



**ATTENTION – FRAUD ALERT!!!!!!!**

It is common for scammers to call potential bidders pretending to be NRF’s employees and offering to swing tenders your way for a fee. **DO NOT FALL FOR IT, IT IS A SCAM!**

The NRF/SAIAB and its employees would never offer payment or any other consideration in return for the favourable consideration of a bid. Please report any suspected acts of fraud or corruption to the following toll-free number - 0800 701 701

**INVITATION TO BID**

**Appointment of a qualified and experienced service provider to supply, install, integrate & commission the two (2) solar backup power systems [one] for the Main Building and [one for the] Collections Building and maintain for a 36-month period**

<b>Works Location:</b>	South African Institute for Aquatic Biodiversity (SAIAB) building, 11 Somerset Street, Makhanda
<b>Bidder Name:</b>	
<b>Bid Number:</b>	<b>NRF/SAIAB/43/2023-24</b>
<b>Closing Date:</b> <b>Closing Time:</b>	<b>Tuesday, 28 November 2023</b> <b>11.00 AM</b>
<b>Compulsory Briefing Session:</b>	A compulsory on site briefing session will be held. Date: 17 November 2023 at 14:00 AM Venue: SAIAB building, 11 Somerset street, Makhanda
<b>Bid Submission:</b>	Electronic submissions must be sent to <a href="mailto:bids@saiab.nrf.ac.za">bids@saiab.nrf.ac.za</a> Bids must be submitted in two separate electronic folders, one with the compliance and technical response, and the second with the financial response. The financial response must be password protected. Folders must be titled with the bidder’s company name and folder title. Attachments are limited to 25 MB per email. Bidders are to send an email to <a href="mailto:bids@saiab.nrf.ac.za">bids@saiab.nrf.ac.za</a> post submission with the password to their financial envelope.

**Direct enquiries in writing to:**

<b>Section</b>	Supply Chain Management	Technical
<b>Contact person</b>	Angela Buthelezi	Francois Lamont
<b>Email address</b>	<a href="mailto:a.buthelezi@saiab.nrf.ac.za">a.buthelezi@saiab.nrf.ac.za</a>	<a href="mailto:FE.Lamont@saiab.nrf.ac.za">FE.Lamont@saiab.nrf.ac.za</a>

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## **INTRODUCTION TO THE NRF**

The National Research Foundation Act as amended, Act 19 of 2018, establishes the National Research Foundation (“NRF”) as the juristic legal entity that will contract with the awarded bidder. Please visit the NRF website (<https://www.nrf.ac.za>) for more information.

## **BACKGROUND TO SAIAB**

The South African Institute for Aquatic Biodiversity (SAIAB), based in Makhanda formerly known as Grahamstown, Eastern Cape, is a National Research Facility of the National Research Foundation, a public entity, established in terms of the National Research Foundation Act No. 23 of 1998. SAIAB is an internationally recognised centre for the study of aquatic biodiversity.

SAIAB is a biological sciences Research Institute specialising in aquatic biodiversity, with a specific academic focus on fish (Ichthyology). In addition to foundational taxonomy and systematics, the Institute specialises in providing cutting-edge research infrastructure platforms for research in marine and freshwater environments, the curation and management of biological specimens and tissue samples, molecular biology and genomics and the supervision of postgraduate students.

## **PART A – THE TENDER**

### **CONTEXT AND OBJECTIVE OF THIS PROCUREMENT CONTRACT**

The SAIAB operates two (2) adjacent facilities namely the Main Building and the Collections Building. The Main Building is responsible for maintaining all necessary administrative and operational functions related to SAIAB, while the Collections Building is used to store aquatic specimens. The two (2) specified power solutions will provide the necessary backup power during load shedding or grid outages.

### **CONTRACT PERIOD**

The contract will be valid for a period of thirty-nine (39) months from the date of signing of the contract. The initial three (3) months is for the supply, installation, integration & commissioning of the backup systems for the Main & Collections Buildings, plus a thirty-six months (36) months installer's unconditional warranty which includes the repair and maintenance of all equipment which is part of the contract period.
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Commencement will be the date of final signature on the SBD 7.1 Contract Form and site handover.
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### **BIDDER REQUIREMENTS**

The Bidder must have a minimum of five (5) years electrical installation experience and Three (3) years Solar installation experience and complete a list of previously completed projects (See Annexure 2).

The Bidder must be a qualified Electrical Installation Electrician

The Bidder must be able execute and complete all works. No Electrical or Solar sub-contractors may be used.

The Bidder must have the capacity to source & procure all equipment required to complete the installation.

The Bidder must be able to provide installation and operation manuals (See Annexure 3).

The Bidder must preferably be based in the Eastern Cape so as to respond and recover to maintenance emergencies within 6 hours. If the bidder is not based in the Eastern Cape, the bidder should demonstrate how emergencies and recoveries will be dealt with within the 6-hour period.

The Bidder must have attended the compulsory pre-tender site inspection/ Briefing Session.

The Bidder will be required to provide an Electrical Certificate of Compliance (COC) for the complete solar installation and affected Distribution Boards

The Bidder will be required to comply with Health and Safety regulations. Please complete Annexure 6 and return it with the bid.

The Bidder must be able to obtain all the necessary licences and permits in line with the Municipal bylaws and National legislation.

The Bidder must be CIDB 5EB accredited.

The Bidder must complete the Schedule of Equipment offered in response to the specification (See Annexure 4)

Supplier Performance Management is a critical component in ensuring value for money acquisition and maintaining supplier relations. The supplier's performance will be monitored by the purchaser on an ongoing basis.

Staff deployed by the Service Provider shall perform their duties at the premises with due diligence and take all precautions to avoid any loss or damage to the property and personnel.

## **DRAWINGS AND SPECIFICATIONS ATTACHED AS ANNEXURES**

Annexure 1: Bill of Quantities

Annexure 2: Schedule of Previous Experience

Annexure 3: Standard Specifications and Technical Specifications Applying to this Installation.

Annexure 4: Schedule of Equipment Offered.

Annexure 5: Drawings

Annexure 6: NRF/SAIAB Health & Safety Specification and Occupational Health and Safety Act 37(2) Mandatory Agreement

Annexure 7: Electronic Bid Submission – Guideline for Bidders

Annexure 8: Inspection and Maintenance Schedule

## SERVICE LEVELS AND MANAGEMENT THEREOF

1. The service provider and the SAIAB's contract shall manager review the initial performance. The review will take place in accordance with the service levels as set out in this document to ensure the service level supports the contract delivery.
2. The performance level indicators are maintained monthly. A review of performance levels will take place after the first four weeks. The review is assessed against the contractual service performance levels.
3. Where both parties agree to variation of these performance levels, both parties will meet and agree on the revised performance levels in writing, sign and append to this contract document.
4. Each performance level document states the agreed performance levels, date effective from, performance penalties, and any matter forming part of such performance levels.
5. The service provider and the SAIAB's contract manager measure delivered performance against the performance levels as agreed in accordance with this document.
6. Management of poor performance:
  - a. Where either party has identified poor performance under this contract, both parties will meet and investigate the matter to determine the root cause.
  - b. Both parties will agree to a correction plan and will implement it.
  - c. Both parties will monitor the corrective actions to ensure performance levels are as agreed.
  - d. Both parties agree to escalate non-corrective actions to senior management where performance levels have not returned to the agreed service levels.
  - e. Both parties will assess the applicability of penalties to the incurred poor performance and apply these,
7. The Service provider shall ensure that all SAIAB OHS and environmental requirements are met and adhered to at all times and project shall be subjected to periodic health and safety audits, at interval agreed between SAIAB and service provider. The service provider is to ensure that all persons under his control on the construction site shall adhere to the specifications, as non-conformance will lead to the client taking action for any anomalies including costs and resulting deficiencies due to delays caused by non-conformance and/or non-compliance to the Health and Safety Specifications and the Health and Safety Plan based on these specifications
8. The service 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.

The service performance levels are:

Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, apply the following penalties –

### Performance Measures and Penalties

Performance requirement	Deliverable	Trigger	Penalty
Completion time of installation of two (2) new backup systems	Backup systems to be completed within 3 months of site handover.	Late completion	0.05% of the Contract Sum per calendar day.  Additional penalty of R1500 per hour will be charged should the generator be required to

			operate.
Turnaround time for repairs/maintenance of the Backup Systems	Acknowledgement of request for repairs/maintenance within 1 working day.	Longer than 1 day response time	Poor reflection on contract review – repeat occurrence may result in termination of contract.
On-site technical support	Technician to be dispatched and arrive on site within 6 hours of reported fault, which cannot be solved remotely. Fault report via SMS, WhatsApp or email.	Longer than 6 hours to have technical support arrive on site.	Poor reflection on contract review – repeat occurrence may result in termination of contract.
Warranty and Maintenance Period	To secure performance of post-completion or post-delivery warranty and maintenance obligations	Failure to honour warranty claims within 5 business days	Up to 4% of the Contract price until the expiration of the warranty/maintenance period (through a 4% On-Demand Guarantee)

## VERIFICATION OF WORK PERFORMED

SAIAB contract manager verifies all work specified has been completed to the specified standard and, where applicable, provides list of all defects and outstanding work that must be corrected in appropriate time (as agreed with the service provider). Only after all defects have been corrected, shall the SAIAB Contract manager and the contractor sign-off the delivery verification documents. Copies of these must be attached to the issued invoice.

The relevant GCC is provided here for clarity:

GCC8	Inspections, tests and analyses
8.1	All pre-bidding testing will be for the account of the bidder.
8.2	If it is a bid condition that supplies to be produced or services to be rendered should at any stage during production or execution or on completion be subject to inspection, the premises of the bidder or contractor shall be open, at all reasonable hours, for inspection by a representative of the purchaser or an organization acting on behalf of the purchaser.
8.3	If there are no inspection requirements indicated in the bidding documents and no mention is made in the contract, but during the contract period, it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.
8.4	If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the supplies to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.
8.5	Where the supplies or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such supplies or services are accepted or not, the supplier shall defray the cost in connection with these inspections, tests, or analyses.
8.6	Supplies and services referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.
8.7	Any contract supplies may on or after delivery be inspected, tested or analysed and may be rejected if found not to comply with the requirements of the contract. Such rejected supplies are held at the cost and risk of the

	supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with supplies, which do comply with the requirements of the contract. Failing such removal, the rejected supplies shall be returned at the suppliers cost and risk. Should the supplier fail to provide the substitute supplies forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected supplies, purchase such supplies as may be necessary at the expense of the supplier.
8.8	The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract because of a breach of the conditions thereof, or to act in terms of Clause 23 of GCC.

## CONTRACT ADMINISTRATION

<b>The service provider shall:</b>	
	Upon notification of the acceptance of its bid, the service provider commences the contract upon signing the SBD 7.1 contract form and handover of the site.
	Commence with and carry out the delivery of the services in accordance with the contract only upon receipt of an authorised purchase order for the required work.
	Provide all of the necessary materials, labour and equipment required for the delivery of the services, including any temporary services that may be required.
	Notify the business unit of any identified risk and/or ad hoc wear requiring maintenance to the equipment being maintained under this contract.
<b>The business unit (SAIAB) shall:</b>	
	Call ad-hoc meetings with the service provider, as and when required during the course of the contract. The service provider will be required to attend such meetings. Provide reasonable notice of such meeting to the service provider.
	Issue purchase orders for the work required under this Contract. No liability for payment will ensue for any work done if a purchase order has not been issued to the service provider by a delegated official in the NRF.
	Regularly have progress meetings with the service provider to establish that the services are being performed in compliance with the contract.
	Give any instructions and/or explanations and/or variations to the service provider including any relevant advice to assist the service provider to understand the contract documents.
	Notify the supplier in writing of any claims arising under the warranties provided.
	Grant or refuse any extension of time requested by the service provider.



