



## TENDER

# SUPPLY AND INSTALL SOLAR SYSTEM IN OLD FORD HOUSE BUILDING AT SARAH BAARTMAN

**SCMU5-23/24-0051**

NAME OF COMPANY:

---

CSD Nr:

---

CRS Nr (CIDB):

---

CLOSING DATE: 24 August 2023

TIME: 11:00 am



Department of Public Works and Infrastructure  
Independence Avenue  
Qhasana Building  
Bhisho  
5605



## **TABLE OF CONTENTS**

THE TENDER	3
PART T1 – TENDERING PROCEDURES	4
T1.1 TENDER NOTICE AND INVITATION TO TENDER	5
T1.2 TENDER DATA	8
PART T2 RETURNABLE DOCUMENTS	24
T2.1 LIST OF RETURNABLE DOCUMENTS	25
SBD 1 – PART A INVITATION TO BID	27
SBD 1 – PART B TERMS AND CONDITIONS FOR BIDDING	29
COMPULSORY ENTERPRISE QUESTIONNAIRE (A)	30
SBD 4 – DECLARATION OF INTEREST	31
SBD 6.1 – PREFERENCE POINT CLAIM	33
PROOF OF REGISTRATION ON THE NATIONAL TREASURY CENTRAL SUPPLIER DATABASE	44
VALID CIDB CERTIFICATE OF A TENDERER	45
PROTECTION OF PERSONAL INFORMATION: CONSENT (POPIA)	46
THE CONTRACT	48
PART C1 – AGREEMENTS AND CONTRACT DATA	49
PART C1.1 – FORM OF OFFER AND ACCEPTANCE	50
PART C1.1 A – J	54
PROJECT REFERENCE FORMS – 1 (K)	65
PROJECT REFERENCE FORMS – 2	67
PROJECT REFERENCE FORMS – 3	69
PART C1.1 L	71
PART C1.2 CONTRACT DATA	72
PART C1.3 DISPUTE RESOLUTION MECHANISM	81
C1.3 CIDB ADJUDICATOR'S AGREEMENT	82
PART C2 – PRICING DATA	84
PART C2.1 – PRICING INSTRUCTIONS	85
OHS SPECIFICATION	86
HIV/STI COMPLIANCE REPORT	87
PART C2.3 – BILLS OF QUANTITIES	92
DRAWINGS / ANNEXURES	102
PART C3 – SCOPE OF WORKS	104
C3.1 – SCOPE OF WORKS	105
C3.2 – TECHNICAL SPECIFICATIONS FOR ROOFTOP PV	106
PART C4 – SITE INFORMATION	114
C4.1 – SITE INFORMATION	115
ANNEXURE 1 - OHS SPECIFICATIONS	116
ANNEXURE 2 – APPROVED CITY OF CAPE TOWN INVERTER LIST	165



## THE TENDER



## **PART T1**

# **TENDERING PROCEDURES**



## **PART T1.1: TENDER NOTICE AND INVITATION TO TENDER**



## T1.1 Tender Notice and Invitation to Tender

The Eastern Cape Department of Public Works and Infrastructure invites contractors with a CIDB Grading of **4EB/EP or higher** in the following Class of works (**4EB/EP or higher**) to tender for the “**SUPPLY AND INSTALL SOLAR SYSTEM IN OLD FORD HOUSE BUILDING AT SARAH BAARTMAN**” for a **4 months’** contract. The contract will be based on the NEC3 TERM SERVICE CONTRACT: APRIL 2013 and the Eastern Cape Public Works and Infrastructure will enter into a contract with the successful tenderer.

Only tenderers who have suitable experience and suitably qualified personnel in providing similar services to those that are required are eligible to submit tenders.

Bid documents are downloadable free of charge from Department of Public Works and Infrastructure website ([www.ecdpw.gov.za/tenders](http://www.ecdpw.gov.za/tenders)) or from National Treasury’s tender portal (<http://www.etender.gov.za/content/advertised-tenders>). Bid documents will be available on **21 July 2023**. No bid documents will be available at departmental offices.

There will be **compulsory** briefing meeting on **31 July 2023**, at Ford House, 55 Albany Road, Gqeberha. Prospective bidders to meet at the **at the main entrance of Old Ford House at 10h00**.

Queries relating to the issue of these documents may be addressed in writing to Mr. Zamuxolo Billie- email: [supply.chain@ecdpw.gov.za](mailto:supply.chain@ecdpw.gov.za) **Technical enquiries:** may be addressed in writing to **Mr. K. Ntsono**– email: [kenneth.ntsono@ecdpw.gov.za](mailto:kenneth.ntsono@ecdpw.gov.za)

It is the responsibility of the tenderer/s to ensure that bid documents /proposals are submitted on or before closing time and the correct location as the department will not take responsibility of wrong delivery. Tenderers using courier services for delivery of their bid documents must ensure the delivery is at the correct place / location and time as the department will not be held responsible for wrong delivery. Not delivered to Departmental officials. The Department will not accept responsibility if bids received by officials are not timely deposited in the Bid Box.

Tenders may only be submitted on the tender documentation that is issued. Tenderers must be registered on the National Treasury Central Supplier Data Base and proof of registration must be submitted with the proposal (<https://secure.csd.gov.za>). Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data.

### B. TENDER SUBMISSION

The closing time for receipt of tenders by the ECDPWI is 11:00am on **24 August 2023**. Telegraphic, telephonic, telex, facsimile, e-mail and late tenders will not be accepted. Bids must be submitted in sealed envelopes clearly marked “**SCMU5-23/24-0051**”: “**SUPPLY AND INSTALL SOLAR SYSTEM IN OLD FORD HOUSE BUILDING AT SARAH BAARTMAN**” must be deposited in the bid box, **DEPARTMENT OF PUBLIC WORKS, FRONT CORNER OF QHASANA BUILDING ON THE WAY TO CIDB OFFICES LABELLED “TENDERS”, BISHO**.

### C. BID EVALUATION:

**This bid will be evaluated in Three (3) phases as follows:**

**Phase One:** Compliance, responsiveness to the bid rules and conditions, thereafter

**Phase Two:** Functionality - the minimum threshold to be further evaluated is 70 on the requirements

**Phase Three:** PPPFA.

### PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT (PPPFA) POINTS WILL BE AWARDED AS FOLLOWS:

Maximum points on price	-	<b>80 points</b>
Maximum points for Specific Goals	-	<b>20 points</b>
<b>Maximum points</b>	-	<b>100 points</b>



#### **C. BID SPECIFICATIONS, CONDITIONS AND RULES**

- The minimum specifications, other bid conditions and rules are detailed in the bid document under Tender Data
- The specifications, rules, special conditions of bid, evaluation criteria, and other bid conditions are detailed in the document.
- The Department of Public Works and Infrastructure SCM policy applies.

Tender validity period is **120 days**.

#### **D. TENDER SUBMISSIONS:**

#### **E. ENQUIRIES WITH REGARD TO THIS ADVERT MAY BE DIRECTED TO:**

- **SCM RELATED ENQUIRIES**

Email Address: [supply.chain@ecdpc.gov.za](mailto:supply.chain@ecdpc.gov.za)

- **TECHNICAL ENQUIRIES**

Mr. K. Ntsono

Tel No: **060 751 9622**

Email Address: [kenneth.ntsono@ecdpc.gov.za](mailto:kenneth.ntsono@ecdpc.gov.za)

#### **FOR COMPLAINTS, FRAUD, & TENDER ABUSE:**

Call: 0800 701 701



## PART T1.2: TENDER DATA





## T1.2 Tender Data

The conditions of tender are the latest edition of SANS 10845-3, *Standard conditions of tender*.

SANS 10845-3 makes 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 provisions of SANS 10845-3 and as contained in **Annexure C of Standard for Uniformity in Construction Procurement (Board Notice 423 of 2009 Government Gazette No 42622 of August 2019)**.

Each item of data given below is cross-referenced to the clause in SANS 10845-3 to which it mainly applies.

Clause number	Tender Data
3.1	The Employer is Public Works and Infrastructure - Eastern Cape
3.2	<p>The tender documents issued by the employer comprise the following documents:</p> <p><b>THE TENDER</b></p> <p><b>Part T1: Tendering procedures</b></p> <p>T1.1 - Tender notice and invitation to tender</p> <p>T1.2 - Tender data</p> <p><b>Part T2: Returnable documents</b></p> <p>T2.1 - List of returnable documents</p> <p>T2.2 - Returnable schedules</p> <p><b>THE CONTRACT</b></p> <p><b>Part C1: Agreements and Contract data</b></p> <p>C1.1 - Form of offer and acceptance</p> <p>C1.2 - Contract data</p> <p>C1.3 - Dispute Resolution Mechanism</p> <p><b>Part C2: Pricing data</b></p> <p>C2.1 - Pricing Instructions</p> <p>C2.2 - Bills of Quantities</p> <p><b>Part C3: Scope of work</b></p> <p>C3 - Scope of work</p> <p><b>Part C4: Site information</b></p> <p>C4 - Site information</p>
3.3	The tender documents issued by the employer comprise the documents listed on the contents page
3.4	<p>The employer's agent is:</p> <p>Name: Mr K. Ntsono</p> <p>Ford House Building,</p> <p>Department of Public Works and Infrastructure</p> <p>55 Albany Road, Gqeberha</p> <p>Tel No: <b>060 751 9622</b></p> <p>Email Address: Kenneth.ntsono@ecdpw.gov.za</p>
3.5	The language for communications is English
3.6	The competitive negotiation procedure shall be applied.
3.7	Method 3: Two (3) stage procurement procedure shall be applied.



<b>4</b>	<b>Tender's obligations</b>
4.1	<p>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:</p> <p>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) of 25(7A) of the Construction Industry Development Regulations, for a CIDB <b>Grade 4EB/EP or Higher</b> class of construction work; and</p> <p>Joint ventures are eligible to submit tenders provided that:</p> <ol style="list-style-type: none"> <li>every member of the joint venture is registered with the CIDB;</li> <li>the lead partner has a contractor grading designation in the CIDB <b>Grade 3EB/EP or higher</b> class of construction work; and</li> <li>the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a CIDB <b>Grade 4EB/EP or higher</b> class of construction work or a value determined in accordance with Regulation 25 (1B) of 25(7A) of the Construction Industry Development Regulations.</li> </ol> <p>4. Joint Venture Agreement.</p>
4.2	<p>The employer will compensate the tender as follows <b>NEC3 TERM SERVICE CONTRACT: APRIL 2013</b>. The employer <b>will not</b> compensate the tenderer for any costs incurred in attending interviews or making any submissions in the office of the employer.</p>
4.3	<p>It is the responsibility of the tenderer to check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission.</p>
4.4	<p><b>Confidentiality and copyright of documents</b></p> <p>Treat as confidential all matters arising in connection with the tender. Use and copy the documents issued by the employer only for the purpose of preparing and submitting a tender offer in response to the invitation.</p>
4.5	<p>Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are incorporated into the tender documents by reference.</p>
4.6	<p>Acknowledge receipt of addenda to the tender documents, which the employer may issue, and, if necessary, apply for an extension to the closing time stated in the tender data, in order to take the addenda into account.</p>
4.7	<p>The arrangements for a compulsory clarification meeting are as stated in the Tender Notice and Invitation to Tender.</p> <p>Tenderers must sign the attendance list in the name of the tendering entity. Addenda will be issued to and tenders will be received only from those tendering entities appearing on the attendance list.</p> <p><b>Tender documents will not be made available at the clarification meeting</b></p>
4.8	<p><b>Seek clarification</b></p> <p><i>Request clarification of the tender documents, if necessary, by notifying the employer at least <b>7 (Seven) working days</b> before the closing time stated in the tender data.</i></p>
4.9	<p>Tenderers are required to state the rates and currencies in Rands.</p> <p>Include in the rates, prices, and the tendered total of the prices (if any), all duties, taxes which the law requires to be paid [except value added tax (VAT)], and other levies payable by the successful tenderer, that are applicable 14 days before the closing time stated in the tender data. Show the VAT payable by the employer separately as an addition to the tendered total of the prices. Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in the contract data.</p> <p>State the rates and prices in monetary value of the contract unless otherwise instructed in the tender data.</p>
4.10	<p>Do not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer or to correct errors made by the tenderer and ensure that all signatories to the tender offer initial all such alterations.</p> <p>Do not make erasures using masking fluid.</p>
4.11	<p>Main tender offers are not required to be submitted together with alternative tenders.</p>



4.12	No alternative tender offers will be considered
4.13.1	<p>Parts of each tender offer communicated on paper shall be submitted as an original. Submit</p> <p>a) the parts of the tender offer communicated on paper as an original plus the number of copies stated in the tender data, with a translation of any documentation in a language other than the language of communication established in 3.5, and</p> <p>b) the parts communicated electronically by the employer of its agents on paper format with the tender.</p>
4.13.2	<p>Sign the original and all copies of the tender offer where required in terms of the tender data. State in the case of a joint venture which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the tender offer. NOTE The employer holds all authorized signatories liable on behalf of the tenderer.</p>
4.13.3	<p>A tender security in the amount of <b>N/A</b> is required and shall remain valid for a period not exceeding <b>N/A</b> days after the closing date for tender offers. The form of the tender security shall not differ substantially from the sample provided in Annex D of SANS 10845-3.</p>
4.13.4	<p>The employer's details and address for delivery of tender offers and identification details that are to be shown on each tender offer package are: <b>Location of tender box: DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE, FRONT CORNER OF QHASANA BUILDING ON THE WAY TO CIDB OFFICES LABELLED "TENDERS", BISHO.</b> <b>Physical address:</b> Independence avenue, Ground Floor, Qhasana Building, Bisho, 5605 <b>Identification details:</b> <b>SCMU5-23/24-0051: "SUPPLY AND INSTALL SOLAR SYSTEM IN OLD FORD HOUSE BUILDING AT SARAH BAARTMAN"</b> <b>Closing time and date: 24 August 2023 at 11:00</b></p>
4.13.5	<p>The tenderer is required to submit with his tender the following certificates:</p> <p>1) a copy of the CSD report showing, amongst other things, that tax matters of the service provider are in order the South African Revenue Services. <i>In the case of a Joint Venture/Consortium/Sub-contractors each party must submit a separate CSD report showing, amongst other things, that tax matters of the service provider are in order the South African Revenue Services.</i></p> <p>2) CIDB Grading certificate or CRS number.</p>
4.13.6	A two-envelope procedure will not be required.
4.13.7	Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted. The tenderer accepts that the employer does not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.
4.14	<p>The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender. Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Proof of posting shall not be accepted as proof of delivery. Accept that, if the employer extends the closing time stated in the tender data for any reason, the requirements of the standard conditions of tender in this part of SANS 10845 apply equally to the extended deadline.</p>
4.15.1	<p>The tender offer validity period is <b>120 days</b>. Hold the tender offer(s) valid for acceptance by the employer at any time during the validity period stated in the tender data after the closing time stated in the tender data. If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period, with or without any conditions attached to such extension. Extend the period of the tender security, if any, to cover any agreed extension requested by the employer.</p>
4.15.2	<p><b>Placing of contractors under restrictions / withdrawal of tenders</b> If any tenderer who has submitted a tender offer or a contractor who has concluded a contract has, as relevant: withdrawn such tender or quotation after the advertised closing date and time for the receipt of submissions; after having been notified of the acceptance of his tender, failed or refused to commence the contract; had their contract terminated for reasons within their control without reasonable cause; offered, promised or given a bribe in relation to the obtaining or the execution of such contract; acted in a fraudulent, collusive or anti-competitive or improper manner or in bad faith towards the Provincial Government; or, made any incorrect statement in any affidavit or declaration</p>



	with regard to a preference claimed and is unable to prove to the satisfaction of the Provincial Government that the statement was made in good faith or reasonable steps were taken to confirm the correctness of the statements, such tenderer/s may be placed under restriction from tendering with the state. Procedures are outlined in the EC SCM Policy for Infrastructure procurement and Delivery Management and also on <b>CIDB</b> Inform Practice Note #30. Excerpts of the policy can be availed on request of any interested tenderer.																				
4.16	Access shall be provided for the following inspections, tests and analysis: <b>N/A</b>																				
4.17	The preferred tenderer will be required to submit an approved insurer undertaking to provide the Performance Bond / Guarantee / Surety / Security to the format and/or standard after 21 days of appointment																				
<b>5</b>	<b>Employer's undertakings</b>																				
5.1	The Employer will respond to requests for clarification received up to <b>Seven (7)</b> working days before the tender closing time. If, as a result of the issuing of addenda, it is necessary to extend the closing time stated in the tender data, grant such extension and notify all respondents accordingly.																				
5.2	The employer shall issue addenda until <b>Seven (7)</b> working days before tender closing time.																				
5.3	Tenders will be opened immediately after the closing time for tenders at <b>11:00am hours</b> .																				
5.4	Do not disclose to tenderers, or to any person not officially concerned with such processes, information relating to the evaluation and comparison of tender offers, the final evaluation price and recommendations for the award of a contract, until after the award of the contract to the successful tenderer.																				
5.5	Determine, after opening and before detailed evaluation, whether each tender offer that was properly received a) complies with the requirements of the standard conditions of tender in this part of SANS 10845, b) has been properly and fully completed and signed, and c) is responsive to the other requirements of the tender documents. A responsive tender is one that conforms to all the terms, conditions, and scope of work of the tender documents, without material deviation or qualification. A material deviation or qualification is one which, in the employer's opinion, would d) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the scope of work, e) significantly change the employer's or the tenderer's risks and responsibilities under the contract, or f) affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified. Reject a non-responsive tender offer, and do not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.																				
5.6	<b>Arithmetical errors, omission and discrepancies</b> Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount in words shall govern. For Vat related discrepancies, National and Provincial Treasury prescripts in relation to VAT procedures apply.																				
5.7.1	The financial offer will be reduced to a comparative basis using the Tender Assessment Schedule. <table><tr><td colspan="4">Table F.1: Formulae for calculating the value of A</td></tr><tr><td>Formula</td><td>Comparison aimed at achieving</td><td>Option 1*</td><td>Option 2*</td></tr><tr><td>1</td><td>Highest price or discount</td><td><math>A = \left( 1 + \frac{(P - P_m)}{P_m} \right)</math></td><td><math>A = P / P_m</math></td></tr><tr><td>2</td><td>Lowest price or percentage commission / fee</td><td><math>A = \left( 1 - \frac{(P - P_m)}{P_m} \right)</math></td><td><math>A = P_m / P</math></td></tr><tr><td colspan="4">a <math>P_m</math> is the comparative offer of the most favourable comparative offer. <math>P</math> is the comparative offer of the tender offer under consideration.</td></tr></table>	Table F.1: Formulae for calculating the value of A				Formula	Comparison aimed at achieving	Option 1*	Option 2*	1	Highest price or discount	$A = \left( 1 + \frac{(P - P_m)}{P_m} \right)$	$A = P / P_m$	2	Lowest price or percentage commission / fee	$A = \left( 1 - \frac{(P - P_m)}{P_m} \right)$	$A = P_m / P$	a $P_m$ is the comparative offer of the most favourable comparative offer. $P$ is the comparative offer of the tender offer under consideration.			
Table F.1: Formulae for calculating the value of A																					
Formula	Comparison aimed at achieving	Option 1*	Option 2*																		
1	Highest price or discount	$A = \left( 1 + \frac{(P - P_m)}{P_m} \right)$	$A = P / P_m$																		
2	Lowest price or percentage commission / fee	$A = \left( 1 - \frac{(P - P_m)}{P_m} \right)$	$A = P_m / P$																		
a $P_m$ is the comparative offer of the most favourable comparative offer. $P$ is the comparative offer of the tender offer under consideration.																					
5.7.2	The procedure for the evaluation of responsive tenders is <b>Method 3: Administrative, Functionality, Price and Preference</b> Phase 1: Compliance, responsiveness to the bid rules and conditions, thereafter																				





	<p>Phase 2: Bidders passing phase one above will thereafter be evaluated on functionality</p> <p>Phase 3: Bidders passing phase two above will thereafter be evaluated on PPPFA (80/20)</p>
	<p><b>1. <u>PHASE ONE: RESPONSIVENESS TO THE BID REQUIREMENTS AND RULES</u></b></p> <p><b>Bidders' proposals must meet the following minimum requirements and supporting documents must be submitted with the completed bid document in a sealed envelope in the bid box at the closing date and time. Failure to comply will automatically eliminate the bid for further consideration:</b></p> <ol style="list-style-type: none"> <li>1. Bid Document (This Document must be submitted in its original format)</li> <li>2. Bids which are late, incomplete, unsigned or submitted by facsimile or electronically, will not be accepted.</li> <li>3. Bidder must be registered with CIDB in the correct grading and class of works as per the tender notice and requirements. The status on CIDB must be active. It is the responsibility of the bidder to keep the status on CIDB active throughout bidding process (advert till award stage).</li> <li>4. Bidders must be a legal entity or partnership or consortia.</li> <li>5. Form of offer and Acceptance (fully completed and signed).</li> <li>6. SBD 4- Declaration of Interest (fully completed and signed). <b>SBD4 must be duly completed and signed. 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, such interest must be disclosed on question 2.3.1.</b></li> <li>7. Incomplete or unsigned or poorly completed forms <b>SBD 4 will lead to a bidder being declared non-responsive.</b></li> <li>8. Compulsory Enterprise Questionnaire (Completed and signed) (JV partners must complete separate Questionnaire forms and submit).</li> <li>9. If the offer (any of the items quoted for) is "Vat Inclusive", the VAT registration number of service provider must be indicated. Bidders are not entitled to claim the VAT if they are not VAT registered.</li> <li>10. If the Bid Sum (amount in words) differs from the Bid Sum (amount in figures), the Bid Sum (amount in words) will govern.</li> <li>11. Resolution to Sign (must be completed, if applicable).</li> <li>12. Declaration of Employees of the State or other State Institutions.</li> <li>13. Only one offer per bidder is allowed and alternative offers will not be considered. If more than one offer is received, none of the offers will be considered.</li> <li>14. Attendance of compulsory briefing meeting</li> </ol> <p><b>Other Conditions of bid (Non eliminating unless expressly mentioned in the document):</b></p> <ol style="list-style-type: none"> <li>1. The bidder must be registered on the Central Supplier Database (CSD) prior the award</li> <li>2. All bidders' tax matters must be in order prior award. Bidders' tax matters will be verified through CSD. In cases where bidder's status found non-compliant the bidder will be granted 7 days to correct status. <b>A bidder that fails to rectify its tax matters with SARS will declared non-responsive.</b></li> <li>3. The bidder has duly completed and signed the <b>SBD 1</b>, and <b>SBD 6.1</b>.</li> <li>4. Bidders need to complete and sign <b>SBD 6.1</b> to claim points for specific goals. <b>Failure will lead in non-awarding of points for specific goals.</b></li> <li>5. Bidders must submit a minimum of three (3) written contactable references for projects successfully completed in the past (clearly indicating client name, contract value, contract term, contact person, contact details). Refer to Annexure I and Annexure M. This is not an elimination factor, but important for the department to make a decision. Unless it is used for Quality/functionality Points.</li> <li>6. Bidders must submit a list of projects where he or she has submitted tender offers but tender results have not been confirmed by the client. Refer to Annexure L. This is not an elimination factor, but important for the department to make a decision. Unless it is used for Quality/functionality Points.</li> </ol>



