



public works
& infrastructure

Department:
Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA

Department of Public Works and Infrastructure: Bloemfontein Regional Office: 18 President Brand Street, Bloemfontein, 9300. (T) 051 408 7335 (M) 060 478 9004

TENDER NO: BL23/008

**BLOEMFONTEIN DEPARTMENT OF PUBLIC WORKS:
IMPLEMENTATION OF EMERGENCY BACK-UP POWER SUPPLY
AT BETHULIE PRISON**

NAME OF TENDERER:

CIDB NO. :

JUNE 2023

RETURNABLE DOCUMENT

INDEX TO VOLUMES 1 - 3

DESCRIPTION	LOCATION
INDEX	2 pages
VOLUME 1: TENDERING PROCEDURES	Cover sheet
T1.1 Tender Notice and Invitation to Tender	Separation sheet
PA-04(EC) - Notice and Invitation to Tender	9 pages
T1.2 Tender Data	Separation sheet
DPW-03(EC) – Tender Data	7 pages
Further Conditions of Tender (Extension of DPW-03)	1 pages
VOLUME 2: RETURNABLE DOCUMENTS	Cover sheet
T2.1 List of Returnable Documents	Separation sheet
PA-09(EC) - List of Returnable Documents	3 pages
C1.1 Form of Offer and Acceptance	Separation sheet
DPW-07(EC) - Form of Offer and Acceptance	4 pages
C2.2 Provisional Bills of Quantities	Separation sheet
Preliminaries for inclusion in Bills of Quantities based on the GCC Series 2010 22 ND Edition documentation	
Bills of Quantities / Specification and Schedule of Rates / Final Summary	
T2.2 Returnable Documents required for tender evaluation purposes	Separation sheet
PA-11 - Declaration of Interest and Bidder's Past Supply Chain Management Practices	3 pages
PA-15.1 - Resolution of Board of Directors	2 pages
PA-15.2 - Resolution of Board of Directors to enter into Consortia or Joint Ventures	2 pages
PA-15.3 - Special Resolution of Consortia or Joint Ventures	3 pages
PA-16.1(EC) - Preference Points Claim Form in terms of the Preferential Procurement Regulations 2022	10 pages
DPW-09(EC) - Particulars of Tenderer's Projects	2 pages
T2.2 Returnable Documents that will be incorporated into the contract	Separation sheet
PA-40 Declaration of Designated Groups for Preferential Procurement	2 pages
EPWP Declaration Form	1 page
DPW-21(EC) – Record of Addenda to tender documents	1 page
DPW-15(EC) – Schedule of Proposed Subcontractors	1 page
DPW-22(EC) - Particulars of Electrical Contractor	1 page
DPW-23(EC) - Schedule for Imported Materials and Equipment	1 page
T2.2 Returnable Documents: Other Documents that will be incorporated into the contract	Separation sheet
Part C1: Agreement and Contract Data	Separation sheet
C1.2 Contract Data	Separation sheet

DPW-05(EC) - Contract Data	13 pages
C1.3 Form of Guarantee	Separation sheet
DPW-10.2(EC) / Form of Guarantee	2 pages
DPW-10.4 (EC)	2 pages
Part C2: Pricing Data	Separation sheet
C2.1 Pricing Instructions	Separation sheet
PG02.1(EC) - Pricing Instructions	9 pages
Part C3: Scope of Work	Separation sheet
C3 Scope of Work	Separation sheet
PG-01.1(EC): Scope of Work	19 pages
Standard PW 1544 - HIV/AIDS Specifications and Schedules	16 pages
Occupational Health & Safety Specification	13 pages
Electrical technical specification	12 pages
Part C4: Site Information	Separation sheet
C4 Site Information	Separation sheet



Volume 1: Tender Procedures

Part 1: Tender Procedures

DPW-05(EC) - Contract Data	13 pages
C1.3 Form of Guarantee	Separation sheet
DPW-10.2(EC) / Form of Guarantee	2 pages
DPW-10.4 (EC)	2 pages
Part C2: Pricing Data	Separation sheet
C2.1 Pricing Instructions	Separation sheet
PG02.1(EC) - Pricing Instructions	9 pages
Part C3: Scope of Work	Separation sheet
C3 Scope of Work	Separation sheet
PG-01.1(EC): Scope of Work	19 pages
Standard PW 1544 - HIV/AIDS Specifications and Schedules	16 pages
Occupational Health & Safety Specification	13 pages
Electrical technical specification	12 pages
Part C4: Site Information	Separation sheet
C4 Site Information	Separation sheet

Volume 1: Tender Procedures

Part 1: Tender Procedures

T1.1: Tender Notice and Invitation to Tender

PA-04 (EC): NOTICE AND INVITATION TO TENDER

THE DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE INVITES TENDERS FOR:

Project title:	DCS: SUPPLY AND INSTALLATION OF BACK UP POWER AT BETHULIE PRISON
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Tender no:	BL23/008	Reference no:	4/2/1/1/1/35/6705
Advertising date:	30/06/2023	Closing date:	25/07/2023
Closing time:	11:00	Validity period:	84 Calendar days

1. REQUIRED CIDB GRADING

It is estimated that tenderers should have a CIDB contractor grading designation of **3 ME** or **3 EB*** or higher.
** Delete "or select tender value range select class of construction works" where only one class of construction works is applicable*

It is estimated that potentially emerging enterprises should have a CIDB contractor grading designation of **2 ME PE** or **2 EB PE*** or higher.

** Delete "or select tender value range select class of construction works PE" where only one class of construction works is applicable*

2. RESPONSIVENESS CRITERIA

2.1 Substantive responsiveness criteria

Only tenderers who are responsive to the following substantive responsiveness criteria are eligible to submit tenders. Failure to comply with the criteria stated hereunder shall result in the tender offer being disqualified from further consideration:

1	☒	Only those tenderers who satisfy the eligibility criteria stated in the Tender Data may submit tenders.
2	☒	Tender offer must be properly received on the tender closing date and time specified on the invitation, fully completed either electronically (if issued in electronic format), or by writing legibly in non-erasable ink. (All as per Standard Conditions of Tender).
3	☒	Use of correction fluid is prohibited.
4	☒	Registration on National Treasury's Central Supplier Database.
5	☒	Submission of (DPW-07 EC): Form of Offer and Acceptance.
6	☐	Submission of DPW-09 (EC): Particulars of Tenderer's Projects.
7	☐	Submission of DPW-16 (EC): Site Inspection Meeting Certificate
8	☐	Submission of record of attending compulsory virtual bid clarification / site inspection meeting.
9	☐	Submission of DPW-21 (EC): Record of Addenda to tender documents
10	☒	The tenderer shall submit his fully priced Bills of Quantities / Lump Sum Document (complete document inclusive of all parts) together with his tender.

Tender no: Error! Reference source not found.

11	☒	The tenderer shall submit his fully priced and completed sectional summary- and final summary pages with the tender.
12	☒	All parts of tender documents submitted must be fully completed in ink and signed where required
13	☒	Submission of DPW-21 (EC): Record of Addenda to tender documents (if an addendum was issued)

2.2 Administrative responsiveness criteria

The Employer reserves the right to request further information regarding the undermentioned criteria. Failing to submit further clarification and/or documentation within seven (7) calendar days from request or as specifically indicated, will disqualify the tender offer from further consideration.

1	☒	Any correction to be initialled by the person authorised to sign the tender documentation as per PA 15.1 or PA 15.2 resolution of board/s of directors / or PA15.3 Special Resolution of Consortia or JV's .
2	☒	Submission of applicable (PA-15.1, PA-15.2, PA-15.3): Resolution by the legal entity, or consortium / joint venture, authorising a dedicated person(s) to sign documents on behalf of the firm / consortium / joint venture.
3	☒	Submission of (PA-09 (EC)): List of Returnable Documents
4	☒	Submission of (PA-11): Bidder's disclosure.
5	☒	Submission of (PA-16): Preference Points Claim Form in terms of the Preferential Procurement Regulations 2022
6	☒	Submission of (PA 40): Declaration of Designated Groups for Preferential Procurement.
7	☒	Submission of proof of Registration on National Treasury's Central Supplier Database (CSD).
8	☐	Submission of DPW-15 (EC): Schedule of proposed sub-contractors
9	☐	The tenderer shall submit his fully priced Bills of Quantities (complete document inclusive of all parts) within 14 days from request.
10	☒	Upon request, submission of fingerprints obtainable from local SAPS including any other additional documentation and information required for vetting purposes.
11	☒	Upon request, submission of a fully completed security clearance application form with supporting documentation and information as required. The security clearance form will be provided by the Employer for projects requiring a security clearance.
12	☒	Submission of DPW-09 (EC): Particulars of Tender's Projects.
13	☒	The tenderer must submit a valid original or certified copy of B-BBEEE certificate/sworn affidavit or DTI certificate together with the bidder's documentation at closing.

3. Method to be used to calculate points for specific goals

☐ For procurement transaction with rand value greater than R2 000, 00 and up to R1 Million (inclusive of all applicable taxes) the specific goals listed below are applicable.			
Serial No	Specific Goals	Preference Points Allocated out of 20	Documentation to be submitted by bidders to validate their data
1.	An EME or QSE which is at least 51% owned by black people.	10	ID Copy. or SANAS Accredited BBEE Certificate/ Sworn Affidavit. or CSD Report.

Any reference to words "Bid" or Bidder" herein and/or in any other documentation shall be construed to have the same meaning as the words



			or CIPC (Company registration)
2.	Located in a specific Local Municipality or District Municipality or Metro or Province area for work to be done or services to be rendered in that area.	2	Office Municipal Rates Statement. or Permission to occupy from local chief in case of rural areas (PTO). or Lease Agreement
3.	An EME or QSE which is at least 51% owned by women	4	ID Copy or CSD Report or CIPC (Company Registrations)
4.	An EME or QSE which is at least 51% owned by people with disability.	2	Medical Certificate or South African Social Security Agency (SASSA) Registration or National Council for Persons with Physical Disability in South Africa registration (NCPDPSA)
5.	An EME or QSE which is at least 51% owned by youth.	2	ID Copy or CSD Report Or CIPC

For procurement transaction with rand value greater than R1 Million and up to R50 Million (Inclusive of all applicable taxes) the specific goals listed below are applicable.



Serial No	Specific Goals	Preference Points Allocated out of 20	Documentation to be submitted by bidders to validate their claim
1.	An EME or QSE which is at least 51% owned by black people. (Bidders must submit all documents listed on the right)	10	ID Copy. or SANAS Accredited BBBEE Certificate/ Sworn Affidavit. or CSD Report. or CIPC (Company registration)
2.	Located in a specific Local Municipality or District Municipality or Metro or Province area for work to be done or services to be rendered in that area. (Located in the Free State Province)	2	Office Municipal Rates Statement. or Permission to occupy from local chief in case of rural areas (PTO). or Lease Agreement
3.	An EME or QSE which is at least 51% owned by women. (Bidders must submit all documents listed on the right)	4	ID Copy or CSD Report or

			CIPC (Company Registrations)	
4.	An EME or QSE which is at least 51% owned by people with disability.	2	Medical Certificate or South African Social Security Agency (SASSA) Registration or National Council for Persons with Physical Disability in South Africa registration (NCPDPSA)	
5.	An EME or QSE which is at least 51% owned by youth (Mandatory)	2	ID Copy or CSD Report Or CIPC	



For procurement transaction with rand value greater than R50 Million (Inclusive of all applicable taxes) the specific goals listed below are applicable.

Serial No	Specific Goals	Preference Points Allocated out of 10	Documentation to be submitted by bidders to validate their claim
1.	An EME or QSE which is at least 51% owned by black people.	4	ID Copy. or SANAS Accredited BBBEE Certificate/ Sworn Affidavit. or CSD Report. or CIPC (Company registration)
2.	Located in a specific Local Municipality or District Municipality or Metro or Province area for work to be done or services to be rendered in that area.	2	Office Municipal Rates Statement. or Permission to occupy from local chief in case of rural areas (PTO). or Lease Agreement
3.	An EME or QSE which is at least 51% owned by women	2	ID Copy or CSD Report or CIPC (Company Registrations)
4. ☐	An EME or QSE which is at least 51% owned by people with disability (Mandatory)	2	Medical Certificate or South African Social Security Agency (SASSA) Registration or National Council for Persons with Physical Disability in South Africa registration (NCPDPSA)
	OR		
5. ☐		2	ID Copy

	An EME or QSE which is at least 51% owned by youth (Mandatory) NB. (The use of this goal is mandatory however the BSC must select either one of the two and not both)		or CSD Report Or CIPC
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4. Functionality criteria:

Note: All bids involving the acquisition of engineering and construction works from cidb Grade 3 and above are subjected to functionality.

Note: Functionality will be applied as a prequalification criterion. Such criteria are used to establish minimum requirements where after bids will be evaluated solely on the basis of price and preference.

Functionality criteria:	Weighting factor:
	N/A
Total	100 Points

Minimum functionality score to qualify for further evaluation:	N/A
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(Total minimum qualifying score for functionality is 50 Percent, any deviation below or above the 50 Percent, provide motivation below)

5. BID EVALUATION METHOD

This bid will be evaluated according to the preferential procurement model in the PPPFA: (Tick applicable preference point scoring system)

☒ 80/20 Preference points scoring system	☐ 90/10 Preference points scoring system	☐ Either 80/20 or 90/10 Preference points scoring system
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In case where below/above R 50 000 000 is selected, the lowest acceptable tender will be used to determine the applicable preference point system.

6. ELIGIBILITY IN RESPECT OF RISK TO THE EMPLOYER:

Standard risk management assessment criteria in respect of tenders received for routine projects in the engineering and construction works environments:

Tender offers will be evaluated by an Evaluation Committee based on the technical and commercial risk criteria listed hereunder. Each criterion carries the same weight / importance and will be evaluated individually based on reports presented to the Bid Evaluation Committee by the Professional Team appointed on the project. A tender offer will be declared non-responsive and removed from any further evaluation if any one criterion is found to present an unacceptable risk to the Employer.

In order for the evaluation reports to be prepared by the Professional Team, the Tenderer is obliged to provide comprehensive information on form DPW-09 (EC). Failure to complete the said form will cause the tender to be declared non-responsive and removed from any further consideration. The Employer reserves the right to request additional information over and above that which is provided by the Tenderer on said form. The information must be provided by the Tenderer within the stipulated time as determined by the Bid Evaluation Committee, failing which the tender offer will *mutatis mutandis* be declared non-responsive.

6.1 Technical risks:

Criterion 1: Experience on comparable projects during the past 5 years.

The tendering Service Provider's experience on comparable projects during the past 5 years. The number of current and previous comparable projects performed by the Tenderer as per the evaluation report prepared by the Consultant Team, based on its research and inspection of a representative sample of the Tenderer's current and previous work as reflected on form DPW-09 (EC), as well as, if necessary, of any additional work executed by the Tenderer, not reflected on form DPW-09 (EC). Failing to provide contactable references will result in the tender offer will be *mutatis mutandis* declared non-responsive.

Aspects to be regarded as "comparable" includes (but may be extended according to circumstances): size of projects (measured against monetary value or other project quantifying parameters), nature of projects (building, engineering, high/low rise, etc.), locality/area of execution (site-specific influences, knowledge of local conditions, etc.), complexity of project, projects for similar client department irrespective of end purpose of buildings/facilities created or in progress of being created and time scales of projects (normal, fast track, etc.) and stage of its/their development.

Criterion 2: Contractual commitment and quality of performance on comparable projects during the past 5 years.

Adherence to contractual commitments and quality of performance of comparable current and previous projects performed by the Tenderer during the past 5 years as per the evaluation report prepared by the Consultant Team, based on its research and inspection of a representative sample of the Tenderer's current and previous work as reflected on form DPW-09 (EC), as well as, if necessary, of any additional work executed by the Tenderer, not reflected on form DPW-09 (EC). Failing to provide contactable references will result in the tender offer be *mutatis mutandis* declared non-responsive.

Aspects to be considered include, but are not limited to the following:

1. The level of progress on current projects in relation to the project programme or, if such is not available/applicable, to the contractual construction period in general;
2. The degree to which previous projects have been completed within the contractual completion periods and/or extensions thereto, and the extend of penalties imposed;
3. Project performance: time management & programming of works, timeous ordering of materials and appointment of subcontractors;
4. Financial management: payment to suppliers and cash flow problems;
5. Quality of workmanship: extent of reworks and timeous attention to remedial works;
6. Personnel resources: suitably qualified and experienced, turnover in site staff and labour force, specifically site manager and foreman;
7. Personnel management: extent of labour disputes and ability to resolving labour disputes amicably;
8. Sub-contractors: extent of turnover in subcontractors, general liaison and payment problems experienced;
9. Contract administration: contractual aspects such as complying to laws and regulations, insurances, security, submission of required documentation timeously, reaction to written contract instructions, appointments of subcontractors, etc. as can generally be expected in standard/normal conditions of contract.

10. Health & Safety: adherence to regulations and compliance, and number of transgressions & serious incidents.
11. Plant & equipment: sufficient resources on site and in time.
12. Delays: extent of causing delays, submission of claims timeously, and abuse of or exaggerated delay claims.
13. Final account: extent to which the contractor assisted in finalising the final account.

Criterion 3: Suitably qualified and appropriately experienced human resources

Allocation of suitably qualified and appropriately experienced human resources, both in respect of principals and/or other staff (contract manager, site agent, site foreman including other professional, technical and/or administrative) of the tendering Service Provider to the project, as proof that the tendering Service Provider will be able to react/respond appropriately to the Services required herein. The Company Organogram with CV's and certified ID's of all principals and employed workforce as well as proof of Professional Registration will be verified. Current and future workload of the tenderer in relation to capacity and capability will also be considered. The tenderer should demonstrate that he or she possesses the necessary professional and technical qualifications and -competence in relation to the scope of work and work to be undertaken.

Criterion 4: Attendance of compulsory bid clarification meeting, if applicable

If applicable, submission of confirmation of DPW-16.1 (PSB) attendance of compulsory bid clarification meeting or proof of attending the compulsory virtual meeting by a suitably qualified and experienced representative of the tenderer in terms of PA-04 (EC): Notice and Invitation to Tender.

6.2 Commercial risks:

The financial viability assessment evaluates the risk over the life of the construction period, as to whether the tenderer will be able to deliver the goods and services which are specified in the contract and / or be able to fulfil guarantees or warranties provided for in the contract in order to complete the project successfully for the amount tendered.

Aspects to be considered include but are not limited to, the respective rates tendered, bank rating, financial capability and capacity whether the tenderer has or has access to sufficient financial resources to deliver the goods or services described in the tender documentation (including fulfilling any guarantees or warranty claims), whether the tenderer is not subject to any current or impending legal action (either formal proceedings or notification of legal action) which could impact on the financial standing of the tenderer or the delivery of the goods or services, financial report from auditors as proof of current liquidity, and company or any parent company or investor guarantee/s and financial statements.

7. CONTRACT PARTICIPATION GOAL TARGETS AND CIDB B.U.I.L.D. PROGRAMME

The contractor shall achieve in the performance of the contract the following Contract Participation Goals (CPGs) as described in PG-01.2 (EC): Scope of Work and PG-02.2 (EC): Pricing Assumptions and in accordance with the feasibility study, which forms part of the specifications in the CPG Section of the Specification of this contract.

(a)	Minimum Targeted Local Manufacturers of Material Contract Participation Goal, in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	Not applicable
(b)	Minimum Targeted Local Building Material Suppliers Contract Participation Goal in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	Not applicable

(c)	Minimum Targeted Local Labour Skills Development Contract Participation Goal in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	Not applicable
(d)	cidb BUILD Programme: Minimum Targeted Enterprise Development Contract Participation Goal in accordance with the cidb Standard for Indirect Targeting for Enterprise Development through Construction Works Contracts, No 36190 Government Gazette, 25 February 2013, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	Not applicable
(e)	cidb BUILD Programme: Minimum Targeted Contract Skills Development Goal in accordance with the cidb Standard for Developing Skills through Infrastructure Contracts as published in the Government Gazette Notice No. 43495 of 3 July 2020, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	Not applicable
(f)	DPWI National Youth Service training and development programme (NYS) – Condition of Contract.	Not applicable
(g)	Labour Intensive Works – Condition of Contract.	Not applicable
(h)		Select
(i)		Select

8. COLLECTION OF TENDER DOCUMENTS

- ☒ Bid documents are available for free download on e-Tender portal www.etenders.gov.za
- ☒ Alternatively; Bid documents may be collected during working hours at the following address 18 President Brand Street, Bloemfontein, 9300. A non-refundable bid deposit of R 100.00 is payable (cash only) on collection of the bid documents.

9. SITE INSPECTION MEETING

A pre-tender site inspection meeting will **not be** held in respect of this tender.
 Attendance of said pre- tender site inspection meeting is **not compulsory**

The particulars for said pre- tender site inspection meeting or virtual bid clarification / site inspection meeting. are:

Venue:	N/A		
Virtual meeting link:	N/A		
Date:	N/A	Starting time:	N/A

10. ENQUIRIES

Enquiries related to tender documents may be addressed to:

WI Project Manager:	Siphokazi Belot	Telephone no:	051 408 7335
Cellular phone no:	060 748 9004	Fax no:	
E-mail:	Siphokazi.belot@dpw.gov.za		

11. DEPOSIT / RETURN OF TENDER DOCUMENTS

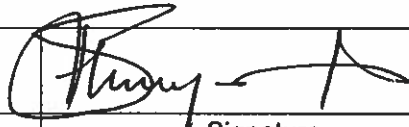
Telegraphic, telephonic, telex, facsimile, electronic and / or late tenders will not be accepted.

Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data.

All tenders must be completed in non-erasable ink and submitted on the official forms – (forms not to be re-typed).

Tender documents may be posted to: The Director-General Department of Public Works and Infrastructure Private Bag X 20605 BLOEMFONTEIN 9300 Attention: Procurement section: Room 233	OR	Deposited in the tender box at: Department of Public Works 18 President Brand Street Bloemfontein 9300
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12. COMPILED BY:

S. HANDEMAN		10/05/2023
Name of Project Manager	Signature	Date

T 1.2 Tender Data

DPW-03 (EC): TENDER DATA

Project title:	DCS: SUPPLY AND INSTALLATION OF BACK UP POWER GENERATOR AT BETHULIE PRISON
Reference no:	4/2/1/1/35/6705

Tender no:	BL23/008	Closing date:	25/07/2023
Closing time:	11:00	Validity period:	84 days

Clause number:	
	The conditions of tender are the Standard Conditions of Tender as contained in Annex C of the CIDB Standard for Uniformity in Construction Procurement as per Government Notice No. 423 published in Government Gazette No. 42622 of 8 August 2019 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 Tender. Each item of data given below is cross-referenced to the clause marked "C" in the above mentioned Standard Conditions of Tender.
C.1.1	The employer is the Government of the Republic of South Africa in its Department of Public Works and Infrastructure.
C.1.2	For this contract the three volume approach is adopted. This procurement document has been formatted and compiled under the headings as contained in the CIDB's "Standard for Uniformity in Construction Procurement." The three volume procurement document issued by the employer comprises the following: Volume 1: Tendering procedures T1.1 - Notice and invitation to tender (PA-04 EC) T1.2 - Tender data (DPW-03 EC) Volume 2: Returnable documents T2.1 - List of returnable documents (PA-09 EC) C1.1 - Form of offer and acceptance (DPW-07 EC) C1.2 - Contract Data T2.2 - Returnable schedules Volume 3: Contract Part C1: Agreement and contract data C1.2 - Contract data (Part 1: Data provided by employer) (DPW-04 EC or DPW-05 EC) C1.3 - Form of guarantee (DPW-10.1 EC / DPW-10.3EC or DPW-10.2 EC/DPW-10.4 EC) Part C2: Pricing data C2.1 - Pricing Assumptions (PG-02.2 EC or PG-02.1EC) C2.2 - Bills of Quantities / Lump sum document (if not a returnable document) Part C3: Scope of work C3 - Scope of work (PG-01.2 EC or PG-01.1EC) Part C4: Site information C4 - Site information (PG-03.2 EC or PG03.1EC)

Tender no: **BL23/008**

C.1.4	The Employer's agent is:	
	Name:	Siphokazi Belot
	Capacity:	Departmental Project Manager
	Address:	18 President Brandt Street, Bloemfontein, 9300
	Tel:	060 748 9004
	Fax:	N/A
	E-mail:	siphokazi.belot@dpw.gov.za
C.2.1 C.3.11	A. <u>ELIGIBILITY IN RESPECT OF CIDB REGISTRATION:</u> The following tenderers who are registered with the CIDB, or are *capable of being so registered prior to the evaluation of submissions, are eligible to have their tenders evaluated (* tenderers who are capable of being so registered, or who have applied for registration but have not yet received confirmation of such registration, must provide, <u>with this tender</u>, acceptable documentary proof thereof): 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 ME or 3 EB** class of construction work; and b) contractors registered as potentially emerging enterprises with the CIDB who are registered in one contractor grading designation lower than that required in terms of a) above Joint ventures are eligible to submit tenders provided that: 1. every member of the joint venture is registered with the CIDB; 2. the lead partner has a contractor grading designation in the 3 ME or 3 EB** class of construction work; and 3. the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations for a 3 ME or 3 EB** class of construction work ** Delete "or select tender value range select class of construction works" where only one class of construction works is applicable A contract will be entered into with a tenderer who has in his employ management and supervisory staff satisfying the requirements of the scope of work for labour intensive competencies for supervisory and management staff. - Not applicable	

Tender no: **BL23/008**

B. INDICATE THE FUNCTIONALITY WEIGHTING APPLICABLE TO THIS BID:

Note: Functionality will only be applied as a prequalification criterion. Such criteria are used to establish minimum requirements where after bids will be evaluated solely on the basis of price and preference.

Functionality Criteria	Weighting Factor
N/A	N/A
Total	100 Points

(Weightings will be multiplied by the scores allocated during the evaluation process to arrive at the total functionality points)

Minimum functionality score to qualify for further evaluation:	N/A
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(Total minimum qualifying score for functionality is 50 Percent).

C ELIGIBILITY IN RESPECT OF RISK TO EMPLOYER:

Provisions applicable to Evaluation Method 1 and 2:

Tender offers will be evaluated by an Evaluation Committee based on the technical and commercial risk criteria listed hereunder. Each criterion carries the same weight / importance and will be evaluated individually based on reports presented to the Evaluation Committee by the Professional Team appointed on the project. A tender offer will be declared non-responsive and removed from any further evaluation if any one criterion is found to present an unacceptable risk to the Employer.

In order for the evaluation reports to be prepared by the Professional Team, the Tenderer is obliged to provide comprehensive information on form DPW-09 (EC). Failure to complete the said form will cause the tender to be declared non-responsive and removed from any further consideration. The Employer reserves the right to request additional information over and above that which is provided by the Tenderer on said form. The information must be provided by the Tenderer within the stipulated time as determined by the Project Manager, failing which the tender offer will *mutatis mutandis* be declared non-responsive.

C.1. Technical risks:

C.1.1 Criterion 1: Quality of current and previous work

Quality of current and previous work performed by the Tenderer in the class of construction work stated above as per the evaluation report prepared by the Professional Team, based on its research and inspection of a representative sample of the Tenderer's current and previous work as reflected on form DPW-09 (EC), as well as, if necessary, of any additional work executed by the Tenderer, not reflected on form DPW-09 (EC).

C.1.2 Criterion 2: Contractual commitment

Adherence to contractual commitments, demonstrated by the Tenderer in the performance on current and previous work, evaluated in terms of:

- the level of progress on current projects in relation to the project programme or, if such is not available/applicable, to the contractual construction period in general;
- the degree to which previous projects have been completed within the contractual completion periods and/or extensions thereto; and
- general contract administration, i.e. compliance with contractual aspects such as laws and regulations, insurances, security, written contract instructions, subcontractors, time delay claims, etc as can generally be expected in standard/normal conditions of contract.

C.2 Commercial risks:

The level to which agreement with the Tenderer is reached in respect of the adjustment of rates which are considered to be imbalanced or unreasonable and to eliminate errors or discrepancies, without changing the tendered total price, over and above the correction of arithmetical errors as provided for in C.3.9.

7	For particulars regarding a pre-tender site inspection meeting, see Notice and Invitation to Tender T1.1
C.2.12	If a tenderer wishes to submit an alternative tender offer, the only criteria permitted for such alternative tender offer is that it demonstrably satisfies the Employer's standards and requirements. A tenderer may submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted. Provided that the tenderer's main tender offer is according to specification and would under normal circumstances be recommended for acceptance, his alternative tender offer may also be considered for the purpose of the award of the contract. Calculations, drawings and all other pertinent technical information and characteristics as well as modified or proposed Pricing Data must be submitted with the alternative tender offer to enable the Employer to evaluate the efficacy of the alternative and its principal elements, to take a view on the degree to which the alternative complies with the Employer's standards and requirements and to evaluate the acceptability of the pricing proposals. Calculations must be set out in a clear and logical sequence and must clearly reflect all design assumptions. Pricing Data must reflect all assumptions in the development of the pricing proposal. Acceptance of an alternative tender offer will mean acceptance in principle of the offer. It will be an obligation of the contract for the tenderer, in the event that the alternative is accepted, to accept full responsibility and liability that the alternative offer complies in all respects with the Employer's standards and requirements. The modified Pricing Data must include an amount equal to 5% of the amount tendered for the alternative offer to cover the Employer's costs of confirming the acceptability of the detailed design before it is constructed. Alternative tender offer permitted: Yes ☐ No ☒
C.2.13.2	The list of Returnable Documents identifies which of the documents a tenderer must complete when submitting a tender offer. The tenderer must submit his tender offer by completing the Returnable Documents, signing the "Offer" section in the "Form of Offer and Acceptance" and delivering the Returnable Documents back to the Department.
C.2.13.5	The Employer's address for delivery of tender offers and identification details to be shown on each tender offer package are as per Notice and Invitation to Tender T1.1.
C.2.13.6 C.3.5	A two-envelope procedure will not be followed.
C.2.15	The closing time for submission of tender offers is as per Notice and Invitation to Tender T1.1.
C.2.16	The tender offer validity period is as per Notice and Invitation to Tender T1.1.
C2.16.3	Omit the wording of the last sentence for those projects which are subject to CPAP
C.2.18	The tenderer will be required to submit his fully priced Bills of Quantities / Lump Sum Document (complete document inclusive of all parts): ☒ Together with his tender; or ☐ Within fourteen (14) calendar days of the date on which he has been requested to do so prior to the award of the contract.
C.2.19	Access shall be provided for inspections, tests and analysis as may be required by the Employer.
C.3.4.1 C.3.4.2	The location for opening of the tender offers, immediately after the closing time thereof shall be at: 18 President Brandt Street, Bloemfontein, 9300
C.3.8	The words "responsive tender" and "acceptable tender" shall be construed to have the same meaning.
C.3.9.3	Omit the wording and replace with the following: "Notify the tenderer of all errors, omissions and/or rate imbalances that are identified in the tender offer and request the tenderer to, within a stipulated time, accept the total of prices as corrected in accordance with C.3.9.4."

Tender no: **BL23/008**



C.3.9.4	Omit the wording of the first sentence and replace with the following: "In cases where tender offers contain errors, omissions and/or rate imbalances, these are to be corrected as follows:"
C.3.9.4	Add sub paragraph c) to C.3.9.4, as follows: "c) If the tenderer does not accept the corrected tender offer, or cannot reach consensus with the Employer on a corrected tender offer, the tender is to be classified as not acceptable/non responsive and removed from further contention."
C.3.11.1	The procedure for the evaluation of responsive tenders is Method 2: Financial Offer and Preference.
C.3.13	Add the following to sub paragraph a), as follows: The tenderer or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act, 2004 (Act No. 12 of 2004) as a person prohibited from doing business with the public sector;
C.3.17	Provide to the successful tenderer one copy of the signed contract document.



public works

Department:
Public Works
REPUBLIC OF SOUTH AFRICA

Further Conditions of Tender (Extension of DPW03)

COMPENSATION FOR OCCUPATIONAL INJURIES AND DISEASES ACT (COIDA):

In compliance with the Compensation for Occupational Injuries and Diseases Act (COIDA), site handover to the successful bidder will only take place once he/she has provided a valid "Proof of Registration" or "letter of Good Standing" issued by the Compensation Commissioner, clearly specifying the nature of business which must be within the relevant category.

SECURITY CLEARANCE:

In compliance with the Department's Internal Security Policy drafted in terms of the Minimum Information Security Standards (MISS) and other security legislation, no service provider shall render any service to the Department without the necessary security clearance.

Bidders will thus be subjected to, and must pass a Security Clearance check undertaken by the Department prior to the award of bids.

The Department reserves the right to cancel a bid should the bidder fail to pass the Security Clearance check.

QUALIFICATION OF PERSON UNDERTAKING ELECTRICAL WORK:

Site handover to the successful bidder will only take place once he/she has submitted acceptable proof of accreditation of the person undertaking any electrical work and which person will thereafter issue the Electrical Certificate of Compliance.



Volume 2

Returnable Document

T 2.1 List of Returnable Documents

PA-09 (EC): LIST OF RETURNABLE DOCUMENTS

Project title:	DCS: SUPPLY AND INSTALLATION OF BACK UP POWER GENERATOR AT BETHULIE PRISON		
Tender / Quote no:	BL23/008	Reference no:	4/1/1/1/35/6705
Receipt Number:			

1. RETURNABLE DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES

Note: Failure to submit the applicable documents will result in the tender offer being disqualified from further consideration.

Tender document name	Number of pages issued	Returnable document
Form of Offer and Acceptance (DPW-07 EC)	4 Pages	Yes
Declaration of Interest and Tenderer's Past Supply Chain Management Practices (PA-11)	4 Pages	Yes
Resolution of Board of Directors (PA-15.1) <i>(if applicable)</i>	1 Page	Yes
Resolution of Board of Directors to enter into Consortia or JV's (PA-15.2) <i>(if applicable)</i>	2 Pages	Yes
Special Resolution of Consortia or JV's (PA-15.3) <i>(if applicable)</i>	3 Pages	Yes
Preference points claim form in terms of the Preferential Procurement Regulations 2017 (PA – 16)	5 Pages	Yes
Certificate of independent Bid Determination (PA - 29)	4 Pages	Yes
Declaration Certificate for Local Production and Content for designated sectors (PA – 36 and Annexure/s C)	N/A	Yes
Fully completed Declaration of Designated Groups for Preferential Procurement (PA 40)	2 Pages	Yes
Registration on National Treasury's Central Supplier Database (CSD).	-	Yes
Particulars of Tenderer's Projects (DPW-09 EC)	2 Pages	Yes
Site Inspection Meeting Certificate (DPW-16 EC) <i>(if applicable)</i> .	1 Page	N/A
Record of attending compulsory virtual bid clarification / site inspection meeting <i>(if applicable)</i> .	1 Page	N/A
Record of Addenda to tender documents (DPW-21 EC)	1 Page	Yes
Site Inspection Meeting Certificate (DPW-16 EC) <i>(if applicable)</i>	1 Page	N/A
Proof of 30% Subcontracting participation and related documents in terms of the Preferential Procurement Regulations 2017 <i>(if applicable)</i> .	N/A	N/A

* In compliance with the requirements of the CIDB SFU Annexure G

Tender no:

2. ADDITIONAL RETURNABLE DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES

Note: Failure to submit the applicable documents will result in the Tenderer having to submit same upon request within a stipulated time and if not complied with, will result in the tender offer being disqualified from further consideration. [See also C.2.18 of the Standard Conditions of Tender]

Tender document name	Number of pages issued	Returnable document
Any <u>additional</u> information required to complete a risk assessment (<i>if applicable</i>)	-	Yes

3. RETURNABLE DOCUMENTS THAT WILL BE INCORPORATED INTO THE CONTRACT

Note: Failure to submit the applicable documents will result in the Tenderer having to submit same upon request within a stipulated time and if not complied with, will result in the tender offer being disqualified from further consideration. [See also C.2.18 of the Standard Conditions of Tender]

Tender document name	Number of pages issued	Returnable document
Schedule of proposed sub-contractors (DPW-15 EC) (<i>if applicable</i>)	1 Page	Yes
Particulars of Electrical Contractor (DPW-22 EC) (<i>if applicable</i>)	1 Page	Yes
Mechanical / Electrical / Security Work material and equipment schedules (<i>if applicable</i>)	5 Pages	Yes
Schedule for Imported Materials and Equipment (DPW-23 EC) (<i>if applicable</i>)	1 Page	Yes

4. OTHER DOCUMENTS THAT WILL BE INCORPORATED INTO THE CONTRACT

(Insert a tick in the "Returnable document" column to indicate which documents must be returned with the tender)

Note: Failure to submit the applicable documents will result in the tender offer being disqualified from further consideration.

Tender document name	Number of pages issued	Returnable document
Priced Bills of Quantities / Lump Sum Document (complete document inclusive of all parts)	38 Pages	☒ Yes ☐ No
Fully priced and completed sectional summary- and final summary pages with the tender.	Pages	☐ Yes ☐ No
<i>insert document name</i>	Pages	☐ Yes ☐ No
<i>insert document name</i>	Pages	☐ Yes ☐ No
<i>insert document name</i>	Pages	☐ Yes ☐ No

Tender no:

5. ADDITIONAL INFORMATION THAT MAY BE REQUIRED FOR TENDER EVALUATION PURPOSES

Legal Status of Tendering Entity: If the Tendering Entity is:	Documentation to be submitted with the tender, or which may be required during the tender evaluation:
a. A close corporation, incorporated prior to 1 May 2011 under the Close Corporations Act, 1984 (Act 69 of 1984, as amended)	Copies of the Founding Statement – CK1
b. A profit company duly registered as a private company. [including a profit company that meets the criteria for a private company, whose Memorandum of Incorporation states that the company is a personal liability company in terms of Section 8(2)(c) of the Companies Act, 2008 (Act 71 of 2008, as amended)].	Copies of: i. Certificate of Incorporation – CM1; ii. Shareholding Certificates of all Shareholders of the company, plus a signed statement of the company's Auditor, certifying each Shareholder's ownership / shareholding percentage relative to the total; and/or iii. Memorandum of Incorporation in the case of a personal liability company.
c. A profit company duly registered as a private company in which any, or all, shares are held by one or more other close corporation(s) or company(ies) duly registered as profit or non-profit company(ies).	Copies of documents referred to in a. and/or b. above in respect of all such close corporation(s) and/or company(ies).
d. A profit company duly registered as a public company.	Copy of Certificate of Incorporation – CM1, and a signed statement of the company's Secretary or Auditor confirming that the company is a public company.
e. A non-profit company, incorporated in terms of Section 10 and Schedule 1 of the Companies Act, 2008 (Act 71 of 2008, as amended).	Copies of: i the Founding Statement – CK1; and ii the Memorandum of Incorporation setting out the object of the company, indicating the public benefit, cultural or social activity, or communal or group interest.
f. A natural person, sole proprietor or a Partnership	Copy(ies) of the Identity Document(s) of: i. such natural person/ sole proprietor, or each of the Partners to the Partnership.
g. A Trust	Deed of Trust duly indicating names of the Trustee(s) and Beneficiary (ies) as well as the purpose of the Trust and the mandate of the Trustees.

Signed by the Tenderer:

Name of representative	Signature	Date

C 1.1 Invitation to Bid/Form of Offer and Acceptance



DPW-07 (EC): FORM OF OFFER AND ACCEPTANCE

Project title:	DCS: SUPPLY AND INSTALLATION OF BACK UP POWER GENERATOR AT BETHULIE PRISON		
Tender no:	BL23/008	Reference no:	4/2/1/1/1/35/6705

OFFER

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

SUPPLY AND INSTALLATION OF BACK UP POWER GENERATOR AT BETHULIE PRISON

The Tenderer, identified in the offer signature block, has examined the documents listed in the tender data and addenda thereto as listed in the returnable schedules, and by submitting this offer has accepted the conditions of tender.

By the representative of the Tenderer, deemed to be duly authorized, signing this part of this form of offer and acceptance, the Tenderer offers to perform all of the obligations and liabilities of the Contractor under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the contract data.

THE TOTAL OFFER INCLUSIVE OF ALL APPLICABLE TAXES (All applicable taxes" includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies) **IS:**

Rand (in words):	
Rand in figures:	R

The award of the tender may be subjected to further price negotiation with the preferred tenderer(s). The negotiated and agreed price will be considered for acceptance as **a firm and final offer**.

This offer may be accepted by the Employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the Tenderer before the end of the period of validity stated in the tender data, whereupon the Tenderer becomes the party named as the Contractor in the conditions of contract identified in the contract data.

THIS OFFER IS MADE BY THE FOLLOWING LEGAL ENTITY: (cross out block which is not applicable)

Company or Close Corporation: And: Whose Registration Number is: And: Whose Income Tax Reference Number is: CSD supplier number:.....	OR	Natural Person or Partnership: Whose Identity Number(s) is/are: Whose Income Tax Reference Number is/are: CSD supplier number:.....
--	----	--

AND WHO IS (if applicable):

Trading under the name and style of:
--

Tender no:

AND WHO IS:

Represented herein, and who is duly authorised to do so, by: Mr/Mrs/Ms: In his/her capacity as:	Note: A Resolution / Power of Attorney, signed by all the Directors / Members / Partners of the Legal Entity must accompany this Offer, authorising the Representative to make this offer.
--	--

SIGNED FOR THE TENDERER:

.....		
Name of representative	Signature	Date

WITNESSED BY:

.....		
Name of witness	Signature	Date

This Offer is in respect of: (Please indicate with an "X" in the appropriate block)

- The official documents ☐
- The official alternative ☐
- Own alternative (only if documentation makes provision therefore) ☐

(N.B.: Separate Offer and Acceptance forms are to be completed for the main and for each alternative offer)

SECURITY OFFERED:

(a) the Tenderer accepts that in respect of contracts up to R1 million, a payment reduction** of 5% of the contract value (excluding VAT) will be applicable and will be deducted by the Employer in terms of the applicable conditions of contract

(b) in respect of contracts above R1 million, the Tenderer offers to provide security as indicated below:

- (1) cash deposit of 10 % of the Contract Sum (excluding VAT) Yes ☐ No ☐
- (2) variable construction guarantee of 10 % of the Contract Sum (excluding VAT) Yes ☐ No ☐
- (3) payment reduction of 10% of the value certified in the payment certificate (excluding VAT) Yes ☐ No ☐
- (4) cash deposit of 5% of the Contract Sum (excluding VAT) and a payment reduction of 5% of the value certified in the payment certificate (excluding VAT) Yes ☐ No ☐
- (5) fixed construction guarantee of 5% of the Contract Sum (excluding VAT) and a payment reduction of 5% of the value certified in the payment certificate (excluding VAT) Yes ☐ No ☐

NB. Guarantees submitted must be issued by either an insurance company duly registered in terms of the Insurance Act [Long-Term Insurance Act, 1998 (Act 52 of 1998) or Short-Term Insurance Act, 1998 (Act 35 of 1998)] or by a bank duly registered in terms of the Banks Act, 1990 (Act 94 of 1990) on the pro-forma referred to above. No alterations or amendments of the wording of the pro-forma will be accepted.

The Tenderer elects as its *domicilium citandi et executandi* in the Republic of South Africa, where any and all legal notices may be served, as (physical address):

Tender no:

Other Contact Details of the Tenderer are:

Telephone No. Cellular Phone No.

Fax No.

Postal address

Banker Branch

Registration No of Tenderer at Department of Labour

CIDB Registration Number:

ACCEPTANCE

By signing this part of this form of offer and acceptance, the Employer identified below accepts the Tenderer's offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the conditions of contract identified in the contract data. Acceptance of the Tenderer's offer shall form an agreement between the Employer and the Tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract are contained in:

Part C1 Agreement and contract data, (which includes this agreement)

Part C2 Pricing data

Part C3 Scope of work

Part C4 Site information and drawings and documents or parts thereof, which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as listed in the tender schedules as well as any changes to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this agreement. No amendments to or deviations from said documents are valid unless contained in this schedule.

The Tenderer shall within two weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the Employer's agent (whose details are given in the contract data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the contract data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy of this document, including the schedule of deviations (if any). Unless the tenderer (now contractor) within five (5) working days of the date of such receipt notifies the employer in writing of any reason why he/she cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.

For the Employer:

Name of signatory	Signature	Date

Name of Organisation:	Department of Public Works and Infrastructure
Address of Organisation:	

WITNESSED BY:

Name of witness	Signature	Date

*Any reference to words "Bid" or "Bidder" herein and/or in any other documentation shall be construed to have the same meaning as the words "Tender" or "Tenderer".

Tender no:

Schedule of Deviations

1.1.1. Subject:
Detail:
1.1.2. Subject:
Detail:
1.1.3. Subject:
Detail:
1.1.4. Subject:
Detail:
1.1.5. Subject:
Detail:
1.1.6. Subject:
Detail:

By the duly authorised representatives signing this agreement, the Employer and the Tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the tender data and addenda thereto as listed in the tender schedules, as well as any confirmation, clarification or 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 Agreement shall have any meaning or effect in the contract between the parties arising from this agreement.

C 2.2 Bills of Quantities

Section 1:

Preliminaries

&

Section 2:

Bill of Quantities

PGA

BETHULIE

TABLE OF CONTENTS

	<u>PAGES</u>
Notice to Tenderers	
PART A - Specification for the supply and installation of emergency generators	
Section 1 – General	1.1 – 1.5
Section 2 – Equipment Requirements	2.1 – 2.18
Section 3 -- Technical Specification	3.1 -3.9
Section 4 – Schedule of Technical Information	4.1 – 4.*
Section 5 – Schedules of Quantities	5.1 – 5.*
Annexure A – Schedule of Imported Materials and Equipment	A1

entire prison shall be connected shall be connected to the emergency power supplied by the DA sets through a single change over. All DBs shall be relabelled and painted red

DETAILED TECHNICAL INFORMATION:

BETHULI CORRECTIONAL CENTRE:

1. Provide a new outdoor weatherproof and silenced, containerized 125kVA DA set (prime rated) with 24h diesel base tank (fitted with lockable fill pipe, and manual fill pump with hose for drum fuel supply) and rigid steel base frame, mount on new level 200mm high concrete plinth cast under this contract, provide ATS change over panel and cable to the local boundary board power supply and to the existing main LT board; a full fuel tank shall be included on hand over after all testing has been completed; set shall be weather proofed and silenced to residential standards and in compliance with all municipal and national by-laws. The sound level from the set, measured on site after installation of the set shall not exceed 65dbA @ 7 metres (all orientations) including the exhaust at full load
2. Supply new control panel and ATS at the generator, run new LV supply from the existing site boundary board and from the generator to existing main LV DB.
3. Refurbish and re-equip the existing main LV board with new equipment and new circuit breakers (coordinate all shut downs with the user to ensure that the DCS is not compromised when work is being done)
4. Label and paint all field DB face plates RED to indicate emergency power, provide internal legends and cable feed information for all DBs

Any required building work, trenching and excavation is to be carried out under this contract by a qualified master builder employed by the DA/electrical Contractor under this contract.

All electrical work is to be carried out by competent electrical contractors registered with the ECA under full time supervision

5. **Co-ordination**

The standby generator shall be a new silenced containerised set with base mounted diesel tank rated for 24h operation at 80% load, positioned on site at a location to be agreed with the user and the engineer

The Contractor shall co-ordinate his program with the User client and obtain written agreement of the programme and any power shut down required during the installation.

Delays due to lack of co-ordination between the Contractor and the User shall not form a basis for claims by the Contractor of this Contract.

6. **Test Certificates and inspections**

The following tests are to be carried out:

- (a) At the supplier's premises, before the generating set will be delivered to site Representatives of the Department may be present during the test to satisfy them that the generating set complies with the specification and delivers the specified output. The test must be carried out in accordance with BSS 5514, Part 2 and 3. The Department must be timeously advised of the date for the test.
- (b) After completion of the works and before first delivery is taken, a full load test will be carried out on the installation on 110% load for at least 1 hours duration to determine the satisfactory working thereof. During this period the installation will be inspected and the contractor shall make good, to the satisfaction of the Representative/Agent, any defects which may arise.
- (c) The Contractor shall provide all instruments and equipment required for testing and any water, power and fuel required for the commissioning and testing of the installation at completion. Load banks with steady loads shall be provided for testing
- (d) Test reports of both tests as specified under (a) and (b) are to be submitted to the Department.

7. **Guarantee and Maintenance**

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

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

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

During this period the contractor will undertake to arrange that the plant be inspected at least once per month by a qualified member of his staff who shall: -

- (a) Report to the Officer-in-charge, keeping the maintenance records, and enter into a log book the date of the visit, the tests carried out, the adjustments made, and any further details that may be required.
- (b) Grease and oil moving parts, where necessary.

- (c) Check the air filter and, when necessary, clean the filter and replace filter oil.
- (d) Check the lubricating oil and top-up when necessary.
- (e) After the plant has run one oil change for the number of hours stipulated by the manufacturers, drain the sump and refill with fresh lubricating oil. The reading of the hour meter on the switchboard will be taken to establish the number of hours run by the plant.

Under this heading only the cost of the actual oil used, shall be charged as an extra on the monthly account.

- (f) Clean the lubricating oil filter and/or replace the filter element at intervals recommended by the engine manufacturer, the cost of a new filter element to be charged as an extra on the monthly account.
- (g) Check and when necessary adjust the valve settings and the fuel injection equipment.
- (h) Check the battery and top-up the electrolyte when necessary.
- (i) Test-run the plant for 0.5 hour and check the automatic starting with simulated faults on the mains, the proper working of all parts, including the electrical gear the protective devices with fault indicators, the changeover equipment and the battery charger. Make the necessary adjustments.
- (j) Report to the Department and to the Contractor on any parts that become unserviceable through fair wear and tear, or damaged by causes beyond the control of the Contractor.