## SPECIAL CONDITIONS OF CONTRACT

**These Special Conditions of Contract must be cross-referenced against the General Conditions of Contract (GCC). The Special Conditions of Contract qualify or augment specific clauses of the GCC, or introduce conditions not included in the GCC.**

The following are special conditions of the contract:

<b>5</b>	<b>Use of contract documents and information</b>
<b>Add the following clause after Clause 5.4:</b>	
5.5	Each party shall be careful and diligent as not to cause any unauthorised disclosure or use of the confidential information, in particular, during the contract term and after termination of the contract. The recipient shall not:
5.5.1	Disclose the confidential information, directly or indirectly, to any person or entity.
5.5.2	Use, exploit or in any other manner whatsoever apply the confidential information for any other purpose whatsoever, other than for the execution of the contract and the delivery of the deliverables or
5.5.3	Copy, reproduce, or otherwise publish confidentiality information except as strictly required for the execution of the contract.
5.6	The parties shall ensure that any employees, agents, directors, contractors, service providers, and associates which may gain access to the confidential information abide by the undertakings in this clause both during the term of their associations with the parties and after termination of their respective associations with the parties, not to -
5.6.1	Disclose the confidential information to any third party, or
5.6.2	Use the confidential information otherwise than as may be strictly necessary for the execution of the contract,
5.6.3	The parties shall take all such steps as may be reasonably necessary to prevent the confidential information from falling into the hands of any unauthorised third party.
5.7	The undertakings set out in this clause shall not apply to confidential information, which the parties are able to prove:
5.7.1	Was independently developed or in the possession of the recipient prior to its involvement with the other party;
5.7.2	Is now or hereafter comes into the public domain other than by breach of this contract by any of the parties;
5.7.3	Was lawfully received by the recipient from a third party acting in good faith having a right of further disclosure and who do not derive the same directly or indirectly from the other party, or
5.7.4	Required by law to be disclosed by the recipient, but only to the extent of such order and the recipient shall inform the other party of such requirement prior to any disclosure.
5.8	The recipient shall within one (1) month of receipt of a written request from the purchaser to do so, return to the purchaser all material embodiments, whether in documentary or electronic form, of the confidential information including but not limited to:
5.8.1	All written disclosures;
5.8.2	All written transcripts of confidential information disclosed verbally; and
5.8.3	All material embodiments of the contract intellectual property.
5.9	The parties acknowledges that the confidential information is made available solely for the execution of the contract and for no other purpose whatsoever and that the confidential information would not have been made available, but for the obligations of confidentiality agreed to herein.
5.10	Except as expressly herein provided, this contract shall not be construed as granting or confirming, either expressly or impliedly any rights, licences or relationships by furnishing of confidential information by either party pursuant to this contract.

5.11	Each party acknowledges that the unauthorised disclosure of confidential information may cause harm to the other party. Each party agrees that, in the event of a breach or threatened breach of confidentiality, the other party purchaser is entitled to seek injunctive relief or specific performance, in order to obtain immediate remedies. Any such remedy shall be in addition to and not in lieu of any other remedies available at law, including monetary damages.
5.12	The supplier hereby gives the purchaser permission, in terms of the Protection of Private Information Act 4 of 2013, to process, collect, receive, record, organise, collate, store, update, modify, retrieve, alter, consult, use, disseminate, distribute, merge, link, erase or destroy personal information received. By submitting a bid, the supplier gives its voluntary explicit consent to the terms of this special condition.
<b>11</b>	<b>Insurance</b>
<b>Substitute Clause 11.1 with the following:</b>	
11.1	Without limiting the obligations of the supplier in terms of this contract, the supplier shall effect and maintain the following additional insurances:
	(a) Public liability insurances, in the name of the supplier, covering the supplier and the purchaser against liability for the death of or injury to any person, or loss of or damage to any property, arising out of or in the course of this Contract,
	(b) Registration / insurance in terms of the Compensation for Occupational Injuries and Disease Act, Act 130 of 1993. This can either take the form of a certified copy of a valid Letter of Good Standing issued by the Compensation Commissioner, or proof of insurance with a licenced compensation insurer, from either the bidder's broker or the insurance company itself
	(c) The supplier shall be obliged to furnish SAIAB with proof of such insurance as SAIAB may require from time to time for the duration of this Contract.
<b>13</b>	<b>Incidental Services</b>
<b>Add the following after Clause 13.2:</b>	
13.3	Any incidental services required for the delivery of the contract shall be agreed upon in advance by the parties and will only be valid if confirmed through the issue of a written purchase order that specifies, where applicable, quality, quantity, description, unit price, and delivery date.
<b>15.</b>	<b>Warranty</b>
<b>Substitute Clause 15.2 with the following:</b>	
15.2	This warranty shall remain valid for ten (10) year after the goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the contract.
<b>Add Clause 15.6:</b>	
15.6	The supplier shall, within five business days of receipt of a warranty claim and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.
<b>16.</b>	<b>Payment</b>
<b>Add the following clause after clause 16.4:</b>	
16.5	The Supplier's invoices must meet the following minimum requirements: (a) Reference the purchase order number (b) Detailed line items as specified in purchase order (c) Include statement of account
16.6	Invoices must be accompanied by the purchaser authorised representative's signature, confirming performance/delivery in accordance with prescribed quality and/or quantity, conformance to specification, and unit pricing in accordance with the contract and any purchase orders issued in terms of the contract.

<b>22</b>	<b>Penalties</b>
<b>Substitute clause 22.1 with the following:</b>	
<b>22.1</b>	Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of the delayed goods or unperformed services using 0.05% of the Contract Sum calculated for each calendar day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.
<b>31</b>	<b>Notices</b>
<b>Add the following to Clause 31:</b>	
<b>31.3</b>	Any notice, request, consent, approvals or other communications made between the Parties pursuant to the Contract shall be in writing and forwarded to the addresses specified in the contract and may be given as set out hereunder and shall be deemed to have been received when: <ul style="list-style-type: none"> <li>(i) hand delivered – on the day of delivery;</li> <li>(ii) registered mail – five (5) working days after mailing;</li> <li>(iii) email – one (1) working day after it has been sent</li> </ul>

## GENERAL CONDITIONS OF CONTRACT

In this document words in the singular also mean in the plural and vice versa, words in the masculine mean in the feminine and neuter, words “department” means organs of state inclusive of public entities and vice versa, and the words “will/should” mean “must”.

The National Research Foundation cannot amend the National Treasury’s General Conditions of Contract (GCC). The National Research Foundation compiles separate Special Conditions of Contract (SCC) relevant to this bid where applicable supplementing the General Conditions of Contract. Where there is conflict, the provisions of the Special Conditions of Contract shall prevail.

<b>GCC 1</b>	<b>Definitions - The following terms shall be interpreted as indicated:</b>
1.1	“Closing time” means the date and hour specified in the bidding documents for the receipt of bids.
1.2	“Contract” means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
1.3	“Contract price” means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.
1.4	“Corrupt practice” means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.
1.5	“Countervailing duties” are imposed in cases where an enterprise abroad is subsidized by its government and encouraged to market its products internationally.
1.6	“Country of origin” means the place where the goods were mined, grown, or produced, or from which the services are supplied. Goods produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components
1.7	“Day” means calendar day.
1.8	“Delivery” means delivery in compliance of the conditions of the contract or order.
1.9	“Delivery ex stock” means immediate delivery directly from stock actually on hand.

1.10	"Delivery into consignees store or to his site" means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the supplies are so delivered and a valid receipt is obtained.
1.11	"Dumping" occurs when a private enterprise abroad markets its goods on own initiative in the RSA at lower prices than that of the country of origin and which have the potential to harm the local industries in the RSA.
1.12	" Force majeure" means an event beyond the control of the supplier and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
1.13	"Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any bidder, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the bidder of the benefits of free and open competition.
1.14	"GCC" means the General Conditions of Contract.
1.15	"Goods" means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.
1.16	"Imported content" means that portion of the bidding price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or his subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic where the supplies covered by the bid will be manufactured.
1.17	"Local content" means that portion of the bidding price, which is not included in the imported content if local manufacture does take place.
1.18	"Manufacture" means the production of products in a factory using labour, materials, components, and machinery and includes other related value-adding activities.
1.19	"Order" means an official written order issued for the supply of goods or works or the rendering of a service.
1.20	"Project site", where applicable, means the place indicated in bidding documents.
1.21	"Purchaser" means the organization purchasing the goods.
1.22	"Republic" means the Republic of South Africa.
1.23	"SCC" means the Special Conditions of Contract.
1.24	"Services" means those functional services ancillary to the supply of the goods, such as transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance and other such obligations of the supplier covered under the contract.
1.25	"Written" or "in writing" means handwritten in ink or any form of electronic or mechanical writing.
<b>GCC2</b>	<b>Application</b>
2.1	These general conditions are applicable to all bids, contracts and orders including bids for functional and professional services, sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the bidding documents.
2.2	Where applicable, special conditions of contract are also laid down to cover specific supplies, services or works.
2.3	Where such special conditions of contract are in conflict with these general conditions, the special conditions shall apply.
<b>GCC 3</b>	<b>General</b>
3.1	Unless otherwise indicated in the bidding documents, the purchaser shall not be liable for any expense incurred in the preparation and submission of a bid. Where applicable a non-refundable fee for documents may be charged.
3.2	With certain exceptions (National Treasury's eTender website), invitations to bid are only published in the

	Government Tender Bulletin. The Government Tender Bulletin may be obtained directly from the Government Printer, Private Bag X85, Pretoria 0001, or accessed electronically from <a href="http://www.treasury.gov.za">www.treasury.gov.za</a>
<b>GCC 4</b>	<b>Standards</b>
4.1	The goods supplied shall conform to the standards mentioned in the bidding documents and specifications.
<b>GCC 5</b>	<b>Use of contract documents and information</b>
5.1	The supplier shall not, without the purchaser's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the performance of the contract. Disclosure made to any such employed person is in confidence and shall extend only as far as may be necessary for purposes of such performance.
5.2	The supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC clause 5.1 except for purposes of performing the contract.
5.3	Any document, other than the contract itself mentioned in GCC clause 5.1 shall remain the property of the purchaser and shall be returned (all copies) to the purchaser on completion of the supplier's performance under the contract if so required by the purchaser.
5.4	The supplier shall permit the purchaser to inspect the supplier's records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so required by the purchaser.
<b>GCC6</b>	<b>Patent rights</b>
6.1	The supplier shall indemnify the purchaser against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by the purchaser.
<b>GCC7</b>	<b>Performance security</b>
7.1	Within thirty days (30) of receipt of the notification of contract award, the successful bidder shall furnish to the purchaser the performance security of the amount specified in SCC.
7.2	The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete his obligations under the contract.
7.3	The performance security shall be denominated in the currency of the contract, or in a freely convertible currency acceptable to the purchaser and shall be in one of the following forms: 7.3.1 bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the purchaser's country or abroad, acceptable to the purchaser, in the form provided in the bidding documents or another form acceptable to the purchaser; or 7.3.2 cashier's or certified cheque.
7.4	The performance security will be discharged by the purchaser and returned to the supplier within thirty (30) days following the date of completion of the supplier's performance obligations under the contract, including any warranty obligations, unless otherwise specified in SCC.
<b>GCC8</b>	<b>Inspections, tests and analyses</b>
8.1	All pre-bidding testing will be for the account of the bidder.
8.2	If it is a bid condition that supplies to be produced or services to be rendered should at any stage during production or execution or on completion be subject to inspection, the premises of the bidder or contractor shall be open, at all reasonable hours, for inspection by a representative of the purchaser or an organization acting on behalf of the purchaser.
8.3	If there are no inspection requirements indicated in the bidding documents and no mention is made in the contract, but during the contract period, it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.
8.4	If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the supplies to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.
8.5	Where the supplies or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such supplies or services are accepted or not, the supplier shall defray the cost in

	connection with these inspections, tests, or analyses.
8.6	Supplies and services referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.
8.7	Any contract supplies may on or after delivery be inspected, tested or analysed and may be rejected if found not to comply with the requirements of the contract. Such rejected supplies are held at the cost and risk of the supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with supplies, which do comply with the requirements of the contract. Failing such removal, the rejected supplies shall be returned at the suppliers cost and risk. Should the supplier fail to provide the substitute supplies forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected supplies, purchase such supplies as may be necessary at the expense of the supplier.
8.8	The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract because of a breach of the conditions thereof, or to act in terms of Clause 23 of GCC.
<b>GCC9</b>	<b>Packing</b>
9.1	The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt, and precipitation during transit, and open storage. Packing, case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.
9.2	The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract, including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the purchaser.
<b>GCC10</b>	<b>Delivery and Documentation</b>
10.1	Delivery of the goods shall be made by the supplier in accordance with the terms specified in the contract. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.
10.2	Documents submitted by the supplier specified in SCC.
<b>GCC11</b>	<b>Insurance</b>
11.1	The goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery.
<b>GCC12</b>	<b>Transportation</b>
12.1	Should a price other than an all-inclusive delivered price be required, this shall be specified in the SCC.
<b>GCC13</b>	<b>Incidental services</b>
13.1	The supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC: 13.1.1 Performance or supervision of on-site assembly and/or commissioning of the supplied goods; 13.1.2 Furnishing of tools required for assembly and/or maintenance of the supplied goods; 13.1.3 Furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods; 13.1.4 Performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the supplier of any warranty obligations under this contract; and 13.1.5 Training of the purchaser's personnel, at the supplier's plant and/or on-site, conducted in assembly, start-up, operation, maintenance, and/or repair of the supplied goods.
13.2	Prices charged by the supplier for incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier for similar services.
<b>GCC14</b>	<b>Spare parts</b>
14.1	As specified in SCC, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier:



	<p>14.1.1 Such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract; and</p> <p>14.1.2 In the event of termination of production of the spare parts:</p> <p>14.1.2.1 Advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements; and</p> <p>14.1.2.2 Following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.</p>
<b>GCC15</b>	<b>Warranty</b>
15.1	The supplier warrants that the goods supplied under the contract are new, unused, of the most recent or current models and those they incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that all goods supplied under this contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.
15.2	This warranty shall remain valid for twelve (12) months after the goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise in SCC.
15.3	The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.
15.4	Upon receipt of such notice, the supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.
15.5	If the supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights, which the purchaser may have against the supplier under the contract.
<b>GCC16</b>	<b>Payment</b>
16.1	The method and conditions of payment to be made to the supplier under this contract shall be specified in SCC.
16.2	The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfillment of other obligations stipulated in the contract.
16.3	Payments shall be made promptly by the purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the supplier.
16.4	Payment will be made in Rand unless otherwise stipulated in SCC.
<b>GCC17</b>	<b>Prices</b>
17.1	Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in his bid, with the exception of any price adjustments authorized in SCC or in the purchaser's request for bid validity extension, as the case may be.
SCC	No additional special conditions other than stated in the price section in this document.
<b>GCC18</b>	<b>Contract amendment</b>
18.1	No variation in or modification of the terms of the contract shall be made except by written amendment signed by the parties concerned.
<b>GCC19</b>	<b>Assignment</b>
19.1	The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.
<b>GCC20</b>	<b>Subcontract</b>
20.1	The supplier shall notify the purchaser in writing of all subcontracts awarded under this contract if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the supplier from any liability or obligation under the contract.