	<p>7. Bidders must submit their company profiles, list of available resources, plant and machinery and any other additional capacity with the bid. Refer to Annexure K and H. This is not an elimination factor, but important for the department to make a decision. Unless it is used for Quality/functionality Points.</p> <p>8. The bidder must also list all projects where there are pending litigations or litigations have been concluded. The form for this is also attached after Annexure J.</p> <p>9. The Department will contract with the successful bidder by signing a formal contract.</p> <p>10. This tender will be awarded as a whole. All trades listed in the Bills of Quantities or Pricing schedule must be priced for (except provisional sums and allowances which also need to be added to the total), failure to do so will increase commercial risk of the bid and may lead to elimination or passing over of the bidder.</p> <p>11. Wherever a brand name is specified in this document (i.e. specifications, pricing schedule, bill of quantities or anywhere), the department requires an item similar/equivalent or better.</p> <p>12. DPWI Policy applies.</p> <p>13. Protection of personal information: Consent (POPIA)</p> <p>14. The successful tenderer (after being informed) will be required to bring along an unsigned copy of the form of contract to be signed by parties (e.g. <b>NEC3 TERM SERVICE CONTRACT: APRIL 2013</b>)</p>		
	<p><b>2. <u>PHASE TWO: FUNCTIONALITY</u></b></p> <p><b>Functionality Evaluation Criteria</b> The functionality evaluation will be conducted by the end-user/operations/the Bid Evaluation Committee which comprises of various skilled and experienced members from diverse professional disciplines. The evaluation process will be based on threshold criteria. The criteria will be as follows:</p> <p>Points allocated for Functionality shall be evaluated in accordance with the criteria as listed below.</p> <p>The criteria for functionality will be evaluated as follows:</p> <ol style="list-style-type: none"> <li>The tenderer will be marked out of a total of 100 points.</li> <li>Only tenderers scoring 70 points (and more) out of 100 points for functionality evaluation will be considered for further evaluation on Specific goals (80:20 split).</li> <li>A combined functionality score will be calculated from the construction and maintenance criteria as shown below.</li> </ol>		
<b>1</b>	<b>EXPERTISE OF PROPOSED KEY PERSONNEL - Maximum Points = 40</b>		
	Criteria	Score	Points Scored
	<p>CVs of proposed key personnel with experience in solar PV projects, the persons need not be in the current employ of the entity at the time of submission, but a commitment either of subcontract agreement between entity and subcontractor (person or entity) or consent between the entity and person whose CV is submitted shall be presented and signed by the proposed individual/subcontractor.</p> <p><b>NB: Proposed key personnel shall be qualified / registered in their respective trades/professions</b></p> <p><u>Project Team</u></p> <ul style="list-style-type: none"> <li>Project Manager / Team Leader (Engineer/Technician) with 5 years or more experience</li> <li>Design Engineer / Technician with 5 years or more experience</li> <li>Installation Electrician with 5 years or more and have a PV Green Card</li> </ul>		



		Project team – all individuals have 5 years' experience or more	40	
		Project team – one or more individuals have over 3 years' experience but less than 5 years	30	
		Project team – one or more individuals have over 1 year' experience, but less than 3 years	20	
		Project team – one or more individuals have less than 1 year'	10	
	<b>2</b>	<b>PROJECT EXPERIENCE AND REFERENCES - Maximum Points = 40</b>		
		Criteria	Score	Points Scored
		Bidder has successfully supplied, constructed, and commissioned rooftop PV Solar plant of a minimum 100kWp plant size. Bidder to provide reference of projects completed within the last 10 years, that has valid Client references on a client letterhead, with valid contact details. Client reference letter to include, Project name, description of works (including plant size), location of works, start date, completion date.		
		4 projects or more	40	
		3 projects	30	
		2 project	20	
		1 Project	10	
	<b>3</b>	<b>METHODOLOGY AND TIMEFRAMES - Maximum Points = 20</b>		
		Criteria	Score	Points Scored
		Submit a Method Statement for the construction of a rooftop PV solar plant that contains: Construction Methodology, Quality Management plan and Safety plan, in-line with construction safety regulations and industry standards and requirements. Construction methodology submitted must include the following: PV Mounting Frame Structure installation, Mounting of PV modules, PV Module Stringing LV Electrical System installation. <b>(NB: Points will not be awarded to method statements that do not contain the info stipulated above).</b> Submit a project program on a Gantt Chart indicating timeline, deliverables and dependencies. Program must include the following: PV Mounting Frame Structure installation, Mounting of PV modules, Inverter, Battery, LV Electrical System installation. <b>(NB: Points will not be awarded to method statements that do not contain the info stipulated above)</b>		
		Submit both Methodology and project program	20	
		Submit either Methodology or project program	10	



	<p><b>3. PHASE THREE: EVALUATION POINTS ON PRICE AND PREFERENTIAL PROCUREMENT REGULATIONS OF 2022</b></p> <p>The <b>80/20 preference point system</b> shall be applied for the purposes of this bid as per the requirements of the <i>Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000)</i> and Specific goals/PPR2022</p> <table border="1"> <tr> <th>Criteria</th><th>Points</th></tr> <tr> <td><b>POINTS ON PRICE</b></td><td><b>80</b></td></tr> <tr> <td><b>Specific Goals</b></td><td><b>20</b></td></tr> <tr> <td><b>TOTAL</b></td><td><b>100</b></td></tr> </table> <p><b>The 80/20 preference point system for acquisition of services, works or goods not exceeding Rand value of R50 million:</b></p> <p>(a) The following formula must be used to calculate the points for price in respect of tenders (including price quotation) with a Rand value equal to, or above R 30 000 and up to Rand value of R 50 000 000 (all applicable taxes included):</p> <p>The financial offer will be scored using the following formula:</p> $A = (1 - \frac{P - P_m}{P_m})$ <p>The value of value of <math>W_1</math> is:</p> <p>1) <b>90</b> where the financial value inclusive of VAT of all responsive tenders received have a value in <b>excess of R50 000 000</b> or</p> <p>2) <b>80</b> where the financial value inclusive of VAT of one or more responsive tender offers have a value that <b>equals or is less than R 50 000 000</b>.</p>	Criteria	Points	<b>POINTS ON PRICE</b>	<b>80</b>	<b>Specific Goals</b>	<b>20</b>	<b>TOTAL</b>	<b>100</b>
Criteria	Points								
<b>POINTS ON PRICE</b>	<b>80</b>								
<b>Specific Goals</b>	<b>20</b>								
<b>TOTAL</b>	<b>100</b>								
5.7.3	The procedure for the evaluation of responsive tenders is <b>Method 3</b> (Administrative, functionality, price and preference)								
5.7.4	The quality criteria and maximum score in respect of each of the criteria are as follows: <b>N/A</b>								
5.7.5	Each evaluation criteria will be assessed in terms of five indicators – <b>N/A</b>								
5.7.6	The prompts for judgment and the associated scores used in the evaluation of quality shall be as follows: <b>N/A</b>								
5.8	<p><b>Tender offers will only be accepted if:</b></p> <ul style="list-style-type: none"> <li>a) the tenderer is registered on the Central Supplier Database (CSD) for the South African government (see <a href="https://secure.csd.gov.za/">https://secure.csd.gov.za/</a>) unless it is a foreign supplier with no local registered entity</li> <li>b) the tenderer is in good standing with SARS according to the Central Supplier Database. Bidders must submit a CSD no. or tax status compliance pin.</li> <li>c) the preferred tenderer will be required to submit an approved insurer undertaking to provide the Performance Bond / Guarantee / Surety / Security to the format and/or standard as per DPWI policy.</li> <li>d) the tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation;</li> <li>e) the tenderer or any of its directors/shareholders is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector.</li> <li>f) the tenderer has not: <ul style="list-style-type: none"> <li>i) abused the Employer's Supply Chain Management System; or</li> <li>ii) failed to perform on any previous contract and has been given a written notice to this effect.</li> </ul> </li> <li>g) the tenderer has completed the Compulsory Declaration and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the tender process.</li> </ul>								
	<ul style="list-style-type: none"> <li>h) the tenderer has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the</li> </ul>								





	<p>employer or potentially compromise the tender process and persons in the employ of the state are permitted to submit tenders or participate in the contract;</p> <p>i) the tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer;</p> <p>j) The tenderer undertakes to maximize the sourcing of building material or infrastructure input material from Eastern Cape based suppliers or manufacturers.</p> <p>k) the employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2014, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely.</p> <p>l) the tender has offered a market related offer. If the offer is believed not to be market related, the department through its Supply Chain Management bid committees will attempt to negotiate the offer with identified bidder/s to a reasonable amount. Bidders are not allowed to increase their tender offers during this process.</p> <p>m) A Resolution of signatory form has been completed and signed by director/s or a letter bearing a letterhead of the tenderer has been attached (specific to this bid) to the bid submission; it must be duly signed by all directors and submitted the bid. Only a duly authorized official can sign the bid.</p> <p>n) <b>NOTE:</b> The amount reflected on the Form of Offer and Acceptance takes precedence over any other total amount indicated elsewhere in bidder's tender submission. If the Form of Offer and Acceptance has no value or figure, the bidder will be regarded as having made no offer.</p> <p>o) The department reserves the right not to award the bid to the most favourable tenderer, if any of the situations occur: if it is not assisting in the advancement of designated groups; risk profile of the favourable firm is too high; the bidder has been awarded a considerable number of projects by the department or provincial government; has performed unsatisfactorily in the past, etc.</p>
5.9	The number of paper copies of the signed contract to be provided by the employer is 1.
	<p>The additional conditions of tender are:</p> <ul style="list-style-type: none"> <li>Wherever a brand name is specified in this document (i.e., specifications, pricing schedule, bill of quantities or anywhere), the department requires an item similar/equivalent or better.</li> </ul>
T.2.1	<b>A. List of returnable documents</b>
1	<p><b>Documentation to demonstrate eligibility to have tenders evaluated i.e. List all documentation to demonstrate eligibility to have a submission evaluated.</b></p> <ul style="list-style-type: none"> <li>Appropriate CIDB grading suitable for the works (as stated in 4.1).</li> </ul>
2	<p><b>Returnable Schedules required for tender evaluation purposes</b></p> <p>The tenderer must fully and appropriately complete and sign the following returnable schedules as relevant:</p> <ul style="list-style-type: none"> <li>Record of Addenda to Tender Documents</li> <li>Proposed amendments and qualifications</li> <li>Compulsory Enterprise Questionnaire (In the case of a joint venture, separate enterprise questionnaires in respect of each partner must be completed and submitted).</li> <li>SBD 1, 4, 6.1.</li> <li>Protection of personal content: Consent</li> <li>Form of Offer and Acceptance</li> <li>Complete priced Bills of Quantities, including Final Summary</li> <li>Certificate of Authority for Joint Ventures</li> </ul>
3	<p><b>Other documents required for tender evaluation purposes</b></p> <p>The tenderer must provide the following returnable documents:</p> <ul style="list-style-type: none"> <li>A CSD Report for a contractor with valid and correct information.</li> </ul>



	<ul style="list-style-type: none"> <li>A letter of good standing from the Compensation Fund or a licensed insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act 1993 (Act No. 130 of 1993)</li> </ul>
4	<p><b>Returnable Schedules that will be used for tender evaluation purposes and be incorporated into the contract</b></p> <p>The tenderer must complete the following returnable documents:</p> <ul style="list-style-type: none"> <li>A duly completed form of Offer and Acceptance (and any revision of prices if there are any).</li> </ul>
5	<p><b>Only authorized signatories may sign the original and all copies of the tender offer where required.</b></p> <ul style="list-style-type: none"> <li>In the case of a ONE-PERSON CONCERN submitting a tender, this shall be clearly stated.</li> <li>In the case of a <b>COMPANY</b> submitting a tender, include a copy of a <b><u>resolution by its board of directors</u></b> authorizing a director or other official of the company to sign the documents on behalf of the company.</li> <li>In the case of a <b>CLOSE CORPORATION</b> submitting a tender, include a copy of a <b><u>resolution by its members</u></b> authorizing a member or other official of the corporation to sign the documents on each member's behalf.</li> <li>In the case of a <b>PARTNERSHIP</b> submitting a tender, <b><u>all the partners</u></b> shall sign the documents, unless one partner or a group of partners has been authorized to sign on behalf of each partner, in which case <b><u>proof of such authorization</u></b> shall be included in the Tender.</li> <li>In the case of a <b>JOINT VENTURE/CONSORTIUM</b> submitting a tender, include <b><u>a resolution of each company</u></b> of the joint venture together with a <b><u>resolution by its members</u></b> authorizing a member of the joint venture to sign the documents on behalf of the joint venture.</li> </ul> <p><b><u>Accept that failure to submit proof of authorization to sign the tender shall result in the tender offer being regarded as non-responsive.</u></b></p>
6	<p><b>Information and data to be completed in all respects</b></p> <p>Accept that tender offers, which do not provide all the data or information requested completely and, in the form, required, may be regarded by the employer as nonresponsive.</p>
7	<p><b>Canvassing and obtaining of additional information by tenderers</b></p> <p>The Tenderer shall not make any attempt either directly or indirectly to canvass any of the Employer's officials or the Employer's agent in respect of his tender, after the opening of the tenders but prior to the Employer arriving at a decision thereon.</p> <p>The Tenderer shall not make any attempt to obtain particulars of any relevant information, other than that disclosed at the opening of tenders.</p>
8	<p><b>Prohibitions on awards to persons in service of the state</b></p> <p>The Employer is prohibited to award a tender to a person -</p> <ol style="list-style-type: none"> <li>who is in the service of the state; or</li> <li>if that person is not a natural person, of which any director, manager, principal shareholder or stakeholder is a person in the service of the state; or</li> <li>a person who is an advisor or consultant contracted with the Department or municipal entity.</li> </ol> <p><b>In the service of the state</b> means to be -</p> <ol style="list-style-type: none"> <li>a member of:- <ol style="list-style-type: none"> <li>any municipal council;</li> <li>any provincial legislature; or</li> <li>the National Assembly or the National Council of Provinces;</li> </ol> </li> <li>a member of the board of directors of any municipal entity;</li> <li>an official of any Department or municipal entity;</li> <li>an employee of any national or provincial department;</li> </ol>



	<p>g) provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);</p> <p>h) a member of the accounting authority of any national or provincial public entity; or</p> <p>i) an employee of Parliament or a provincial legislature.</p> <p>In order to give effect to the above, the questionnaire for the declaration of interests in the tender of persons in service of state in part T2 of this procurement document must be completed.</p>
9	<p><b>Awards to close family members of persons in the service of the state</b></p> <p>Accept that the notes to the Employer's annual financial statements must disclose particulars of any award of more than R2000 to a person who is a spouse, child, or parent of a person in the service of the state (defined in clause 8 above), or has been in the service of the state in the previous twelve months, including -</p> <p>a) the name of that person;</p> <p>b) the capacity in which that person is in the service of the state; and</p> <p>c) the amount of the award.</p> <p>In order to give effect to the above, the questionnaire for the declaration of interests in the tender of persons in service of state in part T2 of this procurement document must be completed.</p>
10	<p><b>Respond to requests from the tenderer</b></p> <p>The employer will respond to requests for clarification up to <b>7 (Seven) working days</b> before the tender closing time.</p>
11	<p><b>Opening of tender submissions</b></p> <p>Tenders will be opened immediately after the closing time for tenders</p>
12	<p><b>Scoring quality / functionality: Yes</b></p>
13	<p><b>Cancellation and re-invitation of tenders</b></p> <p>An organ of state may, prior to the award of the tender, cancel the tender if-</p> <p>(a) due to changed circumstances, there is no longer a need for the services, works or goods requested; or</p> <p>(b) funds are no longer available to cover the total envisaged expenditure; or</p> <p>(c) no acceptable tenders are received.</p> <p>(d) Tender validity period has expired.</p> <p>(e) Gross irregularities in the tender processes and/or tender documents.</p> <p>(f) No market related offer received (after attempts of negotiation processes)</p> <p>Where applicable, the decision to cancel the tender will be published in the CIDB website and in the Tender Bulletin or the media in which the original tender invitation as advertised.</p>
14	<p>Dispute resolution mechanism will be done through the <b>Adjudication</b> route.</p>
15	<p>The department must when be acting against the tenderer or person awarded the contract on a fraudulent basis, considers the provisions of Regulation 14:</p> <p>The remedies provided for in Preferential Procurement Regulations 2017 do not prevent an institution from instituting remedies arising from any other prescripts or contract.</p>
16	<p>Where the employer terminates the contract due to default of the contractor in whole or in part, the employer may decide to: a) Refer the breach in contract to the <b>CIDB</b> for investigation as a breach of the <b>CIDB Code of Conduct</b> in terms of the <b>CIDB Regulations</b>; or b) may impose a restriction penalty on the contractor in terms of Section 14 of the Preferential Procurement Regulations. The outcomes of such investigations in terms of both the CIDB Regulations and the Preferential Procurement Regulations may prohibit the contractor from doing business with the public sector for a period not exceeding 10 years.</p>



## **PART T2**

### **RETURNABLE DOCUMENTS**



## **PART T2.1: LIST OF RETURNABLE DOCUMENTS**



## T2.1 List of Returnable Documents

The tenderer must complete the following returnable documents:

### 1 Returnable Schedules required for quotation evaluation purposes

- Compulsory enterprise questionnaire (In the case of a joint venture, separate enterprise questionnaires in respect of each partner must be completed and submitted).
- Record of addenda issued (Only if addenda is issued)
- Certificate of authority for joint ventures (Only where the tender/ quotation is submitted by a joint venture)

### 2 Other documents required for quotation evaluation purposes

- Form of Offer and Acceptance
- Complete Priced Bills of Quantities & Final Summary

### 3 Returnable Schedules that will be incorporated into the contract

- Details of the Project Team and CV with Qualifications & Proof of Registration completed for each individual of proposed
- Schedule of Plant and Equipment
- Record of projects: current, past and on tender.
- Project References – at least 3
- SBD 1, 4, 6.1,
- Protection of personal content: Consent





**PART A**

**INVITATION TO BID**

<b>YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE</b>					
BID NUMBER:	SCMU5-23/24-0051	CLOSING DATE:	24 August 2023	CLOSING TIME:	11:00
DESCRIPTION:	<b>SUPPLY AND INSTALL SOLAR SYSTEM AT OLD FORD HOUSE BUILDING AT SARAH BAARTMAN</b>				
<b>BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT</b>					
DEPARTMENT OF PUBLIC WORKS, FRONT CORNER OF QHASANA BUILDING ON THE WAY TO CIDB OFFICES LABELLED "TENDERS", BHISHO.					
<b>BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO</b>			<b>TECHNICAL ENQUIRIES MAY BE DIRECTED TO:</b>		
CONTACT PERSON		CONTACT PERSON	Kenneth Ntsono		
TELEPHONE NUMBER	040 602 4000	TELEPHONE NUMBER	060 751 9622		
FACSIMILE NUMBER		FACSIMILE NUMBER			
E-MAIL ADDRESS	<a href="mailto:supply.chain@ecdpw.gov.za">supply.chain@ecdpw.gov.za</a>	E-MAIL ADDRESS	<a href="mailto:kenneth.ntsono@ecdpw.gov.za">kenneth.ntsono@ecdpw.gov.za</a>		
<b>SUPPLIER INFORMATION</b>					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAAA
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE	TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No	B-BBEE STATUS LEVEL SWORN AFFIDAVIT	[TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No		
<b>[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES &amp; QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]</b>					
(a) ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]	a) ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, COMPLETE QUESTIONNAIRE BELOW ]		
<b>QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS</b>					
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
DOES THE ENTITY HAVE A BRANCH IN THE RSA?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
<b>IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.</b>					



## PART B

### TERMS AND CONDITIONS FOR BIDDING

<b>1. BID SUBMISSION:</b>
1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2. <b>ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED– (NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.</b>
1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022, THE CONDITIONS OF CONTRACT (NEC 3) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
1.4. <b>THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).</b>
<b>2. TAX COMPLIANCE REQUIREMENTS</b>
2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE <a href="http://WWW.SARS.GOV.ZA">WWW.SARS.GOV.ZA</a> .
2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.6 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

SIGNATURE OF BIDDER:

.....

CAPACITY UNDER WHICH THIS BID IS SIGNED:

.....

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

DATE:

.....





## Compulsory Enterprise Questionnaire

### A

#### Compulsory Enterprise questionnaire

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

**Section 1: Name of enterprise:** .....

**Section 2: VAT registration number, if any:** .....

**Section 3: CIDB registration number, if any:** .....

**Section 4: Particulars of sole proprietors and partners in partnerships**

Name*	Identity number*	Personal income tax number*

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

**Section 5: Particulars of companies and close corporations**

Company registration number .....

Close corporation number ..... Tax  
reference number .....

**Section 6: The attached SBD 4 must be completed for each tender and be attached as a tender requirement.**

**Section 7: The attached SBD 6.1 must be completed for each tender and be attached as a requirement.**

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

- authorizes the Employer to obtain a tax clearance certificate from the South African Revenue Services that my / our tax matters are in order;
- confirms that the neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004; iii) confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;
- confirms that I / we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest; and
- confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

Signed .....

Date .....

Name .....

Position .....



## SBD 4

### 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<sup>1</sup> in the enterprise, employed by the state? **YES/NO**

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

Full Name	Identity Number	Name of State institution

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

- 2.2.1 If so, furnish particulars:

.....  
.....

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

- 2.3.1 If so, furnish particulars:

.....

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



### 3 DECLARATION

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

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium<sup>2</sup> will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

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

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

.....  
Signature

.....  
Date

.....  
Position

.....  
Name of bidder

<sup>2</sup> **Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.**



## SBD 6.1

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

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

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

#### 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 To be completed by the organ of state

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

- 1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:
- (a) Price; and
  - (b) Specific Goals.

#### 1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
<b>Total points for Price and SPECIFIC GOALS</b>	<b>100</b>

- 1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that



preference points for specific goals are not claimed.

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

## 2. DEFINITIONS

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

## 3. FORMULA 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:

<b>80/20</b>	<b>or</b>	<b>90/10</b>
$Ps = 80 \left( 1 - \frac{Pt - P_{min}}{P_{min}} \right) \text{ or } Ps = 90 \left( 1 - \frac{Pt - P_{min}}{P_{min}} \right)$		

Where

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

### 3.2. FORMULA 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:

<b>80/20</b>	<b>or</b>	<b>90/10</b>
--------------	-----------	--------------





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

Where

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

#### 4. POINTS AWARDED FOR SPECIFIC GOALS

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

**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 (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)
<b>Historically Disadvantaged Individual:-</b>			
	(a) 100% black ownership	6	
	(b) 51% to 99% black ownership	4	
	(c) Less than 51% black ownership	0	
<b>Black women ownership:-</b>			
	(a) 100% black women ownership	4	
	(b) 30% to 99% black women ownership	2	
	(c) Less than 30% black women	0	



	<b>ownership</b>		
<b>Black youth ownership:-</b>			
	(a) 100% black youth ownership	4	
	(b) 30% to 99% black youth ownership	2	
	(c) Less than 30% black youth ownership	0	
<b>People with disability:-</b>			
	(a) 20% or more disabled people ownership	2	
	(b) Less than 20% disabled people ownership	0	
<b>Locality:-</b>			
	(a) Within the Eastern Cape	4	
	(b) Outside the Eastern Cape	0	

**DECLARATION WITH REGARD TO COMPANY/FIRM**

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

4.4. Company registration number: .....

4.5. TYPE OF COMPANY/ FIRM

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

[TICK APPLICABLE BOX]

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

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

	.....
	<b>SIGNATURE(S) OF TENDERER(S)</b>
<b>SURNAME AND NAME:</b>	.....
<b>DATE:</b>	.....
<b>ADDRESS:</b>	.....
	.....
	.....
	.....
	.....





