of such Demand, is in breach of its obligations under the Contract or that a defect had occurred following the performance by the *Contractor* of its obligations under the Contract, and without being required to prove or set out the nature of any such breach or defect.
2. Neither the failure of the *Employer* to enforce strict or substantial compliance by the *Contractor* with its obligations under the Contract nor any act, conduct or omission by the *Employer* prejudicial to the interests of the *Guarantor* will discharge the *Guarantor* from liability under this Guarantee.
3. This Guarantee:
 - 3.1 automatically comes into full force and effect on the date of signature hereof by the *Guarantor*.
 - 3.2 automatically expires, whether or not returned to the *Guarantor* at the earlier of:

Employer:		Contractor:	
Witness:		Witness:	



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- 3.2.1 [the *defects date*; or]
- 3.2.2 90 (ninety) calendar days after the date of termination of the Contract, as notified in writing to the Guarantor by the *Employer*; or
- 3.2.3 **[insert time]** (Central African Time), at the abovementioned address of the Guarantor on **[insert date]**.
- 3.2.4 the “**Expiry Date**”) means the date of **practical completion**.
- 3.3 constitutes the primary obligations of the Guarantor and exists independently of the Contract or any amendment, variation or novation thereof; and
- 3.4 is governed by the laws of the Republic of South Africa and any dispute arising hereunder shall be subject to the jurisdiction of the South African courts. In respect of such proceedings, each of the Parties specifically consents to the non-exclusive jurisdiction of the High Court of South Africa (Gauteng Local Division, Johannesburg).
4. Any Demand must be presented at the aforementioned address of the Guarantor on or before the Expiry Date. After the Expiry Date, this Guarantee shall become null and void, whether returned to the Guarantor for cancellation or not and any Demand received after the Expiry Date shall be ineffective.
5. The *Employer* may require the *Contractor* to extend this Guarantee or replace it if the guaranteed sum has not been paid in full by the date 28 days prior to the Expiry Date. If the guaranteed sum has not been paid in full by the date 28 days prior to the Expiry Date, and the guarantee has not been extended, the Guarantor unconditionally undertakes to pay to the *Employer* any amounts which the *Contractor* has not repaid (subject to the guaranteed sum) upon receipt by the *Employer*, within such 28 day period, of written demand for payment made in accordance with the terms of the advance payment guarantee.
6. Payments made in terms of this Guarantee shall be in cash, free of any set-off, with-holding, counterclaim or deduction of any nature whatsoever.
7. This Guarantee is transferable by the *Employer*, and the Guarantor consents to any transfer of this Guarantee by the *Employer* to any of its affiliates or any other person. This Guarantee is restricted to the payment of a sum of money only and limited to an aggregate amount equal to the Guaranteed Amount.
8. The Guarantor warrants that it has the power and has taken all action and obtained all licenses and approvals required for it, to grant and perform its obligations in terms of this Guarantee.
9. The Guarantor acknowledges that the *Employer* may make multiple demands under this Guarantee provided that the aggregate amount paid by the Guarantor in terms of this Guarantee shall not, at any time, exceed the Guaranteed Amount.
10. The Guarantor's obligations under this Guarantee are of a primary, independent nature and are not ancillary, accessory nor of a collateral nature, to the Contract. Any reference in this

Employer:		Contractor:	
Witness:		Witness:	



**UPGRADE OF EMERGENCY POWER DISTRIBUTION SYSTEM FOR SAVP
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OF FIVE (5) YEARS.**

**TENDERING DATA
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Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship.

11. For the purposes of this Guarantee, the abovementioned address of the Guarantor shall be its *domicilium citandiet executandi* for all purposes in connection with this Guarantee.

SIGNED at _____ on this _____ day of _____ 20____

Witnesses:

1.

For: **[insert name of the Guarantor]**
duly authorized and
warranting such authority
Full Name:
Capacity:

2.

For: **[insert name of Guarantor]**
duly authorized and
warranting such authority
Full Name:
Capacity:

Employer:		Contractor:	
Witness:		Witness:	



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C1.3.2 Blasting Indemnity

Given by _____

*Company Registration No. _____

Address _____

a *Company incorporated with limited liability according to the company laws of the Republic of South Africa,
*Partnership, *Close Corporation, *Public Company (hereinafter called the Contractor), represented herein by
_____ in his capacity as the Contractor's
_____ duly authorised hereto by a resolution of the
Contractor dated _____ a certified copy of which resolution is attached to this
Indemnity.

WHEREAS the Contractor has entered into a Contract with the Johannesburg Water (SOC) Ltd (hereinafter called the Employer) for,

_____ and the Company requires this Indemnity from the Contractor

NOW THEREFORE THIS DEED WITNESSETH that the Contractor does hereby indemnify and hold harmless the Company in respect of all loss or damage that may be incurred or sustained by the Employer by reason of or in any way arising out of or caused by blasting operations that may be carried out by the Contractor in connection with the aforementioned Contract and also in respect of all claims that may be made against the Employer in consequence of such blasting operations, by reason of or in any way arising out of any accidents or damage to persons, life or property or any other cause whatsoever, and also in respect of all legal or other expenses that may be incurred by the Employer in examining, resisting or settling any such claims; for the due performance of which the Contractor binds itself according to law.

THUS DONE AND SIGNED for and on behalf of the Contractor at

_____ on the

_____ day of _____ 20_____ in the presence of the
subscribing witnesses.

As witnesses

Employer:		Contractor:	
Witness:		Witness:	

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2.

Name & Surname	Signature
----------------	-----------

Employer:		Contractor:	
Witness:		Witness:	



**UPGRADE OF EMERGENCY POWER DISTRIBUTION SYSTEM FOR SAVP
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**C1.3.3 Health and Safety Contract Between Employer and Contractor In Terms of Section 37(2) Of
The Occupational Health and Safety Act No 85 Of 1993**

Written agreement between Johannesburg Water ((Proprietary) Limited (hereinafter referred to as “the

Employer) and _____ (hereinafter referred to as “the mandatory”) as envisaged by Section 37(2) of the Occupational Health and Safety Act, No. 85, of 1993 as amended.

I _____ representing _____
_____ (mandatory) do hereby acknowledge that
_____ (mandatory) is an employer in its own right and shall be regarded as the employer for purposes of the contract work specified in the body of the principal agreement with duties as prescribed in the Occupational Health and Safety Act, No. 85 of 1993 as amended so as to ensure that all work will be performed or machinery and plant used in accordance with the provisions of the said Act. I furthermore agree to comply with the requirements of the Employer as contained in the Occupational Health and Safety Specification included with the principal agreement and to liaise with the employer should I, for whatever reason, be unable to perform in terms of this agreement.

Signed this _____ day of _____ at _____

Signature on behalf of mandatory _____

Signature on behalf of Employer _____

Compensation Fund Registration No. of mandatory _____

Good Standing Certificate : ☐ yes ☐ no (tick one box)

Employer:		Contractor:	
Witness:		Witness:	



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C1.3.4 Health and Safety Contract: General Information

1. The Occupational Health and Safety Act comprises Sections 1 to 50 and all un-repealed regulations promulgated in terms of the former Machinery and Occupational Safety Act No 6 of 1983 as amended, as well as other regulations which may be promulgated in terms of the OHS Act.
2. 'Mandatory' is defined as including an agent, a contractor or a subcontractor for work, but without derogating from his status in his own right as an employer or user of plant and machinery
3. Section 37 of the Occupational Health and Safety Act potentially punishes employers (principals) for the unlawful acts or omissions of mandataries (contractors) save where a written agreement between the parties has been concluded containing arrangements and procedures to ensure compliance with the said Act by the mandatory.
4. All documents attached or referred to in the above agreement form an integral part of the agreement.
5. To perform in terms of this agreement mandataries must be familiar with the relevant provisions of the Act.
6. Mandataries who utilise the services of their own mandataries (subcontractors) are advised to conclude a similar written agreement.
7. Be advised that this agreement places the onus on the mandatory to contact the Employer in the event of inability to perform as per this agreement. The Employer, however, reserves the right to unilaterally take any steps as may be necessary to enforce this agreement.
8. The contractor shall be responsible for the full and proper implementation of the terms and provisions of the Act and its regulations in the area in which the work is to be undertaken by the Contractor.
9. The Contractor shall be responsible for the well-being, in relation to health and safety, of all persons coming upon or into such area in accordance with that legislation, including the implementation of any directives issued by management of the Employer in this respect.

The work to be done is **RFB005/25/26: UPGRADE OF THE EMERGENCY POWER DISTRIBUTION
SYSTEM FOR SAVP PRODUCTION BLOCK 14**

10. The area in which the work is to be conducted is **1 Modderfontein road, Sandringham, Johannesburg**
11. The Contractor shall familiarise himself with such area and all risks existing thereon and undertakes to report to the representative of the Employer any hazard or risk to health and safety which arises during the contract work in the area concerned and over which the Contractor may have no control. All necessary and appropriate safety / health equipment shall be issued by the Contractor to all persons working on or coming into the area.

Employer:		Contractor:	
Witness:		Witness:	



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C1.3.4.1 Occupational Health and Safety Indemnity Undertaking

I, the undersigned _____
in my capacity as _____
of the firm _____

1. Hereby undertake to ensure that I/my firm and/or employees and/or subcontractors and/or his employees -
 - 1.1 comply strictly with the provisions of the Occupational Health and Safety Act of 1993 (as amended) and/or the regulations promulgated in terms thereof, with specific reference to section 37(2) of the said act, as well as any relevant legislation, in the course of the performance/execution of any service and/or work in, to or on any of the Employer's buildings, construction sites and/or premises;
 - 1.2 ensure that consultants and/or visitors comply with any instructions and measures relating to occupational health and safety, as prescribed by the Employer; and
 - 1.3 comply strictly with the statutorily prescribed work systems, operational equipment, machinery and occupational health and safety conditions;
2. And as an independent employer and contractor, hereby indemnify, in terms of the above undertakings, the Employer -
 - 2.1 in respect of any costs that I/my firm and/or employees and/or subcontractors and their employees may incur of necessity in compliance with the above undertakings; and
 - 2.2 against any claims that may be instituted against the Employer and/or any liability that the Employer may incur, whether instituted and/or caused by me/my firm's employees, agents, consultants, subcontractors and/or their employees and visitors or the Employer's clients or neighbours in respect of any incidents related to my/my firm's activities and as a result of which the occupational health and safety of the persons involved have been detrimentally affected; and
 - 2.3 against similar claims that I, managers or directors of my firm may have against the Employer and any damages for which I, managers or directors of my firm hold the Employer liable.
3. My firm's compensation commissioner number is _____
and I confirm that my firm and its subcontractors' fees have been paid up and obligations in respect of the compensation commissioner have been complied with and further that I shall furnish proof thereof in writing on request.
4. I hereby confirm that I have the authority to sign this indemnity undertaking and that the Employer is not obliged to confirm such confirmation.

Signed at _____ This _____ day of _____

Signature _____ Capacity _____

As witnesses:
1 _____
2 _____

Employer:		Contractor:	
Witness:		Witness:	

NATIONAL HEALTH LABORATORY SERVICE (NHLS)



CONTRACT: RFB005/25/26

**UPGRADE OF EMERGENCY POWER DISTRIBUTION
SYSTEM FOR SAVP PRODUCTION BLOCK 14
INCLUDING SERVICE AND MAINTENANCE FOR A
PERIOD OF FIVE (5) YEARS.**

VOLUME 1

PART 2: PRICING DATA

Employer:		Contractor:	
Witness:		Witness:	



**UPGRADE OF EMERGENCY POWER DISTRIBUTION SYSTEM FOR SAVP
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Employer:		Contractor:	
Witness:		Witness:	



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C2 PRICING DATA

C2.1 Pricing Instructions

C2.1.1 General preamble to the bill of quantities (Engineering works)

- a) All items in the Bill of Quantities, except where otherwise specified in Clause 8 of a Standardised Specification or in the Project Specification, shall be measured and shall cover operations as recommended in the standard system of measurement of civil engineering quantities, published under the title “Civil Engineering Quantities”, by the South African Institution of Civil Engineering.
- b) The basis and principles of measurement and payment are described in this section (Pricing Instructions) and Clause 8 of each of the Standardised Specifications for Civil Engineering Construction. The applicable SANS 1200 Standardised Specifications are listed in the Scope of Work, Portion 1: Project Specifications. Variations and amendments to the Project Standard Specifications are contained in the Scope of Work, Portion 2: Variations and/or Additions to the Project Standard Specifications.
- c) Descriptions in the Bill of Quantities are abbreviated and comply generally with those in the Standardised Specifications. Clause 8 of each Standardised Specification, read together with the relevant clauses of the Scope of Work, set out what ancillary or associated activities are included in the rates for the operations specified. Should any requirements of the measurement and payment clause of the applicable Standardised Specification or the Scope of Work, conflict with the terms of the Bill of Quantities, the requirements of the Standardised Specification or Scope of Work, as applicable, shall prevail.
- d) The clauses in a specification in which further information regarding the Schedule item may be found are listed in the “Payment Refers” column in the Schedule. The reference clauses indicated are not necessarily the only sources of information in respect of listed items. Further information and specifications may be found elsewhere in the Contract Documents. Standardised Specifications are identified by the letter or letters which follow SANS in the SANS 1200 series of specifications, e.g. G for SANS 1200G.
- e) Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for waste.
- f) The quantities set out in the Bill of Quantities are the estimated quantities of the Contract Works, but the Contractor shall be required to undertake whatever quantities may be directed by the Employer’s Agent from time to time. The Contract Price for the completed Works shall be computed from the actual quantities of work done, valued at the relevant unit rates and/or prices. The Contractor must not order the quantities of materials stated in the Bill of Quantities until the Employer’s Agent has confirmed in writing from the Construction Drawings or measurement on Site that such quantities are in fact the correct quantities.
- g) The rates and/or prices to be inserted in the Bill of Quantities are to be the full inclusive prices for the work described under the several items. Such rates and/or prices shall cover all costs and expenses that may be required in and for the execution of the work described, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the documents, as well as overhead charges and profit. Reasonable charges shall be inserted as these shall be used as a basis for assessment of payment for additional work that may have to be carried out.

Employer:		Contractor:	
Witness:		Witness:	

**UPGRADE OF EMERGENCY POWER DISTRIBUTION SYSTEM FOR SAVP
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h) A price or rate is to be entered against each item in the Bill of Quantities, whether the quantities are stated or not. An item against which no price is entered will be considered to be covered by the other prices or rates in the Schedule.

i) The units of measurement described in the Bill of Quantities are metric units. Alternatives used are as follows:

mm	=	millimetre	=	hour
m	=	metre	kg	= kilogram
km	=	kilometre	t	= ton (1000kg)
m ²	=	square metre	No.	= number
m ² pass	=	square metre pass	sum	= lump sum
ha	=	hectare	MN	= mega-newton
m ³	=	cubic metre	MN.m	= mega-newton-metre
m ³ km	=	cubic metre-kilometre	PC sum	= Prime Cost sum
l	=	litre	Prov sum	= Provisional sum
kl	=	kilolitre	%	= percent
MPa	=	megapascal	kW	= kilowatt
W/day	=	Workday	R/only	= Rate only

j) For the purpose of this Bill of Quantities, where applicable, the following words shall have the meanings hereby assigned to them:

Unit	:	The unit of measurement for each item of work as defined in the SANS 1200.
Quantity	:	The number of units of work for each item.
Rate	:	The agreed payment per unit of measurement.
Amount	:	The product of the quantity and the agreed rate for an item.
Lump sum	:	An agreed amount for an item, the extent of which is described in the Bills of Quantities but the quantity of work of which is not measured in any units.

k) Arithmetical errors in the Bill of Quantities shall be corrected in accordance with Clause C3.9 of the Tender Data.

l) While the Employer has every intent to complete the full scope of works, the Employer reserves the right to reduce the scope of works according to the budget, or to terminate this contract

m) The Bill of Quantities shall be completed by hand in INK or TYPED. The Bill of Quantities in the tender document may be replaced with the typed electronic Bill of Quantities, without changing the quantities, items and description.

Employer:		Contractor:	
Witness:		Witness:	



**UPGRADE OF EMERGENCY POWER DISTRIBUTION SYSTEM FOR SAVP
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C2.1.2 Sufficiency of tender

The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his Tender for the construction of the Works and of the rates and prices, which rates and prices shall, except in so far as it is otherwise provided in the Contract, cover all his obligations under the Contract and all matters and things necessary for the proper execution and completion of the Works.

C2.1.3 Special payment conditions

This clause shall be read in conjunction with the 'Penalties' clause(s). Where the penalty clause shall always receive precedence over this clause, should it be found that duplicative financial corrective measures exist.

C2.1.3.1 Applicability of payment items

All payment items forming part of this Contract shall not apply to ordered Works completed by the Contractor under this Contract, where completed Works:

- are not completed to acceptable quality;
- are not ordered by the Employer's Agent;
- are still within the defects and liability period; or
- are not accepted by the Employer's Agent or his duly authorised representative.

C2.1.3.3 Working outside normal hours

The additional costs, if any, to perform works outside normal working hours shall be deemed to have been allowed for in the provided activity pricing rates and/or prices.

C2.1.4 SMME Portion of the Works

A portion of the works must be allocated for completion by appointed SMMEs.

The Main Contractor shall retain liability and responsibility for the management, scheduling, and quality control of all works performed by the sub-contractors. All Sub-Contractors shall be appointed as per National Health Laboratory Service Standard Operating Procedures (SOP) for SMME appointments. The Main Contractor will be expected to conduct a competitive process to recommend a Sub-Contractor or Sub-Contractors to National Health Laboratory Service. National Health Laboratory Service will then evaluate all rates provided by the Sub-Contractor for fairness. National Health Laboratory Service will then either a) approve the appointment of the Sub-Contractor or Sub-Contractors or b) enter into negotiations with the Main Contractor and Sub-Contractor / s or c) request that the Contractor recommend a different Sub-Contractor.