The Contractor on receiving the report, shall immediately submit a detailed quotation for the repair or replacement of such parts to the Department.

- (k) Advise the Department when it has become necessary to de-carbonise the engine and submit a quotation for this service.
- (l) Top up the water of the radiator, if applicable.
- (m) Clean the plant and its components.

8. Materials and Workmanship

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

own work as may be necessary for the proper installation work and shall co-operate with and co-ordinate the work of others as may be applicable.

- (e) All components and their respective adjustment, which do not form part of the equipment installation work, but influence the optimum and safe operation of the equipment shall be considered to form part of, and shall be included in the Contractor's scope of works.
- (f) All control equipment and serviceable items shall be installed and positioned such that they will be accessible and maintainable.
- (g) The Contractor shall make sure that all safety regulations and measures are applied and enforced during the installation and guarantee periods to ensure the safety of the public and the User Client.
- (h) The Contractor is to include for all scaffolding required to complete the work required.

9. Imported Content

This equipment will not be subject to fluctuations in the rate of exchange.

However, should the Contractor choose to be protected against fluctuations in the rate of exchange on imported equipment, the following conditions will apply.

- a) The Materials Offered Ex-Import (Annexure A), which forms part of this tender document, must be completed by the Contractor.
- b) Any fluctuations in the rate of exchange will be for the account of the Government and shall be calculated from a date seven (7) days prior to the date of the Contractor's tender to a date seven (7) days after receipt by the Contractor's bank of the negotiable bill of lading or the exporter's invoice, provided this latter date is not later than 30 days after the date of payment. Thereafter, fluctuations in the rate of exchange shall not be for the account of the Government.

10. Brochures

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

11. Submittals

The following information must accompany the tender documents

- (a) Full particulars, performance curves and illustrations of the equipment offered, must be submitted with the Tender.
- (b) The design of the control system to comply with the requirements for automatic starting, stopping, interlocking and isolation as specified.
- (c) Curves furnished by the engine makers, showing the output of the engine offered against the speed, for both intermittent and continuous operation as well as fuel consumption curves when the engine is used for electric generation

The successful Tenderer must, as soon as possible after receipt of the order, submit detailed drawings and wiring diagrams of the plant and the switchgear. One diagram shall be contained in a metal pouch on the side of the switchboard.

**SPECIFICATION FOR THE SUPPLY DELIVERY AND INSTALLATION OF AN
EMERGENCY GENERATOR SET**

SECTION 2 – EQUIPMENT REQUIREMENTS

TABLE OF CONTENTS

<u>Clause</u>		<u>Page</u>
1.	Engine.....	2.1
1.1	General.....	2.1
1.2	Rating.....	2.1
1.3	De-rating.....	2.1
1.4	Starting and Stopping.....	2.1
1.5	Starter Battery.....	2.1
1.6	Cooling.....	2.1
1.7	Lubrication.....	2.2
1.8	Fuel Pump.....	2.2
1.9	Fuel Tank.....	2.2
1.10	Governor.....	2.2
1.11	Flywheel.....	2.2
1.12	Exhaust Silencer.....	2.2
1.13	Accessories.....	2.3
2.	Alternator.....	2.3
2.1	General.....	2.3
2.2	Regulation.....	2.3
2.3	Performance.....	2.3
2.4	Coupling.....	2.3
3.	Switchboard.....	2.3
3.1	General.....	2.3
3.2	Construction.....	2.4
3.3	Protection and Alarm Devices.....	2.4
3.4	Manual Starting.....	2.5
3.5	Battery Charging Equipment.....	2.5
3.6	Switchboard Instruments.....	2.5
3.7	Markings.....	2.5
3.8	Earthing.....	2.6
3.9	Operation Selector Switch.....	2.6
3.10	Automatic Change-over System.....	2.6
3.11	Bypass Switch and Main Isolator.....	2.6
3.12	Start Delay.....	2.7
3.13	Stop Delay.....	2.7

3.14	Installation.....	2.7
3.15	Warning Notices.....	2.7
3.16	Construction.....	2.8
3.17	Operation.....	2.8

SECTION 2 – EQUIPMENT REQUIREMENTS

1. Engine

1.1 General

The engine must comply with the requirements as laid down in BS 5514 and must be of the atomised injection, compression ignition type, running at a speed not exceeding 1500 r.p.m. The engine must be amply rated for the required electrical output of the set, when running under the site conditions. The starting period for either manual or automatic switching-on until the taking over by the generating set, in one step, of a load equal to the specified site electrical output, shall not exceed 15 seconds. This must be guaranteed by the Tenderer.

Turbo-charged engines will only be accepted if the Tenderer submits a written guarantee that the engine can deliver full load within the specified starting period.

1.2 Prime Rating

The set shall be capable of delivering the specified output continuously under the site conditions, without overheating. The engine shall be capable of delivering an output of 110 % of the specified output for one hour in any period of 12 hours consecutive running in accordance with BS 5514.

1.3 De-Rating

The engine must be de-rated for the site conditions as set out in the Technical Specification, Section 3 of this document.

The de-rating of the engine for site conditions shall be strictly in accordance with BS 5514 of 1977 as amended to date. Any other methods of de-rating must have the approval of the Department and must be motivated in detail. Such de-rating must be guaranteed in writing and proved by the successful Tenderer at the site test.

1.4 Starting and Stopping

The engine shall be fitted with an electric starter motor and be easily started from cold, without the use of any special ignition devices under summer as well as winter conditions.

Tenderers must state what arrangements are provided to ensure easy starting in cold weather. Full details of this equipment must be submitted. In the case of water cooled engines, any electrical heaters shall be thermostatically controlled. The electrical circuit for such heaters shall be taken from the control panel, and must be protected by a suitable circuit breaker.

1.5 Starter Battery

The set must be supplied a fully charged lead-acid type battery, complete with necessary electrolyte. The battery must have sufficient capacity to provide the starting torque stipulated by the engine makers. The battery capacity shall not be less than 120 Ah and shall be capable of providing three consecutive start attempts from cold and thereafter a fourth attempt under manual control of not less than 20 seconds duration each. The battery must be of the heavy duty "low maintenance" type, housed in a suitable battery box.

1.6 Cooling

The engine may be either of the air or water cooled type. In the case of water-cooling, a built-on heavy duty, tropical type pressurised radiator must be fitted. Only stand-by sets that are water cooled shall have electric heaters.

For either method of cooling, protection must be provided against running at excessive temperatures. The operation of this protective device must give a visual and audible indication on the switchboard on the switchboard. Water-cooled engines shall in addition be fitted with a low water cut-out switch, installed in the radiator, to switch the set off in the event of a loss of coolant. The protection shall operate in the same way as the other cut-outs (e.g. low oil pressure). All air ducts for the cooling of the engine are to be allowed for. The air shall be supplied from the cooling fan cowling/radiator face to air outlet louvers in the plant room wall.

1.7 Lubrication

Lubrication of the main bearings and other important moving parts shall be by forced feed system. An automatic low oil pressure cut-out must be fitted, operating the stop solenoid on the engine and giving a visible and audible indication on the switchboard.

1.8 Fuel Pump

The fuel injection equipment is suitable for operation with the commercial brands of diesel fuel normally available in South Africa.

1.9 Fuel Tanks

A set mounted base fuel tank shall be installed with each set. The tank shall have sufficient capacity for standby sets to run the engine on full load for a period of 24 hours.

A water trap is fitted in the fuel pipeline from the tank to the engine.

The tank shall be fitted with a suitable filter, a fuel gauge glass, "low fuel level" alarm, giving an audible and visible signal on the switchboard as well as a low-low fuel level cut-out.

An manually operated pump with sufficient length of oil resistant hose to reach 2m beyond the door shall be supplied, for each set for filling the fuel tank/s from 200 litre drums.

The interconnection fuel piping shall consist of copper tubes and the connection to vibrating components shall be in flexible tubing with armoured covering.

A water trap is fitted in the fuel pipeline from the tank to the engines.

The tank shall be fitted with a suitable fill point filter, a fuel gauge glass, "low fuel level" alarm (giving an audible and visible signal on the switchboard)

A manual standby pump, with sufficient length of oil resistant hose (and filter) to reach 2m beyond the door shall be supplied, for filling the fuel tank from 200 litre drums.

The interconnection in-set fuel piping shall consist of grade 2 copper tubes and the connection to vibrating components shall be in flexible tubing with armoured covering

1.10 Governor

The speed of the engine shall be controlled by a governor in accordance with class A2 of BS 5514 of 1977 if not otherwise specified in the Technical Specification.

The permanent speed variation between no load and full load shall not exceed 4,5% of the normal engine speed and the temporary speed variation shall not exceed 10% External facilities must be provided on the engine, to adjust the normal speed setting by $\pm 5\%$ at all loads zero and rated load.

1.11 Flywheel

A suitable flywheel must be fitted, so that lights fed from the set will be free from any visible flicker.

The cyclic irregularity of the set must be within the limit laid down in BS 5514 of 1977.

1.12 Exhaust Silencer

It is essential to keep the noise level as low as possible. An effective exhaust silencing system of the residential type must be provided.

The exhaust pipe shall be installed in such a way that the expelled exhaust fumes will not cause discomfort to the public. The exhaust pipe must be flexibly connected to the engine to take up vibrations transmitted from the engine, which may cause breakage. The exhaust piping and silencer shall be lagged to reduce the heat and noise transmission into the plant room and shall be protected against the ingress of driving rain at 45° to the horizontal. The exhaust pipe must extend 0,5m above the roof gutters. It must be secured by flanges both sides of the wall at the point of exit. These flanges must be clamped to the wall with bolts through the wall.

1.13 Accessories

The engine must be supplied complete with all accessories, air and oil filters, 3 instruction manuals, spare parts lists, the first fill of all lubricating oils, fuel, etc.

2. Alternator

2.1 General

The alternator shall be of the self excited brush less type, with enclosed ventilated drip proof housing and must be capable of supplying the specified output continuously with a temperature rise not exceeding the limits laid down in BS 5000 for rotor and stator windings.

The alternator shall be capable of delivering an output of 110% of the specified output, for one hour in any period of 12 hours consecutive running.

Both windings must be fully impregnated for tropical climate and must have an oil resisting finishing varnish.

2.2 Regulation

The alternator must preferably be self-regulated without the utilisation of solid state elements. The inherent voltage regulation must not exceed plus or minus 5% of the nominal voltage specified, at all loads with the power factor between unity and 0,8 lagging and within the driving speed variations of 4,5% between no-load and full load.

2.3 Performance

The excitation system shall be designed to promote rapid voltage recovery following the sudden application of the load. The voltage shall recover to within 5% of the steady state within 300 milli-seconds following the application of full load and the transient voltage dip shall not exceed 18%.

2.4 Coupling

The engine and alternator must be directly coupled by means of a high quality flexible coupling, equal and similar to the "HOLSET" type.

3. Switchboard

3.1 General

A switchboard must be supplied and installed to incorporate the equipment for the control and protection of the generating set and battery charging.

The switchboard must conform the specification as set out in the following paragraphs.

3.2 Construction

The switchboard shall be a totally enclosed, floor mounted unit, fabricated from steel panels, carried on and-substantial angle iron framework.

The board shall be flush fronted and all equipment to be mounted behind the front plate, on suitable supports.

All equipment, connections and terminals shall be easily accessible from the front. The front panels may be either hinged or removable and fixed with studs and chromium-plated cap nuts. Self tapping screws shall be used in the construction of the board.

All pushbuttons, pilot lights, control switches, instrument and control fuses, shall be mounted on hinged panels with the control wires in flexible looms.

The steelwork of the boards must be thoroughly de-rusted, primed with zinc chromate and finished with two coats of signal red quality enamel, or a baked powder epoxy coating.

Suitably rated terminals must be provided for all main circuits and the control and protection circuits. Where cable lugs are used, these shall be crimped onto the cable strands. Screw terminals shall be of the type to prevent spreading of cable strands. All terminals shall be clearly marked.

For the control wiring, each wire shall be fitted with a cable or wire marker of approved type, and numbering of these markers must be shown on the wiring diagram on the switchboard. Control wiring shall be run in PVC trunking. The trunking shall be properly fixed to the switchboard steelwork. Adhesives shall not be acceptable for the fixing of trunking or looms.

The automatic control and protection equipment shall be mounted on a separate easily replaceable small panel with printed circuits. The equipment shall mainly be the "solid state" type. After mounting the equipment on the panel, the rear of this panel shall be sealed with epoxy-resin. However, other proven control systems may also be considered, but must be described in detail.

All equipment on the switchboard, such as contactors, isolators, busbars, etc., shall have ample current carrying capacity to handle at least 110% of the alternator full load current.

3.3 Protection and Alarm Devices

All switchboards shall be equipped with protection and alarm devices as described below.

A circuit breaker and an adjustable current limiting protection relay must be installed for protection of the alternator. The protection relay shall be of the type with inverse time characteristics. The relay shall cause contactor to isolate the alternator and stop the engine.

Protection must be provided for overload, high engine temperature, low lubricating oil pressure, over speed, start-failure, and low water level.

Individual relays with reset pushed are required, to give a visible signal and stop the engine when any of the protective devices operate. In the case of manual operation of standby sets, it shall not be possible to restart the engine.

The indicators and re-set pushes must be marked in English.

"OVERLOAD"
"TEMPERATURE HIGH"
"OIL PRESSURE LOW"
"OVER-SPEED"
"START FAILURE"
"LOW WATER LEVEL"

In addition two relays with reset pushes must be fitted giving an audible and visible signal when:

- (a) The fuel level in the service tank is low. The reset push of this relay must be marked "FUEL LOW" -

In addition, a low-low level sensor must be provided. At this level the engine must stop to prevent air entering the fuel system.

- (b) The battery charger failed. The reset push of this relay must be marked "CHARGER FAIL" -

This is also applicable to the engine driven generator/alternator.

All relays must operate an alarm hooter. A pushbutton must be installed in the hooter circuit to stop the audible signal, but the fault indicating light on the control panel must remain lit until the fault has been rectified.

An on/off switch is not acceptable. After the hooter has been stopped, it must be re-set automatically, ready for a further alarm.

The hooter must be of the continuous duty and low consumption type. Both hooter and protection circuits must operate from the battery.

Potential free contacts from the alarm relay must be brought down to terminals for remote indication of alarm conditions.

A test pushbutton must be provided to test all indicators lamps.

3.4 Manual Starting

Each switchboard shall be equipped with two pushbuttons marked "START" and "STOP" for manual starting and stopping of the set.

3.5 Battery Staring Equipment

Each switchboard shall be equipped with battery charging equipment.

The charger shall operate automatically in accordance with the state of the battery and shall generally consist of an air-cooled transformer, a full wave solid state rectifier, and the necessary automatic control equipment of the constant voltage system.

The charger must be fed from the mains. An engine driven alternator must be also provided for charging the battery while the set is operational. Failure of this alternator must also activate the battery charger failure circuit.

3.6 Switchboard Instruments

Each generating set shall have a switchboard equipped as follows:

- (a) One flush square dial voltmeter, reading the alternator voltage, scaled as follows:

- (i) 0-300V for single phase generators.
- (ii) 0-500V for three phase generator. In this case a six position and off selector switch must be installed for reading all phase and phase to neutral voltages.

- (b) A flush square dial combination maximum demand and instantaneous ampere meter for each phase, with resettable pointer suitably scaled 20% higher than the alternator rating. A red arc stripe above scale markings from 0-20A and a red radial line through the scale at full-load current shall be provided. These instruments shall be supplied complete with the necessary current transformer.
- (c) One flush square dial vibrating type frequency meter, indicating the alternator frequency.
- (d) A six digit running hour meter with digital counter, reading the number of hours the plant has been operating. The smallest figure on this meter must read $\frac{1}{10}$ hour.
- (e) Fuses or m.c.b.'s for the potential voltage circuits of the meters.
- (f) One flush square dial ampere meter suitably scaled for the battery charging current.
- (g) One flush square dial voltmeter with a spring loaded pushbutton or switch for the battery voltage.

3.7 Marking

All labels, markings or instructions on the switchgear shall be in both official languages.

3.8 Earthing

An earth bar must be fitted in the switchboard, to which all non-current carrying metal parts shall be bonded.

The neutral point of the alternator must be solidly connected to this bar by means of a removable link labelled "EARTH" "AARD". Suitable terminals must be provided on the earth bar for connection of up to three earth conductors, which will be supplied and installed by others.

3.9 Operation Selector Switch

A four position selector switch must be provided on the switchboard marked "AUTO", "MANUAL", "TEST" and "OFF" - "

With the selector on "AUTO", the set shall automatically start and stop, according to the mains supply being available or not.

With the selector on "TEST", it shall only be possible to start and stop the set with the pushbuttons, but the running set shall not be switched to the load.

With the selector on "MANUAL", the set must take the load when started with the pushbutton, but it must not be possible to switch the set on to the mains, or the mains onto the running set.

With the selector on "OFF", the set shall be completely disconnected from the automatic controls, for cleaning and maintenance of the engine.

3.10 Automatic Change-over System

A fully automatic change-over system must be provided to isolate the mains supply and connect the standby set to the outgoing feeder in case of a mains failure and reverse this procedure on return of the mains.

3.11 By-pass Switch and Main Isolator

The switchboard shall be equipped with an on-load isolator to isolate the mains and a manually operated on-load by-pass switch, which shall either connect the incoming mains to the automatic control gear or directly to the outgoing feeder. In the latter position the automatic control gear, including the main contractors, shall be isolated for maintenance purposes. It shall not be possible to start the engine except with the selector switch in the "TEST" position.

It is required that this by-pass switch and mains isolator be mounted away from the automatic control gear, in a separate compartment either on the side or in the lower portion of the switchboard cubicle, and that the switches operated from the front of the compartment.

3.12 Start Delay

Starting shall be automatic in event of a mains failure. A 0-15 second adjustable start delay timer shall be provided to prevent start-up on power trips or very short interruptions.

3.13 Stop Delay

A stop delay with timer is required for the set, to keep the set on load for an adjustable period of one to sixty seconds after the return of the mains supply, before changing back to the supply. An additional timer shall keep the set running for a further adjustable cooling period of 5 to 10 minutes at no-load before stopping.

4. Installation

The tenderer must include for the complete installation and wiring of the plant in running order, including the connection of the incoming cable and outgoing feeder cables and all power and control cabling. The sets and Boards are to be handed over in complete working condition.

The connecting of the cable and control cabling to the generator and the control terminals in the LV board remains the responsibility of the tenderer.

5. Warning Notices

Notices, in both official languages, must be installed in the plant rooms.

The contents of these notices are summarised below.

- (a) Unauthorised entry prohibited.
- (b) Unauthorised handing of equipment prohibited.
- (c) Procedure in case of electric shock.
- (d) Procedure in case of fire.

The successful tenderer must consult the Occupational Health and Safety Act 83 of 1993 and get approval of the wording from the Department's representative, prior to ordering the notices.

Lettering must be black on a yellow background.

Notices (a) must be installed outside next to the entrance of the plant room and (b-d) inside the plant room.

In the plant room, a clearly legible and indelible warning notice must be mounted in a conspicuous position.

The motive shall be made of a non-corrodible and non-deteriorating material, preferable plastic, and must read as follows:

DANGER: This engine will start without notice. Turn selector switch on control board to "OFF" before working on the plant.

6. Construction

The engine and alternator of the set shall be built together on a common frame, which must be mounted on a skid base on anti-vibration mountings. The set must be placed direct on the concrete of the generator room. A steel drip tray must be fitted under the engine. The tray must be large enough to catch a drip from any part of the engine. In accordance with EIA requirements bunds walls etc must be provided to contain the base tank fuel amount.

7. Operation

The set is required to supply the lighting and power requirements in the case of a mains power failure.

The set shall be fully automatic i.e. it shall start when any one phase of the main supply fails or get switched and shall shut down when the normal supply is re-established. In addition it shall be possible to manually start and stop the set by means of selector switch and pushbuttons on the switchboard. The set shall have the facility to interlock with the mains and the ATS system, It shall also be used on a manual basis and switched on for continuous operation.

The automatic control shall make provision for three consecutive starting attempts. Thereafter the set must be switched off, and the start failure relay on the switchboard must give a visible and audible indication of the fault.

To prevent the alternator being electrically connected to the mains supply when the mains supply is on and vice versa, a safe and fail proof system of suitably interlocked contactors/switch shall be supplied and fitted to the changeover switchboard.

8. DRAWINGS

The successful Tenderer must, as soon as possible after receipt of the order, visit the site and map out the emergency power requirements and submit detailed dimensioned drawings of the installations and wiring diagrams of the plant and the switchgear and the power distribution requirements of each DB for approval before manufacture. One diagram shall be contained in a metal pouch on the side of the respective switchboard and all drawings shall be included in the manuals

9. INFORMATION REQUIRED

Tenderers must furnish detailed descriptions and illustrations of the equipment offered and must complete the questionnaire following this specification. This includes drawings of the switchboard layouts and control diagrams.

Failure to submit any of the information asked for may disqualify the tender.

10. GUARANTEE

The successful Tenderer will be required to guarantee the complete plant for a period of 12 months from the date it has been taken over by the Department in running order.

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

All repairs under the guarantee shall be carried out within 48 h of notification.

11. MAINTENANCE

The successful Tenderer will be required to maintain the plant in good running order for a period of twelve months after the plant has been taken over by the Department. The full costs of this maintenance must be included in the tender price, inclusive of overheads and travelling fees. A part from the consumables as detailed below, the department shall not acknowledge any cost claims additional to this maintenance cost as tendered.

However, should the Contractor fail to hand over the plant in good working order on expiry of the specified twelve months, the Contractor will be responsible for further monthly maintenance until final delivery is taken.

Under this agreement the Contractor will undertake to arrange once per month for a visit to the plant by a qualified member of his staff, who shall :

- (a) Report to the Officer-in-charge, keeping the maintenance records, and enter into a log book the date of the visit, the tests carried out, the adjustments made, and any further details that may be required.
- (b) Grease and oil moving parts, where necessary.
- (c) Check the air filter and, when necessary, clean the filter and replace filter oil.
- (d) Check the lubricating oil and top-up when necessary.
- (e) After the plant has run one oil change for the number of hours stipulated by the manufacturers, drain the sump and refill with fresh lubricating oil. The reading of the hour meter on the switchboard will be taken to establish the number of hours run by the plant.

Under this heading only the cost of the actual oil used, shall be charged as an extra on the monthly account.

- (f) Clean the lubricating oil filter and/or replace the filter element at intervals recommended by the engine manufacturer, the cost of a new filter element to be charged as an extra on the monthly account.
- (g) Check and when necessary adjust the valve settings and the fuel injection equipment.
- (h) Check the battery and top-up the electrolyte when necessary.
- (i) Test-run the plant for 0,5 hour and check the automatic starting with simulated faults on the mains, the proper working of all parts, including the electrical gear the protective devices with fault indicators, the changeover equipment and the battery charger. Make the necessary adjustments.
- (j) Report to the Department and to the Contractor on any parts that become unserviceable through fair wear and tear, or damaged by causes beyond the control of the Contractor.

The Contractor on receiving the report, shall immediately submit a detailed quotation for the repair or replacement of such parts to the Department.

- (k) Advise the Department when it has become necessary to decarbonise the engine and submit a quotation for this service.

(l) Top up the water of the radiator, if applicable.

Clean the plant and it's components.

Instruction of Operator

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

Three copies of a maintenance fault-localising and operating manual are to be handed over the Department's representatives on site.

12 **TESTS**

The following tests are to be carried out :

- (a) At the supplier's premises, before the generating set will be delivered to site Representatives of the Department may be present during the test to satisfy themselves that the generating set complies with the specification and delivers the specified output. The test must be carried out in accordance with BSS 5514, Part 2 and 3. The Department must be timorously advised of the date for the test.
- (b) At the site after completion of the installation, in accordance with Clause 12.2 of the Standard Conditions (form O.W.G. 379), forming part of this specification.

The resistance for the load and all instruments which may be required for the tests have to be provided by the successful tenderer.

Test reports of both tests as specified under (a) and (b) are to be submitted to the Department.



SPECIFICATION FOR THE SUPPLY DELIVERY AN INSTALLATION OF AN EMERGENCY GENERATOR SET

SECTION 3 – TECHNICAL SPECIFICATION

TABLE OF CONTENTS

<u>Clause</u>		<u>Page</u>
1.	General.....	3.1
2.	Site Information and Conditions.....	3.1
3.	Output and Voltage.....	3.1
4.	Switchboard/Control Panel Unit.....	3.1
5.	Cables.....	3.2
6.	Engine.....	3.2
7.	Alternator.....	3.2
8.	Load Acceptance.....	3.2
9.	Generator Room.....	3.2
10.	Alarms.....	3.2
11.	Remote Control Generator Switch.....	3.3
12.	Fuel Drip Tray.....	3.3
13.	Completion Time.....	3.3
14.	Inform.....	3.3
15.	Fuel Supply Tank	3.3

SECTION 3 – TECHNICAL SPECIFICATION

1. General

Supply, deliver, install, commission, test and maintain an emergency generating set and all associated control boards and Distribution boards and electrics at the Bethuli Correctional Centres for DCS as follows:

BETHULI CORRECTIONAL CENTRE:

1. Provide a new outdoor weatherproof and silenced, containerized 125kVA DA set (prime rated) with 24h diesel base tank (fitted with lockable fill pipe, and manual fill pump with hose for drum fuel supply) and rigid steel base frame, mount on new level 200mm high concrete plinth cast under this contract, provide ATS change over panel and cable to the local boundary board power supply and to the existing main LT board; a full fuel tank shall be included on hand over after all testing has been completed; set shall be weather proofed and silenced to residential standards and in compliance with all municipal and national by-laws. The sound level from the set, measured on site after installation of the set shall not exceed 65dbA @ 7 metres (all orientations) including the exhaust at full load
2. Supply new control panel and ATS at the generator, run new LV supply from the existing site boundary board and from the generator to existing main LV DB.
3. Refurbish and re-equip the existing main LV board with new equipment and new circuit breakers (coordinate all shut downs with the user to ensure that the DCS is not compromised when work is being done)
4. Label and paint all field DB face plates RED to indicate emergency power, provide internal legends and cable feed information for all DBs

These installation must comply fully with all the sections and drawings of this document. This technical specification is supplementary to the Equipment Requirements, Section 2, and must be read together where they are at variance the Technical Specification shall apply.

The set must be installed in the existing plant room.

2. Site Information And Conditions

2.1 Location

The site is Bethuli DCS , Free State Province.

2.2 Site Conditions

The following site conditions will be applicable and equipment shall be suitably rated to develop their assigned rating and duty at these conditions.

- a) Height above sea level : 1300 meter
- b) Maximum ambient temperature : 40 °C
- c) Maximum ambient humidity at lowest temperature : 80 %
- d) Minimum Temperatures: -5deg C

3. Output And Voltage

After the de-rating factors for the engine and generator due to site conditions have been taken into account, the set must have a site output and voltage as follows: -

No load voltage	:	400/230 Volt
Rating	:	125 kVA rating (after de-rating for altitude and temperature)
Power output on site (0,8 power factor)	:	100.00 kW =kVA rating X 0.8
Frequency	:	50Hz
Fault Level	:	10kA

The generating set is required to feed inductive loads consisting of electric motors, fluorescent light fittings and UPS units.

The generating set shall be capable of accepting 75% of the specified site electrical output in one step. The 100% load acceptance shall not exceed 15 seconds.

4. Switchboard/Control Panel Unit

All switch- and control gear shall be rated for a fault current level of 10kA.

The switchboards/control panels unit shall be a free standing floor mounted type in the plant rooms and suitably fixed on a steel frame in the in the diesel set enclosure.

Existing DB boards shall be isolated and removed and replacement boards installed in the same positions and reconnected to the existing circuits wherever possible. Where new circuits are required they shall be supplied and installed in accordance with the general technical specifications

5. Cables

The contractor will be responsible for all electrical cable connections associated with the complete generating set installation.

6. Engine

A sump drainpipe must be fitted with a shut-off valve placed in a convenient position outside the base frame to facilitate drainage.

Recommended oil types must be indicated on the engine, or base frames, by means of suitable labels.

All engine instruments shall have clear markings on the faceplates, indicating the normal operating zone(s), maximum and minimum allowable values/limits and danger zone(s).

The flywheel shall be covered by approved hoods.

7. Alternator

The Alternator shall be of the low harmonic type.

8. Load Acceptance

The generator set shall be capable of accepting 75% of the specified site electrical output 10 seconds after the starter motor is energised and the remaining 25%, 5 seconds thereafter, i.e. 100% load acceptance shall not exceed 15 seconds.

9. Generator Room/Platform

An external level, reinforced concrete plinth is to be cast for the generator set complete with cable sleeves and diesel containment bund (all to the DPW standard details – available from DPW)

10. Alarms

The successful tenderer must pay particular attention to the requirements of the alarms as described in the Equipment Requirements, Section 2.

One alarm hooter and red light shall be supplied and installed on the outside wall of the generator room in the position as shown on the drawing in this specification.

The hooter shall consist of an electronic unit similar and equal to a "Klaxon" - type SY2/725 hooter with a continuously rated output and 110 db at a distance of 2 metres, and shall be IP55 weatherproof rated.

The warning light shall consist of a 40W flashing red light, which shall be mounted on a galvanised steel frame together with the hooter.

The hooter and light shall be switched on or off simultaneously after initiation or cancellation of an alarm condition. The supply and installation of the wiring between the control board and the alarm unit forms part of this contract.

The successful tenderer must ensure that the hooter control circuit resets automatically after cancellation due to a low fuel condition or battery charger failure, but the visible fault indication must remain, i.e. should the operator continue to run the set, the hooter must sound, should any other condition develop.

A remote alarm panel shall be supplied and installed by the contractor in the control room. This shall be of surface mounting, enamelled sheet metal (colour to approval), minimum depth construction, and shall incorporate a flashing red pilot alarm light, adjustable electronic sounder, and a silence push button. The silence button shall not switch off the pilot light - this shall only be switched off when the alarm is reset at the Generator Panel.

A 2,5mm² x 4-core PVC SWA PVC cable will be supplied, installed and terminated by others between the Generator Panel and the Security Office. The Contractor shall connect this cable at both ends and shall supply and install all switch gear relays, etc. to ensure satisfactory operation of the Remote Alarm Panel.

11. Generator Control and Test Switches

These shall be supplied with the Generator control panel and shall incorporate all automatic and manual operating and testing requirements for the sets; they shall be fully and clearly labelled

12. Fuel Drip Tray

A drip tray approximately 100mm deep shall be mounted below the fuel tank and must be large enough to collect any fuel that drips from the tank accessories. The drip tray shall be manufactured from black mild steel. The thickness of the drip tray sheet steel shall not be less than 2mm.

13. Completion Time

The Generator Set is required to be commissioned in conjunction with the agreed programme signed off by the user Client

14. Inform

The successful tenderer shall inform the Engineer when the set is ready for inspection and testing at the manufacturers works and after installation on site once the sets are commissioned and operational

15. Fuel Supply Tank

The fuel tank shall be base mounted. The tank shall have sufficient capacity for the generating set to run the engine on 80% load for a period of 24 hours.

A drip tray approximately 100mm deep shall be mounted below the fuel tank and must be large enough to collect any fuel that drips from the tank accessories. The drip shall be manufactured from black mild steel with a thickness of not less than 2mm.



SPECIFICATION FOR THE SUPPLY DELIVERY AN INSTALLATION OF AN EMERGENCY GENERATOR SET

SECTION 4 – SCHEDULES OF TECHNICAL INFORMATION

TABLE OF CONTENTS

<u>Clause</u>		<u>Page</u>
1.	Engine.....	4.1
2.	Alternator.....	4.2
3.	Switchboard.....	4.3
4.	Battery.....	4.4
5.	Dimensions.....	4.4
6.	Deviations from the Specification As and Alternative.....	4.4
7.	Spare Parts and Facilities.....	4.5

SECTION 4 – 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 BS 551.4 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?	
21.	Method of starting	
22.	Voltage of starting system	

NO	ITEM	REMARKS
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 BS 5514, Part 4, 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 0,8 power factor	
8.	De-rating for site conditions	
9.	Input required in kW	

NO	ITEM	REMARKS
10.	Method of excitation	
11.	Efficiency at 0,8 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	

NO	ITEM	REMARKS
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?	
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 generator room adequate for the installation of the set	

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	

**SCHEDULE OF IMPORTED MATERIALS AND EQUIPMENT
TO BE COMPLETED BY TENDERER**

The Contractor shall list imported items, materials and/or equipment which shall be excluded from the Contact Price Adjustment Provisions and shall be adjusted in terms of currency fluctuations only. Copies of the supplier's quotations for the items, materials or equipment (not higher than the Contract rate as listed below) should be lodged with the Representative/Agent of the Department of Public works within 60 (sixty) days from the date of acceptance of the tenders. No adjustment of the contractor's profit, local VAT amount, discount, mark-up, handling costs, etc. shall be allowed.

ITEMS	MATERIAL / EQUIPMENT	RAND (R) EXCLUDING VAT
1		
2		
3		
4		
5		
6		

FORMULA:

The net amount to be added to or deducted from the contract sum:

$$A = V \times \frac{Z}{Y}$$

A = the amount (R) of adjustment

V = the net amount (R) (Supplier's Quotation) of the imported item
(Material or Equipment)

Y = exchange rate at the closing date of tender submission

Z = exchange rate on the date of payment



SPECIFICATION FOR THE SUPPLY DELIVERY AN INSTALLATION OF AN EMERGENCY GENERATOR SET

TABLE OF CONTENTS

Clause

1.	Preliminaries.....
2.	Summary of Section 1.....
3.	Schedule of Supplementary Information.....
4.	Bill No 2 to 6.....
5.	Summary of Section 2.....
6.	Final Summary.....

SECTION 1**PRELIMINARIES****GENERAL**

Should there be any discrepancy between these Preliminaries and the Conditions of Contract (PW677), the former shall take precedence

These Preliminaries are divided into Parts A, B and C

Part A lists the clauses of and refers directly to the Conditions of Contract (PW677). Some of the clauses have been expanded and the additional terms are set against each relevant clause

Part B contains standard preliminary items, some of which may have been marked NA (not applicable)

Part C contains specific preliminary items which apply to this contract except where marked NA (not applicable)

SCHEDULE OF SUPPLEMENTARY INFORMATION

A Schedule of Supplementary Information is included after the Collection of the Preliminaries, containing supplementary information to items A13, A20, A24, B1.2, B1.5, B1.6 etc

PRICING OF PRELIMINARIES

For the purpose of adjustment of the Preliminaries in terms of item A23 hereof the rate entered in the rate column for each item in the Preliminaries, must be divided into three categories, viz: Fixed, Value Related and Time Related, and the respective amounts entered in the spaces provided under each item

Where the rate entered in the rate column for any item in the Preliminaries is not divided into the three categories, the rate shall be deemed to be value related except for clauses A1, A2, A8, A14, A21, A24, A26 to A29, B1.1 to B1.9, B2.1 to B2.6, B4.1, B5.1, B5.5, B7.1 to B8.2, C2 to C7 which shall be fixed.

PART A**CONDITIONS OF CONTRACT**

The conditions of contract shall be the Conditions of Contract (PW677) of the Department. The contractor is referred to the above mentioned document for the full intent and meaning of each clause referred to under the following headings

A1 DEFINITIONS**Clause 1**

Fixed: _____ Value Related: _____ Time Related: _____ Item

A2 DRAWINGS, SPECIFICATIONS AND BILLS OF QUANTITIES**Clause 2****Priced Bills of Quantities**

The contractor shall deposit his priced bills of quantities with the quantity surveyor stated on the front cover hereof

Rates

Imbalanced, unreasonable or unrealistic rates for any item, the inclusion of the cost of one item in the rate for another item, nil rates or no charge for items will not be allowed
Where appropriate, rates for similar items in the various sections of the bills of quantities should be the same

The Director-General shall be at liberty to make such adjustments to individual rates, whether they are subcontractors' rates or not, as will eliminate errors, discrepancies or which he considers to be imbalanced, unreasonable or unrealistic rates without altering the tender amount

Each Item Carried to Collection

Schedule rates for all items shall be deemed to include all costs to the contractor other than Value-Added Tax (VAT) for the execution of the works in accordance with the Conditions of Contract (PW677)

Fixed: _____ Value Related: _____ Time Related: _____ Item

A3 CONTRACTOR'S OBLIGATIONS

Clause 3

Fixed: _____ Value Related: _____ Time Related: _____ Item

A4 CONTRACTOR'S REPRESENTATIVE

Clause 4

Fixed: _____ Value Related: _____ Time Related: _____ Item

A5 EMPLOYEES TO BE EFFICIENT

Clause 5

Fixed: _____ Value Related: _____ Time Related: _____ Item

A6 MATERIAL AND WORK TO CONFORM TO DESCRIPTION

Clause 6

Fixed: _____ Value Related: _____ Time Related: _____ Item

A7 LOCAL AND OTHER AUTHORITIES

Clause 7

Fixed: _____ Value Related: _____ Time Related: _____ Item

Note: Provisional sums covering such relevant items are included elsewhere in the bills of quantities

A8 SETTING OUT OF THE WORKS

Clause 8

Fixed: _____ Value Related: _____ Time Related: _____ Item

A9 NOTICE OF COVERING WORK

Clause 9

Fixed: _____ Value Related: _____ Time Related: _____ Item

A10 MATERIAL AND GOODS TO BE THE PROPERTY OF THE DIRECTOR-GENERAL

Clause 10

Ownership

Ownership of material and goods referred to in subclause 10(1) of the Conditions of Contract (PW677) shall be deemed to have duly passed to the Director-General by virtue of a constitutum possessarium

Fixed: _____ Value Related: _____ Time Related: _____ Item

Each Item Carried to Collection

A11 PLANT TO BE THE PROPERTY OF THE DIRECTOR-GENERAL**Clause 11****Ownership**

Ownership of plant referred to in sub clause 11(1) of the Conditions of Contract (PW677), shall be deemed to have duly passed to the Director-General by virtue of a constitutum possessorium

Fixed: _____ Value Related: _____ Time Related: _____ Item

A12 INJURY TO THE WORKS**Clause 12****Excepted Risk**

The contractor shall carry the risk of damage to or destruction of the works and material paid for by the Director-General that is the result, whether direct or indirect or proximate or remote of any risk or peril only insurable in the Republic of South Africa by means of a political riot insurance policy issued by or on behalf of the South African Special Risks Insurance Association

Fixed: _____ Value Related: _____ Time Related: _____ Item

A13 INJURY TO PERSONS OR PROPERTY**Clause 13**

Fixed: _____ Value Related: _____ Time Related: _____ Item

Note:

- 1) See the Schedule of Supplementary Information for amount of insurance to be obtained against removal of support to adjoining properties, in respect of any single occurrence (clause 13(4))
- 2) All the conditions of clause 13 will still be applicable should insurance against removal of support to adjoining properties not be specifically prescribed
- 3) Insurance against Removal of Support to adjoining Properties (Clause 13(4)): Before commencing the works the contractor shall arrange with the owners of adjoining buildings and properties, the Representative/Agent, representatives of local authorities and agents of an insurance company for an inspection of the adjoining buildings, structures, services, paving, channels, fences, roads, pavements, kerbs, etc and record all conditions particularly cracks, defects and levels in structures, roads, paving, kerbs, channels and fences which later could be claimed to have been caused or disturbed by the operations carried out under this contract

If so directed the contractor shall take levels and photographs and the cost thereof shall be for the Director-General's account. Written and photographic evidence shall be dated and witnessed in front of an attorney or notary, and the owners should sign the record as true evidence which shall be lodged with the Representative/Agent

The contractor shall insure as set out in clause 13(4) of the Conditions of Contract (PW677) and submit the insurance policy to the Representative/Agent for approval

Should the contractor fail to insure, the Director-General may insure in his own name with an insurance company, pay the premiums and recover such cost from the contractor

A14 CESSION OR ASSIGNMENT**Clause 14**

Fixed: _____ Value Related: _____ Time Related: _____ Item

Each Item Carried to Collection

A15 PRIME COST ITEMS AND PROVISIONAL SUMS**Clause 15****Adjustment of Prime Cost Amounts**

The contract sum will be adjusted by the omission of the prime cost amount and the addition of only the sum actually paid for the goods by the contractor

Fixed: _____ Value Related: _____ Time Related: _____ Item

Note: See items B7.1 and B7.2 hereof for definition and adjustment of attendance on nominated and/or selected subcontractors executing work allowed for under provisional sums

A16 NOMINATED SUBCONTRACTORS**Clause 16**

Fixed: _____ Value Related: _____ Time Related: _____ Item

A17 FACILITIES TO OTHER CONTRACTORS**Clause 17**

Fixed: _____ Value Related: _____ Time Related: _____ Item

Note: See items B7.1 and B7.2 hereof for definition and adjustment of attendance on other contractors executing work not provided for in this contract

A18 VARIATIONS**Clause 18****Variations**

For purposes of this clause, variations shall include any additions, omissions and substitutions ordered by the Director-General

Calculation of the Value of Work for the Limit of 20%

The amount arising out of the Contract Price Adjustment Provisions, and any difference between provisional sums and accepted tender amounts for work to be executed as nominated and/or selected subcontracts, shall be excluded in calculating the value of work omitted or added in excess of the limit of 20%

Fixed: _____ Value Related: _____ Time Related: _____ Item

A19 DAYWORK**Clause 19**

Fixed: _____ Value Related: _____ Time Related: _____ Item

A20 COMMENCEMENT AND COMPLETION**Clause 20****Inclement Weather**

Replace the words exceptionally inclement weather in clause 20(4) with the words inclement weather during which no work is possible

Fixed: _____ Value Related: _____ Time Related: _____ Item

Note: The contract period shall be as stated in the Schedule of Supplementary Information

Each Item Carried to Collection

**FIRST AND FINAL DELIVERY****Clause 21**

Fixed: _____ Value Related: _____ Time Related: _____ Item

Note: The contractor's attention is drawn to the fact that for certain portions of the works the Final Delivery Certificate may be issued twelve months (or some other period dependent on his liability for certain portions of the works) after the date of the First Delivery Certificate

A22 CONTRACTOR'S LIABILITY IN RESPECT OF DEFECTS**Clause 22**

Fixed: _____ Value Related: _____ Time Related: _____ Item

Note: The contractor's attention is drawn to the fact that his liability for certain portions of the works, where so stated in the bills of quantities, may be for twelve months (or for other periods as may be stated) after the date of the First Delivery Certificate

A23 PAYMENT**Clause 23****Retention Money**

Notwithstanding the provisions of clause 23(2) (e)(i) of the Conditions of Contract (PW677) retention money shall be calculated on the individual contract amounts (Value-Added Tax excluded) for the contractor, nominated and/or selected subcontractors and the maximum retention money shall in each case not exceed 10% of each individual contract amount (Value-Added Tax excluded)

THE FOLLOWING CONDITIONS REPLACE CLAUSE 23(2)(b)(ii):**Adjustment of Preliminaries**

The items of Preliminaries shall be adjusted in the following categories and such adjustment shall preclude any further adjustment except where circumstances (other than those listed hereunder) in terms of clause 25 of the Conditions of Contract (PW677) affect any item specifically priced in the preliminaries:

- 1 Fixed i.e. an amount which shall not be varied
2. Value Related i.e. an amount which shall be varied in proportion to the final value of the Works as compared to the contract sum (both excluding amounts arising out of contract price adjustment provisions, preliminaries, provisional sums for nominated or selected subcontractors, credit for old materials and Value-Added Tax)
3. Time Related i.e. an amount which shall be varied in proportion to the extended contract period less 35 days as compared to the contract period less 35 days where such extension results from the following circumstances:
 - 3.1 Instructions which have not been occasioned by the default of the contractor
 - 3.2 Delay in issuing an instruction by the Representative/Agent if approved in terms of said clause 25
 - 3.3 Delay caused by other contractors or workmen employed by the Director-General
 - 3.4 Failure by the Director-General to grant possession of the site to the contractor: Provided that the proportional amount in respect of any such extension be multiplied by a factor of 50%

Each Item Carried to Collection

SECTION 1: PRELIMINARIES (PART C)

Payment of Preliminaries in Progress Payments

proportional amount in respect of the preliminaries or the adjusted preliminaries, if any, shall be included in each progress payment taking into account the priced items within the preliminaries section of the bills of quantities, as well as:

1. In respect of Time Related amounts:
 - 1.1 The 35 day no charge period before handing over of the site
 - 1.2 A reduced charge for extensions given for periods before handing over of the site
 - 1.3 The construction period including any later anticipated completion date
 - 1.4 Any amounts already paid in previous payment certificates when the construction period changes
2. In respect of the Fixed value amounts:
 - 2.1 An initial or establishment charge, payment of which shall be made to the contractor on proof that the relevant expenditures have been made
 - 2.2 A monthly charge, if any
 - 2.3 A final or disestablishment charge
3. In respect of the Value Related amounts:
 - 3.1 The exclusions provided for in the **Adjustment of Preliminaries** above for the adjustment of Value Related amounts
 Fixed: _____ Value Related: _____ Time Related: _____ Item

A24 DEFAULT BY CONTRACTOR

Clause 24

Fixed: _____ Value Related: _____ Time Related: _____ Item

Note: The penalty for default by the contractor shall be calculated as determined in the Schedule of Supplementary Information

A25 DELAYS BY DIRECTOR-GENERAL

Clause 25

Fixed: _____ Value Related: _____ Time Related: _____ Item

A26 SEQUESTRATION, LIQUIDATION, INSOLVENCY AND JUDICIAL MANAGEMENT

Clause 26

Cancellation of Contract

The contract shall be deemed to be cancelled upon the liquidator, or curator, waiving his right to proceed with and complete the contract

Fixed: _____ Value Related: _____ Time Related: _____ Item

Each Item Carried to Collection

A27 DISPUTES

Clause 27

Fixed: _____ Value Related: _____ Time Related: _____ Item

A28 CANCELLATION BY DIRECTOR-GENERAL

Clause 28

Fixed: _____ Value Related: _____ Time Related: _____ Item

A29 AMENDMENT OF CONDITIONS OF CONTRACT

Clause 29

Fixed: _____ Value Related: _____ Time Related: _____ Item

 PART B
STANDARD PRELIMINARIES

The tenderer's attention is drawn to Part C hereof for specific preliminaries which apply to this contract

B1 DOCUMENTATION**B1.1 DOCUMENTS**

The Conditions of Contract (PW677), Articles of Agreement (PW193) and Deed of Suretyship (PW159) and Guarantee for the Execution of a Contract (PW 822) are available for issue to or for inspection by the tenderer during office hours at the head office or the regional office of the Department. Copies of the State Tender Board General Conditions and Procedures (ST36) are available on application from the Chief Director: Procurement Administration, Private Bag X49, Pretoria, 0001

Fixed: _____ Value related: _____ Time related: _____ Item

B1.2 CONTRACT DRAWINGS

The drawings issued with the tender documents do not comprise the complete set but serve as a guide only for tendering purposes and for indicating the scope of the work to enable the tenderer to acquaint himself with the nature and extent of the works and the manner in which they are to be executed

Should any part of the drawings not be clearly intelligible to the tenderer he shall, before submitting his tender, obtain clarification in writing from the Representative/Agent

Fixed: _____ Value related: _____ Time related: _____ Item

Note: See the Schedule of Supplementary Information for the list of contract drawings

B1.3 BILLS OF QUANTITIES

The pages of these bills of quantities are numbered consecutively. The tenderer shall, before submitting his tender, check the numbers of the pages and should any be missing or duplicated, or the reproduction be indistinct, or if any doubt exists as to the full intent or meaning of any description, or these bills of quantities contain any obvious errors, the tenderer shall obtain a directive in writing from the Director-General

The text of these bills of quantities and other documents as prepared by the Representative/Agent will be adhered to and no alteration, erasure, omission or addition thereto by the tenderer will be recognised

Fixed: _____ Value related: _____ Time related: _____ Item

B1.4 PROVISIONAL BILLS OF QUANTITIES

Where reference is made in the documentation to bills of quantities it shall be taken as referring to these Provisional Bills of Quantities

All quantities are provisional, are an indication of the extent and type of work to be executed and have been inserted in order to obtain competitive tenders

All work carried out under this contract shall be measured and valued at schedule rates and in accordance with the Conditions of Contract

Fixed: _____ Value related: _____ Time related: _____ Item

B1.5 GENERAL PREAMBLES

The document Specification of Materials and Methods to be Used (PW371) is obtainable on request from the head office and all regional offices of the Department, and shall be read in conjunction with the bills of quantities and be referred to for the full descriptions of work to be done and materials to be used

Fixed: _____ Value related: _____ Time related: _____ Item

Note: See the Schedule of Supplementary Information for the edition which is applicable

Each Item Carried to Collection

B1.6 STANDARD SYSTEM OF MEASURING BUILDING WORK

Except where stated otherwise or where it is clear from the contents of the measured items these bills of quantities have been compiled in accordance with the Standard System of Measuring Building Work issued by the Association of South African Quantity Surveyors

Fixed: _____ Value related: _____ Time related: _____ Item

Note: See the Schedule of Supplementary Information for the edition which is applicable

B1.7 DEFINITION OF APPROVED, DIRECTED OR SELECTED

The term "approved", "directed" or "selected" shall mean approved, directed or selected by the Representative/Agent

Fixed: _____ Value related: _____ Time related: _____ Item

B1.8 TRADE NAMES

Wherever a trade name for any product has been described in the bills of quantities, the tenderer's attention is drawn to the fact that any other product of equal quality may be used subject to the written approval of the Representative/Agent being obtained prior to the closing date for submission of tenders

If prior written approval for an alternative product is not obtained, the product described shall be deemed to have been tendered for

