



TENDER NO.: PMSUFS/18/22/DCS-ELEC CONTRACTOR

REQUEST FOR BIDS FROM QUALIFYING AND EXPERIENCED ELECTRICAL BUILDING CONTRACTORS FOR THE SUPPLY, INSTALLATION AND MAINTENANCE OF BACK-UP POWER GENERATOR AT BOSHOF CORRECTIONAL CENTRE IN THE FREE STATE.

CLOSING DATE & TIME: 10 AUGUST 2023, 12H00

Name of Tenderer:.....

ISSUED BY:

THE INDEPENDENT DEVELOPMENT TRUST

FREE STATE REGIONAL OFFICE
DEPARTMENT OF PUBLIC WORKS AND
INFRASTRUCTURE REGIONAL OFFICE
18 PRESIDENT BRAND
BLOEMFONTEIN
9301

WEBSITE: WWW.IDT.ORG.ZA

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PART T1: TENDERING PROCEDURE

Independent Development Trust



FREE STATE REGIONAL OFFICE
DEPARTMENT OF PUBLIC WORKS AND
INFRASTRUCTURE
18 PRESIDENT BRAND
BLOEMFONTEIN, 9301
Website: www.idt.org.za

T1.1 Tender Notice and Invitation to Tender

INDEPENDENT DEVELOPMENT TRUST (HEREINAFTER "IDT") INVITES PROPOSALS FROM REQUEST FOR BIDS FROM QUALIFYING AND EXPERIENCED ELECTRICAL BUILDING CONTRACTORS FOR THE SUPPLY, INSTALLATION AND MAINTENANCE OF BACK-UP POWER GENERATOR AT BOSHOF CORRECTIONAL CENTRE IN THE FREE STATE.

The bid closes on **10 August 2023 at 12:00 PM**. Bids must be submitted and deposited in the Tender Box at the IDT Free State Regional Offices, Department of Public Works and Infrastructure, 18 President Brand, Bloemfontein, 9301. **Tender validity period is 90 days**. NB: Telegraphic, telephonic, telex, facsimile, electronic and / or late tenders will not be accepted.

A three-stage process in evaluation of tender offers comprising of (a) Compliance with mandatory / gate keeper criteria, (b) Bids will be evaluated on Functionality, and entities must score a minimum of **70%** on functionality to qualify for further evaluation, (c) 80/20 Preference Point System in line with Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000), Regulations 2022 will be applicable.

Functionality Criteria

Criteria	Sub-categories	Possible Maximum Score
Company's Experience in managing similar electrical installation works		45
Client References on quality of similar electrical installation works		27
Proof of similar projects completed on time		27
TOTAL		99

Queries relating to the issue of these documents may be addressed to the IDT fsidtbid@idt.org.za



Independent Development Trust

FREE STATE REGIONAL OFFICE
DEPARTMENT OF PUBLIC WORKS AND
INFRASTRUCTURE
18 PRESIDENT BRAND
BLOEMFONTEIN, 9301

Website: www.idt.org.za

T1.2 Tender Data

The conditions of tender are the Standard Conditions of Tender as contained in Annexure C of the CIDB Standard for Uniformity in Construction Procurement as per Board Notice No. 136 of 2015 published in Government Gazette No. 38960 of 10 July 2015 and as amended from time to time. (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 the Tender.

Each item of data given below is cross-referenced to the clause marked "C" in the above-mentioned Standard Conditions of Tender.

Clause number	T1.2 Tender Data
C1.1	<p>The <i>Employer</i> is Department of Correctional Centre</p> <p>The employer <i>Representative</i> is: Name: Mr. Riaan Botha Acting Deputy Commissioner Facilities Department of Correctional Centre Poynton Building, 14th Floor room 1410. Cnr WF Nkomo & Sophie de Bryn Street Pretoria</p>

C1.4	<p>The Employer's Agent is: Independent Development Trust</p> <p>The IDT <i>Representative</i> is:</p> <p>Name: Mr. Tsholofelo Thulare</p> <p>FREE STATE REGIONAL OFFICE (DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE: Offices) 18 PRESIDENT BRAND BLOEMFONTEIN, 9301</p> <p>e-mail: fsidtbid@idt.org.za</p> <p>Website: www.idt.org.za</p>
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<p>C2.1</p>	<p>1. COMPULSORY RETURNABLE DOCUMENTS / REQUIREMENTS ('GATE KEEPERS')</p> <p>NB: Eligibility: Failure by any Tenderer to submit and comply with any of the following documents / requirements will automatically result in outright disqualification.</p> <p>1.1 Fully completed bid document and valid, duly signed form of offer.</p> <p>1.2 Proposed maintenance plan comprising of schedule, tasks, tools, personnel etc, as per manufactures recommendations over the 12 months period and covering 1000hrs of running time</p> <p>1.3 Attendance of compulsory clarification / briefing meeting and signed attendance register.</p> <p>1.4 Valid CIDB grading 3 EB (Electrical Building) or Higher certificate to be submitted or provide the CRS Number to enable verification in the CIDB website. The relevant CIDB grading, and category of works should be valid at the date of tender closing.</p> <p>1.5 Registration as an electrical contractor for three phase installation. Bidder to submit a certificate from Department of Labor confirming this category of works.</p> <p>1.6 Valid letter of Good Standing (COIDA/FEM) in terms of Compensation for Occupational Injuries and Diseases Act of 1993. A sole proprietor to get a tender letter from the department of Labour.</p> <p>1.7 Fully completed and signed Standard Bidding Documents (SBD forms):</p> <ol style="list-style-type: none"> 1. SBD 1: Invitation to Bid. 2. SBD 4: Bidder's disclosure 3. SBD 6.1: Preference points claim form in terms of the Preferential Procurement Regulations, 2022 <p>NB: For unincorporated JV's / consortium: Compulsory / Gate keeping documents should be provided for each individual member of the JV or Consortium.</p> <p>2. Non-Mandatory Returnable Documents (for administrative purposes)</p> <ol style="list-style-type: none"> 1. Valid Tax Clearance Certificate; Or Tax compliance letter with Unique Security Personal Identification Number (PIN) in terms of the Electronic Tax Compliance Status (TCS) System from SARS. 2. Provide Proof of registration on Central Supplier Database (CSD) and/or MAAA Number. 3. Originally certified ID copies of all directors. <p>NB: The IDT cannot enter a contract with a Service Provider whose tax status is non-compliant. Adjudication of tax compliance will be done in line with treasury instruction no.7 of 2017/2018</p>
<p>C2.7</p>	<p>No Briefing Session will be held.</p>

C2.8	Prospective bidders are encouraged to submit their requests for clarification before the date of the compulsory briefing session. However, the Employer shall respond to requests for clarification received up to 5 working days prior to tender closure. All request for clarification must be emailed to fsidtbid@idt.org.za
C2.12	No alternative tender offers will be considered.
C2.13.1	Submit one tender offer only, either as a single tendering entity or as a member of a Joint Venture to provide the whole works, services or supply identified in the contract data and described in the scope of works, unless stated otherwise in the tender data.
C2.13.2	The tender shall be submitted as an original copy, duly completed together with all returnable schedules, and signed accordingly. Returnable documents must be filed in a separate bundle and referenced accordingly with table of contents.
C2.13.5	Only one original set of the tender document must be submitted.
C2.13.6	Two-envelope system: NOT APPLICABLE
C2.15	The closing time for submission of the tender offers is as per Notice and Invitation to Tender T1.1.
C2.16	The tender offer validity period is as per Notice and Invitation to Tender T1.1.
C2.20	Bidders must choose a security insurance of their choice as guided in the Contract. (NB: adequacy or inadequacy of such an insurance will only be re-looked prior to appointment of a successful service provider and upon conclusion of specific risk assessment)
C3.4	Tenders shall not be opened in public after the closing time and offers will not be publicly announced.
	a) contractors who have 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 a 3 EB or Higher class of construction work.

C3.5	<ul style="list-style-type: none">• Suppliers must complete the columns on the right-hand side of the pricing schedule, in consideration of what they are offering. No separate quotation will be accepted apart from this template.• Bid rigging and collusive bidding are heavily discouraged and suppliers found guilty of colluding amongst each other or with SCM officials will face automatic disqualification from the bid and may further face restriction from doing business in the public sector.• Re-usable material remains the property of the Department and must not be removed from the construction site. The contractor is required to clean and remove rubble from the construction site on completion of the project.• Independent Development Trust does not bind itself to accept the lowest or any other bid in whole or in part and price alone is not the determining factor. If you do not get a response within 90 days, please consider your bid as unsuccessful.• The successful bidder will be expected to sign a contract (General Conditions of Contract for Construction works, 3rd Edition 2015) and on the contract, the completion date of the project must be stipulated and adhered to by the bidder. The project and the performance of the bidder will be monitored.• The sum payable for penalties in terms of the Conditions of Contract shall be R1 250.00 (One Thousand Two Hundred and Fifty Rand) per day, for each and every day on which the completion of the contract is delayed.
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C3.11 Evaluation of Tender Offers

A three-stage process in evaluation of tender offers comprising of (a) Compliance with mandatory / gate keeper criteria, (b) Bids will be evaluated on Functionality, and entities must score a minimum of 70% on functionality to qualify for further evaluation, (c) 80/20 Preference Point System in line with Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000), Regulations 2022 will be applicable.