Employer:		Contractor:	
Witness:		Witness:	



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Further an allowance has been made for the Contractor to complete the following tasks:

- The Contractor shall ensure that the Sub-Contractor(s) complies with paying all amounts due in respect of his employees and himself (pay when paid by National Health Laboratory Service does not apply) in terms of all relevant legislation and regulations including, but not confined to, the
 - Income Tax Act, the
 - Compensation for Occupational Injuries and Diseases Act,
 - Unemployment Insurance Act,
 - Basic Conditions of Employment Act

Further an allowance has been made for "Training" – this is related to CETA accredited training which is to be agreed with the Employer during project execution. No amount can be claimed under this item for on-site or on-the-job training, only for accredited training which the SMME receives.

Employer:		Contractor:	
Witness:		Witness:	

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TENDERING DATA

BILL OF QUANTITIES



NHLS SAVP-
Electrical BOQ.pdf



NHLS%20SAVP-%20
Electrical%20BOQ.xls

Employer:		Contractor:	
Witness:		Witness:	

NATIONAL HEALTH LABORATORY SERVICE (NHLS)



CONTRACT: RFB005/25/26

**UPGRADE OF EMERGENCY POWER
DISTRIBUTION SYSTEM FOR SAVP
PRODUCTION BLOCK 14 INCLUDING SERVICE
AND MAINTENANCE FOR A PERIOD OF FIVE
(5) YEARS. VOLUME 2**

PART 3: SCOPE OF WORK

Employer:		Contractor:	
Witness:		Witness:	

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Employer:		Contractor:	
Witness:		Witness:	



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Employer:		Contractor:	
Witness:		Witness:	

C3 PREAMBLE TO SCOPE OF WORK

GENERAL

This section specifies and describes the supplies, services and Employer's Agenting and construction works which are to be provided and any other requirements and constraints relating to the manner in which the contract work is to be performed.

SCOPE

The Scope of the Work is set out in two portions:

Portion 1: PROJECT SPECIFICATION covers a general description of the project, the facilities available and the requirements to be met.

Portion 2: VARIATIONS AND ADDITIONS TO THE STANDARDISED SPECIFICATIONS covers variations to the standardised specifications and particular specifications, which are applicable to the contract.

Should any requirement of the Project Specification conflict with any requirement of the standardised or particular specifications, the requirements of the Project Specifications shall prevail.

STATUS

The Project Specifications together with the drawings and Schedule of Quantity indicate the section of Standard Specification applicable to this Contract.

In the event of any discrepancy between parts of the Standard Specification and the Project Specifications, the latter shall take precedence and shall govern.

Should any requirement of the Particular Project Specification conflict with any requirement of the Project Specification or Variations and Additions to the Standardised Specifications, the requirements of the Particular Project Specifications shall prevail.

Employer:		Contractor:	
Witness:		Witness:	



**UPGRADE OF EMERGENCY POWER DISTRIBUTION SYSTEM FOR SAVP
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Volume 2

Part 3: Scope of Work

PORTION 1: PROJECT SPECIFICATION AND GENERAL INFORMATION

PS1 DESCRIPTION OF THE WORKS

PS1.1 Employer's Objectives

The primary objective of the project is to upgrade the existing distribution boards and the electrical installations for SAVP production block 14 to comply with relevant standards and regulations. The second objective is to provide UPS power to the areas identified as critical by the end-user and provide 4-year maintenance contract in place for the installation.

PS1.2 Overview of the Works

The works to be carried out under this contract are listed below:

The Contractor's obligations under the Contract comprise the construction, completion and maintenance of the Works. The provision of all labour, materials, construction plant, temporary works and everything, whether of a temporary or permanent nature required in and for such construction, completion and maintenance so far as the necessity for providing the same is specified in or reasonably to be inferred in the Contract.

The estimated contraction duration of the contract is 9 months.

PS1.3 Extent of the Works

The work covered by this contract comprises the complete electrical installation, in

working order, as shown on the drawings and as per these specifications, including the supply and installation of all fittings and also the installation of such equipment supplied by the Client if any.

The extent of the work could be summarized as follows;

- Remove the existing distribution board, supply and installation of new distribution board SDB-C
- Tracing of all circuits of the distribution board SDB-C to identify all the incoming circuits to the distribution board including the main cable
- Identify the sizes of all the cables and conductors of the circuits of SDB-C
- Remove the existing distribution board, supply and installation of new distribution board SDB-C1

Employer:		Contractor:	
Witness:		Witness:	

C3.2



**UPGRADE OF EMERGENCY POWER DISTRIBUTION SYSTEM FOR SAVP
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- Tracing of all circuits of the distribution board SDB-C1 to identify all the incoming circuits to the distribution board including the main cable
- Identify the sizes of all the cables and conductors of the circuits of SDB-C1
- Remove the existing distribution board, supply and installation of new distribution board SDB-C1/1
- Tracing of all circuits of the distribution board SDB-C1/1 to identify all the incoming circuits to the distribution board including the main cable
- Identify the sizes of all the cables and conductors of the circuits of SDB-C1/1
- Remove the existing distribution board, supply and installation of new distribution board ESDB-C
- Tracing of all circuits of the distribution board ESDB-C to identify all the incoming circuits to the distribution board including the main cable
- Identify the sizes of all the cables and conductors of the circuits of ESDB-C
- Remove the existing distribution board, supply and installation of new distribution board ESDB-E1
- Tracing of all circuits of the distribution board ESDB-C1 to identify all the incoming circuits to the distribution board including the main cable
- Identify the sizes of all the cables and conductors of the circuits of ESDB-E1
- Remove the existing distribution board, supply and installation of new distribution board ESDB-E2
- Tracing of all circuits of the distribution board ESDB-E2 to identify all the incoming circuits to the distribution board including the main cable
- Identify the sizes of all the cables and conductors of the circuits of ESDB-E2
- Remove the existing distribution board, supply and installation of new distribution board ESDB-E4
- Tracing of all circuits of the distribution board ESDB-E4 to identify all the incoming circuits to the distribution board including the main cable
- Identify the sizes of all the cables and conductors of the circuits of ESDB-E4
- Remove the existing distribution board, supply and installation of new distribution board ESDB-CN
- Tracing of all circuits of the distribution board ESDB-CN to identify all the incoming circuits to the distribution board including the main cable
- Identify the sizes of all the cables and conductors of the circuits of ESDB-CN
- Remove the existing distribution board, supply and installation of new distribution board COMPRESSOR DB
- Tracing of all circuits of the distribution board COMPRESSOR DB to identify all the incoming circuits to the distribution board including the main cable
- Identify the sizes of all the cables and conductors of the circuits of COMPRESSOR DB
- Remove the existing distribution board, supply and installation of new distribution board STEAM DB
- Tracing of all circuits of the distribution board STEAM DB to identify all the incoming circuits to the distribution board including the main cable
- Identify the sizes of all the cables and conductors of the circuits of STEAM DB
- Partial rewiring of distribution board ESDB-E for compliance with standards and regulation
- Tracing of all circuits of the distribution board ESDB-E to identify all the incoming circuits to the distribution board including the main cable
- Identify the sizes of all the cables and conductors of the circuits of ESDB-E
- Testing, commissioning and issuing of certificate of compliances for all the distribution boards above
- Supply and installation of 200kVA UPS in the substation room
- Supply and installation of UPS distribution board

Employer:		Contractor:	
Witness:		Witness:	

C3.3



**UPGRADE OF EMERGENCY POWER DISTRIBUTION SYSTEM FOR SAVP
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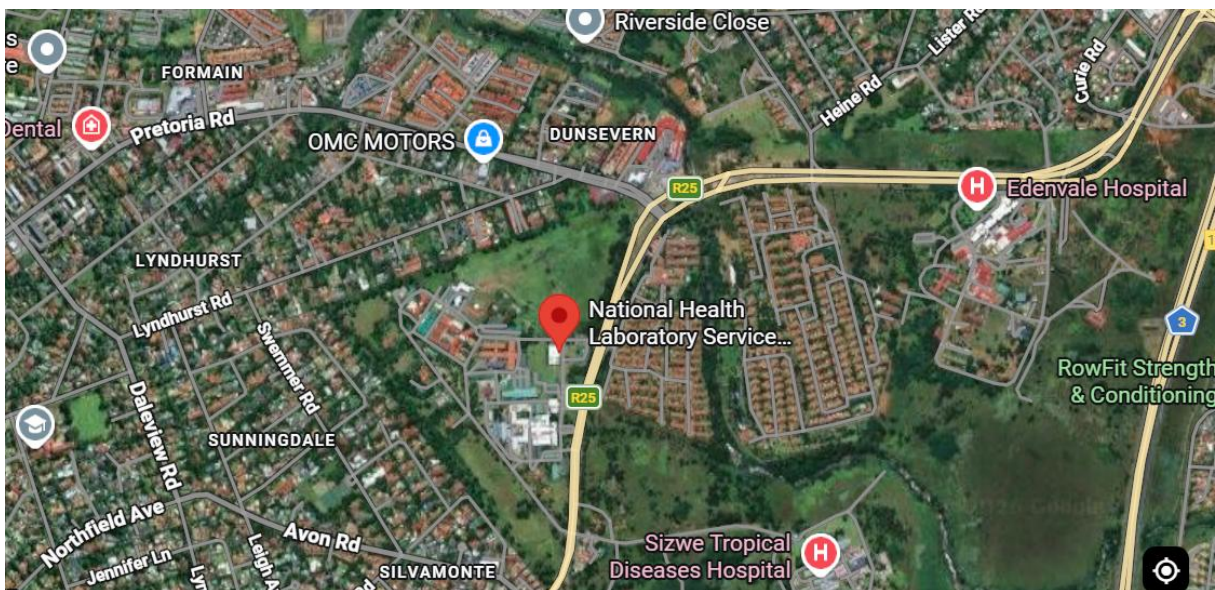
- Supply and installation of cables from the UPS distribution board to the relevant floor distribution boards
- Installation of cable trays for UPS cables reticulations
- Tracing, testing and labelling of all switched socket outlets
- Replacement of non-compliant switched socket outlets
- Labelling of light switches for compliance with COC requirements
- Labelling of isolators for compliance with COC requirements
- Identification of any services that do not comply with health and safety requirements for issuing of COCs
- 4-year maintenance plan after defect liability period

The Contractor's obligations shall also include strict compliance with any Occupational Health and Safety requirements.

This description of the works is not necessarily complete and shall not limit the work to be carried out by the Contractor under the Contract. Approximate quantities of each type of work are given in the Schedule of Quantities.

PS1.4 Location of the Works

The location of the project is in Johannesburg, no1 Modderfontein Rd, Edenvale, NHLS SAVP building.



Employer:		Contractor:	
Witness:		Witness:	

C3.4

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PS2 ENGINEERING

PS2.1 Employer's Agent Design

The Employer's design has been completed by Potent Engineering (the Employer's Agent) on behalf of the Employer.

When and where specific reference is made or preference shall be given to specified equipment, the Tenderer shall include such as his main offer in the Tender. Should the Tenderer fail to comply with these requirements, this may lead to the disqualification of the tender submitted.

Tenderers are free to propose alternative equipment to that proposed in the specifications and, provided that drawings with details of each alternative proposal are submitted with the Tender, such alternative proposals shall be considered in the adjudication of a Tender. Full details of any changes must be included with the tender. The cost of any changes to the Employer's design shall be for the Contractor's account where full details of the changes were not submitted with the tender.

The Contractor undertakes only construction on the basis of designs issued by the Employer's Agent. The Contractor is to follow the specifications, the design and construction drawings as laid out by the Employer's Agent. Tenderers must satisfy themselves that the layouts as provided in the tender documentation suit in all respects the equipment proposed by the Employer or by the Tenderer as the case may be. Where equipment other than that proposed by the Employer's Agent is accepted, it will be the sole responsibility of the Contractor to ensure that the associated equipment is compatible with the accepted material and proposed structures.

In the case of the Employer's Agent's acceptance of an alternative proposal, the Contractor shall submit in triplicate to the Employer's Agent for his approval, detailed working drawings of the Contractor's alternative design proposal before any related work is executed.

An extension of time for Practical Completion of the Contract due to time spent on the alteration of the tender drawings to suit the Contractor's alternative proposals or, due to time spent in obtaining the Employer's Agent's approval of such alternatives, shall not be considered.

Acceptance of an alternative proposal or offer shall not relieve the Contractor of any of his obligations in terms of the Contract. The Contractor's cost of preparation and submission of an alternative proposal shall be deemed to be included in the rates tendered for the execution of the Works.



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PS2.2 Drawings

PS2.2.1 Volume 3

Drawings are included in this Contract Document based on current available information. Such drawing may be updated (based on actual site situation uncovered during execution of the works) and re-issued during the Contract Period as required.

Drawings include:

- a) Schematic diagrams

The as-built records to be submitted by the Contractor to the Employers agent must include:

- a) Hard copy drawings indicating mark-ups of amendments, as updated on site

PS2.2.2 Construction drawings

Upon receiving the instruction to commence with construction the Contractor shall receive 3 sets of construction drawings.

PS2.2.3 Shop drawings

The contractor will be required to submit shop drawings during construction for approval before proceeding to manufacturing. Any distribution board procured without the approval by the employer's agent will not be accepted.

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PS3 PROCUREMENT

PS3.1 Preferential Procurement Procedures

The Employer's promotes preferential procurement. The philosophy of the process and mechanics of the points scoring system are described in section MBD 6.1, which is included in the returnable documents section T2.1.

The Contractor's attention is drawn to the following returnable schedules contained in Part T2:

- a) Empowerment and Preferential Procurement (SBD 6.1); and

These schedules contain all requirements with regard to preferential procurement.

PS 3.2 SUBCONTRACTING

The work shall be carried out by the contractor himself and not be subcontracted to a third part.

PS4 CONSTRUCTION

Volume 2**Part 3: Scope of Work****PS4.1 Applicable Standards****PS4.1.1 General Conditions**

The “Special Condition of Contract” to be read in conjunction with the “General Conditions for Construction Works 2015 Third Edition (GCC 2015).

PS4.1.2 Applicable standards

The Electrical Installations shall comply with the following standards:

- a. South African National Standard - SANS 10142 – 1 - Code of Practice of Wiring Premises – most recent amendment
- b. Occupational Health and Safety Act (Act 85 of 1993) – most recent amendment.
- c. SANS 10400 National Building Regulations– most recent amendment.
- d. The relevant byelaws and regulations of the Electricity Supply Authority and any special requirements of the local supply authority.
- e. The Electricity Act 1984 (Act 41 of 1984) as amended
- f. SANS 0313 (1999) Lightning Protection Systems to Buildings– most recent amendment.
- g. SABS 1063 – as amended - Earthing and surge protection of electrical distribution boards
- h. SANS10139 - Fire Detection and Fire Evacuation system
- i. The Local government Ordinance 1939 (Ordinance 17 of 1939) – most recent amendment and the Municipal byelaws.
- j. The Fire Brigade services Act 1993 Act 99 of 1987 as amended
- k. The Post Office Act 1958 (Act 44 of 1958) as amended
- l. The Regulations of the local Gas Board where applicable
- m. General electrical Specification Part A and Part B (NDPW)
- n. General electrical Specification Part C (NDPW)
- o. SANS 10142-2:2012 Wiring of Premises - Medium Voltage,
- p. SANS 10292:2013 Earthing of Low Voltage Distribution,
- q. SANS 10114-1:2005 Interior Lighting Part 1: Artificial Lighting of Interiors,
- r. SANS 10114-2:2009 Interior Lighting Part 2: Emergency Lighting,
- s. SANS 1277-1:2009 Exterior Lighting Part 2: Emergency Lighting,

PS4.2 Particular specifications**PS4.2.1 Main incoming power supply**

There is power supply on site and this does not form part of this contract

PS4.2.2 UPS uninterruptable power supply

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UPS will form part of the installation and will need to be installed as per the specifications and drawings. A 200kVA UPS will be installed in the substation room to supply power to critical equipment as indicated in the distribution board schematics.

PS4.2.3 Information

Tenderers are cautioned that should any Schedule of Information in this specification that has to be submitted, as part of the tender is not complete, his/her tender cannot be adjudicated and may be disqualified.

PS4.2.4 Specification and drawings

The specifications and drawings generally show the character and extent of the proposed work, and shall not be held as showing every minute detail of the work to be executed.

Tenderers must ensure that their copy of the specification is complete and that all drawings as listed have been received.

Any discrepancy must immediately be brought to the attention of the Electrical Engineer.

PS4.2.5 Contract Drawings

The layout and extent of the electrical installation is shown on the drawings that form part of this document.

The electrical contractor must confirm the positions of distribution boards or routes that may be affected by other services with the Electrical Engineer before placing such distribution board.

PS4.2.6 As-Built Drawings

The contractor is to prepare the As- Built paper prints in strict accordance with this specification. These drawings are to be kept in the site office. Retention monies normally due before commencement of the retention period will not be released until As-Built drawings have been prepared to the satisfaction of the Electrical Engineer.

PS4.2.7 Making good

The electrical contractor will be responsible for making good in all trades of any damage to buildings or other services that he or his employees may have incurred during the construction of the works.

The electrical contractor will be responsible for keeping the site clean and tidy and shall remove from the site all rubble and litter resulting from his construction works.

PS4.2.8 Wording

The word "approve" means approval by the Electrical Engineer.

PS4.2.9 Supervision

A qualified and experienced representative of the electrical contractor, who must be registered, as an accredited person shall under all circumstances supervise work carried out.

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The representative must be authorised by the electrical contractor and must be able to receive instructions on behalf of the contractor.