Fixed: _____ Value related: _____ Time related: _____ Item

B1.9 PROVISIONAL ITEMS

Work described as Provisional in these bills of quantities shall be measured and valued at schedule rates and in accordance with the Conditions of Contract (PW677)

Fixed: _____ Value related: _____ Time related: _____ Item

B1.1 DETAILS

0 Upon receipt of detail drawings for any work the contractor shall, before putting that work in hand, ascertain that the dimensions given on the detail drawings correspond with the dimensions of any work already built. In the event of the detail drawings not agreeing with work already built, the drawings shall immediately be returned for alteration, as no claim for extra work will be entertained in this respect

Fixed: _____ Value related: _____ Time related: _____ Item

B2 THE SITE**B2.1 VIEWING THE SITE**

The tenderer shall view the site and make himself thoroughly acquainted with the conditions under which the works are to be executed, the means of access to the site, the nature of the site, the condition of the roads and generally with all matters which may influence the pricing of the contract

The contractor will not be allowed to extend his operations beyond the area indicated on the drawings

Fixed: _____ Value related: _____ Time related: _____ Item

B2.2 BOUNDARY BEACONS

The boundary beacons of the site will be pointed out by the Representative/Agent to the contractor who shall sign a written acknowledgement therefor before commencing operations. The contractor shall maintain the beacons and shall bear any cost of resurveying should they become disturbed or lost

Fixed: _____ Value related: _____ Time related: _____ Item

B2.3 ADJOINING PROPERTIES

The contractor shall make his own arrangements with owners of adjoining properties in order to execute the works

Fixed: _____ Value related: _____ Time related: _____ Item

Each Item Carried to Collection

B2.4 UNKNOWN SERVICES

Should the contractor encounter any existing services such as underground cables, pipes or sewers during the execution of the works he shall notify the Representative/Agent immediately and suspend all affected work in the immediate vicinity until instruction to proceed has been given by the Representative/Agent

Fixed: _____ Value related: _____ Time related: _____ Item

B2.5 PROTECTION OF TREES AND SHRUBS

Only those trees and shrubs indicated as such on the drawings shall be removed or cut back. The remainder of the trees and shrubs shall be left undamaged

Fixed: _____ Value related: _____ Time related: _____ Item

B2.6 ARTICLES OF VALUE

Any relics, treasure or other articles of value found on the site, shall be handed over to and remain the property of the Director-General who will be the sole arbiter of what constitutes an article of value

Fixed: _____ Value related: _____ Time related: _____ Item

B3 MANAGEMENT OF THE CONTRACT**B3.1 PROGRAMMING OF THE WORKS**

The contractor shall, within one month of the site being handed to him, submit to the Representative/Agent a detailed program and supporting documentation for the execution of the contract including the work of all nominated and/or selected subcontractors and other contractors engaged by the Director-General, representing the duration of categories of work in sufficient detail to enable the Representative/Agent to assess the progress of the works at all times in comparison with the program. The contractor shall, in compiling the program, consult with the nominated and/or selected subcontractors and other contractors and shall also take cognisance of any Procedure of Works (phasing) items, where applicable

The contractor shall implement the program and shall reprogram the works should the program not accurately reflect the progress or the extent of the works. Copies of each program and supporting documentation shall be provided for the use of the Representative/Agent, nominated and/or selected subcontractors and other contractors. The submission to the Representative/Agent of such programs will not relieve the contractor of his responsibility for ensuring timeous completion of the contract

Fixed: _____ Value related: _____ Time related: _____ Item

B3.2 MANAGEMENT OF THE WORKS

The contractor shall be responsible for managing the sequence of the works in such a manner that the subsequent cutting or patching of finished work is avoided. He shall obtain all necessary particulars of subcontractors' and other contractors' work timeously so that provision for recesses, chases, holes, etc may be made

Fixed: _____ Value related: _____ Time related: _____ Item

B3.3 PROGRESS MEETINGS

Regular progress meetings will be held either monthly or as may be necessary and shall be attended by the contractor. Parties other than the contractor shall not attend the meetings unless specifically requested by the Representative/Agent to do so. The Representative/Agent will keep and distribute minutes of the meetings

Fixed: _____ Value related: _____ Time related: _____ Item

Each Item Carried to Collection

B4 MATERIAL AND WORKMANSHIP**B4.1 ORDERING OF MATERIALS**

The contractor shall place orders timeously for materials or special articles that are required. Should the bills of quantities be used for ordering materials, this shall be entirely at the contractor's risk

Fixed: _____ Value related: _____ Time related: _____ Item

B4.2 SAMPLES OF MATERIALS AND WORKMANSHIP

The contractor shall furnish at his own cost such samples of materials, workmanship and specimens of colours as may be called for by the Representative/Agent for his approval who may reject all material, workmanship, etc not corresponding to the approved samples

Fixed: _____ Value related: _____ Time related: _____ Item

B5 TEMPORARY WORKS AND PLANT**B5.1 ENCLOSURE OF WORKS**

The contractor shall provide, erect, alter as necessary, maintain, remove and make good on completion of the works suitable hoardings, complete with gantries, fans, safety screens, barriers, guard railing, access gates, covered gangways, steel sections at crane lifts, splayed corners, returned ends, etc as indicated on the drawings and as necessary for the enclosure of the works and the protection of the public, all to the satisfaction of the Representative/Agent and the Local Authority

Fixed: _____ Value related: _____ Time related: _____ Item

B5.2 SHEDS

The contractor shall provide, maintain and remove on completion of the works temporary sheds for the proper storage of materials

Fixed: _____ Value related: _____ Time related: _____ Item

B5.3 OFFICE FOR THE REPRESENTATIVE/AGENT

The contractor shall provide, maintain and remove on completion of the works an office for the exclusive use of the Representative/Agent, minimum size 4 x 3 x 3m high internally, suitably insulated and ventilated, provided with electric lighting and fitted with boarded floor, desk, chair, drawing stool, drawing board and lock-up drawers for drawings. The office shall be kept clean and fit for use at all times

Fixed: _____ Value related: _____ Time related: _____ Item

B5.4 NOTICE BOARD

The contractor shall provide, erect where directed, maintain and remove on completion of the works a notice board size 3 x 3m as type Drawing GEN 063, constructed of suitable boarding with flat smooth surface and with edging bead 19mm thick all round outer edges and projecting 12mm from face of boarding and rounded on front edge. The board shall be securely fixed to hoarding, where hoarding is provided, or fixed to and including a suitable supporting structure of timber or tubular posts and braces. The board is to be painted ivory white and the bead and 12mm wide dividing lines deep blue. All wording shall be inscribed in deep blue painted sans serif lettering

Subcontractor's individual boards will be allowed on the site subject to the written approval of the Representative/Agent

Fixed: _____ Value related: _____ Time related: _____ Item

Each Item Carried to Collection

B5.5 ADVERTISEMENTS

Advertisements on the hoarding or elsewhere on the site will be allowed subject to the written approval of the Representative/Agent

Fixed: _____ Value related: _____ Time related: _____ Item

B5.6 PLANT AND SCAFFOLDING

The contractor shall provide, maintain and remove if no longer required all plant and scaffolding necessary for the execution of the works

Scaffolding will not be permitted to be erected from buildings on adjacent premises

Fixed: _____ Value related: _____ Time related: _____ Item

B6 TEMPORARY SERVICES**B6.1 PROVISION OF WATER FOR THE WORKS**

The contractor shall provide all water necessary for the execution of the works, including all temporary plumbing, removing same and making good on completion of the works

The contractor may use water free of charge from the existing supply if available. He shall obtain permission from the Representative/Agent before any connection to or extension of the existing supply is made, which shall be executed, removed and made good on completion of the works at the contractor's expense

The contractor shall allow for the risk of failure of the water supply or of an insufficient supply, in which case he shall make his own arrangements and all costs that may arise shall be for his account

Fixed: _____ Value related: _____ Time related: _____ Item

B6.2 PROVISION OF ELECTRICITY AND LIGHTING

The contractor shall provide all electricity and artificial lighting necessary for the execution of the works, including all temporary installation work, removing same and making good on completion of the works

The contractor may use the existing power supply free of charge if available. He shall obtain permission from the Representative/Agent before any connection to or extension of the existing supply is made, which shall be executed, removed and made good on completion of the works at the contractor's expense

The contractor shall allow for the risk of failure of the electrical supply or of an insufficient supply, in which case he shall make his own arrangements and all costs that may arise shall be for his account

Fixed: _____ Value related: _____ Time related: _____ Item

B6.3 PROVISION OF TELEPHONE

The contractor shall provide, maintain and remove on completion of the works a telephone on site for use by all persons engaged upon the works, pay all costs related thereto and make his own arrangements regarding recovering the cost of outgoing calls from those making them

Fixed: _____ Value related: _____ Time related: _____ Item

B6.4 PROVISION OF TOILETS

The contractor shall provide, maintain in a thoroughly clean and tidy condition and remove on completion of the works proper toilets for the use of the workmen

The contractor will be permitted the use of the existing toilet facilities if available unless such facilities are reserved for specific persons. The contractor shall maintain such facilities in a thoroughly clean condition and make good any damage at his own expense

Fixed: _____ Value related: _____ Time related: _____ Item

Each Item Carried to Collection

B7

ATTENDANCE ON NOMINATED AND/OR SELECTED SUBCONTRACTORS AND OTHER CONTRACTORS

B7.1 DEFINITION OF ATTENDANCE

General Attendance shall, without in any way limiting the meaning and interpretation thereof, include the following services to be rendered by the contractor to nominated and/or selected subcontractors or other contractors engaged by the Director-General:

1. Access to the site and to places where the work is to be carried out, the use of ordinary scaffolding and the use of any temporary cranes and personnel hoists erected by the contractor for his own and his subcontractors' use
 2. The provision of water and lighting and electrical power to the place where work is to be carried out excluding water, fuel and power for commissioning of installations
 3. The provision of an area for office accommodation, temporary workshops, and for the storage of plant and materials
 4. The use of erected scaffolding belonging to the contractor in common with others having the like right whilst it so remains erected upon the site
 5. The use of toilet facilities
 6. The use of the site telephone
 7. Making good after nominated and/or selected subcontractors and other contractors
 8. Co-ordinating the main contract work with that of the nominated and/or selected subcontractors and other contractors
- Fixed: _____ Value related: _____ Time related: _____ Item

Note: Items are provided elsewhere for pricing attendance on nominated and/or selected subcontractors and other contractors

B7.2 ADJUSTMENT OF ATTENDANCE

The schedule rates providing for attendance on nominated and/or selected subcontractors and other contractors, will be adjusted only if the scope of the work has changed

Fixed: _____ Value related: _____ Time related: _____ Item

B8 FINANCIAL ASPECTS

B8.1 SECURITY

The contractor shall furnish one of the following forms of security:

1. Two approved sureties who shall be required to sign a deed of suretyship; or
2. A cash deposit of 10% of the contract sum; or
3. A bank guarantee for 10% of the contract sum; or
4. An insurance guarantee for 10% of the contract sum

The security will terminate upon issue of the First Delivery Certificate for the completed works referred to in clause 21(1) of the Conditions of Contract

When the work is to be executed in a single phase and a First Delivery Certificate is issued in respect of a completed portion of the works in terms of clause 21(3) of the Conditions of Contract, the security will neither be terminated nor reduced

When the works is defined to be executed in two or more phases, and a completed phase is handed over and a First Delivery Certificate is issued in respect of that phase, the contractor may apply to the Representative/Agent for a revision of the amount of the security

Fixed: _____ Value related: _____ Time related: _____ Item

Each Item Carried to Collection

B8.2 VALUE-ADDED TAX (VAT)

The tendered price must include for Value-Added Tax (VAT). All rates, provisional sums, etc in these bills of quantities must however be net with VAT calculated and added to the total value thereof in the Final Summary

Fixed: _____ Value related: _____ Time related: _____ Item

B8.3 CONTRACT PRICE ADJUSTMENT PROVISIONS

The contract sum will be adjusted in accordance with the **Contract Price Adjustment Provisions** (CPAP) as set out in the CPAP Manual and Reference guide as prepared by the Joint Building Contracts Committee (JBCC) series 2000, Code 2105, dated May 1998 and any amendments thereto:

1. Glass etc measured in specialist section Metalwork, will be adjusted in terms of the index for that work group unless specifically stated otherwise in the tender enquiry documents
2. All electrical installations in buildings and power distribution systems shall be adjusted in terms of the index for Work Group 160 Electrical Installation. In case of uninterruptible power supplies, elevators, escalators and hoists, generating sets, motor-alternator sets and intercommunication systems shall be in accordance with Work Group 170.
3. With reference to Work Group 190 a proportion of the Value related Preliminaries pro rata to the amount of work excluded from adjustment, shall be excluded from Contract Price Adjustment Provisions.
4. Further to clause 3.4.4 of the Contract Price Adjustment Provisions Manual and Reference guide, the listing of additional items for exclusion by tenderers, will not be permitted. Should a tenderer list any additional items his tender will be regarded as being qualified and dealt with accordingly
5. Selected Sub-Contractors shall be dealt with the same manner as Nominated Sub-Contractors
6. Where V results in a negative amount after application of the formula in clause 9.3 the factor of 0.55 shall be substituted by 1.45

Fixed: _____ Value related: _____ Time related: _____ Item

B8.4 IMPORTED MATERIALS AND EQUIPMENT

Where imported items are listed in the Tender documents, the tenderer shall provide all the information called for, failing with the price of any such item, material or equipment shall be excluded from currency fluctuations.

Notwithstanding any provisions elsewhere regarding the adjustment of contract prices, the price of any item, material or equipment listed in terms of this clause shall be excluded from contract price adjustment or escalation.

Fixed: _____ Value related: _____ Time
related: _____ Item

B9 GENERAL**B9.1 DISTURBANCE**

The contractor shall execute the works with as little noise and disturbance as possible to adjoining premises and tenants thereof. He shall keep the site, structures, etc well watered during operations to prevent dust and shall provide and erect and remove on completion of the works all necessary temporary dust screens all to the satisfaction of the Representative/Agent

In the event of beneficial occupation of a portion of the work being taken the contractor shall take similar precautions as described above in respect of occupied premises

Fixed: _____ Value related: _____ Time related: _____ Item

B9.2 CLEANING

The contractor shall regularly remove or dispose of any rubbish and superfluous material that may accumulate on the site

Fixed: _____ Value related: _____ Time related: _____ Item

Each Item Carried to Collection

B9.3

VERMIN

The contractor shall take all necessary precautions to keep the works and site free from vermin during construction and shall leave the works vermin free on completion

Fixed: _____ Value related: _____ Time related: _____ **Item**

B9.4

JOBGING

Each trade shall perform all necessary jobbing and attendance and shall make good after all other trades

Fixed: _____ Value related: _____ Time related: _____ **Item**

Each Item Carried to Collection

PART C**SPECIFIC PRELIMINARIES**

The following items will apply to this contract except where NA (not applicable) appears against an item

C1 EXISTING PREMISES OCCUPIED

The existing premises will be in use and occupied during the course of this contract
The contractor shall execute the works in such a manner as will least interfere with the general routine of the occupants of the premises and shall minimise any nuisance from dust, noise or other causes

Fixed: _____ Value related: _____ Time related: _____ Item

C2 INACCURATE AND DEFECTIVE WORK EXECUTED UNDER A PREVIOUS CONTRACT

The contractor shall, after taking possession of the site and before commencing the work, check the existing levels, lines, profiles and the like and satisfy himself as to the dimensional accuracy of all work executed under the previous contract which may affect his work
Should any inaccurate or defective work be found the contractor shall immediately notify the Representative/Agent in writing requesting his instructions with regard thereto and afford every facility to those rectifying such inaccurate or defective work

Fixed: _____ Value related: _____ Time related: _____ Item

C3 VIEWING THE SITE IN SECURITY AREAS

The site is situated in a security area and the tenderer must arrange with the unit commander or other responsible officer to obtain permission to enter the site for tendering purposes

Fixed: _____ Value related: _____ Time related: _____ Item

C4 COMMENCEMENT OF WORKS IN SECURITY AREAS

As the works falls within a security area the contractor must give the unit commander or other responsible officer notice before commencement of the works. Should the contractor fail to make such arrangements, admission to the site may be refused and any additional costs will be for the contractor's account

Fixed: _____ Value related: _____ Time related: _____ Item

C5 ENTRANCE PERMITS TO SECURITY AREAS

As the works falls within a security area the contractor shall obtain entrance permits for his personnel and workmen entering the area and shall comply with all regulations and instructions which may be issued from time to time regarding the protection of persons and property under the control of the Defence Force, Police or chief security officer

Fixed: _____ Value related: _____ Time related: _____ Item

C6 SECURITY CHECK OF PERSONNEL

The Representative/Agent may require the contractor to have his personnel and workmen, or a certain number of them, security classified
In the event of the Representative/Agent requesting the removal of a person or persons from the works for security reasons, the contractor shall do so forthwith and shall thereafter ensure that such person or persons are denied access to the works and the site and/or to any document or information relating to the works

Fixed: _____ Value related: _____ Time related: _____ Item

Each Item Carried to Collection

C7

PROHIBITION ON TAKING OF PHOTOGRAPHS

In terms of article 119 of the Defence Act, 44 of 1957, it is prohibited to sketch or to take photographs of any military site or installation or any building or civil works thereon or to be in possession of a camera or other apparatus used for taking of photographs except when authorised thereto by or on behalf of the Minister

The same prohibition is also applicable to all correctional institutions in terms of article 44.1(e) of the Correctional Services Act 8 of 1959

Fixed: _____ Value related: _____ Time related: _____ Item

Each Item Carried to Collection

SECTION 1 PRELIMINARIES

COLLECTION

Item		Page	AMOUNT	
			R	c
PART A: CONDITIONS OF CONTRACT				
A1	Definitions	1		
A2	Drawings, specifications and bills of quantities	2		
A3	Contractor's obligations	2		
A4	Contractor's representative	2		
A5	Employees to be efficient	2		
A6	Material and work to conform to description	2		
A7	Local and other authorities	2		
A8	Setting out of the works	2		
A9	Notice of covering work	2		
A10	Material and goods to be the property of the Director-General	2		
A11	Plant to be the property of the Director-General	3		
A12	Injury to the works	3		
A13	Injury to persons or property	3		
A14	Cession or assignment	3		
A15	Prime cost items and provisional sums	4		
A16	Nominated subcontractors	4		
A17	Facilities to other contractors	4		
A18	Variations	4		
A19	Daywork	4		
A20	Commencement and completion	5		
A21	First and final delivery	5		
A22	Contractor's liability in respect of defects	5		
A23	Payment	6		
A24	Default by contractor	6		
A25	Delays by Director-General	6		
A26	Sequestration, liquidation, insolvency and judicial management	6		
A27	Disputes	6		
A28	Cancellation by Director-General	7		
A29	Amendment of Conditions of Contract	7		
Carried forward R				

Brought forward R

PART B: STANDARD PRELIMINARIES

B1	Documentation	
B1.1	Documents	8
B1.2	Contract drawings	8
B1.3	Bills of Quantities	8
B1.4	Provisional Bills of Quantities	8
B1.5	General preambles	8
B1.6	Standard System of Measuring Building Work	9
B1.7	Definition of approved, directed or selected	9
B1.8	Trade names	9
B1.9	Provisional items	9
B1.10	Details	9
B2	The site	
B2.1	Viewing the site	9
B2.2	Boundary beacons	9
B2.3	Adjoining properties	10
B2.4	Unknown services	10
B2.5	Protection of trees and shrubs	10
B2.6	Articles of value	10
B3	Management of the contract	
B3.1	Programming of the works	10
B3.2	Management of the works	10
B3.3	Progress meetings	10
B4	Material and workmanship	
B4.1	Ordering of materials	11
B4.2	Samples of materials and workmanship	11
B5	Temporary works and plant	
B5.1	Enclosure of works	11
B5.2	Sheds	11
B5.3	Office for the Representative/Agent	11
B5.4	Notice Board	11
B5.5	Advertisements	12
B5.6	Plant and scaffolding	12

Carried forward R

Brought forward R

B6	Temporary services	
B6.1	Provision of water for the works	12
B6.2	Provision of electricity and lighting	12
B6.3	Provision of telephone	12
B6.4	Provision of toilets	12
B7	Attendance on nominated and/or selected subcontractors and other contractors	
B7.1	Definition of attendance	13
B7.2	Adjustment of attendance	13
B8	Financial aspects	
B8.1	Security	13
B8.2	Value-Added Tax (VAT)	14
B8.3	Contract Price Adjustment Provisions	14
B8.4	Imported materials and Equipment	14
B9	General	
B9.1	Disturbance	14
B9.2	Cleaning	14
B9.3	Vermin	15
B9.4	Jobbing	15

PART C: SPECIFIC PRELIMINARIES

C1	Existing premises occupied	16
C2	Inaccurate and defective work executed under a previous contract	16
C3	Viewing the site in security areas	16
C4	Commencement of works in security areas	16
C5	Entrance permits to security areas	16
C6	Security check of personnel	16
C7	Prohibition on the taking of photographs	17

SECTION 1**PRELIMINARIES****CARRIED TO FINAL SUMMARY**

R

SUBTOTALS:

R c

Category: Fixed R

Category: Value R

Category: Time R

NOTE: The information listed below is in respect of certain items in the Preliminaries, requiring the supplementary information:

ITEM NO	PAGE NO	INFORMATION
A13	3	Amount of insurance against removal of support to adjoining properties in respect of any single occurrence (clause 13(iv)); Not specifically prescribed
A20	5	Contract period: 6 Months
A24	6	Amount of penalty per day on which the completion of the works may be in arrear: R 600.00 (Excluding VAT)
B1.2	8	Contract drawing numbers:
B1.5	8	Edition of Specification of Materials and Methods to be used (PW371):
B1.6	9	Edition of Standard System of measuring Building Work:

SCHEDULE OF SUPPLEMENTARY INFORMATION

SUMMARY

	Section	Page	R	c
PART A				
1	Preliminaries.....			
2	Site work.....			
		SUBTOTAL	R	
Credit for old materials recoverable from demolitions/alterations			R	
TOTAL BILL 1 CARRIED TO SUMMARY			R	

BETHULIE

PRELIMINARY AND GENERAL
BILL 2

Page 1 of 7

ITEM	DESCRIPTION	TENDER VALUE			
		UNIT	QTY	RATE	RANDS
2.1	In addition to the Contract P&G the total amount allowed under this Schedule shall provide completely for all requirements of the General and Additional Conditions of Contract and as specified.				
2.2	Allow for all costs associated with site inspection and mapping of all emergency power switchboards and circuits	Item	1		
2.3	Allow for the design of the required switchboards and electrical circuits	Item	1		
2.4	Allow for working in a DCS working environment with all attendant security and access requirements.	Item	1		
2.5	Allow for transport/travelling charges.	Item	1		
2.6	Allow for attending monthly site meetings and managing of project	Item	1		
2.7	Allow for record drawings and operating instructions.	Item	1		
2.8	Allow for 12 months Maintenance as specified	Item	1		
2.9	Allow for submission of drawings to the Engineer for approval.	Item	1		
2.1	Allow for costs incurred for site establishment, ablution facilities, off loading and storage and removal of site establishment on completion of contract.	Item	1		
2.11	Allow for cost for supply and use of electricity, water, telephone and, if applicable, radio communication system.	Item	1		
2.12	Allow for 12 months and 48 h repair guarantee in terms of the Document	Item	1		
2.13	Allow for lifting gear, cranes etc. that may be required for moving plant and equipment into position	Item	1		
2.14	Allow for setting out of the works	Item	1		
2.15	Allow for switching off and earthing to make supply safe and to re-energise after installation or as required by the user	Item	1		
2.16	Allow for disconnection and the removal from site and disposal of existing DA sets and Switchboards	Item	1		
2.17	Test, commission of the installations, and COC certificate	Item	1		
2.18	Compliance with OHS Act and Construction Regulations 2003	Item	1		

TOTAL BILL 2 CARRIED TO SUMMARY

ITEM	DESCRIPTION	TENDER VALUE			
		UNIT	QTY	RATE	RANDS
3.1	<u>Distribution Boards</u>				
	Supply and install distribution boards as specified and shown on the relevant drawings (excludes the DA set control and change over DBs supplied with the sets)				
3.1.1	Bethuli DCS: existing main LV board to be disconnected from mains supply and connected to new feed cable from the DA set ATS; disconnect existing and run new cable to the DA set ATS	No	1		
3.1.2	<u>Replacement MCBs</u>				
	Remove existing Supply and install new 10kA MCBs in the existing main LV DB complete with all rails and labels				
	20A SP	No	4		
	32A SP	No	2		
	40A SP	No	2		
	50A SP	No	2		
	63A SP	No	2		
	20A TP	No	4		
	32A TP	No	2		
	40A TP	No	2		
	50A TP	No	2		
	63A TP	No	2		
	32A SP+N	No	2		
	40A SP+N	No	2		
	50A SP+N	No	2		
	63A SP+N	No	2		
	32A TP+N	No	2		
	40A TP+N	No	2		
	50A TP+N	No	2		
	63A TP+N	No	2		
3.2	<u>Cables</u>				
	Supply and install the following PVC SWA PVC copper cables with clamps and supports				
3.2.1	4 x core 70mm sq on cable ladder/sleeve	m	112		
3.2.2	Cable terminations (all cores) complete with				
3.2.3	4 x core 70 mm sq on cable ladder/ sleeve	No	4		
	35mm BCEW	No	4		
3.3	<u>BCEW</u>				
	Supply install and connect the following BCEW on cable trays or sleeves				
3.3.1	35mm sq	m	112		
3.4	<u>Cable ladders</u>				
	Supply and install the following heavy duty cable ladders inclusive of suspension rods and brackets				
3.4.1	200mm wide	m	8		
3.4.2	200mm wide bends and tees	No	2		
TOTAL BILL 3 CARRIED TO SUMMARY					

BILL 4

Page 4 of 7

[illegible]

DAYWORKS AND AUTHORISED OVERTIME

BILL 5

Page 5 of 7

ITEM	DESCRIPTION	TENDER VALUE			
		UNIT	QTY	RATE	RANDS
5	<u>Schedule of Daywork Rates</u>				
	Work that in the opinion of the engineer cannot be priced at Contract rates or rates analogous thereto shall be paid for a Daywork Rates as				
	The Tenderer is to price hereunder all categories of labour details herein and their respective rates. All handtools, portable electric tools, construction equipment, site supervision, all allowances, preliminaries etc. shall be included in the rates submitted. A flat rate per hour is to be tendered for each category				
5.1	Category 1 : Daywork executed in normal working hours.				
	a) Artisan	Hour	40		
	b) Labourer	Hour	40		
	c) Apprentice	Hour	40		
5.2	Category 2: Daywork executed on Monday to Friday outside the hours of 07:00 to 17:00				
	a) Artisan	Hour	40		
	b) Labourer	Hour	40		
	c) Apprentice	Hour	40		
5.3	Category 3: Daywork Executed on Saturday or Sunday				
	a) Artisan	Hour	20		
	b) Laborer	Hour	20		
	c) Apprentice	Hour	20		
TOTAL BILL 5 CARRIED TO SUMMARY					

GENERAL - CIVIL WORKS

BILL 6

Page 6 of 7

ITEM	DESCRIPTION	TENDER VALUE			
		UNIT	QTY	RATE	RANDS
6.1	Manholes				
	Supply and install manholes with concrete floor, brick walls and heavy duty man hole covers. Sizes of manholes as follows:				
6.1.1	600mm x 600mm x 600mm deep	No	4		
6.2	Sleeves				
	Supply and install sleeves interconnecting manholes buried underground and into buildings				
6.2.1	100mm dia	m	16		
6.3	Split Sleeves				
	Supply and install split sleeves under roadways for cables				
6.3.1	100mm dia	m	24		
6.4	Excavations				
	Excavate trenches for the installation of sleeves and cables 700mm deep and 400mm wide, backfill and compact to specification				
6.4.1	Excavate lineal metres in hand pickable soil	No	98		
6.4.2	Excavate lineal metres in rocky soil	No	14		
6.5	River sand				
	Supply and install river sand for bedding of cables in the bottom of the trenches- 75mm below cables and 150mm above cables				
6.5.1	Cubic metres of river sand	No	13		
6.6	Repair Existing Tarmac Roadways				
	Repair existing roadways by specialist contractor where trenches have had to cross existing tarmac roadways				
6.6.1	Square metres of tarmac roadway	No	12		
6.7	Concrete Plinths				
6.7.1	Supply and install level reinforced concrete plinths with MR395 steel mesh, for new outdoor diesel generators including all earthworks and compaction (95 mod ashto) and carting away and disposal of spoils; construction to DPW details including fuel containment bund	item	1		
TOTAL BILL 6 CARRIED TO SUMMARY					

SUMMARY OF SCHEDULE OF QUANTITIES

Page 7 of 7

DESCRIPTION	TENDER AMOUNT
BILL 1 - PRELIMINARY AND GENERAL	
BILL 2 - ADDITIONAL PRELIMINARY AND GENERAL	
BILL 3 - MAINS POWER INSTALLATION	
BILL 4 - DIESEL GENERATORS	
BILL 5 - DAYWORKS AND AUTHORISED OVERTIME	
BILL 6- CIVIL WORKS	
TOTAL EXCLUDING VAT ADD 15% VAT	
TOTALTENDER SUM (INCLUDING VAT) TO BE CARRIED TO FORM OF TENDER : DPW07EC	

NAME OF CONTRACTOR

ADDRESS

TELEPHONE NUMBER

DATE

SIGNATURE

T 2.2 Returnable Schedules Required for Tender Evaluation Purpose

PA-11: BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

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

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

2. Bidder's declaration

- 2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest (1) in the enterprise, employed by the state?

YES / NO

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

Full Name	Identity Number	Name of State institution

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

2.2 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:

.....
.....

3 DECLARATION

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

- 3.1** I have read and I understand the contents of this disclosure;
- 3.2** I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3** The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium² will not be construed as collusive bidding.
- 3.4** In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.5** 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.
- 3.6** 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.

² 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.



3.7

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

PA-15.1: RESOLUTION OF BOARD OF DIRECTORS

RESOLUTION of a meeting of the Board of *Directors / Members / Partners of:

(Legally correct full name and registration number, if applicable, of the Enterprise)

Held at _____ (place)

on _____ (date)

RESOLVED that:

1. The Enterprise submits a Bid / Tender to the Department of Public Works in respect of the following project:

(Project description as per Bid / Tender Document)

Bid / Tender Number: _____ *(Bid / Tender Number as per Bid / Tender Document)*

2. *Mr/Mrs/Ms: _____

in *his/her Capacity as: _____ *(Position in the Enterprise)*

and who will sign as follows: _____

be, and is hereby, authorised to sign the Bid / Tender, and any and all other documents and/or correspondence in connection with and relating to the Bid / Tender, as well as to sign any Contract, and any and all documentation, resulting from the award of the Bid / Tender to the Enterprise mentioned above.

	Name	Capacity	Signature
1			
2			
3			
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15			
16			

PA-15.1: Resolution of Board of Directors

17			
18			
19			
20			

The bidding enterprise hereby absolves the Department of Public Works from any liability whatsoever that may arise as a result of this document being signed.

Note:

1. * Delete which is not applicable.
2. **NB:** This resolution must, where possible, be signed by all the Directors / Members / Partners of the Bidding Enterprise.
3. In the event that paragraph 2 cannot be complied with, the resolution must be signed by Directors / Members / Partners holding a majority of the shares / ownership of the Bidding Enterprise (attach proof of shareholding / ownership hereto).
4. Directors / Members / Partners of the Bidding Enterprise may alternatively appoint a person to sign this document on behalf of the Bidding Enterprise, which person must be so authorized by way of a duly completed power of attorney, signed by the Directors / Members / Partners holding a majority of the shares / ownership of the Bidding Enterprise (proof of shareholding / ownership and power of attorney are to be attached hereto).
5. Should the number of Directors / Members / Partners exceed the space available above, additional names and signatures must be supplied on a separate page.

ENTERPRISE STAMP

PA-15.2: RESOLUTION OF BOARD OF DIRECTORS TO ENTER INTO CONSORTIA OR JOINT VENTURES

RESOLUTION of a meeting of the Board of *Directors / Members / Partners of:

(Legally correct full name and registration number, if applicable, of the Enterprise)

Held at _____ (place)

on _____ (date)

RESOLVED that:

1. The Enterprise submits a Bid /Tender, in consortium/Joint Venture with the following Enterprises:

(List all the legally correct full names and registration numbers, if applicable, of the Enterprises forming the Consortium/Joint Venture)

to the Department of Public Works in respect of the following project:

(Project description as per Bid /Tender Document)

Bid / Tender Number: _____ (Bid / Tender Number as per Bid / Tender Document)

2. *Mr/Mrs/Ms: _____

in *his/her Capacity as: _____ (Position in the Enterprise)

and who will sign as follows: _____

be, and is hereby, authorised to sign a consortium/joint venture agreement with the parties listed under item 1 above, and any and all other documents and/or correspondence in connection with and relating to the consortium/joint venture, in respect of the project described under item 1 above.

3. The Enterprise accepts joint and several liability with the parties listed under item 1 above for the due fulfilment of the obligations of the joint venture deriving from, and in any way connected with, the Contract to be entered into with the Department in respect of the project described under item 1 above.
4. The Enterprise chooses as its *domicilium citandi et executandi* for all purposes arising from this joint venture agreement and the Contract with the Department in respect of the project under item 1 above:

Physical address: _____

_____ (code)

PA-15.2: Resolution of Board of Directors to enter into Consortia or Joint Ventures

Postal Address: _____

 _____ (code)

Telephone number: _____

Fax number: _____

	Name	Capacity	Signature
1			
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The bidding enterprise hereby absolves the Department of Public Works from any liability whatsoever that may arise as a result of this document being signed

Note:

- * Delete which is not applicable.
- NB:** This resolution must, where possible, be signed by all the Directors / Members / Partners of the Bidding Enterprise.
- In the event that paragraph 2 cannot be complied with, the resolution must be signed by Directors / Members / Partners holding a majority of the shares / ownership of the Bidding Enterprise (attach proof of shareholding / ownership hereto).
- Directors / Members / Partners of the Bidding Enterprise may alternatively appoint a person to sign this document on behalf of the Bidding Enterprise, which person must be so authorized by way of a duly completed power of attorney, signed by the Directors / Members / Partners holding a majority of the shares / ownership of the Bidding Enterprise (proof of shareholding / ownership and power of attorney are to be attached hereto).
- Should the number of Directors / Members / Partners exceed the space available above, additional names and signatures must be supplied on a separate page.

ENTERPRISE STAMP



PA-15.3: SPECIAL RESOLUTION OF CONSORTIA OR JOINT VENTURES

RESOLUTION of a meeting of the duly authorised representatives of the following legal entities who have entered into a consortium/joint venture to jointly bid for the project mentioned below: *(legally correct full names and registration numbers, if applicable, of the Enterprises forming a Consortium/Joint Venture)*

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

Held at _____ (place)

on _____ (date)

RESOLVED that:

RESOLVED that:

- A. The above-mentioned Enterprises submit a Bid in Consortium/Joint Venture to the Department of Public Works in respect of the following project:

(Project description as per Bid /Tender Document)

Bid / Tender Number: _____ *(Bid / Tender Number as per Bid /Tender Document)*

PA-15.3: Special Resolution of Consortia or Joint Ventures

B. Mr/Mrs/Ms: _____

in *his/her Capacity as: _____ (Position in the Enterprise)

and who will sign as follows: _____

be, and is hereby, authorised to sign the Bid, and any and all other documents and/or correspondence in connection with and relating to the Bid, as well as to sign any Contract, and any and all documentation, resulting from the award of the Bid to the Enterprises in Consortium/Joint Venture mentioned above.

C. The Enterprises constituting the Consortium/Joint Venture, notwithstanding its composition, shall conduct all business under the name and style of:

D. The Enterprises to the Consortium/Joint Venture accept joint and several liability for the due fulfilment of the obligations of the Consortium/Joint Venture deriving from, and in any way connected with, the Contract entered into with the Department in respect of the project described under item A above.

E. Any of the Enterprises to the Consortium/Joint Venture intending to terminate the consortium/joint venture agreement, for whatever reason, shall give the Department 30 days written notice of such intention. Notwithstanding such decision to terminate, the Enterprises shall remain jointly and severally liable to the Department for the due fulfilment of the obligations of the Consortium/Joint Venture as mentioned under item D above.

F. No Enterprise to the Consortium/Joint Venture shall, without the prior written consent of the other Enterprises to the Consortium/Joint Venture and of the Department, cede any of its rights or assign any of its obligations under the consortium/joint venture agreement in relation to the Contract with the Department referred to herein.

G. The Enterprises choose as the *domicilium citandi et executandi* of the Consortium/Joint Venture for all purposes arising from the consortium/joint venture agreement and the Contract with the Department in respect of the project under item A above:

Physical address: _____

_____ (Postal code) _____

Postal Address: _____

_____ (Postal code) _____

Telephone number: _____

Fax number: _____

PA-15.3: Special Resolution of Consortia or Joint Ventures

	Name	Capacity	Signature
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The bidding enterprise hereby absolves the Department of Public Works & Infrastructure from any liability whatsoever that may arise as a result of this document being signed.

Note:

1. * Delete which is not applicable.
2. **NB:** This resolution must be signed by all the Duly Authorised Representatives of the Legal Entities to the consortium/joint venture submitting this tender, as named in item 2 of Resolution PA-15.2.
3. Should the number of the Duly Authorised Representatives of the Legal Entities joining forces in this tender exceed the space available above, additional names, capacity and signatures must be supplied on a separate page.
4. Resolution PA-15.2, duly completed and signed, from the separate Enterprises who participate in this consortium/joint venture, must be attached to this Special Resolution (PA-15.3).

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATION
2022



public works
& infrastructure
Department:
Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA

**PA-16: PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL
PROCUREMENT REGULATIONS 2022**

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

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

1. GENERAL CONDITIONS

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

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

1.2 **Preference Points System to be applied**

(Tick whichever is applicable).

- ☒ The applicable preference point system for this tender is the **80/20** preference point system.
- ☐ The applicable preference point system for this tender is the **90/10** preference point system.
- ☐ 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.

1.3 **Points for this tender shall be awarded for:**

1.3.1 **Price; and**

1.3.2 **Specific Goals**

1.4 **The maximum points for this tender are allocated as follows:**

CHOOSE APPLICABLE PREFERENCE POINT SCORING SYSTEM	☒ 80/20	☐ 90/10
PRICE	80	
SPECIFIC GOALS	20	
Total points for Price and Specific Goals		

1 Breakdown Allocation of Specific Goals Points

1.5.1 For Procurement transactions with rand value greater than R2 000.00 and up to R1 Million (Inclusive of all applicable taxes), the specific goals as listed in table 1 below are applicable.

All Acquisitions

Table 1

Serial No	Specific Goals	Preference Points allocated out of 20	Documentation to be submitted by bidders to validate their claim for points
1.	An EME or QSE which is at least 51% owned by black people	10	ID Copy Or SANAS Accredited BBBEE Certificate or sworn affidavit where applicable Or CSD Report Or CIPC (company registration)
2.	Located in a specific Local Municipality or District Municipality or Metro or Province area for work to be done or services to be rendered in that area	2	Office Municipal Rates Statement Or Permission To Occupy from local chief in case of rural areas (PTO) Or Lease Agreement
3.	An EME or QSE which is at least 51% owned by women	4	ID Copy Or CSD Report Or CIPC (company registration)

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATION
2022

Serial	Specific Goals	Preference Points allocated out of 20	Documentation to be submitted by bidders to validate their claim for points
4.	An EME or QSE which is at least 51% owned by people with disability	2	Medical Certificate Or South African Social Security Agency (SASSA) registration Or National Council for Persons with Physical Disability in South Africa registration (NCPDSA) Or CSD Report Or CIPC (company registration)
5.	An EME or QSE which is at least 51% owned by youth .	2	ID Copy Or CSD Report Or CIPC (company registration)

1.5.2 For procurement transactions with rand value greater than R1 Million and up to R50 Million (Inclusive of all applicable taxes) the specific goals as listed in table 2 below are applicable:

All Acquisitions

Table 2

Serial No	Specific Goals	Preference Points allocated out of 20	Documentation to be submitted by bidders to validate their claim for points
1.	An EME or QSE or any entity which is at least 51% owned by Historically Disadvantaged Individuals (HDI)	10	ID Copy Or

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATION
2022

Serial No	Specific Goals	Preference Points allocated out of 20	Documentation to be submitted by bidders to validate their claim for points
			SANAS Accredited BBBEE Certificate or sworn affidavit where applicable Or CSD Report Or CIPC (company registration)
2.	Located in a specific Local Municipality or District Municipality or Metro or Province area for work to be done or services to be rendered in that area	2	Office Municipal Rates Statement Or Permission To Occupy from local chief in case of rural areas (PTO) Or Lease Agreement
3.	An EME or QSE or any entity which is at least 51% owned by women	4	ID Copy Or CSD Report Or CIPC (company registration)
4.	An EME or QSE or any entity which is at least 51% owned by people with disability	2	Medical Certificate Or South African Social Security Agency (SASSA) registration Or National Council for Persons with Physical Disability in South Africa registration (NCPDPSA) Or CSD Report

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATION
2022

Serial No	Specific Goals	Preference Points allocated out of 20	Documentation to be submitted by bidders to validate their claim for points
			Or CIPC (company registration)
5.	An EME or QSE or any entity which is at least 51% owned by youth.	2	ID Copy Or CSD Report Or CIPC (company registration)

1.5.3 For procurement transactions with rand value greater than R50 Million (Inclusive of all applicable taxes) the specific goals as listed in table 3 below are applicable

All Acquisitions

Table 3

Serial No	Specific Goals	Preference Points allocated out of 10	Documentation to be submitted by bidders to validate their claim for points
1.	An EME or QSE or any entity which is at least 51% owned by Historically Disadvantaged Individuals (HDI)	4	ID Copy Or SANAS Accredited BBBEE Certificate or sworn affidavit where applicable Or CSD Report Or CIPC (company registration)
2.	Located in a specific Local Municipality or District Municipality or Metro or Province area for work to be done or services to be rendered in that area	2	Office Municipal Rates Statement Or

Series
No.

- 1.6 Failure on the part of the tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals, if the service provider/ tenderer did not submit proof or documentation required to claim for specific goals will be interpreted to mean that preference points for specific goals are not claimed.
- 1.7 The organ of state reserves the right to require of a service provider/tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

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

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

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

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

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

Where

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

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

3.2.1. POINTS AWARDED FOR PRICE

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

$$\begin{array}{ccc} 80/20 & \text{or} & 90/10 \end{array}$$

$$P_s = 80 \left(1 + \frac{P_t - P_{max}}{P_{max}} \right) \text{ or } P_s = 90 \left(1 + \frac{P_t - P_{max}}{P_{max}} \right)$$

Where

- P_s = Points scored for price of tender under consideration
 P_t = Price of tender under consideration
 P_{max} = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1,2 and 3 above 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)
1. An EME or QSE or any entity which is at least 51% owned by Historically Disadvantaged Individuals (HDI)	4	10		
2. Located in a specific Local Municipality or District Municipality or Metro or Province area for work to be done or services to be rendered in that area	2	2		
3. An EME or QSE or any entity which is at least 51% owned by women	2	4		
4. An EME or QSE or any entity which is at least 51% owned by people with disability or	2	2		
5. An EME or QSE or any entity which is at least 51% owned by youth . (only one specific goal is applicable between specific goal number 4 and specific goal number 5 under 90/10 Preference Point System)		2		

Note: *in respect of the 90/10 point system a selection of either disability or youth may be made with an allocation of 2 points for either of them.

DECLARATION WITH REGARD TO COMPANY/FIRM

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

4.4. Company registration number:

2022

4.5.

TYPE OF COMPANY/ FIRM

Partnership/Joint Venture / Consortium

One-person business/sole propriety

Close corporation

Public Company

Personal Liability Company

(Pty) Limited

Non-Profit Company

State Owned Company

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
 - (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:

.....

DPW-09 (EC): PARTICULARS OF TENDERER'S PROJECTS

Project title:	DCS: SUPPLY AND INSTALLATION OF BACK UP POWER GENERATOR AT BETHULIE PRISON			
Tender / quotation no:	BL23/008	Closing date:	25/07/2023	
Advertising date:	30/6/2023	Validity period:	84 days	

1. PARTICULARS OF THE TENDERER'S CURRENT AND PREVIOUS COMMITMENTS

1.1. Current projects

Projects currently engaged in	Name of Employer or Representative of Employer	Contact tel. no.	Contract sum	Contractual commencement date	Contractual completion date	Current percentage progress
1						
2						
3						
4						
5						
6						
7						
8						



tenderer's projects

Tender no:

1.2. Completed projects

Projects completed in the previous 5 (five) years	Name of Employer or Representative of Employer	Contact tel. no.	Contract sum	Contractual commencement date	Contractual completion date	Date of Certificate of Practical Completion
1						
2						
3						
4						
5						
6						
7						
8						
9						

Name of Tenderer		Signature		Date	
------------------	--	-----------	--	------	--

DPW-21 (EC): RECORD OF ADDENDA TO TENDER DOCUMENTS

Project title:	DCS: SUPPLY AND INSTALLATION OF BACK UP GENERATOR AT BETHULIE PRISON		
Tender no:	BL23/008	Reference no:	4/2/1/1/1/35/6705

1. I / We confirm that the following communications received from the Department of Public Works and Infrastructure before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer: *(Attach additional pages if more space is required)*

	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
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8.		
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11.		
12.		
13.		

Name of Tenderer	Signature	Date

2. I / We confirm that no communications were received from the Department of Public Works and Infrastructure before the submission of this tender offer, amending the tender documents.

Name of Tenderer	Signature	Date



DPW-15 (EC): SCHEDULE OF PROPOSED SUBCONTRACTORS

Project title:	DCS: SUPPLY AND INSTALLATION OF BACK UP POWER GENERATOR AT BETHULIE PRISON		
Tender no:	BL23/008	Reference no:	4/2/1/1/1/35/6705

We notify you that it is our intention to employ the following Subcontractors for work in this contract.

We confirm that all subcontractors who are contracted to construct a house are registered as home builders with the National Home Builders Registration Council.

	Name and address of proposed Subcontractor	Nature and extent of work	Previous experience with Subcontractor
1			
2			
3			
4			
5			

Name of representative	Signature	Capacity	Date

Name of organisation:	
------------------------------	--



public works & infrastructure

Department:
Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA

DECLARATION – EPWP PROGRAMME

I _____ from company
_____.

Hereby Undertake To Comply To:

1. LABOUR INTENSIVE CONSTRUCTION METHODS (LIC)

1.1 Comply To Implementation Of LIC BOQ Items Specified Elsewhere In The Tender Documents.

2. RECRUITMENT AND PLACEMENT OF EPWP NYS PARTICIPANTS

2.1 Recruitment, Placement And Exposure Training Of 25 (Twenty Five) Participants

2.2 Comply To EPWP BOQ, Specifications And Code Of Good Practice

3. RECRUITMENT AND PLACEMENT OF LOCAL LABOURERS

3.1 Recruitment And Placement Of Local Labourers

3.2 Comply With Applicable Wage Order/Determination or Agreement, In Terms of Labour Relations Act or Wage Act

4. COMPLY TO EPWP MONTHLY REPORTING REQUIREMENTS

Monthly prepare and submit below EPWP reports attached to monthly payments certificate:

4.1 All Employees and EPWP Participants Contracts

4.2 All Employees and EPWP Participants Certified SA ID Copies

4.3 All Employees and EPWP Attendance Register

4.4 All Employees and EPWP Proof of Payment

4.5 EPWP Reports Populated on Standard Templates

5. PENALTIES FOR NON COMPLIANCE

Acknowledge Non Compliance Penalty of R3000-00 (Three thousand rand) Per Month Per Participant

Signed by _____ : _____
Director of the Company

ender no:

2. DECLARATION:

he undersigned, who warrants that he/she is duly authorized to do so on behalf of the Tenderer, hereby confirms that:

The information and particulars contained in this Affidavit are true and correct in all respects;

The Broad-based Black Economic Empowerment Act, 2003 (Act 53 of 2003), Preferential Procurement Policy Framework Act, 2000 (Act 5 of 2000), the Preferential Procurement Regulations, 2017, National Small Business Act 102 of 1996 as amended and all documents pertaining to this Tender were studied and understood and that the above form was completed according to the definitions and information contained in said documents;

The Tenderer understands that any intentional misrepresentation or fraudulent information provided herein shall disqualify the Tenderer's offer herein, as well as any other tender offer(s) of the Tenderer simultaneously being evaluated, or will entitle the Employer to cancel any Contract resulting from the Tenderer's offer herein;

The Tenderer accepts that the Employer may exercise any other remedy it may have in law and in the Contract, including a claim for damages for having to accept a less favourable tender as a result of any such disqualification due to misrepresentation or fraudulent information provided herein;

Any further documentary proof required by the Employer regarding the information provided herein, will be submitted to the Employer within the time period as may be set by the latter;

igned by the Tenderer

Name of representative	Signature	Date

PA- 40: DECLARATION OF DESIGNATED GROUPS FOR PREFERENTIAL PROCUREMENT

idder no:

ne of Tenderer

☐ EME¹ ☐ QSE² ☐ Non EME/QSE (tick applicable box)

1. LIST ALL PROPRIETORS, MEMBERS OR SHAREHOLDERS BY NAME, IDENTITY NUMBER, CITIZENSHIP AND DESIGNATED GROUPS.

ame and Surname #	Identity/ Passport number and Citizenship##	Percentage owned	Black	Indicate if youth	Indicate if woman	Indicate if person with disability	Indicate if living in Rural (R) / Under Developed Area (UD) / Township (T) / Urban (U).	Indicate if military veteran
		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No
		%	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ R ☐ UD ☐ T ☐ U	☐ Yes ☐ No

Where Owners are themselves a Company, Close Corporation, Partnership etc, identify the ownership of the Holding Company, together with Registration number
State date of South African citizenship obtained (not applicable to persons born in South Africa)

ME: Exempted Micro Enterprise
SE: Qualifying Small Business Enterprise

**T2.2 Returnable Schedules that will be
incorporated into the contract**

DPW-22 (EC): PARTICULARS OF ELECTRICAL CONTRACTOR

Project title:	<i>Bethulie DCS: Implementation of emergency of back-up power supply generator</i>		
Tender no:	BL23/008	Reference no:	4/1/1/1/35/6705

Name of Electrical Contractor:	
Address:	
Electrical Contractor registration number at the Department of Labour	

Name of Tenderer	Signature	Date

**Supplementary Mechanical or Security
Work, Material and Equipment Schedules**

DPW-23 (EC): SCHEDULE FOR IMPORTED MATERIALS AND EQUIPMENT

Project title:	DCS: SUPPLY AND INSTALLATION OF BACK UP POWER GENERATOR AT BETHULIE PRISON		
Tender no:	BL23/008	Reference no:	4/2/1/1/1/35/6705

This schedule should be completed by the tenderer. *(Attach additional pages if more space is required)*

Item	Material / Equipment	Rand (R) (Excluding VAT)
1.		R
2.		R
3.		R
4.		R
5.		R
6.		R

The Contractor shall list imported items, materials and/or equipment which shall be excluded from the Contract Price Adjustment Provisions (if applicable) and shall be adjusted in terms of currency fluctuations only. Copies of the supplier's quotations for the items, materials or equipment (provided that such costs shall not be higher than the relevant contract rate as listed above) should be lodged with the Principal Agent / Engineer of the Department of Public Works and Infrastructure within 60 (sixty) days from the date of acceptance of the tender. No adjustment of the local VAT amount, nor the contractor's profit, discount, mark-up, handling costs, etc. shall be allowed.