<b>GCC21</b>	<b>Delays in supplier's performance</b>
21.1	Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.
21.2	If at any time during performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration, and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his discretion extend the supplier's time for performance, with or without the imposition of penalties, in which case the extension shall be ratified by the parties by amendment of contract.
21.3	No provision in a contract shall be deemed to prohibit the obtaining of supplies or services from a national department, provincial department, or a local authority.
21.4	The right is reserved to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the supplier's point of supply is not situated at or near the place where the supplies are required, or the supplier's services are not readily available.
21.5	Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 21.2 without the application of penalties.
21.6	Upon any delay beyond the delivery period in the case of a supplies contract, the purchaser shall, without cancelling the contract, be entitled to purchase supplies of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier.
<b>GCC22</b>	<b>Penalties</b>
22.1	Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of the delayed goods or unperformed services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.
<b>GCC23</b>	<b>Termination for default</b>
23.1	The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part: 23.1.1 If the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof granted by the purchaser pursuant to GCC Clause 21.2; 23.1.2 If the supplier fails to perform any other obligation(s) under the contract; or 23.1.3 If the supplier, in the judgment of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.
23.2	In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner as it deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.
23.3	Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding 10 years.
23.4	If a purchaser intends imposing a restriction on a supplier or any person associated with the supplier, the supplier will be allowed a time period of not more than fourteen (14) days to provide reasons why the envisaged restriction should not be imposed. Should the supplier fail to respond within the stipulated fourteen (14) days the purchaser may regard the intended penalty as not objected against and may impose it on the supplier.
23.5	Any restriction imposed on any person by the Accounting Authority will, at the discretion of the Accounting Authority, also be applicable to any other enterprise or any partner, manager, director or other person who



	wholly or partly exercises or exercised or may exercise control over the enterprise of the first-mentioned person, and with which enterprise or person the first-mentioned person, is or was in the opinion of the Accounting Authority actively associated.
23.6	<p>If a restriction is imposed, the purchaser must, within five (5) working days of such imposition, furnish the National Treasury, with the following information:</p> <p>23.6.1 the name and address of the supplier and / or person restricted by the purchaser;</p> <p>23.6.2 the date of commencement of the restriction</p> <p>23.6.3 the period of restriction; and</p> <p>23.6.4 the reasons for the restriction.</p> <p>These details will be loaded in the National Treasury's central database of suppliers or persons prohibited from doing business with the public sector.</p>
23.7	<p>If a court of law convicts a person of an offence as contemplated in sections 12 or 13 of the Prevention and Combating of Corrupt Activities Act, No. 12 of 2004, the court may also rule that such person's name be endorsed on the Register for Tender Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for a period not less than five years and not more than ten (10) years. The National Treasury is empowered to determine the period of restriction and each case will be dealt with on its own merits. According to Section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury website.</p>
<b>GCC24</b>	<b>Anti-dumping and countervailing duties and rights</b>
24.1	<p>When, after the date of bid, provisional payments are required, or anti-dumping or countervailing duties are imposed, or the amount of a provisional payment or anti-dumping or countervailing right is increased in respect of any dumped or subsidized import, the State is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favourable difference shall on demand be paid forthwith by the contractor to the State or the State may deduct such amounts from moneys (if any) which may otherwise be due to the contractor in regard to supplies or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which may be due to him.</p>
<b>GCC25</b>	<b>Force Majeure</b>
25.1	<p>Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay in performance or other failure to perform his obligations under the contract is the result of an event of force majeure.</p>
25.2	<p>If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event</p>
<b>GCC26</b>	<b>Termination for insolvency</b>
26.1	<p>The purchaser may at any time terminate the contract by giving written notice to the supplier if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.</p>
<b>GCC27</b>	<b>Settlement of disputes</b>
27.1	<p>If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in connection with or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.</p>
27.2	<p>If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party.</p>
27.3	<p>Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.</p>

27.4	Mediation proceedings shall be conducted in accordance with the rules of procedure specified in the SCC.
27.5	Notwithstanding any reference to mediation and/or court proceedings herein, 27.5.1 the parties shall continue to perform their respective obligations under the contract unless they otherwise agree; and 27.5.2 the purchaser shall pay the supplier any monies due the supplier.
<b>GCC28</b>	<b>Limitation of liability</b>
28.1	Except in cases of criminal negligence or wilful misconduct, and in the case of infringement pursuant to Clause 6; 28.1.1 the supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and 28.1.2 the aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.
<b>GCC29</b>	<b>Governing language</b>
29.1	The contract shall be written in English. All correspondence and other documents pertaining to the contract that is exchanged by the parties shall also be written in English.
<b>GCC30</b>	<b>Applicable law</b>
30.1	The contract shall be interpreted in accordance with South African laws, unless otherwise specified in SCC.
<b>GCC31</b>	<b>Notices</b>
31.1	Every written acceptance of a bid shall be posted to the supplier concerned by registered or certified mail and any other notice to him shall be posted by ordinary mail to the address furnished in his bid or to the address notified later by him in writing and such posting shall be deemed to be proper service of such notice.
31.2	The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting of such notice.
<b>GCC32</b>	<b>Taxes and duties</b>
32.1	A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the purchaser's country.
32.2	A local supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the purchaser.
32.3	No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid, the Department must be in possession of a tax clearance certificate, submitted by the bidder. This certificate must be an original issued by the South African Revenue Services
SCC	No special condition applicable, unless specified elsewhere in this document.
<b>GCC33</b>	<b>National Industrial Participation Programme</b>
33.1	The NIP Programme administered by the Department of Trade and Industry shall be applicable to all contracts that are subject to the NIP obligation.
SCC	No special condition applicable, unless specified elsewhere in this document.
<b>GCC34</b>	<b>Prohibition of restrictive practices</b>
34.1	In terms of Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, an agreement between, or concerted practice by, firms, or a decision by an association of firms, is prohibited if it is between parties in a horizontal relationship and if a bidder (s) is/are or a contractor(s) was/were involved in collusive bidding (or bid rigging).
34.2	If a bidder(s) or contractor(s), based on reasonable grounds or evidence obtained by the purchaser, has/have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in the Competition Act No. 89 of 1998.

34.3	If a bidder(s) or contractor(s), has/have been found guilty by the Competition Commission of the restrictive practice referred to above, the purchaser may, in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such item(s) offered, and/or terminate the contract in whole or part, and/or restrict the bidder(s) or contractor(s) from conducting business with the public sector for a period not exceeding ten (10) years and/or claim damages from the bidder(s) or contractor(s) concerned.
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## PART B - PRICING

### PRICING INSTRUCTIONS

1.	<b>Applicable currency:</b> All prices shall be quoted in South African Rand.
2.	<b>Completion of pricing schedule:</b> Bidders shall complete the pricing schedule in full, inserting all the information required therein.
3.	<b>Price Quotation Basis:</b> total prices quoted must be inclusive of all applicable taxes <b>including VAT</b> , less all unconditional discounts, plus all costs to deliver the services and/or goods. Where imported goods/services are to be used, and pricing is subject to exchange rate fluctuations, the exchange currency against the Rand must be stipulated, as well as the exchange rate at the time of bidding.  The portion of the bid price subject to exchange rate fluctuations must be stated in SBD 3.2.
4.	<b>Submission of pricing:</b> bidders must submit their pricing proposals in a password protected, unzipped electronic folder. The password must be emailed to bids@saiab.nrf.ac.za. The pricing folder must be clearly labelled as such. <b>(See Annexure 7: Electronic Bid Submission – Guideline for Bidders)</b>
5.	<b>The provisional sum:</b> The provisional sums are provided as indication of unforeseen modifications. SAIAB will issue purchase orders for each item as needed

**See Microsoft Excel Bill of Quantities. This is to be submitted under Annexure 1 as a separate protected document according to the guidelines included in Annexure 7.**

## BID PRICE SCHEDULE (SBD 3.2)

(Submit pricing in separate password protected, unzipped electronic folder)

The Schedule of Prices, attached as **Annexure A**, must be completed by the Tenderer. The total price must include everything necessary to complete the installation in terms of the Specification and Drawings.

Total Cost is determined by multiplying quantity by unit price for all line items

### PRICE ADJUSTMENTS

#### A NON-FIRM PRICES SUBJECT TO ESCALATION

1. NON FIRM PRICES WILL BE ADJUSTED (LOADED) WITH THE ASSESSED CONTRACT PRICE ADJUSTMENTS IMPLICIT IN NON FIRM PRICES WHEN CALCULATING THE COMPARATIVE PRICES
2. IN THIS CATEGORY PRICE ESCALATIONS WILL ONLY BE CONSIDERED IN TERMS OF THE FOLLOWING FORMULA:

$$Pa = (1 - V)Pt \left( D1 \frac{R1t}{R1o} + D2 \frac{R2t}{R2o} + D3 \frac{R3t}{R3o} + D4 \frac{R4t}{R4o} \right) + VPt$$

Where:

Pa	=	The new escalated price to be calculated.
(1-V)Pt	=	<b>Note that Pt must always be the original bid price and not an escalated price.</b>
D1, D2..	=	Each factor of the bid price eg. labour, transport, clothing, footwear, etc. The total of the various factors D1, D2...etc. must add up to 100%.
R1t, R2t.....	=	Index figure obtained from new index (depends on the number of factors used).
R1o, R2o	=	Index figure at time of bidding.
VPt	=	This portion of the bid price remains firm i.e. it is not subject to any price escalations.

3. The following index/indices must be used to calculate your bid price:

Index..... Dated.....      Index..... Dated..... Index..... Dated.....  
 Index..... Dated.....      Index..... Dated..... Index..... Dated.....

4. FURNISH A BREAKDOWN OF YOUR PRICE IN TERMS OF ABOVE-MENTIONED FORMULA

FACTOR (D1, D2 etc. eg. Labour, transport etc.)	P	PERCENTAGE OF BID PRICE


SBD 3.2

**B PRICES SUBJECT TO RATE OF EXCHANGE VARIATIONS**

1. Please furnish full particulars of your financial institution, state the currencies used in the conversion of the prices of the items to South African currency, which portion of the price is subject to rate of exchange variations and the amounts remitted abroad.

PARTICULARS OF FINANCIAL INSTITUTION	ITEM NO	PRICE	CURRENCY	RATE	PORTION OF PRICE SUBJECT TO ROE	AMOUNT IN FOREIGN CURRENCY REMITTED ABROAD
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
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				ZAR=		
				ZAR=		
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				ZAR=		
				ZAR=		
				ZAR=		

2. Adjustments for rate of exchange variations during the contract period will be calculated by using the average monthly exchange rates as issued by your commercial bank for the periods indicated hereunder: (Proof from bank required)

AVERAGE MONTHLY EXCHANGE RATES FOR THE PERIOD:	DATE DOCUMENTATION	DATE FROM WHICH NEW CALCULATED	DATE UNTIL WHICH NEW CALCULATED

	<b>MUST BE SUBMITTED TO THIS OFFICE</b>	<b>PRICES WILL BECOME EFFECTIVE</b>	<b>PRICE WILL BE EFFECTIVE</b>

## **PART C – BIDDER QUALIFICATIONS**

### **BIDDER REQUIREMENTS**

The bidder must provide evidence of the following:

- High level project management plan demonstrating the bidder's proposed execution of the contract, completion time, inclusive of all milestones.
- Three (3) written references with contact details in the optional reference format specified in this bid. The reference is for those customers for whom the bidder has completed industrial solar installation work within the last three years and/or current work in progress or, contact details of three customers for the last three years where practical to enable verbal references (Annexure 2).
- A minimum of Five (5) years Electrical installation experience & Three (3) Years solar installation experience with at least three industrial solar installations
- CIDB Grade 5 EB
- Schedule of equipment offered in response to the specification in this invitation (Annexure 4)
- The Bidder must be a qualified Electrical Installation Electrician, registered with the Department of Labour
- Project Manager registered with PMSA or SACPCMP

Failure to provide documentation of evidence of the above requirements may result in disqualification of bid.