(a) Functionality Criteria

Criteria	Sub-categories	Possible Maximum Score
Company's Experience in managing similar electrical installation works		45
Client References on quality of similar electrical installation works		27
Proof of similar projects completed on time		27
TOTAL		99

Evaluation points will be awarded in terms of the following table

B1.1 Company's experience in managing similar electrical installation works (45 points):

Points are allocated for the bidding entity's experience in managing similar² type projects **completed** (not currently running) in the past 15 years. The experience refers to similar projects managed by the entity on new works and or major electrical installation.

To score points for the above, bidders are required to submit the following:

1. Letters of appointments for projects listed under the "Project Experience" returnable schedule.
2. Confirmation of completion of works by the Client for projects listed under the "Project Experience" returnable schedule.

²The experience refers to **similar** projects managed by the entity on new works and or major electrical installation.

NB: Non-submission of not one of the above-mentioned documents confirming bidder's experience will result in the bidder not scoring any point for such project.

Evaluation points will be awarded in terms of the following table:

Company experience in managing similar type projects (45 points)

Project	Projects between R0 – R500 thousand	Projects above R500 thousand – R1.0 million	Projects Above R 1.0 m - Unlimited
Project 1	5	10	15
Project 2	5	10	15
Project 3	5	10	15
Sub-total number of points	15	30	45

B1.2 Client References on company’s experience in managing similar² type projects (27 points):

Points are allocated for performance of the bidders on previous projects completed (not currently running). Client Reference Scorecards shall be submitted for scoring (see returnable schedules) on the projects listed on the abovementioned “Relevant Project Experience”.

Points will be awarded in terms of the following table:

Client’s Reference on similar² Projects

B2 - Evaluation sub-criteria: Client’s Reference (27 points)				
Projects	Overall assessment by Client			
	Poor	Fair	Good	Excellent
Project 1	0	4	6	9
Project 2	0	4	6	9
Project 3	0	4	6	9
Total number of points	0	12	18	27

²The experience refers to **similar** projects managed by the entity or new works and or major electrical installation.

B1.1 Proof of projects completed on time.

B2 - Evaluation sub-criteria: Client's Reference (27 points)		
Projects	Overall assessment by Client	
	Not completed on time	Completed on time
Project 1	0	9
Project 2	0	9
Project 3	0	9
Total number of points	0	27

POINTS WILL BE ALLOCATED TO BIDDERS FOR SUBMISSION OF A LETTER OF CONFIRMATION FROM THE CLIENT.

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.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.
(Note to organs of state: Where either the 90/10 or 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.)

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 allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed. (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)
Women 100% Ownership	3	6		
Youth 100% Ownership	3	6		
People with Disabilities 100% Ownership	2	4		
Black Male 100% Ownership	2	4		

Source Documents to be submitted with the Bid or RFQ:

- *CIPC Document (Company Registration Document will be required for verification (CIPC DOC))
- *Woman (Originally Certified ID Document)
- *Youth (Originally Certified ID Document)
- *People with Disability (Letter from the Dr. Confirming the Disability)
- *Black Ownership (Originally Certified ID Document)

PART T2: RETURNABLE DOCUMENTS

T2.1 - List of Returnable Documents

Failure to submit any of the returnable documents required for evaluation, will result in zero points being awarded accordingly. Failure to submit any of the mandatory documents will result in outright disqualification.	
T2.1 List of Returnable Documents	
I. Proof of registration on Central Supplier Database (CSD); e.g., CSD Report and/or MAAA Number.	
II. Valid Tax Clearance Certificate; Or Tax compliance letter with Unique PIN in terms of TCS	
III. Fully completed bid document and valid, signed Form of Offer	Mandatory
IV. Attendance of compulsory clarification briefing meeting and sign attendance register	Mandatory
V. Valid CIDB grading 3EB (electrical building) or Higher certificate to be submitted or provide the CRS Number to enable verification in the CIDB website. The relevant CIDB grading, and category of works should be valid at the date of tender closing	Mandatory
VI. Letter of Good Standing (COIDA/FEM) in terms of Compensation for Occupational Injuries and Diseases Act of 1993 ¹	Mandatory
VII. Registration as an electrical contractor for three phase installation. Bidder to submit a certificate from Department of Labor confirming this category of works.	Mandatory
VIII. In case of a joint venture, a signed joint venture agreement must be included.	Mandatory (only in case of JVs)
IX. B-BBEE (Broad-Based Black Economic Empowerment) as per T1.1	Evaluation
T2.2 Returnable Schedules	
I. SBD 1: Invitation to Bid	Mandatory
II. SBD 4: Bidder's Disclosure	Mandatory
III. SBD 6.1: Preference points claim form in terms of PPPFA, Procurement Regulations 2022	Mandatory
IV. Record of addenda to tender documents if applicable	Mandatory
V. Maintenance Plan comprising of schedule, tasks, tools, personnel etc, as per manufactures recommendations over 12 months period and covering 1000hrs of running time.	Evaluation
VI. Client References on similar projects: B1.2	Evaluation
VII. Proof of projects completed on time: B1.1	Evaluation

T2.2 Returnable Schedules

SBD 1

**PART A
INVITATION TO BID**

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/ PUBLIC ENTITY)					
BID NUMBER:	PMSUFS/18/22/DCS	CLOSING DATE:	10 AUGUST 2023	CLOSING TIME:	12:00
DESCRIPTION	REQUEST FOR BIDS FROM QUALIFYING AND EXPERIENCED ELECTRICAL BUILDING CONTRACTORS FOR THE SUPPLY, INSTALLATION AND MAINTENANCE OF BACK-UP POWER GENERATOR AT BOSHOF CORRECTIONAL CENTRES IN THE FREE STATE.				
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)					
DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE					
18 PRESIDENT BRAND STREET					
BLOEMFONTEIN					
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO			TECHNICAL ENQUIRIES MAY BE DIRECTED TO:		
CONTACT PERSON	Obakeng Marwane		CONTACT PERSON	Obakeng Marwane	
TELEPHONE NUMBER	073 424 8149		TELEPHONE NUMBER	073 424 8149	
FACSIMILE NUMBER			FACSIMILE NUMBER		
E-MAIL ADDRESS	fsidtbid@idt.org.za		E-MAIL ADDRESS	fsidtbid@idt.org.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					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAAA
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE	TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT	[TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No	
[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]					
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]		ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]	
QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS					
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
DOES THE ENTITY HAVE A BRANCH IN THE RSA?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?			<input type="checkbox"/> YES <input type="checkbox"/> NO		

IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.

**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, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
- 1.4. **THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).**

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:

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 interest¹ in the enterprise, employed by the state? **YES/NO**

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

Full Name	Identity Number	Name of State institution

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

2.2.1 If so, furnish particulars:

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

2.3.1 If so, furnish particulars:

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

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.
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.
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

³ **Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill, and knowledge in an activity for the execution of a contract.**

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

2. GENERAL CONDITIONS

2.1 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
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

2.2 **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 90/10 preference point system.
- b) The applicable preference point system for this tender is the 80/20 preference point system.
- c) Either the 90/10 or 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.

2.3 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.

2.4 **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

- 2.5 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.
- 2.6 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.

3. 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).

4. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

4.3. POINTS AWARDED FOR PRICE

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

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

$$\begin{array}{ccc}
 \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\
 \\
 \mathbf{Ps} = \mathbf{80} \left(\mathbf{1} - \frac{\mathbf{Pt} - \mathbf{Pmin}}{\mathbf{Pmin}} \right) & \mathbf{or} & \mathbf{Ps} = \mathbf{90} \left(\mathbf{1} - \frac{\mathbf{Pt} - \mathbf{Pmin}}{\mathbf{Pmin}} \right)
 \end{array}$$

Where

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

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

4.4.1. POINTS AWARDED FOR PRICE

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

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

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

5. POINTS AWARDED FOR SPECIFIC GOALS

- 5.1. 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:
- 5.2. 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—
- (c) 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
 - (d) 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.

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

(Note to organs of state: Where either the 90/10 or 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.)

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 allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)
Women 100% Ownership	3	6		
Youth 100% Ownership	3	6		
People with Disabilities 100% Ownership	2	4		
Black Male 100% Ownership	2	4		

DECLARATION WITH REGARD TO COMPANY/FIRM

5.3. Name of company/firm.....

5.4. Company registration number:

5.5. 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]

5.6. 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 –
 - (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:

Record of Addenda to Tender 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 Received	Title or Details
1.		
2.		
3.		
4.		