PS4.2.10 Electrical materials and equipment

All material and equipment and component parts thereof are to be in accordance with the Quality Specification (Part C) of NDPW electrical standards and must have the approval of the Electrical Engineer.

All material and equipment must be suitable for the power supply system at this site, which is 11/230/400V 50Hz three phase four wire.

PS4.2.11 Distribution boards

All distribution boards shall be manufactured and installed to comply with the Quality Specification (Part C) of NDPW electrical standards and must have the approval of the Electrical Engineer.

Any single line schematic diagram and special construction details issued as part of the contract documentation shall be closely followed in the design of the distribution boards.

One sample board selected from one of the boards to be supplied under the contract shall be manufactured and presented to the Electrical Engineer for approval. Any defects pointed out by the Electrical Engineer shall be rectified, whereupon the board shall again be presented for approval.

Once approved, the balance of the boards shall be manufactured to match the approved sample.

PS4.2.12 Balancing of load

The electrical contractor is required to balance the load as equally as possible over the multi-phase supply.

PS4.2.13 Cables

A. General

The electrical contractor is to supply and install all the low voltage cables specified in this document along the routes shown on the drawings and according to the sizes shown on the single line diagrams and/or as specified.

The cables must comply with the requirements in (Part C) of NDPW electrical standards. Bare hard drawn copper earth continuity conductors are to run with all four core underground cables constituting part of the low voltage distribution system. The earth conductors must be bound to the cables at intervals not exceeding 1 meter with cable ties.

For clean earth connections to computer equipment a green PVC insulated single core cable shall be used, which shall be bonded to the main board earth bar and to the clean earth bar of the computer distribution board, and to no other earthed material.

Conductor insulation which is colour coded by a line only, will not be accepted. The total insulation must have the phase colour.

B. Installation

a) Testing

All low voltage cables must be tested on site, in the presence of the Employer's Agent. All test results must be submitted to the Electrical Engineer.

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On each completed section of the laid cable, the insulation resistance shall be tested to approval with an approved "Megger" type instrument of not less than 1000 V for low voltage cables.

b) Depth of Trenches

All low voltage cables must be installed 600mm to the top of the cable, below ground level.

c) Marking Tape

Yellow PVC marking tape, 150 mm wide must be supplied and installed 300mm below the final surface and directly above all cables. The wording "Electric Cable" must be provided on the marking tape.

d) Cable Lengths

Tenderers must base their tender price on the preliminary lengths specified in the Bill of Quantities. After installation the exact lengths shall be determined on site. Adjustments to the contract price shall then be calculated using the rates in the Bill of Quantities.

Cables are **not to be ordered** according to lengths measured in the Bill of Quantities. It shall be the responsibility of the electrical contractor to establish the correct lengths of cable required on site including lengths required for termination of cables, before placing an order. The electrical contractor shall not be reimbursed for any surplus cable.

C. Cable Trenches

Tenderers must base their rates for cable trenches in soil, soft rock and hard rock on the quantities given in the Bill of Quantities. The actual quantities shall be determined on site. Adjustments to the Contract Price shall be calculated using the rates in the Bills of Quantities, after completion of the installation.

The different classes of materials for excavation are defines as follows:

SOIL: Shall mean hand-pickable soil and includes loose gravel, clay, backfilled soil, loose or soft shale, loose literati and rocks less than 75 mm dia.

SOFT ROCK: Shall mean rock that is hand-pickable including hard shale, dense literati and rocks exceeding 75 mm in dia to 0,03 cubic metres volume.

HARD ROCK: Shall mean granite, quartz sandstone, slate and stone of similar hardness as well as rocks exceeding 0,03 cubic metre volume.

No guarantee can be given that explosives will not be necessary for excavations. However, should explosives be necessary and the contractor receive permission to use explosives, the electrical contractor shall remain responsible for all work done with the explosives and shall comply with all conditions, regulations, requirements etc. imposed by the governing bodies. Should excavations be done in close proximity of existing services extreme care must be exercised. Only labourers with experience of these conditions may be utilised.

The bottom and sides of trenches must be of smooth contour, and shall have no sharp dips or rises that may cause tensile forces in the cable during backfilling.

Backfilling of trenches may commence only after the trenches have been approved and shall be compacted in layers of 150 mm. Sufficient allowance must be made for final settlement. For the first layer of 150 mm, soil sifted to remove all hard objects of 15mm mesh or larger and of which 75 mm must be below and 75 mm must be above the cable must be used. Where no suitable soil is available on site, the contractor shall import fill from elsewhere and make

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all the necessary arrangements to do so. The cost of soil importation must be included in the appropriate rate for excavations.

The electrical contractor shall be responsible to take the necessary precautions where excavations may be dangerous. Refer to the Occupational Health & Safety Act (Act 85 of 1993), Reg. 11 of the Construction Regulations. The electrical contractor must ensure that all buildings, sewer, etc., are protected against collapsing soil conditions.

The cable trenches shall be excavated to width of 300mm wide for one to three cables and the width shall be increased where more than three cables are laid together so that the cables may be placed at least two cable diameters apart throughout the run.

Payment will be made on the tendered rates based the specified dimensions or the actual dimensions whichever is the lesser. The only exception shall be in cases of additional excavations caused by obstructions such as water pipes, drains, large rocks, etc., in which case the magnitude of the additional excavation must be agreed upon on site by the Electrical Engineer.

D. Joints

Joints in cable runs shall not be allowed unless specified or authorised in writing by the Electrical Engineer. Where cable joints are to be made, a joint hole must be excavated of sufficient size to enable the cable jointer to work efficiently and unimpeded.

Each cable end must be left in a loop of 0,9 m to prevent any tension on the joint. During backfilling the section supporting the joint must be compacted to the extent that no movement will take place after the trenches have been backfilled.

All joints in LV underground cables and terminations shall be made by means of approved epoxy-resin pressure type jointing kits such as "Scotchcast". Epoxy resin joints must be made entirely in accordance with the manufacturer's instructions and with materials stipulated in such instructions. Low voltage PVC cables are to be made off with sealing glands and materials designed for this purpose that must be of an approved make.

Where cables are cut and not immediately made off, the ends are to be sealed without delay.

E. Cable laying

Cables must be removed from the drums in such a manner that the cable is not subjected to mechanical damage, twisting or tension exceeding that stipulated by the cable manufacturer.

The laying of cables shall not commence until the trenches have been inspected and approved. The cables must be adequately supported at intervals during the whole operation. Particular care must be exercised where it is necessary to draw cables through pipes and ducts to avoid abrasion, elongation or distortion of any kind. The ends of such pipes and ducts shall be sealed to the approval of the Employer's Agent after drawing in of the cables.

F. Sleeves

All sleeves indicated on the drawings are to be supplied and installed by the electrical contractor.

Electrical cable sleeves and communication sleeves must be installed at least 600mm apart. All crossings of these sleeves must be at 90° with the communication sleeves on top.

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Before backfilling, the ends of all sleeves must be sealed with paper and a weak cement mixture.

G. Cable Markers

Cable markers must be provided on all cable runs at 50 m intervals on straight runs and at all bends. The position of cable markers must be confirmed on site. Cable markers must consist of 150mm x 150mm x 300mm high concrete blocks with aluminium or other corrosion proof metal plates marked with arrows to indicate the route.

The cable markers must protrude 25mm above ground level.

One cable marker must be placed at the site boundary where the telephone sleeve enters the site.

PS4.2.14 Manholes

The building contractor will construct all manholes. The electrical contractor shall however co-ordinate the exact location and orientation of all manholes with the building contractor.

PS4.2.15 Site reticulation

Refer to the site layout drawings and the single line diagrams for particulars reroutes and types/sizes of cables to be installed.

PS4.2.16 Testing and inspection

The electrical contractor shall test the entire installation in terms of Regulation 7 of the Electrical Installation Regulations 1992 of the Occupational Health & Safety Act (Act 85 of 1993) and shall issue a Certificate of Compliance on the official form, Annexure 1, obtainable from the Electrical Contracting Board of South Africa. All tests shall be carried out in conjunction with and to the satisfaction of the Supply Authority. The electrical contractor shall make all arrangements for testing and inspection, the costs thereof being included in the Tender Price.

All 230 V socket outlets shall be tested for polarity and the sensitivity of the earth leakage protection equipment shall be tested by means of an approved instrument.

Each length of cable shall be tested for insulation and polarity by means of a 1000 volt Megger designed for that purpose. In the case of underground cables this shall be done before backfilling. In addition, the earth-loop impedance of each main and sub-main feed shall be measured. The earth resistance at each down conductor earth electrode shall be measured. The earth resistance shall be tested by means of an approved instrument.

If there is no power on the day of the test, the electrical contractor shall supply a 3kW, 230 V generating plant for testing purposes.

"DANGER" notices shall be displayed at remote ends of cables under test.

The Electrical Engineer reserves the right to witness all tests. The electrical contractor shall advise the Electrical Engineer in writing of all results and furnish copies of all certificates.

Load balancing shall be undertaken by the electrical contractor to the satisfaction of the Electrical Engineer. Where conductors are altered to achieve satisfactory results, they shall be re-laced by the electrical contractor. The electrical contractor shall provide all the necessary instruments for the proper testing of the complete installation. If there is reason to doubt the accuracy of such

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instruments, the electrical contractor shall take the necessary action to prove their accuracy.

The electrical contractor shall ensure that the installation is completed in every respect and that there are no major defects prior to notifying the Electrical Engineer (in writing) for a first delivery inspection.

The Electrical Engineer will accept no defects during the final inspection. Should any defects be encountered at the final inspection then the Electrical Engineer will abandon that inspection and request that the electrical contractor arrange an additional final inspection.

PS4.2.17 UPS Specifications

PS4.2.17.1 General

1. Intent of Document

The specification is intended to cover the complete installation of the uninterrupted power supply. The minimum equipment requirements are outlined, but do not cover all the details of design and construction. Such details are recognised as being the exclusive responsibility of the contractor.

In all cases where a device or part of the equipment is referred to in the singular, it is intended that such reference shall apply to as many devices as are required to complete the installation.

2. Standards and Codes

Refer to clause 1 of Section 2 of this document for the relevant standards and codes.

All equipment shall be Y2K compliant.

3. Scope of Work

Supply, delivery, installation and commissioning of the complete uninterrupted power supply specified in this document.

The plant room will be provided by other trades and the contractor shall ensure that the space allowed is sufficient for the installation of the UPS and that the ventilation of the plant room is adequate. If any changes to the design have to be made the contractor must inform the consulting engineer in writing.

4. Ambient Operating Conditions

- a) Ambient Temperature
- b) Relative Humidity
- c) Altitude

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- d) Dust
 - e) Corrosion
-

5. Site Information

The UPS will be installed at no 1 Modderfontein road, Sandringham, Johannesburg

6. Co-ordination

Due to the nature of the installation, a fixed sequence of operation is required to properly install the complete uninterrupted power supply. The work shall be closely scheduled in order not to delay the entire project.

The contractor shall familiarise himself with the requirements of the other trades and shall examine the plant and specification covering each of these sections.

The space requirements shall be carefully checked with the other trades to ensure that the equipment can be installed in the proper sequence in the space allocated.

7. Test Certificates and Inspections

The following tests are to be carried out:

- (a) After completion of the works and before first delivery is taken, a full test will be carried out on the installation for a period of sufficient duration to determine the satisfactory working thereof. During this period the installation will be inspected and the contractor shall make good, to the satisfaction of the Representative/Agent, any defects which may arise.
- (b) The Contractor shall provide all instruments and equipment required for testing and any water, power and fuel required for the commissioning and testing of the installation at completion.
- (c) Test reports of both tests as specified under (a) and (b) are to be submitted to the Department.

8. Guarantee and Maintenance

The Contractor shall guarantee the complete plant for a period of twelfth months after first delivery has taken place.

If during this period the plant is not in working order, or not working satisfactorily owing to faulty material, design or workmanship, the Contractor will be notified and immediate steps shall be taken by him to rectify the defects and/or replace the affected parts on site at his own expense.

The Contractor shall maintain the plant in good working condition for the full twelfth month period to the final delivery of the installation. However, should the Contractor fail to hand over the plant in good working order on the expiry of the specified twelfth months, the Contractor shall be responsible for further monthly maintenance until final delivery is taken.

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During this period the contractor will undertake to arrange that the plant be inspected at regular intervals (whatever number of visits the contractor deems necessary to fully maintain the equipment) by a qualified member of his staff who shall: -

- (a) Check the mechanical soundness of all parts
- (b) Check and adjust all the output and control values of the system (voltage, frequency, control voltages, etc.)
- (c) Take control measurements on the major system components and record these measurements.
- (d) Replace all defective components.
- (e) Service batteries.
- (f) Check ventilation UPS equipment.
- (g) Clean all equipment and/or rooms as required.
- (h) Provide 24 hour standby maintenance and repair service at all times, including statutory holidays.

Note: At each visit, which shall be arranged in advance with the client's representative, a record of maintenance carried out shall be kept. The time and date of visits shall be entered in a logbook, which shall be kept in the plant room.

9. Materials and Workmanship

- (a) The work throughout shall be executed to the highest standards and to the entire satisfaction of the Representative/Agent who shall interpret the meaning of the Contract Document and shall have the authority to reject any work and materials, which, in his judgement, are not in full accordance therewith. All condemned material and workmanship shall be replaced or rectified as directed and approved by the Engineer.
- (b) All work shall be executed in a first-class manner by qualified tradesman.
- (c) The Contractor shall warrant that the materials and workmanship shall be of the highest grade, that the equipment shall be installed in a practical and first-class manner in accordance with the best practices and ready and complete for full operation. It is specifically intended that all material or labour which is usually provided as part of such equipment as is called for and which is necessary for its proper completion and operation shall be provided without additional cost whether or not shown or described in the Contract Document.
- (d) The Contractor shall thoroughly acquaint himself with the work involved and shall verify on site all measurements necessary for proper installation work. The Contractor shall also be prepared to promptly furnish any information relating to his own work as may be necessary for the proper installation work and shall co-operate with and co-ordinate the work of others as may be applicable.
- (e) All components and their respective adjustment, which do not form part of the equipment installation work, but influence the optimum and safe operation of the equipment shall be considered to form part of, and shall be included in the Contractor's scope of works.

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- (f) All control equipment and serviceable items shall be installed and positioned such that they will be accessible and maintainable.
- (g) The Contractor shall make sure that all safety regulations and measures are applied and enforced during the installation and guarantee periods to ensure the safety of the public and the User Client.
- (h) The Contractor is to include for all scaffolding required to complete the work required.

10. Brochures

Detailed brochures of all equipment offered shall be presented together with the tender documents.

11. Submittals

The following information must accompany the tender documents

- (a) The information requested in the schedule of information.
- (b) A paragraph by paragraph schedule of compliance with detailed description of any deviations from this specification.
- (c) If alternative systems are offered, a clear description of the operating characteristics and special features of the equipment along with a motivation for offering the alternative.
- (d) Descriptive and illustrated brochures and other information pertaining to the inverter and ventilation equipment and switchgear.
- (e) The proposed layout as stated.
- (f) Arrangement of batteries.
- (g) A sample test report as stated.
- (h) The circuit diagram requested.
- (i) The information requested.
- (j) Tenderers shall submit a list of successful installations completed in the Republic of South Africa.

PS4.2.18 Equipment requirements

1. Quality, standards and regulations

All material and equipment supplied for this contract shall be new and the best of their respective kind. All new materials and equipment supplied, shall comply fully with the requirements laid down in the specification. The whole of the works shall be executed in accordance with best practice and to approval of the engineer. The equipment shall comply with the latest issues of the following standard specifications:

Volume 2**Part 3: Scope of Work****1.1 South African Bureau of Standards**

SABS 150	Insulated wire.
SANS 1091	Colour standards for paint.
SANS 0142	Wiring code of practice.
SANS 1474	UPS units.

1.2 Regulations and Rights of Engineer

Apart from any other authority, which the engineer may have in terms of the contract, he shall have the right to set the standard and to accept or reject part of the specified equipment depending on the quality of material and workmanship offered.

The contractor shall be notified if the quality of such materials and/or workmanship is not acceptable. In such an event, the contractor shall replace the specific part or repair it to the satisfaction of the engineer, all at the cost of the contractor. Such an instruction shall not exempt the contractor from any of his obligations in terms of the contract.

The installation shall be erected and carried out in accordance with:

- a) The Basic Conditions of Employment Act and the Machinery and Occupational Safety Act of 1983, as amended.
- b) The local Municipality by-laws and Regulations as well as the regulations of the local Supply Authority.
- c) The local Fire regulations.
- d) The Regulations of the Department of Posts and Telecommunications.
- e) The Standard Regulations of any Government Department or public service company where applicable.

In addition the contractor shall at his cost issue all notices in respect of the installation to the local authorities, and shall exempt the client from all losses, costs or expenditures which may arise as a result of the contractor's failure to comply with the requirements of the regulations enumerated above.

It shall be assumed that the contractor is conversant with the above-mentioned requirements. Should any requirements, by-law or regulation, which contradicts the requirements of this document, apply or become applicable during erection of the installation, the contractor shall immediately inform the engineer of such a contradiction. Under no circumstances shall the contractor carry out variations to the installation in terms of such contradictions without obtaining the written permission to do so from the engineer.