The successful bidder will be required to supply NRF SAIAB with audited financial statement and Management Accounts and/or forecasts for at least a year for financial due diligence purposes prior to award.



## PART D – BID SELECTION PROCESS

This bid will be evaluated in three stages as follows:

### STAGE 1: SUBMISSION OF RETURNABLE DOCUMENTS AND SCHEDULES

Bids will be evaluated for compliance with the procedural requirements of the bid, which entails the completion and/or submission of the returnable documents and schedules specified in the Returnable Documents and Schedules Checklist in page 25 below.

**Failure to comply with the mandatory requirements in this stage may result in bid disqualification. However, SAIAB may apply the discretion to allow bidders to complete and/or sign returnable schedules not completed and/or signed in the first instance or to submit returnable documents not submitted in the first instance. Such returnable schedules or documents must be of a purely administrative nature (such as SBD forms or B-BBEE certificate), and may not pertain to the substance of the bid such as to affect the competitive position of bidders by giving one or more bidders a second and unfair opportunity to augment the quality (substantive) aspects of their bid. No award will be done without complete provision of returnable documents and schedules.**

### STAGE 2: TECHNICAL EVALUATION

Each bid will be evaluated against the technical/quality criteria outlined in pages 28-29 below.

**Bids which fail to meet the requirements of Stage 2 will be disqualified and not evaluated further in Stage 3.**

### STAGE 3: PRICE AND SPECIFIC GOALS POINTS SCORING

Bid price proposals are compared on an equal and fair basis, considering all aspects of the bid pricing requirements. Qualifying bids are ranked on price and specific goals points claimed in the following manner:

- (i) **Price** - with the lowest priced bid receiving the highest price score as set out in the Preferential Procurement Regulations 2022;
- (ii) **Preference** - preference points are allocated in accordance with the Preferential Procurement Policy Framework Act (Act 5 of 2000) and its Regulations 2022 as claimed in the specific goals claim form (SBD 6.1) are added to the price ranking scores. The points for specific goals must be supported by a valid B-BBEE certificate or sworn affidavit, in the case of EMEs and QSEs.

## STAGE 1 – SUBMISSION OF RETURNABLE DOCUMENTS AND SCHEDULES

All mandatory criteria need to be complied with to move on to the next stage of evaluation. All SBD forms indicated as mandatory must be completed and signed by bidders failing which, a bid submission may be disqualified for non-compliance. SAIAB may apply the discretion to allow bidders to complete and/or sign returnable schedules not completed and/or signed in the first instance or to submit returnable documents not submitted in the first instance. Such returnable schedules or documents must be of a purely administrative nature (e.g. SBD forms, Construction Sector B-BBEE certificate), and may not pertain to the substance of the bid such as to affect the competitive position of bidders by giving one or more bidders a second and unfair opportunity to augment the quality (substantive) aspects of their bid.

Document description	Weight	Criteria (All criteria are weighted equally to each other)	Assessment Methodology	Bid Section Reference	SCM Verification
<b>SBD 1 Form</b> (Invitation to Bid)	Mandatory	Has the bidder completed and signed the SBD 1 Invitation to Bid form?	Yes/No	Page 31	
<b>SBD 3.2 Form</b> (Non-Firm Pricing Schedule) – submitted in a separate electronic folder	Mandatory	Has the bidder submitted its pricing for the infrastructure and the service plan?	Yes/No	Page 19	
<b>SBD 4 Form</b> (Bidder's Disclosure)	Mandatory	Has the bidder completed and signed the SBD 4 form?  Has the bidder disclosed any conflict of interest or possible contravention of the Competitions Act which may preclude it from responding to this bid?	Yes/No	Page 34	
<b>SBD 6.1 Form</b> (Preferential Points Claimed)	Mandatory	Has the bidder completed and signed the SBD 6.1 form?	Yes/No	Page 37	

## STAGE 2 – TECHNICAL EVALUATION

**NOTE:** Bidders must carefully review the evaluation criteria and instructions below and ensure that they understand what information is required, including all documentation that is required to be submitted in this stage of evaluation. No second opportunity will be given to submit documentation not submitted, except in the case where there is no competition (i.e. one bid is received) and therefore no prejudice will accrue to any other bidder.

Bidders must meet all mandatory requirements below (i.e. requirements marked as 'Mandatory') in order pass this stage of evaluation and move on to the next stage of evaluation.

Evaluation Criteria	Evidence required	Page Reference	Weight	Assessment Methodology
Project management plan	High level project management plan demonstrating the bidder's proposed execution of the subsequent contract/ completion time (within 3 months of site handover) inclusive of all milestones.		Mandatory	Go / No Go
Three (3) written references with contact details in the optional reference format specified in this bid. The reference is for those customers for whom the bidder has completed work within the last three years and/or current work in progress or, contact details of three customers for the last three years where practical to enable verbal references (Annexure 2).	Three contactable references contact details from industrial solar installation clients relevant to this bid indicating that the services provided meet requirement.		Mandatory	Go / No Go
Company Experience	Proof that bidding company has a minimum of five (5) years Electrical installation experience and three (3) years in the Solar industry experience. (Bidder must provide copy of company profile).		Mandatory	Go / No Go
CIDB Grading	CIDB Grade 5 EB. Please provide proof.		Mandatory	Go / No Go
Fit for purpose equipment	Schedule of equipment offered in response to the specification in this invitation		Mandatory	Go / No Go

Occupational Health and Safety	<p>Letter of good standing</p> <p>The following will be requested from the successful bidder:</p> <ul style="list-style-type: none"> <li>• Safety plan</li> <li>• Method statement of works</li> </ul>		Mandatory	Go / No Go
10-year warranty for all components	Warranty letter from manufacturer to be provided		Mandatory	Go / No Go
Qualifications	<p>Electrician qualifications. Electrician to be registered with the Department of Labour as an Installation Electrician</p> <p>Project Manager qualifications. Project manager to be register with PMSA under category PM or Registered with SACPCMP under category Pr Construction Project Manager</p>		Mandatory	Go / No Go

<b>BIDDER IS ABLE TO DELIVER THE SPECIFICATION?</b>	<b>YES - PASS TO PRICING</b>	<b>NO – DISQUALIFIED</b>
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<b>STAGE 3 – PRICE AND PREFERENCE POINTS SCORING</b>	
Bids which meet the minimum requirements in Stage 2, will be evaluated on price and specific goals as follows -	
<b>CRITERIA</b>	<b>POINTS</b>
PRICE	<b>80</b>
SPECIFIC GOALS (B-BBEE STATUS LEVEL OF CONTRIBUTION)	<b>20</b>
TOTAL POINTS FOR PRICE AND SPECIFIC GOALS MUST NOT EXCEED	<b>100</b>

## BIDDING INSTRUCTIONS

**Bidders are urged to carefully study these bidding instructions, as well as all corresponding instructions pertaining to the bid evaluation criteria, scope of works, pricing and returnable, contained in this bid document. Failure to comply with these instructions will be at the bidder's risk, and may affect the evaluation of its bid.**

<b>1.</b>	<b><u>Late bids</u></b>
	Bids received after the closing time and/or date shall not be considered.
<b>2.</b>	<b><u>Authority of bid signatory</u></b>
	The bid must be signed by a person duly authorised to do so.
<b>3.</b>	<b><u>Clarification of the bid</u></b>
3.1	A bidder requiring any clarification of the bid documents may direct the request for clarification in writing, to the SAIAB representatives listed on the cover page of this bid document.
3.2	A response will be provided by SAIAB in writing. The response (including an explanation of the query, but without identifying the source of the query) will be sent to all prospective, identifiable bidders.
3.3	The last date for the submission of requests for clarification is 22 November 2023.
<b>4.</b>	<b><u>Bid preparation costs</u></b>
	Bidders will be responsible for all costs associated with the preparation and submissions of their bids.
<b>5.</b>	<b><u>Tender Briefing Session</u></b>
5.1	Bidder will be required to attend the compulsory on-site tender briefing session.
<b>6.</b>	<b><u>Counter proposals</u></b>
	No counter proposals will be accepted.
<b>7.</b>	<b><u>Alterations to the bid document</u></b>
	Bidders may not make any alterations or additions to the content of this bid document, except to comply with the instructions issued by SAIAB, i.e. the completion of the schedules indicated as mandatory for completion. Any alterations made to the content of this bid document other than those mandated by SAIAB will result in the invalidation of a bidder's submission.
<b>8.</b>	<b><u>Submitting a tender offer</u></b>
8.1	Bidders may submit one tender offer only, either as a single tendering entity or as a member of a joint venture or consortium, unless otherwise stated in this bid document.
8.2	Each party to a joint venture or consortium must individually complete and submit the SBD returnable schedules included in this bid document.
8.3	Bidders must return all returnable documents and schedules after completing them in their entirety, preferably electronically, or by writing legibly in non-erasable ink. The bid document must be submitted in its entirety.
<b>10.</b>	<b><u>Clarification of bidder's tender offer after submission</u></b>
10.1	Bidders may be required by SAIAB, to provide clarification or additional details of their tender offer during the bid evaluation or adjudication stages. This may include providing a breakdown of rates or prices, or correction of arithmetical errors by the adjustment of certain rates or item prices (or both).
10.2	No change in the competitive position of bidders or substance of the tender offer may be sought, offered, or

	permitted.
<b>11.</b>	<b><u>Two envelope system</u></b>
11.1	SAIAB utilises the two-envelope system to minimise any form of price bias in the technical evaluation phase.
11.2	All responses must be submitted in two electronic folders; the first folder shall contain the technical, and compliance response and the second shall contain only the pricing response.
11.3	Bidders must ensure that they do not include any pricing details in the first folder, as SAIAB reserves the right to disqualify such bids.
11.4	<p><b>Bidders are required to package their bid as follows:</b></p> <ul style="list-style-type: none"> <li>● <b>Folder 1: Compliance and Technical Response</b></li> <li>● <b>Folder 2: Pricing Response</b></li> </ul>
<b>12.</b>	<b><u>Central Supplier Database registration</u></b>
	Bidders must be registered on the National Treasury Central Supplier Database ('CSD') in order to be recommended for the award of this bid, and must provide their CSD supplier number in their bid submission.
<b>13.</b>	<b><u>Tax compliance status</u></b>
13.1	Bidders must ensure that their tax matters are in order. No award will be made to any bidder whose tax matters have not been declared to be in order by the South African Revenue Services (SARS).
13.2	Each party to a joint venture, consortium or partnership must comply with the above requirement.
13.3	The bid will be declared non-responsive in the event that the bidder's tax matters are shown not be in order, and the bidder fails to ensure that its tax matters are in order within such timeframe as may be granted by SAIAB in writing at time of award.
<b>14.</b>	<b><u>Invalid bids</u></b>
	Tenders shall be invalid if –
14.1	In a two-envelope system, a bidder fails to submit both a technical proposal and a separate financial offer.
14.2	The bidder has been listed on the National Treasury's Register for Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act, No. 12 of 2004, or has been listed on the National Treasury's List of Restricted Suppliers and who is therefore prohibited from doing business with the public sector.
14.3	The bidder has been restricted from doing business with any Organ of state.
<b>15.</b>	<b><u>Price negotiations prior to award</u></b>
15.1	The award of this bid may be subject to price negotiations with the preferred bidder or bidders, where there are opportunities for realising cost savings, or where bid prices are not market related.
15.2	SAIAB reserves the right to reject overpriced or under-priced bids outside the identified price range for the bid.
<b>16.</b>	<b><u>SAIAB's right to vary requirements at time of award</u></b>
	SAIAB reserves the right, at the time of making the award, to decrease the quantity of goods specified in the pricing schedule without any change to the unit price(s), or the terms and conditions of the bid, provided that the items to be decreased were specified in the bid document to be optional, or to be quoted on for indicative purposes.
<b>17.</b>	<b><u>Cancellation of the bid prior to award</u></b>
	SAIAB reserves the right to cancel this bid at any time before award, where -
17.1	Due to changed circumstances there is no longer a need for the services specified in this bid.