(Attach additional pages if more space is required)

Signed

Date

Name

Position

tenderer

B1.1 EVALUATION SCHEDULE: COMPANY EXPERIENCE

Points are allocated for the bidding entity’s experience in managing similar² type projects in the past 15 years. Please list maximum of three (3) projects to score for evaluation purposes.

NB: Only three projects listed below will be evaluated. Bidders must submit only three projects for this purpose. Bidders supplying more than the required number of projects, the evaluation will only deal with the first three project on the list. Only completed projects with either completion certificates and or Client confirmation of project completion will be considered. Currently running projects will not be considered.

PROJECT NAME	BRIEF PROJECT DESCRIPTION	PROJECT VALUE (Incl. VAT)	CONTRACT PERIOD	START DATE	ACTUAL COMPLETION DATE
1.					
2.					
3.					

²The experience refers to **similar** projects managed by the entity or new works and or major electrical installation which have the complexity and value in accordance with the estimated construction cost of this project.

B1.2 EVALUATION SCHEDULE: CLIENT REFERENCES

The Tenderer shall provide details of his performance on each of the previous projects listed in the “Relevant Experience” returnable schedule. “Client Reference Scorecards” will be completed by each of the respective Clients for the projects listed in the “Relevant Experience” returnable schedule. Uncompleted and Unsigned forms by the client will score zero points. Bidders must complete the given client reference letter and no other will be accepted resulting in the service provider receiving zero points.

The following are to be completed by the Client

PROJECT 1:

Name of Firm/Bidder:.....

Client/Client Department:

Contract Amount:.....

Contract Duration:

Actual Contract Duration:

Description / Performance	Poor (0)	Fair (4)	Good (6)	Excellent (9)
Overall performance				

Any other remarks considered necessary to assist in evaluation of the Tenderer?

Name of Client Representative:

Designation:

Telephone:

Client Signature: **Date:**



CONTRACT

PART C1: AGREEMENT & CONTRACT DATA

C1.1 Agreement and Contract Data

General Conditions of Contract for Construction Works, 3rd Edition 2015

C1.2 Form of Offer & Acceptance

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

Contractor for the Supply and Installation of Back- Up Power Generator at Boshof Correctional Centres in the Free State.

The tenderer, identified in the Offer signature block, has.

Either	Examined the documents listed in the Tender Data and addenda thereto as listed in the Returnable Schedules, and by submitting this Offer has accepted the Conditions of Tender.
--------	---

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 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.

Total Amount including VAT (15%)	
Total Amount in words	

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

Signature(s)

Name(s)

Capacity

For the tenderer:

Name & signature of witness (Insert name and address of organisation)

Date

Acceptance

Schedule of Deviations

Note:

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

No.	Subject	Details
1		
2		

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

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

For the tenderer:

For the Employer:

Signature

.....

Name

.....

Capacity

Independent Development Trust
18 President Brand,
Bloemfontein, 9301

On behalf of (Insert name and address of organisation)

(Insert name and address of organisation)

Name & signature of witness

.....

Date

PART C 2: PRICING DATA

ITEMS	DESCRIPTIONS	QTY	UNIT PRICE	TOTAL PRICE
1.1	Preliminaries and General			
1.1.1	Site establishment, setting out of works, cable tracing, construction programme and insurances as per GCC	1		
1.1.2	Site supervision including health and safety, and quality control	1		
1.1.3	Travelling and subsistence	1		
1.1.4	Workshop drawings	1		
1.1.5	Labour	1		
1.2	Construction of a new 30MPA concrete Plinths for the generator	1		
1.3	Supply, deliver, offload into position a Silenced Canopy Type Standby Generator with digital control modules and changeover switch. Prime Power Rated: output shall be 250kVA	1		
1.4	Installation, testing and commissioning the new generator. (This shall include all the cable accessories that a deemed necessary)	1		
1.5	Fill-in the New Generator basement tanks with fuel.	Litres		
1.6	Supply and installation of 95 sq m x 4 core SWA cable	100m		
1.7	Supply and installation of 70 sq mm BCEW	100m		
1.8	Supply and installation of required Earthing (4 x 1800mm earth spikes +70mm ² BCEW around the plinth including exothermic welding). Earthing certificate to be provided	1		
1.9	Trenching and reinstatement			
1.9.1	Concrete	2m³		
1.9.2	Soil /Garden	2m³		
1.10	100mm Flexible PVC Pipe/Sleeve	6m		
1.11	Supply, install palisade fencing 8m x 4m x 1.8m c/w lockable gate and A82 padlock	1		
1.12	Allowance for Factory Acceptance Test and Site Acceptance Test.	1		
1.13	Labelling and Warning Signs	1		
1.14	Issuing of Certificate of Compliance (COC) & supplying of manual.	1		
1.15	12 months and up 1000hr of Maintenance of the plant as specified and as per the manufacturer's requirements			
1.16	Other (please specify)			
SUB TOTAL				
VAT (15%)				
TOTAL AMOUNT CARRIED TO FORM OF OFFER				

NB: Bid Price will be evaluated on the basis of total amount offered carried over to form of offer.

Signature(s)

Name(s)

Capacity

For the tenderer:

Name & signature of
witness

Date

..... (Insert name and address of organisation)

PART C 3: SCOPE OF WORKS & SPECIFICATION

PART C3.1 Project scope and general Specification

PART C3.2 Technical Specification

PART C3.3 SHEQ Specification

Scope:

The Scope includes the Supply and Installation and Maintenance of Back-Up Power Generator. The Installation is to include all electrical components of the Facilities, this includes, perimeter fencing, Kitchen Equipment's, etc.

Specification:

2.1. STANDBY GENERATOR- SPECIFICATION

1. General

The standby generator set shall be diesel engine driven and mounted on a Mild Steel common skid base frame of rigid construction.

The generating set shall have a continuously rated output at site of not less than that specified.

The generating set shall be installed for fully automatic operation during power failures and shall be ready to deliver rated capacity within 15 seconds after main failure.

2. ATMOSPHERIC CONDITIONS

The diesel generator set shall suitable for operation under the following ambient conditions:-

- (1) Temperature - from -5 deg C to 40 deg C
- (2) Humidity - from zero to 100% within the range of temperature above
- (3) Atmospheric - 760 mm of mercury Pressure

3. ENGINE

The engine duty will normally be specified as one of the following duty ratings according to SANS 8528: Reciprocating, internal combustion engine driven alternating current generating sets: Part 1 (Application, ratings and performance):

Continuous Power (COP)
Prime Power (PRP)
Emergency Standby Power (ESP)

Should the duty not be specified in the Specification, then the engine must be rated as a Prime Power Unit.

The engine shall be of the vertical in-line or vee-form, monobloc, four stroke, naturally aspirated or pressure charged, water cooled, direct injection, compression ignition type, capable of cold starting and complying with ISO3046-1 and ISO8528.

The engine should be four strokes with an engine speed of 1500 RPM.-The engine shall be capable of delivering not less than the power required by the full load rating of generator after derating due to ambient conditions above, and after deducting the power take-off for engine driven auxiliaries including lubricating oil pump, circulating water pump if applicable, radiator or cooling air fan exciter. A power calculation verifying the above, together with power curve, efficiencies chart, shall be submitted for approval.

The engine shall be supplied complete with lubricating oil pump and circulating water pump, full flow lubricating oil filters, fuel oil filters, lubricating oil pressure gauge, tachometers, integrating hours run recorder, air inlet filter. The engine shall be equipped with an Electronic Governor with hand operated fine speed control. EMS fuel system with ISO8528-2, Class G3 governing is preferred. Overspeed trip and low oil pressure shutdown, 24 volts D.C. starting motor, flywheel with coupling bolts for flange and direct - coupled mounting, and all necessary auxiliaries. The engine shall be suitable for running on Grade 'A' oil engine fuel ("distillate") generally complying with B.S. 2869.

The engine cooling tower radiator shall be mounted upon the under-frame, together with all necessary auxiliaries, so that completely "packaged" unit is formed.

4. ALTERNATOR

The alternator shall be directly coupled to diesel engine through bolted flanges, and of drip proof, screen protected, revolving field, salient pole with damper windings, Class E insulation to B.S. 2757, brushless and self-regulating type and continuously site rated to comply with engine BHP according to B.S. 2613.

The generator shall be mounted on a fabricated steel under-frame by means of oil resistant mountings of the shear compression type so that the entire unit can be bolted to a solid concrete floor without transmitting vibration to adjacent apparatus or to any part of the building.

All electrical terminations shall be made with spring washer to ensure good and reliable contact.

Neutral point of the alternator shall be solidly earthed.

Electric heater where necessary shall be provided in the alternator stator to prevent condensation.

The performance requirements of the alternator shall be as follows: -

5. STARTING SYSTEM

The electric starting system shall be provided complete with engine mounted motor and starting contactor, 24 volts heavy duty nickel cadmium battery of ample rating for seven successive starts of 15 seconds with rest interval of 10 seconds or attempts to start without re-charging, and all necessary wiring between these components. Wiring shall be carried out using neoprene-insulated conductors in plastic conduit.