## **PROOF OF REGISTRATION ON THE NATIONAL TREASURY CENTRAL SUPPLIER DATABASE**

**(IF APPLICABLE, ATTACH HERE)**



**VALID CIDB CERTIFICATE OF A TENDERER**  
**(IF APPLICABLE, ATTACH HERE)**



### **PROTECTION OF PERSONAL INFORMATION: CONSENT (POPIA)**

The introduction of The Protection of Personal Information Act (POPIA) ensures the regulation of personal information through its entire life cycle of collection, transfer, storing and deletion.

As part of its business activities, the Department of Public Works and Infrastructure obtains and requires access to personal data from a wide range of internal and external parties, including without limitation bidders who respond to requests for proposals that are published by the Department of Public Works and Infrastructure from time to time. The Department of Public Works and Infrastructure confirms that it shall process the information disclosed by Bidders for the purpose of evaluating and subsequently awarding/appointing a successful Bidder.

The Department of Public Works and Infrastructure hereby states that it does not and will never modify, amend, or alter any personal information submitted to it by a Bidder. Not unless directed to do so by an order of court, the Department of Public Works and Infrastructure does not disclose or permit the disclosure of any personal information to any Third Party without the prior written consent of the owner of the information.

Similarly, Bidders will from time-to-time access and be seized with information of a personal nature pertaining to the Department of Public Works and Infrastructure. Some of the information may because of legislative compliances be available in the public domain, whilst some is uniquely provided to bidders in pursuit of procurement or other business-related activities. In this regard, the Department of Public Works and Infrastructure requires that Bidders which receive or have access to its personal information, process any such information in a manner compliant with the requirements of the POPIA.

### **AGREEMENT**

1. The Department of Public Works and Infrastructure and the Bidder (the Parties) agree and undertake that upon obtaining and having access to personal information relating to either of them, they shall always ensure that:
  - a) They process the information only for the express purpose for which it was obtained.
  - b) Information is provided only to designated and authorized personnel who require the personal information to carry out the Parties' respective obligations in terms of the Procurement processes.
  - c) They will introduce, and implement all reasonable measures ensure the protection of all personal information from unauthorized access and/or use.
  - d) They have taken appropriate measures to safeguard the security, integrity, and authenticity of all personal information in its possession or under its control.
  - e) The Parties agree that if personal information will be processed for any other purpose other than the one for which the accessing of the information was intended, explicit written consent will be obtained prior to the execution of such reason.
  - f) The Parties shall carry out regular assessments to identify all reasonably foreseeable internal and external risks to the interception of personal information in its possession or under its control and shall implement and maintain appropriate controls in mitigation of such risks.
2. The Parties agree that they will promptly return or destroy any personal data in their possession or control which belongs to the other Party once it no longer serves the purpose for which it was collected, subject



to any legal retention requirements. The information will be destroyed in such a manner that it cannot be reconstructed to its original form, linking it to any individual or organization.

3. Bidder's Obligations

- a) The Bidder is required to notify the Information Officer of Department of Public Works and Infrastructure, in writing as soon as possible after it becomes aware of or suspects any loss, unauthorized access or unlawful use of any of the Department of Public Works and Infrastructure's personal information.
- b) The Bidder shall, at its own cost, promptly and without delay take all necessary steps to mitigate the extent of the loss or compromise of personal data.
- c) The Bidder shall be required to provide the Department of Public Works and Infrastructure with details of the persons affected by the compromise and the nature and extent of the compromise, including details of the identity (if known) of the unauthorized person who may have accessed or acquired the personal data.
- d) The Bidder undertakes to co-operate with any investigation relating to security breach which is carried out by or on behalf of Department of Public Works and Infrastructure.

**On behalf of the Bidder:**

.....  
Signature

.....  
Date

.....  
Position

.....  
Name of the Bidder

**On behalf of the Client:**

.....  
Signature

.....  
Date

.....  
Position

.....  
Name of Client Representative



## THE CONTRACT



## **PART C1**

### **AGREEMENTS AND CONTRACT DATA**



## **PART C1.1: FORM OF OFFER AND ACCEPTANCE**



**Annex C**  
(normative)

**FORM OF OFFER AND ACCEPTANCE**

<b>PROJECT TITLE</b>	<b>SUPPLY AND INSTALL SOLAR SYSTEM AT OLD FORD HOUSE BUILDING AT SARAH BAARTMAN</b>
<b>SCMU NUMBER</b>	<b>SCMU5-23/24-0051</b>

**OFFER**

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

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

..... Rand (in words);

R .....(in figures) (or other suitable wording)

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

Signature

.....  
Name

.....  
Capacity

.....  
**for the tenderer**

.....  
(Name and address of organization)

Name and signature

of witness ..... Date .....

**ACCEPTANCE**

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

The terms of the contract, are contained in:

Part C1 Agreements and contract data, (which includes this 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 returnable schedules as well as any changes to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this form of offer and acceptance. No amendments to or deviations from said documents are valid unless contained in this schedule.

The tenderer shall within 3 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 working days of the date of such receipt notifies the employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.<sup>1</sup>

Signature

.....  
Name

.....  
Capacity

.....  
**for the Employer**

.....  
(Name and address of organization)

Name and signature

of witness ..... Date .....

### Schedule of Deviations

1 Subject .....  
Details .....

2 Subject .....  
Details .....

3 Subject .....  
Details .....

4 Subject .....  
Details .....

By the duly authorized 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/ quotation 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.

<sup>1</sup> As an alternative, the following wording may be used:

*Notwithstanding anything contained herein, this agreement comes into effect two working days after the submission by the employer of one fully completed original copy of this document including the schedule of deviations (if any), to a courier-to-counter delivery / counter-to-counter delivery / door-to-counter delivery /door-to-door delivery /courier service (delete that which is not applicable), provided that the employer notifies the tenderer of the tracking number within 24 hours of such submission. Unless the tenderer (now contractor) within seven working days of the date of such submission notifies the employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties*



## A

### RECORD OF ADDENDA TO BID DOCUMENTS

<b>PROJECT TITLE</b>		<b>SUPPLY AND INSTALL SOLAR SYSTEM AT OLD FORD HOUSE BUILDING AT SARAH BAARTMAN</b>	
<b>SCMU NUMBER</b>		<b>SCMU5-23/24-0051</b>	
I / We confirm that the following communications received from the Department of Public Works before the submission of this tender offer, amending the tender documents, have been taken into account in this bid offer: (Attach additional pages if more space is required)			
<b>Item</b>	<b>Date</b>	<b>Title or Details</b>	<b>No. of Pages</b>
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Attach additional pages if more space is required.

Signed

Date

Name

Position

Tenderer



## **B**

### **PROPOSED AMENDMENTS AND QUALIFICATIONS**

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

The Tenderer's attention is drawn to clause 5.8 of SANS 10845-3 regarding the employer's handling of material deviations and qualifications.

<b>PROJECT TITLE</b>	<b>SUPPLY AND INSTALL SOLAR SYSTEM IN OLD FORD HOUSE BUILDING AT SARAH BAARTMAN</b>
<b>SCMU NUMBER</b>	<b>SCMU5-23/24-0051</b>

Page	Clause /Item	Proposal

The undersigned, who warrants that she/ he is duly authorised to do so on behalf of the enterprise, confirms that the content of this schedule that presented by the tenderer are within my personal knowledge and are to the best of my knowledge both true and correct

Signed

Date

-----

-----

Name

Position

-----

-----

Enterprise name

-----



## **C**

### **RESOLUTION FOR SIGNATORY**

#### **A: CERTIFICATE OF AUTHORITY FOR SIGNATORY**

Signatory for companies shall confirm their authority hereto by attaching a duly signed and dated copy of the relevant resolution of the board of directors to this form or on company letter head.

An example is given below:

“By resolution of the board of directors passed at a meeting held on \_\_\_\_\_

Mr/Ms \_\_\_\_\_, whose signature appears below, has been duly authorised to

sign all documents in connection with the tender for Contract No. \_\_\_\_\_

and any Contract which may arise there from on behalf of (Block Capitals) \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

SIGNED ON BEHALF OF THE COMPANY: \_\_\_\_\_

IN HIS/HER CAPACITY AS: \_\_\_\_\_

DATE: \_\_\_\_\_

SIGNATURE OF SIGNATORY: \_\_\_\_\_

#### **WITNESSES:**

<b>DIRECTOR (NAMES)</b>		SIGNATURE	
<b>DIRECTOR (NAMES)</b>		SIGNATURE	
<b>DIRECTOR (NAMES)</b>		SIGNATURE	
<b>DIRECTOR (NAMES)</b>		SIGNATURE	
<b>DIRECTOR (NAMES)</b>		SIGNATURE	
<b>DIRECTOR (NAMES)</b>		SIGNATURE	

If you cannot complete this form, attach a separate sheet (in a company letter head, project specific and signed by all directors):



## D

### CERTIFICATE OF AUTHORITY FOR JOINT VENTURES

This Returnable Schedule is to be completed by joint ventures.

We, the undersigned, are submitting this tender offer in Joint Venture and hereby authorize Mr/Ms . . . . ., authorized signatory of the company . . . . ., acting in the capacity of lead partner, to sign all documents in connection with the tender offer and any contract resulting from it on our behalf.

<b>PROJECT TITLE</b>	<b>SUPPLY AND INSTALL SOLAR SYSTEM IN OLD FORD HOUSE BUILDING AT SARAH BAARTMAN</b>	
<b>SCMU NUMBER</b>	<b>SCMU5-23/24-0051</b>	
<b>NAME OF FIRM</b>	<b>ADDRESS</b>	<b>DULY AUTHORISED SIGNATORY</b>
Lead partner: ..... .		Signature. . . . . Name ..... Designation.....
..... .		Signature. . . . . Name ..... Designation.....
..... .		Signature. . . . . Name ..... Designation.....
..... .		Signature. . . . . Name ..... Designation.....





## E

### SCHEDULE OF PROPOSED SUBCONTRACTORS

<b>PROJECT TITLE</b>	<b>SUPPLY AND INSTALL SOLAR SYSTEM IN OLD FORD HOUSE BUILDING AT SARAH BAARTMAN</b>
<b>SCMU NUMBER</b>	<b>SCMU5-23/24-0051</b>
<p>We notify you that it is our intention to employ the following Subcontractors for work in this contract. The Subcontractors will all be CIDB registered and their CIDB Registration number shall be submitted below.</p> <p>If we are awarded a contract, we agree that this notification does not change the requirement for us to submit the names of proposed subcontractors in accordance with requirements in the contract for such appointments. If there are no such requirements in the contract, then your written acceptance of this list shall be binding between us.</p> <p>We confirm that all subcontractors who are or to be contracted are registered on Central Supplier Database (CSD).</p>	

No.	Name and address of proposed Subcontractor	Nature and extent of work	Year completed	Value	Contact details
1					
2					



3					
4					
5					

The undersigned, who warrants that she/ he is duly authorised to do so on behalf of the enterprise, confirms that the content of this schedule that presented by the tenderer are within my personal knowledge and are to the best of my knowledge both true and correct

Signed

Date

-----

-----

Name

Position

-----

-----

*Enterprise name*

-----



## F

### CAPACITY OF THE BIDDER

<b>PROJECT TITLE</b>	<b>SUPPLY AND INSTALL SOLAR SYSTEM IN OLD FORD HOUSE BUILDING AT SARAH BAARTMAN</b>
<b>SCMU NUMBER</b>	<b>SCMU5-23/24-0051</b>
<p>WORK CAPACITY: (The Bidder is requested to furnish the following capacity particulars and to attach additional pages if more space is required. Failure to furnish the particulars may result in the Bid being disregarded.)</p> <p><i>Artisans and Employees: (Artisans and Employees to be, or are, employed for this project)</i></p>	

Quantity / No. of Resources	Categories of Employee - Key Personnel (part of Business Enterprise)	Professional Registration No.	Date of Employment
	Project Manager / Team Leader		
	Design Engineer / Technician		
	Installation Electrician		
	Others		

The undersigned, who warrants that she/ he is duly authorised to do so on behalf of the enterprise, confirms that the content of this schedule that presented by the tenderer are within my personal knowledge and are to the best of my knowledge both true and correct.

<b>Signed:</b>	.....	<b>Date</b>	.....
<b>Name:</b>	.....	<b>Position</b>	.....
<b>Enterprise</b>			<b>Name:</b>
.....			



## **G**

### **RELEVANT PROJECT EXPERIENCE – COMPLETED PROJECTS**

Tenderers must submit a max one-page description of at least three projects successfully completed.

**Attach a Completion Certificate for each of the project provided.**

The description of each project must include the following information:

1. Essential introductory information:
  - 1.1. Name of project.
  - 1.2. Name of client.
  - 1.3. Contact details of client.
  - 1.4. Contact details (including telephone numbers and email addresses) of currently contactable references.
  - 1.5. The period during which the project was performed, and also, if this is different, the period during which the tenderer's team members were contracted.
  - 1.6. Cost of works and/or contract value (making it clear in broad terms what this cost/value purchased, and to what extent (if any) this cost/value was part of a larger project budget or programme budget).

NO.	NAME OF PROJECT.	NAME OF CLIENT.	CONTACT DETAILS OF CLIENT.	PROJECT VALUE	DATE COMPLETED
1					
2					
3					

*If there are more projects, attach a separate page to address this issue (the above table is just for reference purposes).*

The undersigned, who warrants that she/ he is duly authorised to do so on behalf of the enterprise, confirms that the content of this schedule that presented by the tenderer are within my personal knowledge and are to the best of my knowledge both true and correct.

Signed.....

Date.....

Name.....

Position.....

Enterprise name.....



## H

### **RELEVANT PROJECT EXPERIENCE – CURRENT PROJECTS**

Tenderers must submit a max one-page description of at least three projects under construction/ on hold/ just handed over/ towards completion (if they exist). **Attach an Appointment letter for each of the project provided.**

The description of each project must include the following information:

2. Essential introductory information:
  - 2.1. Name of project.
  - 2.2. Name of client.
  - 2.3. Contact details of client.
  - 2.4. Contact details (including telephone numbers and email addresses) of currently contactable references.
  - 2.5. The period during which the project was performed, and if this is different, the period during which the tenderer's team members were contracted.
  - 2.6. Cost of works and/or contract value (making it clear in broad terms what this cost/value purchased, and to what extent (if any) this cost/value was part of a larger project budget or programme budget).

NO.		NAME OF PROJECT.	NAME OF CLIENT.	CONTACT DETAILS OF CLIENT.	PROJECT VALUE	STAGE OF PROJECT
1						
2						
3						

***Attach a separate page to address this issue (the above table is just for reference purposes).***

Signed

Date

.....

Name

Position

.....

Enterprise name

.....

**The undersigned, who warrants that she/ he is duly authorised to do so on behalf of the enterprise, confirms that the content of this schedule that presented by the tenderer are within my personal knowledge and are to the best of my knowledge both true and correct.**



**I**

**OTHER OFFERS SUBMITTED AT TIME OF THIS TENDER FOR WHICH RESULTS ARE PENDING (if they exist)**

*(Any other client's tender must also be included)*

BID NO. / PROJECT NUMBER	PROJECT NAME	CLIENT NAME & CONTACT NO.	VALUE TENDERED IN Rands	DATE SUBMITTED	CONTACT DETAILS (CLIENT)
1					
2					
3					
4					

Signed

Date

.....

.....

Name

Position

.....

.....

*Enterprise name*

.....

***If there are more projects, attach a separate page to address this issue (the above table is just for reference purposes).***





## J

### **SCHEDULE OF TENDERER'S LITIGATION HISTORY**

The tenderer shall list below details of any litigation with which the tenderer (including its directors, shareholders or other senior members in previous companies) has been involved with any organ of state or state department within the last ten years. The details must include the year, the litigating parties, the subject matter of the dispute, the value of any award or estimated award if the litigation is current and in whose favour the award, if any, was made.

NO.	NAME OF CLIENT.	OTHER LITIGATING PARTY	BRIEF DETAILS OF DISPUTE	PROJECT VALUE	DATE RESOLVED OR STATUS OF LITIGATION
1					
2					
3					
4					

Signed

Date

.....

.....

Name

Position

.....

.....

*Enterprise name*

.....



## K

### Project Reference Forms – 1

<b>PROJECT TITLE:</b>	<b>SUPPLY AND INSTALL SOLAR SYSTEM IN OLD FORD HOUSE BUILDING AT SARAH BAARTMAN</b>
<b>SCMU NUMBER:</b>	<b>SCMU5-23/24-0051</b>

**NOTE: This returnable document must be completed by the person who was the Engineer/Project Manager on a project of similar value and complexity that was completed successfully by the tenderer.**

I, \_\_\_\_\_ (name and surname) of \_\_\_\_\_ (company name) declare that I was the Project Manager on the following building construction project successfully executed by \_\_\_\_\_ (name of tenderer):

Project name: \_\_\_\_\_

Project location: \_\_\_\_\_

Construction period: \_\_\_\_\_ Completion date: \_\_\_\_\_

Contract value: \_\_\_\_\_

A. Please evaluate the performance of the Tenderer on the abovementioned project, on which you were the principal agent, by inserting "Yes" in the relevant box below:

Key Performance Indicators	Very Poor 1	Poor 2	Fair 3	Good 4	Excellent 5	Total
1. Project performance / time management / programming						
2. Quality of workmanship						
3. Resources: Personnel						
4. Resources: Plant						
5. Financial management / payment of subcontractors / cash flow, etc						
<b>TOTAL</b>						

B. Would you consider / recommend this tenderer again:

YES	NO

C. Any other comments:

---



---

D. My contact details are:



Telephone: \_\_\_\_\_ Cellphone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

Thus signed at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_ 2023.

\_\_\_\_\_

Signature of principal agent

**COMPANY STAMP**

**NOTE:**

If reference cannot be verified due to the inability to get hold of the referee or failure on his/her part to respond to a written request to do so, that reference will not score any points. It is the responsibility of the tenderer to put referees who are reachable.

\_\_\_\_\_  
Name of Tenderer

\_\_\_\_\_  
Signature of Tenderer

\_\_\_\_\_  
Date



## Project Reference Forms - 2

<b>PROJECT TITLE:</b>	<b>SUPPLY AND INSTALL SOLAR SYSTEM IN OLD FORD HOUSE BUILDING AT SARAH BAARTMAN</b>
<b>SCMU NUMBER:</b>	<b>SCMU5-23/24-0051</b>

**NOTE: This returnable document must be completed by the person who was the Engineer/Project Manager on a project of similar value and complexity that was completed successfully by the tenderer.**

I, \_\_\_\_\_ (name and surname) of  
\_\_\_\_\_ (company name) declare

that I was the Project Manager on the following building construction project successfully executed by \_\_\_\_\_ (name of tenderer):

Project name: \_\_\_\_\_

Project location: \_\_\_\_\_

Construction period: \_\_\_\_\_ Completion date: \_\_\_\_\_

Contract value: \_\_\_\_\_

A. Please evaluate the performance of the Tenderer on the abovementioned project, on which you were the principal agent, by inserting "Yes" in the relevant box below:

Key Performance Indicators	Very Poor 1	Poor 2	Fair 3	Good 4	Excellent 5	Total
1. Project performance / time management / programming						
2. Quality of workmanship						
3. Resources: Personnel						
4. Resources: Plant						
5. Financial management / payment of subcontractors / cash flow, etc.						
<b>TOTAL</b>						

B. Would you consider / recommend this tenderer again:

YES	NO

C. Any other comments:

---



---

D. My contact details are:

Telephone: \_\_\_\_\_ Cellphone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_



Thus signed at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_ 2023.

\_\_\_\_\_  
Signature of principal agent



**NOTE:**

If reference cannot be verified due to the inability to get hold of the referee or failure on his/her part to respond to a written request to do so, that reference will not score any points. It is the responsibility of the tenderer to put referees who are reachable.

\_\_\_\_\_  
Name of Tenderer

\_\_\_\_\_  
Signature of Tenderer

Date



### Project Reference Forms – 3

<b>PROJECT TITLE:</b>	<b>SUPPLY AND INSTALL SOLAR SYSTEM IN OLD FORD HOUSE BUILDING AT SARAH BAARTMAN</b>
<b>SCMU NUMBER:</b>	<b>SCMU5-23/24-0051</b>

**NOTE: This returnable document must be completed by the person who was the Engineer/Project Manager on a project of similar value and complexity that was completed successfully by the tenderer.**

I, \_\_\_\_\_ (name and surname) of  
\_\_\_\_\_ (company name) declare  
that I was the Project Manager on the following building construction project successfully  
executed by \_\_\_\_\_ (name of tenderer):

Project name: \_\_\_\_\_

Project location: \_\_\_\_\_

Construction period: \_\_\_\_\_ Completion date: \_\_\_\_\_

Contract value: \_\_\_\_\_

A. Please evaluate the performance of the Tenderer on the abovementioned project, on which you were the principal agent, by inserting "Yes" in the relevant box below:

Key Performance Indicators	Very Poor 1	Poor 2	Fair 3	Good 4	Excellent 5	Total
1. Project performance / time management / programming						
2. Quality of workmanship						
3. Resources: Personnel						
4. Resources: Plant						
5. Financial management / payment of subcontractors / cash flow, etc.						
<b>TOTAL</b>						

B. Would you consider / recommend this tenderer again:

YES	NO

C. Any other comments:

---



---

D. My contact details are:

Telephone: \_\_\_\_\_ Cellphone: \_\_\_\_\_ Fax: \_\_\_\_\_





E-mail: \_\_\_\_\_

Thus signed at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_ 2023.

\_\_\_\_\_  
Signature of principal agent

**COMPANY STAMP**

**NOTE:**

If reference cannot be verified due to the inability to get hold of the referee or failure on his/her part to respond to a written request to do so, that reference will not score any points. It is the responsibility of the tenderer to put referees who are reachable.