17.2	Funds are no longer available to cover the total envisaged expenditure for the project.
17.3	No bids meet the required specifications.
17.4	There is a material irregularity in the bid process.
<b>18.</b>	<b><u>Bid award</u></b>
18.1	The bid will be awarded after approval by the NRF's Delegated Authority, to the bidder with the highest combined score for Price and specific goals, unless other objective criteria, specified in the bid document, applies.
	Due diligence may be carried out on the recommended bidder, as such the recommended bidder are required to submit at least three client references from clients to whom similar services have been provided.
18.3	Reference letters must be completed in the template provided in this bid document or in the same format, and must indicate that expectations were met.
18.4	The award will be subject to final verification of the bidder's tax compliance status.
<b>19.</b>	<b><u>Collusion, fraud and corruption</u></b>
	Any effort by the bidder to influence evaluation, comparisons, or award decisions in any manner will result in the rejection and disqualification of the bidder concerned.
<b>20.</b>	<b><u>Fronting</u></b>
20.1	SAIAB supports Government's Broad-Based Black Economic Empowerment (B-BBEE) initiatives, recognising that real empowerment is achieved by individuals and businesses conducting themselves in accordance with the Constitution and in an honest, fair, equitable, transparent, and legally compliant manner. Therefore, SAIAB condemns any form of fronting.
20.2	SAIAB's evaluation committees may conduct or initiate investigations to determine the accuracy of bidders' B-BBEE representations.
20.3	Should SAIAB have reasonable grounds to suspect any form of fronting, the bidder in question will be notified and given 7 days from the date of notification to provide evidence refuting the finding of fronting.
20.4	Should the bidder be unable to refute the finding to the satisfaction of SAIAB, SAIAB reserves the right to reject the bid submitted by the bidder or cancel any contracts entered into with the bidder, and apply to National Treasury to restrict for the bidder to be restricted from conducting business with the public sector for a period not exceeding 10 years, and exercise any other remedies SAIAB may have against such a bidder.
<b>21.</b>	<b><u>Disclaimers</u></b>
	SAIAB has produced this document in good faith. The NRF, its agents, and its employees and associates do not warrant its accuracy or completeness; make no representation, warranty, assurance, guarantee or endorsements to any third parties concerning the document. SAIAB has no liability towards the bidders in connection therewith.
<b>22.</b>	<b><u>General definitions</u></b>
22.1	" <b>B-BBEE</b> " means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act.
22.2	" <b>B-BBEE status level of contributor</b> " means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act.
22.3	" <b>Bid</b> " means a written offer in a prescribed or stipulated form in response to an invitation by the National Research Foundation for the provision of goods or services, through price quotations, advertised competitive bidding processes or proposals.

22.4	<b>“Broad-Based Black Economic Empowerment Act”</b> means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003).
22.5	<b>“Contract”</b> means the entire bid document inclusive of scope of work, specification, price conditions, price quote table, service delivery conditions, performance conditions with their key performance indicators, and general conditions when attached to the Standard Bidding Document 7.1 (SBD 7.1) which has been signed by the awarded bidder and the National Research Foundations.
22.6	<b>“Construction Sector Code”</b> means the Amended Construction Sector Code provides a framework for the Construction Sector to address B-BBEE, enhance the capacity of black contractors, black professionals, industry workers and the community and to increase the productivity of the sector to meet world best practice, as issued by Government Gazette 41287, 1 December 2017.
22.6	<b>“EME”</b> means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act or relevant sector scorecard.
22.7	<b>“Functionality”</b> means the ability of a bidder to provide goods and/or services in accordance with specifications as set out in these bid documents.
22.8	<b>“Proof of B-BBEE status level of contributor”</b> means: <ul style="list-style-type: none"> <li>- B-BBEE Status level certificate issued by an authorized body or person;</li> <li>- A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;</li> <li>- Any other requirement prescribed by the B-BBEE Act.</li> </ul>
22.9	<b>“QSE”</b> means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act or relevant sector scorecard.
22.10	<b>“Equipment”</b> means the operational unit including spares, replacement components, consumables, sub-systems, firmware and software that delivers the specified output.
22.11	<b>“NRF”</b> means the National Research Foundation and it is used interchangeably with its business units managing the contract being SAIAB.



## PART E – RETURNABLE SCHEDULES

<b>INVITATION TO BID (SBD 1)</b>	
<b>Bid number</b>	NRF/SAIAB/43/2023-24
<b>Closing date and time</b>	Tuesday, 28 November 2023 at 11.00AM
The NRF recognises the date and time as recorded on its systems for closure purposes.	
<b>SUMMARY OF BID REQUIREMENTS</b>	
<b>Appointment of a qualified and experienced service provider/contractor to supply, install, integrate and commission the two (2) backup systems for the Main &amp; Collections Buildings and maintain for 36 month period.</b>	
<b>Bid submission method:</b>	<p>Electronic submissions must be sent to <a href="mailto:bids@saiab.nrf.ac.za">bids@saiab.nrf.ac.za</a>. Bids must be submitted in two separate electronic folders, one with the compliance and technical response, and the second with the financial response. Technical submissions must be in searchable PDF format.</p> <p>The financial response must be password protected. Folders must be titled with the bidder's company name and folder title. Attachments are limited to 25 MB per email.</p> <p>Bidders are to send an email to <a href="mailto:bids@saiab.nrf.ac.za">bids@saiab.nrf.ac.za</a> post submission with the password to their financial envelope. Receipt will be confirmed by SAIAB via email.</p>
<b>Compulsory briefing session:</b>	<p>A compulsory site briefing session will be held.</p> <p><b>Date:</b> 17 November 2023 at 14:00 AM</p> <p><b>Venue:</b> SAIAB building, Somerset street, Makhanda</p>
<b>Two envelope system</b>	Yes
<b>Bid validity period from date and time of closure</b>	Ninety (90) days
<b>SUPPLIER INFORMATION</b>	
<b>Name of Bidder</b>	
<b>Postal Address</b>	
<b>Street Address</b>	
<b>Telephone Number</b>	
Code	Number
<b>Cell Phone Number</b>	
Code	Number
<b>Facsimile Number</b>	

Code		Number											
<b>E-Mail Address</b>													
<b>VAT Registration Number</b>													
<b>Tax Compliance Status</b>	Tax Compliance System PIN	<b>OR</b>	Central Supplier Database No. MAAA										
<b>B-BBEE Status Level Verification Certificate</b>	Tick Applicable Box. <input type="checkbox"/> Yes <input type="checkbox"/> No	<b>B-BBEE Status Level Sworn Affidavit or CIPC Certificate</b>	Tick Applicable Box. <input type="checkbox"/> Yes <input type="checkbox"/> No										
<b>[A Construction Sector B-BBEE status level verification certificate/sworn affidavit (for EMEs &amp; QSEs) must be submitted in order to qualify for points for specific goals – also refer to the SBD 6.1]</b>													
<b>Are you the accredited representative in South Africa for the goods/services/works offered?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No [If yes enclose proof]	<b>Are you a foreign-based supplier for the goods/services/works offered?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No [If yes, answer the questionnaire below]										
<table border="1"> <tr> <td>Is the entity a resident of the Republic of South Africa (RSA)?</td> <td><input type="checkbox"/>Yes <input type="checkbox"/>No</td> </tr> <tr> <td>Does the entity have a branch in the RSA?</td> <td><input type="checkbox"/>Yes <input type="checkbox"/>No</td> </tr> <tr> <td>Does the entity have a permanent establishment in the RSA?</td> <td><input type="checkbox"/>Yes <input type="checkbox"/>No</td> </tr> <tr> <td>Does the entity have any source of income in the RSA?</td> <td><input type="checkbox"/>Yes <input type="checkbox"/>No</td> </tr> <tr> <td>Is the entity liable in the RSA for any form of taxation?</td> <td><input type="checkbox"/>Yes <input type="checkbox"/>No</td> </tr> </table>				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
Is the entity a resident of the Republic of South Africa (RSA)?	<input type="checkbox"/> Yes <input type="checkbox"/> No												
Does the entity have a branch in the RSA?	<input type="checkbox"/> Yes <input type="checkbox"/> No												
Does the entity have a permanent establishment in the RSA?	<input type="checkbox"/> Yes <input type="checkbox"/> No												
Does the entity have any source of income in the RSA?	<input type="checkbox"/> Yes <input type="checkbox"/> No												
Is the entity liable in the RSA for any form of taxation?	<input type="checkbox"/> Yes <input type="checkbox"/> No												
If the answer is "No" to all of the above, then it is not a requirement to register for a tax compliance status system pin code from the South African Revenue Service (SARS).													
<b>BID SUBMISSION</b>													
1.	Bids must be delivered by the stipulated time to the correct address. Late bid will not be accepted for consideration.												
2.	All bids must be submitted on the officially provided forms provided – (not to be re-typed) or in the manner prescribed in the bid document.												
3.	This bid is subject to the specifications and special conditions of contract pertaining to this bid, the Preferential Procurement Policy Framework Act, 2000, the General Conditions of Contract (GCC), and any other legislative requirements if applicable to this bid. These are included in this document thereby forming the contract between the NRF and the appointed/awarded bidder.												
4.	The successful bidder will be required to fill in and sign the contract signature form (SBD7) for this contract.												
5.	The specification will form part of the contract.												
<b>TAX COMPLIANCE REQUIREMENTS</b>													
1.	Bidders must ensure compliance with their tax obligations.												
2.	Where the bidder is registered on the Central Supplier Database (CSD), a CSD number must be provided												
3.	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. Application for tax compliance status (TCS) pin is made via e-filing through the SARS website <a href="http://www.sars.gov.za">www.sars.gov.za</a> .												
4.	Bidders may also submit a printed TCS certificate together with the bid, available via e-filing through the SARS website <a href="http://www.sars.gov.za">www.sars.gov.za</a> .												

5.	In bids where consortia/ joint ventures/ sub-contractors are involved; each party must submit a separate TCS certificate/PIN/CSD number.
6.	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.

## 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

<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.

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

2.2.1 If so, furnish particulars:

.....  
.....

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

2.3.1 If so, furnish particulars:

.....  
.....

### 3 DECLARATION

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

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

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

3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or 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.

.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices

<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.

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

# 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 The applicable preference point system for this tender is the 80/20 preference point system.

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 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. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

#### 3.1. POINTS AWARDED FOR PRICE

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

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

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

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

### 4. POINTS AWARDED FOR SPECIFIC GOALS

Table 1: Specific goals for the tender and points claimed are indicated per the table below and is based on B-BBEE Status Level of Contribution of the Bidder.

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

B-BBEE Status Level of Contribution	Number of points allocated (80/20 system) (between R2 000 and R50 000 000)	Number of points claimed (80/20 system) (To be completed by the tenderer)
1	20	
2	18	
3	14	
4	12	
5	8	
6	6	
7	4	
8	2	
Non compliant contributor	0	

### DECLARATION WITH REGARD TO COMPANY/FIRM

4.1. Name of company/firm.....



4.2. Company registration number: .....

4.3. TYPE OF COMPANY/ FIRM

<input type="checkbox"/> Partnership/Joint Venture / Consortium	<input type="checkbox"/> Personal Liability Company
<input type="checkbox"/> One-person business/sole propriety	<input type="checkbox"/> (Pty) Limited
<input type="checkbox"/> Close corporation	<input type="checkbox"/> Non-Profit Company
<input type="checkbox"/> Public Company	<input type="checkbox"/> State Owned Company

[TICK APPLICABLE BOX]

4.4. 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>	..... .....

## OPTIONAL REFERENCE LETTER FORMAT

**Referee Letterhead (Copy and paste this reference letter onto referee company letterhead). At a minimum bidders must provide the contact details of contactable references.**

<b><u>Referee Legal Name:</u></b>			
<b><u>REFERENCE ON COMPANY:</u></b>			
<b>Bid Number:</b>			
<b>Bid Description:</b>			
Describe the service/work the above bidder provide to you below			
Criteria / risks	Below requirements	Meets requirements	Exceeds requirements
Project performance/time management			
Quality of workmanship			
Quality of goods supplied			
Resources: Personnel			
Co-ordination with other services			
Occupational Health & Safety compliance			
Satisfaction with the work done			
Delivery scheduling			
Other comments			
Approximate value of contract			
Would you use the provider again?			<input type="checkbox"/> YES <input type="checkbox"/> NO

<b>Completed by:</b>	
<b>Signature:</b>	
<b>Company Name:</b>	
<b>Contact Telephone Number:</b>	
<b>Contact email address</b>	
<b>Date:</b>	

## BID SIGNATURE (SBD 1)

I, the bidder, warrant by signature herein, that –

- (i) I have read and accepted each page in this document including any annexures attached to this document.
- (ii) I undertake to supply all the goods, works, and services described in this bid invitation to SAIAB in accordance with the requirements and specifications stipulated herein, at the prices quoted.
- (iii) I confirm that I have satisfied myself as to the correctness and validity of my offer/bid in response to this invitation, covering all my obligations and I accept that any mistakes regarding price(s), rate(s), and calculations are at my own risk.
- (iv) My offer remains binding upon me and open for acceptance by NRF Corporate during the validity period indicated and calculated from the closing time of bid invitation.
- (v) Should the tender be awarded to me, I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me in terms of this document as the principal liable for the due fulfilment of the subsequent contract conditions.
- (vi) During the bidding period I did not have access to any proprietary information of SAIAB or the NRF, or any other matter that may have unfairly placed our bid in a preferential position in relation to any of the other bidder(s).
- (vii) I confirm that I am duly authorised to sign this offer/ bid response.