A battery charger with dual charging rate (trickle and booster), load test switch, ammeter and voltmeter, shall be provided in a sheet steel cabinet properly ventilated. The boost charge shall restore the batteries from flat condition at full charge within 24 hours.

Dual smoothed full-wave rectifiers operating in parallel shall be provided as standby and shall be able to take over supply of the engine starting current in the event of battery failure or battery maintenance.

Suitable tapings are to be provided for adjustment to suit particular characteristic and to compensate for ageing of the rectifier.

The equipment shall be complete with centre zero M.C.S.C ammeter and voltmeter, 'Mains On' switch and indicator, load test switch and suitably rated test load and boost/trickle/off switch.

A battery charger failure protection unit shall be fitted in each charger unit and arranged to operate in the event of the battery voltage falling below normal float level for a period of more than 30 minutes.

6. COOLING SYSTEM

The engine shall be water cooled or provided with an integral fan-operated radiator or alternatively shall be air cooled. The radiator or cooling air fan, as applicable shall be connected by means of flexible canvas section and steel ducting to the aluminum gravity louvered air outlet set in the wall. Engines of above 50 KVA should be water cooled.

If an air-cooled diesel engine is provided, suitable sheet steel ductwork shall be provided to ensure that cooling air is drawn through the cooling fins on the engine to the induced draught fan. Radiator shall be provided for lubricating oil cooling.

7. EXHAUST SYSTEM

Exhaust piping of sheet steel construction together with an efficient silencer of the absorption type shall be provided and installed. The pipework and silencer shall be properly supported to relieve the engine of all weight. All exposed pipework shall be painted with heat-resistant paint, and all exhaust pipeworks shall be insulated.

Exhaust pipework passing through the wall of the engine room shall be sleeved, the outer pipe being provided with a split circular flange properly fixed to each side of the wall, the sleeve being packed internally with asbestos rope and grounded to the wall.

A moisture drain trap with drain cock shall be fitted at the lowest point. A flexible joint of approved type shall be provided at the connection to join the engine.

Exhaust ductwork connecting radiator to the discharge outlet shall be provided. The ductwork shall be manufactured from 20 gauge G.I. sheets and exhaust duct silencers provided.

The design and construction of the exhaust system shall take into consideration the permissible engine's exhaust back-pressure and the noise pollution permitted.

8. FUEL SYSTEM

The generating set shall be provided complete with a day service fuel tank which must be so located to permit gravity feed to the engine pumps. It may be arranged on the combined under-frame, or alternatively bracket mounted upon the wall adjacent to the generator. The capacity of day service fuel tank shall be 500 litres.

The fuel tank shall be fabricated from mild steel sheet construction, and hot dip galvanised, painted inside and outside with oil-resistant primer and externally finished with undercoat and topcoat. A calibrated contents gauge shall be fitted.

A semi-rotary hand-operated pump shall be provided and installed for filling the fuel tank, with a suitable length of oil-resistant hose for off-loading fuel oil from drums. Alternative arrangements may

be provided but shall be subject to the approval of the Engineer. Vent cap overflow connection, drain valve and piping, drip tray and fuel level indicator should be provided.

9. **ANTI-VIBRATION MOUNTINGS**

The whole generator set shall be provided with anti-vibration mounting arrangement giving a minimum isolation efficiency of 95%. Spring type anti-vibration mountings shall be fitted with leveling and adjustment.

10. **AUTO MAINS FAILURE (AMF) AND GENERATOR CONTROL BOARD**

The above may be a common panel fabricated from 14 SWG floor standing cubicle type and installed complete with all necessary equipment for engine and alternator protection and control.

11. **MCCB**

A moulded case circuit breaker (MCCB) of the appropriated rating and breaking capacity shall be provided for adjustable overload and short circuit protection of the generator. The MCCB shall have a shunt trip coil and a lockable type operating handle. IDMT type earth fault relay shall also be provided.

12. **Instruments**

The instruments to be provided shall include ammeter with selector switch, voltmeter with selector switch, frequency meter, power factor meter, kilowatt-hour meter, kilowatt meter, hour run meter, attempt-start counter with manual reset.

13. **Relays & Emergency Button**

Phase failure relay, necessary control relays, timers, reset buttons, visual and audible alarms shall also be provided. Mushroom type emergency stop button shall also be provided.

14. Battery Charger

Battery charger as specified herein before may be housed within the board and the batteries shall be of nickel cadmium type.

15. **Mode of Operation**

The various modes of operation of the generator shall be as follows:-

"OFF"	Generator remains idle indefinitely
"MANUAL"	Generator shall be started and shutdown manually by effecting the START/STOP push buttons.
"TEST"	(1) <u>Without Changeover</u> Generator shall start automatically after a time delay (adjustable between 1 & 30 seconds), and remain operating for a period between 5-60 minutes, after which the generator shall shut down automatically. Changeover contactor shall not operate. (2) <u>With Changeover</u> Automatic starting and shut down of generator shall be same as of (a) above except that changeover contactor shall operate during the test period.
"AUTO"	Generator shall start automatically upon failure of normal supply (detected by phase failure relay, pick-up and drop out voltage adjustable between 80% - 110% of rated voltage) after a time delay (adjustable between 0 to 30 seconds) Changeover contactor shall operate after alternator has built up to rated voltage. Upon restoration of normal supply, and if normal supply voltage remains stable between 0 to 30 minutes changeover contactor

shall operate to transfer load back to normal supply. Generator set shall, however, continue to operate between 0 to 30 minutes after which it shall automatically shut-down.

Should during the said period, the normal supply fail again after the initial restoration, the changeover contactor shall immediately operate and transfer the load to the generator set.

16. Alarms

The following alarms shall be incorporated

- 1) Low Lube Oil Pressure : Engine shut-down with visual & audible alarms
- 2) High Jacket Water Temperature : Engine shut-down with visual & audible alarms
- 3) Engine Overspeed : Engine shut-down with visual & audible alarms
- 4) Alternator Output : Visual and audible alarm
- 5) Engine Fail to Start : Starting circuit locked out (After 3 attempts) with visual and audible alarms
- 6) Low Fuel Level in Day Tank : Visual and audible alarms

17. Indicating Lamps

Indicating lamps shall be provided to:-

- (1) Indicate status of normal TNB Supply
- (2) Indicate status of changeover contactors
- (3) Warn that selector switch is not set in "AUTO" position
- (4) Warn that emergency stop button is in "OFF" position
- (5) Warn that main MCCB is in "OFF" or "TRIP" position

18. EARLY WARNING SYSTEM (SMS):

Supply and install and maintain an early warning system for the following:

- Low Battery voltage.
- Start Failure
- Low fuel
- Mains failure
- Mains back
- Maintenance overdue

NOTE: As part of the above, a system should be developed and provided by the Bidder whereby the facility manager and maintenance manager (or designated person) should be warned/informed immediately when the early warning system is triggered. It is expected that the same system will be linked to the standby personnel of the successful Bidder.

The Bidder must allow for capacitation/training of facility manager to manage and interpret reports.

19. TOOLS

Tools necessary for normal maintenance by user shall be provided.

20. SPARE PARTS LISTS

A comprehensive spare parts list shall be provided to ensure accurate and easy ordering of parts.

21. WORK TESTS

Test shall be carried out at the manufacturer's work in the presence of the Engineer or his representative and three (3) sets of certificate record of test results shall be provided.

The following loads and period of running shall be included in the test:-

(1)	25%	:	One Hour
(2)	50%	:	One Hour
(3)	75%	:	One Hour
(4)	100%	:	Four Hour
(5)	110%	:	One Hour

Current, voltage, frequency, r.p.m. kW output, radiator water temperature and radiator discharge air temperature, fuel consumptions, oil temperatures and pressure, transient voltage, radiator fan static and exhaust gas temperature shall be recorded and verified.

22. SITE TESTS

On completion of installation on site, various tests including sequential tests on starting, running and safety tests on tripping shall be carried out and witnessed thereof to ensure compliance. Additional test shall be carried out to measure the noise levels.

23. PAINTING & FINISHES

These shall be carried out to the satisfaction of the Engineer.

24. OPERATIONS AND MAINTENANCE MANUALS

Three (3) sets of installation, operating and maintenance manuals together with spare parts lists, and properly bound with hard cardboard covers shall be provided. In addition, three (3) sets of as-fitted drawings depicting the complete installation shall be provided.

25. DANGER SIGNS AND FIRST AID CHART

The following item shall be provided: -

Appropriate danger signs on switchboards and on entry doors to the generator switch room.

One framed copy of the "First Air Chart" for treating electrical shocks

One (1) No. rubber mat 13mm thick to be laid along the whole length of the AMF/Generator Switchboard.

Framed up drawing of the generator control and schematic drawing.

26. EARTHING

All non-current carrying metal parts shall be bonded effectively to earth.