These net amounts will be adjusted as follows:

FORMULA:

The net amount to be added to or deducted from the contract sum:

$$A = V \left(\frac{Z}{Y} - 1 \right)$$

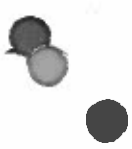
A = the amount (R) of adjustment

V = the net amount (supplier's quotation) (R) of the imported item

Y = exchange rate at the closing date of tender submission

Z = exchange rate on the date of payment.

Name of Tenderer	Signature	Date



Part C1: Agreement and Contract Data

C1.2 Contract Data

DPW-05: (EC) CONTRACT DATA - (GCC (2010) 2nd EDITION: 2010)

Project title: DCS: SUPPLY AND INSTALLATION BACK UP POWER GENERATOR

Tender / Quotation no:	BL23/008	WCS no:		Reference no:	4/1/1/1/35/7605
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	PART 1: DATA PROVIDED BY THE EMPLOYER
	CONDITIONS OF CONTRACT
	The General Conditions of Contract for Construction Works, Second Edition, 2010, published by the South African Institution of Civil Engineering, Private Bag X200, Halfway House, 1685, is applicable to this Contract and is obtainable from www.saice.org.za Bidders to note that materials procured for the works should be from South African manufactures and suppliers. Imported materials shall only be considered under exceptional circumstances, based on compelling technical justifications, and subject to the approval by the NDPWI.

CONTRACT SPECIFIC DATA

The following contract specific data, referring to the General Conditions of Contract for Construction Works, Second Edition, 2010, are applicable to this Contract:

CLAUSES	COMPULSORY DATA
1.1.1.8	Amend Clause 1.1.1.8 to include the word "rights" to read as follows: "Contract Data" means the specific data which, together with these General Conditions of Contract, collectively describe the rights, risks, liabilities and obligations of the contracting parties and the procedures for the administration of the Contract.
1.1.1.13	Amend Clause 1.1.1.13 as follows, clarify when the defects liability period starts: "Defects Liability Period" means the period stated in the Contract Data, commencing on the date indicated on the Certificate of Completion or Certificates of Completion in the event of more than one Certificate of Completion is issued for different parts of the Works, during which the Contractor has both the right and the obligation to make good defects in the materials, Plant and workmanship covered by the Contract. Defects liability period is: 12 months.
1.1.1.14 & 5.14.7	The time for achieving Practical Completion of the whole of the works is: 6 Months measured from the <u>Commencement</u> Date. The time thus stated includes special non-working days and the year-end break. <u>or, if Practical Completion in portions is required,</u> The times for achieving Practical Completion for the portions as set out in the Scope of Works are <i>mutatis mutandi</i>: For portion 1 within For portion 2 within For portion 3 within



Order no: Insert Number and press "Tab"

	For portion 4 within (followed by further portions as required)
	The time for achieving Practical Completion of the whole of the Works is: 6 Months , measured from the Commencement Date. The time thus stated includes special non-working days and the year-end break.
1.1.1.15	The name of the Employer is: The Government of the Republic of South Africa in its Department of Public Works and Infrastructure.
1.1.1.16	The name of the Engineer is: Mustapha Cachalia Engineering cc
1.1.1.26	The Pricing Strategy is a: Re-measurement Contract.
1.1.1.31	Not applicable to this Contract.
1.1.1.35	Insert the definition of "Value of Works" as Clause 1.1.1.35: "Value of Works" means the value of the Works certified by the Engineer as having been satisfactorily executed and shall include the value of the works done, the value of the materials and/or plant and Contract Price Adjustments.
1.2.1.2	Employer's address: Physical Address: National Department of Public Works and Infrastructure 18 President Brandt Street, Bloemfontein 9301 Postal Address: Private Bag X20605 Bloemfontein 9300 Facsimile: N/A Telephone: 060 748 9004
	Engineer's address: Physical Address: 41 Schnehage Avenue Bloemfontein 9301 Postal Address: PO Box 72314 Parkviewds 2122 Facsimile: 0861 112 324 Telephone: 078 459 8618
1.3.4	Not applicable to this Contract.

Tender no: Insert Number and press "Tab" Insert Number and press "Tab"

1.3.5	Replace Clause 1.3.5 with the following provisions: (a) The Employer will become the owner of the information, documents, advice, recommendation and reports collected, furnished and/or compiled by the Contractor during the course of, and for the purposes of executing this Contract, all of which will be handed over to the Employer on request, but in any event on the termination and/or cancellation of this Contract for whatever reason. The Contractor relinquishes its retention or any other rights thereon to which it may be entitled. (b) The copyright of all documents, recommendations and reports compiled by the Contractor during the course of and for the purposes of finalizing the Works will vest in the Employer, and may not be reproduced or distributed or made available to any person outside the Employer's service, or to any institution in any way, without the prior written consent of the Employer. The Employer shall have the right to use such material for any other purpose without the approval of information or payment to the Contractor. (c) The copyright of all electronic aids, software programmes etc. prepared or developed in terms of the Contract shall vest in the Employer, who shall have the right to use such material for any other purpose without the approval of, information or payment to the Contractor. (d) In case of the Contractor providing documents, electronic aids, software programs or like material to the Employer, the development of which has not been at the expense of the Employer, copyright shall not vest in the Employer. The Contractor shall be required to indicate to which documents, electronic aids, software programs or like material this provision applies. (e) The Contractor hereby indemnifies the Employer against any action, claim, damages or legal cost that may be instituted against the Employer on the grounds of an alleged infringement of any copyright, patents or any other intellectual property right in connection with the Works outlined in this Contract. (f) All information, documents, recommendations, programs and reports collected or compiled must be regarded as confidential and may not be communicated or made available to any person outside the Employer's service and may not be published either during the currency of this Contract or after termination thereof without the prior written consent of the Employer.
3.1.3	1. The Engineer's authority to act and/or to execute functions or duties or to issue instructions are expressly excluded in respect of the following: (a) Appointment of nominated Sub-contractors – clause 4.4.3; (b) Granting of an extension of time and/or ruling on claims associated with claims for extension of time – clauses 5.12.3, 10.1.5; (c) Acceleration of the rate of progress and determination of the cost for payment of such acceleration – clause 5.12.4; (d) Rulings on claims and disputes – clauses 10.1.5, 10.2.3 and 10.3.3; (e) Suspension of the Works – clause 5.11.1; (f) Final Payment Certificate – clause 6.10.9; (g) Issuing of <i>mora</i> notices to the Contractor – clauses 9.1.1, 9.1.2.1 and 9.2.1; (h) Cancellation of the contract between the Employer and Contractor – clauses 9.1.1, 9.1.2.1 and 9.2.1.

Order no: Insert Number and press "Tab"

	2. In order to be legally binding and have legal bearing and consequence, any ruling in respect of the above matters (a) to (h) must be on an official document, signed and issued by the Employer to the Contractor. 3. The Contractor must submit claims, demands, notices, notifications, updated particulars and reports in writing, as well as any other supporting documentation pertaining thereto, in respect of any of the above listed matters (a) to (h), to the Engineer within the time periods and in the format(s) as determined in the relevant clauses of the Conditions of Contract. Failing to deliver such to the Engineer timeous and in the correct format will invalidate any claim and the consequences of such failure will <i>mutatis mutandis</i> be as stated in clause 10.1.4. 4. Clauses 6.10.9 and 10.1.5 shall be amended as follows to indicate the limitation on the Engineer's authority in respect thereof: Clause 6.10.9 – Amend to read as follows: Within 14 days of the date of final approval as stated in the Final Approval Certificate, the Contractor shall deliver to the Engineer a final statement claiming final settlement of all moneys due to him (save in respect of matters in dispute, in terms of Clauses 10.3 to 10.11, and not yet resolved). The Employer shall within 14 days issue to the Contractor a Final Payment Certificate the amount of which shall be paid to the Contractor within 28 days of the date of such certificate, after which no further payments shall be due to the Contractor (save in respect of matters in dispute, in terms of Clauses 10.3 to 10.11 and not yet resolved). Clause 10.1.5 – Amend to read as follows: Unless otherwise provided in the Contract, the Employer shall, within 28 days after the Contractor has delivered his claim in terms of Clause 10.1.1 as read with Clause 10.1.2, deliver to the Contractor his written and adequately reasoned ruling on the claim (referring specifically to this Clause). The amount thereof, if any, allowed by the Employer shall be included to the credit of the Contractor in the next payment certificate. 5. Insert the following under 3.1.3: Provided that, notwithstanding any provisions to the contrary in the Contract, the Employer shall have the right to reverse and, should it deem it necessary, to amend any certificate, instruction, decision or valuation of the Engineer and to issue a new one, and such certificate instruction, decisions or valuations shall for the purposes of the Contract be deemed to be issued by the Engineer, provided that the Contractor shall be remunerated in the normal manner for work executed in good faith in terms of an instruction issued by the Engineer and which has subsequently been rescinded.
3.2.2.1	Amend Clause 3.2.2.1 to insert the word "Plant" to read as follows: Observe the execution of the Works, examine and test material, Plant and workmanship, and receive from the Contractor such information as he shall reasonably require.
3.2.3.2	Amend Clause 3.2.3.2 to insert the word "Plant" to reads as follows: Notwithstanding any authority assigned to him in terms of Clauses 3.2.2 and 3.2.4, failure by the Engineer's Representative to disapprove of any work, workmanship, Plant or materials shall not prejudice the power of the Engineer thereafter to disapprove thereof and exercise any of his powers in terms of the Contract in respect of thereof.
4.8.2.1	Amend Clause 4.8.2.1 to include the word "person", as follows: Makes available to the Employer, or to any such contractor, person or authority, any roads or ways for the maintenance of which the Contractor is responsible, or

Order no:

4.8.2.2	Amend Clause 4.8.2.2 to include "Employer" and "contractors", as follows: Provides any other facility or service of whatsoever nature to the Employer or to any of the said contractors, persons or authorities,
5.3.1	The documentation required before commencement with Works execution are: Health and Safety Plan (Refer to Clause 4.3) Initial programme (Refer to Clause 5.6) Security (Refer to Clause 6.2) Insurance (Refer to Clause 8.6) <i>insert other requirements</i> <i>insert other requirements</i> <i>insert other requirements</i>
5.3.2	The time to submit the documentation required before commencement with Works execution is: 21 days.
5.4.2	The access to, and possession of, the Site referred to in Clause 5.4.1 shall be enter "exclusive" or "not exclusive" to the Contractor. In the event of access to, and possession of, the Site is not exclusive to the Contractor, the following limitations apply: <i>Insert an exposition of limitation.</i>
5.8.1	The non-working days are: Saturdays and Sundays The special non-working days are: (1) Public Holidays; (2) The year-end break commencing on 16 December until the Sunday preceding the first working Monday of January of the succeeding year.
5.9.1	Amend Clause 5.9.1 as follows: On the Commencement Date, the Engineer shall deliver to the Contractor three (3) copies, at no cost to the Contractor, of the drawings and any instructions required for the commencement of the Works. The cost of any additional copies of such drawings and/or instructions, as may be required by the Contractor, will be for the account of the Contractor.
5.13.1	The penalty for failing to complete the Works is: R 600 per day <i>or, if completion in portions is required,</i> The penalty for failing to complete portion 1 of the Works is: R per day. The penalty for failing to complete portion 2 of the Works is: R per day. The penalty for failing to complete portion 3 of the Works is: R per day. The penalty for failing to complete portion 4 of the Works is: R per day. <i>Followed by further portions as required.</i> The penalty for failing to complete the whole of the works is: R 600 per day.

Order no: Insert Number and press "Tab"

5.14.1	Amend the second paragraph of Clause 5.14.1 as follows: When the Works are about to reach the said stage, the Contractor shall, in writing, request a Certificate of Practical Completion and the Engineer shall, within 14 days after receiving such request, issue to the Contractor a written list setting out the work to be completed to justify Practical Completion. Should the Engineer not issue such a list within the 14 days, the Contractor shall notify the Employer accordingly. Should the Employer not issue such a list within 7 days of receipt of such notice, Practical Completion shall be deemed to have been achieved on the 14th day after the contractor requested the Certificate of Practical Completion.
5.16.1	Amend Clause 5.16.1 to delete the proviso in the third paragraph of this clause.
5.16.2	Amend Clause 5.16.2 as follows: No certificate other than the Final Approval Certificate referred to in Clause 5.16.1 shall be deemed to constitute approval of the Works or shall be taken as an admission of the due performance of the Contract or any part thereof, nor of the accuracy of any claim made by the Contractor, nor shall any other certificate exclude or prejudice any of the powers of the Engineer and/or the Employer.
5.16.3	The latent defect period for all works is: 5 years .
6.2.1	The type of security for the due performance of the Contract, as selected by the Contractor in the Contract Data, must be delivered to the Employer.
6.2.3	Amend Clause 6.2.3 as follows: If the Contractor has selected a performance guarantee as security, he shall ensure that it remains valid and enforceable as required in terms of the Contract.
6.5.1.2.3	The percentage allowance to cover overhead charges is: 33%, except on material cost where the percentage allowance is 10%.
6.8.2	Contract Price Adjustment (CPA) will be applicable: NO. If CPA is indicated as 'Yes' above the value of payment certificates is to be adjusted by a Contract Price Adjustment Factor: The value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule with the following values: The value of "x" is 0.15. The values of the coefficients are: a = 0.25. (Labour) b = 0.3 (Contractor's equipment) c = 0.3 (Material) d = 0.15 (Fuel) The values of the coefficients for "Repair and Maintenance Project" (RAMP) contracts are: a = 0.35 (Labour) b = 0.20 (Contractor's equipment) c = 0.35 (Material) d = 0.10 (Fuel)

Order no: Insert Number and press "Tab"

6.8.	The urban area nearest the Site is Bloemfontein. <i>(Select urban area from Statistical News Release, P0141, Table 7.1.)</i> The applicable industry for the Producer Price Index for materials is Electrical Engineering. <i>(Select the applicable industry from Statistical News Release, P01421, Table 11.)</i> The area for the Producer Price Index for fuel is Bloemfontein. <i>(Select the area from Statistical News Release, P01421, Table 12.)</i> The base month is N/A. <i>(The month prior to the closing of the tender.)</i>
6.8.3	Price adjustments for variations in the costs of special materials are not allowed.
6.10.1.5	The percentage advance on materials not yet built into the Permanent Works is: 85 % .
6.10.3	The limit of retention money is dependent on the security to be provided by the Contractor in terms of Clause 6.2.1.
6.10.5	Replace Clause 6.10.5 with the following: <u>In respect of contracts up to R2 million and in respect of contracts above R2 million where the Contractor elects a security by means of a 10% retention, 50% of the retention shall be released to the Contractor when the Engineer issues the Certificate of Completion in terms of clause 5.14.4. The remaining 50% of the retention shall be released in accordance with the provisions of the conditions of contract and will become due and payable when the Contractor becomes entitled, in terms of Clause 5.16.1, to receive the Final Approval Certificate.</u> <u>In respect of contracts above R2 million, where the Contractor elects a security by means of a cash deposit or fixed guarantee of 5% of the Contract Sum (excl. VAT) and a 5% retention of the Value of the Works (excl. VAT), the cash deposit or fixed guarantee, whichever is applicable, shall be refunded to the Contractor or return to the guarantor, respectively, when the Engineer issues the Certificate of Completion in terms of Clause 5.14.4. The 5% retention of the Value of the Works (excl. VAT) shall become due and payable when the Contractor becomes entitled, in terms of Clause 5.16.1, to receive the Final Approval Certificate.</u> <u>In respect of contracts above R2 million, where the Contractor elects a security by means of a cash deposit or a variable guarantee of 10% of the Contract Sum (excl. VAT), the cash deposit or the variable guarantee, whichever is applicable, will be reduced to 5% of the Value of the Works (excl. VAT) when the Engineer issues the Certificate of Completion in terms of Clause 5.14.4. The balance of the cash deposit shall become due and payable or the variable guarantee shall expire when the Contractor becomes entitled in terms of Clause 5.16.1 to receive the Final Approval Certificate.</u>
7.9.1	Insert the following at the end of Clause 7.9.1: Provided that, should the Contractor on demand not pay the amount of such costs to the Employer, such amount may be determined and deducted by the Employer from any amount due to or that may become due to the Contractor under this or any other previous or subsequent contract between the Contractor and the Employer.
8.2.2.1	Insert the following as a second paragraph to Clause 8.2.2.1: The Contractor shall at all times proceed immediately to remove or dispose of any debris arising from damage to or destruction of the Works and to rebuild, restore, replace and/or repair the Works, failing which the Employer may cause same to be done and recover the reasonable costs associated therewith from the Contractor.

Order no: Insert Number and press "Tab"

8.4.3	Insert a new Clause 8.4.3 as follows: The Contractor shall on receiving a written instruction from the Engineer immediately proceed at his own cost to remove or dispose of any debris and to rebuild, restore, replace and/or repair such property and to execute the Works.
8.6.1.1.1	Amend Clause 8.6.1.1.1 to read as follows: Contract Sum plus 10%.
8.6.1.1.2	The value of Plant and materials supplied by the Employer to be included in the insurance sum is: Nil
8.6.1.1.3	The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is: Nil
8.6.1.3	Amend Clause 8.6.1.3 to delete reference to limit of indemnity, to read as follows: Liability insurance that covers the Contractor against liability for the death of, or injury to any person, or loss of, or damage to any property (other than property while it is insured in terms of Clause 8.6.1.1) arising from or in the course of the fulfillment of the Contract, from the Commencement Date to the date of the end of the Defects Liability Period, if there is one, or otherwise to the issue of the Certificate of Completion.
8.6.1.5	1. Public liability insurance to be effect by the Contractor to a minimum value of: ☐ R5 million or ☐ R insert amount in figures (and in words) With a deductible not exceeding 5% of each and every claim. 2. Support insurance is to be effected by the Contractor to a minimum value of: R insert amount in figures (and in words) With a deductible not exceeding 5% of each and every claim.
8.6.5	Amend Clause 8.6.5 as follows: Save as otherwise provided in the Contract Data, the insurances referred to in Clause 8.6.1 shall be effected with an insurance company registered in the Republic of South Africa. The Contractor shall submit the insurance policy to the Employer for approval, if so requested.
8.6.7	Amend Clause 8.6.7 as follows: If the Contractor fails to effect and keep in force any of the insurances referred to in Clause 8.6.1, the Employer may cancel the Contract in terms of Clause 9.2.
8.6.8	Insert a new Clause 8.6.8 in provide for high risk insurance for projects executed on areas classified as "High Risk Areas". HIGH RISK INSURANCE In the event of the project being executed in a geological area classified as a "High Risk Area", that is an area which is subject to highly unstable subsurface conditions that might result in catastrophic ground movement evident by sinkhole or doline formation the following will apply:

Order no: Insert Number and press "Tab"

8.6.	(1) Damage to the Works The Contractor shall, from the date of Commencement of the Works until the date of the Certificate of Completion, bear the full risk of and hereby indemnifies and holds harmless the Employer against any damage to and/or destruction of the Works consequent upon a catastrophic ground movement as mentioned above. The Contractor shall take such precautions and security measures and other steps for the protection of the Works as he may deem necessary. When so instructed to do so by the Engineer, the Contractor shall proceed immediately to remove and/or dispose of any debris arising from damage to or destruction of the Works and to rebuild, restore, replace and/or repair the Works, at the Contractor's own costs. (2) Injury to Persons or Loss of or damage to Properties The Contractor shall be liable for and hereby indemnifies and holds harmless the Employer against any liability, loss, claim or proceeding arising during the Contract Period whether arising in common law or by Statute, consequent upon personal injuries to or the death of any person whomsoever resulting from, arising out of or caused by a catastrophic ground movement as mentioned above. The Contractor shall be liable for and hereby indemnifies the Employer against any and all liability, loss, claim or proceeding consequent upon loss of or damage to any moveable, or immovable or personal property or property contiguous to the Site, whether belonging to or under the control of the Employer or any other body or person whomsoever arising out of or caused by a catastrophic ground movement, as mentioned above, which occurred during the Contract Period. (3) It is the responsibility of the Contractor to ensure that he has adequate insurance to cover his risk and liability as mentioned in Clauses 8.6.8(1) and 8.6.8 (2) above. Without limiting his obligations in terms of the Contract, the Contractor shall, within 21 days of the Commencement Date and before Commencement of the Works, submit to the Employer proof of such insurance policy, if requested to do so. (4) The Employer shall be entitled to recover any and all losses and/or damages of whatever nature suffered or incurred consequent upon the Contractor's default of his obligations as set out in Clauses 8.6.8 (1), 8.6.8 (2) and 8.6.8 (3). Provided that, should the Contractor on demand not pay the amount of such costs to the Employer, such amount may be determined and deducted by the Employer from any amount due to or that may become due to the Contractor under this or any other existing or subsequent contract between the Contractor and the Employer.
9.1.4	Amend Clause 9.1.4 as follows: In the circumstances referred to in Clauses 9.1.1, 9.1.2 or 9.1.3 (provided that the circumstances in 9.1.3 is not due to the fault of the Contractor, his employees, contractors or agents), and whether or not the Contract is terminated under the provisions of this Clause, the Contractor shall be entitled to payment of any increased cost of or incidental to the execution of the Works which is specifically attributable to, or consequent upon the circumstances defined in Clauses 9.1.1, 9.1.2 or 9.1.3;
9.1.5	Amend Clause 9.1.5 as follows: If the Contract is terminated on any account in terms of this Clause (provided that the circumstances in 9.1.3 is not due to the fault of the Contractor, his employees, contractors or agents) , the Contractor shall be paid by the Employer (insofar as such amounts or items have not already been covered by payments on account made to the Contractor) for all measured work executed prior to the date of termination, the amount (without retention), payable in terms of the Contract and, in addition:
9.1.6	This Clause is not applicable to this Contract.

Order no: Insert Number and press "Tab"

9.2.1.3.8	Insert a new Clause 9.2.1.3.8 as follows: Has failed to effect and keep in force any of the insurances referred to in Clause 8.6.1,
9.2.4	Insert a new Clause 9.2.4 as follows, to provide for unilateral termination by the Employer: The Employer shall be entitled at any time to unilaterally terminate or cancel this Contract or any part thereof. Save for the following, the Contractor shall not be entitled to claim any other amounts whatsoever in respect of such termination or cancellation of this Contract. The Employer shall be obliged to pay the Contractor as damages and/or loss of profit the lesser of: 9.2.4.1 An amount not exceeding 10% of the Contract Sum; 9.2.4.2 10% of the value of incomplete work; or 9.2.4.3 The Contractor's actual damage or loss as determined by the Employer after receipt of evidence substantiating any such damage or loss.
9.3.2.2	Amend Clause 9.3.2.2 as follows to delete the proviso on lien: The ownership of Plant and unused materials brought onto the Site by the Contractor, and for which the Employer has not made any payment, shall revert to the Contractor and he shall, with all reasonable dispatch, remove from the Site such Plant, materials and all Construction Equipment and Temporary Works.
9.3.3	Insert the following at the end of Clause 9.3.3 After cancellation of the Contract by the Contractor, the Contractor, when requested by the Employer to do so, shall not be entitled to refuse to withdraw from the Works on the grounds of any lien or a right of retention or on the grounds of any other right whatsoever.
10.1.3.1	Amend Clause 10.1.3.1 as follows to insert the word "Plant": All facts and circumstances relating to the claims shall be investigated as and when they occur or arise. For this purpose, the Contractor shall deliver to the Engineer, records in a form approved by the Engineer, of all the facts and circumstances which the Contractor considers relevant and wishes to rely upon in support of his claims, including details of all Construction Equipment, labour, Plant and materials relevant to each claim. Such records shall be submitted promptly after the occurrence of the event giving rise to the claim.
10.1.6	Insert a new Clause 10.1.6 as follows: If the Employer fails to give his ruling within the period referred to in Clause 10.1.5 he shall be deemed to have given a ruling dismissing the claim.
10.2.1	Amend Clause 10.2.1 as follows: In respect of any matter arising out of or in connection with the Contract, which is not required to be dealt with in terms of Clause 10.1 or which does not require the decision or ruling of the Employer, the Contractor or the Employer shall have the right to deliver a written dissatisfaction claim to the Engineer. This written claim shall be supported by particulars and substantiated.
10.2.2	Amend Clause 10.2.2 as follows: If, in respect of any matter arising out of or in connection with the Contract, which is not required to be dealt with in terms of Clause 10.1 or which does not require the decision or ruling of the Employer, the Contractor or the Employer fails to submit a claim within 28 days after the cause of dissatisfaction, he shall have no further right to raise any dissatisfaction on such matter.

Order no: Insert Number and press "Tab"

10.3	Amend Clause 10.3.2 as follows to replace "adjudication" with "court": If either party shall have given notice in compliance with Clause 10.3.1, the dispute shall be referred to court proceedings in terms of Clause 10.8, unless amicable settlement is contemplated.
10.3.3	Replace "Engineer" with "Employer".
10.4.2	Amend Clause 10.4.2 as follows to provide for submission to court: If the other party rejects the invitation to amicable settlement in writing or does not respond in writing to the invitation with 14 days, or amicable settlement is unsuccessful, either party may submit the dispute to court.
10.4.4	Amend Clause 10.4.4 to delete reference to "adjudication" and "arbitration" to read as follows: Save for reference to any portion of any settlement or decision which has been agreed to be final and binding on the parties, no reference shall be made by or on behalf of either party in any subsequent court proceedings, to any outcome of an amicable settlement, or to the fact that any particular evidence was given, or to any submission, statement or admission made in the course of the amicable settlement.
10.5 10.6 & 10.7	The entire provisions of these Clauses are not applicable to this Contract.
10.10.3	Amend Clause 10.10.3 as follows to reword and remove reference to "arbitrator": The court shall have full power to open up, review and revise any ruling, decision, order, instruction, certificate or valuation of the Engineer and Employer and neither party shall be limited in such proceedings before such court to the evidence or arguments put before the Engineer or Employer for the purpose of obtaining his ruling.

CONTRACT PARTICIPATION GOAL TARGETS AND CIDB B.U.I.L.D. PROGRAMME

The contractor shall achieve in the performance of the contract the following Contract Participation Goals (CPGs) as described in PG-01.2 (EC): Scope of Work and PG-02.2 (EC): Pricing Assumptions and in accordance with the feasibility study, which forms part of the specifications in the CPG Section of the Specification of this contract.

(a)	Minimum 30% mandatory Subcontracting to SMMEs in accordance with the Preferential Procurement Policy Framework Act, 2000: Preferential Procurement Regulations, 2017 as published in the Government Gazette Notice No. 40553 of 20 January 2017 – Condition of Tender.	Not Applicable
(b)	Minimum Targeted Local Manufacturers of Material Contract Participation Goal, in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	Not Applicable
(c)	Minimum Targeted Local Building Material Suppliers Contract Participation Goal in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	Not Applicable



Order no: Insert Number and press "Tab"

(d)	Minimum Targeted Local Labour Skills Development Contract Participation Goal in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	Not Applicable
(e)	cidb BUILD Programme: Minimum Targeted Enterprise Development Contract Participation Goal in accordance with the cidb Standard for Indirect Targeting for Enterprise Development through Construction Works Contracts, No 36190 Government Gazette, 25 February 2013, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	Not Applicable
(f)	cidb BUILD Programme: Minimum Targeted Contract Skills Development Goal in accordance with the cidb Standard for Developing Skills through Infrastructure Contracts as published in the Government Gazette Notice No. 43495 of 3 July 2020, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.	Not Applicable
(g)	DPWI National Youth Service training and development programme (NYS) – Condition of Contract.	Not Applicable
(h)	Labour Intensive Works – Condition of Contract.	Not Applicable
(i)		Select
(j)		Select



ender no: Insert Number and press "Tab"

PART 2: DATA PROVIDED BY THE BIDDER																					
1.1.1.9	The name of the Bidder is: _____																				
1.2.1.2	The address of the Bidder is: Postal address: _____ _____ _____ Postal Code: _____ Tel: _____ Fax: _____ TAX / VAT Registration No: _____ Physical address: _____ _____ _____ Postal Code: _____ E-mail address: _____																				
6.2.1	The security to be provided by the Contractor shall be one of the following: <table border="0"><tbody><tr><td>(a) Cash deposit of 10 % of the Contact Sum (excl. VAT)</td><td>☐ YES</td><td>or</td><td>☐ NO</td></tr><tr><td>(b) Variable performance guarantee of 10 % of the Contract Sum (excl. VAT)</td><td>☐ YES</td><td>or</td><td>☐ NO</td></tr><tr><td>(c) Retention of 10 % of the value of the Works (excl. VAT)</td><td>☐ YES</td><td>or</td><td>☐ NO</td></tr><tr><td>(d) Cash deposit of 5 % of the Contract Sum (excl. VAT) plus retention of 5 % of the value of the Works (excl. VAT)</td><td>☐ YES</td><td>or</td><td>☐ NO</td></tr><tr><td>(e) Performance guarantee of 5 % of the Contract Sum (excl. VAT) plus retention of 5 % of the value of the Works (excl. VAT)</td><td>☐ YES</td><td>or</td><td>☐ NO</td></tr></tbody></table> NB: Guarantees submitted must be issued by either an insurance company duly registered in terms of the Insurance Act [Long-Term Insurance Act, 1998 (Act 52 of 1998) or Short-Term Insurance Act, 1998 (Act 53 of 1998)] or by a bank duly registered in terms of the Banks Act, 1990 (Act 94 of 1990) on the pro-forma referred to above. No alterations or amendments of the wording of the pro-forma will be accepted.	(a) Cash deposit of 10 % of the Contact Sum (excl. VAT)	☐ YES	or	☐ NO	(b) Variable performance guarantee of 10 % of the Contract Sum (excl. VAT)	☐ YES	or	☐ NO	(c) Retention of 10 % of the value of the Works (excl. VAT)	☐ YES	or	☐ NO	(d) Cash deposit of 5 % of the Contract Sum (excl. VAT) plus retention of 5 % of the value of the Works (excl. VAT)	☐ YES	or	☐ NO	(e) Performance guarantee of 5 % of the Contract Sum (excl. VAT) plus retention of 5 % of the value of the Works (excl. VAT)	☐ YES	or	☐ NO
(a) Cash deposit of 10 % of the Contact Sum (excl. VAT)	☐ YES	or	☐ NO																		
(b) Variable performance guarantee of 10 % of the Contract Sum (excl. VAT)	☐ YES	or	☐ NO																		
(c) Retention of 10 % of the value of the Works (excl. VAT)	☐ YES	or	☐ NO																		
(d) Cash deposit of 5 % of the Contract Sum (excl. VAT) plus retention of 5 % of the value of the Works (excl. VAT)	☐ YES	or	☐ NO																		
(e) Performance guarantee of 5 % of the Contract Sum (excl. VAT) plus retention of 5 % of the value of the Works (excl. VAT)	☐ YES	or	☐ NO																		

C1.3 Form of Guarantee

DPW-10.2 (EC): VARIABLE CONSTRUCTION GUARANTEE (GCC (2010) 2nd EDITION: 2010)

Director-General
Department of Public Works and Infrastructure
Government of the Republic of South Africa

FOR ATTENTION

To: National Department of Public Works
Private Bag X20605
Bloemfontein
9301

Sir,

VARIABLE CONSTRUCTION GUARANTEE FOR THE EXECUTION OF A CONTRACT IN TERMS OF GCC (2010) 2nd EDITION 2010

1. With reference to the contract between _____
_____ (hereinafter referred to as the "contractor") and the Government of the Republic of South Africa in its Department of Public Works and Infrastructure (hereinafter referred to as the "employer"), Contract/Tender No: / **Tender No**, for the **BETHULIE DCS: IMPLEMENTATION OF EMERGENCY BACK UP POWER SUPPLY** (hereinafter referred to as the "contract") for the sum of R _____, (_____), (hereinafter referred to as the "contract sum").

I / We, _____
in my/our capacity as _____ and hereby
representing _____ (hereinafter referred to as the "guarantor") advise that the guarantor holds at the employer's disposal the sum of R **insert amount**, (**insert amount in words**) being 10% of the contract sum (excluding VAT), for the due fulfilment of the contract.
2. I / We advise that the guarantor's liability in terms of this guarantee shall be as follows:
 - (a) From and including the date on which this guarantee is issued and up to and including the day before the date on which the last **certificate of completion** of works is issued, the guarantor will be liable in terms of this guarantee to the maximum amount of 10% of the **contract sum** (excluding VAT);
 - (b) The guarantor's liability shall reduce to 5 % of the **value of the works** (excluding VAT) as determined at the date of the last **certificate of completion** of works, subject to such amount not exceeding 10% of the **contract sum** (excluding VAT);
 - (c) This guarantee shall expire on the date of the last **final approval certificate**.
3. The guarantor hereby renounces the benefits of the exceptions *non numeratae pecunia; non causa debiti; excussionis et divisionis*; and *de duobus vel pluribus reis debendi* which could be pleaded against the enforcement of this guarantee, with the meaning and effect whereof I/we declare myself/ourselves to be conversant, and undertake to pay the employer the amount guaranteed on receipt of a written demand from the employer to do so, stating that (in the employer's opinion and sole discretion):
 - (a) the contractor has failed or neglected to comply with the terms and/or conditions of the contract;
or

Ten  no: (Insert Tender Number)

- (b) the contractor's estate is sequestrated, liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa.
4. Subject to the above, but without in any way detracting from the employer's rights to adopt any of the procedures provided for in the contract, the said demand can be made by the employer at any stage prior to the expiry of this guarantee.
 5. The amount paid by the guarantor in terms of this guarantee may be retained by the employer on condition that upon issue of the last final approval certificate, the employer shall account to the guarantor showing how this amount has been expended and refund any balance due to the guarantor.
 6. The employer shall have the absolute right to arrange his affairs with the contractor in any manner which the employer deems fit and the guarantor shall not have the right to claim his release on account of any conduct alleged to be prejudicial to the guarantor. Without derogating from the foregoing, any compromise, extension of the construction period, indulgence, release or variation of the contractor's obligation shall not affect the validity of this guarantee.
 7. The guarantor reserves the right to withdraw from this guarantee at any time by depositing the guaranteed amount with the employer, whereupon the guarantor's liability ceases.
 8. This guarantee is neither negotiable nor transferable, and
 - (a) must be surrendered to the guarantor at the time when the employer accounts to the guarantor in terms of clause 5 above, or
 - (b) shall lapse in accordance with clause 2 (c) above.
 9. This guarantee shall not be interpreted as extending the guarantor's liability to anything more than payment of the amount guaranteed.

SIGNED AT _____ ON THIS _____ DAY OF _____ 20_____

AS WITNESS

1. _____

2. _____

By and on behalf of

(insert the name and physical address of the guarantor)

NAME: _____

CAPACITY: _____
 (duly authorised thereto by resolution attached marked Annexure A)

DATE: _____

- A. No alterations and/or additions of the wording of this form will be accepted.
- B. The physical address of the guarantor must be clearly indicated and will be regarded as the guarantor's *domicillium citandi et executandi*, for all purposes arising from this guarantee.
- C. This GUARANTEE must be returned to: _____

DPW-10.4 (EC): FIXED CONSTRUCTION GUARANTEE GCC (2010) 2nd EDITION: 2010

Director-General
Department of Public Works and Infrastructure
Government of the Republic of South Africa

FOR ATTENTION

To: **National Department of Public Works**
Private Bag X20605
Bloemfontein
9301

Sir,

FIXED CONSTRUCTION GUARANTEE FOR THE EXECUTION OF A CONTRACT IN TERMS OF GCC 2ND EDITION 2010

1. With reference to the contract between _____ (hereinafter referred to as the "**contractor**") and the Government of the Republic of South Africa in its Department of Public Works and Infrastructure (hereinafter referred to as the "**employer**"), Contract/Tender No: _____, for the **BETHULIE DCS: IMPLEMENTATION OF EMERGENCY BACK UP POWER SUPPLY** (hereinafter referred to as the "**contract**"), for the sum of R _____, (_____), (hereinafter referred to as the "**contract sum**").

I / We, _____

in my/our capacity as _____ and hereby

representing _____ (hereinafter referred to as the "**guarantor**") advise that the **guarantor** holds at the **employer's** disposal the sum of R **insert amount**, (**insert amount in words**) being 5% of the **contract sum** (excluding VAT), for the due fulfillment of the **contract**.
2. The **guarantor** hereby renounces the benefits of the exceptions *non numeratae pecunia; non causa debiti; excussionis et divisionis*; and *de duobus vel pluribus reis debendi* which could be pleaded against the enforcement of this guarantee, with the meaning and effect whereof I/we declare myself/ourselves to be conversant, and undertake to pay the **employer** the amount guaranteed on receipt of a written demand from the **employer** to do so, stating that (in the **employer's** opinion and sole discretion):
 - (a) the **contractor** has failed or neglected to comply with the terms and/or conditions of the **contract**;
or
 - (b) the **contractor's** estate is sequestrated; liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa.
3. Subject to the above, but without in any way detracting from the **employer's** rights to adopt any of the procedures provided for in the **contract**, the said demand can be made by the **employer** at any stage prior to the expiry of this guarantee.
4. The amount paid by the **guarantor** in terms of this guarantee may be retained by the **employer** on condition that upon the issue of the last **final approval certificate**, the **employer** shall account to the **guarantor** showing how this amount has been expended and refund any balance due to the **guarantor**.

Tender No: **insert Contract / Tender No**

5. The **employer** shall have the absolute right to arrange his affairs with the **contractor** in any manner which the **employer** deems fit and the **guarantor** shall not have the right to claim his release on account of any conduct alleged to be prejudicial to the **guarantor**. Without derogating from the foregoing, any compromise, extension of the construction period, indulgence, release or variation of the **contractor's** obligation shall not affect the validity of this guarantee.
6. The **guarantor** reserves the right to withdraw from this guarantee at any time by depositing the guaranteed amount with the **employer**, whereupon the **guarantor's** liability ceases.
7. This guarantee is neither negotiable nor transferable, and
 - (a) must be surrendered to the **guarantor** at the time when the **employer** accounts to the **guarantor** in terms of clause 4 above, or
 - (b) shall lapse on the date of the last **certificate of completion** of works.
8. This guarantee shall not be interpreted as extending the **guarantor's** liability to anything more than the payment of the amount guaranteed.

SIGNED AT _____ ON THIS _____ DAY OF _____ 20____.

AS WITNESS

1. _____

2. _____

By and on behalf of

(insert the name and physical address of the guarantor)

NAME: _____

CAPACITY: _____
(duly authorised thereto by resolution attached marked Annexure A)

DATE: _____

- A. No alterations and/or additions of the wording of this form will be accepted.
- B. The physical address of the guarantor must be clearly indicated and will be regarded as the guarantor's *domicilium citandi et executandi*, for all purposes arising from this guarantee.
- C. This GUARANTEE must be returned to: _____



Part C2: Pricing Data

C2.1 Pricing Instructions

PG-02.1 (EC) PRICING ASSUMPTIONS – GCC (2010) 2nd Edition 2010

Project title:	DCS SUPPLY AND INSTALLATION OF BACK UP POWER GENERATOR AT BETHULIE PRISON		
Tender / Quotation no:	BL23/008	Reference no:	4/1/1/1/35/6705

C2.1 Pricing Assumptions

C2.1.1 GENERAL

The Bill of Quantities forms part of the Contract Documents and must be read and priced in conjunction with all the other documents comprising the Contract Documents, which include the Conditions of Tender, Conditions of Contract, the Specifications (including the Project Specification) and the Drawings.

C2.1.2 DESCRIPTION OF ITEMS IN THE SCHEDULE

The Bill of Quantities has been drawn up generally in accordance with Civil Engineering Quantities 1990 issued by the SA Institution of Civil Engineers.

The short descriptions of the items in the Bill of Quantities are for identification purposes only and the measurement and payment clause of the Standardized Specifications and the Particular Specifications, read together with the relevant clauses of the Project Specification and directives on the drawings, set out what ancillary or associated work and activities are included in the rates for the operations specified.

C2.1.3 QUANTITIES REFLECTED IN THE SCHEDULE

The quantities given in the Bill of Quantities are estimates only, and subject to remeasuring during the execution of the work. The Contractor shall obtain the Engineer's detailed instructions for all work before ordering any materials or executing work or making arrangements for it.

The Works as finally completed in accordance with the Contract shall be measured and paid for as specified in the Bill of Quantities and in accordance with the General and Special Conditions of Contract, the Specifications and Project Specifications and the Drawings. Unless otherwise stated, items are measured net in accordance with the Drawings, and no allowance has been made for waste.

The validity of the contract will in no way be affected by differences between the quantities in the Bill of Quantities and the quantities finally certified for payment.

C2.1.4 PROVISIONAL SUMS

Where Provisional sums or Prime Cost sums are provided for items in the Bill of Quantities, payment for the work done under such items will be made in accordance with Clause 45 of the General Conditions of Contract 2004. The Employer reserves the right, during the execution of the works, to adjust the stated amounts upwards or downwards according to the work actually done under the item, or the item may be omitted altogether, without affecting the validity of the Contract.

The Tenderer shall not under any circumstances whatsoever delete or amend any of the sums inserted in the "Amount" column of the Bill of Quantities and in the Summary of the Bill of Quantities unless ordered or authorized in writing by the Employer before closure of tenders. Unauthorized changes made by the Tenderer to provisional items in the Bill of Quantities, or to the provisional percentages and sums in the Summary of the Bill of Quantities will lead to the disqualification of the Tenderer.

C2.1.5 PRICING OF THE BILL OF QUANTITIES

The **bills of quantities / lump sum document** forms part of and must be read and priced in conjunction with all the other documents forming part of the **contract documents**, the Standard Conditions of Tender, Conditions of Contract, Specifications, Drawings and all other relevant documentation.

The prices and rates to be inserted by the Tenderer in the Bill of Quantities shall be the full inclusive

full compensation for all cost and expenses that may be required in and for the completion and maintenance during the defects liability period of all the work described and as shown on the drawings as well as all overheads, profits, incidentals and the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the Tender is based.

Each item shall be priced and extended to the "Total" column by the Tenderer, with the exception of the items for which only rates are required, or items which already have Prime Cost or Provisional Sums affixed thereto. If the Contractor omits to price any items in the Bill of Quantities, then these items will be considered to have a nil rate or price.

The Tenderer is required to check the Bills of Quantities and the numbers of the pages and should any be found to be missing or in duplicate, or should any of the typing be indistinct, or any doubt of obscurity arise as to the meaning of any description or particulars of any item, or if this Tender Enquiry contains any obvious errors, then the Tenderer must immediately inform the Principal Agent and have them rectified or explained in writing as the case may be. No liability whatsoever will be admitted by reason of the Contractor having failed to comply with the foregoing instruction.

No alterations, erasures, omissions or additions is to be made in the text and/or conditions of these Bills of Quantities. Should any such alterations, amendments, note/s or addition be made, the same will not be recognized, but reading of these Bills of Quantities as originally prepared by the Quantity Surveyor will be adhered to.

The contractor is cautioned that the use of any quantities appearing in these Bills of Quantities for the purpose of ordering material, it is done at own risk and no liability whatsoever will be admitted by the Employer or Quantity Surveyor for the correctness of such Quantities. Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for waste.

The prices and rates to be inserted by the Tenderer in the Bills of Quantities shall be the full inclusive prices to be paid by the Employer for the work described. Such prices and rates shall cover all costs and expenses that may be required in and for the execution of the work described, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the documents on which the tender is based, as well as overhead charges and profit. Market related prices shall be inserted as these will be used as a basis for assessment of payment for additional work that may have to be carried out. The Employer reserves the right to balance the Bill rates where deemed necessary within the Tendered Amount.

A price or rate is to be entered against each item in the Bills of Quantities, whether the quantities are stated or not. An item against which no rate is/are entered, or if anything other than a rate or a nil rate (for example, a zero, a dash or the word "included" or abbreviations thereof) is entered against an item, it will also be regarded as a nil rate having been entered against that item, i.e. that there is no charge for that item. The Tenderer may be requested to clarify nil rates, or items regarded as having nil rates; and the Employer may also perform a risk analysis with regard to the reasonableness of such rates.

Should the full intent and meaning of any description not be clear, the bidder shall, before submission of his tender, call for a written directive from the principal agent, failing which it shall be assumed that the contractor has allowed in his pricing for materials and workmanship in terms of National Best Practice.

All items for which terminology such as "inclusive" or "not applicable" have been added by the Tenderer will be regarded as having a nil rate which shall be valid irrespective of any change in quantities during the execution of the Contract.

The Tenderer shall fill in rates for all items where the words "rate only" appear in the "Total" column. "Rate Only" items have been included where:

- (a) variations of specified components in the make-up of a pay item may be expected; and
- (b) no work under the item is foreseen at tender stage but the possibility that such work may be required is not excluded.

For 'Rate Only' items no quantities are given in the "Quantity" column but the quoted rate shall apply in the event of work under this item being required. The Tenderer shall however note that in terms of

the Tender Data the Tenderer may be asked to reconsider any such rates which the Employer may regard as unbalanced.

Descriptions in the Bills of Quantities are abbreviated and comply generally with those in the "PW 371" and the principles contained in the latest version of the SANS 1200 in South Africa. It is the intention that the abbreviated descriptions be fully described when read with the applicable measuring system and the relevant preambles and/or specifications. However, should the full intent and meaning of any description not be clear, the bidder shall, before submission of his tender, call for a written directive from the principal agent, failing which it shall be assumed that the contractor has allowed in his pricing for materials and workmanship in terms of National Best Practice.

The price quoted against each item of this Bills of Quantities shall cover the full inclusive cost of the complete work to which it refers, as described in the Conditions of Contract and Specifications and as shown on the Drawings and shall allow for labour, material, transporting, loading, storage, supervision, commissioning, wastage, as well as the builders profit and attendance.

The Tenderer must ensure that he fully completes all columns of the Bill of Quantities including the Final Summary. The fully priced bill of quantities must be submitted with the tender or The Final Summary and the Section Summary pages **MUST** be returned with the tender document as indicated the PA-03 Notice and Invitation to Tender / PA-04 Notice and Invitation for quotation.

The tenderers are to ensure that they have read and understood the project specifications included in C3: Scope of Work. All the information provided in the Scope of Works form part of the work and must be included in the rates.

"The Contractor shall be deemed to have inspected and examined the Site and its surroundings and information available in connection therewith and to have satisfied himself before submitting his tender (as far as is practicable) as to:

- (a) the form and nature of the Site and its surroundings, including subsurface conditions,
- (b) the hydrological and climatic conditions,
- (c) the extent and nature of work and materials necessary for the execution and completion of the Works,
- (d) the means of access to the Site and the accommodation he may require

and, in general, shall be deemed to have obtained all information (as far as is practicable) as to risks, contingencies and all other circumstances which may influence or affect his Tender"

C2.1.6 VALUE ADDED TAX

The **contract sum** must include for Value Added Tax (VAT). All rates, provisional sums, etc. in the **bills of quantities / lump sum document** shall be in Rands and cents and shall include all levies and taxes (other than VAT). VAT will be added in the summary of the Bill of Quantities. The rates must however be net (exclusive of VAT) with VAT calculated and added to the total value thereof in the Final Summary. All rates and amounts quoted in the Bill of Quantities

C2.1.7 CORRECTION OF ENTRIES

Incorrect entries shall not be erased or obliterated with correction fluid but must be crossed out neatly. The correct figures must be entered above or adjacent to the deleted entry, and the alteration must be initialled by the Tenderer.

C2.1.8 ARITHMETICAL ERRORS

Arithmetical errors found in the Bill of Quantities as a result of faulty multiplication of addition, will be corrected by the Engineer at the tender evaluation stage, as set out in the Tender Data.

1.9 CONTRACT DOCUMENTS

Tenderers are advised to examine the bills of quantities, drawings and specifications including all other contract documents and make themselves thoroughly acquainted with the nature and requirements of the work, as no claim for extra payment in this regard will be entertained. Should any parts of the drawings not be clearly intelligible to the Tender, he must, before submitting his tender, obtain clarification from the Principal Agent.