NB: Failure to provide / or comply with any of the above particulars may render the bid invalid.

Signature of bidder:

Capacity under which this bid is signed (Proof of authority must be submitted e.g. company resolution)

## ANNEXURE 1

### **SCHEDULE OF PRICING / BILL OF QUANTITIES**

Supply, delivery, installation, testing and commissioning of the following complete systems.

## ANNEXURE 2

### SCHEDULE OF PREVIOUS EXPERIENCE

The Tenderer shall state in the schedule below, the names of all Contracts of a similar/comparable nature with which he has been involved, and the nature of his involvement.

EMPLOYER NAME, CONTACT PERSON AND CONTACT NUMBER	NATURE OF WORK	VALUE OF WORK	YEAR COMPLETED

Signature

Date

Name

Position

## ANNEXURE 3

### STANDARD SPECIFICATIONS APPLYING TO THIS INSTALLATION

The works carried out under this contract shall be governed by the following Standard Specifications:

SANS 10142-1	The wiring of premises Part 1. Low Voltage Installation
NRS 097-2-1	Utility Interface
NRS 097-2-3	Simplified Connection Criteria
EN 50618	Electrical Cables for Photovoltaic Systems
SANS 10313	Lightning Protection of Buildings
SANS 10292	Earthing of LV systems
SANS 60439	LV Switch-boards
SANS IEC 60439	Low-Voltage Switch-gear and Control Gear
SANS IEC 62444	Cable Glands for Electrical Installations
SANS IEC 60044-1&60185	Current Transformers
SANS ISO 9001 & 14001	Quality Management
Sans 1901	National Colour standards
ACT85/1993	Occupational Health and Safety Act and Regulations
SANS IEC 61000	Electromagnetic Compatibility (EMC)
SANS IEC 62444	Cable Glands for Electrical Installations
IEC 60051	Indicating Instruments
SANS IEC 60529	Degree of Protection (IP Rating)

**The Standard Specifications are not bound in this document. Standard Specifications may be obtained from the offices of the Consulting Mechanical Engineers on request provided they are not subject to copyright. Standards or Codes such as SANS, ISO, DIN, BS, EN may be obtained from the offices of SANS**

# **TECHNICAL SPECIFICATION APPLYING TO THIS INSTALLATION**

## **1 GENERAL**

The standard specifications apply unless otherwise indicated in this section.

The drawings issued herewith and listed in the relevant section are to be read in conjunction with the specification and all items mentioned, together with all ancillary equipment necessary for the correct installation, operation and full compliance with the Standards and Codes must be provided, notwithstanding the fact that they may not have been included in detail in these documents.

The Tenderer shall, at the time of tendering, draw the Engineer's attention to any omissions or discrepancy between the specification and the drawings and request from him clarification of details or responsibilities.

If a limited allowance or special conditions are made in the Tender Sum for the supply or erection of any item of the installation, the limit or special conditions shall be defined at the time of tendering.

It is the sole responsibility of the tenderer to ensure that all quotations obtained from manufacturers and suppliers are complete in their entirety and must include all equipment and accessories necessary for compliance with this specification, current practice and the efficient and proper functioning of the installation.

If any such items of equipment, brackets and accessories, etc., have been omitted from a supplier's quotation, or incidental work is necessary, the Contractor must include for all such items and work in the tender.

The Contractor shall complete the installation within the time stipulated.

The sequence in which the work is to be carried out shall be decided upon in consultation with the Engineer and the Contractor. The Contractor shall thereafter submit a detailed installation programme for approval within two (2) weeks of the contract being awarded unless otherwise indicated herein after. Submission of an outline programme is required in terms of the tender submission requirements as detailed hereafter.

The detailed programme must be updated weekly as the work progresses and as may be necessary to meet changing site conditions and alterations to the overall installation programme.

Programmes shall take the form of bar charts, network diagrams and schedules as may be required by the Engineer or Contractor or as applicable, and shall reflect quantities of work as required for supervision purposes and measurements.

As a minimum the detailed programme shall reflect:

- sequence and timing of installation activities
- sequence and latest event times of major equipment ordering, manufacture and delivery dates
- sequence and dates for the submission of drawings and samples for approval
- sequence and dates for site inspections and tests
- target and achieved work quantities on a weekly, fortnightly and monthly basis

## 2 HEALTH & SAFETY

The Electrical Contractor shall adhere to the provisions of the Occupations Health and Safety Act, 1993 (Act No 85 of 1993), as amended, and including the Construction Regulations (2014), as amended, forming part thereof.

Annexure 6 of this document contains the NRF/SAIAB Health & Safety Specification. The Electrical Contractor shall adhere to all aspects of this specification.

The following shall be noted in particular:

- The Collections Building incorporates hazardous areas (Level 1).
- Work shall generally be restricted to the solar equipment room, generator area, Main LV DB's in the Main and Collections Buildings, as well as the Main Building roof top.
- Scissor lift operation for roof access and equipment installation
- Where access to other areas is required, permission shall be arranged and all safety measures adhered to.
- NO SMOKING IS ALLOWED ON SITE.

## 3 DESIGN CONDITIONS

<u>Location:</u>	Makhanda, Eastern Cape
<u>Altitude:</u>	580 m above mean sea level
<u>Ambient Temperature Extremes:</u>	Maximum 44.8 deg C - Minimum 2.2 deg C

## 4 SCOPE OF WORK

The Scope of Works for the solar installations shall include the entirety of the components, equipment, work & systems required, notwithstanding that they may not be described in detail or their entirety below. The installations shall include, but not be limited to the items listed below. The Contractor must carry out all works necessary for the full and functional,



reliable and safe operation of the complete Solar and Battery Backup installations including cable reticulation and tie-in to the Main Low Voltage Distribution Boards (MLVP).

The two (2) systems are sized at 100kW each, but shall be scalable to 400kW, should the clients need and budget allow.

#### Main Building System Overview

48,4 KW PV generating plant as per the specification hereunder, with 50kW 3 phase High Voltage True Hybrid inverter(s) and 240kWh Lithium Iron Phosphate (LiFePO4) battery storage, with the ability to be expanded and include an additional 22kWp of PV solar panels for a combined PV output of 68.4kWp.

#### Collections Building System Overview

A battery backup system as per the specification hereunder, with 50kW 3 phase High Voltage True Hybrid inverter(s) and 240kWh Lithium Iron Phosphate (LiFePO4) battery storage.

#### 4.1 MLVP Main Building

- Supply & install 200A TP MCCB in MLVP fed from the normal supply. Rework to the existing DB required.
- Supply & install Voltage indicators
- Colour coding of Distribution board face plates and or safety/warning labels, as per SANS 10141-2
- Supply and installation of Metal enclosure to house Inverter Current Transformers (CT)
- Supply and install 70mm<sup>2</sup> 4C ECC cable terminated to 200A TP breaker feeding the AC Inverter DB
- Supply and install cable ladder between main building and equipment building to reticulate 70mm<sup>2</sup> 4C cable
- Bonding of panels structures and trunking

#### 4.2 Main Building Roof Top

- Supply and install pitched panel mounting structures fixed to concrete ballasts
- Supply and install solar panels to structures with mid and end clamps
- Supply and install 200mm return flange galvanized cable tray (with cover) for solar cable fixed to concrete ballasts
- Supply and install 200mm return flange galvanized cable tray (with cover) for solar cable fixed to face brick column
- Supply and install 6mm<sup>2</sup> Red & Black solar cable from solar arrays to inverter/s
- Supply and install DC Array Junction Box
- Bonding of panels structures and trunking

#### 4.3 Equipment Room

- Supply and install 50kW inverters for both the Main (2) and Collections Building (2)
- Supply and install 25mm<sup>2</sup> 4C ECC cable terminated to 100A TP CB feeding Inverter No. 1 & 2
- Supply and install batteries, racks, cabling & connectors
- Supply and install 300mm wire mesh tray mounted to P2000 to run DC cabling
- Supply and install 300mm cable ladder mounted to P2000 to run AC cabling

- Supply and install DC distribution box (DCDB)
- Supply and install AC Inverter Distribution Board
- Supply and install 100mm cable tray linking inverter to battery rack mounted to P2000

#### 4.4 MLVP Collections Building

- Supply & install 200A TP MCCB in MLVP fed from the normal supply. Rework to the existing DB required.
- Supply & install Voltage indicators
- Colour coding of Distribution board face plates and or safety/warning labels, as per SANS 10141-2
- Supply and installation of Metal enclosure to house Inverter Current Transformers (CT)
- Supply and install 70mm<sup>2</sup> 4C ECC cable terminated to 200A TP breaker feeding the AC Inverter DB
- Bonding of panels structures and trunking

#### 4.5 Complete Installation

- The electrical supply will be 400/231 volts, 3 phase, 4 wire, 50 Hertz and all equipment supplied under this contract shall be suitable for this supply.
- The Testing and Commissioning of the Solar and LV installations and Protection systems as per this Specification and Drawings
- Provide Certificate of Compliance for all the distribution boards
- Fully label all Distribution Boards and install typed, laminated legend cards
- Label all wiring and cabling in accordance with SANS 10142
- Provision of all O&M Manuals and As Built drawings

## 5 DRAWINGS

Drawing numbers as listed and included in this tender document are to be read in conjunction with this specification.

## 6 SOLAR ARRAY

### 6.1 Main Building Rooftop

The contractor shall price for full compensation for the supply, installation, erection and acceptance of module mounting structure (MMS) with all necessary accessories, auxiliaries and spare part, deemed to form part of the scope of works.

A 48kW PV generating plant consisting of Forty (40) NE facing and Forty-Eight (48) NW facing, 550W (min) Tier 1 solar panels will be installed to the existing flat concrete roof. The solar panels will be mounted to modular pitched structures comprising of, top and bottom profile rails (40x40mm), 1800mm Long uprights, 20° Short uprights, concrete ballasts with

stud bolt and secured with proprietary brackets, bolts, nuts, washers, etc., as per drawing number E2310\_NRF\_102 & No. E2310\_NRF\_103

Only ballast supporting structures will be accepted, as **No penetrations to the roof waterproofing will be permitted!** Failure to adhere to this instruction will void the waterproofing warranty and all costs necessary to reinstate this will be for the contractor's account.

Components making up the structural array's weight and material content covering a total of are tabled below:

<b>Solar Panel Mounting Structure</b>				
<i>Description</i>	<i>Material</i>	<i>Weight (kg)</i>	<i>Quantity</i>	<i>Total Weight (kg)</i>
Black Top & Bottom Slot Profile- 40 x 40 x 6.6 Meter	Aluminium	4,989	32	159,65
Flat Plate Joiner	Aluminium Alloy 6063	0,043	56	2,41
Single Upright configuration for mounting /tilting PV systems with module inclination, ranging from 10° to 45°	Aluminium Extruded	1,251	74	92,57
Concrete Ballast	Concrete	35	610	21350,00
Mid Clamp	Aluminium Alloy 6063	0,012	168	2,02
End clamp Z-Shaped 30mm	Aluminium Alloy 6063	0,026	16	0,42
L-Bracket Standard 40 x 60 x 5mm	Aluminium Alloy 6063	0,035	500	17,50
*Excludes Nuts, Bolts, flat washers, spring washers, etc				
			<b>kg</b>	<b>21624,56</b>
			<b>Tonnes</b>	<b>21,62</b>

## 6.2 Collections Building Rooftop

No solar panels will be installed on the Collection Building system.

## 7 SOLAR CABLE & TRUNKING

DC Solar Cables are to be 1 x 6mm<sup>2</sup> multistrand tinned copper conductors with core insulation and sheath. Cables are to have a nominal voltage of 1,5kV with a max permissible voltage of 1.8kV and a permissible operating temperature of +120°C.

Cables are to reticulate in and be secured to a 200mm wide return flange cable tray (with cover) mounted to P2000, using cable ties and securing the cable at intervals of 500mm. All cable trunking and accessories shall be galvanized and be properly supported at intervals of at least 1500 mm.

The Contractor shall take cognizance of any changes in levels in the trunking route and parapet walls. All trunking shall be continuous throughout the full length of the run.

## **8 EQUIPMENT ROOM**

The equipment room will house the inverters and battery racks, as shown on drawing No. E2310\_NRF\_100

No equipment shall be installed within 1000mm from the back wall to allow space for protection DBs. The inverters shall be mounted at 955mm AFFL to the underside of inverter and spaced 500mm apart. The battery racks will be positioned off centre of the room and link to the inverter via wire mesh cable tray mounted to the wall with P2000 or suspended from the roof trusses with threaded rods, supported by P2000 trunking.