An independent earthing system adequate for the proposed installation shall be provided. The overall resistance of the earthing system shall be less than 5 ohm.

An earth name plate shall be provided at the main earthing bar stating the date and value of earth resistance obtained.

Earth electrodes shall be provided with a concrete inspection chamber installed flush with the surface.

The neutral of the generator set shall be separately earthed.

27. NOISE CONTROL

The completed installation shall meet the requirements regarding acceptable noise level as set out by relevant environmental legislation, bylaws and SANS.

The necessary acoustic treatment and additional measures required to reduce to acceptable level of noise and vibrations generated during running of the proposed generator set are deemed to be inclusive in the Scope of Work. Such acoustic treatments and measures shall include provisions of noise absorbing wall paneling, noise attenuators on the engine exhaust system and radiator air ducting system, specially constructed noise attenuation boxes complete with grills/louvers at all openings of the generator room, additional treatment on all doors and door frames leading into generator room and suitably selected spring type vibration isolators.

28. FACTORY ACCEPTANCE TEST

The Contractor is to include the price for to and pro passages for factory acceptance test at places of manufacturer for at least one (1) personnel of Client/Consultant.

2.2. GUARANTEE AND MAINTENANCE

1. Guarantee:

The Contractor shall guarantee the Contract Works for a period of twelve months after notification of taking over. During this period any defective material, equipment or workmanship, shall be made good with all possible speed at the Contractor's expense to the satisfaction of the Engineer.

2. Making Good:

When called on by the Engineer the Contractor shall make good on site and bear all the expenses incidental thereto including making good of work by others, arising out of removal or re-installation of equipment. The Contractor may delegate such making good to an approved party. All work arising from the implementation of the guarantee of maintenance of equipment shall be carried out at times which will not result in any undue inconvenience to users of the equipment or occupants of premises.

If any defects are not remedied within a reasonable time the Employer may proceed to do the work at the Contractor's risk and expense, but without prejudice to any other rights which the Employer may have against the Contractor.

3. Latent Defects and Failure to Comply with Specification:

The Engineer reserves the right to demand the replacement or making good by the Contractor at the Contractor's expense any part of the Contract Works which is shown to have any latent defects or not to have complied with the Specification, notwithstanding that such work has been taken over or that the guarantee period has expired.

4. Qualification by Tenderer:

Should any specified materials or equipment in the Tenderer's opinion be of inferior quality or unsuitably employed, rated or loaded, the Tenderer shall, at the time of tendering draw the attention of the Engineer to these conditions and duly qualify his tender. His failure to do so shall mean that he guarantees the work including all materials or equipment as specified.

5. Maintenance:

At quarterly intervals during the guarantee period of twelve months, the Contractor shall adjust and maintain the standby generator and its ancillary equipment in proper working order or as per manufacturer's recommendations. As a minimum requirement, the Contractor shall:

- a) Check and top-up, if necessary, the fluid levels in the radiator, engine sump and batteries.
- b) Test run the standby generator and ancillary equipment for a period of 15 minutes.
- c) Wipe down the standby plant and its ancillary equipment and report on any evidence of any fluid leaks or other defects.
- d) For the purpose of costing the renewing of any part which may have become worn through fair wear and tear, including oil changes, the contractor shall make allowance for generator runs based on daily load shedding at level 2.
- e) Fill in the standby plant logbook.

The cost of such inspections, maintenance, adjustments, repairs, etc shall be included in the Price Summary.

If during the guarantee and maintenance period the standby generator is not in working order for any reason for which the Contractor can be held responsible, then the Contractor will be notified, and immediate steps shall be taken by him to remedy the defects. Should the standby generator defects be so frequent as to become objectionable or should the equipment otherwise prove unsatisfactorily during the guarantee period of twelve months, the Contractor shall, if called upon by the Engineer, at his own expense replace the whole or such parts thereof as the Engineer may deem necessary with the equipment to be specified by the Engineer. Approval, tacit or otherwise of the equipment installed shall be considered as provisional only and shall not invalidate the Engineer's rights as indicated above.

2.3. SCHEDULES OF TECHNICAL INFORMATION

1. Engine

NO	ITEM	REMARKS
1.	Manufacturer's Name	
2.	Country of Origin	
3.	Manufacturer's model No. and year of manufacture	
4.	Continuous sea level rating after allowing for ancillary equipment: a) In b.h.p. b) In kW	
5.	Percentage de-rating for site conditions, in accordance with SANS 8528 a) For altitude b) For temperature c) For humidity d) Total de-rating	
6.	Net output on site in kW	
7.	Nominal speed in r.p.m.	
8.	Number of cylinders	
9.	Strokes per working cycle	
10.	Stroke in mm	
11.	Cylinder bore in mm	
12.	Swept volume in cm ³	
13.	Mean piston speed in m/min	
14.	Compression ratio	
15.	Cyclic irregularity	
16.	Fuel consumption of the complete generating set on site in l/h of alternator output at: a) Full load b) $\frac{3}{4}$ load c) $\frac{1}{2}$ load NOTE: A tolerance of 5% shall be allowed above the stated value of fuel consumption.	
17.	Make of fuel injection system.	
18.	Capacity of fuel tank in litres	
19.	Is gauge glass fitted to tank?	
20.	Is electric pump for filling the fuel tank included?	

NO	ITEM	REMARKS
21.	Method of starting	
22.	Voltage of starting system	
23.	Method of cooling	
24.	Type of radiator if water-cooled	
25.	Type of heater for warming cylinder heads	
26.	Capacity of heater in kW	
27.	Method of protection against high temperature	
28.	Method of protection against low oil pressure	
29.	Type of governor	
30.	Speed variation in % a. Temporary b. Permanent	
31.	Minimum time required for as assumption of full load in seconds	
32.	Recommended interval in running hours for : a. Lubricating oil change b. Oil filter element change c. Decarbonising	
33.	Type of base	
34.	Can plant be placed on solid concrete floor?	
35.	Are all accessories and ducts included?	
36.	Is engine naturally aspirated?	
37.	Are performance curves attached?	
38.	Diameter of exhaust pipe	
39.	Noise level in plant room in dBA	N/A
40.	Noise level at tail of exhaust pipe in dBA	
41.	BMEP (4 stroke) at continuous rating (kPa)	
42.	% Load acceptance to SANS 8528, with 10% transient speed drop	

2. Alternator

NO	ITEM	REMARKS
1.	Maker's name and model no.	
2.	Country of Origin and year of manufacture	
3.	Type of enclosure	
4.	Nominal speed in r.p.m.	
5.	Number of bearings	
6.	Terminal voltage	
7.	Sea level rating kVA at 0,9 power factor	
8.	De-rating for site conditions	
9.	Input required in kW	
10.	Method of excitation	
11.	Efficiency at 0,9 power factor and: a) Full load b) $\frac{3}{4}$ load c) $\frac{1}{2}$ load	
12.	Maximum permanent voltage variation in %	
13.	Transient voltage dip on full load	
14.	Voltage recovery on full load application in milli-seconds	
15.	Is alternator brushless?	
16.	Class of insulation of windings	
17.	Is alternator tropicalised?	
18.	Symmetrical short circuit current at terminals n Ampere	
19.	Type of Coupling	

3. Switchboard

NO	ITEM	REMARKS
1.	Maker's Name	
2.	Country of Origin	
3.	Is board floor mounted?	
4.	Finish of board	
5.	Make of volt, amp, and frequency meters	
6.	Dial size of meters in mm	
7.	Scale range of voltmeter	
8.	Scale range of ammeters	
9.	Ratio of current transformers	
10.	Make of hour meter	
11.	Range of cyclometer counter	
12.	Smallest unit shown on counter (Item 11)	
13.	Make of circuit breaker	
14.	Type of circuit breaker	
15.	Rating of circuit breaker in Amp and fault level in kA	
16.	Setting range of overload trips	
17.	Setting range of instantaneous trips	
18.	Make of change-over equipment	
19.	Make of voltage relay	
20.	Is control and protection equipment mounted on a small removable panel?	
21.	Type of control equipment	
22.	Make of mains isolator	
23.	Type of indicators for protective devices	
24.	Make of rectifier	
25.	Type of rectifier	
26.	Is battery charging	
27.	Are volt- and ammeters provided for charging circuit?	
28.	Is the alarm hooter of the continuous duty type?	
29.	Rating in Amps of: a. Change-over equipment b. Mains on load isolator c. By-pass switch d. Circuit breaker to outgoing feed	
30.	Is manufacture of switchboard/control panel to be sub-let?	