2. UNINTERRUPTED POWER SUPPLY (UPS)**2.1 Definitions**

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-
- (a) **UPS** shall denote the complete UPS unit with associated controls, remote alarm panel and batteries and any accessories required by the system for its successful operation.
 - (b) **Power Converter Module** shall denote a rectifier, battery charger, inverter, electromechanical by-pass switch and manually operated by-pass switch.
 - (c) **Rectifier** shall denote that portion of the converter module containing the equipment and controls to convert the incoming AC power to regulated DC power required by the inverter.
 - (d) **Inverter** shall denote that part that converts the DC supplied by the rectifier to AC satisfying the load requirements.
 - (e) **Electro-mechanical** by-pass static switch shall denote a by-pass system provided break free switching from inverter to mains operation and vice versa.
 - (f) **Battery charger** shall denote that portion of the power converter module containing the equipment and controls to convert the incoming AC power to precisely regulated DC power required for battery charging.
 - (g) **Critical load** denotes the load as presented to the UPS by the computer or other load requiring constant supply and associated circuits and apparatus.
 - (h) **Mean-Time-Between-Failure (MTBF)** shall denote an overall MTBF of the UPS as a complete system.
 - (i) **A system failure** shall denote any interruption to, or degradation of the critical load bus voltage or frequency beyond the limits set forth herein.
 - (j) **Efficiency** shall denote the ratio of real output power (kW) to real input power (kW) with the UPS operating at a defined load power at the defined power factor, the battery fully charged and with nominal input voltage.

2.2 System Requirements (The Required Input and Output Voltages Are Detailed In Part 2 Of This Specification)

(A) Input to the UPS

- (a) Input voltage : 400/231V $\pm$ 10% or 231V $\pm$ 5%
- (b) Frequency : 50Hz $\pm$ 4%
- (c) System : 1 phase 2 wire or 3 phase 4 wire with operative earth conductor, supplied from utility network or standby generator set. Refer to detail specification.
- (d) Power factor : Not less than 0,8 lagging.
- (e) Max starting current: 10 times full load current for not more than ½ a cycle with rectifier soft starting facility.

(B) Output to Load

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-
- | | | | |
|-----|----------------------|---|--|
| (a) | Rating | : | Refer to detail specification. |
| (b) | Output voltage | : | Refer to detail specification. |
| (c) | Frequency | : | 50 Hz $\pm$ 0,5 Hz. |
| (d) | System | : | 1 phase 2 wire or 3 phase 4 wire with operative earth conductor. Refer to detail specification. |
| (e) | Voltage regulator | : | $\pm$ 10% maximum deviation of steady state voltage recovering to within 5% in less than 50 ms and to within 1% less in that 100 ms. |
| (f) | Frequency stability | : | Normally automatically synchronised to mains frequency if the latter is within 50 Hz $\pm$ 2% (adjustable window) Runs free at 50 Hz $\pm$ 0,5 Hz at any load when mains is out of limits. |
| (g) | Harmonic content | : | Less than 4% total distortion. |
| (h) | Amplitude modulation | : | Less than 2% |
- (C) Overall Performance
- Efficiency (overall) : 80 - 85%
- (D) Ambient Operating Conditions
- Refer to Section 1, General – Clause 5
- (E) System Description
- The system shall consist of a static UPS complete with the following components:
- | | |
|-----|--|
| (a) | Rectifier/charger. |
| (b) | Inverter. |
| (c) | Battery. |
| (d) | Automatic electronic no-break bypass circuit and switch. |
| (e) | Separate manual bypass switch. |
| (f) | Protective devices and measuring equipment. |
| (g) | The required controls and necessary equipment. |
| (h) | A self monitoring system with digital readout by means of which all critical functions can be checked. |

Note: Requirement (h) Is Only For Ups Systems Above 200 kVA

The system shall be capable of providing an uninterrupted supply to the load with the output characteristics as specified for a minimum period of **30 minutes** during a total mains failure

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(i.e. normal mains and standby generator supply failure). The batteries shall be rated at an AC load power factor of 0,8 lagging.

The complete system, including all controls shall be designed in such a way that the failure of any one vital central component will **NOT** cause a complete system failure. If necessary such a failure must be avoided by connecting the load directly to the mains by means of the bypass switch.

The UPS shall operate satisfactorily synchronous with the mains supply even under severe conditions of up to 100% unbalanced load.

The UPS shall be amply rated to carry the stated full load current. The UPS shall furthermore be capable of withstanding the following overloads.

Static Overloads: 100% of full load continuously.

125% of full load for 5 minutes.

150% of full load for 2 minutes.

165% of full load for 1 second with inductive decay after initial equipment switch on surge current.

Dynamic Overload : 300% for less than 5 msec.

1000% for less than 1 msec.

All component parts, cables and other connections shall be amply rated to withstand the overloads stated and maintain the input voltage **at the load** within the tolerances stated.

The equipment shall be designed for the maximum operating efficiency. The efficiency shall be determined when the system is delivering full load at 0,8 power factor with the batteries fully charged. The load required by the auxiliary equipment (controls, alarms, etc). electronic switches and cabinet fan shall be included in the determination of overall efficiency. A typical test report clearly showing how the efficiencies are calculated, shall be submitted with the tender.

It shall be the responsibility of the successful tenderer to ensure satisfactory operation of the complete system for the load to be supplied. It is, therefore, essential that the tenderer acquaint himself fully with typical load conditions before the tender closing date.

All cabinets containing thyristors shall be adequately screened and earthed to prevent direct radio frequency radiation.

Tenderers shall submit with their tenders a schematic diagram showing :

Input circuit breakers.

System busbars.

Rectifiers.

Batteries.

Inverters.

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Electronic switches.

Bypass circuit.

Detour circuit.

Fuse protection.

Output circuit breakers.

Oscillator.

Power supply circuits to oscillator, alarms, controls, etc.

Battery isolator.

The diagram shall also show the relative phase displacement of the rectifier transformers.

NOTE: This Is Not Applicable To Systems Below 200kVA.

(F) Inverter Oscillator

The inverter shall contain an oscillator capable of operating and maintaining the inverter output frequency as specified. The inverter oscillator shall be capable of frequency synchronisation and phase locking to the mains (or standby generator) power source frequency. When operating as a slave to the mains or standby power and a failure occurs in the slaving signal, the inverter oscillator shall automatically revert to a free running state and maintain the specified limits. All changes in output frequency to free run or synchronise shall be gradual to suit the load requirements.

(G) Rectifier

The UPS shall have its own rectifier and rectifier transformer which shall operate satisfactorily from the mains or standby supply.

The rectifier shall be of the solid state type providing full wave rectification of the input voltage suitably regulated to suit the input requirements of the inverter. Where necessary, a high grade DC filter shall be utilised to limit the output ripple to within acceptable levels for the inverter input. Current limiting features shall be provided to protect the rectifier. The current limiting settings shall be variable for final adjustment on site.

Voltage free contacts shall be provided for the malfunction alarms of the rectifier.

An input monitoring circuit shall be provided for the rectifier. This circuit shall switch off the rectifier when the r.m.s. value or frequency of the input voltage falls below present values.

The necessary protection circuitry shall be provided to switch off the rectifier if any one of the rectifier phases should fail, thus presenting an unbalanced load to the incoming supply.

The output of the rectifier shall be connected in parallel to the battery and inverter.

The rectifier shall have over temperature protection. Temperature sensing probes shall be placed on the thyristor housing, thyristor mounting, or on the heat sink close to the thyristor. The sensing of the off coming air temperature alone is not acceptable.

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Tenderers shall take into account the possible effects of harmonics that may be present on the input supply due to non-sinusoidal waveforms at the rectifier input, phase commutation, the effect of reactance during phase commutation etc. The input voltage monitoring circuits of the rectifiers shall be adequately filtered and buffered to ensure reliable load control and to prevent continuous on-off switching of the rectifiers.

For three phase units each of the three rectifier transformers shall have a different primary to secondary phase displacement in order to minimise the harmonics generated by the rectifiers.

NOTE: This Is Not Applicable For Systems Below 200 kVA

(H) Inverter

The inverter shall be adequately protected against any excessive overload or short circuits that occur in the load. Reactive current limiting or other methods shall be employed to render the thyristors short circuit proof. The successful tenderer shall replace any thyristors or any inverter components at his own expense if these should be damaged.

The necessary feedback and control circuits shall be incorporated to ensure satisfactory operation separately or in synchronisation with the mains supply under all conditions of dynamic load variations, stated overloads, severe unbalanced conditions and high operating temperatures. The thyristor bridge shall contain the necessary auxiliary circuitry to ensure satisfactory operation.

The output of the inverter shall be connected in parallel with the thyristor switch output.

Each inverter shall have over temperature protection similar to the over temperature protection for the rectifier.

A discharge device shall be provided across the D.C. input to the inverter, which will discharge any capacitors in the inverter module when it is switched off.

(I) Battery charger

The battery charger shall be a solid state, constant voltage type providing full wave rectification of the input voltage with the output regulated to an accuracy as specified. A high grade D.C. filter shall be utilised to limit the output ripple to the stated tolerance. Current limiting features shall be provided. The value of the current limit setting, shall be in accordance with the maximum allowable charging current that the batteries can withstand.

The maintained voltage on float charge shall be such as to give maximum life to the batteries whilst maintaining the maximum charge conservation and minimising gas formation and water loss. The optimum float charge voltage shall be specified by the battery manufacturer but is expected to be approximately 2,23 volts per cell. The voltage shall be kept within $\pm 0,5\%$ of the nominal value for all loads from no load to the full rated battery charger current when supplying the full output with batteries discharged.

(J) Computer rooms/office UPS installation

The rectifier shall be equipped with **2 independent** over voltage shutdown contacts for maximum charger security.

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The battery charger shall be designed to charge the batteries to 90% of its fully charged capacity within 14 hours and to 100% capacity within 20 hours.

The battery charger shall be capable of boost charging the batteries to 2,6 volt per cell. The boost facility shall be manually operated.

The battery charger shall be provided with a current limiting circuit.

The current limit setting shall be variable for easy adjustment on site.

The necessary voltage free contacts for the alarms and battery charger failures shall be allowed for in the tender price.

The battery charger shall have over temperature protection similar to the protection specified for the rectifier.

The battery charger shall have circuitry to inhibit the charging of batteries from the standby generator. This circuitry shall be activated by normally open contacts on the generator control panel. The interconnecting cables will be supplied and installed as part of this contract.

☐ NOTE: This requirement is only applicable for UPS systems above 200kVA

(K) Battery

The battery capacity shall be sufficient to provide full load for the specified time. The capacity shall be rated at a maximum specific gravity of 1,245 at 25 C and correctly filled.

Tenderers shall state the discharge capacity of the battery after 10 hours of charge and the battery voltage at its terminals under various conditions. The inverter shall switch off on low battery voltage.

The battery cells shall be of the maintenance free type.

The batteries shall give satisfactory service for a minimum period of **3 years**. Tenderers shall state the maximum expected lifetime of the batteries and motivate their statement, and provide a statement by the battery manufacturer supporting this and stating that the charger offered is suitable for the battery.

The cells must be mounted in a matching steel cabinet or in the same cabinet as the control equipment. The vented type cells should be mounted on a wooden stand, consecutively, numbered with positive and negative terminals clearly marked in a ventilated battery room.

The batteries shall be complete with cell inter-connectors and row inter-connectors. The output terminals shall be robust and adequately dimensioned for the output cable terminations.

The inter-connectors between cells and shall be made in a manner giving the lowest volt drop and maximum resistance to corrosion.

All connections to cells must consist of flexible cable to avoid mechanical stress at the cell terminals.

The tenderer shall describe the method of removal and replacement of a faulty cell.

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The battery shall be complete with a battery fuse isolator capable of breaking the full load current drawn by the inverter. These battery fuse isolators shall be installed in the inverter unit room or cabinet.

Terminal posts should be effective for the expected lifetime of the battery and should be effective even if the cell is overfilled.

The battery may be resistance grounded through 5000 ohm to 10000 ohm for the purpose of ground fault.

Tenderers shall submit full details with dimensioned drawings of the batteries offered.

Tenderers shall submit the calculations and motivations complete with curves supporting the selection of a specific battery cell.

All cabling for the battery shall be installed on PVC cable trays and fitted to the satisfaction of the engineer.

(L) Automatic by-pass switch

An integral automatic bypass switch shall be provided to transfer the critical load without break to the mains should the UPS unit fail. The latter unit shall simultaneously be disconnected from the critical load bus. This transfer shall, however, be inhibited if the mains is out of synchronism with the UPS output. Retransfer to the UPS output shall be on a manual or automatic command. This switch must have a cover fitted screwed to the panel so as to make the operating of this switch impossible without having first removed the cover. This switch cover must also have the following words etched in white with a red background mounted on or adjacent the cover: **CAUTION: BYPASS SWITCH ONLY: ONLY TO BE OPERATED BY QUALIFIED PERSONNEL**

The static switch should prevent "hunting" and after trying unsuccessfully to switch a maximum of **three** times the static switch should be inhibited from further switching.

- 3. CONSTRUCTION OF CUBICLES AND SWITCHBOARDS

All the converter equipment shall be housed in totally enclosed, free standing, floor mounted cubicles, designed to provide adequate ventilation for the equipment.

All cubicles shall be rigid with suitably braced doors providing front access.

All cubicles shall be vermin proof.

All equipment shall be mounted on the metal framework suitably arranged to provide safe operation and ease of access. Fuses and switchgear in particular should be safely accessible even under load conditions.

All power bridges, filters and other major components both in the inverter and rectifier, shall be completely withdrawable to facilitate rapid repair and/or replacement. The method of withdrawal shall be such that a complete module can be extracted in the operating condition so that checks and measurements may be made while in operation and access to all components facilitated.

All electronic printed circuit cards shall be of a good quality and shall be easy and simple to interchange.

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All auxiliary power supplies shall be duplicated and shall be connected so as to operate in parallel redundancy. At least two primary sources of power shall be provided for each of the power supplies in the system.

Flexible wires shall not be soldered directly onto terminals but shall have a crimped tab, which is soldered onto a terminal or post. The wire wrapping technique shall be employed for electronic circuits where possible.

The front panel alarms shall be clearly and adequately marked in both official languages. A single line mimic layout of the switchgear shall be provided on the front of the cubicles providing a graphic display of the circuitry of the equipment involved.

All input and output power cables shall be terminated using approved cable glands, onto a cable gland support bracket. The cable conductors shall terminate at the connecting busbars or shall be connected directly to the appropriate switchgear. All power cables shall be properly numbered with wrap around cable markers with punched figures to identify cables at each termination point.

4. INSTRUMENTATION AND CONTROLS

All the required instrumentation as indicated on the drawings shall be provided.

Supply and install all the necessary controls for the operation of the system. Facilities shall be provided for controlling the rectifier, switching the inverter on, switching the inverter output to the synchronous motor/alternator and controlling the bypass thyristor switch circuit.

All control switching of the rectifier and inverter as well as the bypass operation shall be pushbutton initiated.

Standard electronic equipment from overseas manufactures shall **not be accepted** if not duly protected with transsorb and metal oxide varistors in power supplies and external communication lines. Standard electronic equipment not internally protected with transsorb or MOV's may be protected externally by means of transsorb and MOV's mounted on klippon type terminals. All external communication and remote power supply lines shall be protected by means of transsorb and MOV's of sufficient rating mounted on klippon type terminals.

5. ALARMS

All alarms shall be of the tell tale type with memory features e.g. a flashing light indicates a fault coupled with an audible alarm. The pressing of the appropriate button shall cancel the audible alarm and allow the alarm lamp to burn continuously until the fault is removed.

The following minimum alarm conditions shall be monitored on the equipment:

- (1) Normal
- (2) Mains failure
- (3) Inverter failure
- (4) Shutdown imminent
- (5) Load on mains

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- (6) Overload
- (7) Charger fails

Where required a remote panel must be supplied and installed. The alarms indicated must duplicate all the alarms indicated on the UPS control panel. In addition a buzzer must be provided. Any alarm occurring must sound the buzzer to draw attention. An alarm accept pushbutton to silence the buzzer must be provided.

Provision shall be made on all the alarms mentioned above to be remotely monitored. Normally open contacts shall be supplied at the converter for each alarm for this purpose. The contacts shall close under an alarm condition.

6. VENTILATION

All equipment racks shall be positioned in logical fashion on the floor in a configuration, which will ensure proper ventilation

Each cubicle containing heat-generating equipment (thyristors, transformers electronic circuitry, filters, etc) shall, where necessary, have extraction ventilation fans mounted on the top of the cubicle to assist air circulation. These fans shall be fed from the output distribution panel of the uninterrupted power supply.

7. QUALITY ASSURANCE

The manufacturer shall be responsible for the performance as specified herein and to prove such performances to the satisfaction of the engineer. Except as otherwise specified, the supplier must utilise facilities acceptable to the engineer.

8. DRAWINGS

As soon as possible after the awarding of the contract, the successful tenderer shall at his expense submit to the engineer for approval, three prints of:

- (1) All general arrangement drawings.
- (2) Detailed dimensioned drawings of all plant and equipment.
- (3) Complete wiring diagrams and block schematic diagrams.

At the same time a list of all equipment designations, labels, etc. in both official languages shall be submitted for approval.

The approval of drawings shall not relieve the successful tenderer of his liability to carry out work in accordance with the terms of the contract.

On completion of the contract, a complete set of transparencies of all drawings of a quality acceptable to the engineer shall be handed to the engineer at the expense of the successful tenderer. These final drawings shall include:

- (1) A proper and accurate as-made wiring diagram of the complete installation showing circuit numbers, terminal strip numbers and conductor colours.

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- (2) A schematic diagram clearly showing functions and component values. A material list showing make, model and characteristics of all components of the control equipment and switchgear is to be included.
- (3) Fully dimensioned as-made physical layout drawing of the equipment, batteries and ventilation equipment.
- (4) A detailed **schedule** of all wiring.

The contract shall be deemed incomplete until all drawings have been received by the client.

9. INSTRUCTION OF OPERATOR AND MANUALS

After completion of the installation, and when the plant is in running order, the successful tenderer will be required to instruct an attendant in the operation of the plant, until he is fully conversant with the equipment and handling thereof.

Three (3) copies of maintenance, fault-localising and operating manuals together with the drawings required shall be handed over to the engineer.