A 300mm wide cable ladder mounted to P2000 shall be installed +/- 300mm above finished floor level (AFFL) to allow for reticulation of AC cabling.

A 300mm wide wire mesh trunking mounted to P2000 shall be installed +/- 600mm above finished floor level (AFFL) to allow for reticulation of DC Solar and battery cables. Solar cables and battery cables are to be kept apart and installed on the outside of the wire mesh cable tray and move towards the centre.

## **9 MLVP MAIN BUILDING**

A 200A triple pole (TP) moulded case circuit breaker will be supplied and installed in the existing MLVP. The contractor is to allow for reworking of the panel to accommodate the new frame and circuit breaker, including connection jumpers and lugs to terminate to the busbars.

A 70mm<sup>2</sup> x 4 Core (Cu) Armoured ECC cable will provide non-Essential power to the Inverter DB and be protected by a 200A TP CB installed as above. A separate 70mm<sup>2</sup> x 4 Core (Cu) Armoured ECC cable will provide Essential power to the Main LV Panel DB.

Both mains cables will be installed in the riser duct and run on a cable ladder clamped to wall mounted L- brackets, installed between the Main Building to the Equipment room.

## **10 MLVP COLLECTIONS BUILDING**

A 200A triple pole (TP) moulded case circuit breaker will be supplied and installed in the existing MLVP. The contractor is to allow for reworking of the panel to accommodate the new frame and circuit breaker, including connection jumpers and lugs to terminate to the busbars.

A 70mm<sup>2</sup> x 4 Core (Cu) Armoured ECC cable will provide non-Essential power to the Inverter DB and be protected by a 200A TP CB installed as above. A separate 70mm<sup>2</sup> x 4 Core (Cu) Armoured ECC cable will provide Essential power to

the Essential DB. The cables will be installed in the riser duct, on cable ladder and in sleeves linking the Collections building to the Equipment room.

## 11 PRINCIPLES OF OPERATION

### 11.1 Main Building

The Solar PV System shall be utilised to provide power during grid failure or load shedding, with the priority source being the PV array and battery pack. Should insufficient power be generated from the PV array, power shall be sourced from the battery pack to power the building needs. In the event that the battery reserve charge has fallen below the 20-30% threshold, then the system should allow for the generator set to start up automatically and provide power to both the batteries and the facility.

### 11.2 Collections Building

The Backup Power System shall be utilised to provide power during grid failure or load shedding. Power shall be sourced from the battery pack to power the building needs. Should the battery power fall below the 20% threshold, then the system should allow for the generator set to start up automatically and provide power to both the batteries and the facility.

## 12 INVERTER SPECIFICATION

The inverter/s selected should be of the True Hybrid Nature and comply with the following specifications:

Model	50kW Inverter
<b>Battery Input Data</b>	
Battery Type	Lead-acid or Lithium-ion
Battery Voltage Range	200~600V
Max. Charging Current	37A+37A
Max. Discharging Current	37A+37A
Charging Curve	3 Stages/Equalization
Charging Strategy for Li-Ion Battery	Self-adaption to BMS
<b>PV String Input Data</b>	
Max. DC Input Power	65000W
PV Input Voltage	1000V
Start-up Voltage	160V
MPPT Range	200-850V
Full Load DC Voltage Range	450-850V
Rated DC Input Voltage	625V
PV Input Current	36A+36A+36A+36A
Max PV Isc	50A+50A+50A+50A
No. of MPPT Trackers	4
No. of Strings Per MPPT Tracker	2+2+2+2
<b>AC Output Data</b>	
Rated AC Output and UPS Power	50000W
Max. AC Power	55000W
AC Output Rated Current	75.8A

Max AC Output Current	83.3A
Max Continuous AC Passthrough	100A
Power Factor	0.8 leading to 0.8 lagging
Output Frequency and Voltage	50-60Hz; 3L/N/PE 220/380Vac; 230/400Vac
Grid Type	Three Phase
DC Injection Current (mA)	<0.5%1n
<b>Efficiency</b>	
Max. Efficiency	97,60%
MPPT Efficiency	97,00%
Euro Efficiency	99,90%
<b>Protection</b>	
PV Input Lightning Protection	Integrated
Anti-islanding Protection	Integrated
PV String Input Reverse Polarity Protection	Integrated
Insulation Resistor Detection	Integrated
Residual Current Monitoring Unit	Integrated
Output Over Current Protection	Integrated
Output Shorted Protection	Integrated
Output Over Voltage Protection	Integrated
Surge Protection	DC Type II / AC Type II
<b>General Data</b>	
Operating Temperature Range	-25~60°C, >45°C Derating
Cooling	Smart Cooling
Noise	<45dB
Communication with BMS	RS485; CAN
Weight	44.5kg
Size	647.5W × 537H × 303.5D
Protection Degree	IP65
Installation Type	Wall-Mounted
Warranty	10 Years

### 13 BATTERY PACK SPECIFICATION

Lithium Iron Phosphate (LiFePO4) batteries of appropriate capacity with complete battery management system should be used, which conform to the following specification:

Technical data	
Cell Chemistry	LiFePO4

Module Energy(kWh)	5.12
Module Nominal Voltage (Vdc)	51.2
Module Capacity (Ah)	100
Battery Module Dimensions (W/D/H)	440*570*133mm
Battery Module Weight (kg)	44
System Nominal Voltage (Vdc)	614.4
System Operating Voltage (Vdc)	538- 691
System Energy (kWh)	61.44
System Usable Energy (kWh)	55.29
Charge/ Discharge Current	
Recommended (A)	50
Max	100
Peak (2 mins, 25°C)	125
Miscellaneous	
Working Temperature (°C)	Charge: 0-50 Discharge: -20-55
Status Indicator	
Communication Port	CAN2.0/RS485
Humidity	5-85% RH
Altitude	≤2000m
IP Rating of Enclosure	IP20
Dimensions (W/D/H, mm)	580 x 590 x 2200
Weight Approximate (kg)	628
Installation location	Rack Mounting

Storage temperature (°C)	0-35
Recommended depth of discharge	90%
Cycle Life	25±2°C,0.5C/0.5C, EOL70%≥6000
Warranty	10 years
Certification	CE/IEC62619 UL1973 UL9540A UN38.3

The battery rack shall be controlled by a battery control box adhering to the following specifications:

Technical Data	
Operating Voltage (Vdc)	120 - 750
Nominal Charge/Discharge Current	100
Max Charge/Discharge Current (A)	125
DC Input rating	12±2%V/4.15A
Operating Temperature Range	-20 to 55°C
Ingress Protection	IP20
Dimension (W/D/H)	440 x 565 x 150 mm
Weight Approximate	15.5kg

## 14 SOLAR PANEL SPECIFICATION

The PV modules chosen must qualify to the latest edition of IEC standards IEC 61215, IEC 61853-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

The PV cells shall have a 25-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.



PV module warranty; 12-year product warranty & 25-year linear power output warranty, with 0.55% annual degradation over 25 years

Solar panels of appropriate capacity, which conform to the following minimum specification shall be used:

Specifications	
Cell type	Mono crystalline
Weight	28.6kg±3%
Dimensions (mm)	2279±2 x 1134±2 x 35±1
Cable Cross Section Size	4mm <sup>2</sup> (IEC), 12 AWG (UL)
No. of Cells	144 (6 x 24)
Junction Box	IP68, 3 diodes
Connector	QC4.10 (1000V), QC 4.10-35 (1500V)
Cable length (Including connector)	Portrait 300mm(+)/400mm(-) Landscape 1300mm(+)/1300mm(-)
Electrical Parameters at STC	
Rated maximum Power (Pmax) .	550W
Open circuit Voltage (Voc)	49.90V
Max Power Voltage (Vmp)	41.96V
Short Circuit Current (Isc)	14.00A
Max Power Current (Imp)	13.11A
Module Efficiency	21,3%
Power Tolerance	0 -+5W
Temperature Coefficient of Isc( $\alpha_{Isc}$ )	+0.045%/°C
Temperature Coefficient of Voc( $\beta_{Voc}$ )	-0.275%/°C
Temperature Coefficient of Pmax( $\gamma_{Pmp}$ )_	-0.350%/°C
STC (Standard Test Conditions)	Irradiance 1000W/m <sup>2</sup> , cell temperature 25°C, AM1.5G
Operating Conditions	
Maximum System Voltage	1000V/1500V DC
Operating temperature	-40°C to +85°C
Maximum Series Fuse Rating	25A
Maximum Static Load, Front	3600Pa, 1.5
Maximum Static Load, Back	1600Pa, 1.5
NOCT (Nominal Operating Cell Temperature)	45±2°C
Electrical parameters at NOCT	
Rated maximum Power (Pmax) .	416 W
Open circuit Voltage (Voc)	46.68V
Max Power Voltage (Vmp)	39.43V
Short Circuit Current (Isc)	11.17A
Max Power Current (Imp)	10.55A
NOCT	Irradiance 800W/m <sup>2</sup> , ambient temperature 20°C, Wind speed 1m/s, AM1.5G

## 15 OPERATING AND MAINTENANCE MANUALS

### 15.1 General

**Three** hard copies (and a flash drive containing PDF files of all documents) of the manuals described in this section shall be handed over as part of the final handover procedures. As far as possible all documents shall be the original issued by suppliers etc. Three (3) paper copies of all as built drawings shall be included. Each volume shall be separately bound and clearly labelled.

### 15.2 Manual Content

SECTION	DETAILS TO BE INCLUDED
Solar PV System	Complete description of the Solar PV system.
Battery Backup System	Complete description of the Battery Backup system.
Guarantee / Warrantee	Summary schedule of guarantee/warrantees comprising description, start date, duration and completion dates.
Guarantee / Warrantee	All guarantee and/or warrantee certificates
Suppliers Literature	Original copies of supplies literature / catalogues
Operating Manuals	Complete system operating Manual
Maintenance (36 Month)	Complete maintenance schedule for 36 months
Commissioning Data	All commissioning data and test certificates
Spare Parts	Schedule of recommended spare parts and schedule of suppliers
As Built Drawings	

## ANNEXURE 4

### SCHEDULE OF EQUIPMENT OFFERED

- NOTE:
1. This Schedule must be completed for all items offered. Failure to comply with this requirement may render the Tender invalid.
  2. Information in amplification of that given below may be submitted in the form of a covering letter, published literature, etc.
  3. Acceptance of a tender, with this schedule complete, does not relieve the Tenderer of the responsibility of complying with the Specification for the items listed.

<b>MATERIAL SCHEDULE</b>		
<i>Description</i>	<i>Manufacturer</i>	<i>Model</i>
Solar PV Module Solar panel mounting structure and ballast system Solar DC Cable MC4 Connectors (Male & Female) 32A SP Cartridge Type Fuse Holders 16A SP Cartridge Type Fuse DP 1500V DC SPD Type 1 + 2 50kW Hybrid Inverter 61kWh HV Lithium Battery Rack 200A TP MCCB with Trip setting characteristics 100A TP MCCB with Trip setting characteristics 70mm <sup>2</sup> 4C ECC cable 70mm <sup>2</sup> 4C ECC cable terminations 25mm <sup>2</sup> 4C ECC cable 25mm <sup>2</sup> 4C ECC cable terminations 250A Frame Size; Fuse Switch Disconnecter 2 Pole for 200-250A Fuses 200A NH1 Blade Fuse 200A 1500V HV Battery Cable Battery Connectors		

NAME OF TENDERER: \_\_\_\_\_

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

SIGNATURE: \_\_\_\_\_

(for the Tenderer)

## ANNEXURE 5

The following Engineers Drawings are attached to this Document and are applicable to this installation.  
(See attached PDF of the drawing)

<b><u>Drawing No</u></b>	<b><u>Title</u></b>
E2310_NRF_100	Solar Equipment Room Layout Phase 1
E2310_NRF_101	Solar Equipment Room Elevations Phase 1
E2310_NRF_102	Solar Panel & Mounting Structure Layouts
E2310_NRF_103	Solar Array Layout
E2310_NRF_200	Main Building Solar System Schematic
E2310_NRF_201	Collections Building Backup System Schematic
E2310_NRF_202	Main Building AC Inverter Distribution Board Schematic
E2310_NRF_203	Collections Building AC Inverter Distribution Board Schematic

# ANNEXURE 6

## NRF/SAIAB HEALTH & SAFETY SPECIFICATION AND OCCUPATIONAL HEALTH AND SAFETY ACT 37(2) MANDATORY AGREEMENT

**Special Conditions and Protocols to be complied with as part of the Contract with SAIAB. These conditions are subject to the Terms and Conditions of the GCC.**

### 1. PURPOSE

1.1 The purpose of this document is to:

1.1.1 Outline the NRF/SAIAB Health and Safety Specifications and establish an Agreement between the Mandatory and the Client, that being NRF/SAIAB, for a stipulated contract or agreement period for the delivery of services and / or goods.