\_\_\_\_\_  
Name of Tenderer

\_\_\_\_\_  
Signature of Tenderer

\_\_\_\_\_  
Date



**L**

**BASELINE RISK ASSESSMENT**

<b>PROJECT TITLE</b>	<b>SUPPLY AND INSTALL SOLAR SYSTEM IN OLD FORD HOUSE BUILDING AT SARAH BAARTMAN</b>
<b>SCMU NUMBER</b>	<b>SCMU5-23/24-0051</b>
<i>PLEASE NOTE THAT THIS IS A BASELINE RISK ASSESSMENT AND NOT A DETAILED RISK ASSESSMENT OF ALL ANTICIPATED ACTIVITIES ON SITE</i>	

Activity	Risk to Safety	Risk to Health	Risk to Environmental	Risk to Public Safety	Control Measures
Solar panels	Physical injury, Fatality				PPE, Use of Scaffolding, Safety Harness
Support frames	Physical injury, Fatality				PPE, Use of Scaffolding, Safety Harness
Cabling	Physical injury, Fatality				PPE, Use of Scaffolding, Safety Harness
Inverters	Physical injury, Fatality				Use of PPE
Batteries	Physical injury, Fatality				Use of PPE

*You can list all activities on a separate page to address this issue (the above table is just for reference purposes).*



## PART C1.2: CONTRACT DATA



## PART C1.2 CONTRACT DATA

<b>PROJECT TITLE:</b>	<b>SUPPLY AND INSTALL SOLAR SYSTEM IN OLD FORD HOUSE AT SARAH BAARTMAN</b>
<b>SCMU NUMBER:</b>	<b>SCMU5-23/24-0051</b>

### Part 1– Data provided by the Employer

Clause	Statement	Data
<b>1. General</b>		
	The conditions of contract are the core clauses and the clauses for main Option:	B Priced contract with bill of quantities
	dispute resolution Option	W1 Dispute resolution procedure
	and secondary Options	X7 Delay Damages
		X13 Performance Bond
		X16 Retention
		X18 Limitation of liability
	of the NEC3 (June 2005)	
10.1	The Employer is (name):	Eastern Cape Department of Public Works & Infrastructure
	Address	Department of Public Works and Infrastructure 3 <sup>rd</sup> Floor. Office 3-46 Independence Avenue Qhasana Building 5605
	Represented by:	TBA
	Tel No.	
	Fax No.	



11.2(2)	The Affected Property is	Old Ford House, 55 Albany Road, Gqeberha
11.2(13)	The works is	Supply, install and commission solar system
11.2(15)	The works information is	The Scope is in Part C3: Scope of Work in this document.
11.2(16)	The site information is	The site is as described in the Site Information of this document.
12.2	The law of the contract is the law of	the Republic of South Africa
13.1	The language of this contract is	English
13.2	The period for reply is	7 days

2. The Contractor's responsibility		
21.2	The contractor's design	The Contractor shall submit proposed solar installation layout that meets criteria for approval

3. Time		
30.1	The starting date is	Site Handover Meeting Date.
30.2	The completion date is	The completion date for the whole of the works is the date following 16 weeks after the starting date, which includes a period of 4 weeks for the Contractor to provide the Client with the necessary bonds, guarantees, insurance certificates, OHS plan, and other information required by this contract. The period of 4 weeks includes one week for the Client to assess and process the submitted documentation.

4. Testing and defects		
41.1		The defects date is 52 weeks after Completion.
42.3		The defect correction period is 2 weeks.



5. Payment		
50.1	The assessment interval is	Monthly
51.1	Certify payment	Delete the first sentence of Clause 51.1 and replace with the following: The Client certifies a payment within one week of the assessment day. The Contractor prepares a tax invoice for the exact amount certified by the Client. The Contractor submits the tax invoice together with the corresponding payment certificate to the Client for payment. Incomplete and incorrect payment submissions are returned within one week to the Contractor for correction. Payment is made within thirty days of receipt of a complete and correct Contractor's payment submission. The currency is South African Rand
51.2	The period with which payments are made is	30 Days after submission of a valid TAX Invoice to the Employer
51.4	The interest rate is	(i) zero percent above the publicly quoted prime rate of interest (calculated on a 365-day year) charged by from time to time by the South African Reserve Bank (as certified, in the event of any dispute, by any manager of such bank, whose appointment it shall not be necessary to prove) for amounts due in Rands.

6. Compensation Events		(if the optional statement for this section is not used, no data will be required for this section)
These are additional compensation events		N/A

7. Use of Equipment Plant and Materials		No data is required for this section of the conditions of contract.
-----------------------------------------	--	---------------------------------------------------------------------





8. Risks and Insurance		
80.1	These are additional Employer's risks	N/A
83.1	The Employer provides these insurances from the Insurance Table	N/A
83.1	The Employer provides these additional insurances	N/A
83.1	The minimum amount of cover for insurance against loss and damage caused by the Contractor to the Employer's property is	R 5 000 000.00
83.1	The insurance against loss of or damage to the works, Plant and Materials is to include cover for Plant and Materials provided by the Employer to an amount of	R 5 000 000.00
83.1	The minimum amount of cover for insurance in respect of loss of or damage to property (except the Employer's property, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the Contractor) arising from or in connection with the Contractor's Providing the Service for any one event is:	R 5 000 000.00
83.1	The Minimum limit of indemnity for insurance in respect of death of or bodily injury to employees of the Contractor arising out of and in course of their employment in connection with this contract for any one event is:	As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 and the Contractor's common law liability for people falling outside the scope of the Act with a limit of Indemnity of not less than R 5 000 000.00
9. Termination		
		No data is required for this section of the conditions of contract.
10. Data for Main Option Clauses		
A	Priced Contract with Price List	Option B
20.5	The Contractor prepares forecasts of the final total of the Prices for the whole of the service at intervals of no longer than	4 Weeks



11. Data for Option W1		
W1.1	The Adjudicator is (Name)	The person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the party intending to refer a dispute to him. (See <a href="http://www.icesa.org.za">www.icesa.org.za</a> )
	Address	
	Tel. No, Fax No.	
	Email	
W1.2(3)	The Adjudicator nominating body is:	The Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering Arbitration
W1.4(2)	The Tribunal is:	The latest edition of Rules for the Conduct of Arbitrations published by the Association of Arbitrators (South Africa) or its successor body.
W1.4(5)	The Arbitration Procedure is	
	The place where arbitration is to be held is	South Africa
	The person or organization who will choose an arbitrator	The Chairman for the time being or his nominee of the Association of Arbitrators (South Africa) or its successor body.
	- If the Parties cannot agree a choice or	
	- If the procedure does not state who selects an arbitrator, is	



X7.	Delay Damages	
X7.1.	The Contractor pays delay damages	The delay damages are R5000 per day.
X13.	Performance Bond	
X13.1	The Contractor gives the Employer a performance bond	The Tenderer must provide a Performance Bond in the form of a Fixed Performance Guarantee by means of a Bank Guarantee, or from an Insurer approved by the Project Manager, in the amount of 2.5% of the Awarded Contract Value, once the Contract has been awarded to him. This Bond must be given to the Employer with in four (4) weeks of the Contract Date.
X16.	Retention	
X16.1	The retention is	The retention is 5% (five percent) excluding VAT of the contract value, attained by payment reduction of 10% (ten percent) of the value certified in payment certificates until the retention amount is reached.
X18.	Limitation of Liability	
X18.1	The Contractor's liability to the Employer for indirect or consequential loss is limited to	R0.0 (zero Rand)
X18.2	For any one event, the Contractor's liability to the Employer for loss of or damage to the Employer's property is limited to	R2 500 000.00
X18.3	The Contractor's liability for Defects due to his design of an item of Equipment is limited to	The greater of <ul style="list-style-type: none"> <li>the total of the Prices at the Contract Date And</li> <li>R2 500 000</li> </ul>
X18.4	The Contractor's liability to the Employer for all matters arising under or in connection with this contract, other than the excluded matters, is limited to	N/A
X18.5	The end of liability date is	12 Months after the completion date.



## Part Two – Data provided by the Contractor

Clause	Statement	Data
10.1	The Contractor is (Name):  Address: Tel No. Fax No.	
11.2(14)	The following matters will be included in the Risk Register	
21.2	The proposal for the implementation of the works	
24.1	The Key Persons are:  Name :  Job :  Responsibilities :  Qualifications :  Experience	
	Name :  Job :  Responsibilities :  Qualifications :  Experience	
	Name :  Job :  Responsibilities :  Qualifications :  Experience	
		CV's and further key person's data are in _____
B	Priced Contract with Method Statement and Timeframes	
11.2(12)	The price list is in	



11.2(19) The tendered total of the Prices is



## **PART C1.3: DISPUTE RESOLUTION MECHANISM**



## C1.3 CIDB ADJUDICATOR'S AGREEMENT

This agreement is made on the . . . . . day of . . . . . between: . . . . .  
 . . . . . (name of company / organization) of . . . . .  
 . . . . . (address) and. . . . .  
 (name of company / organization) of . . . . .  
 . . . . . (address) (the Parties) and. . . . . (name)  
 of . . . . . (address) (the Adjudicator).

Disputes or differences may arise/have arisen\* between the Parties under a Contract dated . . . . .  
 . . . . . and known as. . . . .  
 . . . . . and these disputes or differences shall be/have been\* referred to adjudication in accordance  
 with the CIDB Adjudication Procedure, (hereinafter called "the Procedure") and the Adjudicator may  
 be or has been requested to act.

\* Delete as necessary

**IT IS NOW AGREED** as follows:

- 1 The rights and obligations of the Adjudicator and the Parties shall be as set out in the Procedure.
- 2 The Adjudicator hereby accepts the appointment and agrees to conduct the adjudication in accordance with the Procedure.
- 3 The Parties bind themselves jointly and severally to pay the Adjudicator's fees and expenses in accordance with the Procedure as set out in the Contract Data.
- 4 The Parties and the Adjudicator shall at all times maintain the confidentiality of the adjudication and shall endeavour to ensure that anyone acting on their behalf or through them will do likewise, save with the consent of the other Parties which consent shall not be unreasonably refused.
- 5 The Adjudicator shall inform the Parties if he intends to destroy the documents which have been sent to him in relation to the adjudication and he shall retain documents for a further period at the request of either Party.

SIGNED by: \_\_\_\_\_  
 Name: \_\_\_\_\_  
 who warrants that he / she is  
 duly authorized to sign for and  
 on behalf of the first Party in the  
 presence of

SIGNED by: \_\_\_\_\_  
 Name: \_\_\_\_\_  
 who warrants that he / she is  
 duly authorized to sign for and  
 behalf of the second Party in  
 the presence of

SIGNED by: \_\_\_\_\_  
 Name: \_\_\_\_\_  
 the Adjudicator in the presence  
 of

Witness  
 Name: \_\_\_\_\_  
 Address: \_\_\_\_\_

Witness: \_\_\_\_\_  
 Name \_\_\_\_\_  
 Address: \_\_\_\_\_

Witness: \_\_\_\_\_  
 Name: \_\_\_\_\_  
 Address: \_\_\_\_\_





Date: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

### **Contract Data**

1	The Adjudicator shall be paid at the hourly rate of R. . . . . in respect of all time spent upon, or in connection with, the adjudication including time spent travelling.
2	The Adjudicator shall be reimbursed in respect of all disbursements properly made including, but not restricted to: (a) Printing, reproduction and purchase of documents, drawings, maps, records and photographs. (b) Telegrams, telex, faxes, and telephone calls. € Postage and similar delivery charges. (d) Travelling, hotel expenses and other similar disbursements. € Room charges. (f) Charges for legal or technical advice obtained in accordance with the Procedure.
3	The Adjudicator shall be paid an appointment fee of R. . . . . This fee shall become payable in equal amounts by each Party within ..... days of the appointment of the Adjudicator, subject to an Invoice being provided. This fee will be deducted from the final statement of any sums which shall become payable under item 1 and/or item 2 of the Contract Data. If the final statement is less than the appointment fee the balance shall be refunded to the Parties.
4	The Adjudicator is/is not* currently registered for VAT.
5	Where the Adjudicator is registered for VAT it shall be charged additionally in accordance with the rates current at the date of invoice.
6	All payments, other than the appointment fee (item 3) shall become due in 30 days after receipt of invoice, thereafter interest shall be payable at 5% per annum above the Reserve Bank base rate for every day the amount remains outstanding.

\* Delete as necessary



## **PART C2 PRICING DATA**



## PART C2.1: PRICING INSTRUCTIONS

### C2.1 Pricing Instructions

Pricing Instructions mean the criteria as set out below, read together with all Parts of the contract document, which it will be deemed in the contract that the Tenderer has taken into account when developing his prices.

1. For the purpose of the Pricing Schedule, the following words shall have the meanings hereby assigned to them:
  - Unit: The unit of measurement for each item of work.
  - Quantity: The number of units of work for each item.
  - Rate: The agreed payment per unit of measurement.
  - Amount: The product of the quantity and the agreed rate for an item.
  - Sum: An agreed lump sum payment amount for an item, the extent of which is described in the Scope of Work, but the quantity of work which is not measured in any units.
2. A rate, sum, and/or price as applicable, is to be entered against each item in the Pricing Schedule. An item against which no price is entered will be considered to be covered by the other prices or rates in the Pricing Schedule.
3. The rates, sums, and prices in the Pricing Schedule are to be fully inclusive prices for the work described under the several items. Such prices and rates are to cover all costs and expenses that may be required in and for the execution of the work described in accordance with the provisions of the Scope of Work, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the Contract Data, as well as overhead charges and profit.
4. Where quantities are given in the Pricing Schedule, these are provisional and do not necessarily represent the actual amount of work to be done. The quantities of work accepted and certified for payment will be used for determining payments due and not the quantities given in the Activity Schedule.
5. All other rates, sums, or prices (as applicable) tendered in the Pricing Schedule shall be final and binding and shall **not** be subject to any variation throughout the period of the contract.
6. While the Employer has every intention to complete the full scope of works, the Employer reserves the right to reduce or increase the scope of works according to the dictates of the budget, or to terminate this contract, without adjustment to the agreed rates, sums and without payment of any penalty or surcharge in this regard. The Service Provider shall however be entitled to pro-rata payment for all services carried out in terms of any adjustment to the Scope of Work.
7. All Prices in the Price List exclude VAT, while the total of Prices reflected in the Contractor's Offer includes VAT.
8. Where the Scope requires detailed shop drawings and designs or other information to be provided, all costs associated therewith are deemed to have been provided for and included in the unit rates and Prices tendered for such items.



## **OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION AS PER ANNEXURE 1**



# HIV/STI COMPLIANCE REPORT

## SPECIFICATION FOR HIV/AIDS AWARENESS

### 1 Scope

This generic specification contains requirements applicable to the reduction of the risk of transfer of the HIV virus between and among construction workers and the local community through the following four strategies:

- a) raising awareness about HIV/AIDS;
- b) providing construction workers with access to condoms;
- c) HIV counselling, testing and referral services; and
- d) Sexually Transmitted Infection diagnosis and treatment.

### 2 Normative references:

The following standard contains provisions that, through reference in this text, constitute provisions of this standard:

SANS 4074 ISO 4074, *Condom Rubbers*

### 3 Definitions and Abbreviations

#### 3.1 Definitions

**Construction Worker:** all persons in the employ of the contractor or in the employ of any of the subcontractors contracted by the contractor.

**Local Community:** the communities' local to the site which are most likely to have contact with the construction worker and, in particular, sex workers in those communities.

**Service provider:** the natural or juristic person recognised by the South African Department of Health as specialist in conducting Aids Awareness Programmes.

#### 3.2 Abbreviations

STI: Sexually transmitted infection

HIV: Human Immunodeficiency Virus

AIDS: Acquired Immune Deficiency Syndrome

### 4 Objectives

The objectives are to:

- a) reduce the risk of transfer of the HIV virus between and among construction workers and the local community;



- b) raise awareness amongst construction workers and the local community of the risk of infection with the HIV virus;
- c) promote early diagnosis; and
- d) assist affected individuals to access care and counselling.

## **5 Requirements**

### **5.1 General requirement**

The contractor shall, in order to satisfy the objectives stated in 4:

- a) make condoms complying with the requirements of SABS ISO 4074 available to all construction workers at readily accessible points on the site, suitably protected from the elements, for the duration of the contract;
- b) either place and maintain HIV/AIDS awareness posters of size of not less than A1 in areas which are highly trafficked by construction workers, or provide construction workers with a pamphlet, in languages largely understood by construction workers, which
- c) encourage voluntary HIV/STI testing;
- d) provide information concerning counselling, support and care of those that are infected services; and
- e) comply with the requirements of 5.2.

***The provisions of 5.1 c) and d) do not apply to this contract.***

### **5.2 HIV awareness programme**

#### **5.2.1** The contractor shall:

- a) engage a qualified service provider as described in the scope of works to conduct an HIV Awareness Programme which is structured to achieve the outcomes stated in 5.2.3 for contract workers as soon as a construction workers camp is established and populated or, where no such camp is established, within two weeks of the commencement of a significant portion of the works and at subsequent intervals, if any, provided for in the scope of works; and
- b) Arrange for, provide a suitable venue, and instruct all construction workers to attend the HIV Awareness Programme and notify the Employer's Representative of the date, time and venue whenever a session with construction workers is conducted.

**Note: The National Department of Public Works maintains a list of qualified service providers.**

- 5.2.2** The contractor shall do nothing to dissuade construction workers from attending such an HIV Awareness Programme and shall take all reasonable steps to ensure that a minimum of 90% of construction workers engaged in the works attend such a programme, when it is conducted.



- 5.2.3** The outcomes of the HIV Awareness Programme shall as a minimum, result in contract workers exposed to such a programme being able to:
- a) communicate the existence of problems of HIV and be able to outline the consequences of transmission of HIV to or from the local community;
  - b) recall and communicate the mode of HIV transmission and preventative measures including the proper use of the condom.





## HIV/STI COMPLIANCE REPORT

### Pro-forma reporting format in terms of the SPECIFICATION FOR HIV/AIDS AWARENESS

SCMU number:   
 Payment Claim number:  Period covered by payment claim:

1. Distribution of condoms (briefly describe where and how condoms are distributed).
<hr/> <hr/> <hr/> <hr/> <hr/>
2. Posters / pamphlets (briefly describe where posters were placed / how pamphlets were distributed).
<hr/> <hr/> <hr/> <hr/> <hr/>
3. Voluntary testing (briefly describe the actions taken / information provided to promote testing).
4. Counselling, support and care (summarise information provided).
5. HIV awareness programme (briefly describe action).
<hr/> <hr/> <hr/> <hr/> <hr/>



6. Schedule of construction workers exposed to the HIV awareness programme.

Name	<u>Identity number</u>	<u>Trade / occupation</u>	Name of <u>employer</u>

I hereby declare the above to be a true reflection of actions taken to ensure compliance with the specification.

**For Contractor:**

**Employer's  
representative:**

Name: \_\_\_\_\_ Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Signature: \_\_\_\_\_

Date: \_\_\_\_\_ Date: \_\_\_\_\_



## **PART C2.3: BILLS OF QUANTITIES**



## Bill of Quantities

Item	Description	Unit	Qty.	Rate	Total amount
1	<b><u>Preliminaries &amp; General:</u></b> <ul style="list-style-type: none"> <li>The system is designed to cover the loads at Ford House.</li> <li>System design to be approved by suitably qualified Electrical Engineer prior to commencement of work.</li> <li>The system will be grid interactive connected with battery backup system, which will allow multiple power source options. The system will be required to import from the grid when required (e.g. when loads are greater than what can be supplied via the PV and Battery) and export surplus electricity when required. The PV should generate enough electricity to charge the batteries and supply power to the site. When required, the batteries must be able to be charged using the grid.</li> <li>Contractor shall submit engineering drawings for all architectural, civil, electrical and a complete photovoltaic solar system works, including a single line diagram showing all the components of the PV system, DC and AC distribution boards, PV Arrays lay out and battery backup systems, connections and cables, wires.</li> <li>Contractor shall submit the catalogues of each component showing the requested specifications stated on the bill of quantity.</li> <li>The contractor shall submit the Manufacture testing certificate, country of origin, certified characteristics, test performance curves, spare parts regular (as recommended by manufacturer, maintenance manuals and manufacturer's warranty for all relevant components of the system.</li> <li>As-built drawings shall be submitted after handing over the work.</li> <li>All junction boxes and DBs will be lockable type.</li> <li>Upon completion of the installation, the contractor shall organize an on-site training program involving nominated employer's staff. Such a program shall be carried out during the commissioning phase. The cost of the training shall be deemed to have been included in the tendered rates.</li> </ul>	Sum	1		



	<ul style="list-style-type: none"> <li>The price includes all builders' works, making good and reinstatement including necessary materials and workmanship as well as removal of unwanted materials to dump sites approved by the engineer to complete the job successfully.</li> <li>All the following items include supply, install, commission and operate of the complete PV solar system.</li> <li>The work includes maintenance period for each device according to BOQ and Specifications.</li> <li>The tender must include all relevant registrations and hardware for SSEG applications.</li> <li>The tenderer shall include all Sums hereunder which are of a preliminary or general nature. This shall include provisions for all the contractor's regulatory obligations, including all relevant Health and Safety requirements.</li> </ul>				
2	<p><b><u>PV Modules – 275 kWp:</u></b></p> <p>Supply, install, connect and operate Tier 1 Mono Crystalline Photovoltaic Solar Modules (JA Solar or equivalent) with all material needed to have complete job ready for installing high quality PV modules with total arrays capacity to achieve 275 kWp. The item Includes supply, install &amp; connect the following:</p> <ul style="list-style-type: none"> <li>Water proof PV junction boxes IP65 for each array including DC Fuses, DC switch disconnectors, busbars, terminals, ducts or trays, supports &amp; labels suitable to the PV arrays loads.</li> <li>Solar DC cables appropriately sized to connect the PV solar cells together and to the inverter directly to have a complete operational circuit with all conduits, clamps, trays and cable end terminations which shall be DC plug and socket connectors. The DC cables must be sized in accordance with the installation requirements applicable on site, the allowable voltage drop for DC cables between PV Arrays and inverter is equal to or less than 5%.</li> <li>The price includes all works, making good and reinstatement including necessary materials and workmanship as well as removal of unwanted materials to dump sites approved by the engineer to complete the job successfully.</li> </ul>	kWp	275		