NO	ITEM	REMARKS
31.	If yes, state name and address of specialist manufacturer	

4. Battery

NO	ITEM	REMARKS
1.	Maker's Name	
2.	Country of Origin	
3.	Type of battery	
4.	Voltage of battery	
5.	Number of cells	
6.	Capacity in cold crank amp	

5. Dimensions

NO	ITEM	REMARKS
1.	Overall dimensions of set-in mm	
2.	Overall mass	
3.	Is the canopy/container adequate for the installation of the set, switch board and fuel tank	

6. Deviation from the Specification as an Alternative (State Briefly)

NO	DESCRIPTION

7. Spare Parts and Maintenance Facilities

NO	ITEM	REMARKS
1	Approximate value of spares carried in stock for this particular diesel engine and alternator	
2	Where are these spares held in stock	
3	What facilities exist for the servicing of the equipment offered	
4	Where are these facilities available	

PART C3.2: SHEQ SPECIFICATION

Occupational health and safety specification for construction works

1 Scope

This health and safety specification in respect if an engineering and construction works contract:

- a) provides the overarching framework within which the Contractor is required to demonstrate compliance with certain requirements for occupation health and safety established by the Occupational Health and Safety Act of 1993;
- b) establishes the manner in which the Contractor is to manage the risk of health and safety incidents in the execution of the contract; and
- c) establishes the manner in which the Employer's health and safety agent will interact with the Contractor.

Note: 1) This specification establishes general requirements to enable the Employer and the Contractor to satisfy the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and the Construction Regulations, 2003.

2) The Construction Regulations, 2003, require an Employer to stop any Contractor from executing construction work which is not in accordance with the Contractor's health and safety plan for the site or which poses to be a threat to the health and safety of persons.

3) This specification establishes generic health and safety requirements Site specific requirements for health and safety are stated in the scope of work associated with a contract.

2 Interpretation

2.1 The Act and its associated regulations shall have precedence in the interpretation of any ambiguity or inconsistency between it and this specification.

2.2 Compliance with the requirements of this specification does not necessarily result in compliance with the provisions of the Act.

3 Requirements

3.1 General requirement

The Contractor shall:

- a) Create and maintain a safe and healthy work environment,
- b) Execute the works in a manner that complies with all the requirements of the Act and all its associated regulations, and in so doing, minimize the risk of incidents occurring; and
- c) Respond to the notices issued by the Employer's Health and Safety Agent as follows:
 - 1) improvement Notice: improve health and safety performance over time so that repeat notices are not issued;
 - 2) contravention Notice: rectify contravention as soon as possible;
 - 3) prohibition Notice: terminate affected activities with immediate effect and only recommence activities when it is safe to do so.

3.2 Administration

3.2.1 Notification of intention to commence construction work

3.2.1.1 The Contractor shall notify the Provincial Director of Labour in writing using a form similar to that contained in Annexure A of the Construction Regulations issued in terms of the Act before construction work commences and retain a copy of such notification in the health and safety file where such work:

- a) involves the demolition of a structure exceeding a height of 3m;
- b) involves the use of explosives to perform construction work;
- c) involves the dismantling of fixed plant at a height greater than 3m;
- d) exceeds 30 days or will involve more than 300 person days of construction work; and

includes:

- i) excavation work deeper than 1m; or
- ii) working at a height greater than 3 m above ground or a landing.

3.2.1.2 The Contractor shall ensure that no work commences on an electrical installation which requires a new supply or an increase in electricity supply before the person who supplies or contracts or agrees to supply electricity to that electrical installation has been notified of such work.

3.2.1.3 The Contractor shall ensure that no asbestos work is carried out before the Provincial Director of the Department of Labour has been notified in writing.

3.2.2 Copy of the Act

The Contractor shall ensure that a copy of the Act and relevant regulations is available on site for inspection by any person engaged in any activity on the site.

3.2.3 Good standing with the compensation fund or a licensed compensation insurer

The Contractor shall before commencing with any works on the site provide the Employer's Health and Safety Representative with proof of good standing with the compensation fund or with a licensed compensation insurer.

3.2.4 Emergency procedures

3.2.4.1 The Contractor shall submit for acceptance to the Employer's Health and Safety Agent an emergency procedure which include but are not limited to fire, spills, accidents to employees, exposure to hazardous substances, which:

- a) identifies the key personnel who are to be notified of any emergency;
- b) sets out details including contact particulars of available emergency services; and
- c) the actions or steps which are to be taken during an emergency.

3.2.4.2 The Contractor shall within 24 hours of an emergency taking place notify the Employer's Health and Safety Agent in writing of the emergency and briefly outline what happened and how it was dealt with.

3.2.5 Health and safety file

3.2.5.1 The Contractor shall maintain on site a health and safety file which contains copies of the following, as relevant:

a) Documents required prior to commencing with physical construction activities

- 1) the Contractor's health and safety policy, signed by the chief executive officer, which outlines the Contractor's objectives and how they will be achieved and implemented by the Contractor;
- 2) the notification made to the Provincial Director of Labour, and if relevant, the notification of the person who supplies or contracts or agrees to supply electricity to that electrical installation;
- 3) the letters of appointment, as relevant, of the construction supervisor for the site in respect of construction works covered by the Construction Regulations and the registered person responsible for the electrical installation covered by the Electrical Installations Regulations;
- 4) a copy of the certificate of registration of the registered person responsible for the electrical installation covered by the Electrical Installations Regulations;
- 5) the approval of the design of the part of an electrical installation which has a voltage in excess of 1 kV by a person deemed competent in terms of the Electrical Installations Regulations;
- 6) proof of registration of the electrical contractor who undertakes the electrical installation in terms of the Electrical Installations Regulations;
- 7) the preliminary hazard identification undertaken by a competent person;
- 8) the organogram which outlines the roles and responsibilities of the construction supervisor's assistants and safety officers; and
- 9) the contractor's health and safety plan;
- 10) the emergency procedures;
- 11) the procedure for the replacement of lost, stolen, worn or damaged personal protective clothing and
- 12) proof that the contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer;

b) documents required after construction activities have commenced

- 1) the letters of appointments, if relevant, of:
 - i) persons who are required to assist the construction supervisor;
 - ii) safety officers;
 - iii) health and safety representatives;
 - iv) replacement construction supervisor, and
 - v) assistants of construction supervisor.
- 2) any revisions to the organogram which outlines the roles and responsibilities of the construction supervisor's assistants and safety officers;
- 3) each and every subcontract agreement;

- 4) proof that every subcontractor is registered and in good standing with the compensation fund or with a licensed compensation insurer;
- 5) proof of all subcontractor's induction training whenever it is conducted;
- 6) copies of the minutes of the Contractor's subcontractor's health and safety meetings;
- 7) copies of each of the Contractor's subcontractors' health and safety policy, signed by the chief executive officer, which outlines the Contractor's objectives and how they will be achieved and implemented by the Contractor;
- 8) the health and safety plans of all the Contractor's subcontractors who are required to provide such plans;
- 9) a comprehensive and updated list of all the subcontractors employed on site by the contractor, indicating the type of work being performed by such sub-contractors;
- 10) the outcomes of the monthly audits for compliance with the approved health and safety plan of each and every sub-contractor working on the site;
- 11) any report made to an inspector by the health and safety committee;
- 12) the minutes of all health and safety meetings and any recommendations made to the Contractor by the health and safety committee;
- 13) the findings of all audit reports made regarding the implementation of the Contractor's or a subcontractor's health and safety plan;
- 14) the inputs of the safety officer, if any, into the health and safety plan;
- 15) details of induction training conducted whenever it is conducted including the list of attendees;
- 16) proof of the following where suspended platforms are used:
 - i) a certificate of system design issued by a professional engineer, professional certificated engineer or a professional engineering technologist;
 - ii) proof of competency of erectors;
 - iii) proof of compliance of operational design calculations with requirements of the system design certificate;
 - iv) proof of performance test results;
 - v) sketches indicating the completed system with the operational loading capacity of the platform;
 - vi) procedures for and records of inspections having been carried out;
 - vii) procedures for and records of maintenance work having been carried out;
 - viii) proof that the prescribed documentation has been forwarded to the provincial director;
- 17) letters of appointments for competent persons to supervise the activities which law requires to be so supervised;
- 18) a copy of risk assessments made by competent persons;
- 19) records of the register of inspections made by a competent person immediately before and during the placement of concrete or any other load on formwork;

20) the names of the first aiders on site and copies of the first aid certificates of competency;

21) the names of the persons the persons who are in possession of valid certificate of competency in first aid and copies of such certificates;

22) details of all incidents together with the Contractor's report on such incident; and

23) the record of inspections carried out by the designers of structures to ensure compliance with designs.

3.2.5.2 The health and safety file shall be made available for inspection by any inspector, subcontractor, the Project Manager, the Employer's Health and Safety Agent or employee of the Contractor upon the request of such persons.

3.2.5.3 The Contractor shall hand over the health and safety file to the Employer's Health and Safety Agent upon completion of the contract and if relevant, a certificate of compliance accompanied by a test report for the electrical installation in accordance with the provisions of the Electrical Installation Regulations.

3.2.6 Health and safety committee

3.2.6.1 The Contractor shall convene health and safety meetings whenever more than two health and safety representatives have been appointed for the site. These meetings shall be attended by all health and safety representatives and persons nominated by the Contractor. Such meetings shall be convened at least once every month to:

- a) make recommendations to the Contractor regarding any matter affecting the health or safety of persons on the site; and
- b) discuss any incident on the site in which or in consequence of which any person was injured, became ill or died.