C2.1.10 UNITS OF MEASUREMENT

The units of measurement described in the Bill of Quantities are metric units for which the standard international abbreviations are used. Non-standard abbreviations which may appear in the Bill of Quantities are as follows:

No.	=	Number
%	=	Percent
Sum	=	Lump sum
PCsum	=	Prime cost sum
Prov sum	=	Provisional sum
m ³ .km	=	Cubic metre - kilometre
Km-pas	=	kilometre - pass
m ² .pass	=	square metre – pass

C2.1.11 TRADE NAMES

Tenderers attention is drawn to the fact that wherever trade names or references to any catalogue have been made in these Bills of Quantities, it is purely to establish a standard for the required material. If use is made of any other equally approved material in lieu of the prescribed trade name or catalogue, the necessary price adjustments will be made.

C2.1.12 CONTRACT DOCUMENTS

The Tenderers are advised to examine the bills of quantities, drawings and specifications including all other contract documents and make themselves thoroughly acquainted with the nature and requirements of the work, as no claim for extra payment in this regard will be entertained. Should any parts of the drawings not be clearly intelligible to the Tender, he must, before submitting his tender, obtain clarification from the Principal Agent.

C2.1.13 PAYMENTS

Interim valuations and payments will be prepared on a monthly basis, all in terms of the conditions of contract.

The contractor is to note that no payment will be made for materials stored off site and in the case of materials being stored on site, payment will only be made for such materials on condition that they have not been delivered to the site prematurely, a tax invoice and proof of payment (ownership) is submitted by the Contractor.

C2.1.14 ACCOMMODATION ON SITE

It is imperative to note that no living quarters for construction workers on site will not be permitted for the full duration of the contract unless otherwise stated in the contract data or permission be granted by the Employer.

C2.1.15 LOCAL MATERIAL UTILISATION REPORT (LOCAL CONTENT)

Bidders to note that materials procured for the works should be from South African manufactures and suppliers. Imported materials shall only be considered under exceptional circumstances, based on justified circumstances, and subject to the approval by the NDPWI

The contractor shall achieve in the performance of this contract the prescribed local content deliverables as listed in PA36 and annexures C thereto in the respective designated sectors as published by Department Trade Industry and Competition (DTIC). The Service Provider shall submit an accumulative monthly report to the Employer's representative indicating the percentage targets achieved which must be reconciled upon completion of the project and to form part of the final account.

The contractor shall be responsible for record keeping, documenting and submission of monthly local material utilization report with supporting documentation to the Employer's representative within 7 working days of the beginning of the successive month, in terms of DTI&C designated industry/sector/sub-sector schedule as per the PA36 and Annexures C attached to the tender document. The final percentage achievement to be reconciled upon completion of the project and form part of the final account.

C2.1.16 CONTRACT PARTICIPATION GOALS

The contractor shall achieve in the performance of this contract the following Contract Participation Goals (CPGs) as indicated below:

Provision for pricing of compliance with the achieving the CPGs is made in the Contract Participation Goal Section of the Bills of Quantities and it is explicitly pointed out that all requirements in respect of the aforementioned are deemed to be priced thereunder and no additional claims in this regard shall be entertained

Monthly progressive reports to be submitted to the Employer's representative indicating the percentage targets achieved which must be reconciled upon completion of the project and to form part of the final account.

C2.1.16.1 Minimum 30% Sub-contracting Contract Participation Goal

MINIMUM 30% MANDATORY SUBCONTRACTING TO SMMEs: IMPLEMENTATION OF PREFERENTIAL PROCUREMENT REGULATIONS 2017

30% Mandatory subcontracting is *insert "applicable" or "not applicable"* to this project.

Provision is made within the Contract Participation Goal section in the Bill of Quantities for thirty percent (30%) subcontracting to SMMEs in the execution of this project as described in PG-01.1 (EC) SCOPE OF WORKS C3.5.1. The contractor shall price his Profit and Attendance, all inclusive of associated costs to the contractor for implementation. Allowance must be made for submitting reports to the Employer's Representative on a monthly basis in terms of monthly and accumulative targets achieved with audited supporting documentation.

C2.1.16.2 MINIMUM TARGETED LOCAL BUILDING MATERIAL MANUFACTURERS CONTRACT PARTICIPATION GOAL

The Minimum Targeted Local Building Material Manufacturers CPG is *insert "applicable" or "not applicable"* to this project.

Provision is made within the Contract Participation Goal section in the Bill of Quantities for the Minimum Targeted Local Building Material Manufacturers CPG in the execution of this project as described in PG-01.1 (EC) SCOPE OF WORKS C3.5.2. The contractor shall price his Profit and Attendance, all inclusive of associated costs to the contractor for implementation. Allowance must be made for submitting reports to the Employer's Representative on a monthly basis in terms of monthly and accumulative targets achieved with audited supporting documentation.

C2.1.16.3

MINIMUM TARGETED LOCAL BUILDING MATERIAL SUPPLIERS CONTRACT PARTICIPATION GOAL

The Minimum Targeted Local Building Material Suppliers CPG is *insert "applicable" or "not applicable"* to this project.

Provision is made within the Contract Participation Goal section in the Bill of Quantities for the Minimum Targeted Local Building Material Suppliers CPG in the execution of this project as described in PG-01.1 (EC) SCOPE OF WORKS C3.5.3. The contractor shall price his Profit and Attendance, all inclusive of associated costs to the contractor for implementation. Allowance must be made for submitting reports to the Employer's Representative on a monthly basis in terms of monthly and accumulative targets achieved with audited supporting documentation.

C2.1.16.4

MINIMUM TARGETED LOCAL LABOUR SKILLS DEVELOPMENT CONTRACT PARTICIPATION GOAL

The Minimum Targeted Local Labour Skills Development CPG is *insert "applicable" or "not applicable"* to this project.

Provision is made within the Contract Participation Goal section in the Bill of Quantities for the Minimum Targeted Local Labour Skills Development CPG in the execution of this project as described in PG-01.1 (EC) SCOPE OF WORKS C3.5.4. The contractor shall price his Profit and Attendance, all inclusive of associated costs to the contractor for implementation. Allowance must be made for submitting reports to the Employer's Representative on a monthly basis in terms of monthly and accumulative targets achieved with audited supporting documentation.

C2.1.16.5

CIDB BUILD PROGRAMME: MINIMUM TARGETED ENTERPRISE DEVELOPMENT: CONTRACT PARTICIPATION GOALS (CPG)

The Minimum Targeted Enterprise Development CPG is *insert "applicable" or "not applicable"* to this project.

A provisional amount has been allowed for within the Contract Participation Goal section in the Bill of Quantities for the Minimum Targeted Enterprise Development CPG in the execution of this project as described in PG-01.1 (EC) SCOPE OF WORKS C3.5.5. The provisional amount allowed is for the appointment of training coordinator, mentor, training service providers and training of the beneficiary enterprises.

The contractor shall price his Profit and Attendance, all inclusive of associated costs to the contractor for implementation. Allowance must be made for submitting reports to the Employer's Representative on a monthly basis in terms of monthly and accumulative targets achieved with audited supporting documentation.

The contractor shall complete a separate bill of quantities upon the award of the project and identification of the respective beneficiaries and the appointment of the training coordinator, mentor, training service providers of which the cost will be offset against the provisional amount allowed in the Bills of Quantities.

C2.1.16.6

CIDB BUILD PROGRAMME: MINIMUM TARGETED TARGETED CONTRACT SKILLS DEVELOPMENT GOALS (CSDG)

The Minimum Targeted Contract Skills Development CPG is *insert "applicable" or "not applicable"* to this project.

A provisional amount has been allowed for within the Contract Participation Goal section in the Bill of Quantities for the Minimum Targeted Skills Development CPG in the execution of this project as described in PG-01.1 (EC) SCOPE OF WORKS C3.5.6. The provisional amount allowed is for:

- stipends payable to the beneficiaries
- appointment of training coordinator
- appointment of mentor (where applicable)
- appointment of training service providers
- other additional costs as per table 3 of the Standard

The contractor shall price his Profit and Attendance (all inclusive of associated costs to the contractor for implementation and reporting), based on the provisional amount in the Contract Participation Goal section in the Bill of Quantities. The contractor shall complete a separate bill of quantities upon the award of the project and identification of the respective beneficiaries. The CPG value to be achieved will be based on the actual contract amount which will be offset against the provisional amount allowed for within the Contract Participation Goal section in the Bill of Quantities.

Allowance must be made for submitting reports to the Employer's Representative on a monthly basis in terms of monthly and accumulative targets achieved with audited supporting documentation.

Payment

The contractor shall upon the appointment of beneficiaries, provide a breakdown of all the associated costs. The contractor shall provide a payment schedule as to how the CPG costs will be claimed against for inclusion in the monthly payment certificates.

(a) Payment to the contractor to accommodate Part/Full Occupational qualification and Trade qualifications;

Should the contractor select Part/Full Occupational qualification and Trade qualifications learners, then the employer shall make provision for payment to the contractor as indicated in Table 3 of the Standard.

The contract skills participation goal, expressed in Rand, shall not be less than the contract amount multiplied by a percentage (%) factor given in Table 2 in the Standard for the applicable class of construction works. Should the contractor select Part/Full Occupational qualification and Trade qualifications learners, then the employer shall make provision for payment to the contractor as indicated in Table 3 of the Standard.

No provision for an additional payment item for the payment of the supervisor and/or mentors for the provision of training as provided for in the Contract Participation Goal section in the Bill of Quantities for the training of part/full time occupational learners and/or trade qualification learners. The associated cost is deemed to be included in general supervision on site.

The contractor shall complete a separate bill of quantities upon award, indicating the type and number of beneficiaries as well as the associated Notional Cost of Training to be provided, on which payment will be based.

(b) Payment to the contractor to accommodate Work Integrated Learners and Candidates for professional registration;

Should the contractor select Work Integrated Learners and/or Candidates for professional registration, then the employer shall make provision for payment to the contractor as indicated in Table 3 of the Standard.



Provisional amounts have been included in the Contract Participation Goal section in the Bill of Quantities for the training of Work Integrated Learners and Candidates for professional registration. The contractor shall price his Profit and Attendance (all inclusive of associated costs to the contractor for implementation and reporting), based on the provisional amount in the Contract Participation Goal section in the Bill of Quantities.

The contractor shall complete a separate bill of quantities upon award, indicating the type and number of beneficiaries as well as the associated Notional Cost of Training to be provided, on which payment will be based.

The CPG value to be achieved will be based on the contract amount as defined by the Standard, which will be offset against the provisional amount allowed for within the Contract Participation Goal section in the Bill of Quantities.

The contractor shall apportion the cost of accommodating work integrated learners (P1 and P2 learners) and candidates for professional registration by using Table 3 in the Standard and this cost will be used to determine the Rand value and will be used in determining the contract participation goal in the Bills of Quantities.

Table 3: Notional Cost of Training; Headcount

Source: cidb Standard for Skills Development

Source: cidb Standard for Skills Development

Type of Training Opportunity	Provision for stipends (Unemployed learners only)	Provisions for mentorship	Provisions for additional costs*	Total costs	
				Unemployed learners	Employed learners
Method 1					
Occupational qualification	R7 000	R0	R9 000	R16 000	R9 000
Method 2					
TVET College graduates	R14 000	R0	R9 000	R23 000	N/A
Apprenticeship	R14 000	R0	R12 000	R26 000	R12 000
Method 3					
P1 and P2 learners	R24 000	R20 000	R4 500	R48 500	N/A
Method 4					
Candidates with a 3 year diploma	R37 000	R20 000	R4 500	R61 500	R20 000
Candidates with 4 year qualification	R47 000	R20 000	R4 500	R71 500	R20 000

Note: the required CPG will be recalculated based on the awarded tender amount and "Contract amount" once the beneficiaries have been appointed and actual costs are known. The notional cost of providing training opportunities will increase by CPI on an annual basis based on April CPI. Should the rates increase after bid award or during construction the rates will be adjusted as a remeasuarble item.

Example: Training Target Calculation for a R65,7m GB contract

Contract amount	R65 700 000
Contract duration	12 Months
CSDG	0,50%
Minimum CSDG target	0,50% x R65 700 000 = R328 500 (Minimum requirement)

Table 4: Notional cost recalculation upon appointment of beneficiaries

Skills Types	Number of learners	Notional Cost / Learner / Quarter	Notional cost/learner/year	Total Notional Cost over 12 months Contract
Method 2: Workplace learning opportunities, with unemployed TVET graduates	1	R23 000	R92 000	R92 000
Method 3: Candidacy for an unemployed learner with a 3-year qualification	1	R61 500	R246 000	R246 000
Total	2			R338 000

C2.1.16.7 NATIONAL YOUTH SERVICE TRAINING AND DEVELOPMENT PROGRAMME

The National Youth Service Training and Development Programme is *insert "applicable" or "not applicable"* to this project.

The programme shall be implemented in terms of the Implementation of the National Youth Service Programme under the Expanded Public Works (EPWP) and shall be priced in the CPG section of the Bills of Quantities.

Provision has been made within the Contract Participation Goal section in the Bill of Quantities for the National Youth Service Training and Development Programme CPG in the execution of this project as described in PG-01.1 (EC) SCOPE OF WORKS C3.5.7. The contractor to price all elements of this section and allowance must be made for submitting monthly reports in the prescribed manner as per examples of reports bound in the specification document.

C2.1.16.8 LABOUR-INTENSIVE WORKS

Labour Intensive Works is *insert "applicable" or "not applicable"* to this project

Where labour intensive work is specified in the Bill of Quantities and indicated by "LI" the contractor must price for and include in rates. Contractors are expected to use their initiative to identify additional activities that can be done labour-intensively to comply with the set minimum labour intensity target. Allowance must be made for submitting monthly reports illustrating the value of the works executed under Labour Intensive Works.

C2.2 Submission of Accrual Reports

The Contractor shall submit accrual reports to the client representative at the end of March and September each year for the duration of the Service Contract period from the date of appointment up to and including project closeout. This is to ensure that PMTE complies with the accounting framework GRAP, which requires that PMTE disclose all its accruals as at the end of each reporting date. Allowance must be made for submitting reports to the Employer's Representative on a monthly basis in terms of monthly and accumulative targets achieved with audited supporting documentation.

Part 3: Scope of Work

C3 Scope of Work

PG-01.1 (EC) SCOPE OF WORKS – (GCC (2010) 2nd EDITION: 2010)

Project title:	<i>Bethulie Prison: Implementation of Emergency Back-up Power Generator</i>		
Tender no:	<i>BL23/008</i>	Reference no:	<i>4/1/1/1/35/6705</i>

C3. Scope of Works

CONTENTS

C3.1 STANDARD SPECIFICATIONS

C3.2 PROJECT SPECIFICATIONS

A: GENERAL

- PS-1 PROJECT DESCRIPTION
- PS-2 DESCRIPTION OF SITE AND ACCESS
- PS-3 DETAILS OF CONTRACT
- PS-4 CONSTRUCTION AND MANAGEMENT REQUIREMENTS
- PS-5 CONSTRUCTION PROGRAMME
- PS-6 SITE FACILITIES AVAILABLE
- PS-7 SITE FACILITIES REQUIRED
- PS-8 REQUIREMENTS FOR ACCOMMODATION OF TRAFFIC
- PS-9 OCCUPATIONAL HEALTH AND SAFETY
- PS-10 ADVERSE WEATHER CONDITIONS

NOTE: This is an example only. Compiler / Designer to provide the applicable contents.

B: AMENDMENTS TO THE PARTICULAR SPECIFICATIONS Insert amendments to particular specifications

C3.3 PARTICULAR SPECIFICATIONS PGA

C3.4 STANDARD SPECIFICATIONS:

The standard specifications on which this contract is based are the **South African Bureau of Standards Standardized Specifications for Civil Engineering Construction SABS 1200**. (Note to compiler. "SABS" has been changed to "SANS"; the SABS 1200 specifications are due to be replaced in the foreseeable future by SANS 2100)

Although not bound in nor issued with this Document, the following Sections of the Standardized Specifications of SABS 1200 shall form part of this Contract:

A - 1986 - GENERAL / D – (etc, to be provide by compiler)

PROJECT SPECIFICATIONS:

Status

The Project Specification, consisting of two parts, forms an integral part of the contract and supplements the Standard Specifications.

Part 1 A contains a general description of the works, the site and the requirements to be met.

Part B contains variations, amendments and additions to the Standardized Specifications and, if applicable, the Particular Specifications.

In the event of any discrepancy between a part or parts of the Standardised of Particular Specifications and the Project Specification, the Project Specification shall take precedence. In the event of a discrepancy between the specifications, (including the Project Specifications) and the drawings and / or the Bill of Quantities, the discrepancy shall be resolved by the Engineer before the execution of the work under the relevant item.

3.5.1 GENERAL

PS-1 PROJECT DESCRIPTION:

1. Scope of Work

Supply, delivery and installation of the complete new containerised and silenced emergency diesel alternator generator sets (DA) with ATS, associated switchboards and general electrical work as specified in this document: the entire prison shall be connected to the emergency power supplied by the DA sets through a single change over.

3.5.2 AMENDMENTS TO THE STANDARD AND PARTICULAR SPECIFICATION:

C3.5.3 PARTICULAR SPECIFICATIONS:

C3.6 STANDARD MINIMUM REQUIREMENTS

In terms of section 5(2) of the Construction Industry Development Board Act, 2000 (Act no. 38 of 2000) (the Act), the Construction Industry Development Board is empowered to establish and promote best practice standards, Standard Requirements and Guidelines which includes the following but not limited to:

C3.6.1 cidb Best Practice: Green Building Certification, No. 34158 Government Gazette, 1 April 2011

C3.6.2 cidb Standard for Developing Skills through Infrastructure Contracts, No. 36760 Government Gazette, 23 August 2013

C3.6.3 cidb Standard for Indirect Targeting for Enterprise Development through Construction Works Contracts, No 36190 Government Gazette, 25 February 2013

C3.6.4 Preferential Procurement Policy Framework Act, 2000: Preferential Procurement Regulations, 2017, No. 40553 Government Gazette, 20 January 2017

C3.6.5 cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts, No. 41237 Government Gazette, 10 November 2017

C3.6.6 cidb Standard for Minimum Requirements for Engaging Contractors and Sub-Contractors on Construction Works Contracts, No. 41237 Government Gazette, 10 November 2017

6.7 cidb Standard for Minimum Requirements for Engaging Contractors and Sub- Contractors on Construction Works Contracts, No. 42021 Government Gazette, 9 November 2018

C3.6.8 cidb Standard for Developing Skills through Infrastructure Contracts, No. 43495 Government Gazette, 3 July 2020

C3.7 CONTRACT PARTICIPATION GOALS AND CIDB BUILD PROGRAMME

The contractor shall achieve in the performance of the contract the following Contract Participation Goals (CPGs) as indicated below. Provision for pricing of compliance with the achieving the CPGs is made in the Contract Participation Goal Section of the Bills of Quantities and it is explicitly pointed out that all requirements in respect of the aforementioned are deemed to be priced thereunder and no additional claims in this regard shall be entertained:

C3.7.1 Minimum Thirty Percent (30%) Mandatory Sub-contracting Contract Participation Goal

MINIMUM THIRTY PERCENT (30%) MANDATORY SUBCONTRACTING TO SMMEs: IMPLEMENTATION OF PREFERENTIAL PROCUREMENT REGULATIONS 2017

30% Mandatory subcontracting is *not applicable* to this project.

It is the requirement of the employer that the contractor enhances the use of local Small, Micro and Medium Enterprises (SMME's) in executing this contract, irrespective whether the 30% Participation Goal is applicable or not.

The thirty percent (30%) mandatory Sub-contracting shall be achieved in the execution of the contract. in terms of in accordance with the Preferential Procurement Policy Framework Act, 2000: Preferential Procurement Regulations, 2017 as published in the Government Gazette Notice No. 40553 of 20 January 2017.

- (a) SMME's involvement of at least **insert applicable percentage, both in words and figures** of the tender amount at the time of tender to be sourced from within **insert applicable kilometers** km radius of the project site with the intention to maximize use of local SMMEs within **insert applicable Ward/s, Municipal District, Town, City, Province,**
- (b) SMME's involvement of at least **insert applicable percentage, both in words and figures** of the Tender Value to be sourced from within **insert applicable kilometers** km radius of the project site.

Bidders are cautioned not to under-price items earmarked to be executed by SMMEs as adjustment to too low rates will not be entertained by the Employer.

Bidders to sub-contract a minimum of thirty percent (30%) of the tender amount including VAT at the time of tender (All inclusive, Including VAT). to any one or more of the following categories:

- a. An EME or QSE
- b. An EME or QSE which is at least 51% owned by black people
- c. An EME or QSE which is at least 51% owned by black people who are youth
- d. An EME or QSE which is at least 51% owned by black people who are women
- e. An EME or QSE which is at least 51% owned by black people with disabilities
- f. An EME or QSE which is at least 51% owned by black people living in rural or underdeveloped areas or townships
- g. A co-operative which is at least 51% owned by black people
- h. An EME or QSE which is at least 51% owned by black people who are Military veterans
- i. More than one of the categories referred to in paragraphs (a) to (h).

Bidders to refer to the CSD for a list of prospective sub-contractors provided with the tender. The bidder to refer to the CSD website should the list provided be insufficient.

Bidders must ensure that the sub-contractors conform to the following:

- a. Possess relevant accreditation where applicable;
- b. Be registered with relevant bodies (CIDB, various Councils, etc.) where applicable;
- c. Possess necessary capabilities to deliver the sub-contracted work;
- d. Meet the requirements in terms of the stipulated designated groups; and
- e. Geographical located at the place where the project will be delivered. Geographical location must be determined using the following criteria:
 - Relevant Ward. If not available;
 - Relevant neighbouring Wards. If not available;
 - Relevant Local Municipality. If not available;
 - Relevant District Municipality. If not available;
 - Relevant Metro. If not available;
 - Relevant Province. If not available;
 - Relevant Neighbouring Province. And If not available;
 - Anywhere within the borders of South Africa .

It is the bidder's responsibility to source alternative SMMEs should the parties with whom agreements were entered into at the time of tendering either no longer exist or do not perform or render work of an acceptable standard, subject to the approval by the Employer. Failure to achieve the **minimum thirty percent (30%) SMME participation** based on the tender amount including VAT, will result in a **insert applicable percentage, both in words and figures** penalty on the amount of work on which there is no compliance (Excluding VAT), unless the contractor can prove to the Employer's satisfaction that the non-achievement was beyond his/her control.

The bidder shall submit monthly reports in terms of monthly achievement and accumulative targets achieved including audited supporting documentation to the Employer's Representative.

The bidder shall submit monthly reports in terms of monthly achievement and accumulative targets achieved including audited supporting documentation to the Employer's Representative.

C3.7.2 Minimum Targeted Local Material Manufacturer Contract Participation Goal

The Minimum Targeted Local Building Material Manufacturers CPG is *not applicable* to this project.

It is the requirement of the employer that the contractor enhances the use of local Small, Micro and Medium Enterprise Local Material Manufacturers (SMME's) in executing this contract, irrespective whether a minimum percentage Participation Goals is applicable or not.

The Minimum Targeted Local Manufacturers of Material Contract Participation Goal, in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020.

A Targeted Local Material Manufacturer is a targeted enterprise that operates or maintains a factory or establishment that produces on its premises materials or goods required by the principal contractor for the performance of the contract.

Note: Adapted from SANS 10845-7:2015, definition 2.13

Preference shall be given to the Targeted Local Material Manufacturer where feasible in **insert applicable Ward/s, Municipal District, Town, City, Province**, and provided that:

- (a) Such materials comply in all respects with the specific requirements of PW371 and SANS specifications,
- (b) The non-availability of such materials shall not adversely affect the desired progress of the specific works,
- (c) The use of such suppliers shall not constitute grounds for any claim for increased cost in respect thereof,
- (d) Materials of at least **insert applicable percentage, both in words and figures** of the total value of materials purchased excluding VAT to be sourced from within **insert applicable**

- (e) Material of at least **insert applicable percentage, both in words and figures** of the total value of materials purchased excluding VAT to be sourced from within **insert applicable kilometerskm** radius of the project site.

Failure to achieve the minimum **insert applicable percentage, both in words and figures** Targeted Local Material Manufacturer participation expressed as a percentage of the original tender amount, excluding allowances and VAT, will result in a **insert applicable percentage, both in words and figures** penalty of the prorated targeted value of materials not complied with unless the contractor can prove to the Employer's satisfaction that the non-achievement was beyond his/her control.

The bidder shall submit monthly reports in terms of monthly achievement and accumulative targets achieved including audited supporting documentation to the Employer's Representative.

C3.7.3 Minimum Targeted-Local Building Material Suppliers Contract Participation Goal

The Minimum Targeted Local Building Material Suppliers CPG is *not applicable* to this project.

It is the requirement of the employer that the contractor enhances the use of local Small, Micro and Medium Enterprise Local Material Suppliers (SMME's) in executing this contract, irrespective whether a minimum percentage Participation Goals is applicable or not.

The Minimum Targeted Local Manufacturers of Material Contract Participation Goal shall be achieved in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract..

A targeted supplier is a targeted enterprise that

- owns, operates or maintains a store, warehouse or other establishment in which goods are bought, kept in stock and regularly sold to wholesalers, retailers or the public in the usual course of business; and
- engages, as its principal business and in its own name, in the purchase and sale of goods.

Note: Adapted from SANS 10845-7:2015, definition 2.14

Preference shall be given to the local material suppliers where feasible in the **insert applicable Ward/s, Municipal District, Town, City, Province**, and provided that:

- Such materials comply in all respects with the specific requirements of PW371 and SANS specifications,
- The none availability of such materials shall not adversely affect the desired progress of the specific works,
- The use of such suppliers shall not constitute grounds for any claim for increased cost in respect thereof,
- Materials of at least **insert applicable percentage, both in words and figures** of the total value of materials purchased excluding VAT to be sourced from within **insert applicable kilometerskm** of the project site,
- Material of at least **insert applicable percentage, both in words and figures** of the total value of materials purchased excluding VAT to be sourced from within **insert applicable kilometerskm** of the project site.

Failure to achieve the minimum **insert applicable percentage, both in words and figures** Targeted Local Material Manufacturer participation expressed as a percentage of the original tender amount, excluding allowances and VAT, will result in a **insert applicable percentage, both in words and figures** penalty of the prorated targeted value of materials not complied with, unless the contractor can prove to the Employer's satisfaction that the non-achievement was beyond his/her control.

The bidder shall submit monthly reports in terms of monthly achievement and accumulative targets achieved including audited supporting documentation to the Employer's Representative.

The Minimum Targeted Local Labour Skills Development CPG is *not applicable* to this project.

It is the requirement of the employer that the contractor enhances the use of local labour in executing this contract. This is required to be done through the use of both traditional building techniques and labour-intensive construction techniques careful and considered construction planning and implemented in the project irrespective whether a minimum percentage Participation Goal is applicable or not.

The Minimum Targeted Local Skills Development Contract Participation Goal shall be achieved in accordance with the cidb Standard for Contract Participation Goals for Targeting Enterprises and Labour through Construction Works Contracts as published in the Government Gazette Notice No. 41237 of 10 November 2017, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract..

Targeted labour: individuals who:

- a) are employed by the principal contractor, sub-contractor or targeted enterprises in the performance of the contract;
- b) are defined as the target group in the targeting data; and
- c) permanently reside in the target area or who are recognized as being residents of the target area on the basis of identification and association with and recognition by the residents of the target area.

Adapted from SANS 10845-7:2015, definition 2.12

Targeting of labour by skills categories is only permissible within categories of semi-skilled and unskilled labour.

Contract participation goals for semi-skilled and unskilled labour shall be limited to on-the-job training to targeted labour to enable such labour to master the basic work techniques required to undertake the work in accordance with the requirements of the contract and in a manner that does not compromise worker health and safety. In the case of targeted labour, the certification of records shall be in accordance with SANS 10845-8.

Beneficiaries will be sourced from the **insert applicable Ward/s, Municipal District, Town, City, Province** for the full duration of the Construction Period, employed by either the principal contractor, sub-contractors or targeted enterprises. The total number of working days to complete the Works amount to **insert number of working days as determined by the Construction Period** working days. The minimum CPG participation for Targeted Local Labour Skills Development is **insert applicable percentage, both in words and figures**, expressed as a percentage of the total number of working days required to complete the Works. The contractor shall attain or exceed the CPG in the performance of the contract. Failure to achieve the minimum Targeted Local Labour Skills Development CPG will result in a payment reduction of **R5 000** (Excluding VAT), per working day which training has not been provided to the workforce in attendance, unless the contractor can prove to the Employer's satisfaction that the non-achievement was beyond his/her control.

The bidder shall submit monthly reports in terms of monthly achievement and accumulative targets achieved including audited supporting documentation to the Employer's Representative.

C3.7.5 CIDB BUILD PROGRAMME: Minimum Targeted Enterprise Development Contract Participation Goal

The Minimum Targeted Enterprise Development CPG is *not applicable* to this project.

The aim of this best practice standard for indirect targeting for enterprise development in accordance with the Standard for Indirect Targeting for Enterprise Development (published in Government Gazette 36190 of 25 February 2013), as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract. is to promote enterprise development by providing for a minimum contract participation goal (CPG) of **five percent (5%)** of the contract amount as defined in the Standard (Tender amount, excluding allowances and VAT on



contractors that are also to be beneficiaries of enterprise development support from the main contractor.

The lead partner or main contractor shall dedicate a **minimum five percent (5%)** of the tender value at the time of award, excluding allowances and VAT, to provide developmental support to targeted subcontractor or joint venture partner applicable to contracts in Grades 7 to 9, General Building and Civil Engineering contracts. Preference will be given to insert type of enterprises, e.g. General Building, Electrical, Mechanical, Plumbing, etc. It could be either or any combination of all Enterprises.

The contractor shall attain or exceed the enterprise development goal in the performance of the contract. Failing to achieve the Participation Goal will result in A) a thirty percent (30%) penalty of the value not achieved, excluding VAT, unless the contractor can prove to the Employer's satisfaction that the non-achievement was beyond his/her control.

The bidder shall submit monthly reports in terms of monthly achievement and accumulative targets achieved including audited supporting documentation to the Employer's Representative.

C3.7.5.1 Criteria

The main or lead partner of the successful bidder shall:

- (a) There must be a needs analysis for indirect targeting and development or skill standard and should be development in at least any two developmental areas namely;
 - Administrative and cost control systems
 - construction management systems and plans
 - planning, tendering and programming
 - business; technical; procurement skills
 - legal compliance
 - credit rating/history; financial loan capacity/history
 - contractual knowledge
- (b) The above needs analysis shall be mutually agreed upon between contractor and targeted enterprise
- (c) The contractor shall appoint an enterprise development coordinator to:
 - perform needs analysis on the targeted enterprise to identify developmental goals
 - develop a project specific enterprise development plan to improve the targeted enterprise/s performance in the identified developmental areas
 - provide internal mentorship support to improve the targeted enterprise/s performance
 - monitor and submit to the employer's representative a monthly enterprise development report thereby reporting on the progress of the agreed development areas with the targeted enterprise/s
 - submit a project completion report to the Employer's representative for each targeted enterprise.

C3.7.5.2 Management

The contractor shall provide a competent person/s to provide internal mentorship to the Targeted Enterprise/s in the two agreed developmental areas.

C3.7.5.3 Competence Criteria for an Enterprise Development Co-ordinator

The enterprise development co-ordinator shall have the following competencies:

- Minimum experience of 5 years in the construction industry at Managerial level as a Site Agent, Contracts Manager, Site Manager, Construction Manager, Business Development Manager or Enterprise Development Manager.
- Minimum experience of 2 years in training and development in Building or Construction; and
- National Diploma or B Degree in the Built Environment or Business Management

C3.7.5.4 Format of Communications

The contractor shall submit to the Employer's Representative:

- *Project interim reports* in the specified format (**ED105P**) detailing interim values of the CPG that was achieved together with an assessment of the enterprise development support provided should be tabled and discussed at least monthly at progress meetings between employer's representative and the contractor;
- *Project completion report* in the specified format (**ED101P**) to the Employer's Representative for acceptance within 15 days of achieving practical completion. The report shall include the value of the CPG that was certified in accordance with the contract, cidb registration numbers of each and every targeted enterprise, and the value of the subcontracted works or of the joint venture entered into; and the participation parameter
- *Enterprise development declaration* (**ED104P**).

C3.7.5.5 The Key Personal

The contractor shall appoint an Enterprise Development Co-ordinator and a competent person/s to provide internal mentorship.

C3.7.5.6 Management Meetings

The contractor shall report to the Employer's Representative on the implementation and progress of the targeted enterprise development and CPG at monthly progress site meetings.

C3.7.5.7 Forms for contract administration

The contractor shall submit to the Employer's Representative the following proformas:

- Form ED 105P Project Interim Report
- Form ED 104P Enterprise Development Declaration
- Form ED 101P Project Completion Report

C3.7.5.8 Records

The contractor shall:

- keep records of the targeted enterprise development
- keep records of the payments made to the targeted enterprises in relation to the CPG.
- ensure all the documentation required in terms of the Standard is provided with each monthly progress payment certificate and according to a prescribed format where applicable.

C3.7.5.9 Payment Certificates

The contractor shall:

- achieve the measurable CPG and providing enterprise development support to the targeted enterprise/s as per the Standard.

- submit payment certificates to the Employer Representative at intervals determined in the Contract.

C3.7.5.10 Compliance requirements

Non-compliance with the Best Practice Project Assessment Scheme

The wording of regulation 27A of the cidb regulations makes provision for the Board to enforce the cidb code of conduct in the event of clients being found to be in breach of the best practice project assessment scheme.

- Not including the requirements of the cidb standards in the conditions of tender
- Not registering the award of contract on the cidb Register of Projects (RoP)
- Not reporting practical completion on the cidb Register of Projects (RoP)

3.7.6 **CIDB BUILD PROGRAMME: Minimum Targeted Contract Skills Development Goal (CSDG)**

The Minimum Targeted Contract Skills Development CPG is *not applicable* to this project.

The contractor shall achieve or exceed in the performance of the contract the Contract Skills Development Goal (CSDG) established in the Standard for Developing Skills through Infrastructure Contracts (published in Government Gazette No 43495 of 3 July 2020, as amended in cidb Best Practice Project Assessment Scheme Notice No. 43726 of 18 September 2020 – Condition of Contract.

Failing to achieve the targeted Contract Skills Development Goal will result in A) a **thirty percent (30%)** penalty of the value of the portion not achieved, excluding VAT, and B) the issuing of completion certificates only after the completion certificate of achieving the skills development goal, counter-signed by the relevant individuals has been submitted, unless the contractor can prove to the Employer's satisfaction that the non-achievement was beyond his/her control.

The contractor shall apportion the learners in the different construction activities based on the scope of work. The cost of accommodating learners will be determined by using Table 3 in the Standard and this cost will be used to determine the value in Rand and will be added to the provision for training as provided for in the Preliminary and General section in the Bill of Quantities/Pricing schedules/Activity schedule.

C3.7.6.1 Methodology

The contractor shall achieve the measurable contract skills development goal by providing opportunities to learners requiring structured workplace learning using one or a combination of any of the following in relation to work directly related to the contract or order:

Method 1: structured workplace learning opportunities for learners towards the attainment of a part or a full occupational qualification;

Method 2: structured workplace learning opportunities for apprentices or other artisan learners towards the attainment of a trade qualification leading to a listed trade (GG No. 35625, 31 August 2012) subject to at least sixty percent (60%) of the artisan learners being holders of public TVET college qualifications;

Method 3: work integrated learning opportunities for University of Technology or Comprehensive University students completing their national diplomas;

Method 4: structured workplace learning opportunities for candidates towards registration in a professional category by a statutory council listed in Table 1 above.

The contract skills participation goals, expressed in Rand, shall not be less than the contract amount multiplied by a percentage (%) factor given in Table 2 in the Standard for the applicable class of construction works.

Table 2: Contracting skills development goals for different classes of engineering and construction works contracts

Class of construction works as identified in terms of Regulation 25 (3) of the Construction Industry Regulations 2004		Construction skills development goal (CSDG) (%)
Designation	Description	
CE	Civil Engineering	0.25
CE and GB	Civil engineering and General Building	0.375
EE	Electrical Engineering works (buildings)	0.25
EP	Electrical Engineering works (infrastructure)	0.25
GB	General Building	0.5
ME	Mechanical Engineering works	0.25
SB	Specialist	0.25

The contractor shall apportion the learners in the different construction activities based on the scope of work. The cost of accommodating learners will be determined by using Table 3 in the Standard and this cost will be used to determine the value in Rand and will be added to the provision for training as provided for in the Preliminary and General section in the Bill of Quantities/Pricing schedules/Activity schedule.

Table 3: Notional Cost of Training per Headcount

Source: cidb Standard for Skills Development

Type of Training Opportunity	Provision for stipends (Unemployed learners only)	Provisions for mentorship	Provisions for additional costs*	Total costs	
				Unemployed learners	Employed learners
Method 1					
Occupational qualification	R7 000	R0	R9 000	R16 000	R9 000
Method 2					
TVET College graduates	R14 000	R0	R9 000	R23 000	N/A
Apprenticeship	R14 000	R0	R12 000	R26 000	R12 000
Method 3					
P1 and P2 learners	R24 000	R20 000	R4 500	R48 500	N/A
Method 4					
Candidates with a 3 year diploma	R37 000	R20 000	R4 500	R61 500	R20 000
Candidates with 4 year qualification	R47 000	R20 000	R4 500	R71 500	R20 000

Note: the required CPG will be recalculated based on the awarded tender amount and "Contract amount" once the beneficiaries have been appointed and actual costs are known. The notional cost of providing training opportunities will increase by CPI on an annual basis based on April CPI. Should the rates increase after bid award or during construction the rates will be adjusted as a re-measurable item.

- (a) (a) The successful contractor may employ part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates directly or through a Skills Development Agency (SDA), (A1 - List of cidb accredited SDAs).
- (b) The successful contractor must employ at least sixty percent (60%) of the learners from an FET / TVET college should the contractor select to have part/full occupational qualification learners and

- (c) The successful contractor shall employ at least **insert applicable percentage, both in words and figures** from eligible part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates in the employment of the employer.
- (d) The successful contractor shall ensure that no single method shall contribute more than seventy five percent (75%) of the CSDG for the contract.
- (e) The successful contractor may only place thirty three percent (33%) employed employees or that of his subcontractors contributing to the CSDG.
- (f) The contractor shall employ at least sixty percent (60%) of the learners from a Public FET / TVET college should the contractor select to have trade qualification learners (Method 2) contributing to the CSDG.
- (g) One of the objectives of the project is to train **insert applicable number, both in words and figures** Occupational qualifications, trade qualification, work integrated learners – P1 and P2 learners, professional candidates.

C3.7.6.2 Management

- (a) The successful contractor must keep site records regarding the part/full occupational qualification learners', trade qualification learners', work integrated learners' or candidates' (delete that which is not applicable) progress, site attendance, hours worked and other relevant information as required by the Standard.
- (b) The successful contractor shall provide the required number of appropriately qualified mentors to the maximum number of part/full occupational qualification learners, trade qualification learners, work integrated learners in the proportion as specified in the Standard.
- (c) The successful contractor shall provide a supervisor to manage the training of the part/full occupational qualification learners, trade qualification learners, work integrated learners, candidates.
- (d) The successful contractor shall submit to the employer's representative a baseline training plan in the specified format (Pro-forma A2) for the part/full occupational qualification learners, trade qualification learners, work integrated learners, candidates within 30 days of start of the contract.
- (e) The successful contractor shall submit to the employer's representative project interim report in the specified format (Pro-forma A3) on the progress of each of part/full occupational qualification learner, trade qualification learner, work integrated learner, candidate every three months.
- (f) The successful contractor shall submit to the employer's representative the names and particulars in the specified format (Pro-forma A4) of the supervisor, mentors for the part/full occupational qualification learners, trade qualification learners, and work integrated learners or within 30 days of start of the contract.
- (g) The successful contractor shall keep a daily record of all the part/full occupational qualification learners, trade qualification learners, work integrated learners, candidates on site and their daily activities and shall be made available to the employer's representative on request.
- (h) The successful contractor shall submit to the employer's representative the reports on the progress and status of the part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates with the monthly invoice for the payment certificate.
- (i) The successful contractor shall have health and safety inductions for all part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates (j)
The successful contractor shall conduct entry and exit medical tests of all part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates

- (k) The successful contractor shall provide personal protective equipment (PPE) to all part/full occupational qualification learners, trade qualification learners, work integrated learners or candidates at the start of their employment on site.
- (l) Based on the agreed skills methods the contractor may employ part/full Occupational Qualification Learners and /or Trade Qualification Learners and/or Work Integrated Learners and/or Candidates directly or through a Skills Development Agency (SDA), training provider or skills development facilitator (Form A1 - List of cidb accredited SDAs). The contractor shall ensure that no more than one Method shall be applied to any individual concurrently in the calculation of the CSDG for the contract.

C3.7.7 NATIONAL YOUTH SERVICE TRAINING AND DEVELOPMENT PROGRAMME (NYS)

The National Youth Service Training and Development Programme is *not applicable* to this project.

The programme shall be implemented in terms of the Implementation of the National Youth Service Programme under the Expanded Public Works (EPWP) and shall be priced in the CPG section of the Bills of Quantities. Monthly reports are to be submitted to the Employer's Representative.

Failure by the contractors to achieve the specified number to be trained in the NYS section of the CPG section within the Bills of quantities will result in a payment reduction as per bill of quantities per person, excluding VAT unless the contractor can prove to the Employer's satisfaction that the non-achievement was beyond his/her control.

C3.7.8 LABOUR-INTENSIVE WORKS

Labour Intensive Works is *not applicable* to this project.

Where labour intensive work is specified in the Bill of Qualities and indicated by "LI" the contractor must price for and include in rates. Contractors are expected to use their initiative to identify additional activities that can be done labour-intensively to comply with the set minimum labour intensity target. Allowance must be made for submitting monthly reports illustrating the value of the works executed under Labour Intensive Works.

Failure by the contractor to achieve the specified value of the Labour Intensive Participation Goal as stipulated within the Bills of quantities will result in a thirty percent (30%) penalty of the value of the works not done by means of labour intensive methods, excluding VAT, unless the contractor can prove to the Employer's satisfaction that the non-achievement was beyond his/her control.

Employer's objectives:

The employer's objectives are to deliver public infrastructure using labour-intensive methods in accordance with EPWP Guidelines.

Labour-intensive works:

Labour-intensive works shall be constructed/maintained using local workers who are temporarily employed in terms of the scope of work. A **thirty percent (30%)** penalty of the value of the works will be imposed on items where unauthorised use of plant was used to carry out work which was to be done labour-intensively.

Labour-intensive competencies of supervisory and management staff:

Contractors shall only engage supervisory and management staff in labour-intensive works that have completed the skills programme including Foremen/ Supervisors at NQF level 4 "National Certificate: Supervision of Civil Engineering Construction Processes" and Site Agent/ Manager at NQF level 5 "Manage Labour-Intensive Construction Processes" or equivalent QCTO qualifications (See Appendix C) at NQF outlined in Table 1

C3.7.8.1

GENERIC LABOUR-INTENSIVE SPECIFICATION

Contractors are referred to the Guidelines for the Implementation of Labour-intensive Infrastructure Projects under the Expanded Public Works Programme (EPWP) for the generic labour-intensive specification applicable to the contract.

This specification establishes general requirements for activities which are to be executed by hand involving the following:

- trenches having a depth of less than 1.5 metres
- stormwater drainage
- roads
- sidewalks and non-motorised transport infrastructure
- water and sanitation

Precedence

Where this specification is in conflict with any other standard or specification referred to in the Scope of Works to this Contract, the requirements of this specification shall prevail

Hand excavateable material

Hand excavateable material is:

a) granular materials:

- i) whose consistency when profiled may in terms of table 2 be classified as very loose, loose, medium dense, or dense; or
- ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 15 blows of a dynamic cone penetrometer is required to penetrate 100mm;

b) cohesive materials:

- i) whose consistency when profiled may in terms of table 2 be classified as very soft, soft, firm, stiff and stiff / very stiff; or
- ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 8 blows of a dynamic cone penetrometer is required to penetrate 100mm;

Note

- 1) A boulder is material with a particle size greater than 200mm, a cobble and gravel is material between 60 and 200mm.
- 2) A dynamic cone penetrometer is an instrument used to measure the in-situ shear resistance of a soil comprising a drop weight of approximately 10 kg which falls through a height of 400mm and drives a cone having a maximum diameter of 20mm (cone angle of 60° with respect to the horizontal) into the material being used.

Table 2: Consistency of materials when profiled			
GRANULAR MATERIALS		COHESIVE MATERIALS	
CONSISTENCY	DESCRIPTION	CONSISTENCY	DESCRIPTION
Very loose	Crumbles very easily when scraped with a geological pick.	Very soft	Geological pick head can easily be pushed in as far as the shaft of the handle.
Loose	Small resistance to penetration by sharp end of a geological pick.	Soft	Easily dented by thumb; sharp end of a geological pick can be pushed in 30-40 mm; can be moulded by fingers with some pressure.
Medium dense	Considerable resistance to penetration by sharp end of a geological pick.	Firm	Indented by thumb with effort; sharp end of geological pick can be pushed in up to 10 mm; very difficult to mould with fingers; can just be penetrated with an

Dense	Very high resistance to penetration by the sharp end of a geological pick; requires many blows for excavation.	Stiff	Can be indented by thumb-nail; slight indentation produced by pushing geological pick point into soil; cannot be moulded by fingers.
Very dense	High resistance to repeated blows of a geological pick.	Very stiff	Indented by thumb-nail with difficulty; slight indentation produced by blow of a geological pick point.

Trench excavation

All hand excavateable material in trenches having a depth of less than 1,5 metres shall be excavated by hand.

Compaction of backfilling to trenches (areas not subject to traffic)

Backfilling to trenches shall be placed in layers of thickness (before compaction) not exceeding 100mm. Each layer shall be compacted using hand stampers;

- a) to ninety percent (90%) Mod AASHTO;
- b) such that in excess of 5 blows of a dynamic cone penetrometer (DCP) is required to penetrate 100 mm of the backfill, provided that backfill does not comprise more than ten (10%) gravel of size less than 10mm and contains no isolated boulders, or
- c) such that the density of the compacted trench backfill is not less than that of the surrounding undisturbed soil when tested comparatively with a DCP.

Excavation

All excavateable material including topsoil classified as hand excavateable shall be excavated by hand. Harder material may be loosened by mechanical means prior to excavation by hand. Any material which presents the possibility of danger or injury to workers shall not be excavated by hand.

Clearing and grubbing

Grass and bushes shall be cleared by hand.

Shaping

All shaping shall be undertaken by hand.

Loading

All loading shall be done by hand. Haulage equipment should be selected in a manner that allows loading by hand to the greatest extent possible.

Haul

Excavation material shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150m.

Offloading

All material, however transported, is to be off-loaded by hand, unless tipper-trucks are utilised for haulage.

Spreading

All material shall be spread by hand.

Compaction

Small areas may be compacted by hand provided that the specified compaction is achieved. Appropriate rollers should be used where higher (than can be achieved by hand) levels of compaction are required or for large areas.

Grassing

All grassing shall be undertaken by sprigging, sodding, or seeding by hand.

Stone pitching and rubble concrete masonry

All stone required for stone pitching and rubble concrete masonry, whether grouted or dry, must to be collected, loaded, off loaded and placed by hand.

Sand and stone shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150m.

Grout shall be mixed and placed by hand.

Manufactured Elements

Elements manufactured or supplied by the Contractor, such as manhole rings and cover slabs, precast concrete planks and pipes, masonry units and edge beams shall not individually, have a mass of more than 320kg. Where the mass of an element exceeds 55 kg, consideration should be given to the size of the element relative to its total mass related to the number of workers who would be needed to lift such mass

C3.8 Submission of Accrual Reports

The Contractor shall submit accrual reports to the client representative at the end of March and September each year for the duration of the Service Contract period from the date of appointment up to and including project closeout. This is to ensure that PMTE complies with the accounting framework GRAP, which requires that PMTE disclose all its accruals as at the end of each reporting date.

C.3.9 Submission of Monthly Local Material Utilisation Report (Local Content)

The contractors shall be responsible for record keeping, documenting and submission of monthly local material utilization report with supporting documentation to the Employer's representative within 7 working days of the beginning of the successive month, in terms of DTI&C designated industry/sector/sub-sector schedule as per the PA36 and Annexures C attached to the tender document. The final percentage achievement to be reconciled upon completion of the project and form part of the final account.

Failure by the contractors to achieve the specified percentage of local content per designated industry/sector/sub-sector as listed will result in a thirty percent thirty percent (30%) penalty of the value not achieved, excluding VAT, unless the contractor can prove to the Employer's satisfaction that the non-achievement was beyond his/her control. Allowance must be made for submitting monthly reports illustrating the value of local material utilisation report.

Examples of calculating CPGs and related penalties

CPGs values are based on the Tender Amount at the time of the award. Determining the actual values is based either on the Tender Amount including allowances and Vat or the Tender Amount at the time of award excluding allowances and VAT, where Allowances include the following:

- Provisional amounts
- CPG allowances
- Nominated and/or selected subcontractors
- Contract price adjustment (Not provided for within the B of Q by NDPWI)
- Contingency amounts (Not provided for within the B of Q by NDPWI)

CPG values in the CPG Bill of Quantities Section will be recalculated based on the “Tender Amount” or the “Contract Amount” which ever applicable and the provisional amounts adjusted accordingly. Sanctions (penalties) are applicable to all CPGs where the contractor fails to achieve the minimum specified requirements, unless the contractor can prove to the Employer’s satisfaction that the non-achievement was beyond his/her control. No penalties will be applied should the CPG value, based on the original “Tender Amount” or the “Contract Amount”, has been achieved.