10. TESTS

The complete testing including the provision of test facilities, instruments, dummy loads and switchgear at the manufacturer's premises in the Republic of South Africa shall form part of this contract. If the factory tests cannot be performed in the RSA, the client may, at his discretion and own cost, decide to attend tests at the supplier's overseas factory. Tenderers shall not allow for this.

For the test in the manufacture's premises the client shall be notified four weeks in advance in order that a representative can be sent to witness these tests.

10.1 Battery tests

- (1) The output voltage of the battery unit (i.e. all the cells making up one battery) shall be tested with the incoming supply removed.
- (2) The full rated load for the battery shall then be connected to it. The voltage shall be measured at 5 minute intervals for the duration discharge period.
- (3) The batteries shall be left to recharge. The voltage shall be checked after 14 hours with the load and incoming supply removed as well as with the load connected but incoming supply removed.
- (4) When fully recharged, the voltage and specific gravity of every cell shall be measured with the incoming supply removed.
- (5) The circulating A.C. current through and the A.C. voltage across the batteries shall be measured when the rectifiers are on with the battery discharged and fully charged.

10.2 Oscillator tests

- (1) Frequency within tolerances at all loads.

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(2) Parallel redundancy.

(3) Auto automatic synchronisation for connection of the synchronous motor/alternator to mains via the thyristor switch.

An electronic frequency counter shall be used to measure the frequency.

10.3 Rectifier tests

(1) Output voltage of rectifiers at no load and full load with batteries charged and not charged.

(2) Current limit, both for mains failure and return to mains.

(3) Switch off value mains input monitor.

(4) Sequential switch on for return to mains.

(5) Soft start circuits.

10.4 General

Ammeters will not be acceptable to prove the above items. A wave analyser and a recording oscilloscope will be required. Photographs shall be taken of the oscillograms by the contractor in the presence of the engineer.

The overall efficiency of the complete uninterrupted power supply shall be proved to be within the specified limit at full load and at no load.

The overcurrent protection mechanisms of the A.C.B. shall be proved by current injection (either primary or secondary)

The bypass and detour circuits shall be proved.

All alarms, indications and control functions shall be proved.

The test instruments provided shall in all cases be of high quality and suitable to be able to adequately assess the quantities being measured and the equipment being tested. All instruments shall be calibrated by a testing laboratory approved by the National Calibration Service of the CSIR. The test equipment remains the property of the successful tenderer.

At the completion of the tests, a full test report shall be submitted by the contractor to the engineer in triplicate.

Continuously adjustable dummy loads of a rating suitable to comprehensively test the UPS shall be provided by the contractor as well as any temporary cables required for the connection of the dummy load to the UPS on site.

11. CABINET

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The contractor shall supply and install a metal cabinet with lockable doors of sufficient size to house all operating and maintenance instructions, drawings, spares, tools, etc.

12. SCHEMATIC DIAGRAM

A schematic diagram of the complete system shall be mounted in a suitable place and shall be resin encapsulated.

13. AUXILIARY EQUIPMENT

Tenderers shall make all allowances for plant required (i.e. hoists, cranes, trolleys, etc.) ensuring positioning of the equipment in the UPS room.

14. UPS POWER PLUG OUTLET

All UPS power plug outlets must be of the red non-standard 3-pin type with the earth pin not earthed to the plug baseplate to facilitate the installation of a single earth connection earthing system. Each socket outlet must be provided with a red plug top.

Each socket outlet must be labelled with an engraved label indicating the power circuit number to which it is connected.

15. DISTRIBUTION WIRING

All sub-distribution wiring circuits must be wired as follows:

15.1 Mains power plug circuits

4 mm² PVC/copper in red and black conductors and a 2,5mm² bare copper earth.

15.2 UPS power plug circuit

4 mm² PVC/copper in blue and black and a green PVC insulated 2,5mm² earth wire.

The black neutral conductors must be clearly labelled at each end as follows: "UPS" or "OKT"

15.3 UPS Earthing

The main earth bar must be connected to the insulated earth bar of the UPS via a removable copper link bar.

All UPS boards must have insulated earth bars, separately earthed to a clean 1,2m earth spike by means of 70mm² insulated earth to obtain at least one ohm at the UPS board.

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PS4.2.19 Schedule of technical information

1. SYSTEM PARAMETERS

1.	Net output power of inverter system	200kVA
2.	Power factor for which the system is rated	Lagging
3.	Nominal input voltage	Volts
4.	Maximum input voltage tolerated	Volts
5.	Minimum input voltage tolerated	Volts
6.	Maximum input frequency deviation tolerated	Hz
7.	Maximum and minimum input power factor at rated KVA	kVA
8	Maximum harmonic input tolerated for successful operation	%
9	Nominal output voltage	Volts
10	Steady state output voltage regulation	Volts
11	Dynamic output voltage regulation:	

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(a)	Step load of 25% between 10% and 100% of full load	%
(b)	150% overload for 1 sec	%
(c)	Input voltage step variation of $\pm 15\%$	%
12	Time for voltage recovery to steady state:	
(a)	25% step load	ms
(b)	100% step load	ms
(c)	150% step load for 1 sec and then returned to 100%	ms
13.	Relative output phase angles at 100% unbalanced load (in degrees)	Degrees
14.	Maximum harmonic content of output voltage	%
15.	Overload capacity	
(a)	One hour	%
(b)	One minute	%
(c)	Ten seconds	%

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(d)	One second	%
(e)	Five msec	%
(f)	One msec	%
16.	Total input required with batteries charged for rated full load	KVA
17.	Total input required at full load and and battery discharged	KVA
18.	Allowable temperature rise across equipment at input air temperature of:	
(a)	25 °C	°C
(b)	30 °C	°C
(c)	32 °C	°C
(d)	35 °C	°C
(e)	40 °C	°C
19.	Heat dissipation under normal full load Running conditions:	
(a)	Converter	KW

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(b)	Battery	KW	
20.	Efficiency of the complete UPS system	<u>1.0p.f.</u>	<u>0.8p.f</u>
(a)	Full load	%	%
(b)	80% load	%	%
(c)	75% load	%	%
(d)	65% load	%	%
(e)	50% load	%	%
(f)	40% load	%	%
21.	R.M.S. value of the A.C. <u>current</u> component through the batteries for:		
(a)	Discharged battery	Amp	
(b)	Charged battery	Amp	
22.	R.M.S. value of the A.C. <u>voltage</u> component through the batteries for:		
(a)	Discharged battery	Volts	

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(b)	Charged battery	Volts
23.	Total number of cubicles	
24.	Total floor space required	m ²
25.	Dimensions of cubicle in mm	W
		H
		L

2. BATTERY CHARGER

1.	Type	
2.	Output voltage for trickle charge	Volts
3.	Steady state regulation of output voltage trickle to full load	± %
4.	Output voltage for input voltage fluctuation	
(a)	± 10%	%
(b)	± 15%	%
5.	Ripple content (%)	%
6.	Current limit value	Amp

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7.	Input voltage at which battery charger switches off	
(a)	Maximum	Volts
(b)	Minimum	Volts
8.	Maximum switch on inrush current	Ampere
9.	Battery charger overload protection (type)	
10.	Efficiency	%
11.	How is the effect of harmonics on input voltage minimised ?	

3. OSCILLATOR

1.	Type of oscillator (RC, crystal, etc.)	
2.	Stability:	
(a)	With oscillator supply fluctuation	± %
(b)	Temperature variation	± °C
(c)	Number of power supplies in parallel redundancy	

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3.	Number of batteries from which oscillator is fed	
4.	Minimum time synchronise to mains frequency	sec

4. INVERTER

1.	Maximum continuous power output (kVA)	KVA
2.	Nominal output voltage	Volts
3.	Maximum harmonic content	%
4.	Nominal input voltage:	
(a)	Maximum	Volts
(b)	Nominal	Volts
(c)	Minimum	Volts
5.	Input current at full load	Ampere
6.	Input power factor at full load	Lagging
7.	Efficiency at full load	%

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8.	Overload protection	

5. STATIC SWITCH

	Does switch comply to clause 3.2.2.12	
1.	Describe electronic switch	
2.	Minimum power factor at which switches will operate satisfactorily	
3.	How does switch derive operating signal ?	
4.	Maximum break time for switchover	ms

6. BATTERIES

1.	Manufacturer	
2.	Country of origin	
3.	Type	

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4.	Type No	
5.	Total number of cells	
6.	Number of cells per inverter	
7.	Battery voltage (float conditions)	Volts
8.	Battery voltage (Boost charge)	Volts
9.	Capacity (rated for time required)	Ah at
		Hrs
10.	Battery time offered under load conditions specified in Clause 2.17 Part 2) and (Clause 3.2.2.5 (Part 3)	Minutes
11.	Maximum output current	Ampere
12.	Cell voltage under float conditions	Volts
13.	Cell conditions under boost conditions	Volts
14.	Cell voltage at start of discharge and full inverter load	Volts
15.	Cell voltage at end of discharge period	Volts
16.	Expected lifetime of batteries	Years



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17.	Time to charge to 90% capacity	Hrs
18.	Total time to charge to 100% capacity	Hrs
19.	Material of supporting framework	
20.	Finish of framework	
21.	Dimensions of each cell	W
		H
		L
22.	Design of positive plate of cell	
23.	Rating of fused isolator	Ampere
24.	Cell configuration	

(i) 7. SYSTEMS ABOVE 200kVA

1.	No of shelves	
2.	No of rows/shelves	
3.	No of tiers/shelves	



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4.	Shelf length	
5.	Shelf height (incl. Batteries)	

NOTE : ALL BATTERY CALCULATIONS INCLUDING CURVES SHALL BE INCLUDED IN THE TENDER

8. DETAILS OF MANUFACTURE OF UPS

1.	Manufacturer	
2.	Address	
3.	Country of origin	
4.	Make or trade name of equipment	
5.	Manufacture's type no.	
6.	Is tenderer an accredited agent ?	YES/NO
7.	Furnish details of maintenance and repair service facilities which can be rendered.	



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PS5 MANAGEMENT OF THE WORKS

PS5.1 Planning and Programming

PS5.1.1 Work plan

Seven days prior to commencing with any part of the Works, the Contractor shall submit to the Employer's Agent, for review and approval, a work plan detailing the procedure and schedule to be used to execute such works, detailing and substantiating any deviation from the originally proposed approach. Further, the work plan shall include a:

- a) time frame;
- b) description of all equipment and tools to be used;
- c) list of personnel and their qualifications and experience (including back-up personnel in the event that an individual is unavailable);
- d) schedule of work activity;
- e) safety plan (clearly highlighting any potentially hazardous substances to be used);
- f) Contingency plans for possible problems.

The approval given by the Employer's Agent shall in no way relieve the Contractor of the ultimate responsibility for the satisfactory completion of the work as prescribed under this Contract

Work plan shall be comprehensive, realistic and based on actual working conditions. Further it shall form the various sub-sections of the overall Contract programme and plan

NOTA BENE: No works shall be allowed to commence without an approved work plan.

PS5.1.2 Planning

The Contractor shall ensure that he:

- a) is well informed with regard to the Employer's overall maintenance programme and avail resources as required to efficiently complete this Contract; and
- b) delivers goods and services timeously to meet the Employer's prevalent performance standards and where applicable to not unnecessarily delay any other contractors, service providers and suppliers.

PS5.1.3 Programming

In order to ensure a clear understanding, at the beginning of the Contract, of the programming and documentation format requirements, the Contractor shall appoint a project programmer/planner for liaison during the Contract. The Contractor shall for the Contract Period provide and regularly update (maximum monthly) a Contract Programme.

The programme shall at minimum contain:

- a) Time Scale (minimum):

Employer:		Contractor:	
Witness:		Witness:	

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- i) Days, where the period does not exceed three months. Weeks, where the project period exceeds three months.
- ii) Months, where the period does not exceed one year.
- iii) Years, where the project period exceeds one year.
- b) Tasks: Where phases or stages are anticipated, this shall be the highest level of division, and all tasks related to the successful accomplishment of that phase of the area shall be grouped. Resources allocation and task dependency shall be indicated.
- c) Start and Finish Dates: All tasks shall have specific start and finish dates.
- d) Critical Path: All tasks forming the programme line that will establish any delays in the overall Contract Period shall be clearly indicated and an indication of their sensitivity characteristics shall be provided.
- e) Progress Tracking: The Contractor shall be required to periodically indicate progress per task graphically and on a percentage basis.
- f) Non-working Time: All South African public holidays, weekends and the local traditional annual builder's break shall be incorporated in the programme.
No deviation from the approved sequence of construction shall be accepted without prior written approval.

The programme shall not be in the form of a bar chart only but shall show clearly the anticipated quantities of work to be performed each month, together with the manner in which the listed plant is to be used, as well as the anticipated earnings for the various sections of work.

NOTA BENE: A Contract programme shall be submitted to the Employer's Agent no later than the period stated in contract data after Contract Commencement Date.

The Contractor shall provide the Employer's Agent with a method statement indicating the manner and sequence in which he intends to construct the works, for each work area, with the program. In the method statement the Contractor must address at least the following items:

- a) sequence of the works for the relevant works area;
- b) target dates for the tasks identified in sequence of the works for the relevant works area;
- c) materials requirements;
- d) construction Plant to be used;
- e) services affecting construction; and
- f) any factors that could affect construction progress after commencement.

The method statement must be approved by the Employer's Agent before commencement of construction. In order to minimize the impact on traffic, pedestrians and business the Contractor will be required to segment the works in such a manner that no portion of the works is more than one day ahead of the following position. These segments of the works shall be clearly defined in the Contractor's method statement for each work area.

If, during the progress of the work, the quantities of work performed per month fall below those shown on the program or if the sequence of operations is altered, or if the program is deviated from in any other way, the Contractor shall, within one week after being notified by the Employer's Agent, submit a revised program.

If the program is to be revised by reason of the Contractor falling behind his program, he shall produce a revised program showing the modifications to the original program necessary to ensure completion of the Works or any part thereof within the time for completion. Any proposal to increase the rate of work must be accompanied by positive steps to increase production by

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Witness:		Witness:	



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providing more labour and plant on the Site, or by using the available labour and plant in a more efficient manner.

Failure on the part of the Contractor to submit or to work according to the program or revised program shall be sufficient reason for the Employer to take steps as provided for in the General Conditions of Contract 2015.

The approval by the Employer's Agent of any program shall have no contractual significance other than that the Employer's Agent would be satisfied if the work is carried out in accordance with such program and that the Contractor undertakes to carry out the work in accordance with the program. It shall not limit the right of the Employer's Agent to instruct the Contractor to vary the program should circumstances make this necessary.

PS5.2 Software application for programming

The construction programme shall be completed in Microsoft ® Project Standard 2007 or compatible software. The construction programme and updated versions thereof shall be made electronically available to the Employer's Agent.

PS5.3 Methods and procedures

The Contractor shall submit to the Employer's Agent, within a period stated in the Contract Data, a detailed construction programme, detailing the date of commencement and completion of the work activities. The detailed programme shall be based on the preliminary programme submitted with the tender and shall make an allowance for the following:

- Normal working hours shall be defined as between 07:00 and 17:00 Mondays to Fridays.
- No work outside working hours will be allowed. Should the Contractor wish to work outside normal working hours written permission shall be obtained from the Employer's Agent and all additional costs arising out of such work shall be entirely to the Contractor's account.

The Employer's Agent shall provide the Contractor with drawings and details of the Works that need to be done.

Once a detailed programme has been approved, the Contractor shall not deviate from the planned operations.

PS5.4 Quality plans and control

The onus to produce work that conforms in quality and accuracy of detail to the requirements of the specifications and drawings rests with the Contractor, and the Contractor shall, at his own expense adhere to the quality monitoring system set by Employer's Agent and where not available, the contractor will institute their quality monitoring system as long as it conforms with the required SANS standard. The contractor must provide the experienced personnel, together with all transport, instruments and equipment to ensure adequate supervision and positive control of the works at all times.

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Witness:		Witness:	



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The cost of supervision and process control will be deemed to be included in the rates tendered for the related items of work.

On completion and submission of every part of the Works to the Employer's Agent for examination, the Contractor shall furnish the Employer's Agent with proof of quality in the form of a data pack containing measurements, inspection request, daily diaries to indicate compliance with the scope of work.

PS5.5 Access to the properties

The contractor shall make necessary arrangement with the employer before accessing the properties.

PS5.6 Other Contractors on site

There may be other Contractors working within the same area. As such, the Contractor is required to make adequate allowances for such possibilities. No claims with respect to works being carried out by other contractors shall be entertained by the Employer.

PS5.7 Testing, completion, commissioning and correction of defects

The onus is on the Contractor to produce goods and services which shall conform in quality and in accuracy of detail to the requirements hereinafter specified. The Contractor must clearly understand that it is not the duty of the Employer's Agent or his representative to act as foreman or surveyor on the Works.

The Contractor shall, at his own expense, provide experienced Employer's Agents, foremen and surveyors together with all instruments and equipment for supervising, checking and controlling the work.

The act of passing any completed work or accepting materials or goods for payment by the Employer's Agent shall not be construed as signifying approval or acceptance thereof. Failure on the part of the Employer's Agent to reject any defective work or material or goods shall not in any way relieve the Contractor of his obligations under the Contract, nor prevent later rejection when such work or material is discovered.

The Contractor shall, when submitting any work to the Employer's Agent for examination, satisfy himself by testing, measurement and otherwise as may be necessary that the work does in fact meet with the requirements of the Specifications. This information shall be submitted with the Contractor's request for examination and the Employer's Agent shall be authorised to decide on the number and type of tests, measurements, etc. required to enable him to judge the quality of the work. The submission of this information shall in no way diminish the authority of the Employer's Agent to conduct such tests as he may consider necessary in order to determine the quality of the work performed by the Contractor, nor shall he be bound to take account of the Contractor's tests, measurements, etc. should he consider these to be either incorrect or not representative.