3.2.6.2 The Contractor shall consult with the health and safety committee on the development, monitoring and review of the risk assessment.

3.2.6.3 The Contractor shall ensure that minutes of the health and safety committee meetings are kept.

3.2.6.4 The Employer's Health and Safety Agent shall be invited to attend such meetings as an observer.

3.2.7 Inspections, formal enquires and incidents

3.2.7.1 The Contractor shall inform the relevant safety representative:

- a) beforehand of inspections, investigations or formal inquiries of which he has been notified by an inspector; and
- b) as soon as reasonably practicable of the occurrence of an incident on the site.

3.2.7.2 The Contractor shall record all incidents and notify the Employer's Health and Safety Agent of any incident, except in the case of a traffic accident on a public road, as soon as possible after it has occurred and report such incidence to an inspector.

3.2.7.3 The Contractor shall investigate all incidents and issue the Employer's Health and Safety Agent with copies of such investigations.

3.2.8 Personal protective equipment and clothing

The Contractor shall ensure that:

- a) all workers are issued with the necessary personal protective clothing;
- b) all workers are identifiable at all times by having the company for which they work for printed on the back or front of their overalls; and
- c) clear procedures are in place for the replacement of lost, stolen, worn or damage personal protective clothing.

3.3 Appointments

3.3.1 Health and safety representatives

3.3.1.1 The Contractor shall appoint in writing one health and safety representative for every 50 employees working on the site, whenever there are more than 20 employees on the site, to:

- a) review the effectiveness of health and safety measures;
- b) identify potential hazards and potential major incidents;
- c) in collaboration with his employer, examine the causes of incidents;
- d) investigate complaints by any employee of the Contractor relating to that employee's health or safety on the site;
- e) make representations to the Contractor on matters arising from a), b), c) or d) or on general matters affecting the health or safety of the employees at the workplace;
- g) inspect the site with a view to, the health and safety of employees, at regular intervals;
- h) participate in consultations with inspectors at the workplace and accompany inspectors on inspections of the workplace; and
- i) participate in any internal health or safety audit.

3.3.1.2 The Contractor shall provide the health and safety representatives with the necessary assistance, facilities and training to carry out the functions established in 3.3.1

3.3.2 Appointment of construction supervisor and safety officers

3.3.2.1 The Contractor shall, prior to commencing the work, appoint a full-time competent employee in writing as the construction supervisor for the site, with the duty of supervising the performance of the work falling within the scope of the contract and may appoint one or more competent employees to assist the appointed construction supervisor.

3.3.2.2 The Contractor may, having considered the size of the project, the degree of dangers likely to be encountered or the accumulation of hazards or risks on the site, appoint a full-time or part time construction safety officer in writing, who has in the Contractor's opinion the necessary competencies and resources, to assist the Contractor in the control of all safety related aspects on the site.

3.3.2.3 The Contractor shall compile and maintain an organogram which outlines the roles and responsibilities of the construction supervisor's assistants and safety officers.

3.3.3 Competent persons

3.3.3.1 The Contractor shall appoint in writing competent persons to supervise or inspect, as relevant, any of the following:

- a) . formwork and support work operations;
- b) excavation work;
- c) demolition work;
- d) scaffolding work operations;
- e) suspended platform work operations;
- f) material hoists;
- g) operation of batch plants;
- h) explosive power tools;
- i) vehicles and mobile equipment;
- j) fire equipment; and
- g) the stacking and storage of articles on the site.

3.3.3.2 The Contractor shall appoint in writing competent persons to:

- a) induct employees in health and safety; and
- b) prepare a fall protection plan.

3.4 Employer's health and safety agent

3.4.1 The Employer's Health and Safety Agent shall:

- a) audit the Contractor's compliance with the requirements of this specification prior to the commencement of any physical construction activities on the site;
- b) accept or reject all safety plans, giving reasons for rejecting such plans;
- c) monitor the effective implementation of all safety plans;
- d) conduct periodic and random audits on the health and safety file to establish compliance with the requirements of this specification;
- e) visit the site at regular intervals to conduct site inspections, and based upon such visits issue, wherever necessary, Improvement Notices, Contravention Notices and Prohibition Notices, to the Contractor or any of the Contractor's subcontractors with a copy to the Project Manager and, where relevant, to the Contractor.

3.4.2 The Contractor shall invite the Employer's Health and Safety Agent to audit compliance with the requirements of this specification before commencing with any physical construction activity on the site.

3.5 Creating and maintaining a safe and healthy work environment

3.5.1 General

3.5.1.1 The Contractor shall with respect to the site and the construction works that are contemplated:

- a) cause a preliminary hazard identification to be performed by a competent person before commencing any physical construction activity;
- b) evaluate the risks associated with such work constituting a hazard to the health and safety of such employees and the steps that need to be taken to comply with the Act; and
- c) as far as is reasonably practicable, prevent the exposure of such employees to the hazards concerned or, where prevention is not reasonably practicable, minimize such exposure.

3.5.1.2 The Contractor shall ensure that:

- a) all reasonably practicable steps are taken to prevent the uncontrolled collapse of any new or existing structure or any part thereof, which may become unstable or is in a temporary state of weakness or instability due to the carrying out of construction work;
- b) no structure or part of a structure is loaded in a manner which would render it unsafe; and
- c) account of information, if any, provided by the designer of the structure is considered in the risk assessment;

Note: The information provided by the designer should outline known or anticipated dangers or hazards relating to the works and make available all information required for the safe execution of the work. It should provide as relevant, geotechnical information (or refer to reports provided in the site information), the loading the structure is designed to withstand, the methods and sequence of construction.

3.5.1.3 The Contractor shall carry out regular inspections and audits to ensure that the works are being performed in accordance with the requirements of this specification.

3.5.2 Risk assessment

3.5.2.1 The Contractor shall before the commencement of any work on site and during construction work, cause a risk assessment to be performed by a competent person appointed in writing. Such an assessment shall as a minimum:

- a) identify the risks and hazards to which persons may be exposed to;
- b) analyse and evaluate the identified risks and hazards;
- c) document a plan of safe work procedures, including the use of any personal protective equipment or clothing and the undertaking of periodic "toolbox talks" or inductions before undertaking hazardous work, to mitigate, reduce or control the risks and hazards that have been identified;
- d) provide a monitoring plan; and
- e) provide a review plan.

Note: A risk assessment is an important step in protecting workers as well as complying with the law. It helps to focus on the risks that really matter in a particular workplace – the ones with the potential to cause real harm. Workers and others have a right to be protected from harm caused by a failure to take reasonable control measures. The following four steps are recommended:

1) **Identify the hazards** by looking at what could reasonably be expected to cause harm, ask employees or their representatives what they think, obtain advice from trade associations or publications on health and safety, check manufacturer's instructions or data sheets for chemicals and equipment as they can be very helpful in spelling out the hazards and putting them in their true perspective, review accident and ill-health records, think about long-term hazards to health (eg high levels of noise or exposure to harmful substances) as well as safety hazards etc.

2) **Identify who may be harmed and how** by identifying how groups of people might be harmed i.e. what type of injury or ill health might occur.

3) **Evaluate the risks and decide on precautions** by doing everything 'reasonably practicable' to protect people from harm i.e. by looking at how things are done, what controls are in place and how the work is organised and comparing this against good practice to see if more can be done to bring practices up to standard. Consider if the hazard can be got rid of all together, and if not, how can the risks be controlled so that harm is unlikely, e.g. try a less risky option (eg switch to using a less hazardous chemical); prevent access to the hazard (eg by guarding); organise work to reduce exposure to the hazard (eg put barriers between pedestrians and traffic); issue personal protective equipment (eg clothing, footwear, goggles etc); and provide welfare facilities (eg first aid and washing facilities for removal of contamination).

4) **Record the findings** by writing down the findings of the risk assessment.

3.5.2.2 The Contractor shall ensure that as far as is reasonably practicable, ergonomic related hazards are analysed, evaluated and addressed in the risk assessment.

3.5.2.3 Notwithstanding the provisions of the fall protection plan, the Contractor shall ensure that:

a) all unprotected openings in floors, edges, slabs, hatchways and stairways are adequately guarded, fenced or barricaded or that similar means are used to safeguard any person from falling through such openings;

b) no person works in an elevated position, unless such work is performed safely as if working from a scaffold or ladder;

c) notices are conspicuously placed at all openings where the possibility exists that a person might fall through such openings;

d) fall prevention and fall arrest equipment is:

i) suitable and of sufficient strength for the purpose or purposes for which it is being used having regard to the work being carried out and the load, including any person, it is intended to bear; and

ii) securely attached to a structure or plant and the structure or plant and the means of attachment thereto is suitable and of sufficient strength and stability for the purpose of safely supporting the equipment and any person who is liable to fall;

e) fall arrest equipment is only used where it is not reasonably practicable to use fall prevention equipment; and

f) suitable and sufficient steps are taken to ensure, as far as is reasonably practicable, that in

the event of a fall by any person, the fall arrest equipment or the surrounding environment does not cause injury to the person.