1.1. 30% SMME mandatory subcontracting CPG

When applicable, a minimum of 30% of the total tender amount at the time of award, including all allowances and VAT are to be subcontracted to SMMEs.

CPG calculation example:

“Tender Amount” = R150 mil

CPG 30% subcontracting value = R45 Mil

Calculation of penalty:

Percentage penalty applicable = 5% as specified in the Scope of Works (PG01.1)

CPG Achieved = R30 Mil (R15 Mil shortfall)

Penalty = R15 Mil x 5% = R750 000 Excl. VAT

1.2 Targeted Local Building Material Manufacturers CPG

When applicable, the CPG is expressed as a percentage of the “Contract Amount”, i.e. the Tender Amount at the time of award excluding allowances and VAT.

CPG calculation example:

“Tender Amount” = R150 Mil all inclusive of allowances and VAT

“Contract Amount” = R130 Mil (Tender Amount at the time of award excluding allowances and VAT)

CPG to be achieved = 5% as specified in the Scope of Works (PG01.1)

CPG target value = R130 Mil x 5% = R 6,5 Mil (Value of material to be purchased from local manufacturers, excluding VAT)

Calculation of penalty:

Percentage penalty applicable = 10% as specified in the Scope of Works (PG01.1)

CPG target value = R6,5 Mil excluding VAT

CPG Achieved = R5,5 Mil (R1 Mil shortfall) excluding VAT

Penalty = R1 Mil x 10% = R100 000 excluding VAT

1.3 Targeted Local Building Material Suppliers CPG

When applicable, the CPG is expressed as a percentage of the “Contract Amount”, i.e. the Tender Amount at the time of award excluding allowances and VAT.

CPG calculation example:

“Tender Amount” = R150 Mil all inclusive of allowances and VAT

“Contract Amount” = R130 Mil (Tender Amount at the time of award excluding allowances and VAT)

CPG to be achieved = 5% as specified in the Scope of Works (PG01.1)

G target value = R130 Mil x 5% = R 6,5 Mil (Value of material to be purchased from local suppliers, excluding VAT)

Calculation of penalty:

Percentage penalty applicable = 20% as specified in the Scope of Works (PG01.1)

CPG target value = R6,5 Mil excluding VAT

CPG Achieved = R5,5 Mil (R1 Mil shortfall) excluding VAT

Penalty = R1 Mil x 20% = R200 000 excluding VAT

1.4 Targeted Local Labour Skills Development CPG

When applicable, the CPG is expressed as a percentage of the total number working days required to complete the Works.

CPG calculation example:

"Tender Amount" = R150 Mil all inclusive of allowances and VAT

"Contract amount" = R130 Mil (Tender Amount at the time of award excluding allowances and VAT)

Number of working days required to complete the Works based on the construction period = 600 days

CPG percentage participation to be achieved = 30% as specified in the Scope of Works (PG01.1)

Required number of working days training to be provided = 180 days (600 x 30%)

Calculation of penalty:

Payment reduction = R 5 000 per day for not providing training as specified in the Scope of Works (PG01.1)

CPG = 600 working days x 30% = 180 working days training to be provided

CPG Achieved = 160 days (20 days shortfall where no training was provided)

Penalty = 20 days x R5 000 payment reduction per day = R100 000 excluding VAT

1.5 National Youth Service Programme (NYS) CPG

When applicable, a separate NYS Bill of Quantities will be included in the tender documentation will indicate the number of beneficiaries to be trained.

Calculation of penalty:

Payment reduction per person not trained as stipulated in the NYS Bill of Quantities = R 2 500 per person.

Total number of NYS Beneficiaries as stipulated in the NYS Bill of Quantities = 25

Total Number of NYS beneficiaries trained = 20 (shortfall of 5 beneficiaries)

Penalty = 5 x R2 500 = R12 500 Excl. VAT

1.6 Labour Intensive Works CPG

When applicable, the work to be done by way of Labour intensive methods are specified in the Bills of Quantities with a "LI".

CPG calculation example:

"Tender Amount" = R150 Mil all inclusive of allowances and VAT

"Contract Amount" = R130 Mil (Tender Amount at the time of award excluding allowances and VAT)

CPG value = R10 Mil (Total value of labour-intensive works specified in the Bills of Quantities)

Calculation of penalty:

CPG value = R10 Mil

Percentage penalty applicable = 30% as specified in the PG01.1 Scope of Work

CPG Achieved = 9 Mil (R1 Mil shortfall)

Penalty = R1 Mil x 30% = R300 000 Excl. VAT

1.7 Cidb BUILD Programme: Enterprise Development

When applicable, the Enterprise Development CPG expressed as a percentage of the "Contract amount" = Tender amount at the time of award excluding allowances and VAT. Failure to achieve the minimum Targeted Local Labour Skills Development CPG will result in a payment reduction of an amount specified in the Scope of Works (PG01.1) per working day where training was not provided.

monetary value of training to be provided is stipulated in the CPG BoQ section. The number of beneficiaries to be trained is dependent on the "Contract Amount" as well the number of beneficiaries appointed which will generally resort under the Grade 1 and 2 cidb categories. The provisional amount will therefore be adjusted in terms of the "contract Amount", the number of beneficiaries to be trained and the actual cost for providing the training.

Part 1: Calculation of 5% CPG example:

"Tender Amount" = R150 Mil all inclusive of allowances and VAT

"Contract Amount" = R130 Mil (Tender Amount at the time of award excluding allowances and VAT)

CPG percentage participation to be achieved = 5% as specified in the Scope of Works (PG01.1)

CPG value = R6,5 Mil (Value of work to be subcontracted to emerging enterprises)

Calculation of penalty

Percentage penalty applicable = 30% as specified in the Scope of Works (PG01.1)

CPG Minimum 5% = R6,5 Mil

Achieved = R5,5 Mil (Only subcontracted work to the value of R5,5 Mil, i.e. R1 Mil shortfall)

Penalty = R1 Mil x 30% = R300 000 Excl. VAT

Part 2: Calculations in terms of training to be done:

The number of enterprises to be developed is subject to the contract amount and the apportionment of the work as per Example 1 below.

Number of enterprises to be trained = 6 x 1 GB subcontractors

Total cost for training = R 1 660 000

Calculation of penalty

Total number of enterprises to be trained = 6

Total number trained = 4 (2 Shortfall)

Training cost per beneficiary = R1 660 000 / 6 = R 276 666,67 per beneficiary

Penalty = R 276 666,67 x 2 x 30% = R166 000 Excl. VAT

B of Q Item	Description	Unit	Rate	Quantity	Amount (R)
5	Enterprise Development				
5.1	Enterprise Development of Targeted Enterprise or JV partners				
5.1.1	Appointment of training co-ordinator	Per Quarter	45 000	8	360 000
5.1.2	Appointment of Mentor /Training Service provider	Per Quarter	135 000	8	1 080 000
5.1.3	Needs Analysis and Enterprise Development Plan per Targeted Enterprise	No.	5 000	6	30 000
5.1.4	Monitoring and Interim reporting per targeted enterprise	Per Quarter	20 000	8	160 000
5.1.5	Project Completion report per Targeted Enterprise	No.	5 000	6	30 000
	Provisional Sum to be carried over to CPG bill of quantities				1 660 000

"Contract amount" Tender amount excl. allowances and VAT 130 000 000

CPG Monetary value (5%) to be subcontracted to beneficiaries for training 6 500 000

No of enterprises based on the CPG value 6

Grade 1 / 2
GB/CE,ETC.

Contract period (months) 24

Note: Rates to be determined by PQS and adjusted to accepted quotation amounts

1.8 Cidb BUILD Programme: Skills Development (Principal contractor including subcontractors and consultants)

When applicable, the contract skills development participation goals, expressed in Rand, shall be no less than the "contract amount" multiplied by a percentage (%) factor for the applicable class of construction works.

The monetary value of training to be provided is stipulated in the CPG BoQ section. The number of beneficiaries to be trained is dependent on the "Contract Amount" as well the number of beneficiaries appointed which will generally resort under the Grade 1 and 2 cidb categories. The provisional amount will therefore be adjusted in terms of the "Contract Amount", the number of beneficiaries to be trained from which Method and the actual cost for providing the training.

CPG Calculation

Table 2: Contracting skills development goals for different classes of engineering and construction works contracts

Source: cidb Standard for Developing Skills through Infrastructure Contracts as published in the Government Gazette Notice No. 43495 of 3 July 2020 (Page 7)

Class of construction works as identified in terms of Regulation 25 (3) of the Construction Industry Regulations 2004		Construction skills development goal (CSDG) (%)
Designation	Description	
CE	Civil Engineering	0.25
CE and GB	Civil engineering and General Building	0.375
EE	Electrical Engineering works (buildings)	0.25
EP	Electrical Engineering works (infrastructure)	0.25
GB	General Building	0.5
ME	Mechanical Engineering works	0.25
SB	Specialist	0.25

"Contract amount" = Tender amount at the time of award excluding allowances and expenses, and VAT

Contractor CPG:

CPG calculation

"Contract amount" x factor from Table 3 above.

CPG calculation example:

"Tender Amount" = R150 Mil for GB, all inclusive of allowances and VAT

"Contract Amount" = R130 Mil (Tender Amount at the time of award excluding allowances and VAT)

Factor for GB = 0,5% (as per Table 2 above)

CPG in R value = R130 Mil x 0,5% = R650 000 i.e. total cost of training to amount to R650 000

Calculation of penalty:

Percentage penalty applicable = 30% as specified in the Scope of Works (PG01.1)

CPG value = R650 000

Achieved = R550 000 = R100 000 Shortfall

Penalty = R100 000 x 30% = R30 000 Excl. VAT

Calculations based on "Contract Amount" after bid award and after bid award and appointment of beneficiaries

Actual CPG training requirement value after award upon selecting method/s of training and appointment of beneficiaries = R676 000 (Table 4 below) and the provisional amount allowed for to be adjusted accordingly. The new monetary value of training required will then form the basis for determining penalties applicable. No penalties will be applied should the CPG value, based on the "Contract Amount" be achieved.

Table 4: Notional cost recalculation upon appointment of beneficiaries.

Source: cidb Standard for Developing Skills through Infrastructure Contracts as published in the Government Gazette Notice No. 43495 of 3 July 2020 (Page 10)

Skills Types	Number of learners	Notional Cost / Learner / Quarter	Notional cost / learner / year	Total Notional Cost over 12 months Contract
Method 2: Workplace learning opportunities, with unemployed TVET graduates	2	R23 000	R92 000	R184 000
Method 3: Candidacy for an unemployed learner with a 3-year qualification	2	R61 500	R246 000	R492 000
Total	4			R676 000

Note: the required CPG will be recalculated based on the awarded Tender amount and "Contract Amount" once the beneficiaries have been appointed and actual costs are known

Note: The notional cost of providing training opportunities will increase by CPI on an annual basis based on April CPI as published by Stats SA. The rates will be adjusted as an adjustment to the provisional amounts should the rates increase after bid award or during the construction period



HIV/AIDS Specification and Schedule

Occupational Health and Safety **Specification**

Electrical Technical Specification



DEPARTMENT OF PUBLIC WORKS

OCCUPATIONAL HEALTH AND SAFETY

HEALTH & SAFETY SPECIFICATIONS

FOR

**BETHULIE DEPARTMENT OF CORRECTIONAL SERVICES
IMPLEMENTATION OF EMERGENCY BACK-UP POWER
SUPPLY**

MANAGED ON BEHALF OF

**THE NATIONAL DEPARTMENT OF
PUBLIC WORKS**



Contents

Page Number

1. Preamble	4
2. Scope of Health & Safety Document	5
3. Purpose	5
4. Definitions	5
5. Occupational Health & Safety Management	6
5.1 Structure & Organization of OH&S Responsibilities	6
5.2 Communication & Liaison	7
6. Interpretation	8
7. Responsibilities	8
7.1 Client	8
7.2 Principal Contractor	9
7.3 Contractor	9
8. SCOPE OF WORK	9-10
9. Health and Safety file	11
10. OH&S Goals & Objectives & Arrangements for Monitoring & Reviewing OH&S Performance	11
11. Identification of Hazards & Development of Risk Assessments, Standard Working Procedures (SWP) & Method Statements	11
12. arrangements for Monitoring and Review	11
12.1 Monthly Audit by Client and/or its Agent on its behalf	11
12.2 Other Audits & Inspections	12
12.3 Reports	12
12.4 Review	12
12.5 Site Rules and other Restrictions	13
12.6 Training	13
12.7 Accident & Incident Investigation	14
12.8 H&S Representatives (SHE-Reps) & H&S Committees	14
13. Project/site specific requirements	15-16
14. Outlined data, References & information on certain and/or specific obligatory requirements to ensure compliance	17-27
15. The principal contractor's general duties	27
16. The principal contractor's specific duties	28
17. The principal contractor's specific duties with regard	28
18. General notes to the principal contractor	29
19. House keeping	29
20. Lockout systems	30
21. Incident investigation	30
22. General	30
23. Important Lists and Records to be kept	30
23.1 List of Appointments	31
23.2 List of Record Keeping Responsibilities	31
23.3 Inspection Checklist	32-34
24. Health & safety file compilation & content (document attached)	35
25. Safety and switching procedures for electrical	35
26. Guide to the general administrative regulations (attached)	35
27. Important contact details (health & safety only) (attached)	35

attachments:

14. Health and safety file compilation and content
15. Safety and switching procedures for electrical
16. **COVID 19 Guidelines (These items will be included into the Health and Safety Plan developed by the Appointed service Provider)**
 - 16.1 Covid - 19 Management plan
 - 16.2 Covid - 19 Risk Assessment
 - 16.3 Covid 19 Policy



16.4 Employee Screening declarations



16.5 PPE Issue Register

16.6 Compliance Employees Appointments

16.7 Toolbox Talks

16.8 Safe Work Procedures

16.9 Checklists

16.10 Training Material

16.11 Posters

16.12 Compliance Officer Appointments

1. PREAMBLE

*In terms of Construction Regulation 4(1) (a) of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), the Department of Public Works, as the Client and/or its Agent on its behalf, shall be responsible to prepare Health & Safety Specifications for any intended construction project and provide any Principal Contractor who is making a bid or appointed to perform construction work for the Client and/or its Agent on its behalf with the same.

The Client's further duties are as described in The Act and the Regulations made there-under. The Principal Contractor shall be responsible for the Health & Safety Policy for the site in terms of Section 7 of the Act and in line with Construction Regulation 5 as well as the Health and Safety Plan for the project.

This 'Health and Safety Specifications' document is governed by the "Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), hereinafter referred to as 'The Act'. Notwithstanding this, cognizance should be taken of the fact that no single Act or its set of Regulations can be read in isolation. Furthermore, although the definition of Health and Safety Specifications stipulates 'a documented specification of all health and safety requirements pertaining to associated works on a construction site, so as to ensure the health and safety of persons', it is suggested that the entire scope of the Labor legislation, including the Basic Conditions of Employment Act be considered as part of the legal compliance system. With reference to this specification document this argument is limited to all health, safety and environmental issues pertaining to the site of the project as referred to here-in. It is reiterated that environmental management can not be disregarded.

Due to the wide scope and definition of construction work, every construction activity and site will be different, and may change even on a daily basis. Therefore, due caution is to be taken when drafting the Health and Safety Plan based on these Health and Safety Specifications. Prior to drafting the Health and Safety Plan, and in consideration of the information contained here-in, the contractor shall set up a Risk Assessment Program to determine any risk associated with any hazard at the construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard. This Risk Assessment and the steps identified will be the basis or point of departure for the Health and Safety Plan. The Health and Safety Plan shall include documented 'Methods of Statement' detailing the key activities to be performed in order to reduce as reasonably as practicable the hazards identified in the Risk Assessment.

The Department of Public Works is tasked to provide accommodation and operational facilities to a very large proportion of the approximate 40 National Departments responsible for the governance of the Department of Public Works. A very large number of State employees and public users of the facilities and the services provided there-in directly interacts with the facilities provided by the well-being, health and safety of a great number of people. This Department thus has directly or indirectly, an impact on the Republic of South Africa as well as the National Parliament.

In this a high premium is to be placed on the health and safety of the most valuable assets of the Department of Public Works. These are its personnel, the personnel of its Clients and the physical assets of which it is the custodian and may also include the public as well. The responsibilities the Department and relevant stakeholders have toward its employees and other people present in the facilities or on the sites are captured further in this specification document. These responsibilities stem from both moral, civil and a variety of legal obligations.

*Every effort has been made to ensure that this specification document is accurate and adequate in all respects. Should it however, contain any errors or omissions they may not be considered as grounds for claims under the contract for additional reimbursement or extension of time, or relieve the Principal Contractor from his responsibilities and accountability in respect of the project to which this specification document pertains.

***2. SCOPE OF HEALTH AND SAFETY SPECIFICATION DOCUMENT**

The Health and Safety Specifications pertaining to the project; Phase 1 and Phase 2" etc. etc.), cover the subjects contained in the index and is intended to outline the normal as well as any special requirements of the Department pertaining to the health and safety matters (including the environment) applicable to the project in question. These Specifications should be read in conjunction with the Act, the Construction Regulations and all other Regulations and Safety Standards which were or will be promulgated under the Act or incorporated into the Act and be in force or come into force during the effective duration of the project. The stipulations in this specification, as well as those contained in all other documentation pertaining to the project, including contract documentation and technical

specifications shall not be interpreted, in any way whatsoever, to countermand or nullify any stipulation of the Act, Regulations and Safety Standards which are promulgated under, or incorporated into the Act.

3. PURPOSE

The Department is obligated to implement measures to ensure the health and safety of all people and properties affected under its custodianship or contractual commitments, and is further obligated to monitor that these measures are structured and applied according to the requirements of these Health and Safety Specifications.

The purpose of this specification document is to provide the relevant Principal Contractor (and his /her contractor) with any information which might affect the health and safety of persons at work and the health and safety of persons in connection with the use of plant and machinery; and to protect persons other than persons at work against hazards to health and safety arising out of or in connection with the activities of persons at work during the carrying out of construction work for the Department of Public Works. The Principal Contractor (and his /her contractor) is to be briefed on the significant health and safety aspects of the project and to be provided with information and requirements on inter alia:

- a) Safety considerations affecting the site of the project and its environment;
- b) Health and safety aspects of the associated structures and equipment;
- c) Submissions on health and safety matters required from the Principal Contractor (and his /her contractor); and
- d) The Principal Contractor's (and his /her contractor) health & safety plan.

It must be ensured that the Principal Contractor (and his /her contractor) is fully aware of what is expected from him/her with regard to the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and the Regulations made there-under including the applicable safety standards, and in particular in terms of Section 8 of the Act.

The **Occupational Health and Safety Act (Sixth Revised Edition: 16.2 August 2016), 1993 (Act 85 of 1993)** in its entirety shall apply to the contract to which this specification document applies. The Construction Regulations promulgated on 18 July 2003 and incorporated into the above Act by Government Notice R 1010, published in Government Gazette 25207 shall apply to any person involved in construction work pertaining to this project, as will the Act read with the **Amended Construction Regulation 2014**

4. DEFINITIONS

"Purpose of the Act" –NB: This information below shall be read with the new Construction Regulations 2017(Sixth Revised Edition: 16.2 August 2016), 1993 (Act 85 of 1993)

To provide for the health and safety of persons at work and the health and safety of persons in connection with the use of plant and machinery; the protection of persons other than persons at work against hazards to health and safety arising out of or in connection with the activities of persons at work; to establish an advisory council for occupational health and safety; and to provide for matters connected therewith.

"Agent" –Means any person who acts as a representative for a client;

"Client" –Means any person for whom construction work is performed;

"Construction Work" is defined as any work in connection with –

- (a) the erection, maintenance, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure;
- (b) the installation, erection, dismantling or maintenance of a fixed plant where such work includes the risk of a person falling;
- (c) the construction, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system or any similar civil engineering structure; or
- (d) the moving of earth, clearing of land, the making of an excavation, piling, or any similar type of work;

"Contractor" –means an employer, as defined in Section 1 of the Act, who performs construction work and includes



"Health and Safety File" –means a file, or other record in permanent form, containing the information required as templated in the regulations;

"Health and Safety Plan" –means a documented plan which addresses hazards identified and includes safe work procedures to mitigate, reduce or control the hazards identified;

"Health and Safety Specification" –means a documented specification of all health and safety requirements pertaining to the associated works on a construction site, so as to ensure the health and safety of persons;

"Method Statement" –means a document detailing the key activities to be performed in order to reduce as reasonably as practicable the hazards identified in any risk assessment;

"Principal Contractor" –means an employer, as defined in section 1 of the Act who performs construction work and is appointed by the client to be in overall control and management of a part of or the whole of a construction site;

"Risk Assessment" –means a program to determine any risk associated with any hazard at a construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard.

***5. OCCUPATIONAL HEALTH & SAFETY MANAGEMENT**

5.1 Structure and Organization of OH&S Responsibilities

5.1.1. Overall Supervision and Responsibility for OH&S

- * The Client and/or its Agent on its behalf to ensure that the Principal Contractor, appointed in terms of Construction Regulation 4(1)(c), implements and maintains the agreed and approved H&S Plan.
- * The Chief Executive Officer of the Principal Contractor in terms of Section 16 (1) of the Act to ensure that the Employer (as defined in the Act) complies with the Act. The pro forma Legal Compliance Audit may be used for this purpose.
- * All OH&S Act (85 /1993), Section 16 (2) appointee/s as detailed in his/her/their respective appointment forms to regularly, in writing, report to their principals on matters of health and safety per routine and ad hoc inspections and on any deviations as soon as observed, regardless of whether the observation was made during any routine or ad hoc inspection and to ensure that the reports are made available to the principal Contractor to become part of site records (Health & Safety File).
- * The Construction Supervisor and Assistant Construction Supervisor/s appointed in terms of Construction Regulation 6 to regularly, in writing, report to their principals on matters of health and safety per routine and ad hoc inspections and on any deviations as soon as observed, regardless of whether the observation was made during any routine or ad hoc inspection and to ensure that the reports are made available to the principal Contractor to become part of site records (Health & Safety File).
- * All Health and Safety Representatives (SHE-Reps) as per Section 18 of the Act.

5.1.2. Further (Specific) Supervision Responsibilities for OH&S

Several appointments or designations of responsible and /or competent people in specific areas of construction work are required by the Act and Regulations. The following competent appointments, where applicable, in terms of the Construction Regulations are necessary to ensure compliance to the Act, Regulations and Safety Standards.

Required appointments as per the Construction Regulations:-

Item	Regulation	Appointment	Responsible Person
	4(1)(c)	Principal contractor for each phase or project	Client
2.	5.(3)(b)	Contractor	Principal Contractor
3.	5(11)	Contractor	Contractor
4.	6(1)	Construction supervisor	Contractor
5.	6(2)	Construction supervisor sub-ordinates	Contractor
6.	6(6)	Construction Safety Officer	Contractor
7.	7(1)	Person to carry out risk assessment	Contractor
8.	7(4)	Trainer/Instructor	Contractor
9.	8(1)(a)	Fall protection planner	Contractor
10.	10 (a)	Formwork & support work supervisor	Contractor
11.	10(e) + (f)	Formwork & support work examiner	Contractor
12.	11(1)	Excavation supervisor	Contractor
13.	11(3)(b)(ii)(b)	Professional engineer or technologist	Contractor
14.	11(3)(k)	Explosives expert	Contractor
15.	12(1)	Supervisor demolition work	Contractor
16.	12(2) + (3)	Demolition expert	Contractor
17.	12(11)	Explosives expert	Contractor
18.	14(2)	Scaffold supervisor	Contractor
19.	15(1)	Suspended platform supervisor	Contractor
20.	15(2)(c)	Compliance plan developer	Contractor
21.	15(8)(c)	Suspended platform expert	Contractor
22.	15(13)	Outrigger expert	Contractor
23.	17(8)(a)	Material hoist inspector	Contractor
24.	18(1)	Batch plant supervisor	Contractor
25.	18(7)	Batch plant operator	Contractor
26.	19(2)(b)	Power tool expert	Contractor
27.	19.2 (g) (i)	Power tool controller	Contractor
28.	20(f)	Tower crane operator	Contractor
29.	21(1)(d)(i)	Construction vehicle and mobile plant operator	Contractor
30.	21(1)(j)	Construction vehicle and mobile plant inspector	Contractor
31.	22(d)	Temporary electrical installations inspector	Contractor
32.	22 (e)	Temporary electrical installations controller	Contractor
33.	26 (a)	Stacking and storage supervisor	Contractor
34.	27 (h)	Fire equipment inspector	Contractor

This list may be used as a reference or tool to determine which components of the Act and Regulations would be applicable to a particular site, as was intended under the Chapter "Preamble" above. (Page 4)

5.2 Communication & Liaison

- 5.2.1 OH&S Liaison between the Employer, the Principal Contractor, the other Contractors, the Designer and other concerned parties will be through the H&S Committee as per the procedures determined by the H&S Committee.
- 5.2.2 In addition to the above, communication may be directly to the Client or his appointed Agent, verbally or in writing, as and when the need arises.
- 5.2.3 Consultation with the workforce on OH&S matters will be through their Supervisors and H&S Representatives ('SHE – Reps')
- 5.2.4 The Principal Contractor will be responsible for the dissemination of all relevant OH&S information to the other Contractors e.g. design changes agreed with the Client and/or its Agent on its behalf and the Designer, instructions by the Client and/or his/her agent, exchange of information between Contractors, the reporting of hazardous/dangerous conditions/situations etc.

The Occupational Health and Safety Act and all its Regulations, with the exception of the Construction Regulations, distinguish between the roles, responsibilities and functions of employers and employees respectively. It views consultants and contractors as employees of the "owner" of a construction or operational project, the "owner" being regarded as the employer. Only if formally agreed to by way of the written agreement in this regard between the "owner(s)" and consultant and /or between the "owner(s)" and the contractor(s), will these assumptions be relinquished in favor of the position agreed upon between the relevant parties.

(ii) The position taken by the Construction Regulations is that the "owner", in terms of its instructions, operates (has to operate) in the role of client as per relevant definition. The contractors working for the "client" are seen to be in two categories, i.e. the Principal Contractor and Contractors. The Principal Contractor has to take full responsibility for the health and safety on the site of the relevant project / contract. This includes monitoring health and safety conditions and overseeing administrative measures required by the Construction Regulations from all contractors on the project site. (Ordinary / sub) Contractors are required to operate under the scrutiny and control (in terms of all health and safety measures which are covered in the Construction Regulations) of the Principal Contractor. Where for the work the Principal Contractor will have to execute himself, practical health and safety measures are applicable, he will also be subject to the relevant requirements with which (ordinary / sub) Contractors have to comply. The Principal Contractor will, however, not have to actually fulfill such requirements in respect of any of the work / functions of any (ordinary / sub) Contractors on the site for which he has been appointed as Principal Contractor. However, he has to monitor / oversee such processes, ensuring that the requirements are complied with and that the required appointments / evaluations / inspections / assessments and tests are done and that the records are duly generated and kept as prescribed in the Construction Regulations. This has to feature clearly in the Principal Contractor's Health and Safety Plan.

7. RESPONSIBILITIES

7.1 Client

7.1.1 The Client or his appointed Agent on his behalf will appoint each Principal Contractor for the project in writing for assuming the role of Principal Contractor as intended by the Construction Regulations and determined by the Bills of Quantities.

7.1.2 The Client or his appointed Agent on his behalf shall discuss and negotiate with the Principal Contractor the contents of the health and safety plan of the both Principal Contractor and Contractor for approval.

7.1.3 The Client or his appointed Agent on his behalf will take reasonable steps to ensure that the health and safety plan of both the Principal Contractor and Contractor is implemented and maintained. The steps taken will include periodic audits at intervals of at least once every month.

7.1.4 The Client or his appointed Agent on his behalf will prevent the Principal Contractor and/or the Contractor from commencing or continuing with construction work should the Principal Contractor and/or the Contractor at any stage in the execution of the works be found to:

- have failed to have complied with any of the administrative measures required by the Construction Regulations in preparation for the construction project or any physical preparations necessary in terms of the Act;
- have failed to implement or maintain their health and safety plan;
- have executed construction work which is not in accordance with their health and safety plan; or
- Act in any way which may pose a threat to the health and safety of any person(s) present on the site of the works or in its vicinity, irrespective of him/them being employed or legitimately on the site of the works or in its vicinity.

7.2 Principal Contractor

7.2.1 The Principal Contractor shall accept the appointment under the terms and Conditions of Contract. The Principal Contractor shall sign and agree to those terms and conditions and shall, before commencing work, notify the Department of Labor of the intended construction work in terms of Regulation 3 of the Construction Regulations. Annexure B of this Specification contains a "Notification of Construction Work" form. The Principal Contractor shall submit the notification in writing prior to commencement of work and inform the Client or his Agent accordingly.

7.2.2 The Principal Contractor shall ensure that he is fully conversant with the requirements of this Specification all relevant health and safety legislation. This Specification is not intended to supersede the Act nor the Construction Regulations or any part of either. Those sections of the Act and the Construction Regulations which apply to the scope of work to be performed by the Principal Contractor in terms of this contract (entirely or in part) will continue to be legally required of the Principal Contractor. The Principal Contractor will in no manner or means be absolved from the responsibility to comply with all applicable sections of the Act, the Construction Regulations or any Regulations proclaimed under the Act or which may perceivable be applicable to this contract.

7.2.3 The Principal Contractor shall provide and demonstrate to the Client a suitable and sufficiently documented Health and safety plan based on this Specification, the Act and the Construction Regulations, which shall be applied from the date of commencement of and for the duration of execution of the works. This plan shall, as appendices, include the health and safety plans of all Sub-contractors for which he has to take responsibility in terms of this contract.

7.2.4 The Principal Contractor shall provide proof of his registration and good standing with the Compensation Fund or with a licensed compensation insurer prior to commencement with the works.

7.2.5 The Potential Principal Contractor shall, in submitting his tender, demonstrate that he has made provision for the cost of compliance with the specified health and safety requirements, the Act and Construction Regulations. (Note: This shall have to be contained in the conditions of tender upon which a tenderer's offer is based.)

7.2.6 The Principal Contractor shall consistently demonstrate his competence and the adequacy of his resources to Perform the duties imposed on the Principal Contractor in terms of this Specification, the Act and the Construction Regulations.

7.2.7 The Principal Contractor shall ensure that a copy of his health and safety plan is available on site and is Presented upon request to the Client, an Inspector, Employee or Sub-contractor.

7.2.8 The Principal Contractor shall ensure that a health and safety file, which shall include all documentation required in terms of the provisions of this Specification, the Act and the Construction Regulations, is opened and kept on site and made available to the Client or Inspector upon request. Upon completion of the works, the Principal Contractor shall hand over a consolidated health and safety file to the Client.

7.2.9 The Principal Contractor shall, throughout execution of the contract, ensure that all conditions imposed on his Sub-contractors in terms of the Act and the Construction Regulations are complied with as if they were the Principal Contractor.

7.3 **Contractor** (Responsibilities of in terms of this contract and health and safety specification)

As per 7.2 above as and where applicable or as indicated in the letter of appointment.

8. SCOPE OF WORK

These specifications are applicable to the specific scope of work pertaining to the above-mentioned project as detailed in the tender documents (**Building Work Specifications**), this amongst all includes for example: (elaborate sufficiently and provide adequate information to give full understanding of all work to be done)

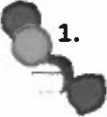
8.1 BUILDING WORK:

NB

The scope of shall be red with the Tender Document or bill of Quantities (**Part C3: Scope of Works**).

SCOPE:

EXISTING SINGLE-STOREY BUILDINGS:

- 
1. Popper notice shall be given to all persons in and around the building where construction work shall be executed. The building shall occupy during the construction period.
 2. Notification to the provincial director must be given.
 3. The contractor and sub-contractors must be registered and in good standing with the compensation fund at all time.
 4. The contractor shall appoint a full-time competent employee in writing as the construction supervisor.
 5. Work shall be executed at a height greater than 3 meters.
 6. Excavation work exceeding 1 meter and more.
 7. All site work; the contractor must take care of proper sun-protection for all his workmen, woman.
 8. No work, contractor or sub-contractor shall be allowed to work in in-climate weather.
 9. No danger tape shall be used on the construction site. All work areas shall proper be brigade.
 10. Special care must be taken of;-
Contractors using scaffolding shall ensure that such scaffolding, when used, complies with the safety standards are carried out under the supervision of a competent person who has been appointed in writing.

8.2 ELECTRICAL WORK:

ELECTRICAL INSTALLATIONS AND MACHINERY ON CONSTRUCTION SITES:

Notwithstanding the provisions contained in the Electrical Installation Regulations promulgated by Government Notice No. R.2920 of 23 October 1992 and the Electrical Machinery Regulations promulgated by Government Notice No. R.1953 of August 1988, respectively, as amended.

1. *Work shall be medium and low voltage electrical work. The contractor shall given proof of his high and low voltage registration.*

[Notes to the Client, Designer, Project Manager, Architect, and Agent:

add references to the above project and include specific elements identified as the 'Critical Few'. The 'Critical Few' refer to those few or singular elements of the project that have the potential to impact in a major or devastating way on the project as a whole in the event of an accident or incident occurring. (20:80 principle)

Because of the inherent generic nature of the Health and Safety Specifications document, specific relevant information on the project must be provided and it may be necessary to draft the required information under this paragraph on a separate attached document.

If at any time after commencement of the project changes is brought about to the design or construction, sufficient health and safety information and appropriate resources are to be made available to the Principal Contractor to execute the work safely.]

N.B The Principal Contractor shall on tendering make provision for the cost of health and safety measures in terms of his/her documented Health and Safety Plan and measures based on these Health and Safety Specifications during the period of the project. Construction Regulation 5(3)(g) determines that potential contractors submitting tenders have made provision for the cost of health and safety measures during the construction process.

THE HEALTH AND SAFETY PLAN IS THEREFORE TO BE INCLUDED WITH THE TENDER DOCUMENTS WHEN TENDERS ARE INVITED FOR THE PROJECT.

9. HEALTH AND SAFETY FILE

The Principal Contractor must, in terms of Construction Regulation 5(7), keep a Health & Safety File on site at all times that must include all documentation required in terms of the Act and Regulations and must also include a list of all Contractors on site that are accountable to the Principal Contractor and the agreements between the parties and details of work being done. A more detailed list of documents and other legal requirements that must be kept in the Health and Safety File is attached as an addendum to this document.

IMPORTANT:

The Health and Safety File will remain the property of the Client and/or its Agent on its behalf throughout the period of the project and shall be consolidated and handed over to the Client and/or its Agent on its behalf at the time of completion of the project.

10. OH&S GOALS AND OBJECTIVES AND ARRANGEMENTS FOR MONITORING AND REVIEWING OH&S PERFORMANCE

The Principal Contractor is required to maintain a CIFR of at least 8 (See Annexure 3. to this document: "Measuring Injury Experience") and report on this to the Client and/or its Agent on its behalf on a monthly basis.

11. IDENTIFICATION OF HAZARDS AND DEVELOPMENT OF RISK ASSESSMENTS, STANDARD WORKING PROCEDURES (SWP) AND METHOD STATEMENTS

The Principal Contractor is required to develop Risk Assessments, Standard Working Procedures (SWP) and Method Statements for each activity executed in the contract or project (see 4. below "Project/Site Specific Requirements")

The identification of hazards is over and above the hazards identification programme and those hazards identified during the drafting of the Health and Safety Plan.

12. ARRANGEMENTS FOR MONITORING AND REVIEW

12.1 Monthly Audit by Client and/or its Agent on its behalf

The Client and/or its Agent on its behalf will be conducting Periodic Audits at times agreed with the Principal Contractor Audit to comply with Construction Regulation 4(1)(d) to ensure that the principal Contractor has implemented, is adhering to and is maintaining the agreed and approved OH&S Plan.

12.2 Other audits and inspections by client and/or its agent on its behalf.

The Client and/or its Agent on its behalf reserves the right to conduct any other ad hoc audits and inspections as it and/or its Agent on its behalf deem necessary.

A representative of the Principal Contractor and the relevant Health and Safety Representative(s) (SHE-Reps) must accompany the Client and/or its Agent on its behalf on all Audits and Inspections and may conduct their own audit/inspection at the same time. Each party will, however, take responsibility for the results of his/her own audit/inspection results. The Client and/or its Agent on its behalf may require to be handed a copy of the minutes of the previous Health and Safety Committee meeting reflecting possible recommendations made by that committee to the Employer for reference purposes.

12.3 Reports

The Principal Contractor is required to provide the Client and/or its Agent on its behalf with a monthly "SHE Risk Management Report".

The Principal Contractor shall report all incidents where an employee is injured on duty to the extent that he/she:



* becomes unconscious
loses a limb or part of a limb
is injured or becomes ill to such a degree that he/she is likely either to die or to suffer a permanent physical defect or likely to be unable for a period of at least 14 days either to work or continue with the activity for which he/she was usually employed

OR where:

- * a major incident occurred
- * the health or safety of any person was endangered
- * where a dangerous substance was spilled
- * the uncontrolled release of any substance under pressure took place
- * machinery or any part of machinery fractured or failed resulting in flying, falling or uncontrolled moving objects
- * machinery ran out of control,

to the Provincial Director of the Department of Labour (DoL) within seven days and at the same time to the Client and/or its Agent on its behalf.

(Section 24 of the Act & General Administrative Regulation 8.)

The Principal Contractor is required to provide the Client and/or its Agent on its behalf with copies of all statutory reports required in terms of the Act and the Regulations.

The Principal Contractor is required to provide a.s.a.p. the Client and/or its Agent on its behalf with copies of all internal and external accident/incident investigation reports including the reports contemplated in 12.7, 12.8.2, 15, 16, 17, 21 and 22 below. As soon as the occurrence of any accident/incident of whatever nature comes to the notice of the Principal Contractor, it shall be reported immediately to any of the following:

12.4 Review

The Principal Contractor is to review the Hazard Identification, Risk Assessments and Standard Work Processes at each Production Planning and Progress Report meeting as the construction work develops and progresses and each time changes are made to the designs, plans and construction methods and processes.

The Principal Contractor must provide the Client and/or its Agent on its behalf, other Contractors and all other concerned parties with copies of any changes, alterations or amendments as contemplated in the above paragraph.

12.5 Site Rules and other Restrictions

12.5.1 Site OH&S Rules

The Principal Contractor must develop a set of site-specific OH&S rules that will be applied to regulate the Health and Safety Plan and associated aspects of the construction.

When required, visitors and non-employees upon entering the site shall be issued with the proper Personal Protective Equipment (PPE) as and when necessary.

12.5.2 Security Arrangements

The Principal Contractor must establish site access rules and implement and maintain these throughout the construction period. Access control must include the rule that non-employees shall at all times be provided with fulltime supervision while on site.

The Principal Contractor must develop a set of Security rules and procedures and maintain these throughout the construction period.

If not already tasked to the H&S Officer appointed in terms of Construction Regulation 6(6), the Principal Contractor must appoint a competent Emergency Controller who must develop contingency plans for any emergency that may arise on site as indicated by the risk assessments. These must include a monthly practice/testing programmed for the

plans e.g. January: trench collapse, February: flooding etc. and practiced/tested with all persons on site at the time, participating.

12.6 Training

The contents and syllabi of all training required by the Act and Regulations including any other related or relevant training as required must be included in the Principal Contractor's Health and Safety Plan and Health and Safety File.

12.6.1 General Induction Training

All employees of the Principal and other Contractors must be in possession of proof of General Induction training

12.6.2 Site Specific Induction Training

All employees of the Principal and other Contractors must be in possession of Site Specific Occupational Health and Safety Induction training.

12.6.3 Other Training

All operators, drivers and users of construction vehicles, mobile plant and other equipment must be in possession of valid proof of training.

All employees in jobs requiring training in terms of the Act and Regulations must be in Possession of valid proof of training as follows:

Occupational Health and Safety Training Requirements: (as required by the Construction Regulations and as indicated by the Health and Safety Specification Document & the Risk Assessment/s and recommendations by the Health and Safety Committee):

- * General Induction (Section 8 of the Act)
- * Site/Job Specific Induction (also visitors) (Sections 8 & 9 of the Act)
- * Site/Project Manager
- * Construction Supervisor
- * OH&S Representatives (Section 18 (3) of the Act)
- * Training of the Appointees indicated in 12.6.1. & 12.6.2.
- * Operation of Cranes (Driven Machinery Regulations 18 (11))
- * Operators & Drivers of Construction Vehicles & Mobile Plant (Construction Regulation 21)
- * Basic Fire Prevention & Protection (Environmental Regulations 9 and Construction Regulation 27)
- * As a minimum basic First Aid to be upgraded when necessary (General Safety Regulations 3)
- * Storekeeping Methods & Safe Stacking (Construction Regulation 26)
- * Emergency, Security and Fire Co-coordinator

12.7 Accident and Incident Investigation

The Principal Contractor is responsible to oversee the investigation of all accidents/incidents where employees and non-employees were injured to the extent that he/she/they had to receive first aid or be referred for medical treatment by a doctor, hospital or clinic. (General Administrative Regulation 9)

The results of the investigation to be entered into the Accident/Incident Register listed above. (General Administrative Regulation 9)

The Principal Contractor is responsible for the investigation of all non-injury incidents as described in Section 24 (1) (b) & (c) of the Act and keeping a record of the results of such investigations including the steps taken to prevent similar incidents in future.

The Principal Contractor is responsible for the investigation of all road traffic accidents relating to the construction site and keeping a record of the results of such investigations including the steps taken to prevent similar accidents in future.

Notwithstanding the requirements of Section 24 of the Act, ALL incidents shall be investigated and reported on in writing, irrespective of whether such incident gave rise to injury or damage.

12.8 H&S Representatives (SHE-Reps) and H&S Committees

12.8.1 Designation of H&S Representatives ('SHE - Reps')

Where the Principal Contractor employs more than 20 persons (including the employees of other Contractors (sub-contractors) he has to appoint one H&S Representative for every 50 employees or part thereof. (Section 17 of the Act and General Administrative Regulation 6. & 7.)

H&S Representatives have to be designated in writing and the designation shall be in accordance with the Collective Agreement as concluded between the parties as is required in terms of General Administration Regulation 6.

12.8.2 Duties and Functions of the H&S Representatives

The Principal Contractor must ensure that the designated H&S Representatives conduct at least a weekly inspection of their respective areas of responsibility using a checklist and report thereon to the Principal Contractor, after which these reports shall be consolidated for submission to the Health and Safety Committee.

H&S Representatives must be included in and be part of accident/incident investigations.

H&S Representatives shall be members of at least one H&S Committee and must attend all meetings of that H&S committee.

12.8.3 Establishment of H&S Committee(s)

The Principal Contractor must establish H&S Committees consisting of designated H&S Representatives together with a number of Employers Representatives appointed as per Section 19(3) that are not allowed to exceed the number of H&S Representatives on the committee. The persons nominated by the employer on a H&S Committee must be designated in writing for such period as may be determined by him. The H&S Committee shall co-opt advisory (temporary) members and determine the procedures of the meetings including the chairmanship.

The H&S Committee must meet minimum monthly and consider, at least, the following Agenda for the first meeting. Thereafter the H&S Committee shall determine its own procedures as per the previous paragraph.

Agenda:

- 1) Opening and determining of chairmanship (only when necessary)
- 2) Minutes of Previous Minutes
- 3) Observations
- 4) Program and Safety considerations
- 5) Hygiene
- 6) Housekeeping improvement
- 7) Incidents & Accidents / Injuries
- 8) Registers:
 - a H&S Rep. Inspections
 - b. Matters of First Aid
 - c. Scaffolding
 - d. Ladders
 - e. Excavations
 - f. Portable Electric Equipment
 - g. Fire Equipment
 - h. Explosive Power Tools
 - i. Power Hand tools
 - j. Incident! Report Investigation
 - k. Pressure Vessels
 - l. Personal Protective Equipment
- 9) Safety performance Evaluations

- 11) First Aid Officials and training in First Aid
- 12) Demarcation of work- /hazardous-/safe areas/walkways
- 13) Posters and signage
- 14) Environmental preservation and conservation
- 15) Specific training programmes
- 16) General
- 17) Date of Next Meeting
- 18) Closing

13. PROJECT/SITE SPECIFIC REQUIREMENTS

The following is a list of specific activities and considerations that have been identified for the project and site and for which Risk Assessments, Standard Working Procedures (SWP), management and control measures and Method Statements (where necessary) have to be developed by the Principal Contractor:

- * **Clearing & Grubbing of the Area/Site**
- * **Site Establishment including:**
 - o Office/s
 - o Secure/Safe Storage and storage areas for materials, plant & equipment
 - o Ablution facilities
 - o Sheltered dining area
 - o Vehicle access to the site
- * **Dealing with existing Structures.**
- * **Location of existing Services**
- * **Installation & Maintenance of Temporary Construction Electrical Supply, Lighting and Equipment**
- * **Adjacent Land uses/Surrounding property exposures**
- * **Boundary & Access control/Public Liability Exposures (Remember: the Employer is also responsible for the OH&S of non-employees affected by his/her work activities.)**
- * **Health risks arising from neighboring as well as own activities and from the environment e.g. threats by dogs, bees, snakes, lightning, allergies etc.**
- * **Exposure to Noise**
- * **Exposure to Vibration**
- * **Protection against dehydration and heat exhaustion**
- * **Protection from wet & cold conditions**
- * **Dealing with HIV/Aids and other diseases as per specific programme provided by the client and/or its Agent on its behalf**
- * **Use of Portable Electrical Equipment including:**
 - o Angle grinder
 - o Electrical Drilling machine
 - o Skill saw
- * **Excavations including:**
 - o Ground/soil conditions
 - o Trenching
 - o Shoring
 - o Drainage
 - o Daily inspections
- * **Welding including:**
 - o Arc Welding
 - o Gas welding
 - o Flame Cutting
 - o Use of LP Gas torches and appliances
- * **Loading & Offloading of Trucks**
- * **Aggregate/Sand and other Materials Delivery**
- * **Manual and Mechanical Handling**
- * **Lifting and Lowering Operations**
- * **Driving & Operation of Construction Vehicles and Mobile Plant including:**
 - o Trenching machine
 - o Excavator

- Plate Compactor
- Front End Loader
- Mobile Cranes and the ancillary lifting tackle
- Parking of Vehicles & Mobile Plant
- Towing of Vehicles & Mobile Plant

- * Use and Storage of Flammable Liquids and other Hazardous Substances – the client and/or its Agent on its behalf to be informed of this prior to commencing of the project
- * Layering and Bedding of trench floor
- * Installation of Pipes in trenches
- * Backfilling of Trenches
- * Protection against Flooding
- * Gabion work
- * Use of Explosives - the client and/or its Agent on its behalf to be informed of this prior to commencing of the project
- * Protection from Overhead Power Lines
- * As discovered by the Principal Contractor's hazard identification exercise
- * As discovered from any inspections and audits conducted by the Client and/or its Agent on its behalf or by the Principal Contractor or any other Contractor on site
- * As discovered from any accident/incident investigation.

13.1 The following are in particular requirements depending on scope of works and will form a basis for compliance audits.