Quality control and completion tests shall be in accordance with the relevant standard and amended specifications and additional specifications.

Employer:		Contractor:	
Witness:		Witness:	



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PS5.8 Format of communications

The Contractor and Client shall follow the communication protocol through the Employer's Agent and Contractor representatives. Communication media applicable shall be site meetings, telephone, letter and email.

PS5.9 Key personnel
PS5.9.1 General

The key role players involved or associated with the contract are listed below with references made to the General Conditions of Contract:

- The Employer (GCC, Clause 1.1.1.15)
- The Employer's Agent (GCC, Clause 1.1.1.16)
- The Employer's Agent's Representative (GCC, Clause 1.1.1.17)
- The Contractor (GCC, Clause 1.1.1.9)
- The Contractor's Site Agent (GCC, Clause 4.12.2)
- Responsible person in terms of the OHAS Act (GCC, Clause 3.1.4)

Please note that the Contractor will be required to provide key personnel similar to or of higher qualifications and experience as stated in Contract Data Section.

PS5.10 Management meetings

Monthly site meetings shall be arranged and facilitated by the Employer's Agent or his representatives. Senior Contractor management staff attendance shall be compulsory. The Contractor shall be required to provide reporting with regard to project progress, resources (human, plant and equipment), community issues, environmental and health and safety aspects.

PS5.11 Forms for contract administration

The Contractor shall maintain a file which shall contain project information related to project progress, resources (human, plant and equipment), community issues, environmental, health and safety aspects, quality control, penalties imposed, claims lodged and outcomes, disputes and resolutions, payment and variations.

PS5.12 Daily records

The Contractor shall keep daily site records as required by the Employer or his representative and as specified herein. Daily records shall include, labour, plant, materials, rainfall, environmental issues, health and safety issues, daily diary and the like. Such records shall be the property of the Employer and shall be made available to the Employer or his representative within 24 hours from being requested to do so.

Employer:		Contractor:	
Witness:		Witness:	



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PS5.13 Bonds and Guarantees

In addition to GCC 2015 Clause 8.6, the Contractor shall provide the Form of Guarantee for the due and punctual fulfilment and completion of all the Contractor's obligations under the Contract. No extension of time of the Contract Period of Performance or neither any variation of the Contract, nor the determination of the Contract by the Employer in terms of Clause 8.6 hereof, shall in any way impair or diminish or terminate any liability to the Employer under and by virtue of such Guarantee.

Should the Contractor, when notified of the acceptance of his offer, fail to provide an approved Guarantee within the stated period, then the Employer may, at his sole discretion:

- (a) Grant the Contractor a further reasonable period in which to provide the bond; or
- (b) Withdraw his acceptance of the tender in which case the Contract shall be deemed to be void, but without prejudice to the Employer's rights to recover whatever damages he may have suffered by virtue of the Contractor's failure to fulfil his obligations.

PS5.14 Payment Certificates

Measurements will be done continuously between the Employer's Agents Representatives and the Contractor on dates and times agreed on. Dates must be arranged by these parties. The progress of the following items will be recorded hereunder:

- The Contractor will provide a certificate with quantities to the Employer's Agent before or on the date to be advised by the employer.
- After the payment certificate has been approved by Employer's Agent, the Contractor must issue a VAT invoice. The certificate will then be ready for processing.
- Payment certificates must be completed monthly and submitted to the Employer's Agent before or on the to be advised by the employer each month.
- The Contractor shall note that payment shall only be made for Works activities successfully (delivering the end result) executed, complying with the quality requirements and provided to the Employer's Agent or his duly authorized representative.

Employer:		Contractor:	
Witness:		Witness:	

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PS6 FEATURES REQUIRING SPECIAL ATTENTION

PS6.1 Security

The Contractor shall be responsible to provide security on site(s):

- a) as he deems necessary. The Employer shall not be held responsible for any loss or damage(s) suffered by the Contractor, his plant, equipment, materials or employees as a result of a security incident of any nature.

- b) which have been identified, by the Employer's Agent and/or Employer, as potential high risk areas requiring security during site visits for the duration of the contract. The Contractor shall arrange that the security meet with the Employer's Agent and/or Employer representative at a convenient and safe location and thereafter escort to the necessary areas.

PS6.2 Sanitary facilities

The Contractor is required to supply adequate sanitary facilities for employees, visitors, the Employer's Agent.

Employer:		Contractor:	
Witness:		Witness:	

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PS7 HEALTH AND SAFETY FOR CONSTRUCTION WORK

- a) The Occupational Health and Safety Specification of the Employer's is bound in these contract documents forms an integral part of the Contract Specification and, in particular, shall be a part of the HEALTH AND SAFETY SPECIFICATION FOR CONSTRUCTION WORK.

In terms of Construction Regulations 4 (1) (a) of the Occupational Health and Safety Act, Act No 85 of 1993, the Client is required to compile an occupational health and safety specification for any intended project and to provide the specification to prospective tenderers.

The objective of this specification is to ensure that the principal Contractor entering into a contract with the Client achieves and maintains an acceptable level of occupational health and safety performance.

The specification provides the requirements that the principal Contractor and other Contractors shall comply with in order to reduce the risks associated with the contract work, and that may lead to incidents causing injury and/or ill health, to a level as low as reasonably practicable and possible.

The Contractor, appointed by the Employer in terms of Regulation 4 (1) (c), is required to prepare an occupational health and safety plan.

This plan has to be prepared in terms of Regulation 5 (1) as well as the Client's occupational health and safety specification. In terms of Regulation 4 (2), the Client and the principle Contractor are required to agree on the occupational health and safety plan before any work may commence.

The principal Contractor's health and safety plan has to follow the framework in Volume 2, as a minimum.

PS 7.1 Site Specific Health and Safety Issues

- b) The following site-specific assessment of health and safety issues includes a list of risk assessment headings that have been identified by the client as possibly applicable to the contract work for this project.

- Cutting of pipes
- Distribution boards – Electrical
- Drivers – of vehicles
- Electrical installation – Maintenance
- Excavator
- Gas explosions
- Fire prevention and protection
- Form and support work
- Front end loader
- Fuel supply
- Gas welding-cutting operations

Employer:		Contractor:	
Witness:		Witness:	



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- Hand and spray painting
- Hand tools
- Landscaping
- Laying of pipes
- Levelling – of materials
- Loading supervisor
- Loading/unloading - of trucks
- Machine operator
- Making of steel items
- Material delivery
- Material handling
- Mixer operator
- Pedestal drill
- Pedestal grinder
- Placing concrete
- Portable ladders
- Refuelling vehicles/plant
- Scaffolding
- Site establishment
- Trenches – Digging of
- Trees – Bracing/removing if roots are
- Damaged during excavations
- Use of angle grinder
- Use of portable electrical tools
- Work in confined spaces
- Work in elevated positions
- Working close to existing services i.e. electrical, wastewater etc
- Working close to water
- Workshops

PS 7.2 Barricading of Trenches

The Contractor shall ascertain himself of the nature, volume, stability, depth and possible safety risks of the excavations, before any decision with regards to the method of excavation is made.

Allowance for hand excavation has been made for the location of services. Extreme caution shall be taken when excavating along the route of the new pipe for existing services. Any damages and or repairs to the existing services will be for the Contractor's account.

The length of open excavation must at all times not exceed 100m

Adequately protected by a barrier or fence comprising fluorescent orange plastic netting of height at least 1 000mm and as close to the excavation as practicable; and

Employer:		Contractor:	
Witness:		Witness:	

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- The barrier or fence (at least 1m high) shall be suitably wrapped with reflective red and white danger tape or provided with flashing orange lights, placed at 15m intervals along the barricading at night.
- Where the depth of an excavation or the nature of the material excavated renders the sides of the excavation liable to movement that might endanger the works or the workers engaged on the excavation,
- the sides of the excavation shall be supported by suitable timber or other sheeting adequately strutted and braced, all properly assembled and of sufficient strength and stiffness to prevent movement in the materials supported, or, alternatively,
- the slope of the excavated face or faces shall be reduced so that any danger to the works or workers is removed.

Any cavities formed by the fall of rock or earth due to rain, flooding, insufficient timbering or other causes, shall be adequately filled.

The Contractor shall so maintain borrow pits that they do not become a danger to persons or livestock.

Trenches may not be left open during the builder's holidays or for any shutdown period exceeding 5 calendar days. Should the Contractor not comply with this requirement without the written approval of the Employer's Agent; the Employer's Agent shall have the open trenches closed by others at the expense of the Contractor. Furthermore, all further opening-up of the backfilled excavation and dealing with the excavated material and subsequent making good will all be to the Contractor's cost.

PS 7.3 Precaution against Pollution and Contamination

The Contractor shall take all necessary steps and precautions to prevent pollution of the surrounding area by his employees in any way. Any debris falling from construction vehicles and plant shall be removed immediately.

Every care is to be taken to avoid possible contamination of the mains during construction. Pipes are not to be stacked in the streets or gutters. On completion of a section, all loose material and foreign bodies are to be removed. The open ends of the new pipeline are to be protected by watertight caps, to the satisfaction of the Employer's Agent, to prevent the entrance of groundwater and foreign bodies until such time as these sections are connected to the live mains.

PS 7.4 Operations under Live Conditions

Prior to the execution of any operation under live conditions, the Contractor shall liaise with the relevant Depot Manager, at least 7 working days in advance, in this regard. At least one representative of the Depot shall be present during the execution of such operation. These operations will include disconnection and reconnection to the existing Sewer/ Storm water main and Water storage tank at the works.

Employer:		Contractor:	
Witness:		Witness:	



PORTION 2: VARIATIONS AND ADDITIONS TO THE STANDARDISED SPECIFICATIONS

PSA GENERAL

PSA 2 INTERPRETATIONS

PSA 2.3 DEFINITIONS

a) General

ADD THE FOLLOWING DEFINITIONS:

“General conditions: The General Conditions of Contract specified for use with this Contract and the special conditions of Contract as applicable.

Specified: As specified in the standardized specifications, the Drawings or the Project Specifications. Specifications shall have the corresponding meaning.”

c) Measurement and payment

REPLACE THE DEFINITIONS FOR “fixed charge”, “time-related charge” AND “value-related charge” WITH THE FOLLOWING:

“Fixed charge: A charge that is not subject to adjustment on account of variation in the value of the Contract amount or the Contract Time of Completion.

Time-related charge: A charge, the amount of which varies in accordance with the Time for Completion of the work, adjusted in accordance with the provisions of the Contract.

Value-related charge: A charge, the amount of which varies pro rata with the final value of the measured work executed and valued in accordance with the provisions of the Contract.”

PSA 3 MATERIALS

PSA 3.1 QUALITY

ADD THE FOLLOWING:

“All manufactured materials supplied shall be new materials unless the contrary is specified. All materials specified in accordance with SANS Specifications shall bear the SANS mark, whether so specified or not.”

ADD THE FOLLOWING SUB-CLAUSE:

“PSA 3.3 ORDERING OF MATERIALS

Employer:		Contractor:	
Witness:		Witness:	



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The quantities set out in the Schedule of Quantities have been carefully determined from calculations based on data available at the time and should therefore be considered to be approximate quantities only. Before ordering materials of any kind the Contractor shall check with the Employer's Agent whether or not the scope of the work for which the materials are required is likely to change substantially. No liability or responsibility whatsoever shall be attached to the Employer for materials ordered by the Contractor except when ordered in accordance with written confirmation issued by the Employer's Agent."

PSA 4 PLANT

PSA 4.1 SILENCING OF PLANT

"The Contractor's attention is drawn to the applicable regulations pertaining to noise and hearing conservation, framed under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) as amended.

The Contractor shall at all times and at his own cost, be responsible for implementing all necessary steps to ensure full compliance with such regulations, including but not restricted to the provision and use of suitable and effective silencing devices for pneumatic tools and other plant which would otherwise cause a noise level in excess of that specified in the said regulations.

Where appropriate, the Contractor shall further, by means of temporary barriers, effectively isolate the source of such noise in order to comply with the said regulations."

Employer:		Contractor:	
Witness:		Witness:	

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PART 4: SITE INFORMATION

Employer:		Contractor	
Witness:		Witness:	



Part 4: Site Information

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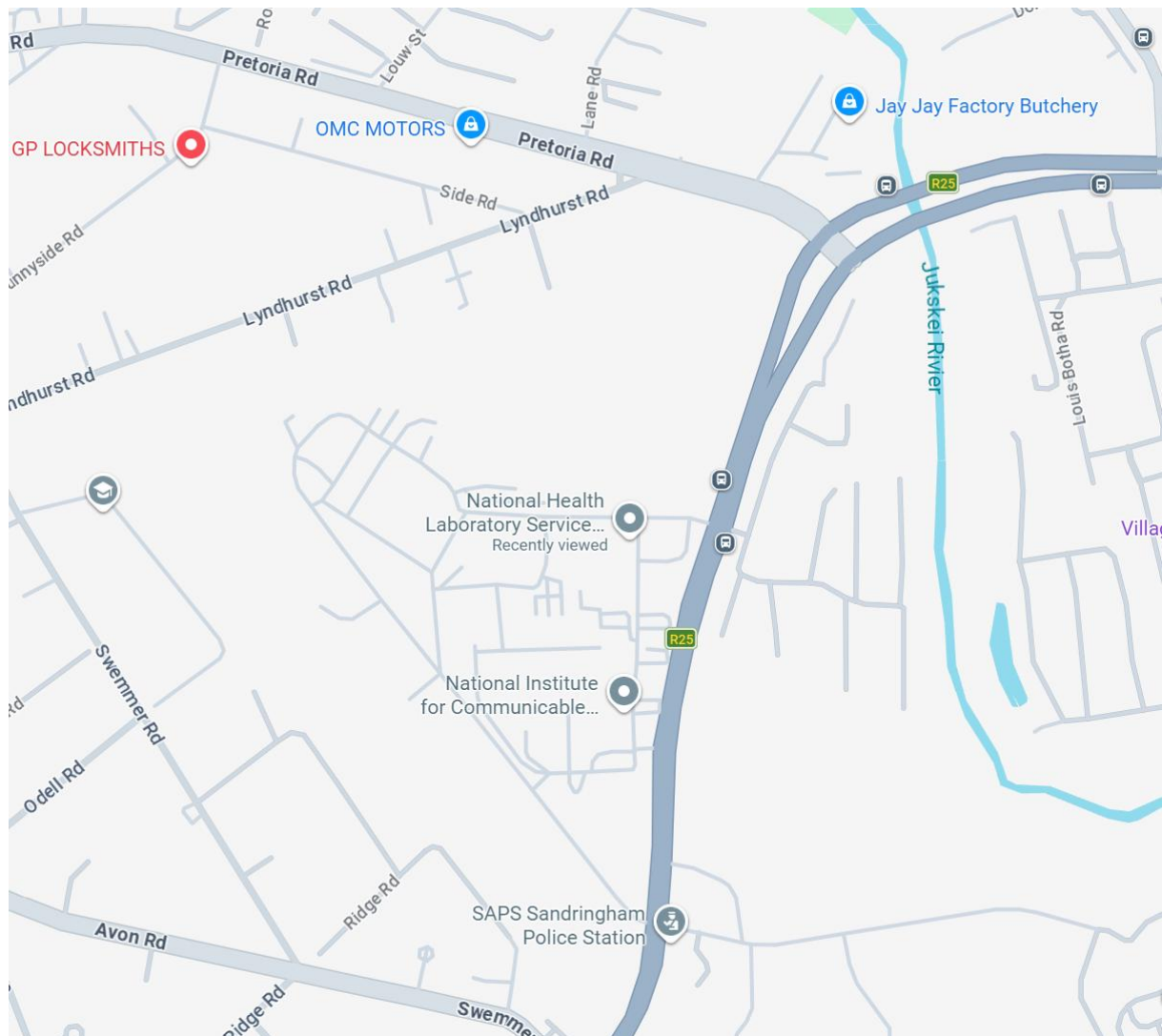
C4 SITE INFORMATION

C4.1 GENERAL

This section describes the site at the time of tender to enable the tenderer to price his tender and to decide upon his method of working and programming and risks.

C4.2 SITE LOCATION

The project is located in 1 Modderfontein road, Sandringham, Johannesburg



Employer:		Contractor	
Witness:		Witness:	

C4.3 ACCESS TO SITE AND RESTRICTIONS

Any permission as may become necessary shall be the responsibility of the Contractor to obtain.

Having been granted access to works areas by the Employer, and other service authorities, the Contractor shall adhere to any agreed conditions of access and ensure the works area is left in a condition similar to when it was first accessed.

The Contractor shall provide temporary access to the works as may be required by him and to the approval of the Employer's Agent.

Having been granted access to works areas by the Employer, other service authorities and private owners, the Contractor shall adhere to any agreed conditions of access and ensure the works area is left in a condition similar to when it was first accessed

No restriction on access to the site of works will be placed on persons or vehicles involved with the execution of the works. All traffic must be restricted to the maximum speed of 40 km/h and vehicles must be driven with extreme caution.

The Contractor's staff shall be identified by either clothing bearing the contracting companies name or an identification tag, which shall be displayed when entering the site of works.

Access is to be made available to NHLS's employees to any portion of the Site whenever required.

C4.4 EXISTING SERVICES, SERVITUDES AND WAYLEAVES

Approximate positions of existing underground services are indicated on the construction drawings and wayleave approval drawings by service providers. The services must be located by hand and any deviation of the positions of such services must be reported to the Engineer immediately. Should the Contractor find underground services, which are not indicated on the construction drawings at all, the Engineer must be notified immediately. In both cases the Engineer shall assess the situation and instruct the Contractor on an appropriate course of action to be taken.

The attention of the Contractor is drawn to the fact that many services share the same footway.

Should the Contractor damage an existing service he shall immediately contact the Engineer who will investigate the matter and determine liability for the damage.