	<ul style="list-style-type: none"> <li>Contractor must submit manufacturer warranty for solar panels with a minimum of 12-year product warranty and 25-year linear power warranty</li> <li>Contractor must submit all the required certificates for PV solar panel.</li> <li>All works and materials must be according to the drawings, specifications and supervisor engineer instruction's and approval.</li> </ul>				
3	<p><b><u>Inverters – 500 KVA:</u></b></p> <p>Supply, install, connect and operate DC/AC 3-phase inverter (Atess or equivalent) with data communication unit. The inverter must be suited to any PV module configuration, and depending on the system design and installation proposed including possible future expansion. The inverter unit shall be suitable for indoor installations with IP20. The inverter AC nominal power output rating must be equal or greater than 500 KW compatible with the AC loads design. The price includes:</p> <ul style="list-style-type: none"> <li>Supply, install and connect (monitoring and controlling unit) for all PV solar system installed especially compatible with the inverters, with all needed accessories, interface modules &amp; data cables and all connections needed to complete and connect the monitoring system to internet.</li> <li>Supply, install and connect all DC cables appropriately sized in accordance with the installation requirements and to connect the inverters with PV system designed with all conduits, clamps, trays and cable terminations end which shall be DC plug and socket connectors to have a complete job, the allowable voltage drop for DC cables between inverters and PV system not less than 5%.</li> <li>Inverters shall allow an adjustable power factor minimum AC output power with all necessary electrical cables, earthing system, conduits, trays and all other materials and workmanship needed to connect with the main distribution panel according to the engineer's instruction and approval and have a complete job.</li> <li>The contractor must submit manufacturer warranty for each inverter for a period not less than 5 years.</li> <li>All works and materials must be according to the drawings, specifications and</li> </ul>	No	1		



	supervisor engineer instruction's and approval.				
4	<p><b><u>Charge Controller:</u></b></p> <p>Supply, install, connect and operate a solar charge controller that is compatible with the battery inverter and able to take the complete kilowatt peak of the PV. The price includes:</p> <ul style="list-style-type: none"> <li>• Supply, install and connect Remote Control Units (RC Unit) for the installed battery inverters with all data &amp; communication cables and connection needed to complete the job.</li> <li>• Supply, install and connect: DC cables appropriately sized in accordance with the installation requirements to connect the battery inverters with DC battery fuses box. The works includes all conduits, clamps, trays and cable terminations end and workmanship needed to have a complete job.</li> <li>• The allowable voltage drop for DC cables between battery inverter and batteries less than 5%.</li> <li>• The contractor must submit manufacturer warranty for each battery inverter for a period not less than 5 years.</li> <li>• All works and materials must be according to the drawings, specifications and supervisor engineer instruction's and approval.</li> </ul>	No	1		
5	<p><b><u>Battery Bank:</u></b></p> <p>Supply, install, connect and operate Lithium Phosphate (LiFeP04) batteries (Freedom Won or Equivalent or as specified by the inverter manufacturer). The total demand energy is 400kWh (320kWh Usable power). The batteries must be of high-quality and achieving superior performance. The manufacturing date must be new and not more than 6 months and must be suitable for every type of applications especially for solar renewable energy with designed Service Life of 10 years. The manufacturers' warranty must be greater than 16 years or 5 500 cycles expected life at 70% DoD per cycle, greater than 20 years or 7 500 cycles at 50% DoD. The Battery should provide benefits of being maintenance free, case flame retardant &amp; non-hazardous. The price includes supply,</p>	kWh	400		





	<p>install &amp; connect Battery temp. sensor (BTS) and the following:</p> <ul style="list-style-type: none"> <li>• All necessary DC cables between the batteries together and to the battery fuse box to have a complete operational circuit with all bus bars, conduits, clamps, stainless steel bolts, washers and cable end terminations and all needed materials to complete the job. All DC cables must be sized in accordance with the installation requirements applicable on site, the allowable voltage drop must be less than 5%.</li> <li>• Battery Banks rack from the same manufacturer of the batteries with dividers and all needed accessories to finish the job. the rack must be enough to carry all the weight of the required batteries for the system.</li> <li>• The contractor must submit manufacturer warranty for each battery cell per requirements as stipulated above. All works and materials must be according to the drawings, specifications and supervisor engineer instructions and approval.</li> </ul>				
6	<p><b><u>PV Mounting structure:</u></b></p> <p>Supply and install Module mounting structure from aluminium profile structures to fix the photovoltaic panels on the roof including profiles composed of extruded aluminium, rivets with seal of an aluminium body and shank.</p> <p>The structure must be suitable to the dimension of selected PV modules and PV numbers, the mounting provides a fixed inclination of the modules 30 degree with vertical supports, plates, screws, the structure profile includes bracing and double hot galvanized angles for dividers.</p> <p>The mounting structures and the fixtures must be designed structurally to be suitable to withstand all static loads (weight of modules, wind loads etc.) that might occur according to the Site conditions. The mounting structure components are bonded together to guaranty potential equalization. All works and materials must be according to drawings, specifications and supervisor instructions and approval.</p> <ul style="list-style-type: none"> <li>• Mounting structures to have a minimum of 20-year product warranty.</li> </ul>	Sum	1		



	<ul style="list-style-type: none"> <li>All roof penetration must be insulated using EPDM or equivalent to prevent water leaks.</li> <li>Structural Engineer to inspect roof integrity for panel mounting. Roof mounting to be signed off by Structural Engineer.</li> </ul>				
7	<p><b><u>Battery Fuse Box:</u></b></p> <p>Supply, install, connect and operate battery DC fuse box as an external DC distributor to protect the battery connections of the inverters. The box must be water proof protection with IP65, simple wall mounting, suitable connections for battery inverters and up to six DC connections inlet on the battery side, cable glands, with all necessary DC cables from the battery bank and to the fuse box and from the fuse box to the battery inverters to have a complete operational circuit with all conduits, clamps, stainless steel bolts, washers and cable end terminations needed to fix, all DC cables must be sized in accordance with the installation requirements applicable on site ,the allowable voltage drop must be less than 5%.</p> <p>The contractor must submit manufacturer warranty for each battery fuse box for a period not less than 3 years. (Type is SMA or equivalent).</p> <p>All works and materials must be according to the drawings, specifications and supervisor engineer instruction's and approval.</p>	Sum	1		
8	<p><b><u>Earthing System for Battery Banks:</u></b></p> <p>Supply, install, connect and operate complete independent earthing system for Battery Banks system and must be separated of the main earthing system to obtain 1 ohm max resistance. The item includes (copper electrodes driven into ground, manholes with iron cover, earth joints, clamps, ducts, conduits and flexible earthing copper wires and cables from the negative busbar in the battery fuse box to the electrode to complete the system as specifications and supervisor engineer instruction's and approval.)</p>	Sum	1		
9	<p><b><u>Earthing for PV Solar System:</u></b></p> <p>Supply, install, connect and operate complete independent earthing system for PV solar</p>	Sum	1		



	system and must be separated of the main earthing system to obtain 1 ohm max resistance. the item includes (copper electrodes driven into ground, manholes with iron cover, earth joints, clamps, ducts, conduits and flexible earthing copper wires and cables from the PV system components to the electrode to complete the system as s.)				
10	<b><u>Fire Suppression System (Provisional Amount):</u></b>  Supply, install 4 x 2.5kg Stat-X complete with brackets and accessories. This is to include gas panel complete with batteries, 4 conventional smoke detectors, 1 conventional call point, 2 conventional sound strobes, mechanical valves, gas release interface. This must be integrated into existing fire alarm system.	Sum	1	R 130,000.00	R 130,000.00
11	<b><u>Ventilation System (Provisional Amount):</u></b>  Supply and install extraction system (1200l/s), inclusive of ducting, sound attenuator, and all necessary accessories. Supply and install modular filter panels, pleated filter media with galvanized filter housing for easy filter cleaning, weather louvre, etc.	Sum	1	R 50,000.00	R 50,000.00
<b>SUB-TOTAL</b>					
<b><u>Standards:</u></b>  The above system shall be required to meet all required standards including: <ul style="list-style-type: none"> <li>• IEC 62116, Utility-interconnected photovoltaic inverters – Test procedure of islanding prevention measures.</li> <li>• SANS 60364-7-712/IEC 60364-7-712, Electrical installations of buildings – Part 7-712: Requirements for special installations or locations – Solar photovoltaic (PV) power supply systems.</li> <li>• SANS 61215/IEC 61215, Crystalline silicon terrestrial photovoltaic (PV) modules – Design qualification and type approval.</li> <li>• IEC 62109: Safety of power converters for use in photovoltaic power systems: all Parts</li> <li>• IEC 61727: Photovoltaic (PV) Systems - Characteristics of the Utility Interface.</li> <li>• IEC 60068: Environmental Testing.</li> <li>• IEC 61683: Photovoltaic Systems - Power Conditioners - Procedure for Measuring Efficiency.</li> <li>• IEC 62446-2:2020 Photovoltaic (PV) systems - Requirements for testing, documentation and maintenance - Part 2: Grid connected systems - Maintenance of PV systems</li> </ul>					



- IEC 62930: Electric cables for photovoltaic systems with a voltage rating of 1,5 kV DC (SANS 62930).
- IEC 62852 / SANS 62852: Connectors for DC-application in photovoltaic systems - Safety requirements and tests.
- Osh Act – Republic of South Africa Occupational Health and Safety Act, Act 85 of 1993.
- NRS 097 Part 2: Small scale embedded generation (all part 2 series)
- Grid connection code for renewable power Plants (RPPs) connected to the electricity Transmission system (TS) or the distribution System (DS) in South Africa (latest edition)
- SANS10142-1: The wiring of premises



## SUMMARY PAGE

	DESCRIPTION	AMOUNT
1	Contingency amount	R 300,000.00
2	Supply, delivery and commissioning of complete systems as per specification	
3	<b>SUB TOTAL</b>	
4	<b>15% VAT</b>	
5	<b>TOTAL (Including VAT)</b>	

**THIS TOTAL INCLUDING VAT (item 5) MUST BE CARRIED TO THE FORM OF TENDER**

**PLACE COMPANY NAME, CONTACT DETAILS AND STAMP HERE**

**Signature of authorized person:** \_\_\_\_\_

**Print name:** \_\_\_\_\_

**I.D. Number:** \_\_\_\_\_

**Date:** \_\_\_\_\_



## **DRAWINGS**

Annotations at end of description i.e. (San005) refer to the Architect's specification attached to the back of these bills of quantities. Tenderers are advised to study the Architect's specification for the full intent and meaning of the relevant item



### **PART 3 - LIST OF DRAWINGS 7**

The following drawings/annexure shall be issued during the bid period to form part of the bid documentation. Where applicable, drawings/annexure could be re-issued to the Contractor at commencement of the construction phase.

#### **Contract drawings**

<b><u>DRAWINGS</u></b>	<b><u>DESCRIPTION</u></b>
PE-PL01	PLAN LAYOUTS AND SECTION





## **PART C3**

### **SCOPE OF WORKS**



## C3 SCOPE OF WORK

### C3 Scope of Work

<b>PROJECT TITLE:</b>	<b>SUPPLY AND INSTALL SOLAR SYSTEM IN OLD FORD HOUSE BUILDING AT SARAH BAARTMAN</b>
<b>SCMU NUMBER:</b>	<b>SCMU5-23/24-0051</b>

### C3.1 SCOPE OF WORKS

#### DESCRIPTION OF THE WORKS

The Scope of work shall include the following: -

- 3.1.1 The Design, Manufacture, Supply, Delivery, Storage and Safekeeping, Complete Installation, Commissioning and Testing, Guarantee, and initial Maintenance for one-year period of a complete **275 kWp** PV generating plant as per the specification hereunder, with **400kWh** lithium Phosphate (LiFeP04) battery storage.
- 3.1.2 The contract shall be for a turn-key project integrating the PV plant into the existing electrical network. No work will be undertaken by DPWI.
- 3.1.3 Excess power will be fed back into the Nelson Mandela Municipal Electrical Network
- 3.1.4 All materials supplied shall be new.
- 3.1.5 The successful tenderer / contractor will be required to undertake a full power and energy analysis of the facility electricity use in the preceding 12 months using historical data from Nelson Mandela Metro Municipality. After the installation of the PV generation plant another analysis must be undertaken and the results compared. The post PV plant commissioning must cover the 12 month guarantee period and be submitted at the completion of the period.
- 3.1.6 The tenderer is required to provide: -
  - 3.1.6.1 a single line schematic diagram of their proposal
  - 3.1.6.2 a drawing showing the proposed layout of the PV arrangement suitable for the facility.
- 3.1.7 Three copies of the Operating and Maintenance manuals including all drawings are to be supplied at hand over of the plant.
- 3.1.8 The PV cells shall have a 20-year minimum performance lifespan as per the manufacturer's specification and to an internationally accepted standard. The tenderer is to provide details on the lifespan of the solar panels offered in relation to their output vs. time. Attach a certificate of testing.
- 3.1.9 A separate main power incoming control board shall be provided to accept the power from the PV generating plant. The necessary new circuit breakers shall be provided as determined by the tenderer.
- 3.1.10 Suitable data logging shall be supplied to view and record the instantaneous power being generated, the energy consumed by the load, and energy stored in the batteries. These values shall be recorded and the data shall be stored continuously and shall be permanently retained in the data logger computer, which shall be included in the scope of supply. This computer is to be approved by the DPWI IT department. The tenderer is to provide details.
- 3.1.11 The complete design of the supporting metalwork including the fixing of the PV array to the roof. The design is to be undertaken by a registered Civil / Structural Engineer. The Tenderer is to supply details of how this will be undertaken as regards design, fabrication and erection.
- 3.1.12 All supplied steelwork is to be hot dipped galvanized after all cutting and drilling has been undertaken. No damage to the galvanizing is to take place after galvanizing. Details of the steel protection are to be supplied before manufacture. The structural design must be approved by the DPWI before manufacture commences.
- 3.1.13 All work shall comply with the quality standards of ISO 9001 and NRS 048.



- 3.1.14 Installation of the plant shall include all work and materials necessary to integrate the equipment, into the existing power supply network, and shall include all cabling, cable trays, trenching and making good of any trenching, any required supports, core drilling and making good of any damage, connections, commissioning, testing, hand-over and commencement of guarantee and maintenance periods.
- 3.1.15 No overhead wiring is permitted.
- 3.1.16 Following commissioning of the plant, there shall be a one (1) month test period of operation and proof of meeting the design criteria and only then shall it be handed over to DPWI for their acceptance in terms of the contract.
- 3.1.17 A plant guarantee period of one (1) year is required commencing on formal take-over of the plant by DPWI. The guarantee shall include for all materials and labour.
- 3.1.18 The tenderer is to include the necessary literature, descriptions and brochures for the DPWI to evaluate the technical aspects of the equipment offered.
- 3.1.19 **The inverters must be chosen from the list approved by the local electricity supplier and must enable reverse metering. It must also have an NRS 097-2-1: 2017 ed. 2.1 certification.**

### **C3.2 TECHNICAL SPECIFICATIONS FOR ROOFTOP SOLAR PV**

The projects under shall be commissioned as per the technical specifications given below. The vendor will be solely responsible for any shortcomings or negligence.

#### **DEFINITION**

A Roof Top Solar (RTS) Photo Voltaic (PV) system shall consist of following equipment/components:

- Solar Photo Voltaic (SPV) modules consisting of required number of Crystalline PV modules
- Inverter/PCU
- Module Mounting structures
- Energy Meter
- Array Junction Boxes
- DC Distribution Box
- AC Distribution Box
- Protections – Earthing, Lightning, Surge
- Cables
- Drawing & Manuals
- Miscellaneous
- Lithium Phosphate batteries
- Fire suppression system
- Ventilation system

#### **1. SOLAR PV MODULES**

- 1.1. The PV modules used must qualify to the latest edition of IEC standards or equivalent BIS standards. IEC 61215/IS14286, IEC 61853-Part I/IS 16170-Part I, IEC 61730 Part-1 & Part 2 and IEC 62804 (PID). For the PV modules to be used in a highly corrosive atmosphere throughout their lifetime, they must qualify to IEC 61701/IS 61701.
- 1.2. The rated power of solar PV module shall have maximum tolerance up to +3%.
- 1.3. The peak-power point current of any supplied module string (series connected modules) shall not vary by +1% from the respective arithmetic means for all modules and/or for all module strings (connected to the same MPPT), as the case may be.



- 1.4. The peak-power point voltage of any supplied module string (series connected modules) shall not vary by + 2% from the respective arithmetic means for all modules and/or for all module strings (connected to the same MPPT), as the case may be.
- 1.5. The temperature co-efficient power of the PV module shall be equal to or better than -0.45%/°C.
- 1.6. Solar PV modules of minimum capacity  $\geq 400 \text{ Wp}$  to be used.
- 1.8. The PV Module efficiency should be minimum 16%.
- 1.9. Solar PV modules of minimum fill factor 75%, to be used.
- 1.10. All electrical parameters at STC shall have to be provided.
- 1.11. The PV modules shall be equipped with IP 65 or better protection level junction box with required numbers of bypass diodes of appropriate rating and appropriately sized output power cable of symmetric length with MC4 or equivalent solar connectors. The IP level for protection may be chosen based on following conditions:
  - i. An IP 65 rated enclosure is suitable for most outdoor enclosures that won't encounter extreme weather such as flooding.
  - ii. An IP 67 rated enclosure is suitable at locations which may encounter temporary submersion at depths of up to one meter.
  - iii. An IP 68 enclosure is recommended if there may exist situations of submergence for extended periods of time and at substantial depths.
- 1.12. All PV modules should carry a performance warranty of >90% during the first 10 years, and >80% during the next 15 years. Further, module shall have performance warranty of >97% during the first year of installation—degradation of the module below 1 % per annum.
- 1.13. The manufacturer should warrant the Solar Module(s) to be free from the defects and/or failures specified below for a period not less than five (05) years from the date of commissioning:
- 1.14. Defects and/or failures due to manufacturing.
- 1.15. Defects and/or failures due to quality of materials.
- 1.16. Nonconformity to specifications due to faulty manufacturing and/or inspection processes. If the solar Module(s) fails to conform to this warranty, the manufacturer will repair or replace the solar module(s), at the Owners sole option.
- 1.17. PV modules must be tested and approved by one of the accredited and approved test centres.
- 1.18. Modules deployed must use a RF identification tag laminated inside the glass. The following information must be mentioned in the RFID used on each module:
  - i. Name of the manufacturer of the PV module
  - ii. Name of the manufacturer of Solar Cells.
  - iii. Month & year of the manufacture (separate for solar cells and modules)
  - iv. Country of origin (separately for solar cells and module)
  - v. I-V curve for the module Wattage,  $I_m$ ,  $V_m$  and FF for the module
  - vi. Unique Serial No and Model No of the module
  - vii. Date and year of obtaining IEC PV module qualification certificate.
  - viii. Name of the test lab issuing IEC certificate.
  - ix. Other relevant information on traceability of solar cells and module as per ISO 9001 and ISO 14001.
  - x. Nominal wattage +3%.
  - xi. Brand Name, if applicable.
- 1.19. Other details as per IS/IEC 61730-1 clause 11 should be provided at appropriate place. In addition to the above, the following information should also be provided:
  - i. The actual Power Output  $P_{max}$  shall be mentioned on the label pasted on the back side of PV Module.
  - ii. The Maximum system voltage for which the module is suitable to be provided on the back sheet of the module.
  - iii. Polarity of terminals or leads (colour coding is permissible) on junction Box housing near cable entry or cable and connector.
- 1.20. Unique Serial No, Model No, Name of Manufacturer, Manufacturing year, Make and module wattage details should be displayed inside the laminated glass.

## 2. INVERTER/PCU



- 2.1. Inverters/PCU should comply with applicable IEC/equivalent BIS standard for efficiency measurements and environmental tests as per standard codes IEC 61683/IS 61683, IS 16221 (Part 2), IS 16169 and IEC 60068-2(1,2,14,30) /Equivalent BIS Std.
- 2.2. Maximum Power Point Tracker (MPPT) shall be integrated in the inverter/PCU to maximize energy drawn from the array. Charge controller (if any) / MPPT units environmental testing should qualify IEC 60068-2(1, 2, 14, 30)/Equivalent BIS standard. The junction boxes/enclosures should be IP 65 or better (for outdoor)/ IP 54or better (indoor) and as per IEC 529 Specifications.
- 2.3. All inverters/PCUs shall be IEC 61000 compliant for electromagnetic compatibility, harmonics, Surge, etc.
- 2.4. The PCU/ inverter shall have overloading capacity of minimum 10%.
- 2.5. Typical technical features of the inverter shall be as following:
  - i. Switching devices: IGBT/MOSFET
  - ii. Control: Microprocessor/DSP
  - iii. Nominal AC output voltage and frequency: as per CEA/State regulations iv. Output frequency: 50 Hz v. Grid Frequency Synchronization range: as per CEA/State Regulations
  - vi. Ambient temperature considered: -20°C to 60°C
  - vii. Humidity: 95 % Non-condensing
  - viii. Protection of Enclosure: IP-54 (Minimum) for indoor and IP-65(Minimum) for outdoor.
  - ix. Grid Frequency Tolerance range: as per CEA/State regulations
  - x. Grid Voltage tolerance: as per CEA/State Regulations
  - xi. No-load losses: Less than 1% of rated power
  - xii. Inverter efficiency (Min.): >93% (In case of 10 kW or above with in-built galvanic isolation) >97% (In case of 10 kW or above without inbuilt galvanic isolation)
  - xiii. Inverter efficiency (minimum): > 90% (In case of less than 10 kW)
  - xiv. THD: < 3%
  - xv. PF: > 0.9 (lag or lead)
  - xvi. Should not inject DC power more than 0.5% of full rated output at the interconnection point and comply to IEEE 519.
- 2.6. The output power factor of inverter should be suitable for all voltage ranges or sink of reactive power, inverter should have internal protection arrangement against any sustain fault in feeder line and against the lightning on feeder.
- 2.7. All the Inverters should contain the following clear and indelible Marking Label & Warning Label as per IS16221 Part II, clause 5. The equipment shall, as a minimum, be permanently marked with:
  - i. The name or trademark of the manufacturer or supplier;
  - ii. A model number, name or other means to identify the equipment,
  - iii. A serial number, code or other marking allowing identification of manufacturing location and the manufacturing batch or date within a twelvemonth time period.
  - iv. Input voltage, type of voltage (a.c. or d.c.), frequency, and maximum continuous current for each input.
  - v. Output voltage, type of voltage (a.c. or d.c.), frequency, maximum continuous current, and for a.c. outputs, either the power or power factor for each output.
  - vi. The Ingress Protection (IP) rating
- 2.8. Marking shall be located adjacent to each fuse or fuse holder, or on the fuse holder, or in another location provided that it is obvious to which fuse the marking applies, giving the fuse current rating and voltage rating for fuses that may be changed at the installed site.
- 2.9. In case the consumer is having a 3- $\phi$  connection, 1- $\phi$ /3- $\phi$  inverter shall be provided by the vendor as per the consumer's requirement and regulations of the State.
- 2.10. Inverter/PCU shall be capable of complete automatic operation including wake-up, synchronization & shutdown.
- 2.11. For CFA calculation, minimum of following two shall be considered:
  - i. Solar PV array capacity in kWp
  - ii. Inverter Capacity in KW
- 2.12. Integration of PV Power with Grid & Grid Islanding:





- i. The output power from SPV would be fed to the inverters/PCU which converts DC produced by SPV array to AC and feeds it into the main electricity grid after synchronization.
- ii. In the event of a power failure on the electric grid, it is required that any independent power-producing inverters attached to the grid turn off in a short period of time. This prevents the DC-to-AC inverters from continuing to feed power into small sections of the grid, known as "islands." Powered islands present a risk to workers who may expect the area to be unpowered, and they may also damage grid-tied equipment. The Rooftop PV system shall be equipped with islanding protection. In addition to disconnection from the grid (due to islanding protection) disconnection due to under and over voltage conditions shall also be provided, if not available in inverter.
- iii. MCB/MCCB or a manual isolation switch, besides automatic disconnection to grid, would have to be provided at utility end to isolate the grid connection by the utility personnel to carry out any maintenance. This switch shall be locked by the utility personnel.