1. Administrative & Legal Requirements
2. Education, Training & Promotion
3. Public Safety & Emergency Preparedness
4. Personal Protective Equipment
5. Housekeeping
6. Scaffolding, Formwork & Support work
7. Ladders
8. Electrical Safeguarding
9. Emergency/Fire Prevention & Protection
10. Excavations & Demolition
11. Tools
12. Cranes
13. Personnel & Material Hoists
14. Transport & Materials Handling
15. Site Plant & Machinery
16. Plant & Storage Yards/Site Workshops Specifics
17. Health & Hygiene

14. OUTLINED DATA, REFERENCES AND INFORMATION ON CERTAIN AND/OR SPECIFIC OBLIGATORY REQUIREMENTS TO ENSURE COMPLIANCE

14.1 Administrative & Legal Requirements

OHS Act Section/ Regulation	Subject	Requirements
Construction. Regulation 3	Notice of carrying out Construction work	Department of Labour notified Copy of Notice available on Site
General Admin. Regulation 4	*Copy of OH&S Act (Act 85 of 1993)	Updated copy of Act & Regulations on site. Readily available for perusal by employees.
COID Act Section 80	*Registration with Compens. Insurer	Written proof of registration/Letter of good standing available on Site
Construction. Regulation 4 & 5(1)	H&S Specification & Programmed	H&S Spec received from Client and/or its Agent on its behalf OH&S programme developed & Updated regularly

Section 8(2)(d) Construction. Regulation 7	*Hazard Identification & Risk Assessment	Hazard Identification carried out/Recorded Risk Assessment and – Plan drawn up/Updated RA Plan available on Site Employees/Sub-Contractors informed/trained
Section 16(2)	*Assigned duties (Managers)	Responsibility of complying with the OH&S Act assigned to other person/s by CEO.
Construction. Regulation 6(1)	Designation of Person Responsible on Site	Competent person appointed in writing as Construction Supervisor with job description
Construction. Regulation 6(2)	Designation of Assistant for above	Competent person appointed in writing as Assistant Construction Supervisor with job description
Section 17 & 18 General Administrative Regulations 6 & 7	*Designation of Health & Safety Representatives	More than 20 employees - one H&S Representative, one additional H&S Rep. for each 50 employees or part thereof. Designation in writing, period and area of responsibility specified in terms of GAR 6 & 7 Meaningful H&S Rep. reports. Reports auctioned by Management.
Section 19 & 20 General Administrative Regulations 5	*Health & Safety Committee/s	H&S Committee/s established. All H&S Reps shall be members of H&S Committees Additional members are appointed in writing. Meetings held monthly, Minutes kept. Auctioned by Management.
Section 37(1) & (2)	*Agreement with Mandatories/ (Sub-)Contractors	Written agreement with (Sub-)Contractors List of (Sub-)Contractors displayed. Proof of Registration with Compensation Insurer/Letter of Good Standing Construction Supervisor designated Written arrangements re. H&S Reps & H&S Committee Written arrangements re. First Aid
Section 24 & General Admin. Regulation 8 COIDA Act Sect.38, 39 & 41	*Reporting of Incidents (Dept. of Labour)	Incident Reporting Procedure displayed. All incidents in terms of Sect. 24 reported to the Provincial Director, Department of Labour, within 3 days. (Annexure 1?)(WCL 1 or 2) and to the Client and/or its Agent on its behalf Cases of Occupational Disease Reported Copies of Reports available on Site Record of First Aid injuries kept
General Admin. Regulation 9	*Investigation and Recording of Incidents	All injuries which resulted in the person receiving medical treatment other than first aid, recorded and investigated by investigator designated in writing. Copies of Reports (Annexure 1) available on Site Tabled at H&S Committee meeting Action taken by Site Management.
Construction. Regulation 8	Fall Prevention & Protection	Competent person appointed to draw up and supervise the Fall Protection Plan Proof of appointees competence available on Site Risk Assessment carried out for work at heights Fall Protection Plan drawn up/updated Available on Site
Construction. Regulation 8(5)	Roof work	Competent person appointed to plan & supervise Roof work. Proof of appointees competence available on Site Risk Assessment carried out Roof work Plan drawn up/updated Roof work inspect before each shift. Inspection register kept Employees medically examined for physical & psychological fitness. Written proof on site
Construction. Regulation 9	Structures	Information re. the structure being erected received from the Designer including:

		- the design loading of the structure - the methods & sequence of construction - anticipated dangers/hazards/special measures to construct safely Risk Assessment carried out Method statement drawn up All above available on Site Structures inspected before each shift. Inspections register kept
Construction. Regulation 10	Formwork & Support work	Competent person appointed in writing to supervise erection, maintenance, use and dismantling of Support & Formwork Design drawings available on site Risk Assessment carried out Support & Formwork inspected: - before use/inspection - before pouring of concrete - weekly whilst in place - before stripping/dismantling. - Inspection register kept
Construction. Regulation 14	Scaffolding	Competent persons appointed in writing to: - erect scaffolding (Scaffold Erector/s) - act as Scaffold Team Leaders - inspect Scaffolding weekly and after inclement weather (Scaffold Inspector/s) Written Proof of Competence of above appointees available on Site Copy of SABS 085 available on Site Risk Assessment carried out Inspected weekly/after bad weather. Inspection register/s kept
Construction. Regulation 11	Excavations	Competent person/s appointed in writing to supervise and inspect excavation work Written Proof of Competence of above appointee/s available on Site Risk Assessment carried out Inspected: - before every shift - after any blasting - after an unexpected fall of ground - after any substantial damage to the shoring - after rain. Inspections register kept Method statement developed where explosives will be/ are used
Construction. Regulation 19	Explosive Powered Tools	Competent person appointed to control the issue of the Explosive Powered Tools & cartridges and the service, maintenance and cleaning. Register kept of above Empty cartridge cases/nails/fixing bolts returns recorded Cleaned daily after use Work areas are demarcated!
Construction. Regulation 22/Electrical Machinery Regulations 9 & 10/ Electrical Installation Regulations	*Inspection & Maintenance of Electrical Installation & Equipment (including portable electrical tools)	Competent person appointed in writing to inspect/test the installation and equipment. Written Proof of Competence of above appointee available on Site. Inspections: - Electrical Installation & equipment inspected after installation, after alterations and quarterly. Inspection Registers kept Portable electric tools, electric lights and extension leads must be uniquely identified/numbered. Weekly visual inspection by User/Issuer/Storeman. Register kept.
Construction. Regulation 26/ General Safety	*Designation of Stacking & Storage Supervisor.	Competent Person/s with specific knowledge and experience designated to supervise all Stacking & Storage Written Proof of Competence of above appointee available on Site

Regulation 8(1)(a) Instruction. Regulation 27/ Environmental Regulation 9	*Designation of a Person to Co-ordinate Emergency Planning And Fire Protection	Person/s with specific knowledge and experience designated to co-ordinate emergency contingency planning and execution and fire prevention measures Emergency Evacuation Plan developed: - Drilled/Practiced - Plan & Records of Drills/Practices available on Site Fire Risk Assessment carried out All Fire Extinguishing Equipment identified and on register . Inspected weekly. Inspection Register kept Serviced annually
General Safety Regulation 3	*First Aid	Every workplace provided with sufficient number of First Aid boxes. (Required where 5 persons or more are employed) First Aid freely available Equipment as per the list in the OH&S Act. One qualified First Aider appointed for every 50 employees. (Required where more than 10 persons are employed) List of First Aid Officials and Certificates Name of person/s in charge of First Aid box/es displayed. Location of First Aid box/es clearly indicated. Signs instructing employees to report all Injuries/illness including first aid injuries
General Safety Regulation 2	Personal Safety Equipment (PSE)	PSE Risk Assessment carried out Items of PSE prescribed/use enforced Records of Issue kept Undertaking by Employee to use/wear PSE PSE remain property of Employer, not to be removed from premises GSR 2(4)
General Safety Regulation 9	*Inspection & Use of Welding/Flame Cutting Equipment	Competent Person/s with specific knowledge and experience designated to inspect Electric Arc, Gas Welding and Flame Cutting Equipment Written Proof of Competence of above appointee available on Site All new vessels checked for leaks, leaking vessels NOT taken into stock but returned to supplier immediately Equipment identified/numbered and entered into a register Equipment inspected weekly. Inspection Register kept Separate, purpose made storage available for full and empty vessels
Hazardous Chemical Substances (HCS) Regulations Construction Regulation 23	Control of Storage & Usage of HCS and Flammables	Competent Person/s with specific knowledge and experience designated to Control the Storage & Usage of HCS (including Flammables) Written Proof of Competence of above appointee available on Site Risk Assessment carried out Register of HCS kept/used on Site Separate, purpose made storage available for full and empty containers
Vessels under Pressure Regulations	Vessels under Pressure (VUP)	Competent Person/s with specific knowledge and experience designated to supervise the use, storage, maintenance, statutory inspections & testing of VUP's Written Proof of Competence of above appointee available on Site Risk Assessment carried out Certificates of Manufacture available on Site Register of VUP's on Site Inspections & Testing by Approved Inspection Authority (AIA): - after installation/re-erection or repairs - every 36 months. - Register/Log kept of inspections, tests. Modifications & repair
General Safety	Inspection of Ladders	Competent person appointed in writing to inspect Ladders

Regulation 13A		Ladders inspected at arrival on site and weekly there after. Inspections register kept Application of the types of ladders (wooden, aluminium etc.) regulated by training and inspections and noted in register
General Safety regulation 13B	Ramps	Competent person appointed in writing to Supervise the erection & inspection of Ramps. Inspection register kept. Daily inspected and noted in register

14.2 Education & Training

Subject	Requirement
*Company OH&S Policy Section 7(1)	Policy signed by CEO and published/Circulated to Employees Policy displayed on Employee Notice Boards Management and employees committed.
*Company/Site OH&S Rules (Section 13(a))	Rules published Rules displayed on Employee Notice Boards Rules issued and employees effectively informed or trained: written proof Follow-up to ensure employees understand/adhere to the policy and rules.
*Induction & Task Safety Training (Section 13(a))	All new employees receive OH&S Induction Training. Training includes Task Safety Instructions. Employees acknowledge receipt of training. Follow-up to ensure employees understand/adhere to instructions.
*General OH&S Training (Section 13(a))	All current employees receive specified OH&S training: written proof Operators of Plant & Equipment receive specified training Follow-up to ensure employees understand/adhere to instructions.
*Occupational Health & Safety Promotion	<u>Incident Experience Board indicating e.g.</u> * No. of hours worked without an Injury * No. of days worked without an Injury Mission, Vision and Goal Star Grading - Board kept up to date. Safety Posters displayed & changed regularly Employee Notice Board for OH&S Notices. Site OH&S Competition. Company OH&S Competition. Participation in Regional OH&S Competition Suggestion scheme.

14.3 Public Safety, Security Measures & Emergency Preparedness

Subject	Requirement
*Notices & Signs	Notices & Signs at entrances / along perimeters indicating "No Unauthorised Entry" . Notices & Signs at entrance instructing visitors and non - employees what to do, where to go and where to report on entering the site/yard with directional signs. e.g. "Visitors to report to Office" Notices & Signs posted to warn of overhead work and other hazardous activities. e.g. General Warning Signs
Site Safeguarding Security Measures	Nets, Canopies, Platforms, Fans etc. to protect members of the public passing / entering the site. Access control measures/register in operation Security patrols after hours during weekends and holidays Sufficient lighting after dark Guard has access to telephone/ mobile/other means of emergency communication
Emergency Preparedness	Emergency contact numbers displayed and made available to Security & Guard Emergency Evacuation instructions posted up on all notice boards (including employees' notice boards) Emergency contingency plan available on site/in yard Doors open outwards/unobstructed Emergency alarm audible all over (including in toilets)
Emergency Drill & Evacuation	Adequate No. of employees trained to use Fire Fighting Equipment. Emergency Evacuation Plan available, displayed and practiced.

14.4 Personal Protective Equipment

Subject	Requirement
*PPE needs analysis	Need for PPE identified and prescribed in writing. PPE remain property of Employer, not to be removed from premises GSR 2(4)
*Head Protection	All persons on site wearing Safety Helmets including Sub-contractors and Visitors (where prescribed)
*Foot Protection	All employees on site wearing Safety Footwear including Gumboots for concrete / wet work and non-slip shoes for roof work. Visitors to wear same upon request or where prescribed
*Eye and Face Protection	<u>Eye and Face (also Hand and Body) Protection</u> (Goggles, Face Shields, Welding Helmets etc.) used when operating the following: * Jack/ Kango Hammers * Angle / Bench Grinders * Electric Drills (Overhead work into concrete / cement / bricks * Explosive Powered tools * Concrete Vibrators / Pokers * Hammers & Chisels * Cutting / Welding Torches * Cutting Tools and Equipment * Guillotines and Benders * Shears * Sanders and Sanding Machines * CO2 and Arc Welding Equipment * Skill / Bench Saws * Spray Painting Equipment etc.
*Hearing Protection	<u>Hearing Protectors</u> (Muffs, Plugs etc.) used when operating the following: * Jack / Kango Hammers * Explosive Powered Tools * Wood/Aluminium Working Machines e.g. saws, planers, routers
*Hand Protection	<u>Protective Gloves</u> worn by employees handling / using: * Cement / Bricks / Steel / Chemicals * Welding Equipment * Hammers & Chisels * Jack / Kango Hammers etc.
*Respiratory Protection	Suitable/efficient prescribed <u>Respirators</u> worn correctly by employees handling / using: * Dry cement * Dusty areas * Hazardous chemicals * Angle Grinders * Spray Painting etc.
*Fall Prevention Equipment	Suitable <u>Safety Belts</u> / Fall Arrest Equipment correctly used by persons working on / in unguarded, elevated positions e.g.: * Scaffolding * Riggers * Lift shafts * Edge work * Ring beam edges etc. Other methods of fall prevention applied e.g. catch nets
*Protective Clothing	All jobs requiring protective clothing (Overalls, Rain Wear, Welding Aprons etc.) Identified and clothing worn.
*PPE Issue & Control	Identified Equipment issued free of charge. All PPE maintained in good condition. (Regular checks).

Workers instructed in the proper use & maintenance of PPE.
 Commitment obtained from wearer accepting conditions and to wear the PPE.
 Record of PPE issued kept on H&S File.
 PPE remain property of Employer, not to be removed from premises GSR 2(4)

14.5 Housekeeping

Subject	Requirement
*Scrap Removal System	All items of Scrap/Unusable Off-cuts/Rubble and redundant material removed from working areas on a regular basis. (Daily) Scrap/Waste removal from heights by chute/hoist/crane. Nothing thrown/swept over sides. Scrap disposed of in designated containers/areas Removal from site/yard on a regular basis.
Stacking & Storage (See Section 1 for Designation & Register)	<u>Stacking:</u> * Stable, on firm level surface/base. * Prevent leaning/collapsing * Irregular shapes bonded * Not exceeding 3x the base * Stacks accessible * Removal from top only. <u>Storage:</u> * Adequate storage areas provided. * Functional – e.g. demarcated storage areas/racks/bins etc. * Special areas identified and demarcated e.g. flammable gas, cement etc. * Neat, safe, stable and square. * Store/storage areas clear of superfluous material. * Storage behind sheds etc. neat/under control. * Storage areas free from weeds, litter etc.
*Waste Control/Reclamation	Re-usable off-cuts and other re-usable material removed daily and kept to a minimum in the work areas. All re-usable materials neatly stacked/stored in designated areas. (Nails removed/bent over in re-usable timber). Issue of hardware/nails/screws/cartridges etc. controlled and return of unused items monitored.
Sub-contractors (Housekeeping)	Sub-contractors required to comply with Housekeeping requirements.

14.6 Working at Heights (including roof work)

Subject	Requirement
Openings	Unprotected openings adequately guarded/fenced/barricaded/catch nets installed
	Roof work discontinued when bad/hazardous weather Fall protection measures (including warning notices) when working close to edges or on fragile roofing material Covers over openings in roof of robust construction/secured against displacement

14.7 Scaffolding / Formwork / Support Work

Subject	Requirement
Access/System Scaffolding	Foundation firm / stable Sufficient bracing. Tied to Structure/prevented from side or cross movement Platform boards in good condition/sufficient/secured. Handrails and toe boards provided. Access ladders / stairs provided. Area/s under scaffolding tidy. Safe/unsafe for use signs

Free Standing Scaffolding	Foundation firm / stable Sufficient bracing. Platform boards in good condition/sufficient/secured. Handrails and toe boards provided. Access ladders / stairs provided. Area/s under scaffolding tidy. Safe/unsafe for use signs Height to base ratio correct Outriggers used /tied to structure where necessary Complying with OH&S Act/SABS 085
*Mobile Scaffolding	Wheels / swivels in good condition Brakes working and applied. Height to base ratio correct. Outriggers used where necessary Complying with OH&S Act/SABS 085
Formwork / Support Work	All components in good condition. Foundation firm / stable. Adequate bracing / stability ensured. Good workmanship / uprights straight and plumb. Good cantilever construction. Safe access provided. Areas under support work tidy. Same standards as for system scaffolding.
Edges & Openings	Edges barricaded to acceptable standards. Manhole openings covered / barricaded. Openings in floor / other openings covered, barricaded/fenced. Stairs provided with handrails. Lift shafts barricaded / fenced off.

14.8 Ladders

Subject	Requirement
*Physical Condition / Use & Storage	Stepladders - hinges/stays/braces/stiles in order. Extension ladders - ropes/rungs/stiles/safety latch/hook in order. Extension / Straight ladders secured or tied at the bottom / top. No joined ladders used Wooden ladders are never painted except with varnish Aluminium ladders NOT to be used with electrical work All ladders stored on hooks / racks and not on ground. Ladders protrude 900 mm above landings / platforms / roof. Fixed ladders higher than 5 m have cages/Fall arrest system

14.9 Electricity (as part of, or additional to the manual "Safety & Switching Procedures for Electrical Installations"- see attached document)

Subject	Requirement
*Electrical Distribution Boards & Earth Leakage	Colour coded / numbered / symbolic sign displayed. Area in front kept clear and unobstructed. Fitted with inside cover plate / openings blanked off / no exposed "live" conductors / terminals/Door kept close Switches / circuit breakers identified. Earth leakage protection unit fitted and operating. Tested with instrument: Test results within 15 – 30 milliamps Aperture/Opening/s provided for the plugging in and removal of extension leads without the need to open the door Apertures and openings used for extension leads to be protected against the elements and especially rain

Electrical Installations & Wiring	Temporary wiring / extension leads in good condition / no bare or exposed wires. Earthing continuity / polarity correct: Looking at the open connectors to connect the wiring, the word "Brown" has the letter 'R' in it, so the <u>b'R'own</u> wire connects to the 'R'ight hand connector. "Blue" has the letter 'L' in it, so the <u>b'L'ue</u> wire connects to the 'L'eft hand connector. Cables protected from mechanical damage and moisture. Correct loading observed e.g. no heating appliance used from lighting circuit etc. Light fittings/lamps protected from mechanical damage/moisture. Cable arrestors in place and used inside plugs
*Physical condition of Electrical Appliances & Tools	<u>Electrical Equipment and Tools:</u> (includes all items plugging in to a 16 Amp supply socket) Insulation / casing in good condition. Earth wire connected/intact where not of double insulated design Double insulation mark indicates that no earth wire is to be connected. Cord in good condition/no bare wires/secured to machine & plug. Plug in good condition, connected correctly and correct polarity.

14.10 Emergency and Fire Prevention and Protection

Subject	Requirement
*Fire Extinguishing Equipment	Fire Risks Identified and on record <u>The correct and adequate Fire Extinguishing Equipment available for:</u> * Offices * General Stores * Flammable Store * Fuel Storage Tank/s and catchment well * Gas Welding / Cutting operations * Where flammable substances are being used / applied. * Equipment Easily Accessible
*Maintenance	Fire equipment checked minimum monthly, serviced yearly
*Location & Signs	<u>Fire Extinguishing Equipment:</u> * Clearly visible * Unobstructed * Signs posted including "No Smoking" / "No Naked Lights" where required. (Flammable store, Gas store, Fuel tanks etc.)
* Storage Issue & Control of Flammables (incl. Gas cylinders)	Storage Area provided for flammables with suitable doors, ventilation, bund etc. Flammable store neat / tidy and no Class A combustibles. Decanting of flammable substances carried out in ignition free and adequately ventilated area. Container bonding principles applied Only sufficient quantities issued for one task or one day's usage Separate, special gas cylinder store/storage area. Gas Cylinders stored / used / transported upright and secured in trolley/cradle/structure and ventilated. Types of Gas Cylinders clearly identified as well as the storage area and stored separately. Full cylinders stored separately from empty cylinders. All valves, gauges, connections, threads of all vessels to be checked regularly for leaks. Leaking acetylene vessels to be returned to the supplier IMMEDIATELY.
*Storage, Issue & Control of Hazardous Chemical Substances (HCS)	HCS storage principles applied: products segregated Only approved, non-expired HCS to be used Only the prescribed PPE shall be used as the minimum protection Provision made for leakage/spillage containment and ventilation Emergency showers/eye wash facilities provided HCS under lock & key controlled by designated person Decanted/issued in containers as prescribed with information/warning labels Disposal of unwanted HCS by accredited disposal agent No dumping or disposal of any HCS on or inside the storage area or anywhere else on the project site All vessels or containers to be regularly checked for leaks

Subject	Requirement
Excavations deeper than 1m.	Shored / Braced to prevent caving / falling in. Provided with an access ladder. Excavations guarded/barricaded/lighted after dark in public areas Soil dumped at least 1 m away from edge of excavation On sloping ground soil dumped on lower side of excavation All excavations are subject to daily inspections

14.12 Tools

Subject	Requirement
*Hand Tools	<u>Shovels / Spades / Picks:</u> * Handles free from cracks and splinters * Handles fit securely * Working end sharp and true <u>Hammers:</u> * Good quality handles, no pipe or reinforcing steel handles. * Handles free from cracks and splinters Handles fit securely <u>Chisels:</u> * No mushroomed heads / heads chamfered * Not hardened * Cutting edge sharp and square <u>Saws:</u> * Teeth sharp and set correctly * Correct saw used for the job
*Explosive Powered Tools.	Only used by trained / authorised personnel. Prescribed warning signs placed / displayed where tool is in use. Work area must be properly isolated/demarcated during use of tool. Inspected at least monthly by competent person and results recorded. Issue and return recorded including cartridges / nails and unused cartridges / nails / empty shells recorded. Cleaned daily after use.

14.13 Transport & Materials Handling Equipment

Subject	Requirement
*Site Vehicles	All Site Vehicles, Dumpers, Bobcats, Loaders etc; checked daily before use by driver / operator. Inventory of vehicles used/operated on site Inspection by means of a checklist / results recorded. No persons riding on equipment not designed or designated for passengers. Site speed limit posted, enforced and not exceeded. Drivers / Operators trained / licensed and carrying proof. No unauthorised persons allowed to drive / operate equipment.
Conveyors	Conveyor belt nip points and drive gear guarded. Emergency stop/lever/brake fitted, clearly marked & accessible and tested to be functional under full load.

14.14 Site Plant and Machinery

Subject	Requirement
Brick Cutting Machine	Operator Trained. Only authorised persons use the machine. Emergency stop switch clearly marked and accessible. Area around the machine dry and slip/trip free/clear of off-cuts All moving drive parts guarded/electrical supply cable protected Operator using correct PPE - eye/face/hearing/foot/hands/body.
*Electric Arc Welder	Welder Trained. Only authorised / trained persons use welder. Earth cable adequately earthed to work.

	Electrode holder in good condition/safe Cables, clamps & lugs/connectors in good condition. Area in which welding machine is used is dry/protected from wet. Welder using correct PPE - eye/ face/foot/body/respirator. Correct transparent screens & warning signs placed
*Compressors	Relief valves correctly set and locked / sealed. Maximum Safe Working Pressure (MSWP) indicated on face of pressure gauge: not on glass cover. All drives adequately guarded. Receiver/lines drained daily Hoses good condition/clamped, not wired Compressed air NEITHER used to dust off clothing/PPE/ and work areas NOR on bare skin
Concrete Mixer / Batch Plant	Top platform provided with guardrails. Dust abatement methods in use. Operators using correct PPE - eye / hands / respirators. All moving drive parts guarded. Emergency stops identified / indicated and accessible. Area kept clean/dry/and free from tripping and slipping hazards. Operators overseer identified and crane signals displayed and used.
*Gas Welding / Flame Cutting Equipment	Only authorised/trained persons use the equipment. Torches and gauges in good condition. Flashback arrestors fitted at cylinders and gauges. Hoses in good condition/correct type/all connections with clamps Cylinders stored, used and transported in upright position, secured in trolley / cradle / to structure. All cylinders regularly checked for leaks, leaking cylinders returned immediately Fire prevention/control methods applied/hot work permits.

14.15 Plant & Storage Yards/Site Workshops Specifics

Subject	Requirements
Section 8(2)(1) General Machinery Regulation 2(1): Supervision of the Use & Maintenance of Machinery	Person/s with specific knowledge and experience designated in writing to Supervise the Use & Maintenance of Machinery Critical items of Machinery identified/numbered/placed on register/inventory Inspection/maintenance schedules for abovementioned Inspections/maintenance carried out to above schedules Results recorded
General Machinery Regulation 9(2): Notices re. Operation of Machinery	Schedule D Notice posted in Work areas
Vessels under Pressure Regulation 13(1)(b): Supervision of the Use & Maintenance of Vessels under Pressure (VuP)	Person/s with specific knowledge and experience designated in writing to Supervise the Use & Maintenance of VuP's VuP's identified/numbered/placed on register/Manufacturers plate intact Inspection/maintenance schedules for abovementioned Inspections/maintenance carried out to above schedules Results recorded/Test certificates available

Lock-out Procedure	Lock-out procedure in operation
Ergonomics	Ergonomics survey conducted – results on record Survey results applied
Demarcation & Colour Coding	Demarcation principles applied All services, pipes, electrical installation, stop-start controls, emergency controls etc. colour coded to own published or SABS standard Employees trained to identify colour coding
Portable & Bench Grinders	Area around grinder clear/trip/slip free Bench grinders mounted securely - grinder generally in good condition - no excessive vibration On/Off switch/button clearly demarcated/accessible Adequate guards in place Toolrest – secure/square/max. 2 mm gap, perpendicular to drive shaft Stone/disk - correct type and size/mounted correctly/dressed Use of Eye protection enforced
Battery Storage & Charging	Adequately ventilated, ignition free room/area/no smoking sign/s Batteries placed on rubber/wooden surface Emergency shower/eye wash provided No acid storage in area Prescribed methods in place and adhered to when charging batteries
Ancillary Lifting Equipment	Chain Blocks/Tirfors/jacks/mobile gantries etc. identified/ numbered on register Chains in good condition/links no excessive wear/checked daily Lifting hooks – throat pop marked/safety latch fitted SWL/MML marked/displayed
Presses/Guillotines/ Shears	Only operated by trained/authorised persons Interlocks/lock-outs fitted/PPE worn or used at all times

14.16 Workplace Environment, Health and Hygiene

Subject	Requirement
*Lighting	Adequate lighting in places where work is being executed e.g. stairwells and basements. Light fittings placed / installed causing no irritating/blinding glare. Stroboscopic effect eliminated (not only reduced) where moving objects or machinery is used
*Ventilation	Adequate ventilation / extraction / exhausting in hazardous areas e.g. chemicals / adhesives / welding / petrol or diesel/ motors running and in confined spaces / basements.
*Noise	Tasks identified where noise levels exceeds 85 dB at any one time. All reasonable steps taken to reduce noise levels at the source. Hearing protection used where noise levels could not be reduced to below 85 dB.
*Heat Stress	Measures in place to prevent heat exhaustion in heat stress problem areas e.g. steel decks, when the WBGT index reaches 30. (See Environmental Regulation 4) Cold drinking water readily available at all times.
*Ablutions	Sufficient hygiene facilities provided - 1 toilet per 30 employees (National Building Regulations prescribe chemical toilets for Construction sites) Toilet paper available. Sufficient showers provided. Facilities for washing hands provided Soap/cleaning agent available for washing hands Means of drying hands available Lock-up changing facilities / area provided. Ablution facilities kept hygienic and clean.
*Eating / Cooking Facilities	Adequate storage facilities provided. Weather protected eating area provided, separate from changing area Refuse bins with lids provided. Facilities kept clean and hygienic.
*Pollution of Environment	Measures in place to minimize dust generation. Accumulation or littering of empty cement pockets, plastic wrapping / bags, packing materials

	etc. prevented. Spillage / discarding of oil, chemicals and diesel into storm water and other drains or into existing or newly dug holes/cavities on site expressly prohibited.
*Hazardous Chemical Substances	All substances identified and list available e.g. acids, flammables, poisons etc. Material Safety Data Sheets (MSDS) indicating hazardous properties and emergency procedures in case of incident on file and readily available. Substances stored safely. Expiry dates meticulously checked where applicable

15. THE PRINCIPAL CONTRACTOR'S GENERAL DUTIES

The Principal Contractor shall at all times maintain his status of an "employer" as referred to in the Act, and will abide by his/her responsibilities, duties and functions as per the requirements of the Act and Regulations with specific reference to Section 8 of the Act.

The Principal Contractor shall keep, and on demand make available, a copy of the Act on site at all times and in addition to that he/she will introduce and maintain a file titled "Health and Safety File", or other record in permanent form, which shall contain all relevant aspects and information as contemplated in the Construction Regulations. He/she will make this file available to the client or his representative whenever necessary or on request to an interested party.

16. THE PRINCIPAL CONTRACTOR'S SPECIFIC DUTIES

The Principal Contractor's specific duties in terms of these specifications are detailed in the Construction Regulations as published under government notice No.R1010 dated 18 July 2003.

The Principal Contractor is specifically referred to the following elements of the Construction Regulations:

- Regulation No. 1 - Definitions
- Regulation No. 2 - Scope of application
- Regulation No. 3 - Notification of construction work
- Regulation No. 5 - Principal Contractor and Contractor
- Regulation No. 6 - Supervision of construction work
- Regulation No. 7 - Risk Assessment
- Regulation No. 26 - Stacking & Storage on construction sites
- Regulation No. 28 - Construction welfare facilities
- Regulation No. 29 - Approved Inspection authorities
- Regulation No. 30 - Offences and penalties

The Principal Contractor shall ensure compliance to the Act and its Regulations and specifically to the above regulations, and document each record in the Health and Safety File.

17. THE PRINCIPAL CONTRACTOR'S SPECIFIC RESPONSIBILITIES WITH REGARD TO HAZARDOUS ACTIVITIES

The following activities are identifiable as hazardous in terms of the Construction Regulations.

The contractor shall execute the activities in accordance with the following Construction Regulations and other applicable regulations of the Act:

- Regulation No. 8 - Fall protection
- Regulation No. 9 - Structures



Regulation No. 11	- Excavation work
Regulation No. 12	- Demolition work
Regulation No. 13	- Tunneling
Regulation No. 14	- Scaffolding
Regulation No. 15	- Suspended platforms
Regulation No. 16	- Boatswain's chairs
Regulation No. 17	- Material hoists
Regulation No. 18	- Batch plants
Regulation No. 19	- Explosive powered tools
Regulation No. 20	- Cranes
Regulation No. 21	- Construction vehicles & mobile plant.
Regulation No. 22	- Electrical installations and machinery on construction sites
Regulation No. 23	- Use and temporary storage of flammable liquids on construction sites
Regulation No. 24	- Water environments
Regulation No. 25	- Housekeeping on construction sites
Regulation No. 27	- Fire precautions on construction sites.

All these will be read in conjunction with the relevant regulations and health and safety standards as required by the Act. All documents and records required by the Construction Regulations will be kept in the Health and Safety File and will be made available at any time when required by the client or his representative, or on request to an interested party.

18. GENERAL NOTES TO THE PRINCIPAL CONTRACTOR

Legal Framework

Part of legal obligations

The more important Acts and relevant subordinate/secondary legislation as well as other (inter alia Local Government) legislation that also apply to the State as well as to State owned buildings and premises: -

- (i) The latest issue of SABS 0142: "Code of Practice for the Wiring of Premises"
- (ii) The Local Government Ordinance 1939 (Ordinance 17 of 1939) as amended and the municipal by-laws and any special requirements of the local supply authority
- (iii) The Fire Brigade Services Act 1987, Act 99 of 1987 as amended
- (iv) The National Building Regulations and Building Standards Act 1977 (Act 103 of 1977) as amended and relevant proclaimed Regulations (SABS 0400)
- (v) The Post Office Act 1958 (Act 44 of 1958) as amended
- (vi) The Electricity Act 1984, Act 41 of 1984
- (vii) The Regulations of Local Gas Board(s)
- (viii) Legislation pertaining to water usage and the environment
- (ix) Legislation governing the use of equipment, which may emit radiation (e.g. X-Rays etc.)
- (x) Common Law

19. HOUSE KEEPING

Good housekeeping will be maintained at all times as per Construction Regulation No. 25. Poor housekeeping contributes to three major problems, namely, costly or increased accidents, fire or fire hazards and reduction in

Particular emphasis is to be placed on the following crucial elements of a construction site:

- Phase priorities and production/plant layout
- Enclosures
- Pits, openings and shoring
- Storage facilities
- Effective, sufficient and maintained lighting or illumination
- Principal sources of injuries e.g. stairways, runways, ramps, loose building material
- Oil, grease, water, waste, rubble, glass, storm water
- Colour coding
- Demarcations
- Pollution
- Waste disposal
- Ablution and hygiene facilities
- First aid

In promotion of environmental control all waste, rubble, scrap etc, will be disposed of at a registered dump site and records will be maintained. Where it is found to be impractical to use a registered dump site or it is not available, the Principal Contractor will ensure that the matter is brought to record with the client or his representative, after which suitable, acceptable alternatives will be sought and applied.

Dross and refuse from metals, and waste matters or by-products whose nature is such that they are poisonous or capable of fermentation, putrefaction or constituting a nuisance shall be treated or disposed of by methods approved of by an inspector.

NOTE: No employer (Principal Contractor) shall require or permit any person to work at night or after hours unless there is adequate, suitable artificial lighting.

20. LOCKOUT SYSTEMS

A system of control shall be established in order that no unauthorized person can energize a circuit, open a valve, or activate a machine on which people are working or doing maintenance, even if equipment, plant or machinery is out of commission for any period, thus eliminating injuries and damage to people and equipment as far as is reasonably practicable.

Physical/mechanical lock-out systems shall be part of the safety system and included in training. Lockouts shall be tagged and the system tested before commencing with any work or repairs.

21. INCIDENT INVESTIGATION

Inspection and reporting is the best way in which a responsible contractor can control his area of responsibility. All incidents therefore, whether it gave rise to loss, injury, damage or not, shall be investigated and the results recorded in the Health and Safety File. (Attached GAR 9)

22. GENERAL

The project under control of the Principal Contractor shall be subject to periodic health and safety audits that will be conducted by the client at intervals agreed upon between the Principal Contractor and the client, provided such intervals will not exceed periods longer than one month. The Principal Contractor is to ensure that he/she and all persons under his control on the construction site shall adhere to the above specifications, as non-conformance will lead to the client taking action as directed by Construction Regulation 4.1(e). The Principal Contractor should note that he/she shall be held liable for any anomalies including costs and resulting deficiencies due to delays caused by non-conformance and/or non-compliance to the above Health and Safety Specifications and the Health and Safety Plan based on these specifications.

23. IMPORTANT LISTS AND RECORDS TO BE KEPT

The following are lists of several records that are to be kept in terms of the Construction Regulations. The lists are:



- 1 List of appointments
- 2 List of record keeping responsibilities
- 3 Inspection checklist

These lists and documents are to be used as a point of reference to determine which components of the Act would be applicable to a particular site or task or project, as was intended under paragraph 1 ("Preamble") above.

1. LIST OF APPOINTMENTS

ITEM	REGULATION	APPOINTMENT	RESPONSIBLE PERSON
1.	4(1)(c)	Principal contractor for each phase or project	Client
2.	5.(3)(b)	Contractor	Principal Contractor
3.	5(11)	Contractor	Contractor
4.	6(1)	Construction supervisor	Contractor
5.	6(2)	Construction supervisor sub-ordinates	Contractor
6.	6(6)	Health and Safety Officer	Contractor
7.	7(1)	Person to Carry Out Risk Assessment	Contractor
8.	7(4)	Trainer/Instructor	Contractor
9.	8(1)(a)	Fall Protection Planner	Contractor
10.	10 (a)	Formwork & Support Work Supervisor	Contractor
11.	10(e) + (f)	Formwork & Support Work Examiner	Contractor
12.	11(1)	Excavation Supervisor	Contractor
13.	11(3)(b)(ii)(b)	Professional Engineer or Technologist	Contractor
14.	11(3)(k)	Explosives Expert	Contractor
15.	12(1)	Supervisor Demolition Work	Contractor
16.	12(2) + (3)	Demolition Expert	Contractor
17.	12(11)	Explosives Expert	Contractor
18.	14(2)	Scaffold Supervisor	Contractor
19.	15(1)	Suspended Platform Supervisor	Contractor
20.	15(2)(c)	Compliance Plan Developer	Contractor
26.	19(2)(b)	Power Tool Expert	Contractor
27.	19.2 (g) (i)	Power Tool Controller	Contractor
31.	22(d)	Temporary Electrical Installations Inspector	Contractor
32.	22 (e)	Temporary Electrical Installations Controller	Contractor
33.	26 (a)	Stacking and Storage Supervisor	Contractor
34.	27 (h)	Fire Equipment Inspector	Contractor

2. LIST OF RECORD KEEPING RESPONSIBILITIES

ITEM	CR	RECORD TO BE KEPT	RESPONSIBLE PERSON
1.	3(3)	Notification to Provincial Director – Annexure A Available on site	Principal Contractor
2.	4(3)	Copy of Principal Contractor's Health & Safety Plan Available on request	Client
3.	5(6)	Copy of Principal Contractor's Health & Safety Plan As well as each Contractor's Health & Safety Plan Available on request	Principal Contractor
4.	5(7)	Health and Safety File opened and kept on site (including all documentation required i.t.o. OHSA & Regulations Available on request	Every Contractor
5.	5(8)	Consolidated Health and Safety File handed to Client on completion of Construction work. To include all documentation required i.t.o. OHSA & Regulations and records of all drawings, designs, materials used and similar information on the structure	Principal Contractor
6.	5(9)	Comprehensive and Updated List of all Contractors on site, the agreements between the parties and the work being done	Principal Contractor

		Included in Health and Safety file and available on request	
7.	6(7)	Keep record on the Health and Safety File of the input by Construction Safety Officer [CR 6 (7)] at design stage or on the Health and Safety Plan	Contractor
8.	7(2)	Risk Assessment - Available on site for inspection	Contractor
9.	7 (9)	Proof of Health and Safety Induction Training	Every Employee on site
10.	8(3)	Construction Supervisor [CR 6(1)] has latest updated version of Fall Protection Plan [CR 8(1)]	Contractor
11.	9(2)(b)	Inform contractor in writing of dangers and hazards relating to construction work	Designer of Structure
12.	9(3)	All drawings pertaining to the design of structure On site available for inspection	Contractor
13.	9(4)	Record of inspections of the structure [First 2 years – once every 6 months, thereafter yearly] - Available on request	Owner of Structure
14.	9(5)	Maintenance records - safety of structure - Available on request	Owner of Structure
15.	10(d)	Drawings pertaining to the design of formwork/support work structure - Kept on site, available on request	Contractor
16.	11(3)(h)	Record of excavation inspection - On site available on request	Contractor
17.	17(8)(c)	Material Hoist daily inspection entered and signed in record book kept on the premises	Contractor
18.	17(8)(d)	Maintenance records for Material Hoist - Available on site	Contractor
19.	22(d)	Record of temporary electrical installation inspections [once a week] and electrical machinery [daily before use] in a register and kept on site	Contractor
20.	27(f)	Fire Evacuation Plan	Contractor

3. INSPECTION CHECKLIST

Employer Particulars	
Employer:	
Registered Name of Enterprise:	
Trade Name of Enterprise:	
Company Registration No.:	
SARS Registration No.:	
UIF Registration No.:	
COIDA Registration No.:	
Relevant SETA for EEA purposes:	
Industry Sector:	
Bargaining Council:	
Contact Person:	
Address of Premises:	
Postal Address:	
Telephone Number:	
Fax Number:	
E-mail Address:	
Chief Executive Officer:	
Chief Executive Officer Address:	
Competent Person:	
Maximum power demand: in KW	
Health and Safety Representatives:	
Activities, products manufactured and/ services rendered:	
Raw materials, materials and chemical/ biological substances:	
Total Number of Employees:	Male: Female:

Contractor Particulars	
Contractors:	
Site Address:	
Contracts Manager:	
Managing Director:	
Competent Persons:	
CR14: SCAFFOLDING:	
CR15: SUSPENDED SCAFFOLDING:	
CR17(6): MATERIAL HOIST (S):	
CR18(1): BATCH PLANT:	
CR8(1)(a): FALL PROTECTION:	
CR11(1)(1): EXCAVATION WORK:	
CR12: DEMOLITION WORK:	
CR19(2)(b): EXPLOSIVE POWER TOOLS	
CR26(a): STACKING	

INSPECTION				
SECTION/REGS	ITEM CHECKED	N/A	YES	NO
	APPOINTMENTS			
CR6(1)	Supervisor:			
CR6(2)	Assistant Supervisor:			
S17(1)	Health & Safety Representative: (ratio)			
S19(1)	Health & Safety Committees			
CR 12(1)	Demolition Director			
	DOCUMENTS			
GAR 9(1)	Records of Incidents			
GAR 4	Copy of the Act			
GAR 7	Safety Reps Report			
GAR 8	Safety Committee Minutes			
DMR 18(7)	Lifting Machinery Log (Crane)			
CR 3(3)	Notification of Construction Work			
CR 7(2)	Risk Assessment			
CR 7(9)(e)	Proof of the Health & Safety Induction Training			
CR 11(13)(h)	Inspection of Excavation (Records)			
CR 20(g)	Crane Operator Medical Certificate			
CR 21(11)	Mobile Plant Operator Medical Certificate			
CR 18(9)	Batch Plant Repairs & Maintenance Records			
CR22(d)	Temporary Electrical Installation Record			
CR 5(7)	Health & Safety File			
CR 15(11)	Suspended Platforms' Performance Records			
CR 17(b)& (c)	Material Hoists Record Book			

CR 21(1)(d)(ii)	Medical Certificate of Fitness			
CR 21(1)(i)	Construction Vehicle & Mobile Plant Register			
CR 22(d)	Electrical Installation & Machinery Register			
	INCIDENTS			
GAR 8(1) S24	Reported			
GAR 9(1)	Recorded Investigated Action Taken			
	PUBLIC SITE			
FR 2(1)	Sanitary Facilities			
CR 28(1) (c)	Changing Facilities for each sex			
CR 25(d)	Perimeter fence & no admittance			
CR 25(e)	Overhead protection netting/falling objects			
NB Notice	Pedestrian warning			
	PERSONAL SAFETY EQUIPMENT			
	Items Issued:			
GSR 2(3)	Items Required:			
S23	(What is the payment on each item?)			
	SAFETY PLANS			
	FIRST AID			
GSR 3(6)	Name(s) of First Aider (s):			
CR 4(1)(3)	Client's Health & Safety Specification			
CR5	Principal's contractor H&S Plan			
	FIRE HAZARD & PRECAUTIONS			
GSR 4	Flammables used, waste, hot work, diesel			
ER 9(1)	Portable Extinguishers			
	ELECTRICAL INSTALLATIONS & MACHINERY			
CR22	Guarding & PPE to Electrical Installations			
	ILLUMINATION			
ER 3(6)	Dangerous Places			
	Housekeeping			
ER6(2)(b),(c),(d)	Clear space storage			
ER6(3)	Disposal of waste			
	EXCAVATIONS			
CR 11(3)(i)	Barricades			
CR 11(3)(c)	Safe Depth Shoring/Bracing			
CR 11(1)(a)	Monitored			
CR 11(3)(h)	Excavation Inspection Record			
	GUARDING			
ER 6(2)(f)	Floor Openings			
	Floor slab sides, shafts			

	SITE EQUIPMENT			
GSR 13A(a)	Ladders condition, secured			
IMPROV	Scaffold condition, secured			
	Platforms no. of boards condition Support 1.25. Toe Boards			
IMPROV	Hand Rails			
	SITE MACHINES			
DMR 3(2)(3)	Circulars, guards, riving knives			
DMR 2(a)	Mixers guarded			
	ELECTRIC POWER			
EMR 6(1)	Supply Board, condition E.L Relay Test			
GMR 3(1)	Condition of Tools, Leads, Plugs, etc			
	LIFTING MACHINE/TACKLE			
DMR 18(8)	Lifting of persons			
DMR 18(8)	Condition, Securing of Load			
	EXPLOSIVE POWERED TOOLS			
CR 19(1)	Safe Use and Storage			
IMPROV	Warning Notice			
	ROOF WORK			
CR 8(1)	Safety equipment & precautions			
CR 8(2)	Fall protection plan			
CR 8(3)	Updated fall protection plan			
	ASBESTOS CEMENT			
AR 10(a)	Suitable Tools			

WARNING: Under no circumstances shall any work of any nature whatsoever on any ASBESTOS material be undertaken unless the work is entrusted and mandated to a "REGISTERED ASBESTOS CONTRACTOR" in terms of the Asbestos Regulations. [CR 12(9)] (plse. contact the Regional Manager's Office)

24. HEALTH AND SAFETY FILE COMPILATION AND CONTENT
(Document attached)

25. SAFETY AND SWITCHING PROCEDURES FOR ELECTRICAL INSTALLATIONS (Document attached)

NOTE:

The guidelines and conditions provided in this attached document form an integral constituent of the Health and Safety Specifications. It is therefore a condition of acceptance that no Health and Safety Plan shall be complete unless all relevant elements of this document applicable to the above project have been included in the Health and Safety Plan. The final approval of the Health and Safety Plan in terms of CR 4(2) shall be subject to this requirement based on the following certification by the Principal Contractor or his Agent:

" I hereby certify that I have taken cognisance of the content of the document titled 'SAFETY AND SWITCHING PROCEDURES FOR ELECTRICAL INSTALLATIONS' and have included the relevant elements of the document applicable to the above project in my Health and Safety Plan and shall ensure adherence to the requirements thereof."

The contents of CR 5 is pivotal when mandatory appointments are contemplated.

26. **GUIDE TO THE GENERAL ADMINISTRATIVE REGULATIONS**

(Document attached)

27. **IMPORTANT CONTACT DETAILS (HEALTH & SAFETY ONLY)** (Document attached)

ATTACHMENTS

**14. HEALTH AND SAFETY FILE COMPILATION AND
CONTENT**

**15. SAFETY AND SWITCHING PROCEDURES FOR
ELECTRICAL INSTALLATIONS**

**16. GUIDE TO THE GENERAL ADMINISTRATIVE
REGULATIONS**

**17. IMPORTANT CONTACT DETAILS - HEALTH &
SAFETY ONLY**

"HEALTH AND SAFETY FILE"

FOR

**PROJECTS AND MAINTENANCE
(ELECTRICAL)**

MANAGED ON BEHALF OF

**THE NATIONAL DEPARTMENT OF
PUBLIC WORKS**

This document serves as a guide to Principle Contractors and Contractors (and their agents) to assist them in complying with the requirements of the Act and more specifically the Construction Regulations and to ensure a most comprehensive Health and Safety File. Kindly note the following extractions from the Construction Regulations:

"Every contractor shall ensure that a health and safety file, which shall include all documentation required in terms of the provisions of the Act and the Regulations, is opened and kept on site and made available to an inspector, client, client's agent or principle contractor upon request. [CR 5(7)]"

A Principal Contractor shall hand over a consolidated health and safety file to the client upon completion of the construction work and shall, in addition to the documentation referred to in sub regulation (7) [above], include a record of all drawings, designs, materials used and other similar information concerning the completed structure. [CR 5(8)]

A Principal Contractor shall ensure that in addition to the documentation required in the health and safety file as determined in the two sub regulations above, a comprehensive and updated list of all the contractors on site accountable to the Principal Contractor, the agreements between the parties and the type of work being done are included and available. [CR 5(9)]"

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The information, documentation and lists required to be included in the Health and Safety File as contemplated in the Construction Regulations [CR 5(7)], shall be suitably and sufficiently documented in terms of the following items listed below to ensure compliance with the Act as far as is reasonably practicable.

Note: In the event that any of the items listed below may not have reference to the planning, implementation and completion of the work to be done pertaining to the project on the construction site, it must clearly be indicated as such with a proper statement e.g. 'Not Applicable'. All other relevant references or items below shall relate to the information required as contemplated in the Act and Regulations.

IMPORTANT - This Health and Safety File shall be regarded as the property of the Client as it has to be consolidated and handed over to the Client upon completion of the project. The Principal Contractor shall ensure that this file is adequately protected against any form of damage, abuse or fraud.

Registers as follows:

- * Accident/Incident Register (Annexure 1 of the General Administrative Regulations)
- * H&S Representatives ('SHE - Reps') Inspection Register
- * Arc & Gas Welding & Flame Cutting Equipment Inspections
- * Inspection of Cranes
- * Inspection of Ladders
- * Inspection of Vessels under Pressure plus all other excluded under VUP regulations
- * Fire fighting equipment

The H&S Representatives (SHE-Reps) will be required to submit the abovementioned registers as well as other legally required registers, also from the list below, on a monthly basis to the chairman of the H&S committee for submission to, and endorsement by the H&S Committee. Also refer to the suggested Agenda for the H&S Committee under 12.8.3

Documents as follows:

Copy of OH&S Act (updated) (General Administrative Regulation 4.)
Proof of Registration and good standing with a COID Insurer (Construction Regulation 4(1)(g))
Appointments – in terms of the Construction Regulations * [See references Page 4]
Notification of Construction Work – Annexure 1 [CR 3]
H&S Specifications [CR 4]
H&S Plan – Principal Contractor, Contractor & Sub-contractors [CR 5(1) & (4)]
Proof of Periodic Audits [CR 4, 5 & 6]
List of all Contractors (accountable to Principal Contractor) on site [CR 5(9)]
Contractor Agreements [CR 5(10)]

- Records of drawings, designs, materials used and similar information concerning the completed structure [CR 5(8)]
- Input by Construction Safety Officer [CR 6(7)]
- Risk Assessment [CR 7(1)]
- Copy of Risk Assessment [CR 7(2)]
- Proof of H&S Induction Training [CR 7(4) & (7) & (9)(b)]
- Proof of training on Hazards and Work Related Procedures [CR 7(4)]
- Fall Protection Plan [CR 8]
- Designer notice to contractor of dangers and hazards relating to construction work [CR 9(2)(b)]
- Drawings design of structure [CR 9(3)]
- Records of Inspections of Structure [CR 9(4)]
- Maintenance records – structure safety [CR 9(5)]
- Record Excavation Inspection [CR 11(3)(h)]
- Method Statement [CR 11(3)(k)]
- Method Statement [CR 12(2)]
- Method Statement [CR 12(11)]
- Operational Compliance Plan [CR 15(2)(c)]
- Certificates, design calculations, sketches and test results [CR 15(3)]
- Examination results [CR 15(9)]
- Suspended Platform Inspection and Performance Test records [CR 15(11)]
- Medical Certificate of Fitness [CR 15(12)(b)]
- Proof of Training [CR 15(12)(c)]
- Material Hoist Inspections [CR 17(8)(c)]
- Maintenance Records Material hoist [CR 17(8)(d)]
- Record Batch Plant Maintenance & Repair [CR 18(9)]
- Register for control of cartridges/nails studs – explosive powered tools [CR 19(2)(g)(ii)]
- Medical Certificates of Fitness [CR 20(g)]
- Medical Certificates of Fitness [CR 21(1)(d)(ii)]
- Findings of daily inspections Construction Vehicles & Mobile Plant [CR 21(1)(j)]
- Record of Temporary Electrical Installation Inspections [CR 22(d)]
- Record of Electrical Machinery Inspections [CR 22(d)]
- Proof of Training [CR 27(i)]
- Evacuation Plan [CR 27(l)]
- H&S Rep & Committee Members details
- H&S Committee Meetings' Minutes
- Other appointments in terms of OHASA

The following further identified requirements in terms of the Act and other Regulations of the Act are similarly applicable as part of the contents of the 'Health and Safety File':

- Details of Inspections (by DoL)
- Recording and Investigation of Incidents – Annexure 1 [GAR 9(1-3)]
- Action taken on all incidents [GAR 9(4)]
- Certificates of Competency in First Aid [GSR 3(4)]
- Record of Medical Surveillance required in terms of OHASA
- Proof of compliance with Asbestos Regulation requirements
- Proof of compliance with Major Hazard Installation requirements

****The Appointments to be made in writing with job descriptions as per the Construction Regulations may include some or all of the following:***

- PRINCIPAL CONTRACTORS - [CR 4(1)(c)]
- CONTRACTORS – [CR 5(3)(b) + (11)]
- COMPETENT PERSONS
 - [CR 6(1) + (2)]
 - [CR 6(6)]
 - [CR 7(1) + (4)]
 - [CR 8(1)(a)]
 - [CR 10(a) + (e) + (f)]
 - [CR 11(1) + (3)(b)(ii)(b) + (3)(k)]
 - [CR 12(1) + (2) + (3) + (11)]
 - [CR 14(2)]

- [CR 17(8)(a)]
- [CR 18(1) + (7)]
- [CR 19(2)(b) + (2)(g)(i)]
- [CR 20(f)]
- [CR 21(1)(d)(i) + (1)(j)]
- [CR 22(d) + (e)]
- [CR 26(a)]
- [CR 27(h)]

CONSTRUCTION SAFETY OFFICER - [CR 6(6)]
DESIGNER - [CR 9(2)]

☐ ☐ ☐

IMPORTANT:

A copy of the following certification in terms of the **"SAFETY AND SWITCHING PROCEDURES FOR ELECTRICAL INSTALLATIONS"** (Document attached) signed by the prospective tenderer / contractor is to be included in the Health and Safety File:

" I hereby certify that I have taken cognizance of the content of the document titled 'SAFETY AND SWITCHING PROCEDURES FOR ELECTRICAL INSTALLATIONS' and have included the relevant elements of the document applicable to the above project in my Health and Safety Plan and shall ensure adherence and compliance to the requirements thereof."