3.5.2.4 Where roof work is being performed on a construction site, the Contractor shall ensure that it is indicated in the fall protection plan that:

- a) the roof work has been properly planned;
- b) the roof erectors are competent to carry out the work;
- c) no employees are permitted to work on roofs during inclement weather conditions or if weather conditions are a hazard to the health and safety of the employees;
- d) prominent warning notices are to be placed where all covers to openings are not of sufficient strength to withstand any imposed loads and where fragile material exists;
- e) the areas mentioned in paragraph (d) are to be barricaded off to prevent persons from entering;
- f) suitable and sufficient platforms, coverings or other similar means of support have been provided to be used in such a way that the weight of any person passing across or working on or from fragile material is supported; and
- g) there is suitable and sufficient guard-rails or barriers and toe-boards or other similar means of protection to prevent, so far as is reasonably practicable, the fall of any person, material or equipment.

3.5.3 Health and safety plans

3.5.3.1 The Contractor shall prior to commencing the works to which this specification applies, submit to the Employer's Health and Safety Agent for approval a suitable and sufficiently documented health and safety plan, based on this specification and the risk assessment that is conducted.

b) an outline of the manner in which the Contractor intends complying with the requirements of this specification.

3.5.3.3 The Contractor shall discuss the submitted health and safety plan with the Employer's Health and Safety Agent, modify such plan in the light of the discussions and resubmit the modified plan for approval.

3.5.3.4 The Contractor shall apply the approved health and safety plan from the date of its commencement and for the duration of the works to which this specification applies.

3.5.3.5 The Contractor shall conduct periodic audits for compliance with the approved health and safety plan at intervals agreed upon with the Employer's Health and Safety Agent, but at least once every month.

3.5.3.5 The Contractor shall update the health and safety plan whenever changes to the works are brought about.

3.5.4 Fall protection plan

3.5.4.1 The Contractor shall require a competent person to prepare a fall protection plan in compliance with the requirements of the Construction Regulations.

3.5.4.2 The Contractor shall ensure that the construction supervisor is in possession of the most recently updated version of the fall protection plan.

3.5.5 Responsibilities towards employees and visitors

3.5.5.1 The Contractor shall as far as is reasonably practicable, cause every employee to be made conversant with the hazards to his health and safety attached to any work which he has to perform, any article or substance which he has to produce, process, use, handle, store or transport and any plant or machinery which he is required or permitted to use, as well as with the precautionary measures which should be taken and observed with respect to those hazards or safe work procedures.

3.5.5.2 The Contractor shall ensure that all employees under his or her control are:

- a) informed, instructed and trained by a competent person regarding any hazard and the related work procedures before any work commences, and thereafter at such times as may be determined in the risk assessment; and
- b) issued with proof of health and safety induction training issued by a competent person and carry proof of such induction when working on site.

3.5.5.3 The Contractor shall cause a record of training to be kept which indicates the names, identity numbers and job description of all those who attended such training.

3.5.5.4 The Contractor shall not allow or permit any employee to enter the site, unless such person has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry.

3.5.5.5 The Contractor shall ensure that each visitor to a construction site, save where such visitor only visits the site office and is not in direct contact with the construction work activities:

- a) undergoes health and safety instruction pertaining to the hazards prevalent on the site; and
- b) is provided with the necessary personal protective equipment.

3.5.5.6 The Contractor shall provide suitable on-site signage to alert workers and visitors to health and safety requirements. Such signage shall include but not be limited to:

- a) unauthorized entrance prohibited;
- b) signage to indicate what personal protective equipment is to be worn; and
- c) activity related signs.

3.5.5.7 The Contractor shall not permit any person who is or who appears to be under the influence of intoxicating liquor or drugs, to enter or remain at a workplace.

3.5.6 Subcontractors

3.5.6.1 The Contractor may only subcontract work in terms of a written subcontract and shall only appoint a subcontractor should he be reasonably satisfied that such a subcontractor has the necessary competencies and resources to safely perform the work falling within the scope of the

contract. Such a subcontract shall require that the subcontractor to:

- a) co-operate with the Contractor as far as is necessary to enable both the Contractor and sub-contractor to comply with the provisions of the Act; and
- b) as far as is reasonably practicable, promptly provide the Contractor with any information which might affect the health and safety of any person at work carrying out work or any person who might be affected by the work of such a person at work or which might justify a review of the health and safety plan.

3.5.6.2 The Contractor shall provide any sub-contractor who is submitting a tender or appointed to perform a sub-contract falling within the scope of the contract, with the relevant sections of this specification and any work specific information which might be pertinent to the sub-contract.

3.5.6.3 The Contractor shall take reasonable steps as are necessary to ensure:

- a) co-operation between all sub-contractors to enable each of those sub-contractors to comply with the requirements of the Act and associated regulations; and
- b) that each sub-contractor's health and safety plan is implemented.

3.5.6.4 The Contractor shall conduct periodic audits for compliance with the approved health and safety plan of each and every sub-contractor working on the site at intervals agreed upon with such subcontractors, but at least once per month.

3.5.6.5 The Contractor shall stop any subcontractor from executing construction work which is not in accordance with the Contractor's or subcontractor's health and safety plan for the site or which poses a threat to the health and safety of persons.

3.5.6.6 The Contractor shall ensure that where changes to the works occur, sufficient health and safety information and appropriate resources are made available to subcontractor to execute the work safely.

3.5.6.7 The Contractor shall ensure that:

- a) every subcontractor is registered and in good standing with the compensation fund or with a licensed compensation insurer prior to work commencing on site;
- b) potential subcontractors submitting tenders have made provision for the cost of health and safety measures during the construction process; and
- c) every subcontractor has in place a documented health and safety plan prior to commencing any work on site which falls within the scope of the contract.

3.5.6.8 The contractor shall receive, discuss and approve health and safety plans submitted by subcontractors.

3.5.6.9 The contractor shall ensure that all subcontractors are informed regarding any hazard as stipulated in the risk assessment before any work commences, and thereafter at such times as may be determined in the risk assessment.

3.5.6.10 The contractor shall reasonably satisfy himself that all employees of subcontractors are informed, instructed and trained by a competent person regarding any hazard and the related work procedures before any work commences, and thereafter at such times as may be determined in the risk assessment.

3.5.6.11 The Contractor shall satisfy himself that ensure that all subcontractor employees deployed in the site are:

a) informed, instructed and trained by a competent person regarding any hazard and the related work procedures before any work commences, and thereafter at such times as may be determined in the risk assessment; and

b) issued with proof of health and safety induction training issued by a competent person and carry proof such induction when working on site.

3.5.7 First aid, emergency equipment and procedures

3.5.7.1 The Contractor shall where more than five employees are employed at a workplace, provide a first aid box or boxes at or near the workplace which shall be available and accessible for the treatment of injured persons at that workplace. Such first aid boxes shall contain suitable first aid equipment.

3.5.7.1 The Contractor shall ensure that where there are more than 10 employees employed on the site that for every group of up to 50 employees at that workplace, at least one person is readily available during normal working hours, who is in possession of a valid certificate of competency in first aid.

3.5.8 Facilities for workers

3.5.8.1 The Contractor shall provide and keep clean and fit for use at or within reasonable access of the site:

a) at least one shower facility for every 15 workers;

b) at least one sanitary facility for every 30 workers;

c) changing facilities for each sex; and

d) sheltered eating areas.

3.5.8.2 A contractor shall provide reasonable and suitable living accommodation for the workers at construction sites which are remote from their homes and where adequate transportation between the s12.

4. Potential Sources of Risk

4.1 The following potential sources of risk to the health and safety of persons on site must be appropriately addressed by the Principal Contactor's H&SP. In addition, the Principal Contractor must perform its own risk assessments to enable it to take precautions to protect the health and safety of persons on site, to comply with the Principal Contractor's obligations under the Act and all Regulations made there under, including the Construction Regulations. All such precautionary

measures and procedures must be included in the Principal Contactor's H&SP, which must be submitted to the Client for review and approval and where applicable should include:

- Noise
- Potential presence of asbestos that forms part of the structure (cement fibre)
- Dust
- Working at height (fall protection)
- Drilling (Breaking of walls)
- Formwork and support work
- Scaffolding
- Construction vehicles and mobile equipment
- Electrical installations and electrical machinery
- Housekeeping
- Stacking and storage practices
- Fire risks and fire precautions
- Use of jackhammers
- Hot work (steel cutting and welding)
- Portable electrical tools
- Intoxicated persons on site
- Use of ladders
- Impact of construction work upon occupants of buildings not evacuated for the duration of the work.

PART C 4: SITE INFORMATION

Boshof Correctional Centre is situated in the town of Boshof, Free State.

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