### **3. MODULE MOUNTING STRUCTURE (MMS)**

- 3.1. Supply, installation, erection and acceptance of module mounting structure (MMS) with all necessary accessories, auxiliaries and spare part shall be in the scope of the work.
- 3.2. Module mounting structures can be made from three types of materials. They are Hot Dip Galvanized Iron, Aluminium and Hot Dip Galvanized Mild Steel (MS). However, MS will be preferred for raised structure.
- 3.3. MMS Steel shall be as per latest IS 2062:2011 and galvanization of the mounting structure shall be in compliance of latest IS 4759. MMS Aluminium shall be as per AA6063 T6. For Aluminium structures, necessary protection towards rusting need to be provided either by coating or anodization.
- 3.4. All bolts, nuts, fasteners shall be of stainless steel of grade SS 304 or hot dip galvanized, panel mounting clamps shall be of aluminium and must sustain the adverse climatic conditions. Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, nuts and bolts.
- 3.5. The module mounting structures should have angle of inclination as per the site conditions to take maximum insolation and complete shadow-free operation during generation hours. However, to accommodate more capacity the angle of inclination may be reduced until the plant meets the specified performance ratio requirements.
- 3.6. The Mounting structure shall be so designed to withstand the speed for the wind zone of the location where a PV system is proposed to be installed. The PV array structure design shall be appropriate with a factor of safety of minimum 1.5.
- 3.7. The upper edge of the module must be covered with wind shield so as to avoid build air ingress below the module. Slight clearance must be provided on both edges (upper & lower) to allow air for cooling.
- 3.8. Suitable fastening arrangement such as grouting and calming should be provided to secure the installation against the specific wind speed. The Contractor shall be fully responsible for any damages to SPV System caused due to high wind velocity within guarantee period as per technical specification.
- 3.9. The structures shall be designed to allow easy replacement, repairing and cleaning of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from the SPV panels. Necessary testing provision for MMS to be made available at site.
- 3.10. Adequate spacing shall be provided between two panel frames and rows of panels to facilitate personnel protection, ease of installation, replacement, cleaning of panels and electrical maintenance.
- 3.11. The structure shall be designed to withstand operating environmental conditions for a period of minimum 25 years.



#### **4. METERING**

- 4.1. A Roof Top Solar (RTS) Photo Voltaic (PV) system shall consist of following energy meters:
  - i. Net meter: To record import and export units
  - ii. Generation meter: To keep record for total generation of the plant.

#### **5. ARRAY JUNCTION BOXES**

- 5.1 The junction boxes are to be provided in the PV array for termination of connecting cables. The Junction Boxes (JBs) shall be made of GRP/FRP/Powder Coated aluminum /cast aluminum alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cable lugs. The JB's shall be such that input & output termination can be made through suitable cable glands. Suitable markings shall be provided on the bus-bars for easy identification and cable ferrules will be fitted at the cable termination points for identification.
- 5.2 Copper bus bars/terminal blocks housed in the junction box with suitable termination threads Conforming to IP 65 or better standard and IEC 62208 Hinged door with EPDM rubber gasket to prevent water entry, Single /double compression cable glands should be provided.
- 5.3 Polyamide glands and MC4 Connectors may also be provided. The rating of the junction box shall be suitable with adequate safety factor to interconnect the Solar PV array.
- 5.4 Suitable markings shall be provided on the bus bar for easy identification and the cable ferrules must be fitted at the cable termination points for identification.
- 5.5 Junction boxes shall be mounted on the MMS such that they are easily accessible and are protected from direct sunlight and harsh weather.

#### **6 DC DISTRIBUTION BOX (DCDB)**

- 6.1 May not be required for small plants, if suitable arrangement is available in the inverter.
- 6.2 DC Distribution Box are to be provided to receive the DC output from the PV array field.
- 6.3 DCDBs shall be dust & vermin proof conform having IP 65 or better protection, as per site conditions.
- 6.4 The bus bars are made of EC grade copper of required size. Suitable capacity MCBs/MCCB shall be provided for controlling the DC power output to the inverter along with necessary surge arrestors. MCB shall be used for currents up to 63 Amperes, and MCCB shall be used for currents greater than 63 Amperes.

#### **7 AC DISTRIBUTION BOX (ACDB)**

- 7.1 AC Distribution Panel Board (DPB) shall control the AC power from inverter, and should have necessary surge arrestors, if required. There is interconnection from ACDB to mains at LT Bus bar while in grid tied mode.
- 7.2 All switches and the circuit breakers, connectors should conform to IEC 60947:2019, part I, II and III/ IS 60947 part I, II and III.
- 7.3 The isolators, cabling work should be undertaken as part of the project.
- 7.4 All the Panel's shall be metal clad, totally enclosed, rigid, floor mounted, air -insulated, cubical type suitable for operation on 1- $\phi$ /3- $\phi$ , 415 or 230 volts, 50 Hz (or voltage levels as per CEA/State regulations).
- 7.5 The panels shall be designed for minimum expected ambient temperature of 45 degree Celsius, 80 percent humidity and dusty weather.
- 7.6 All indoor panels will have protection of IP 54 or better, as per site conditions. All outdoor panels will have protection of IP 65 or better, as per site conditions.
- 7.7 Should conform to SANS 10142 safety regulations (till last amendment).
- 7.8 All the 415 or 230 volts (or voltage levels as per regulations) AC devices / equipment like bus support insulators, circuit breakers, SPDs, Voltage Transformers (VTs) etc., mounted inside the





switchgear shall be suitable for continuous operation and satisfactory performance under the following supply conditions.

- i. Variation in supply voltage: as per regulations
  - ii. Variation in supply frequency: as per regulations
- 7.9 The inverter output shall have the necessary rated AC surge arrestors, if required and MCB/MCCB. RCCB shall be used for successful operation of the PV system, if inverter does not have required earth fault/residual current protection.

## 8 PROTECTIONS

The system should be provided with all necessary protections like Earthing, Lightning, and Surge Protection, as described below:

### 8.1 Earthing Protection

- i. The earthing shall be done in accordance with latest Standards.
- ii. Each array structure of the PV, Low Tension (LT) power system, all electrical equipment, inverter, all junction boxes, etc. shall be grounded properly.
- iii. All metal casing/ shielding of the plant shall be thoroughly grounded in accordance with Regulation. In addition, the lightning arrester/masts should also be earthed inside the array field.
- iv. Earth resistance should be as low as possible and shall never be higher than 5 ohms.
- v. For 10 KW and above systems, separate three earth pits shall be provided for individual three earthing viz.: DC side earthing, AC side earthing and lightning arrester earthing.

### 8.2 Lightning Protection

- i. The SPV power plants shall be provided with lightning & over voltage protection, if required. The main aim in this protection shall be to reduce the overvoltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmosphere disturbances etc. Lightning arrester shall not be installed on the mounting structure.
- ii. The entire space occupying the SPV array shall be suitably protected against Lightning by deploying required number of Lightning Arrestors (LAs). Lightning protection should be provided as per NFC17-102:2011/IEC 62305 standard.
- iii. The protection against induced high-voltages shall be provided by the use of Metal Oxide Varistors (MOVs)/Franklin Rod type LA/Early streamer type LA.
- iv. The current carrying cable from lightning arrester to the earth pit should have sufficient current carrying capacity according to IEC 62305. According to standard, the minimum requirement for a lightning protection system designed for class of LPS III is a 6 mm<sup>2</sup> copper/ 16 mm<sup>2</sup> aluminum or GI strip bearing size 25\*3 mm thick. Separate pipe for running earth wires of Lightning Arrester shall be used.

### 8.3 Surge Protection

- i. Internal surge protection, wherever required, shall be provided.
- ii. It will consist of three SPD type-II/MOV type surge arrestors connected from +ve and -ve terminals to earth.

## 9 CABLES

- 9.1 All cables should conform to latest edition of IEC/equivalent BIS Standards along with IEC 60227/IS 694, IEC 60502/IS 1554 standards.
- 9.2 Cables should be flexible and should have good resistance to heat, cold, water, oil, abrasion etc.
- 9.3 Armored cable should be used and overall PVC type 'A' pressure extruded insulation or XLPE insulation should be there for UV protection.



- 9.4 Cables should have Multi Strand, annealed high conductivity copper conductor on DC side and copper/FRLS type Aluminum conductor on AC side. For DC cabling, multicore cables shall not be used.
- 9.5 Cables should have operating temperature range of -10°C to +80°C and voltage rating of 660/1000 V.
- 9.6 Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter etc. shall be so selected to keep the voltage drop less than 2% (DC Cable losses).
- 9.7 The size of each type of AC cable selected shall be based on minimum voltage drop. However; the maximum drop shall be limited to 2%.
- 9.8 The electric cables for DC systems for rated voltage of 1500 V shall conform to BIS 17293:2020.
- 9.9 All cable/wires are to be routed in a RPVC pipe/ GI cable tray and suitably tagged and marked with proper manner by good quality ferule or by other means so that the cable is easily identified.
- 9.10 All cable trays including covers to be provided.
- 9.11 Thermo-plastic clamps to be used to clamp the cables and conduits, at intervals not exceeding 50 cm.
- 9.12 Size of neutral wire shall be equal to the size of phase wires, in a three phase system.
- 9.13 The Cable should be so selected that it should be compatible up to the life of the solar PV panels i.e. 25 years.

## **10 DRAWINGS & MANUALS**

- 10.1 Operation & Maintenance manual/user manual, Engineering and Electrical Drawings shall be supplied along with the power plant.
- 10.2 The manual shall include complete system details such as array lay out, schematic of the system, inverter details, working principle etc.
- 10.3 The Manual should also include all the Dos & Don'ts of Power Plant along with Graphical Representation with indication of proper methodology for cleaning, Operation and Maintenance etc.
- 10.4 Step by step maintenance and troubleshooting procedures shall also be given in the manuals.
- 10.5 Vendors should also educate the consumers during their guarantee period.

## **11 MISCELLANEOUS**

- 11.1 Connectivity:  
The maximum capacity for interconnection with the grid at a specific voltage level shall be as specified in the regulation for Grid connectivity.
- 11.2 Safety measures:  
Electrical safety of the installation(s) including connectivity with the grid must be taken into account and all the safety rules & regulations applicable as per NRS and SANS must be followed.
- 11.3 Shadow analysis:  
The shadow analysis report with the instrument such as Solar Pathfinder or professional shadow analysis software of each site should be provided and the consumer should be educated to install the system only in shadow free space. Lower performance of the system due to shadow effect shall be liable for penalty for lower performance.

## **12 BATTERY BOX**

- 12.1 The battery bank should be housed in a vented compartment that prevents users from coming in contact with batteries terminals. This compartment should be strong enough to accommodate the weight of the batteries. A mechanism to prevent opening and entry of the batteries should be provided.



- 12.2 The entire enclosure must be constructed to last at least twenty years without maintenance and should be protected against corrosion. The battery bank enclosure should have a clean and neat appearance.

### **13 BATTERY**

Lithium Phosphate batteries of appropriate capacity with complete battery management system should be used in hybrid and off grid system where required.

- 13.1 The batteries must conform to the latest edition of IEC 62133 and/or IEC 61960 (whichever is applicable).
- 13.2 The battery bank should provide backup to night load of building.
- 13.3 The battery must ensure safe and reliable operation in the whole range of ambient temperatures from -10° C to + 50° C.
- 13.4 The maximum permissible self-discharge rate is 5 percent of rated capacity per month at 25 C.
- 13.5 Cycle life of the batteries must be greater than 6000 when discharged down to depth of discharge (DOD) of 80% percent discharge rate.
- 13.6 The battery shall have a certificate of compliances, issued by a recognized laboratory.
- 13.7 Batteries should be packaged in order to withstand transportation on non-metallic road.
- 13.8 The performance guarantee shall cover at least 05 years.

Note: Bidder should justify the specs with appropriate lab test reports/certifications from the principle manufacturer.

### **14 FIRE PROTECTION**

The complete PV installation shall comply to the minimum building regulations.

- 14.1 The battery and inverter room shall be classified as J1 occupancy
- 14.2 All safety distances shall be accounted for when dealing with combustible roof assemblies and covering as per SANS 10400 T.
- 14.3 The battery and inverter room shall be equipped with a fire suppression system

### **15 VENTILATION SYSTEM**

- 15.1 The battery and inverter room shall be ventilated to keep the temperature between -5°C and 40°C



## **PART C4**

### **SITE INFORMATION**



#### C4.1 SITE INFORMATION

<b>PROJECT TITLE:</b>	<b>SUPPLY AND INSTALL SOLAR SYSTEM IN OLD FORD HOUSE BUILDING AT SARAH BAARTMAN</b>
<b>SCMU NUMBER:</b>	<b>SCMU5-23/24-0051</b>

#### GENERAL

Prospective bidders to familiarize themselves with the locality, access, any other "restrictions".  
(Refer to *Scope of Works C3*)  
The site is the existing Ford House, 55 Albany Road



## **ANNEXURE 1**

### **OHS SPECIFICATION**



## TABLE OF CONTENT

1. Preamble .....	3
2. Scope of health & safety specification document.....	5
3. Purpose .....	5
4. Definitions.....	6
5. Occupational health & safety management.....	8
5.1 Structure and organization of OHS responsibilities.....	8
5.1.1 Overall supervision and responsibilities OHS.....	8
5.1.2 Required appointment as per the construction regulation.....	10
5.2 Communication, participation & consultation.....	11
6. Interpretation.....	11
7. Responsibilities.....	12
7.1 Client.....	12
7.2 Principal contractor.....	13
7.3 Contractor.....	14
7.4 Responsibilities of <b>Construction Health &amp; Safety Agent (SACPCMP)</b> .....	15
8. Scope of work.....	16
9. Preparing Health & Safety Plan.....	16
10. Health & Safety File.....	19
11. OH&S Goals & Objective & Arrangements for Monitoring & Reviewing OH&S Performance..	19
11.1 Identification of Hazards & development of Risk Assessment, Standard working Procedures (SWP) & Method Statement.....	19
11.1.1. Monthly audit by client and/or its agent.....	19
11.1.2 Health & Safety incident/accident reporting and investigation.....	19
12. Review.....	21
12.1 Site Rules & other Restrictions.....	22
12.1.1 Appointment of Health & Safety Reps.....	23
12.1.2 Duties and functions of the Health & Safety Reps.....	23
12.1.3 Establishment of Health & Safety Committee.....	23
12.1.4 Training & Awareness.....	2
13. Project Site Specific Requirements.....	25
14. Outlined Data References & information on Certain & Specific Obligatory Requirements to ensure compliance.....	26
15. Principal Contractor General duties.....	30
16. The Principal Contractor Specific Duties.....	31





17. The Principal Contractor Specific Responsibilities with regard to hazardous activities.....	<b>31</b>
18. General Notes to the Principal Contractor.....	<b>32</b>
19. House Keeping.....	<b>33</b>
20. Lockout System.....	<b>36</b>
21. Important Lists & Records to be kept.....	<b>36</b>



## 1. PREAMBLE

In terms of Construction Regulation 4(1)(a) of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), and 5(1) construction regulation of 2014, 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 required that the entire scope of the Labour legislation, including the Basic Conditions of Employment Act be considered as part of the legal compliance system. With reference to this specification document this requirement is limited to all health, safety and environmental issues pertaining to the site of the project as referred to here-in. Despite the foregoing it is reiterated that environmental management shall receive due attention.

Due to the wide scope and definition of construction work, every construction activity and site will be different, and circumstances and conditions may change even on a daily basis. Therefore, due caution is to be taken by the Principal Contractor 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 identify and determine the scope and details of 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' (see definitions under Construction Regulations) detailing the key activities to be performed in order to reduce as far as practicable, the hazards identified in the Risk Assessment.

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. The Principal Contractor is to take due cognisance of the above statement.



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. Any such inaccuracies, inconsistencies and/or inadequacies must immediately be brought to the attention of the Agent and/or Client.

## **2. SCOPE OF HEALTH AND SAFETY SPECIFICATION DOCUMENT**

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.

This health and safety specification in respect of a construction work contract:

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

**Note 1:** This specification establishes generic requirements to enable the employer and the contractor to satisfy aspects of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and the Construction Regulations, 2014. The contractor is required to develop, implement and maintain package specific health and safety plans. The employer is required to provide certain package specific information to the contractor or a health and safety specification for the works to enable such plans to be formulated. Accordingly, this generic specification on its own cannot ensure compliance with the requirements of the aforementioned Act (See Annexure A).

**Note 2:** The Construction Regulations, 2014, require an employer to stop any contractor from executing construction work which is not in accordance with the contractor's health and safety plan for the site or which poses to be a threat to the health and safety of persons.

**Note 3:** This specification establishes generic health and safety requirements. Site specific requirements for health and safety are stated in the scope of work associated with a contract (see Annexure A).

**Note 4:** The South African Council for the Project and Construction Management Professions has established the following specified categories of registration in terms of the Project and Construction Management Professions Act of 2000 (Act No. 48 of 2000):

- a) a Construction Health and Safety Agent who may be appointed by an employer to act as his agent in terms of the Occupational Health and Safety Act of 1993 and the Construction Regulations issued in terms of that Act;
- b) a Construction Health and Safety Manager who may be appointed by an employer to complement his professional team or by a contractor to manage company or project health and safety performance and compliance in accordance with the Occupational Health and Safety Act and Regulations; and a Construction Health and Safety Officers who may be appointed by an employer to mitigate the risk on a project or by a contractor to monitor and assist on-site health and safety performance and compliance in accordance with the Occupational Health and Safety Act and Regulations and services.



### 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 other than the standard conditions pertaining to construction sites 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.

To serve to ensure 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 6, 7 and 8 of the construction regulation (2014).

To inform the Principal Contractor that the Occupational Health and Safety Act, 1993 (Act 85 of 1993) in its entirety shall apply to the contract to which this specification document applies. The Construction Regulations promulgated on 07 February 2014.



## CREATING AND MAINTAINING A SAFE AND HEALTHY WORK ENVIRONMENT

### General

The contractor shall with respect to the site and the construction work that are contemplated:

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

The contractor shall ensure that:

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

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

The contractor shall carry out regular inspections and audits to ensure that the work is being performed in accordance with the requirements of this specification.

## 4. DEFINITIONS

**The most important definitions in the Act and Regulations pertaining to this specification document are hereby extracted.**

**Act:** the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)

**Accident** – means unplanned occurrence that happens due to the unsafe condition and may cause injury to a person, damage to the property, material, plant, equipment and the environment;



**Agent** – means any person who acts as a representative for a client. The word agent, in some instances, may be used interchangeable with the Construction Health and Safety Agent, the distinguishing factor will be on the role expected to be played by the agent mentioned. For example, all H&S related issues (audits, inspections, and/or reports) are done by the Construction Health and Safety Agent, whilst the accountability of overall project success or portions of the work is done by the Agent i.e. Principal Agent or Project Manager or Engineer.

**Client** means Department of Public Works

**Competent person** means a person who-

- (a) has in respect of the work or task to be performed the required knowledge, training and experience and, where applicable, qualifications, specific for that work or task: Provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualifications Framework Act, 2000 (Act No.67 of 2000), those qualifications and that training must be regarded as the required qualifications and training; and
- (b) Is familiar with the OHS Act, Act 85 of 1993 and with the applicable regulations made under the Act;

**Construction Health & Safety Agent (SACPCMP)** – The person or entity appointed by the client through the Agent and who has a full authority and obligation to act on the clients behalf in terms of the construction regulations. *Pr.CHSA* means a competent person who acts as a representative for a Client in terms of regulation (5)5.

**Contract Amount**” Financial value of the contract at the time of the award of the contract, exclusive of all allowance and any value added tax or sales tax which the law requires the employer to pay to the contractor.

**contractor:** person or organization that contracts to provide the work covered by the contract

**contract manager:** person appointed by the employer to administer the contract on his behalf

**competent person:** any person who:

- a) has in respect of the work or task to be performed the required knowledge, training and experience and, where applicable, qualifications specific to that work or task; and
- b) is familiar with the Act and applicable regulations made in terms of the Act

Note: The Regulations stipulate that where appropriate qualifications and training are registered in terms of the provisions of the National Qualification Framework Act of 2000.those qualifications and training must be regarded as the required qualifications and training.

**danger:** anything which may cause injury or damage to persons or property

**employer:** person or organisation that enters into a contract with the contractor for the provision of the work covered by the contract





**employer's health and safety agent:** the person appointed as agent by the employer in terms of Regulation 4(5) of the Construction regulations and named in the contract data as the being the employer's agent responsible for health and safety matters. **This is a Construction Health & Safety Agent (SACPCMP)** – The person or entity appointed by the client through the Agent and who has a full authority and obligation to act on the client's behalf in terms of the construction regulations.

**"Construction Manager (Site Agent)"** means a competent person responsible for the management of the physical construction processes and the coordination, administration and management of resources on a construction site;

**Construction Site** means a work place where construction work is being performed;

**Construction Supervisor** means a competent person responsible for supervising construction activities on a construction site;

**Construction Vehicle** means a vehicle used as a means of conveyance for transporting persons or material, or persons and material, on and off the construction site for the purposes of performing construction work;

**Construction work** means any work in connection with –

- a) The construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure; or
- b) the construction, erection, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system; or the moving of earth, clearing of land, the making of excavation, piling, or any similar civil engineering structure or type of work;

**Construction Work Permit** means a document issued in terms of regulation 3 of the Construction Regulations 2014;

**CR** refers to the Construction Regulations 2014.

**Demolition Work** means a method to dismantle, wreck, break, pull down or knock down of a structure or part thereof by way of manual labour, machinery, or the use of explosives;

**ergonomics:** the application of scientific information concerning humans to the design of objects, systems and the environment for human use in order to optimize human well-being and overall system performance.

**Fall Protection Plan** means a documented plan, which includes and provides for-

- All risks relating to working from a fall risk position, considering the nature of work undertaken;
- The procedures and methods to be applied in order to eliminate the risk of falling; and
- A rescue plan and procedures;

**H&S** – health and safety

**hazard:** a source of or exposure to danger





**hazard identification:** the identification and documenting of existing or expected hazards to the health and safety of persons, which are normally associated with the type of construction work being executed or to be executed.

**Health and Safety File** – means a file, or other record in permanent form, containing the information required a contemplated in the regulations;

**health and safety plan:** a documented plan which addresses hazards identified and includes safe work procedures to mitigate, reduce or control the hazards identified.

**health and safety specification:** a site, activity or project specific document pertaining to all health and safety requirements related to construction work which is included in the contractor's contract with the employer or an order issued in terms of framework agreement

**healthy:** free from illness or injury attributable to occupational causes

**incident:** an event or occurrence occurring at work or arising out of or in connection with the activities of persons at work, or in connection with the use of plant or machinery, in which, or in consequence of which:

- a) any person dies, becomes unconscious, suffers the loss of a limb or part of a limb or is otherwise injured or becomes ill to such a degree that he 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 to continue with the activity for which he was employed or is usually employed;
- b) a major incident occurred; or
- c) the health or safety of any person was endangered and where:
  - i) a dangerous substance was spilled;
  - ii) the uncontrolled release of any substance under pressure took place;
  - iii) machinery or any part thereof fractured or failed resulting in flying, falling or uncontrolled moving objects; or machinery ran out of control

**inspector:** a person designated as such under section 28 the Act

**major incident:** an occurrence of catastrophic proportions, resulting from the use of plant or machinery, or from activities at a workplace.

**Medical Certificate of Fitness** means a certificate contemplated in regulation 7(8) of Construction Regulations 2014;

**Practical Completion Certificates-** A certificates issued in terms of a contract by the employer, signifying that the whole of the construction works have reached a state of readiness for occupation or use for the purposes intended, although some minor work may be outstanding.