**NATIONAL
DEPARTMENT OF
PUBLIC WORKS**

**SAFETY AND SWITCHING
PROCEDURES**

FOR

ELECTRICAL INSTALLATIONS



CONTENTS

	PAGE
REGULATIONS AND DEFINITION OF A COMPETENT PERSON	59
1.1 REGULATIONS	59
1.2 DEFINITION OF A COMPETENT PERSON	59
2. SAFETY EQUIPMENT	59
3. DEFINITION OF OPERATING TERMS	59
3.1 Alive or Live	59
3.2 Dead	60
3.3 Earthing	60
3.4 Isolate	61
3.5 Circuit-Breaker	62
3.6 Link	62
3.7 Operating Methods	63
4. GENERAL SAFETY PRECAUTIONS	63
5. ACCESS TO HIGH VOLTAGE ENCLOSURES	64
6. SWITCHING	64
7. WORK IN SUBSTATIONS AND SWITCHING STATIONS CONTAINING EXPOSED LIVE CONDUCTORS	64
7.1 Safety Clearances to Live Conductors	64
7.2 Insufficient Clearances	64
7.3 Ladders and Other Long Objects	65
8. WORK ON METAL CLAD SWITCHGEAR SPOUTS	65
9. WORK ON TRANSFORMERS	65
10 WORK ON CABLES, CONDUCTORS AND OVERHEAD LINES	65
10.1 Cables and Conductors	65
10.2 Overhead Lines	65

1 REGULATIONS AND DEFINITION OF COMPETENT PERSON:

1.1 REGULATIONS:

All persons who carry out or arrange for work of any description for the Department in connection with electrical apparatus shall make themselves acquainted with the Occupational Health and Safety Act (Act 85 1993) with particular reference to the Electrical Machinery Regulations, Regulations 1 to 23 inclusive.

1.2 DEFINITION OF COMPETENT PERSON:

"competent person" in relation to machinery, means any person who—

- (a) has served an apprenticeship in an engineering trade which included the operation and maintenance of machinery, or has had at least five years' practical experience in the operation and maintenance of machinery, and who during or subsequent to such apprenticeship or period of practical experience, as the case may be, has had not less than one year's experience in the operation and maintenance appropriate to the class of machinery he is required to supervise;
- (b) has obtained an engineering diploma in either the mechanical or electro technical (heavy current) fields with an academic qualification of at least T3 or N5, or of an equivalent level, and who subsequent to achieving such qualification has had not less than two years' practical experience in the operation and maintenance appropriate to the class of machinery he is required to supervise;
- (c) is a graduate engineer and has had not less than two years' post-graduate practical experience in the operation and maintenance appropriate to the class of machinery he is required to supervise and who has passed the examination on the Act and the regulations made there-under, held by the Commission of Examiners in terms of regulations E5 (2) of the regulations published under Government Notice R.929 of 28 June 1963; or
- (d) is a certificated engineer;

2 SAFETY EQUIPMENT

The following equipment required for working on electrical installations and distribution systems, must be maintained in good order and repair and must be made available:-

Safety belt, overalls, hard hat, safety shoes or boots, rubber gloves, "Men Working" notice boards, locks for locking off switches, buss bar shutters in truck-type switchgear, isolators or earthing links, rubber sheet and length of rope with short circuiting earthing-chains, earthing sticks and testing/phasing sticks rated for the voltage of the equipment to be tested.

Under no circumstances shall work be carried out on electrical apparatus unless the proper safety equipment is used

With regard to overhead linesmen, no work shall be carried out unless use is made of a non-metallic ladder and the appropriate safety belt, rubber gloves, overalls, hardhat and safety shoes or boots are worn. The buddy system must also be implemented.

3 DEFINITION OF OPERATING TERMS

3.1 Alive or live

This means electrically connected to the power system and/or electrically charged.

Consider an isolated overhead line that is not earthed. An overhead line can be electrically connected to the system in the following ways:

- (a) By means of a metallic conductor such as links and breakers or switches. This is the normal way of transmitting electrical energy.
- (b) Electromagnetic induction or transformer action from a nearby current carrying line will induce a dangerous voltage in the isolated lines and are a hazard to all personnel that must work on or with the line.
- (c) Electrostatic induction or condenser action from a nearby live line will induce a dangerous voltage in any isolated, but not earthed, overhead line. Electrically charged means at a potential difference or

3.2 Dead

This means that any apparatus so described is isolated from the power system. Rotating plant shall not be regarded as dead until it is stationary or is being slowly rotated by means of barring gear and is not excited.

The Occupational Health and Safety Act defines dead as: "dead" means at or about zero potential and isolated from any live system. Disconnected has the same meaning as isolated. An overhead line disconnected from all sources of supply but not earthed, cannot be regarded as dead because:

- (a) It can retain a static charge.
- (b) It can acquire a static charge due to atmospheric conditions.
- (c) It can accidentally be made alive.
- (d) Nearby lines continually induce voltage in them.

The regulations recognise only the following devices as disconnects or isolators:-

- (a) Links.
- (b) Fuses.
- (c) Truck type switchgear.

3.3 Earthing

This means the connecting of apparatus electrically to the general mass of earth in such a manner as will ensure at all times an immediate safe discharge of electrical energy. This is done through an earth bar or spike by means of a good metallic conductor.

To fully appreciate this definition we must refer to the Electrical Machinery Regulations, Regulation 3 of the Occupational Health and Safety Act which states:

"Work on Disconnected Electrical Machinery. — Without derogating from any specific duty imposed on employers or users of machinery by the Act, the employer or user shall, whenever work is to be carried out on any electrical machinery which has been disconnected from all sources of electrical energy but which is liable to acquire or to retain an electrical charge, as far as is practicable, cause precautions to be taken by earthing or other means to discharge the electrical energy to earth from such electrical machinery or any adjacent electrical machinery if there is danger if there is danger there from before it is handled and to prevent any electrical machinery from being charged or made live while persons are working thereon."

Electrical apparatus and in particular overhead lines may become charged due to:-

- (a) Direct lightning strokes.
- (b) Electro magnetically induced currents due to a lightning stroke in the immediate vicinity of the line.
- (c) Electro statically induced charges on the lines due to the presence of thunderclouds.
- (d) Electrostatic charges imparted to the line by the friction of dust or snow blowing past the conductors.
- (e) Electrostatic charges imparted to the line due to changes in line altitude"

These changes are responsible for tremendously high voltages between overhead lines and earth, in fact, sometimes high enough to cause a flash over on insulators. A spark may span several centimetres of air to a person's hand should he approach too closely to an isolated unearthed overhead line.

An overhead line or apparatus can be made alive by:

- (a) Unauthorised operating, i.e., closing the wrong links and breaker.
- (b) Faulty wiring on consumer's stand-by sets. (Back feed from consumer)
- (c) A broken overhead conductor from a different line falling onto the isolated line.
- (d) Synchronising plugs.

From the foregoing paragraphs it is clear that the purpose of earthing isolated lines and apparatus are:

- (a) To discharge them should there be a residual voltage or charge.
- (b) To prevent them acquiring a static charge.
- (c) To prevent danger to persons working on apparatus in the event of someone accidentally making it alive.
- (d) To dissipate induced voltages continuously and safely.

Earthing gear means the fixed or portable appliances used for earthing electrical apparatus. The dangers from inadequate or improper earth connections are:

- (a) Electrocution.
- (b) Burns from arcing.
- (c) Electric shock leading to falls.

Earthing may be done by the closing of earthing links, or by the attaching of fixed earthing devices or by the affixing of portable earthing straps. In each case the main idea is to ensure the safety of personnel.

In affixing portable earth straps, the connection to the earthbar or earthed metal or spike must be made first and in removing such earthing straps, the disconnecting from the earthbar or earthed metal or spike must be done last. Also, a link stick or an insulated stick should be used to connect the earth wires to the overhead lines or apparatus.

These requirements are most important because connecting the portable strap first to earth and then to the conductors by means of a link stick avoids the risk of a shock to the operator from static charges or induced voltages.

REMEMBER: *Always safety test before applying earths.*

3.4 Isolate

This means to disconnect from all Sources of electrical potential by means of opening of links or fuses or the withdrawal of truck-type circuit-breakers.

All sources of electrical potential mean all points or circuits from where the apparatus can be made alive. Links, fuses and truck-type switchgear can be regarded as isolators because:

- (a) They leave a visible air gap in a circuit when open, removed or withdrawn.
- (b) They contain no stored energy and will not close due to defects.
- (c) They can be locked in a physical condition and thus can only be operated by the person with the correct key.

Opening links and locking them in the open position; removing fuses and locking them away; withdrawing truck-type switchgear and locking the buss bar shutters are the only safe methods of isolating.

3.5 Circuit Breaker

This is a device designed to make or break electric current under normal and fault conditions. A breaker can make or break an electric current because it is designed to extinguish the arc very rapidly and effectively. It is also designed to withstand the tremendous forces under short circuit conditions. The arc-extinguishing medium for high-voltage breakers is normally air, oil or vacuum and should this medium be lost, the breaker becomes a link. Never use a breaker without an arc-extinguishing medium to interrupt current flow because the breaker will probably explode or it will sustain severe damage.

A fault condition is any condition that will cause an excessive amount of current flow. The normal fault conditions are:

- (a) Phase faults.
- (b) Earth faults.
- (c) Open circuit in one line of a three-phase system (Single-phasing).
- (d) Too low a voltage. (Motors will draw a large current or even stall).

- (e) Too high a voltage.
- (f) Overloading.

For the following reasons breakers cannot be regarded as isolators:

- (a) They leave no visible gap in a circuit.
- (b) They contain stored energy and can close on their own due to various defects.
- (c) It is normally not possible to lock them in an open position.
- (d) Oil circuit-breakers are subjected to carbon tracking which could cause a flash-over between contacts.

3.6 Link

This is a device for making or breaking a circuit when no load current is flowing. Links differ from breakers and switches in the following respects:

- (a) They are not equipped with an arc extinguishing medium/device.
- (b) Their movement is very slow.

Should current be interrupted by means of links, an uncontrollable arc will be struck at the points where the contacts part.

The temperature of the arc is so high ($+ 2\,000^{\circ}\text{C}$) that it will simply melt the parting contacts. As the contacts move further apart, the arc will lengthen and burn everything away. Molten metal could splash onto the operator and cause severe injuries.

As the arc lengthens, considerable noise is generated and the light intensity is so severe that the operator could suffer from "welding flash" of the eyes.

When apparatus equipped with earthing links is required to be earthed at more than one place, the earthing links shall always be closed first and thereafter, any necessary portable earthing gear may be affixed to the apparatus.

In removing the earths in readiness for making the apparatus alive, all portable earthing gear shall first be removed and earthing links shall be opened last.

Closing the earthing links first ensures maximum safety to the operator. These links are easily operated, make good contact and the operating handles are at a safe distance from the contact points.

Locks and keys shall also be provided for links. The operating mechanism of all manually operated links shall be fitted with fastenings for locks. The operating mechanisms of each set of manually operated links shall normally be locked whether the links are in the open or in the closed position.

The locking of links provides a safeguard against their being opened or closed in error by other persons apart from the one with the correct key and a written instruction to operate.

3.7 Operating methods

This means switching, linking, safety testing and earthing. This definition also indicates the order of operating when making apparatus safe to work on.

- (a) Switching -
 - (i) Open breaker or switch to interrupt current flow safely, i.e. prevent arcs,
 - (ii) Close breaker or switch to start current flow - the only safe way.
- (b) Linking - open at least one set of links from where the apparatus can be made alive and lock the links in the open position. Always ensure that you are not going to start or interrupt current flow with the links by ensuring that the breaker or switch is open.
- (c) Safety test - test all three phases to ensure that the apparatus is disconnected from all sources of supply and that there is no back-feed from a consumer's standby set or other source.

(d) Apply earths - ensure safety of the workers by:-

- (i) Discharging the line or apparatus.
- (ii) Preventing the line from acquiring a static charge.
- (iii) Preventing the line or apparatus from being accidentally made alive.

Before applying portable earths, ensure that they are mechanically and electrically in good condition. There should be no broken strands, the clamps should be rigid and without defect and when applied properly, should make intimate contact with the conductors and earthbar or spike. The earthing cable tails should be as short as possible. The current carrying capacity of the portable earth is greatly reduced by broken strands. It will act as a fuse and increase the danger to workmen.

4 GENERAL SAFETY PRECAUTIONS

No person shall carry out work of any description (including maintenance, repairs, cleaning and testing) on any part of electrical apparatus unless such parts of the apparatus are:

- (a) dead;
- (b) disconnected, isolated and all practicable steps taken to lock off from live conductors;
- (c) efficiently connected to earth with the appropriate earthing sticks or gear designed for this purpose at all points of disconnection of supply;
- (d) screened where necessary to prevent danger, and caution and danger notices fixed;

and unless such person is fully conversant with the nature and extent of the work to be done.

It is the duty of the competent person in charge of the work to ensure that the foregoing provisions are complied with. He shall also ensure that when the work has been completed, the apparatus is safe to be made alive and that all earths and temporary danger notices have been removed.

Provided that cleaning and painting of earthed metal enclosures, connections or disconnections of circuits to or from live systems may be carried out in accordance with instructions issued by the competent person concerned.

Provided also that where the design of the apparatus precludes the strict compliance with all details of these precautions, the work shall be carried out to the instructions of the senior competent person present.

When any person receives instructions: regarding work on or the operation of high voltage apparatus he shall report any objection to the carrying out of such instructions to the competent person who shall have the matter investigated and, if necessary, referred to higher authority.

5 ACCESS TO HIGH VOLTAGE ENCLOSURES AND APPARATUS

Enclosures, chambers, cubicles or cells containing high voltage conductors shall be kept locked and shall not be opened except by a competent person.

6 SWITCHING:

- (a) No switching shall be carried out without the sanction of the appropriate competent person except for agreed routine switching or in cases of emergency.

All telephone instructions/messages relating to the switching operation shall be written down and be repeated in full to the sender to ensure that the message has been accurately received.

- (b) When a switch shows any sign of distress after operating, its condition shall be immediately reported to the appropriate competent person, and it shall be examined before further operation.
- (c) The examination of and necessary adjustments including inspection and/or changing of oil of any high voltage oil immersed circuit-breaker which has operated under fault conditions shall be carried out if possible before the circuit-breaker is re-closed, or at the earliest available opportunity

WORK IN SUBSTATIONS AND SWITCHING STATIONS CONTAINING EXPOSED LIVE CONDUCTORS.

7.1 Safety Clearances to Live Conductors:

Unless the whole equipment is "dead", the section which is made dead for work to be carried out shall be defined by the use of barriers or roping such that the minimum clearance from the nearest exposed conductor to ground level or platform or access way shall be:-

Rated Voltage	Clearance
Up to 11 kV	3.0 m.
From 11 kV to 33 kV	3.4 m

The area at ground level shall be only that in which the work is to be carried out.

7.2 Insufficient Clearances

If the above clearances are not sufficient to avoid danger, other suitable arrangements shall be made to provide the requisite degree of safety.

7.3 Ladders and Other Long Objects

Ladders and other long objects shall not be used without the permission of the senior authorised person in charge of the work and the movement and erection of such ladders shall be under his/her direct supervision at all times.

8 WORK ON METAL CLAD SWITCHGEAR SPOUTS:

- (i) The section of bus bars on which work is to be carried out shall be made dead and isolated from all points of supply.
- (ii) The shutters of live spouts shall be locked closed.
- (iii) The busbars shall be earthed with approved earthing equipment if possible, at a panel other than that at which work is to be carried out. Temporary earths shall in any case be applied to all phases on the busbar at the point of work. These earths may then be removed one phase at a time for work to be carried out. Each phase earth shall be replaced before a second phase earth is removed.

For the earthing of metal clad switchgear, approved appliances only shall be used. The insertion of the hand or any other tool in contact spouts for this purpose is forbidden.

9 WORK ON TRANSFORMERS:

When work is carried out on transformers, both the primary and secondary switches and isolators shall be opened. The transformer shall also be isolated from all common neutral earthing equipment from which it may become live. This does not require the disconnection of solidly earthed neutrals.

10 WORK ON CABLES, CONDUCTORS AND OVERHEAD LINES:

10.1 Cables and Conductors

- (a) No person shall touch the insulation, which covers or supports any high voltage conductor unless the conductor is dead and earthed.
- (b) Before carrying out work involving cutting into a high voltage cable, the responsible person shall satisfy himself that the cable has been made dead, isolated and earthed where practicable and identified. In all cases of doubt, the cable shall be spiked in an approved manner.

TESTING PROCEDURES AND PRECAUTIONS FOR COMMISSIONING OF ELECTRICAL CABLES

The aim of this section is to create an awareness of the latest standards and testing procedures for the commissioning of new and the re-commissioning of repaired electrical cables.

Before commissioning or re-commissioning cables tests must be carried out to ensure the integrity of the cable/s and to ensure the safety of operating personnel.

1. Low voltage Cables

1.1 Initial Tests

Carry out a meter test to ensure that the insulation resistance complies with the manufacture's and the relevant SABS requirements. For L.V. cables a 500V d.c. meter is adequate for this purpose.

1.2 Voltage Tests

This covers extruded solid dielectric cables (covered by SABS 1507), voltage ranges are as indicated in Table 1

After installation the cable has to be tested to ensure the integrity of the cable and the quality of the work. A.C. testing of solid dielectric cables is preferred. Very low frequency high voltage sinusoidal electrical testing methods are recommended to avoid the use of cumbersome large testing equipment.

Method: The test voltage should be applied between conductors and between each conductor and the metallic protection or earthed surroundings of the cable as appropriate. The voltage to be raised gradually to the specified values in the table and maintained for 15 minutes.

Table 1 - Test Voltages After Installation

1	2	3	4
Cable operating voltage	The test voltage is to be applied	Test Voltage V	
		m.s)	d.c.
300/500	Between Conductors and conductors/earth		
600/1000	Between Conductors and conductors/earth		
1900/3300	Between conductors		
1900/3300	Between Conductors and conductors/earth		

2. Medium/High Voltage

Each section of the cable installation between substations shall be subjected to a preliminary voltage or insulation resistance test to prove the insulation resistance.

The installation resistance can be measured with a high voltage meter with a rating of 5000V.

2.1 Paper Insulated Lead covered Double Steel Tape or Wire Armoured Cable (covered by SABS 97), voltage ranges are as indicated in Table 2

The test voltage should be applied between conductors and between each conductor and the metal sheath, which should be held at earth potential. In each case, the voltage should be increased steadily to the stipulated value and maintained at this value for 15 minutes.

Table 2 in-situ test voltages.

	2	3	4	5	6	7
Age Rating of Cable kV	Test Voltage					
	Belted Cables				Single-core and screened cables	
	Between conductors		From conductor to sheath		Between conductor and sheath or screen	
	a.c.	d.c.	a.c.	d.c.	a.c.	d.c.
3.3/3.3	7	9	7	9	-	-
3.8/6.6	13	19	8	11	8	11
6.6/6.6	13	19	13	19	-	-
6.35/11	22	31	13	19	13	19
11/11	22	31	22	31	-	-
12.7/22	-	-	-	-	25	36
19/33	-	-	-	-	38	54

2.2 XLPE-Insulated Cables covered by SABS 0198 Part 13.

NOTE: If circumstances necessitate testing that is not in accordance with the recommendations of this section, the cable manufacturer or a test expert should be consulted before any testing is carried out.

The use of inappropriate or excessive test voltages or of unsuitable fault location methods can damage XLPE-insulated cables. Cables that are particularly prone to damage during testing are those that have water trees and those that have a construction that differs from that specified in the 1981 and in subsequent editions of SABS 1339.

The Types of Test Waveforms to be applied are:

- Very low frequency (VLF): An Alternating waveform that is either sinusoidal or pseudo-square/cosine rectangular, of nominal frequency 0,1 Hz.
- Power frequency: An alternating sinusoidal waveform of frequency in the range 25 Hz to 100 Hz.
- Surge: A step waveform that has a rise time of a few microseconds and that gradually decays to zero within 5 s.

These waveforms are referred to in the various test tables below.

Note: Where the capacity of the test set permits, all three cores of a three-core cable may be tested together.

2.2.1 PRELIMINARY TESTS

- 2.2.1.1 Leakage Resistance. Before carrying out any testing or fault location, determine and accurately record the leakage resistance to earth and, if relevant, between conductors. Use an instrument that generates a d.c test voltage of not less than 250 V and not more than 5 kV. Typical minimum values of leakage resistance are given in Table 3.

TABLE 3—MINIMUM LEAKAGE RESISTANCE

1	2	3	4	5
Cable Operating voltage U , kV	Minimum leakage resistance, M Ω			
	Cable length, m			
	100	300	1 000	3 000
6,6	150	50	15	5
11	240	80	24	8
22	460	153	46	15
33	680	227	68	23

NOTE:

- 1 The value of leakage resistance multiplied by the cable length should not be less than $(2 U + 2) \text{ M}\Omega\cdot\text{km}$, where U is the voltage rating of the cable in kilovolt.
- 2 This test is repeated after the required sequence of tests (see 2.2.2.7).

2.2.2 TESTING

- 2.2.2.1 **Over voltage Commissioning Tests.** When newly installed cables are being commissioned, they should be tested at the test voltages given in Table 4, appropriate to the test waveforms and test durations given in columns 1 and 2 of the table.

TABLE 4—COMMISSIONING TEST VOLTAGES (r.m.s.)					
1	2	3	4	5	6
Test waveform (see 2.2)	Duration, Min	Commissioning test voltage, kV			
		Cable Operating voltage, kV			
		6.6	11	22	33
VLF (0,1 Hz)	60	11	19	38	57
Power frequency	60	8	13	25	38

NOTE:

1. Test sets for the above are commercially available.
2. Where the above test levels cannot be achieved, a reduced voltage for an extended time may be negotiated.

- 2.2.2.2 **Overvoltage Maintenance/Repair Tests.** When cables are tested for maintenance or repair purposes, they should be tested at the test voltages given in Table 5, appropriate to the waveforms and test durations given in columns 1 and 2 of the table.

- 2.2.2.3 **Surge Test Method** (see Table 5). The surge test is intended to be a practical basic safety test. It can be used as a non-damaging means of identifying fairly serious existing or potential faults when power frequency or VLF equipment is not available. The test avoids the application of a continuous d.c. voltage (see 2.2.2.4), but it is not as conclusive or rigorous as the other methods.

CAUTION: During the surge test, a peak voltage of up to twice the test voltage can be generated in the cable.

Method. Charge the surge generator to the appropriate test voltage given in Table 5. Using single-shot mode, release a surge into the cable and then soft-discharge the cable (see 2.2.5.5) within 5 s. Repeat the procedure up to five times and then fully discharge the cable by solidly earthing it for at least 5 min.

TABLE 5—MAINTENANCE/REPAIRS TEST VOLTAGES (r.m.s.)					
1	2	3	4	5	6
Test waveform (see 2.2)	Duration	Maintenance/repair test voltage, kV			
		Cable operating voltage, kV			
		6.6	11	22	33
VLF (0,1 Hz)	15 min	8	13	25	38
Power frequency	15 min	7	11	22	33
Surge test (see 2.2.1.3)	5 surges, max.	7	11	22	33

2.2.2.4

D.c. Over voltage Testing. D.c. over voltage testing is likely to cause irreversible damage to XLPE-insulated cable systems, particularly if the cables have water trees. It often fails to identify potentially hazardous conditions in the cable. If d.c. testing has to be carried out because no other test methods are available, the voltage and duration should be limited to the appropriate values given in Table 6, which are recommended for quick identification of gross faults only. Use a d.c. test set or a surge generator in d.c. mode to apply the test voltage. After applying the voltage, soft-discharge the cable (see 2.2.2.5), using either the d.c. test set or a discharge stick. Fully discharge the cable by solidly earthing it for at least 8 h but preferably for 24 h.

TABLE 6—D.C. TEST VOLTAGES

1	2	3	4	5
Duration, s	D.c. test voltage, kV			
	Cable operating voltage, kV			
	6.6	11	22	33
10	6	10	20	30

2.2.2.5 SOFT DISCHARGE OF CABLE. An XLPE-insulated cable should always be soft-discharged through a resistance of at least 200 k Ω , for example by using a discharge stick. Discharging a conductor direct to earth by short-circuiting it with a lead can severely damage the cable. After the initial discharge, a cable should be solidly earthed for at least 5 min. If the cable has been subjected to any form of d.c. test, it should be solidly earthed for at least 8 h, but preferably for 24 h.

2.2.2.6 CABLE SHEATH TESTING. To avoid problems caused by the ingress of water into the cable, a cable should be subjected to sheath testing:

- a) at commissioning,
- b) annually, and
- c) after the location and repair of a fault.

Cable sheath testing can also be used to locate conductor earth faults that have punctured the outer sheath, provided that multiple sheath faults are not present. A direct current sheath test voltage of 5 kV should be applied for 1 min, with a leakage current of 1 mA/km being regarded as acceptable.

2.2.2.7 AFTER TESTING. After completion of any of the above tests, the leakage test described in 2.2.1.1 should be repeated. A tenfold reduction in the value of leakage resistance could indicate a potential problem.

2.2.3 CIRCUIT-BREAKER CLOSURE

2.2.3.1 Faulty or Unknown Cable Conditions. Closing a circuit-breaker on an untested cable can be hazardous to the operator and can damage the cable. A fault should never be re-established by repeated closing of a circuit-breaker.

2.2.3.2 Voltage Doubling. During switch-in onto open circuit, voltage doubling occurs at the remote end of the cable. Voltages of up to 20 kV can occur on an 11 kV system. Switching onto a load such as a transformer avoids this voltage doubling.



IMPORTANT CONTACT DETAILS

(FOR HEALTH & SAFETY ASPECTS ONLY)

The contractor is to add all the important contact information about essentials services, support and assistance.

SERVICE

NUMBER

CONTACT PERSON



Hospital		



Ambulance		



Water		
Electricity		



Police		



Fire Brigade		



Engineer		

ADD OTHER IMPORTANT HEALTH & SAFETY CONTACT DETAILS AS MAY BE FOUND NECESSARY.



public works
& infrastructure
Department
Public Works and Infrastructure
REPUBLIC OF SOUTH AFRICA

Addendum to the health and safety specification document.

COVID-19 pandemic

Site Name:

Date:

Principal Contractor Name:

Contractor Name:

COVID-19 should not be allowed to destroy the construction sector, or our income in this sector. We are committed to working with government and the private sector towards ensuring that returning to work will achieve the envisioned economic prosperity for all employees and the country as a whole.

You are going to start working on the site as soon as it is allowed by Government. That means you must have a Covid - 19 management plan that form part of your health and safety plan, as an addendum, in your safety file. The Covid - 19 management plan must be developed by a competent person.

Your Covid - 19 management plan must be site specific and practically viable and must cover this sites anticipated areas where infections are likely to occur on your site area. All persons in your employ on site must be trained in your Covid - 19 management plan. The attendance register for the training must be attached to the Covid - 19 management plan.

Your CEO and site management must endorse (sign) the Covid - 19 management plan.

The Regulation that govern your Covid - 19 management plan have not been promulgated yet. We are however being pro-active in this regard. If and when the Regulations are promulgated and published in the Government Gazette, we will amend this addendum to correspond with the Regulations. We do not foresee major changes in the draft Regulations.

Your Covid - 19 management plan must contain at least the following:

- a. A schematical drawing of the actual workarea and where the actual work will be performed.
- b. Health Risk Assessment:
 - i This risk assessment must form part of your management plan. We do not want it as a separate document. It must physically form part of the Covid - 19 management plan. Bind it within the plan document.
 - ii Different areas in the workplace might require different methods of safeguarding the employees. In that case specify the area and determine the risks and mitigating measures of that specific area.
- c. What are the symptoms and how to identify them in the workplace?
- d. Screening of workers. How will it be done and when?
- e. If someone is suspected of having the Covid -19 virus, what will the procedure be?

If an employee suspects that he/she has contracted the virus, what would the procedure be?

What PPE will be issued and when?

- h. Quarantine:- self quarantine, forced quarantine, what will your procedure and policy be?
- i. Working from home guidelines. (When, who, etc.)
- j. Safe travelling to and from work.
- k. How will you safeguard meetings? Precautions during meetings?
- l. Hygiene in the workplace:

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Page 2

- i. Disinfecting workplace, tools, facilities, etc.
- ii. Disinfecting hands and bodyparts.
- iii. Methods of disinfecting that will be used.
- iv. What type of disinfectant?
- m. Physical contact. (Control, who, when, etc.)
- n. Training of employees
- o. Cross Provincial border travel of employees.
- p. Keeping record and communicating vital information of cases detected on site.
- q. Visitors to the site.
- r. Social distancing on site.
- s. Employee awareness program.
- t. Regularly cleaning common contact surfaces on site?
- u. How will you treat drivers that deliver to site?
- v. Handwashing facilities. (Where, when, how many, type, etc)
- w. Provision and disposal of hand towels.
- x. Cleaning regimes for toilet facilities particularly door handles, locks and the toilet flush.
- y. Portable toilet hygiene.
- z. Break times, how will you reduce congestion and contact?
- aa Hygiene at water drinking stations.
- ab Tracing of infected employees.
- ac Your weekly Covid - 19 reports that must be submitted to the Client.
- ad Congestion at the workplaces.
- ae Consequence of not adhering to the Covid - 19 management plan, the risk assessment and the policy.
- af You must develop a Covid - 19 Policy.
- ag How will you manage your contractors on site regarding the Covid - 19?

The required document must be submitted to DPW Consultants/Projectmanagers/OHS Managers. We will issue a letter of approval if all the requirements in this addendum to the health and safety plan, have been met. Please note that these requirements are minimum requirements only and all of the items must be addressed in your Covid - 19 management plan, risk assessment and Covid - 19 policy document.

The index to your Covid - 19 File should contain at least the following:

- | | |
|-------------------------------------|------------------------------------|
| 1 Covid - 19 Management plan | 7 Toolbox Talks |
| 2 Covid - 19 Risk Assessment | 8 Safe Work Procedures |
| 3 Covid 19 Policy | 9 Checklists |
| 4 Employee Screening declarations | 10 Training Material |
| 5 PPE Issue Register | 11 Posters |
| 6 Compliance Employees Appointments | 12 Compliance Officer Appointments |

ewith my signature confirm that I have received this Covid - 19 specification document.

This specs was developed for Construction sites.

PW 1544



DEPARTMENT OF PUBLIC WORKS

HIV/AIDS

SPECIFICATION

OCTOBER 2004

SECTION

HIV/AIDS SPECIFICATION

HIV/AIDS REQUIREMENTS

1 SCOPE

This specification contains all requirements applicable to the Contractor for creating HIV/AIDS awareness amongst all of the Workers involved in this project for the duration of the construction period, through the following strategies:

- Raising awareness about HIV/AIDS through education and information on the nature of the disease, how it is transmitted, safe sexual behaviour, attitudes towards people affected and people living with HIV/AIDS, how to live a healthy lifestyle with HIV/AIDS, the importance of voluntary testing and counselling, the diagnosis and treatment of Sexually Transmitted Infections and the closest health Service Providers;
- Informing Workers of their rights with regard to HIV/AIDS in the workplace;
- Providing Workers with access to condoms and other awareness material that will enable them to make informed decisions about sexual practices.

2 DEFINITIONS AND ABBREVIATIONS

2.1 Definitions

Service Provider: The natural or juristic person recognised and approved by the Department of Public Works as a specialist in conducting HIV/AIDS awareness programmes.

Service Provider Workshop Plan: A plan outlining the content, process and schedule of the training and education workshops, presented by a Service Provider which has been approved by the Representative/Agent.

Worker: Person in the employ of the Contractor or under the direction or supervision of the Contractor or any of his Sub-contractors, who is on site for a minimum period of 30 days in all.

2.2 Abbreviations

- HIV : Human Immunodeficiency Virus.
- AIDS : Acquired Immune Deficiency Syndrome.
- STI : Sexually Transmitted Infection.

3 BASIC METHOD REQUIREMENT

- 3.1 The Contractor shall, through a Service Provider, conduct onsite workshops with the Workers.

The Service Provider shall develop and compile a Service Provider Workshop Plan to be presented at the workshops and which will be best suited for this project to achieve the specified objectives with regard to HIV/AIDS awareness.

The Service Provider Workshop Plan shall be based on the following information provided by the Contractor:

- Number of Workers and Sub-contractors on site;
- When new Workers or Sub-contractors will join the construction project;
- Duration of Workers and Sub-contractors on site;
- How the maximum number of Workers can be targeted with workshops;
- How the Contractor prefers workshops to be scheduled, e.g. three hourly sessions per Worker, or one 2.5 hour workshop per Worker;
- Profile of Workers, including educational level, age and gender (if available);
- Preferred time of day or month to conduct workshops;
- A Gantt chart reflecting the construction programme, for scheduling of workshops;
- Suitable venues for workshops.

The Contractor shall submit the Service Provider Workshop Plan for approval within 21 days after the tender acceptance date. After approval by the Representative/Agent, the Contractor shall make available a suitable venue that will be conducive to education and training.

3.2 The Service Provider Workshop Plan shall address, but will not be limited to the following:

- 3.2.1 The nature of the disease;
- 3.2.2 How it is transmitted;
- 3.2.3 Safe sexual behaviour;
- 3.2.4 Post exposure services such as voluntary counselling and testing (VCT) and nutritional plans for people living with HIV/AIDS;
- 3.2.5 Attitudes towards other people with HIV/AIDS;
- 3.2.6 Rights of the Worker in the workplace;
- 3.2.7 How the Awareness Champion will be equipped prior to commencement of the HIV/AIDS awareness programme with basic HIV/AIDS information and the necessary skills to handle questions regarding the HIV/AIDS awareness programme on site sensitively and confidentially;
- 3.2.8 How the Service Provider will support the Awareness Champion;
- 3.2.9 Location and contact numbers of the closest clinics, VCT facilities, counselling services and referral systems;
- 3.2.10 How the workshops will be presented, including frequency and duration;
- 3.2.11 How the workshops will fit in with the construction programme;
- 3.2.12 How the Service Provider will assess the knowledge and attitude levels of attendees to structure workshops accordingly;
- 3.2.13 How the video will be used;
- 3.2.14 How the Service Provider will elicit maximum participation from the Workers;
- 3.2.15 A questions and answers slot (interactive session).

The Service Provider Workshop Plan shall encompass the Specific Learning Outcomes (SLO) as stipulated.

4 HIV/ AIDS AWARENESS EDUCATION AND TRAINING

4.1 Workshops

The Contractor shall ensure that all Workers attend the workshops.

The workshops shall adequately deal with all the aspects contained in the Service Provider Workshop Plan. A video of HIV/AIDS in the construction industry, which can be obtained from all Regional Offices of the Department of Public Works, is to be screened to Workers at workshops. In order to enhance the

learning experience, groups of not exceeding 25 people shall attend the interactive sessions of the workshops.

4.2 Recommended practice

4.2.1 Workshop Schedule

Presenting information contained in the Service Provider Workshop Plan can be divided in as many workshop sessions as deemed practicable by the Contractor, provided that all Workers are exposed to all aspects of the workshops as outlined in the Service Provider Workshop Plan.

Breaking down the content of information to be presented to Workers into more than one workshop session however, has the added advantage that messages are reinforced over time while providing opportunity between workshop sessions for Workers to reflect and test information. Workers will also have an opportunity to ask questions at a following session.

4.2.2 Service Providers

A database of recommended Service Providers is available from all Regional Offices of the Department of Public Works.

4.2.3 HIV/AIDS Specific Learning Outcomes and Assessment Criteria

Workers shall be exposed to workshops for a minimum duration of two-and-a-half hours. In order to set a minimum standard requirement, the following specific learning outcomes and assessment criteria shall be met.

4.2.3.1 UNIT 1: The nature of HIV/AIDS

After studying and understanding this unit, the Worker will be able to differentiate between HIV and AIDS and comprehend whether or not it is curable. The Worker will also be able to explain how the HI virus operates once a person is infected and identify the symptoms associated with the progression of HIV/AIDS.

Assessment Criteria:

1. Define and describe HIV and AIDS;
2. List and describe the progression of HIV/AIDS.

4.2.3.2 UNIT 2: Transmission of the HI virus

After studying and understanding this unit, the Worker will be able to identify bodily fluids that carry the HI virus. The Worker will be able to recognise how HIV/AIDS is transmitted and how it is not transmitted.

Assessment Criteria:

1. Record in what bodily fluids the HI virus can be found;
2. Describe how HIV/AIDS can be transmitted;
3. Demonstrate the ability to distinguish between how HIV/AIDS is transmitted and misconceptions around transmittance of HIV/AIDS.

4.2.3.3 UNIT 3: HIV/AIDS preventative measures

After studying and understanding this unit, the Worker will comprehend how to act in a way that would minimise the risk of HIV/AIDS infection and to use measures to prevent the HI virus from entering the bloodstream.

Assessment Criteria:

1. Report on how to minimise the risk of HIV/AIDS infection;
2. Report on precautions that can be taken to prevent HIV/AIDS infection;
3. Explain or demonstrate how to use a male and female condom;
4. List the factors that could jeopardize the safety of condoms provided against HIV/AIDS Transmission.

4.2.3.4 UNIT 4: Voluntary HIV/AIDS counselling and testing

After studying and understanding this unit, the Worker will be able to recognise methods of testing for HIV/AIDS infection. The Worker will be able to understand the purpose of voluntary HIV/AIDS testing and pre- and post-test counseling.

Assessment Criteria:

1. Describe methods of testing for HIV/AIDS infection;
2. Report on why voluntary testing is important;
3. Report on why pre- and post-test counselling is important.

4.2.3.5 UNIT 5: Living with HIV/AIDS

After studying and understanding this unit, the Worker will be able to recognise the importance of caring for people living with HIV/AIDS and be able to manage HIV/AIDS.

Assessment Criteria:

1. List and describe ways to manage HIV/AIDS;
2. Describe nutritional needs of people living with HIV/AIDS;
3. Describe ways to embrace a healthy lifestyle as a person living with HIV/AIDS;
4. Explain the need for counselling and support to people living with HIV/AIDS.

4.2.3.6 UNIT 6: Treatment options for people with HIV/AIDS

After studying and understanding this unit, the Worker will be familiar with the various treatments available to HIV/AIDS infected or potentially HIV/AIDS infected people.

Assessment Criteria:

1. Discuss anti-retroviral therapy;
2. List methods of treatment to prevent HIV/AIDS transmission from mother-to-child;
3. Describe the need for treatment of opportunistic diseases for people living with HIV/AIDS;
4. Describe post exposure prophylactics.

4.2.3.7 UNIT 7: The rights and responsibilities of Workers in the workplace with regard to HIV/AIDS

After studying and understanding this unit, the Worker will be able to identify the rights and responsibilities of the Worker living with HIV/AIDS in the workplace. The Worker will recognise the importance of accepting colleagues living with HIV/AIDS and treating them in a non-discriminative way.

Assessment Criteria:

1. Discuss the rights of a person living with HIV/AIDS in the workplace;
2. Discuss the responsibilities of a person living with HIV/AIDS in the workplace;
3. Report on why acceptance and non-discrimination of colleagues living with HIV/AIDS is important.



4.3 Displaying of plastic laminated posters and distribution of information booklets

The Contractor shall obtain a set of four laminated posters conveying different key messages and information booklets. The contractor should include the costs of posters and information booklets in his/her tender price.

The above-mentioned posters and information booklets have been prepared to raise awareness and to share information about HIV/AIDS and STI's.

Posters or display stands shall be displayed on site as soon as possible, but not later than 14 days after the date of site handover.

Posters shall be displayed in areas highly trafficked by Workers, including toilets, rest areas, the site office and compounds.

The posters on display must always be intact, clear and readable.

Information booklets must be distributed to all Workers as soon as possible, but not later than 14 days after site handover, or as soon as the Worker joins the site.

5 PROVIDING WORKERS WITH ACCESS TO CONDOMS

The Contractor shall provide and maintain condom dispensers and make both male and female condoms, complying with the requirements of SABS ISO 4074, available at all times to all Workers at readily accessible points on site, for the duration of the contract. The Contractor may obtain condom dispensers from the Department of Health and condoms may be obtained from the Local Clinic or the Department of Health.

At least one male and one female condom dispenser and a sufficient supply of condoms, all to the approval of the Representative/Agent, shall be made available on site within 14 days of site hand over. Contractors should note that arrangements to obtain condoms from the Department of Health Clinics prior to site hand over may be necessary, to ensure that condoms are available within 14 days of site handover.

Condoms shall be made available in areas highly trafficked by Workers, including toilets, the site office and compounds.

6 ENSURING ACCESS TO HIV/AIDS TESTING AND COUNSELLING FACILITIES AND TREATMENT OF SEXUALLY TRANSMITTED INFECTIONS (STI)

The Contractor shall provide Workers with the names of the closest Service Providers that provide HIV/AIDS testing and counselling and Clinics providing Sexually Transmitted Infection (STI) diagnosis and treatment. Information on these Service Providers and Clinics must be displayed on a poster of a size not smaller than A1 in an area highly trafficked by Workers.

7 APPOINTMENT OF AN HIV/AIDS AWARENESS CHAMPION

- 7.1 Within 14 days of site handover the Contractor shall appoint an Awareness Champion from amongst the Workers, who speaks, reads and writes English, who speaks and understands all the local languages spoken by the Workers and who shall be on site during all stages of the construction period. The Contractor shall ensure that the Awareness Champion has been trained by the Service Provider on basic HIV/AIDS information, the support services available and the necessary skills to handle questions regarding the HIV/AIDS programme in a sensitive and confidential manner.

7.2 The Awareness Champion shall be responsible for:

- 7.2.1 Liaising with the Service Provider on organising awareness workshops;
- 7.2.2 Filling condom dispensers and monitoring condom distribution;
- 7.2.3 Handing out information booklets;
- 7.2.4 Placing and maintaining posters.

8 **MONITORING**

The Contractor shall grant to the Representative/Agent reasonable access to the construction site, in order to establish that the Contractor complies with his obligations regarding HIV/AIDS awareness under this contract.

The Contractor must report problems experienced in implementing the HIV/AIDS requirements to the Representative/Agent.

The attached SITE CHECKLIST (SCHEDULE A) shall be completed and submitted at every construction progress inspection to the Representative/Agent.

The attached SERVICE PROVIDER REPORT (SCHEDULE B) shall be completed and submitted on a monthly basis to the Department's Project Manager, through the Representative/Agent.

The attached CONTRACTOR HIV/AIDS PROGRAMME REPORT (SCHEDULE C), a close out programme report, shall be completed by the Contractor at the end of the contract.

SCHEDULE A

HIV/AIDS PROGRAMME: SITE CHECKLIST

When did construction commence: _____

Name of Departmental Project Manager: _____

Please refer to HIV/AIDS Programme activities during the reporting period

DATE	PI							PI							PI							PI						
	D	D	M	M	D	D	M	D	D	M	M	D	D	M	D	D	M	M	D	D	M	D	D	M	M	D	D	M
Programme implemented within 14 days of site handover																												
Awareness champion on site																												
HIV/AIDS awareness service provider report																												
Male condom dispenser																												
Sufficient male condoms available																												
Male condom dispenser in a highly trafficked area																												
Female condom dispenser																												
Sufficient female condoms available																												
Female condom dispenser in a highly trafficked area																												
All four types of posters displayed																												
Posters in a good condition																												
Posters in a highly trafficked area																												
Posters displayed on local support services: clinic & VCT centre																												
Support service poster/s in highly trafficked area																												
Support service poster/s in a good condition																												

SCHEDULE A

<i>Please indicate the applicable number for the reporting period</i>							
Workers on payroll (at PI)							
Sub-Contractors who will be on site for longer than 30 days (at PI)							
Workshop attendees							
Number of workshops held							
Scheduled workshops according to approved workshop plan							
Booklets distributed							
Male condoms distributed							
Female condoms distributed							

Representative/Agent

Date _____

Contractor

Date _____

Date of progress inspection: (ccyy/mm/dd)

Reporting period: (ccyy/mm/dd) _____ to (ccyy/mm/dd) _____

Deviations from HIV/AIDS awareness programme plan:

--

Corrective actions:

--

Representative/Agent

Departmental Project Manager

Date

Date

SCHEDULE B**HIV/AIDS AWARENESS PROGRAMME: SERVICE PROVIDER REPORT**

Reporting period: (ccyy/mm/dd) _____ to (ccyy/mm/dd) _____

Number of workshops conducted in reporting period: _____

Number of scheduled workshops according to approved workshop plan: _____

Deviations from workshop plan:

--

State reasons for deviating from workshop plan:

--

Corrective actions:

--

Service Provider_____
Date_____
Date

HIV/AIDS AWARENESS PROGRAMME : WORKSHOP CONTENT ADDRESSED

DATE		W/S			W/S			W/S			W/S			W/S		
		D	D	M	D	D	M	D	D	M	D	D	M	D	D	M
Content of workshop: (Mark the content included)																
SLO1																
SLO2																
SLO3																
SLO4																
SLO5																
SLO6																
SLO7																
HIV/AIDS in construction video																
Indicate the duration of the workshop in hours																
Total number of Workers																
Indicate workshop venue																

SCHEDULE C**CONTRACTOR HIV/AIDS PROGRAMME REPORT**

Project name: _____

Project Location: _____

Contract value of project: R_____

Department of Public Works Project Manager: _____

HIV/AIDS Programme duration: (ccyy/mm/dd) _____ to (ccyy/mm/dd) _____

AWARENESS MATERIAL

Describe location of posters displayed during the programme: _____

Comments on posters: _____

Indicate total number of booklets distributed: _____

Comments on booklets: _____

CONDOMS

Indicate total number of male condoms distributed: _____

Indicate total number of female condoms distributed: _____

Describe where male condom dispenser was placed: _____

Describe where female condom dispenser was placed: _____

HIV/AIDS WORKSHOPS

Indicate the total number of HIV/AIDS workshops conducted: _____

Indicate the duration of workshops: _____

Indicate the total number of Workers that participated in the HIV/AIDS workshops: _____

Indicate the total number of Workers that were exposed to the video on HIV/AIDS in the Construction Industry: _____

Comments on HIV/AIDS workshops on site: _____

GENERAL

Briefly describe programme activities and satisfaction with outcome: _____

Additional comments, suggestions or needs with regard to the HIV/AIDS awareness programmes on site: _____

Please indicate if your company has a formal HIV/AIDS policy focussing on HIV/AIDS awareness raising and care and support of HIV/AIDS Workers:

Yes	No	Currently developing one
-----	----	--------------------------

Please indicate if, to your knowledge, you have lost any workers during the duration of the project to HIV/AIDS related sicknesses. One or more of the following might indicate an HIV/AIDS related death:

Excessive weight loss
Reactive TB
Hair loss
Severe tiredness

Coughing or chest pain
Pain when swallowing
Persistent fever
Diarrhoea

Vomiting
Meningitis
Memory loss
Pneumonia

Number of HIV/AIDS-related deaths: _____

Contractor

Date

Departmental Project Manager

Date

Part 4: Site information

C4 Site Information

PG-03.1 (EC) SITE INFORMATION – GCC (2010) 2nd Edition 2010

Project title:	DCS: SUPPLY AND INSTALLATION OF BACK UP POWER GENERATOR AT BETHULIE PRISON			
Tender no:	BL23/008	WCS no:	051561	Reference no: 4/1/1/1/35/6705

C4 Site Information

The site is located at Bethulie Prison, Free State Province.

Ground condition are flat.