All cables and pipes shall be considered "live" unless confirmed otherwise by the relevant authority.

The positions of known services cannot be guaranteed. On establishing on Site, the Contractor must determine the positions of all existing services in the various areas of work. The Contractor must take precautions to prevent any damage to existing services and infrastructure. Damages which might occur will be repaired at the cost of the Contractor.

It is envisaged that no permits or wayleaves will be required.

Employer:		Contractor	
Witness:		Witness:	

For detailed specification the Contractor shall refer to clauses PS 1.5 (Temporary Works), PS 4.4 (Existing services), and PS 4.8 (Permits and wayleaves), Part 3: Scope of Work.

C4.5 SECURITY

The Contractor shall be responsible for the security of his personnel, materials and construction plant on and around the site of the Works and for the security of his camp, and the Client in this regard will consider no claims.

Refer to clause PS 6.1 (Security)

C4.6 NATURE OF GROUND AND SUBSOIL CONDITIONS

The Contractor shall satisfy himself concerning all matters relating to the nature the ground and subsoil conditions in terms of the General Conditions of Contract. Provision is made in the Bill of Quantities for the importing of materials for pipe bedding, deficiencies in backfilling and for material tests as required by the Employer's Agent.

C4.7 GEOTECHNICAL REPORT

No Geotechnical Report is available.

C4.8 HYDROLOGICAL REPORT AND FLOODLINES

No hydrological and flood lines report available.

Employer:		Contractor	
Witness:		Witness:	

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**OCCUPATIONAL HEALTH AND SAFETY
SPECIFICATIONS**

Employer:		Contractor	
Witness:		Witness:	

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1. HEALTH & SAFETY

1.1 Introduction and Background

A. Background

The Construction Regulations to the Occupational Health and Safety Act (Act 85 of 1993) which were promulgated in July 2003 place the onus on the Employer (defined as the Client in terms of the Construction Regulations) to prepare a preconstruction health & safety (H&S) specification, highlighting all risks not successfully eliminated during design.

B. Purpose of the Pre-Construction Health and Safety (H&S) Specification

The purpose of the pre-construction H&S specification is to assist with the achievement of compliance with the OHS Act, and in particular with the Construction Regulations, so as to reduce incidents and injuries on the project. The pre-construction specification enables Tenderers to make adequate financial provisions in their tenders to cover the H&S requirements of the project and thereafter, for the Contractor and its sub-contractors to use as the basis for the preparation of the construction Phase H&S plan.

The pre-construction specification sets out the basic requirements to be met by the Contractor and all sub-contractors so that the H&S of all persons potentially at risk may receive a priority at least equal to the other facets of the project such as the standard of workmanship, costs, programme, environment, etc.

C. Status of the Preconstruction Health and Safety Specification

The Client's H&S specification will form an integral part of the contract, and Tenderers are required to use it during the tender phase for pricing the preparation a project-specific construction phase H&S plan prior to commencing any work and for pricing the costs of ensuring compliance thereto during the entire construction phase.

Tenderers shall forward a copy of the H&S specification to all other persons or organizations who may be preparing to submit prices to the Tenderer during their tendering phase so that they can also price for preparing their own H&S plans relating to their individual operations and for complying with the H&S requirements during the construction phase.

1.2 Health and Safety Specification

A. Scope

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This health and safety (H&S) specification is the Client's H&S specification prepared in accordance with Clause 4(a) of the Construction Regulations. It covers the requirements for eliminating and mitigating incidents and injuries during the construction phase of the project. The specification addresses legal compliance, hazard identification and risk assessment, risk control, and promoting a health and safety culture amongst those working on the project. The specification also makes provision for the protection of those persons other than employees of the Principal Contractor and Contractors.

B. Interpretation

Application

- a) This specification is a compliance document drawn up in terms of South African legislation and will therefore be binding on the Contractor. It must be read in conjunction with all of the other contract documentation and also with all the relevant statutory documents.
- b) This specification is not intended to over-ride, or in any way to amend, the statutory/regulatory documents and, in the event of there being any conflict, the legislation will take precedence.

Definitions

The definitions as listed in the Occupational Health & Safety Act 85/1993 and Construction Regulations (July 2003) shall apply to this H&S specification. More specifically, where used in this H&S specification, "Principal Contractor" means the Contractor, "Contractor" means sub-contractors to the Principal Contractor, and "Client" means the Employer or his/her duly appointed Agent.

C. Minimum administrative requirements

Notification of Intention to Commence Construction Work

- a) On receipt of the Client's notification of award of the contract and, in any event before any construction work commences, the Principal Contractor shall notify the Provincial Director of the Department of Labour in writing of the intention to undertake construction work.
 - b) Annexure A to the Construction Regulations must be used for that purpose. A copy of the completed notification must be forwarded to the Client and to the Engineer and a copy shall be attached to the H&S plan. The addresses of the nine Provincial Directors of the Department of Labour are given in Clause 1 of the General Administrative Regulations to the OHS Act.
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Assignment of the CEO's Responsibility for Health and Safety on Site

- a) In terms of Section 16 of the Act, the CEO's of the Client, the Engineer, the Principal Contractor and all other Contractors shall make the requisite assignments of their responsibilities in writing prior to commencement of work on site. Copies of the completed forms shall be attached to the H&S plan.

Appointment of the Construction Supervisor

- a) The Principal Contractor's CEO (or his duly assigned employee) shall appoint (in writing) a full time competent person to supervise the construction work. One or more competent persons may also be appointed (in writing) to assist the appointed construction supervisor should the Principal Contractor deem it necessary or desirable.
- b) The Principal Contractor's and the Contractors' competent persons for the various roles shall fulfil the criteria as defined the Construction Regulations. Copies of these appointments, together with proof of competence of the individuals concerned, shall be attached to the H&S plan. Proof of competencies shall take cognisance of the definition of a "competent person" as set out in the Construction Regulations and may comprise CV's and written motivations / recommendations by the persons' direct report.

Compensation of Occupational Injuries and Diseases Act 130 of 1993 (COIDA)

- a) The Principal Contractor shall, prior to commencing work on site, submit a letter of good standing with its Compensation Insurer to the Client and to the Engineer as proof of registration. All other Contractors shall submit their proof of registration to the Principal Contractor before they commence work on site. Copies of these documents shall be attached to the H&S plan.

Occupational Health and Safety Policy

- a) The Principal Contractor and all other Contractors shall submit to the Client and to the Engineer, a copy of their organisation's H&S Policy signed by their Chief Executive Officer. Each policy must include a description of the organisation and state the H&S objectives and how they will be achieved and implemented by the organisation. Copies of these policies shall be attached to the H&S plan.

Health and Safety Organogram

- a) The Principal Contractor shall submit an organogram, outlining the H&S site management structure including those of all other Contractors. In cases where appointments have not been made, the organogram shall reflect the intended

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positions, and the names shall be filled in as and when the appointments are made.

- b) The organogram shall be updated whenever there are any changes in the site management structure and/or personnel. A copy shall be attached to the H&S plan.

Health and Safety Representative(s)

- a) The Principal Contractor and all other Contractors shall, after due consultation with the parties concerned, ensure that an H&S Representative is appointed in writing as soon as there are 20 persons employed on a site. Additional H&S Representatives are required once the workforce exceeds 50 persons. Copies of the appointments are to be attached to the H&S plan.
- b) Each H&S Representative(s) is to be trained to carry out their respective functions and must carry out regular inspections, keep records, and report all findings to the responsible person forthwith, and also at the next H&S meeting. Copies of these documents are to be kept in the Project H&S File.

Health and Safety Committees

- a) Provided that two or more Safety Representatives have been designated, the Principal Contractor shall ensure that one or more Safety Committees are established and that H&S committee meetings are held at least monthly and that minutes are kept on record. Meetings must be convened and chaired by the Principal Contractor's Construction Supervisor. All of the Principal Contractor's and other Contractors' responsible persons and H&S Representatives shall attend the monthly H&S meetings.
- b) Contractors shall also have their own internal H&S committees as required in terms of the OHS Act and copies of their agendas and minutes of their meetings shall be forwarded to the Principal Contractor on a monthly basis. Copies of all H&S committees' agendas and minutes are to be kept in the Project H&S File.

Health & Safety Audits, Monitoring and Reporting

- a) The Client shall conduct monthly H&S audits of the construction work operations including a full audit of physical site activities as well as an audit of the administration of H&S.
 - b) The Principal Contractor is obligated to conduct similar audits on all Contractors that they have appointed. Detailed reports of the audit findings shall be reported on at all levels of project management meetings/forums. Copies of all audit reports shall be kept in the Project H&S File.
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Emergency Procedures

- a) The Principal Contractor shall prepare a detailed emergency procedure prior to commencement of work on site and it shall be included in, and form part of, the H&S plan. The procedure shall be updated whenever changes occur and it shall detail the emergency response plans. The emergency procedures shall not be limited to, but shall include, the following key elements:
- b) List of key competent personnel on site;
- c) Details of the nearest emergency services, including their physical addresses and phone numbers;
- d) Actions or steps to be taken in the event of each specific type of emergency;
- e) Information on hazardous materials/situations that may be encountered on site.
- f) Emergency procedures shall include, but shall not be limited to, fire, spills, accidents to employees, use of hazardous substances, bomb threats, and major incidents/accidents.
- g) A contact list of all service providers (Fire Department, Ambulance, Police, Medical and Hospital, etc.) must be maintained and be readily available to site personnel at all times that there are persons on site i.e. it must not be located in an area which may be inaccessible outside of normal working hours.
- h) The Principal Contractor shall advise the Client and the Engineer in writing forthwith, and thereafter at the project and H&S meetings, of any emergencies that occurred, together with a record of the action taken. Copies of all reports on emergencies shall be kept in the Project H&S File.

Accident / Incident Reporting and Investigation

- a) The Principal Contractor must record and report all Incidents/Accidents to the Client in the form of Annexure 1, as detailed in the General Administrative Regulations (GAR). The Principal Contractor must comply with the procedures in the Act and Regulations, namely:
- b) GAR 8 – Reporting of Accidents and Incidents
- c) Section 24(1)(a) of the Act
- d) Notice to the Provincial Director on form WCL1 or WCL2
- e) Section 24(1)(b) and (c)
- f) GAR 9 – Recording and Investigation of Incidents

General Record Keeping

- a) The Principal Contractor and all Contractors shall keep and maintain H&S records to demonstrate compliance with this specification, the approved H&S plan, the OHS Act, and the Regulations. The Principal Contractor shall ensure

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that all records of incidents/accidents, training, inspections, audits, etc. are kept in the Project H&S File stored in a suitable place on site. The Principal Contractor must ensure that every Contractor opens its own H&S file, maintains the file, makes it available to the Principal Contractor and other authorised persons on request and sends copies of the relevant documentation to the Principal Contractor.

- b) The Principal Contractor shall maintain an up to date register of each Contractor engaged in construction work on site giving the Contractors' name and the Responsible Persons' contact details and the number of employees on site. As these details may be subject to frequent change, the register must be updated at least weekly. The register is to be available for inspection.

Project H & S File

- a) The Principal Contractor shall prepare, and update on at least a monthly basis, a properly indexed H&S file for the project. This file will evolve during the construction phase and is to be handed over to the Client on completion of the construction work on site. The Project H&S File shall contain:
- b) The names and addresses and contact details of the Principal Contractor
- c) The names and addresses of all other Contractors that worked on the project, copies of their agreements with the Principal Contractor and the type of work that each one is carrying/has carried out.
- d) The original and all subsequent versions/revisions of the H&S plan and the Annexures and Appendices thereto.
- e) All information specifically called for in the OHS Act and the Construction Regulations and this specification and any other pertinent information relating to H&S on the project that is considered relevant
- f) The geosciences report, design loadings of the structure(s) and methods and sequence of construction issued to the Principal Contractor and all other Contractors.
- g) The safe work procedures developed by the Principal Contractor and all other Contractors.
- h) Details of any special or unusual materials forming part of the completed works.
- i) All relevant information concerning the completed works. This information shall comprise the record/"as built" drawings prepared by the Engineer, copies of which will be issued to the Principal Contractor for inclusion in the File, and the operating and maintenance instructions and all relevant information relating to any unusual or special features of the completed works that could affect H&S of the end users.
- j) When compiling this data, consideration must be given to all information that may be relevant to possible future alterations and/or demolition of all or part of
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the works.

1.3 Health and Safety Induction, Training and Equipment

A. Induction of Site Personnel

The Principal Contractor shall ensure that all site personnel, including those of all other Contractors, undergo risk-specific H&S induction training before starting work. A record of attendance at every induction session shall be kept in the Project H&S File. A suitable venue must be made available by the Principal Contractor to accommodate this training.

B. Awareness of Site Personnel

The Principal Contractor shall ensure that periodic 'toolbox talks' take place on site. These talks should deal with risks relevant to the construction work at hand. All Contractors shall conduct 'toolbox' talks at least once per week with their own employees. A record of attendance at each 'toolbox talk' shall be kept in the Project H&S File.

C. Competency of Site Personnel

All competent persons shall have the knowledge, experience, training, and qualifications specific to the work they have been appointed to supervise, control and/or carry out. This will have to be assessed on a regular basis by, for example, periodic H&S audits, progress meetings, etc. The Principal Contractor will be responsible for ensuring that only competent Contractors are appointed to carry out construction work.

D. Public and Site Visitor Health & Safety

Both the Client and the Principal Contractor have a duty in terms of the OHS Act to do all that is reasonably practicable to prevent members of the public and site visitors from being adversely affected by the construction activities.

The Principal Contractor shall ensure that every person working on or visiting the site, as well as the public in general, shall be made aware of the dangers likely to arise from site activities, including the precautions to be taken to avoid or minimize those dangers. Appropriate H&S notices and signs shall be posted up, but this shall not be the only measure taken.

Site visitors must be briefed on the hazards and risks they may be exposed to and what measures are in place or should be taken to control these hazards and risks. A record of these inductions/briefings shall be kept in the Project H&S File.

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E. First Aid Boxes and First Aid Training

The Principal Contractor and all other Contractors shall appoint First Aider(s) in writing. All Contractors with more than 10 employees shall have a trained, certified First Aider on site at all times. The appointed First Aider(s) are to be sent for accredited first aid training unless they are already in possession of a valid first aid certificate. Copies of the valid first aid certificates for each First Aider are to be kept in the Project H&S File. The Principal Contractor shall provide an on-site first aid station with first aid facilities, including first aid boxes adequately stocked at all times.

All Contractors with more than 5 employees shall supply their own first aid box/es.

F. Occupational Health and Hygiene

Exposure of workers to occupational health hazards and risks is very common in any work environment, especially in construction. Occupational exposure is a major problem and the Principal Contractor must ensure that proper health and hygiene measures are put in place to prevent exposure by any person to hazards such as inhalation, ingestion, absorption, and noise induction. Some of the more common occupational hazards to be considered are cement dust, sun exposure and noise. In addition, the ergonomic issues relating to repetitive and/or strenuous body and limb movements, must be considered and ameliorated wherever possible. Stress due to tight project schedules has been shown to adversely affect construction workers and this shall be taken into account when planning and managing work schedules. The preventative and/or amelioration measures shall be addressed in the H&S plan by way of safe work procedures which are to be followed.

G. Alcohol and other Drugs

Alcohol and drug/other substance abuse have been shown to be a problem in the construction industry. No alcohol or other drugs will be allowed on site. No person may be under the influence of alcohol or any other drugs while on the construction site. Any person on prescription drugs must inform his/her superior, who shall in turn report this to the Principal Contractor forthwith. Any person suffering from any illness/condition that may have a negative effect on his/her safety performance must report this to his/her superior, who shall in turn report this to the Principal Contractor forthwith.

Any person suspected of being under the influence of alcohol or other drugs must be sent home immediately, to report back the next day for a preliminary inquiry. A full disciplinary procedure must be followed by the employer concerned and details of the disciplinary action taken must be forwarded to the Principal Contractor for his records.

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H. Personal Protective Equipment (PPE) and Clothing

The Principal Contractor shall ensure that all workers are issued with, and wear, hard hats, safe footwear and overalls and specific PPE wherever such equipment is identified in the SWP's as being necessary for particular tasks. The Principal Contractor and all other Contractors shall make provision for, and keep adequate quantities of, SABS-approved PPE on site at all times.

The Principal Contractor shall clearly outline in the H&S plan the procedures to be taken when PPE or clothing is lost, stolen, work-out or damaged. This procedure applies to all Contractors, as they are all Employers in their own right.

I. Fire Extinguishers and Fire Fighting Equipment

The Principal Contractor and all other relevant Contractors shall provide adequate, regularly serviced firefighting equipment located at strategic points on site, specific to the classes of fire likely to occur.

The appropriate notices and signs must be posted up as required.

J. Occupational Health and Safety Signage

The Contractor shall provide adequate on-site H&S signage including, but not limited to, 'no unauthorized entry', 'report to site office', 'site office', 'beware of overhead work', 'hard hat area'. Signage shall be posted up at all entrances to site as well as on site in strategic locations e.g. access routes, stairways, entrances to structures and buildings, scaffolding, and other potential risk areas/operations.

Preliminary hazard identification and risk assessment and progress hazard identification and risk assessment

The Principal Contractor and all other Contractors shall cause a hazard identification to be performed by a competent person(s) before commencement of their respective construction work, and the assessed risks shall be documented in the construction phase H&S plan to be submitted for discussion with, and subsequent approval by, the Client. The risk assessments must include:

A list of all hazards identified as well as potentially hazardous tasks to be carried out;

A documented risk assessment based on the list of hazards and tasks;

A set of safe working procedures (method statements) to eliminate, reduce and/or control the risks assessed;

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Details of the PPE and clothing to be worn;

A monitoring and review procedure of the risk assessments to be carried out on a monthly basis, whenever variation orders are issued or changes made, and whenever the risks change.