**"Professional Engineer or Professional Certificated Engineer"** means a person holding registration as either a Professional Engineer or Professional Certificated Engineer in terms of the Engineering Profession Act, 2000 (Act No. 46 of 2000);

**reasonably practicable:** practicable having regard to:

- a) the severity and scope of the hazard or risk concerned;



- b) the state of knowledge reasonably available concerning that hazard or risk and of any means of removing or mitigating that hazard or risk;
  - c) the availability and suitability of means to remove or mitigate that hazard or risk; and
  - d) the cost of removing or mitigating that hazard or risk in relation to the benefits deriving therefrom;
- risk** – means the likelihood that harm will occur and the subsequent consequences.

**“Risk assessment”** – means a process to determine any risk associated with any hazard at a construction site in order to identify the steps needed to be taken to mitigate, reduce or control such hazards.

**safe:** free from any hazard

**Safety Officer** – a person deemed competent by SACPCMP under the relevant category of registration.

**scaffold:** any temporary elevated platform and supporting structure used for providing access to and supporting workmen or materials or both

**structure:**

- a) any building, steel or reinforced concrete structure (not being a building), railway line or siding, bridge, waterworks, reservoir, pipe or pipeline, cable, sewer, sewage works, fixed vessels, road, drainage works, earthworks, dam, wall, mast, tower, tower crane, bulk mixing plant, pylon, surface and underground tanks, earth retaining structure or any structure designed to preserve or alter any natural feature, and any other similar structure;
- b) any false work, scaffold or other structure designed or used to provide support or means of access during construction work; or
- c) any fixed plant in respect of construction work which includes installation, commissioning, decommissioning or dismantling and where any construction work involves a risk of a person falling

**substance:** any solid, liquid, vapour, gas or aerosol, or combination thereof

**suitable:** capable of fulfilling or having fulfilled the intended function or fit for its intended purpose

**temporary works:** any falsework, formwork, support work, scaffold, shoring or other temporary structure designed to provide support or means of access during construction

**workplace:** any premises or place where a person performs work in the course of his employment

## **5. OCCUPATIONAL HEALTH & SAFETY MANAGEMENT**

### **5.1 Structure and Organization of OH&S Responsibilities**

#### **5.1.1. Overall Supervision and Responsibility for OH&S**

- a) 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. Failure on the part of the Client or Agent to comply with this requirement will not relieve the Principal Contractor from any one or more of his/her duties under the Act and Regulations.



- b) 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 by the Principal Contractor or his/her appointed contractor.
- c) 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).
- d) 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).
- e) All Health and Safety Representatives (SHE-Reps) shall act and report as per Section 18 of the Act.

#### 5.12 Required appointments as per the Construction Regulations:-

Item	Regulation	Appointment	Responsible Person
1.	3.	Application Construction work permit	Client
2.	5(1)(k)	Principal contractor for each phase or project	Client
3.	5(6)	Construction Health & Safety Agent	Client
4.	7.(1)(c)	Contractor	Principal Contractor
5.	7(3)	Contractor	Contractor
6.	8(1)	Construction manager	Contractor
7.	8(2)	Assistance Construction manager	Contractor
8.	6(1)	Construction supervisor	Contractor
9.	6(2)	Construction supervisor sub-ordinates	Contractor
10.	8(5)	Construction Safety Officer	Contractor



11.	8(8)	Responsible employee	
12.	9(1)	Person to carry out risk assessment	Contractor
13.	10(1)	Fall protection planner	Contractor
14.	12(1)	Temporal work designer	
15.	12(2)	Supervisor of temporal work operation	
16.	13(1)	Excavation supervisor	Contractor
17.	13(2)(k)	Competent person in the use of explosive for excavations	Contractor
18.	14(11)	Explosives expert	Contractor
19.	14(1)	Supervisor demolition work	Contractor
20.	14(2)	Scaffold supervisor	Contractor
21.	16(1)	Suspended platform supervisor	Contractor
22.	18(1)a	Rope access	Contractor
23.	19(8)(a)	Material hoist inspector	Contractor
24.	20(1)	Bulk mixing plant supervisor	Contractor
25.	21(2)	Explosive actuated fastening device inspector	Contractor
26.	21(2)(g)	Explosive actuated fastening device cartridge, nails and studs: issuer & collector	Contractor
27.	23 (1)	Operator : construction vehicle and mobile plant	Contractor
28.	28 (a)	Stacking and storage supervisor	Contractor
29.	29 (h)	Fire equipment inspector	Contractor

## 5.2 **Communication, Participation & Consultation**

5.2.1 Occupational Health & Safety matters/issues shall be communicated between the Employer, the Principal Contractor, the other Contractors, the Designer and other concerned parties shall be through the H&S Committee or other means determined by the client.

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.

## 6. INTERPRETATION

- a) The Act and its associated regulations shall have precedence in the interpretation of any ambiguity or inconsistency between it and this specification.
- b) Compliance with the requirements of this specification does not necessarily result in compliance with the provisions of the Act.
- c) 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.
- d) 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.
- e) 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.
- f) The words **Principal Contractor** and **Contractor** in this document are used interchangeable, unless clearly expressed otherwise to mean something else e.g. when used to describe roles, responsibilities, functions, acts or omissions of the sub-contractor(s).

## 7. RESPONSIBILITIES

### 7.1 Client



- a) The Client or his appointed Agent on his behalf will appoint each Principal Contractor for this project or phase/section of the project in writing for assuming the role of Principal Contractor as intended by the Construction Regulations.
- b) 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.
- c) 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.
- d) 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**

- a) 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 Labour of the intended construction. Annexure 2 of this construction regulation 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.
- b) The Principal Contractor shall ensure that he is fully conversant with the requirements of this Specification and all relevant health and safety legislation.
- c) 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.
- d) 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.

- e) 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.
- f) 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.)
- g) 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.
- h) 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.
- i) 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.
- j) 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.
- k) The Principal Contractor shall from time to time evaluate the relevance of the Health and Safety Plan and revise the same as required, following which revised plan shall be submitted to the Client and/or his/her Agent for approval.

### **7.3 Contractor / sub-contractor**

The contractor must demonstrate to the Principal Contractor that he has the necessary competencies and resources to perform the construction work safely.

Acceptance by the Principal Contractor of the contract with Public Works shall constitute acknowledgement that the Principal Contractor has familiarised him/herself with the contents of the OHSE Spec and that he/she will comply with all its obligations in respect thereof.

Due to fact that this document is based on legislative requirements, the Client requires that all Contractors comply with the requirements of this document and all other relevant legislative requirements not covered by this document.





The Client or its duly appointed Construction H&S Agent reserves the right to stop any Principal Contractor or Sub-Contractors from working whenever Safety, Health or Environmental requirements are being violated as required by regulation 5(1)(q). Any resultant costs of such work stoppages will be for the relevant Contractor's account.

The requirements as specified by the Client in this document must not be deemed to be exhaustive and the Client reserves the right to make changes as and when the Client deems fit to address issue of OHSE Compliance.

The Client will not entertain any claim of any nature whatsoever which arises as a result of costs incurred or delays being experienced due to the Contractor not complying with the requirements of this document and/or any other applicable legislative requirements imposed on the Contractor.

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

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

The contractor shall provide any sub-contractor who is submitting a tender or appointed to perform a sub-contract falling within the scope of the contract, with the relevant sections of this specification and the health and safety specification.

The contractor shall discuss and negotiate with each subcontractor performing construction work the subcontractor's health and safety plan and approve that plan for implementation.

The contractor shall take reasonable steps as are necessary to ensure that:

- potential contractors submitting tenders have made sufficient provision for health and safety measures during the construction process;
- each subcontractor is registered and in good standing with the compensation fund or with a licensed compensation insurer prior to their performance of work on site;



- all the subcontractor's employees have a valid medical certificate of fitness specific to the construction work which are to be performed which is issued by an occupational health and safety practitioner;
- all sub-contractors co-operate with each other to enable each of those sub-contractors to comply with the requirements of the Act and associated regulations;
- each subcontractor performing construction work has and maintains a health and safety file containing the relevant information described in 4.2.5; and
- each sub-contractor's health and safety plan is implemented and maintained.

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

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

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

The contractor shall ensure that:

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

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

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

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



The contractor shall satisfy himself and ensure that all subcontractor employees deployed in the site are:

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

The contractor shall undertake a risk assessment together with subcontractors whenever subcontractors are working in close proximity to other subcontractors particularly activities involve excavations, the moving of earth, the movement of heavy machinery and working at heights

## **7.4 Construction supervisors**

The construction manager shall in writing appoint construction supervisors responsible for construction activities and ensuring occupational health and safety compliance on the construction site.

A contractor shall after considering the size of the project and if considered necessary, appoint in writing one or more competent employees for different sections of the work to assist the construction supervisor.

## **7.5 Competent persons**

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

- formwork and support work operations;
- excavation work;
- demolition work;
- scaffolding work operations;
- suspended platform work operations;
- material hoists;
- bulk mixing plants;
- temporary electrical installations;
- the stacking and storage of articles on the site; and
- fire equipment.

The contractor shall appoint in writing competent persons to:

- induct employees in health and safety; and
- prepare and update as necessary a fall protection plan and to provide the construction manager with a copy of the latest version of such plan.



## **6. Appointment of a Fulltime/ Part time Safety Officer**

The Principal Contractors will have to appoint a competent Construction H&S Officer as per the following criteria;

- i. Number of employees onsite between 30 but below 50 – Part Time Safety Officer shall be appointed and will be onsite at least 2 days a week.*
- ii. Number of employees above 50 – Fulltime Safety Officer should be appointed.*
- iii. Should the project require a Construction Work Permit – a Fulltime Safety Officer should be appointed.*

Further to the above criteria, should the Client or its Representative having considered the risks present and lack of compliance to the Occupational Health and Safety Act, Act 85 of 1993 and its applicable Regulations the Client or its Representative may issue an instruction that a Part/ Full Time Construction Health and Safety Officer must be appointed, such a requirement will have to be met. Taking the Risk associated with this project into consideration it is deemed that a full time Safety Officer needs to be appointed and be present on site at all times.

## **7.6 Responsibilities towards employees and visitors**

1. The contractor shall as far as is reasonably practicable, cause every employee to be made conversant with the hazards to his health and safety attached to any work which he has to perform, any article or substance which he has to produce, process, use, handle, store or transport and any plant or machinery which he is required or permitted to use, as well as with the precautionary measures which should be taken and observed with respect to those hazards or safe work procedures.
2. The contractor shall ensure that all employees under his or her control and the employees of his subcontractors who are performing construction work are:
  - informed, instructed and trained by a competent person regarding any hazard and the related work procedures before any work commences, and thereafter at such times as may be determined in the risk assessment; and
  - issued with proof of health and safety induction training issued by a competent person and carry proof of such induction when working on site.



3. The contractor shall cause a record of training to be kept which indicates the training dates, the names, identity numbers and job description of all those who attended such training and the name, identity number and competence of the person who provided the training..
4. The contractor shall not allow or permit any employee to enter the site, unless such person has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry.
5. The contractor shall ensure that each visitor to a construction site, save where such visitor only visits the site office and is not in direct contact with the construction work activities:
  - a. undergoes health and safety instruction pertaining to the hazards prevalent on the site; and
  - b. is provided with the necessary personal protective equipment.
6. The contractor shall provide suitable on-site signage to alert workers and visitors to health and safety requirements. Such signage shall include but not be limited to:
  - a. unauthorized entrance prohibited;
  - b. signage to indicate what personal protective equipment is to be worn; and
  - c. activity related signs.
7. The contractor shall not permit any person who is or who appears to be under the influence of intoxicating liquor or drugs, to enter or remain at a workplace.

## **7.8 Design of temporary work**

The contractor shall:

- a) provide the health and safety agent with the names and contract particulars of the designers involved in the design of temporary works;
- b) issue the designers with a copy of the health and safety specification as well as any pertinent information contained in the contract; and
- c) provide the health and safety agent with certificates issued by the designer of the temporary works that such works are fit for purpose before such works are used in support construction activities

## **7.9 Notification of intention to commence construction work**

- i. The contractor shall on sites where no construction work permit has been issued by the Provincial Director of the Department of Labour notify such director in writing using a form similar to that contained in Annexure 2 of the Construction Regulations issued in terms of the Act before



construction work commences and retain proof of such notification in the health and safety file where the work includes:

- a. excavation work;
  - b. working at height where there is a risk of falling;
  - c. the demolition of a structure;
  - d. the use of explosives; or
  - e. a single storey dwelling for a client who is going to reside in such dwelling upon completion
- ii. The contractor shall ensure that no work commences on an electrical installation which requires a new supply or an increase in electricity supply before the person who supplies or contracts or agrees to supply electricity to that electrical installation has been notified of such work.
  - iii. The contractor shall ensure that no asbestos.

## **9. PREPARING A HEALTH & SAFETY PLAN**

- (a) The level of detail required for a H&S plan will depend on how complex the workplace is (in particular, the number of contractors at the workplace at any one time) and the risks involved in the work. The plan must be easily accessible in a construction site and it must be clearly understood by management, supervisors & workers on construction site.
- (b) The plan must be implemented, maintained and kept up to date during the construction of the project.
- (c) The principal contractor should prepare a H&S plan that includes
  - project information;
  - client requirements for H&S management on the project;
  - Environmental restrictions and existing on-site risks arrangements, imposed by others or developed by the principal contractor, to control significant site H&S risks; H&S file & project H&S review.
- (d) The H&S plan should include the following information:
  - details of the client, that is the person commissioning the construction work, for example their name, representative and contact details;
  - details of the principal contractor;
  - details of the construction project, for example address of the workplace, anticipated start and end date and a brief description of the type of construction work that the H&S plan will cover;



- details on how subcontractors will be managed and monitored, including how the principal contractor intends to implement and ensure compliance with the H&S plan such as checking on the performance of subcontractors and how non-compliance will be handled; and
- details on how the risks associated with falls, falling objects, moving plant, electrical work and all high risk construction work that will take place on a construction project will be managed.

(e) The H&S plan should also include information on:

- the provision and maintenance of a hazardous chemicals register, safety data sheets and hazardous chemicals storage;
- the safe use and storage of plant;
- obtaining and providing essential services information – electrical, gas, telecom, water and similar services;
- workplace security and public safety; and
- ensuring workers have appropriate licences and training to undertake the construction work.

(f) The H&S plan must contain:

- a general description of the type of work activities involved in the project and not just a description of the facility to be constructed;
- the project program or schedule details, including start and finish dates, showing principal activities;
- details of client, design team, principal contractor, subcontractors, and major suppliers; and
- extent and location of relevant existing records, surveys, site investigation and geotechnical reports, 'as-built' plans, H&S files.

## **10. HEALTH AND SAFETY FILE**

- a) The H&S file is a document prepared by the principal contractor containing important project H&S information for use by the owner of the completed structure after construction has been completed.
- b) The principal contractor is responsible for producing an H&S file. It contains important project H&S information for use by the owner of the completed structure after construction has been completed. It is essential that the process of compiling the file commences as early as possible to ensure sufficient time to gather the required information.





- c) The Principal Contractor must, in terms of Construction Regulation 7(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 & Safety File.
- d) The contractor must ensure that the client's format and layout of the H&S file is adhered to. The contractor must identify the responsible person that will prepare the H&S file and who will be responsible for the drafting of as-built drawings. The contractor must establish procedures:
- e) 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.
- f) The contractor shall establish and maintain on site a health and safety file which contains copies, as relevant of:

the following documents which shall be placed in the file prior to commencing with physical construction activities:

- copy of the contraction work permit issued in terms of the Construction Regulations 2014;
- the contractor's health and safety policy, signed by the chief executive officer, which outlines the contractor's objectives and how they will be achieved and implemented by the contractor;
- copies of all risk assessments that were conducted.
- the notification made to the Provincial Director of Labour, and if relevant, the notification of the person who supplies or contracts or agrees to supply electricity to that electrical installation;
- the letters of appointment, as relevant, together with a brief curriculum vitae (CV) of:
  - the construction manager and any assistant construction managers;
  - the construction health and safety manager
  - the construction health and safety officer
  - the risk assessor who is tasked to perform the risk assessments; and
  - the registered person responsible for the electrical installation covered by the Electrical Installations Regulations;
  - the authorised persons responsible for gas appliances, gas system gas reticulation system covered by the Pressure Equipment Regulations;
- g) a copy of the certificate of registration of the registered person responsible for the electrical installation covered by the Electrical Installations Regulations;
- h) the approval of the design of the part of an electrical installation which has a voltage in excess of 1 kV by a person deemed competent in terms of the Electrical Installations Regulations;
- i) proof of registration of the electrical contractor who undertakes the electrical installation in terms of the Electrical Installations Regulations;
- j) the preliminary hazard identification undertaken by a competent person;



- k) the organogram which outlines the roles of the construction supervisor's assistants and safety officers; and
- l) the contractor's health and safety plan;
- m) the emergency procedures;
- n) the procedure for the issuing and replacement of lost, stolen, worn or damaged personal protective clothing and equipment; and
- o) proof that the contractor and all the subcontractors are registered and in good standing with the compensation fund or with a licensed compensation insurer relevant to the type of work performed;
- p) the following documents, as relevant, which shall be placed in the file after construction activities have commenced;
- q) the letters of appointments, if relevant, together with a brief curriculae vita (CV) of:
  - persons who are required to assist the construction supervisor;
  - construction supervisor for the site in respect of construction work covered by the Construction Regulations;
  - competent persons;
  - assistants of construction supervisor; and
  - designers of temporary works;
- r) any revisions to the organogram which outlines the roles of the construction supervisor's assistants and safety officers;
- s) each and every subcontract agreement and each and every subcontractor's approved health and safety plan;
- t) proof that every subcontractor is registered and in good standing with the compensation fund or with a licensed compensation insurer relevant to the type of work performed;
- u) proof of all subcontractor's induction training whenever it is conducted;
- v) copies of the minutes of the contractor's sub-contractors health and safety meetings;
- w) copies of each of the contractor's subcontractors' health and safety policy, signed by the chief executive officer, which outlines the contractor's objectives and how they will be achieved and implemented by the contractor;
- x) the health and safety plans of all the contractor's subcontractors who are required to provide such plans;
- y) copies of the fall protection plan and each revision thereof;
- z) a comprehensive and updated list of all the subcontractors employed on site by the contractor, indicating the type of work being performed by such sub-contractors;
- aa) the outcomes of the monthly audits for compliance with the approved health and safety plan of each and every sub-contractor working on the site;



- bb) any report made to an inspector by the health and safety committee;
- cc) the minutes of all health and safety meetings and any recommendations made to the contractor by the health and safety committee;
- dd) the findings of all audit reports made regarding the implementation of the contractor's or a subcontractor's health and safety plan;
- ee) the inputs of the safety officer, if any, into the health and safety plan;
- ff) details of induction training conducted whenever it is conducted including the list of attendees;
- gg) proof of the following where suspended platforms are used:
  - a certificate of system design issued by a professional engineer, professional certificated engineer or a professional engineering technologist;
  - proof of competency of erectors, operators and inspectors;
  - proof of compliance of operational design calculations with requirements of the system design certificate;
  - proof of performance test results;
  - sketches indicating the completed system with the operational loading capacity of the platform;
  - procedures for and records of inspections having been carried out;
  - procedures for and records of maintenance work having been carried out;
  - proof that the prescribed documentation has been forwarded to the provincial director;
- hh) letters of appointments for competent persons to supervise the activities which law requires to be so supervised;
- ii) a copy of risk assessments made by competent persons;
- jj) records of the register of inspections made by a competent person immediately before and during the placement of concrete or any other load on formwork;
- kk) the names of the first aiders on site and copies of the first aid certificates of competency;
- ll) the names of the persons who are in possession of valid certificate of competency in first aid and copies of such certificates;
- mm) medical certificates of fitness for the contractor's and subcontractors' employees specific to the construction work to be performed and issued by an occupational health and safety practitioner:
  - a. details of all incidents together with the Contractor's investigative report on such incident;
  - b. the record of inspections carried out by the designers of structures to ensure compliance with designs; and
- nn) any other documentation required in terms of regulations issued in terms of the Act including a record of all drawings, designs, materials used and other similar information concerning the completed structure;



- oo) The health and safety file shall be made available for inspection by any inspector, subcontractor, the contract manager, the employer's health and safety agent or employee of the contractor upon the request of such persons.
- pp) The health and safety file shall be updated to ensure that its contents always reflect the latest available information.
- qq) The contractor shall hand over a copy of the health and safety file to the employer's health and safety agent upon completion of the contract and if relevant, a certificate of compliance accompanied by a test report for the electrical installation in accordance with the provisions of the Electrical Installation Regulations.

## **11.1 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.

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.

### **11.1.1 Monthly Audit by Client and/or its H&S Agent.**

The Client and/or its H&S 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.

- a) 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.

### **11.1.2 Health & Safety incident/accident reporting & investigations**

- a) The Principal Contractor shall report all incidents where an employee is injured on duty to the extent that he/she:
  - i. dies



- ii. becomes unconscious
- iii. loses a limb or part of a limb
- iv. 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

- i. the health or safety of any person was endangered
  - ii. where a dangerous substance was spilled
  - iii. the uncontrolled release of any substance under pressure took place
  - iv. machinery or any part of machinery fractured or failed resulting in flying, falling or uncontrolled moving objects
  - v. Machinery ran out of control, to the Provincial Director of the Department of Labour within seven days and at the same time to the Client and/or its Agent on its behalf.
- b) 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.
- c) The Principal Contractor is required to provide the Client and/or its Agent on its behalf with a monthly "SHE Risk Management Report".
- d) 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.  
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)
- e) The results of the investigation to be entered into the Accident/Incident Register listed above.  
(General Administrative Regulation 9)
- f) 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.



- g) The Principal Contractor is responsible for the investigation of all 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.
- h) 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.
- Determine the underlying H&S deficiencies and other contributory factors
  - Identification of corrective/preventative actions and continual improvement
  - Communicating the outcome/results and documenting the events of the investigation.

#### **Reporting of Near-Misses**

- Department of Public Works views the reporting of near misses as a critical component in creating a positive health and safety awareness culture on site.
- Department of Public Works retains the right to enforce the reporting of near misses within 24 hours of occurrence.

### **12. 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.

### **12.1 Site Rules and other Restrictions**

#### **a) 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 for a site by law, visitors and non-employees upon entering the site shall be issued with the proper Personal Protective Equipment (PPE) as and when necessary.

#### **b) 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, the Principal Contractor must appoint a competent person who must develop contingency plans for any emergency that may arise on site as indicated by the risk assessments.

#### **12.1.1 Appointment of Health & Safety Representatives**

##### **a) 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 Representatives for every 50 employees or part thereof. (Section 17 of the Act and General Administrative Regulation 6. & 7.)

H&S Representatives must be appointed 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.

#### **12.1.2 Duties and Functions of the H&S Representatives**

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

- conduct at least a weekly inspection of their respective areas of responsibility using a checklist developed by a Principal Contractor.
- review the effectiveness of health and safety measures;
- identify potential hazards and potential major incidents;
- in collaboration with his employer, examine the causes of incidents;
- investigate complaints by any employee of the contractor relating to that employee's health or safety on the site;
- make representations to the contractor on matters arising from a), b), c) or d) or on general matters affecting the health or safety of the employees at the workplace;
- inspect the site with a view to, the health and safety of employees, at regular intervals;
- participate in consultations with inspectors at the workplace and accompany inspectors on inspections of the workplace; and
- participate in any internal health or safety audit.

The report must be consolidated and submitted to the Health & Safety Committee.

H&S Representatives must form part of the incident/accident investigating team.

The contractor shall provide the health and safety representatives with the necessary assistance, facilities and training to carry out the functions established above.





### 12.1.3 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, an agreed Agenda for the first meeting. Thereafter the H&S Committee shall determine its own procedures.

### 12.1.4 Training & Awareness

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.

#### **a) Training & Induction**

All employees performing work or task on site that potentially impact on H&S must be competent & have the necessary appropriate education, training & experience.

All the training must be closely aligned with the risk profile of the project; procedures must be put in place to ensure that all workers are aware of the consequences of their work activities & benefits of improved H&S performance.

All employees of the Principal and other Contractors must be in possession of proof of General Induction training

#### **b) Site Specific Induction Training**

All employees of the Principal and other Contractors must be in possession of Site Specific Occupational Health and Safety Induction or other qualifying training.

#### **c) Other Training**

All operators, drivers and users of construction vehicles, mobile plant and other equipment must be in possession of valid proof of training.

#### **d) Copy of the Act**

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

## 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:

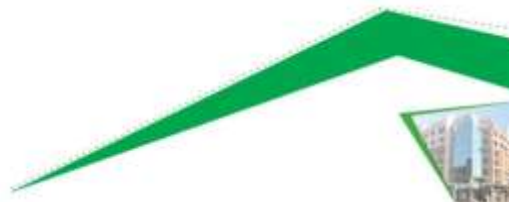
- a) Site establishment
- b) Dealing with existing structures
- c) Location of existing services
- d) Boundary & Access control/Public liability exposures
- e) Protection against heat exhaustion, dehydration, wet & cold conditions
- f) Dealing with HIV & aids other related diseases
- g) Use of portable electrical & explosive tools
- h) Any Excavation work
- i) Any welding work
- j) Loading & offloading of trucks
- k) Driving & operations of Construction vehicles & mobile plant
- l) Temporal works and
- m) Construction work as defined in the construction regulation 2014



#### 14. OUTLINED DATA, REFERENCES AND INFORMATION ON CERTAIN AND/OR SPECIFIC OBLIGATORY REQUIREMENTS TO ENSURE COMPLIANCE

##### Administrative & Legal Requirements

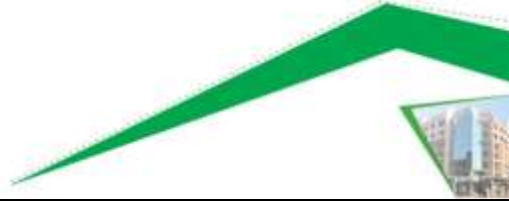
(a) OHS Act Section/ (b) Regulation	b) Subject	(1) Requirements
Construction. Regulation	<b>Notice of carrying out Construction work</b>	<ul style="list-style-type: none"> <li>Department of Labour notified</li> <li>Copy of Notice available on Site</li> </ul>
General Admin. Regulation 4	<b>Copy of OH&amp;S Act (Act 85 of 1993)</b>	<ul style="list-style-type: none"> <li>Updated copy of Act &amp; Regulations on site.</li> <li>Readily available for perusal by employees.</li> </ul>
COID Act Section 80	<b>Registration with Compensation Insurer.</b>	<ul style="list-style-type: none"> <li>Written proof of registration/Letter of good standing available on Site</li> </ul>
Construction. Regulation 4 & 5(1)	<b>H&amp;S Specification &amp; Programme</b>	<ul style="list-style-type: none"> <li>H&amp;S Spec received from Client and/or its Agent on its behalf</li> <li>OH&amp;S programme developed &amp; Updated regularly</li> </ul>
Section 8(2)(d) Construction. Regulation 7	<b>Hazard Identification &amp; Risk Assessment</b>	<ul style="list-style-type: none"> <li>Hazard Identification carried out/Recorded</li> <li>Risk Assessment and – Plan drawn up/Updated</li> <li>RA Plan available on Site</li> <li>Employees/Sub-Contractors informed/trained</li> </ul>
Section 16(2)	<b>Assigned duties (Managers)</b>	<ul style="list-style-type: none"> <li>Responsibility of complying with the OH&amp;S Act assigned to other person/s by CEO.</li> </ul>
Construction. Regulation 6(1)	<b>Designation of Person Responsible on Site</b>	<ul style="list-style-type: none"> <li>Competent person appointed in writing as</li> <li>Construction Supervisor with job description</li> </ul>
Construction. Regulation 6(2)	<b>Designation of Assistant for above</b>	<ul style="list-style-type: none"> <li>Competent person appointed in writing as</li> <li>Assistant Construction Supervisor with job description</li> </ul>
Section 17 & 18 General Administrative Regulations 6 & 7	<b>Designation of Health &amp; Safety Representatives</b>	<ul style="list-style-type: none"> <li>More than 20 employees - one H&amp;S Representative, one additional H&amp;S Rep. for each 50 employees or part thereof.</li> <li>Designation in writing, period and area of responsibility specified in terms of GAR 6 &amp; 7</li> <li>Meaningful H&amp;S Rep. reports.</li> <li>Reports actioned by Management.</li> </ul>



Section 19 & 20 General Administrative Regulations 5	<b>Health &amp; Safety Committee/s</b>	<ul style="list-style-type: none"> <li>• H&amp;S Committee/s established.</li> <li>• All H&amp;S Reps shall be members of H&amp;S Committees</li> <li>• Additional members are appointed in writing.</li> <li>• Meetings held monthly, Minutes kept.</li> <li>• Actioned by Management.</li> </ul>
Section 37(1) & (2)	<b>Agreement with Mandatories/ (Sub-)Contractors</b>	<ul style="list-style-type: none"> <li>• Written agreement with (Sub-)Contractors</li> <li>• List of Sub-contractors displayed.</li> <li>• Proof of Registration with Compensation Insurer/Letter of Good Standing</li> <li>• Construction Supervisor designated</li> <li>• Written arrangements re.</li> <li>• H&amp;S Reps &amp; H&amp;S Committee</li> <li>• Written arrangements re. First Aid</li> </ul>
Section 24 & General Admin. Regulation 8 COID Act Sect.38, 39 & 41	<b>Reporting of Incidents (Dept. of Labour)</b>	<ul style="list-style-type: none"> <li>• Incident Reporting Procedure displayed.</li> <li>• 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</li> <li>• Cases of Occupational Disease Reported</li> <li>• Copies of Reports available on Site</li> <li>• Record of First Aid injuries kept</li> </ul>
General Admin. Regulation 9	<b>Investigation and Recording of Incidents</b>	<ul style="list-style-type: none"> <li>• All injuries which resulted in the person receiving medical treatment other than first aid, recorded and investigated by investigator designated in writing.</li> <li>• Copies of Reports (Annexure 1) available on Site</li> <li>• Tabled at H&amp;S Committee meeting</li> <li>• Action taken by Site Management.</li> </ul>
Construction. Regulation 8	<b>Fall Prevention &amp; Protection</b>	<ul style="list-style-type: none"> <li>• Competent person appointed to draw up the Fall Protection Plan</li> <li>• Proof of appointee's competence available on Site</li> <li>• Risk Assessment carried out for work at heights</li> <li>• Fall Protection Plan drawn up/updated</li> <li>• Available on Site</li> </ul>
Construction. Regulation Driven Machinery Regulations 18 & 19	<b>Cranes &amp; Lifting Machines Equipment</b>	<ul style="list-style-type: none"> <li>• Competent person appointed in writing to inspect Cranes, Lifting Machines &amp; Equipment</li> <li>• Written Proof of Competence of above appointee available on Site.</li> <li>• Cranes &amp; Lifting tackle identified/numbered</li> </ul>



		<ul style="list-style-type: none"> <li>• Register kept for Lifting Tackle</li> <li>• Log Book kept for each individual Crane</li> <li>• Inspection: - All cranes - <b>daily by operator</b> <ul style="list-style-type: none"> <li>- Tower Crane/s - <b>after erection/6monthly</b></li> <li>- Other cranes - <b>annually by comp. person</b></li> </ul> </li> <li>• - Lifting tackle(slings/ropes/chain slings etc.) - daily or before every new application</li> </ul>
General Safety Regulation 8(1)(a)	<b>Designation of Stacking &amp; Storage Supervisor.</b>	<ul style="list-style-type: none"> <li>• Competent Person/s with specific knowledge and experience designated to supervise all Stacking &amp; Storage</li> <li>• Written Proof of Competence of above appointee available on Site</li> </ul>
Construction. Regulation Environmental Regulation 9	<b>Designation of a Person to Co-ordinate Emergency Planning And Fire Protection</b>	<ul style="list-style-type: none"> <li>• Person/s with specific knowledge and experience designated to co-ordinate emergency contingency planning and execution and fire prevention measures</li> <li>• Emergency Evacuation Plan developed:</li> <li>• Drilled/Practiced</li> <li>• Plan &amp; Records of Drills/Practices available on Site</li> <li>• Fire Risk Assessment carried out</li> <li>• All Fire Extinguishing Equipment identified and on <b>register</b>.</li> <li>• Inspected weekly. Inspection Register kept</li> <li>• Serviced annually</li> </ul>
General Safety Regulation 3	<b>First Aid</b>	<ul style="list-style-type: none"> <li>• Every workplace provided with sufficient number of First Aid boxes. (Required where 5 persons or more are employed)</li> <li>• First Aid freely available</li> <li>• Equipment as per the list in the OH&amp;S Act.</li> <li>• One qualified First Aider appointed for every 50 employees. (Required where more than 10 persons are employed)</li> <li>• List of First Aid Officials and Certificates</li> <li>• Name of person/s in charge of First Aid box/es displayed.</li> <li>• Location of First Aid box/es clearly indicated.</li> <li>• Signs instructing employees to report all</li> <li>• Injuries/illness including first aid injuries</li> </ul>
General Safety Regulation 2	<b>Personal Safety Equipment (PSE)</b>	<ul style="list-style-type: none"> <li>• PSE Risk Assessment carried out</li> <li>• Items of PSE prescribed/use enforced</li> </ul>



		<ul style="list-style-type: none"> <li>Records of Issue kept</li> <li>Undertaking by Employee to use/wear PSE</li> <li>PSE remain property of Employer, not to be removed from premises GSR 2(4)</li> </ul>
General Safety Regulation 9	<b>Inspection &amp; Use of Welding/Flame Cutting Equipment</b>	<ul style="list-style-type: none"> <li>Competent Person/s with specific knowledge and experience designated to Inspect Electric Arc, Gas Welding and Flame Cutting Equipment</li> <li>Written Proof of Competence of above appointee available on Site</li> <li>All new vessels checked for leaks, leaking vessels NOT taken into stock but returned to supplier immediately</li> <li>Equipment identified/numbered and entered into a register</li> <li>Equipment inspected weekly. Inspection Register kept</li> <li>Separate, purpose made storage available for full and empty vessels</li> </ul>
General Safety Regulation 13A	<b>Inspection of Ladders</b>	<ul style="list-style-type: none"> <li>Competent person appointed in writing to inspect Ladders</li> <li>Ladders inspected at arrival on site and weekly thereafter. Inspections register kept</li> <li>Application of the types of ladders (wooden, aluminium etc.) regulated by training and inspections and noted in register</li> </ul>
General Safety regulation 13B	<b>Ramps</b>	<ul style="list-style-type: none"> <li>Competent person appointed in writing to supervise the erection &amp; inspection of Ramps. Inspection register kept.</li> <li>Daily inspected and noted in register</li> </ul>



## **15. THE PRINCIPAL CONTRACTOR'S GENERAL DUTIES**

### **i. General**

- The Principal Contractor shall at all times ensure 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.
- 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 of 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.
- 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.

### **ii. Personal protective equipment and clothing**

The contractor shall ensure that:

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

### **iii. Competent persons**





The Principal contractor and other contractors shall appoint in writing competent persons to supervise or inspect, as relevant, any of the following:

- formwork and support work operations;
- excavation work;
- demolition work;
- scaffolding work operations;
- suspended platform work operations;
- material hoists;
- bulk mixing plants;
- temporary electrical installations;
- the stacking and storage of articles on the site; and
- fire equipment.

The contractor shall appoint in writing competent persons to:

- induct employees in health and safety; and
- prepare and update as necessary a fall protection plan and to provide the construction manager with a copy of the latest version of such plan.

## **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 07 August 2014, stipulated in Section 7.

## **17. THE PRINCIPAL CONTRACTOR'S SPECIFIC RESPONSIBILITIES WITH REGARD TO HAZARDOUS ACTIVITIES**

The following examples of 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:

- Fall protection
- Structures
- Excavation work
- Demolition work
- Scaffolding



- Construction vehicles & mobile plant.
- Water environments
- Housekeeping on construction sites
- Fire precautions on construction sites.

This list must not be taken to be exclusive or exhaustive! All of the above requirements 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**

### **i. 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: -

- a. The latest issue of SABS 0142: "Code of Practice for the Wiring of Premises"
- b. 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
- c. The Fire Brigade Services Act 1987, Act 99 of 1987 as amended
- d. The National Building Regulations and Building Standards Act 1977 (Act 103 of 1977) as amended and relevant proclaimed Regulations (SABS 0400)
- e. The Post Office Act 1958 (Act 44 of 1958) as amended
- f. The Electricity Act 1984, Act 41 of 1984
- g. The Regulations of Local Gas Board(s), including Publications of the SABS Standards and Codes of Practice, with specific reference to GNR 17468 dated 4<sup>th</sup> October 1997
- h. Legislation pertaining to water usage and the environment
- i. Legislation governing the use of equipment, which may emit radiation (e.g. X-Rays etc.)
- j. Common Law

### **ii. General requirements**



The contractor shall:

- a) create and maintain as reasonably practicable a safe and healthy work environment,
- b) execute the work in a manner that complies with all the requirements of the Act and all its associated regulations, and in so doing, minimize the risk of incidents occurring;
- c) conspicuously display any site specific number assigned to the construction site in terms of the Construction Regulations 2014 at the main entrance to the site; and
- d) respond to the notices issued by the employer's health and safety agent as follows:
  - Improvement Notice: improve health and safety performance over time so that repeat notices are not issued;
  - Contravention Notice: rectify contravention as soon as possible;

Prohibition Notice: terminate affected activities with immediate effect and only recommence activities when it is safe to do so

Note: Financial penalties can be applied should Contravention Notices be issued. This should be dealt under the sub heading "NON-CONFORMANCES" in the same document.

## **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 production. Good housekeeping will enhance production time.

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 including support services in respect of Health and Safety.

### **Facilities**



The site establishment plan shall make provision for:

**a) Dining room facilities**

The contractor shall make provision for adequate dining room facilities for his employees on site.

**b) Change rooms**

The contractor shall make provision for adequate change rooms for his employees on site.

**c) Ablution facilities**

The contractor shall make provision for adequate ablution facilities for his employees on site.

These facilities shall be maintained by the contractor.

**d) Smoking Areas**

Designated smoking areas shall be established by Department of Public Works.

**e) Drinking Water Facilities**

The provision of drinking water facilities shall be negotiated between the Contractor and Department of Public Works.

**f) Equipment Compliance Certificates**

Before equipment is brought on site valid certificates of compliance issued by a competent person shall be presented. The equipment includes but shall not be limited to:

- i. lifting equipment and lifting tackle
- ii. power driven machinery
- iii. electrical equipment
- iv. testing and monitoring equipment



#### **g) Barricading**

All barricading shall be of the rigid type unless the use of non-rigid barricading has been approved in writing by the Department of Public Works Project Manager. The contractors' barricading standard shall be included in the Health and Safety Plan.

Where more than one contractor is working on a site, the fixed barricading shall be clearly marked with the company's name, site contact person as well as the contact number/s.

#### **h) Erection of Structures for Logistic Support**

Prior to site establishment Department of Public Works shall approve the contractor's site plan.

Department of Public Works shall approve all structures erected for logistical support by the contractor.

These structures include fences, workshops, tool sheds, offices, ablution facilities, etc.

#### **i) Salvage Yard Management**

Depending on the site specific arrangements and procedures, Department of Public Works may provide the salvage yard and the resources to manage it.

The salvage yard management shall conform to safety, health and environmental requirements. The contractors are required to move the equipment from the place of work to the salvage yard.

#### **j) Fall Arrest and Prevention Equipment**

Approved fall prevention equipment shall be used at heights of less than 2.0 metres.

Above heights of 2.0 metres, fall prevention equipment shall include fall arrest equipment. Users of fall arrest equipment shall, amongst other things be trained in what an appropriate load bearing point is for connecting fall prevention equipment.

Any deviation from this requirement shall be negotiated and agreed with Department of Public Works in writing.

#### **k) Hazardous Chemical Substances Waste Removal**

Department of Public Works shall provide a facility to collect all hazardous chemical waste material.



The contractor shall provide adequately marked and sealable containers to transport  
The hazardous chemical waste from the source to the approved Department of Public  
Works disposal point.

#### **I) Personal Protective Equipment (PPE)**

Personal protective equipment issued shall be specific to the risks associated with the work to be  
performed and specific to conditions on site and shall comply with South African National Standards  
(SANS) or similar.



## **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. 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:

- i. List of appointments
- ii. List of record keeping responsibilities
- iii. Inspection checklist

### **a) Contractor Risk Assessment Process**

The risk assessment process shall include:

- 1) an evaluation of the method of the work to be conducted
- 2) the method statement on the procedure to be followed in performing the task shall be developed
- 3) the risk assessment will also include activities like:
  - i. Transportation of passengers and goods to and from site
  - ii. Site establishment
  - iii. Physical and mental capabilities of employees
  - iv. Others as may be specified.
- 4) the hazards as listed in the paragraph – Site Specific Health and Safety Hazards
- 5) a review plan for risk assessments shall provide for:
  - i. the quarterly review of all applicable risk assessments
  - ii. the review of an assessment if there is reason to believe that the previous assessment is no longer valid, or there has been a change in a process, work methods, equipment or procedures and working conditions
  - iii. Risk assessment/s to be reviewed if the outcome of incident investigations and audits etc. requires such action.





A pre - task risk assessment shall be conducted in writing on every task and be facilitated by the team leader. All risk assessments and pre-task risk assessments shall be filed and be available on site.

**b) Risk Profile**

All contractors shall submit a risk profile of the work to be conducted with their Health and Safety Plan.

**c) Risk Based Inspection Program**

The inspection programme shall be risk based. The inspection plan shall form part of the Health and Safety Plan.

## 22. MEASUREMENT AND PAYMENT

The payment items for Occupational Health & Safety are contained in the Bill of Quantities. The same rules are applicable in respect of the pricing of these items as for every other payment item. Attention is drawn to the Pricing Instructions in this document.

## 23. NON-CONFORMANCES

Should, at any time, the works, or part of the works, be stopped due to unsafe acts or non-compliance with the Clients or PCs H&S Plan; neither the PC nor any other Contractor shall have a claim for extension of time or any other compensation.

<b>Minor: Penalty: R50/count</b>	<b>Medium: Penalty: R500/count and a non-conformance</b>	<b>Severe Penalty: R5000/count, a non- conformance and/or activity stoppage</b>
Non-use of PPE supplied	Toilets not supplied or regularly serviced; lack of drinking water	Contractors working without Health and Safety Plan approval
Non completion of registers for plant and equipment on site	Contractors not audited	Workers transported in contravention of the OHS plan or legal requirements
Lack of H&S signage at work areas	Working without training or the appropriate, approved H&S method statements	Invalid Letters of Good Standing
Tools and equipment identified in poor condition during inspections	Legal non-conformances identified during the previous	Non-compliance with traffic accommodation requirements: layout or physical conditions



<b>Minor: Penalty: R50/count</b>	<b>Medium: Penalty: R500/count and a non-conformance</b>	<b>Severe Penalty: R5000/count, a non- conformance and/or activity stoppage</b>
	audit and not addressed within the agreed time frame	
	No monthly OHS report at site meeting to report on	Any serious breach of legal requirements
	No certificates of fitness for workers as required	
	Working without approved method statements	

### **Failure to Comply with Provisions**

Failure or refusal on the part of the PC or their Contractors to take the necessary steps to ensure the safety of workers and the general public in accordance with these specifications or as required by statutory authorities or ordered by the engineer, shall be sufficient cause for the engineer to apply penalties as follows:

- (i) A penalty as shown in the Table above shall be deducted for each and every occurrence of non-compliance with any of the requirements of the H&S Specification.
- (ii) In addition, a time-related penalty of R500,00 per hour over and above the fixed penalty may be deducted for non-compliance to rectify any non-conformance within the allowable time after a site instruction to this effect has been given by the Client's representative. The site instruction shall state the agreed time, which shall be the time in hours for reinstatement of the defects. Should the Contractor fail to adhere to this instruction, the time-related penalty shall be applied from the time the instruction was given.

The payment items for Occupational Health & Safety are contained in the Bill of Quantities. The same rules are applicable in respect of the pricing of these items as for every other payment item. Attention is drawn to the Pricing Instructions in this document.

## **24.INSPECTIONS, FORMAL ENQUIRES AND INCIDENTS**

1. The contractor shall inform the relevant safety representative:



- i. beforehand of inspections, investigations or formal inquiries of which he has been notified by an inspector; and
  - ii. as soon as reasonably practicable of the occurrence of an incident on the site.
2. The contractor shall record all incidents and notify the employer's health and safety agent of any incident, except in the case of a traffic accident on a public road, as soon as possible after it has occurred and report such incidence to an inspector of the department of labour and notify the Provincial Director of the Department of Labour of such incident within 7 days on the prescribed form.
3. The contractor shall investigate all incidents and issue the employer's health and safety agent with copies of such investigations.
4. The contractor shall in the event of an incident in which a person dies, or is injured to such an extent that he is likely to die, or suffered the loss of a limb or part of a limb:
  - i. notify the Provincial Director of the Department of Labour of such incident by telephone, facsimile or similar means of communication;
  - ii. ensure that no person disturbs the site at which the incident occurred or remove any article or substance involved in the incident therefrom, without the consent of an inspector, unless an action is necessary to prevent a further incident, to remove the injured or dead, or to rescue persons from danger;
  - iii. and provide the Provincial Director of the Department of Labour with a report which includes the measures that the contractor or his subcontractor intend to implement to ensure a safe site as reasonably practicable.
5. The contractor shall notify the Provincial Director of the Department of Labour of the death of any person which results from injuries sustained in an incident.

## **25. EMERGENCY PROCEDURES**

The contractor shall submit for acceptance to the employer's health and safety agent an emergency procedure which include but are not limited to fire, spills, accidents to employees, exposure to hazardous substances, which:

- identifies the key personnel who are to be notified of any emergency;



- sets out details including contact particulars of available emergency services; and
- the actions or steps which are to be taken during an emergency.

The contractor shall within 24 hours of an emergency taking place notify the employer's health and safety agent in writing of the emergency and briefly outline what happened and how it was dealt with.



## **ANNEXURE 2**

### **APPROVED CITY OF CAPE TOWN INVERTER LIST (recommended by Nelson Mandela Municipality)**