The Principal Contractor shall ensure that all other Contractors are informed, instructed and trained, by a competent person regarding all hazards, risks, and the related safe work procedures before any work commences and thereafter at regular intervals if the risks change and/or if new risks are identified.

The Principal Contractor shall be responsible for ensuring that all persons who could be negatively affected by its operations are informed and trained according to the hazards and risks and are conversant with the safe work procedures, control measures, and other related rules such as the 'tool box talk' strategy that is to be implemented.

The Principal Contractor shall immediately notify all other Contractors as well as the Client of any hazardous or potentially hazardous situations that may arise during performance of construction activities.

Principal Contractor shall keep records as per Clause 9 of the Hazardous Chemical Substances Regulations.

All of the above are to be documented in the H&S plan.

K. Permits

Permits may be required for certain activities and these are not limited to but may include the following:

Use of Explosives and Blasting

Work for which a fall prevention plan is required

Removal of asbestos materials.

Disposal of (old type) fire detectors with radioactive elements.

Decanting/handling of Ammonia.

If and where applicable, the Employer will issue to the Principal Contractor, permits and log books (which log books shall thereafter be kept up to date by the Principal Contractor), for the following installations:

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Boilers

MV switchgear and chambers/rooms

MV switchgear outdoor yards

Live electrical (MV & LV) networks (overhead and cables)

Lifts

All of the above are to be documented in the H&S plan.

1.4 **Specific Project Requirements**

A. Construction Vehicles and Mobile Plant

The Principal Contractor shall ensure that all persons in its employ, all Contractors, and all those that are visiting the site are aware and comply with the site speed restriction(s).

Only suitable equipment shall be permitted to use this road. Adequate warning signs and safe deviations shall be provided at all times. Separate vehicle and pedestrian access routes shall be provided, maintained, controlled, and enforced.

The Principal Contractor and all relevant Contractors shall inspect and keep records of inspections of the construction plant used on site. Only authorized/competent persons are to use machinery under proper supervision.

Principal Contractor shall ensure that all hired plant and machinery used on site is safe for use. The Principal Contractor shall ensure that operators hired with machinery are competent and that certificates are kept on site in the health & safety file. All relevant Contractors must ensure the same.

B. Warning signs

The Principal Contractor shall erect and maintain the necessary signs, notices and barricades at strategic points on the boundaries to inform people of the dangers of the construction site.

C. Construction Welfare Facilities

The Principal Contractor shall supply hand washing facilities, soap, toilet paper, and hand drying material. Waste bins must be strategically placed and emptied regularly.

Safe, clean storage areas must be provided for workers to store personal belongings and personal protective equipment. Workers shall not be exposed to hazardous materials/substances while eating.

D. General Machinery

The Principal Contractor and relevant Contractors shall ensure compliance with the Driven Machinery Regulations, which include inspecting machinery



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regularly, appointing a competent person to inspect and ensure maintenance, issuing PPE or clothing, and training those who use machinery.

E. Transport of Workers

The Principal Contractor and other Contractors shall not:

Transport persons together with goods or tools unless there is an appropriate area or section to store them;

Transport persons in a non-enclosed vehicle, e.g. truck; there must be a proper canopy (properly covering the back and top) with suitable sitting area. Workers shall not be permitted to stand or sit at the edge of the transporting vehicle. Transport

workers in bakkies unless they are closed/covered and have the correct number of seats for the passengers.

Working near Water

Some part of the Contract requires that work be carried out next to the river banks or in the inlet works and sumps. Adequate lifesaving equipment, such as ropes and ladders shall be available at times when work is being carried out in these areas.

1.5 Legal Appointments

A. Summary of Legal Appointments

OHS Act Ref	Appointment	Name of Appointee/s
SEC 16(1)	Overall authority and accountability	
SEC 16(2)	Assistant to Chief Executive	
GMR 2(1)	Supervision of machinery (engineer)	
SEC 17	Health and Safety Representatives	
GAR 7.2(f)	Endorsement of Health and Safety Representative Reports	
SEC 19	Health and Safety Committee Member/Chairman	
GAR 8.2 (d&e)	Endorsement of Minutes of Meetings	
GAR 9	Reporting of Incidents	
GAR 10	Recording and Investigation of Incidents	



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GSR 8.1(a)	Person/s responsible for stacking	
GSR 3.4	Person/s with certificates of competency in first aid	
DMR 18.11	Authorized Operator of lifting machinery	
DMR 20	Explosive Powered Tools Operator	
EMR 9	Portable electrical Tools Inspector and Earth Leakage Inspector	
DMR 18(5)	Lifting Machinery Inspector	
DMR 18.10(e), 18(6)	Lifting Tackle Inspector	
GSR 13D	Scaffold Inspector	
GSR 13	Excavation Inspector	
EMR 8(7)	Electrical Flameproof Inspector	
GSR 11(1)	Supervision of building work	
GSR 11(3)	Supervision of building work	
VUP REGS	Vessels under Pressure Inspector	

B. Instructions for Legal Appointments

Appointment No. 1A and B-

Responsible Person

- a) In terms of the OHS Act, Act 85 of 1993 the Chief Executive Officer of a public company, private company, closed corporation or one-man business is automatically responsible for complying with the rules and regulations of the Act.
- b) In partnerships and closed corporations the partners or members should decide amongst themselves who the responsible person would be.
- c) In terms of section 16 the Chief Executive Officer may appoint someone else in his business to assist him with his duties under this act. In case like this it would be good practice to appoint such a person in writing.
- d) One must just bear in mind that such a delegation of duties is only of duties and that the Chief Executive Officer could never delegate his legal accountability to such a person.
- e) Section 16 states very clearly that the employer subject to the provision of section 37 shall not be relieved of any responsibility or any liability under this act.
- f) Section 16 states that the head of any Department of State shall be deemed

to be Chief Executive Officer of that Department.

- g) In terms of the interpretations act this is a Deputy Director General of a Department.

Appointment No. 2 – Competent Person

- a) The general Machinery Regulation 2(1) provide for the appointment of a Competent Person in terms of the amount of energy generated/used/distributed. The appointment is done in the form of a notification to the Department of Manpower. The relevant section of the Act and regulations are a notification to the Department of Manpower. The relevant section of the Act and regulations are herewith included. The forms should be completed and send to the Divisional Inspector together with certified copies of the persons qualifications. Please take note that the requirement for a plant that generates steam or electricity is stricter than for distribution of energy only. Make sure that the person you appoint qualifies 100%.

Appointment No. 3 – Health and Safety Representatives

- a) This is one of the most important appointments that should be made. The choice of the person appointed could have a drastic effect on the total program. The Health and Safety Representative can carry out inspections, attend safety meetings and complete reports thus he/she should have basic knowledge of safety principles. Safety Representatives should be made responsible for a specific area inside the plant/factor in which inspections can be carried out.

NOTE: A Health and Safety Representative will not be civilly liable for any incident that may or could take place.

Appointment No. 4 – Endorsement of Health and Safety Representatives Reports

The person endorsing the health and safety representatives should be the employer of highest-ranking manager on the premises. In other words the Chief Executive Officer or his appointee if he is not available.

Appointment No. 5 – Health and Safety Committee Member/Chairman

- a) Chairman of the Health and Safety Committee is a key appointment and a senior manager should be appointed.



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Appointment No. 6 – Endorsement of Minutes of Meetings

- a) The person endorsing the minutes of meetings should be the employer or manager with the highest rank on the premises. In other words the Chief Executive Officer or his appointee if he is not available.

Appointment No. 7 – Incident Reporter

- a) The person appointed officer shall report all incidents as per Section 9 and Section 24 of the Act.

Appointment No. 8 – Incident/Accident Investigator

- a) The person appointed should be able to investigate all accidents/incidents and should be able to determine the cause of the accident. He should be able to complete all the legal documentation and follow it up. He/she should have the ability to estimate damage and costs of accidents.

Appointment No. 9 - Person responsible for stacking

- a) The person appointed will normally be a store manager or person in charge of the area where stacking is done.

Appointment No. 10 – Persons with certificates of competency in first aid

- a) The person appointed must be readily available during normal working hours, and must be in possession of a valid certificate of competency in first aid, as per the regulation.

Appointment No. 11 - Authorized Operator of Lifting Machinery

- a) Any lifting machine should be operated by a person trained and authorized to do so. Ensure that all other statutory requirements are made in DMR 18 (1) (d).

Appointment No. 12 - Explosive Powered Tools Operator/Inspector

- a) The person appointed must be trained in the use and operations of the tool. These tools are very dangerous if not used in the prescribed way. All statutory

requirements should be met as described in DMR 20. Make sure that you appoint a responsible person.

Appointment No. 13 - Portable Electrical Tools/Earth Leakage Inspector

- a) Portable electrical tools can be inspected by the Health and Safety Representative, but it will be safer to appoint a maintenance electrician. Earth leakages should also be inspected and all 3 point sockets should be linked with it. The statutory requirements as well as the SABS code in this regard should be adhered to.

Appointment No. 14 - Lifting Machinery Inspector

- a) The person appointed should have a workable knowledge of lifting machinery and could be a Senior Operator or Supervisor or qualified maintenance staff member. Inspection tests must be done in accordance with the statutory requirements. Note that all the attachments to be inspected as well.

Appointment No. 15 - Lifting Tackle Inspector

- a) The person appointed should have a workable knowledge of lifting tackle (steel, ropes, fibre ropes, hooks, shackles). He should be able to test the equipment and to judge their service ability according to the statutory requirements.

Appointment No. 16 – Scaffold (Erection, Dismantling) Inspector

- a) The person appointed should have good knowledge or erection and dismantling of scaffold. The appointee should be in a position to inspect the equipment regularly. Should you be involved in outside work the appointee should be able to inspect it as well.

Appointment No. 17 - Excavation Inspector

- a) You may well argue that you are not in the excavation business and this appointment is not necessary. However, any excavation that exceeds 1,5m is regarded as dangerous and should be inspected as per GSR 13. The person appointed should be in a position to do these inspections regularly as it could be a distance away from the office or factory. Take note of the statutory requirements.

Appointment No. 18 - Electrical Flameproof Inspector

- a) The person appointed should be formally qualified to the effect that he/she knows how to inspect such equipment. Take note that the EMR 8(7)

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prescribe certain qualifications. The Inspector should have access to the correct testing apparatus and facilities.

Appointment No. 19/20 - Supervisor of Building Work

- a) The person appointed should be qualified as per GSR 11(1). If outside contractors are used the appointment should be made in conjunction with the outside party and should be negotiated as part of the contract.

Appointment No. 21 - Vessels under Pressure

- a) The appointed person or enterprise should be competent to do such inspections.

Appointment No. 22 – Supervisor for work in confined spaces

- a) General Safety Regulation 5.1
- b) Confined spaces should only be entered by an employee after the air has been tested and evaluated by a person who is competent to pronounce on the safety thereof.

1.6 Occupational Health and Safety Act, Act 85 of 1993

The Contractor shall have a complete copy of the act available on site as per Regulation 5 of the general Administrative Regulations.

The Contractor is specifically instructed to study and implement the following regulations of the act, amongst other, with reference to this contract:

SECTION NO.	DESCRIPTION
1.	<i>General duties of employers to their employees.</i>
2.	<i>General duties of employers and self-employed persons to persons other than their employees.</i>
3.	<i>General duties of manufactures and other regarding articles and substances for use at work.</i>
4.	<i>Listed work.</i>
5.	<i>General duties of employers regarding listed work.</i>
6.	<i>Duty to inform.</i>
7.	<i>General duties of employees at work.</i>
8.	<i>Duty not to interfere with, damage or misuse things.</i>
9.	<i>Chief Executive Officer charged with certain duties.</i>



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- 10. *Health and safety representatives.*
- 11. *Functions of health and safety representatives.*
- 12. *Health and safety committees.*
- 13. *Functions of health and safety committees.*
- 14. *Report to inspector regarding certain incidents.*
- 15. *Report to Chief Inspector regarding occupational disease.*
- 16. *Victimization forbidden.*
- 17. *Acts or omissions by employees or mandatory's.*
- 18. *Regulations.*

- a) This instruction, however, does not exempt the Contractor from any of his responsibilities in terms of these or any other regulation of the Act.

A. General administration regulations

The Contractor shall have a complete copy of the Regulations available on site.

The Contractor is specifically instructed to study and implement the following General Administrative Regulations, amongst other, with reference to this contract:

SECTION NO.	DESCRIPTION
5.	<i>General duties of employers and users of machinery.</i>
6.	<i>General duties of employees.</i>
7.	<i>Safety representatives.</i>
8.	<i>Safety committees.</i>
9.	<i>Reporting of incidents.</i>
10.	<i>Recording and investigation of incidents.</i>
12.	<i>Intoxication.</i>
13.	<i>Admittance of persons.</i>
15B	<i>Display of substituted notices and signs.</i>
a)	This instruction, however, does not exempt the Contractor from any of his responsibilities in terms of these or any other of the General Administrative Regulations.

B. Electrical installation regulation

The Contractor shall have a complete copy of the Regulations available on site.

Contractor is specifically instructed to study and implement the following Electrical Installation Regulations, amongst other, with reference to this contract:



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SECTION NO.	DESCRIPTION
7.	<i>Responsibility for electrical installations.</i>
8.	<i>Certificate of compliance.</i>
9.	<i>Construction.</i>
10.	<i>Electrical contractor.</i>
11.	<i>Commencement of and permission to connect installation work.</i>
12.	<i>Issuing of a certificate of compliance.</i>
2.	<i>Application for registration as an accredited person.</i>
13.	<i>Substitution of lost, damaged or destroyed certificates of registration.</i>
a)	This instruction, however, does not exempt the Contractor from any of his responsibilities in terms of these or any other of the Electrical Installation Regulations.

C. General safety regulations

The Contractor shall have a complete copy of the Regulations available on site.

The Contractor is specifically instructed to study and implement the following General Safety Regulations, amongst other, with reference to this contract:

SECTION NO.	DESCRIPTION
1.	<i>Personal safety equipment and facilities.</i>
2.	<i>First aid, emergency equipment and procedures.</i>
5.	<i>Work in confined spaces.</i>
6.	<i>Work in elevated positions.</i>
8.	<i>Stacking of articles.</i>
9.	<i>Welding, flame cutting, soldering and similar operations.</i>
10.	<i>Supervision of building work.</i>
11.	<i>Demolition and excavation.</i>
13A	<i>Ladders.</i>
13B	<i>Scaffold framework.</i>
13E	<i>Scaffold platforms.</i>
a)	This instruction, however, does not exempt the Contractor from any of his responsibilities in terms of these or any other of the General Safety Regulations.



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D. Environmental regulations

The Contractor shall have a complete copy of the Regulations available on site.

The Contractor is specifically instructed to study and implement the following Environmental Regulations, amongst other, with reference to this contract:

SECTION NO.	DESCRIPTION
2.	<i>Thermal requirements.</i>
3.	<i>Housekeeping</i>
4.	<i>Noise and hearing conservation.</i>
9.	<i>Fire precautions and means of egress.</i>
a)	This instruction, however, does not exempt the Contractor from any of his responsibilities in terms of these or any other of the Environmental Regulations.

E. Driven machinery regulations

The Contractor shall have a complete copy of the Regulations available on site.

The Contractor is specifically instructed to study and implement the following Driven Machinery Regulations, amongst other, with reference to this contract:

SECTION NO.	DESCRIPTION
2.	<i>Revolving machinery.</i>
8.	<i>Grinding machines.</i>
3.	<i>Air compressors.</i>
4.	<i>Lifting machines and lifting tackle.</i>
5.	<i>Explosives powered tools.</i>
a)	This instruction, however, does not exempt the Contractor from any of his responsibilities in terms of these or any other of the Driven Machinery Regulations.

F. General machinery regulations

The Contractor shall have a complete copy of the Regulations available on site.

The Contractor is specifically instructed to study and implement the following General Machinery Regulations, amongst other, with reference to this contract:



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SECTION NO.	DESCRIPTION
2.	<i>Supervision of machinery.</i>
3.	<i>Safeguarding of machinery.</i>
4.	<i>Operation of machinery.</i>
5.	<i>Working on moving or electrically live machinery.</i>
6.	<i>Devices to start and stop machinery.</i>
7.	<i>Reporting of incidents in connection with machinery.</i>
9.	<i>Information regarding regulations.</i>
a)	This instruction, however, does not exempt the Contractor from any of his responsibilities in terms of these or any other of the General Machinery Regulations.

G. Electrical machinery regulations

The Contractor shall have a complete copy of the Regulations available on site.

The Contractor is specifically instructed to study and implement the following Electrical Machinery Regulations, amongst other, with reference to this contract:

SECTION NO.	DESCRIPTION
2.	<i>Safety equipment.</i>
3.	<i>Work on disconnected electrical machinery.</i>
4.	<i>Notices.</i>
5.	<i>Switch and transformer premises.</i>
6.	<i>Electric control gear.</i>
7.	<i>Switchboards</i>
9.	<i>Portable electric tools.</i>
10.	<i>Portable electric lights.</i>
13.	<i>Earthing</i>
14.	<i>Supports.</i>
8.	<i>Clearances for power lines.</i>
9.	<i>Protection of supports.</i>
10.	<i>Insulators and fittings.</i>
11.	<i>Conductors.</i>
12.	<i>Overhead service connections and overhead service conductors.</i>
13.	<i>Crossings.</i>
14.	<i>Bare conductors on premises.</i>

- a) This instruction, however, does not exempt the Contractor from any of his responsibilities in terms of these or any other of the Electrical Machinery Regulations.

H. **Construction regulations**

The detailed instructions in this Contract does not exempt the Contractor from any of his other responsibilities in terms of any other regulation of the Act or of any other of the other Regulations incorporated into the Occupational Health and Safety Act, Act 85 of 1993, from time to time.