1.1.2 Ensure effective communication of the requirements for the safe work practices to contractor under contract and subcontract to NRF/SAIAB.

1.1.3 Ensure better co-ordination and management of Contractors at NRF/SAIAB.

1.1.4 Provide guidance of the minimum requirements for the safe systems of work and practices for contractors.

1.1.5 Ensure and clarify NRF/SAIAB personnel's different roles and responsibilities with regard to Contractor management.

### 2. DEFINITIONS

2.1 **Mandatory / Mandatories:** Shall refer to Contractors, Sub-Contractors, Agents and their employees.

2.2 **OHSA:** Occupational Health and Safety Act, no. 85 of 1993.

2.3 **CLIENT:** National Research Foundation (NRF), acting through its National Facility, South African Institute for Aquatic Biodiversity(SAIAB).

2.4 **COIDA:** Compensation for Occupational Injuries and Disease Act, no. 130 of 1993

2.5 **CONTRACT:** The contracting agreement which governs the deliverables of goods and services between the Client and the Mandatory.

2.6 **SHER Department:** Safety, Health, Environmental and Risk Department.

2.7 **Zone 1:** An area in which an explosive gas atmosphere is likely to occur in normal operation

2.8 **GNR:** Government Notice Regulations

2.9 **PPE:** Personal Protective Equipment

2.10 **Noise Zone:** any work area where noise levels exceed 85 dB(A) in accordance with the OHSA, Noise-Induced Hearing Loss Regulations, GNR 307 of 7 March 2003

2.11 **HIRA:** Hazard Identification and Risk Assessment

2.12 **HCA:** Hazardous Chemical Agent

### 3. **ROLES AND RESPONSIBILITIES**

3.1 It is the responsibility of SHER to periodically review the system and the procedure.

3.2 It is the responsibility of each person employing / appointing / controlling Contractors to comply with this procedure.

3.3 It is the responsibility of the NRF/SAIAB SCM / Project manager / Bid committee to ensure that orders are only placed with Contracting Companies who:

3.3.1 Have a satisfactory safety performance history and Complies with the OHSA.

3.3.2 Have the necessary skills and expertise to carry out the work.

3.4 It is the responsibility of the NRF/SAIAB Project manager to clearly define the scope of work to be done.

3.5 It is the responsibility of the SHER /Project manager to:

3.5.1 Ensure the Safety file and all the relevant documentation is received and checked

3.5.2 Ensure the Contractor and the Contractor's employees have all received safety induction.

3.5.2 Ensure validity of COID registration and Letter of Good standing

3.5.3 Issue the Contractor with the Contractor Work Permit and ensure all other relevant permits to work are issued before work commences.

3.5.4 Inform the Contractor of hazards likely to affect the health and safety of the Contractor's employees.

3.5.5 Ensure the Contractor and sub-Contractors comply with this agreement.

3.5.6 Do frequent visual inspections/Audits on-site to ensure compliance.

3.5.7 Oversee the wearing of applicable PPE at all times whilst contractors are performing activities at SAIAB' premise.

3.6 It is the responsibility of the Mandatory:

3.6.1 Ensuring PPE is provided to contracted employees as identified in the Risk Assessment or method statement

3.6.2 Ensure this procedure are complied with by all his/her employees

3.6.3 Ensure they have the necessary competencies and resources to carry out the work safely and all employees are trained, competent and legally appointed

3.6.4 Ensure fall protection plan when working at heights are in place.

3.6.5 Ensure WI's are available for High-risk work before commencing work.

- 3.6.6 Ensure method statements is available in accordance to the scope of work.
- 3.6.7 Ensure a risk assessments (HIRA's) is conducted for all tasks
- 3.6.8 Ensure the list of Hazardous chemical agent and copies of SDS of HCA's to be used during the contract, are handed in to SHER for review.
- 3.6.9 Ensure tools and equipment are in good condition and safe to use (where required, on registers e.g. PPE, ladders, scaffolding etc.).
- 3.6.10 Ensure licenses and permits are available when required.

#### 4. **OHSA 37(2) AGREEMENT**

- 4.1 In terms of this Agreement, the Mandatary shall familiarize him / herself with the working Environment and Premises and that he / she agrees to the Arrangements and Procedures, as prescribed by the NRF/SAIAB, and as prescribed in terms of Section 37(2) of the OHSA, for the purpose of compliance with the OHSA.
- 4.2. The Mandatary acknowledges that this Agreement constitutes an agreement in terms of Section 37(2) of the OHSA, whereby all responsibility for health and safety matters relating to the work that the Mandatary and its Employees are to perform on the NRF/SAIAB Premises shall be the obligation of the Mandatary.
- 4.3. The Mandatary further warrants that he and/or the Employees undertake to maintain all necessary compliance with the OHSA. Without derogating from the generality of the above, nor from the provisions of this Agreement, the Mandatary shall ensure that the clauses as hereunder described are at all times strictly adhered to by himself and the Employees.
- 4.4. The Mandatary therefore undertakes to ensure that the health and safety of any person on the Premises is not endangered by the conduct and / or activities of the Employees whilst they are on the NRF/SAIAB Premises.
- 4.5 The Mandatary shall be deemed to be an employer in his own right whilst on the NRF/SAIAB Premises. In terms of Section 16(1) of the OHSA, the Mandatary shall ensure that the requirements of the OHSA are complied with by him / herself and/or his/her Chief Executive Officer.

#### 5. **STATUTORY AND NRF/SAIAB REQUIREMENTS**

- 5.1 All Mandatories working within the premises of SAIAB, shall comply with the Regulations of the Occupational Health and Safety Act, No. 85 of 1993 and all other SAIAB requirements.
- 5.2 All Mandatories shall comply with conditions of the Compensation for Occupational injuries and Disease Act, No. 130 of 1993. All Mandatories shall be required to provide a letter of good standing with the Compensation Commission and shall be required to complete the attached form in this document as stated under **Appendices 01**.
- 5.3 All Mandatories shall be required to review, complete and agree to the terms stated in this Agreement before finalization of any contractual agreement between the Mandatary and NRF/SAIAB.

#### 6. **GENERAL REQUIREMENTS**

- 6.1 Where reasonably practicable, a Mandatary shall be required to provide a Safety File with all relevant project and safety information pertaining to the contracted works / project in terms of the OHSA and its relevant Regulations.
- 6.2 Where Sub-Contractors are in use, the Primary Contractor shall also ensure that all Sub-Contractors under their management provide a Safety File / Safety Plan in relation to the works they shall conduct.

- 6.3 A copy of this safety file / plan will be kept with the Mandatory at all times and will be updated throughout the course of the project. The Safety File shall be available at all times for auditing by the NRF/SAIAB Project Manager, SHER Department and any Department of Labour Inspectorate.
- 6.4 All Safety Files / Safety Plans shall, as a minimum requirement, be in line with guideline as stated in this document under **Appendices 02**.
- 6.5 The SAIAB Project Manager, SHER Department and other affected Departments must authorize any work/s which could affect or interfere with any SAIAB activities. This shall be done via the issuing of an NRF/SAIAB **General Works Permit** to all Mandatories.
- 6.6 Mandatories and subcontractors shall be required to attend SHER Induction Training which will be conducted by the NRF/SAIAB SHER Team before commencement of any work.
- 6.7 Mandatories shall stay confined to their area/s of work. Any required deviation must be discussed with the NRF/SAIAB Project Manager and the SHER Department.
- 6.8 A Mandatory shall provide reasonable notification to the NRF/SAIAB Project Manager of any intention to deviate from specified work areas / work plans or requirements to enter into any areas related to the project being performed. The time periods for notification shall be agreed upon between the Mandatory and the NRF/SAIAB Project team members.
- 6.9 The NRF/SAIAB Project Team Members and the SHER Department reserve the right to conduct site inspections at any reasonable time it sees fit to ensure compliance with Contract and Safety requirements. The Mandatory is required to be available and assist during all site inspections.
- 6.10 As per Construction Regulations requirements, Section 7 (1e), Mandatories shall be required to hand over a consolidated version of the Safety File the NRF/SAIAB Project Manager upon completion and sign off contracted works.

## 7. **SITE ESTABLISHMENT AND SAFETY SIGNAGE**

- 7.1 Mandatories will be allowed to establish a work site at the NRF/SAIAB Facility only if provisions are agreed upon.
- 7.2 These areas shall be marked with appropriate signage by the Mandatory.

## 8. **CONSTRUCTION WORKS**

- 8.1 In the case where Construction Work will take place, all Mandatories shall comply with the requirements as stated in the Construction Regulations, GNR 84 of 7 February 2014 in the Occupational Health and Safety Act, No. 85 of 1993.
- 8.2 Mandatories shall be required to submit a detailed Safety File / works plan which will include all Safety programs, Risk Assessments, Legal appointments, equipment and tools lists, Personnel information and details and other relevant project requirements as per Construction Regulations noted in 8.1.
- 8.3 NRF/SAIAB reserves the right to employ the services of a Professional Agent or any other Professional appointment in terms of the Project and Construction Management Professions Act, No. 48 of 2000 and the Construction Regulations, GNR 84 of 2014.

## 9. **PERSONAL PROTECTIVE EQUIPMENT**



- 9.1 All Mandatories shall be equipped with the minimum Personal Protective Equipment (PPE) when conducting work at the SAIAB site:
- 9.2 The Mandatory and/or their appointed representative is responsible for provision of the necessary protective equipment, the training of their employees in the proper use of the equipment and to ensure, where applicable, the equipment is used in its proper context.
- 9.3 The Mandatory shall ensure that all PPE damaged during the course of the employee's duties shall be replaced within 2 hours. The employee shall then be allowed to continue with that operation for which the PPE was required.

## 10. **TOOLS AND EQUIPMENT**

- 10.1 Mandatories shall submit a list of all **safe portable electrical** tools and equipment to the Project Manager and SHER Department as part of their safety file submission.
- 10.2 Makeshift or unsafe equipment shall not be permitted on the premises and will be confiscated / be removed for the duration of the contract.
- 10.3 Mandatories must conduct daily inspections of all tools and equipment in their possession and use and provide an inspection report to that effect as part of their safety file for auditing purposes. NRF/SAIAB Project Manager and SHER Department reserve the right to audit such a document against the equipment listed and in use as and when reasonably required.

## 11. **TRANSPORT**

- 11.1 Mandatories shall ensure that all vehicles in use by them and brought onto the SAIAB premises shall be in a roadworthy condition, licensed and insured. All drivers of such vehicles will have the required license and no vehicle shall be used for passenger conveyance unless it is designed for this purpose.

## 12. **HAZARDOUS LOCATION (ZONE 1) AND PRECAUTIONS AGAINST FIRES**

- 12.1 All Mandatories shall take all necessary precautions to eliminate all fire hazards and to prevent fire damage.
- 12.2 Proper demarcation of the work area will be done using safe material to prevent excess temperature, arcs and sparks that can ignite.
- 12.3 All Mandatories shall ensure that his employees do not smoke anywhere on the premises.
- 12.4 All fires shall immediately be reported to the NRF/SAIAB Project Manager and the SHER Department.
- 12.5 Any hazardous chemicals / substances / materials brought on site by the Mandatory must always be accompanied by **Material Safety Data Sheets**.

## 13. **INTOXICATION AND ILLNESS**

- 13.1 No intoxicating substance of any form shall be allowed on the NRF/SAIAB Premises. Any person suspected of being intoxicated shall not be allowed on the premises.
- 13.2 Any person required to take medication, which may affect sobriety, shall notify the relevant responsible person thereof, as well as the potential side effects of the medication.
- 13.3 The Mandatory shall ensure that none of his/her employees report to the site while ill to such a degree where their own Health, Safety and wellbeing is jeopardized and where risk to other personnel may also exist.

14. **FIRST-AID**

- 14.1 The Mandatory will be required to have their own First-Aider/s appointed for the duration of the project. These First-Aiders must be in possession of a valid First-Aid Certificate.
- 14.2 The Mandatory must have a first-aid box in their possession at all times that is compliant with the General Safety Regulations, no. 3 and its relevant annexure.

15. **HOUSEKEEPING AND WASTE MANAGEMENT**

- 15.1 The Mandatory shall uphold high standards of housekeeping throughout the course of their contract to ensure a safe working environment.
- 15.2 The NRF/SAIAB Technical supervisor and SHER Department together with the appointed Contractor shall authorize areas where rubble and other waste material may be stored. This shall be done in a way that does not present a risk / hazard to personnel, interfere with any processes, obstruct movement and traffic flow and create an Environmental fallout.
- 15.3 All surplus, waste material and builders' rubble shall be removed from the premises on completion of the contract or as otherwise specified by the Project requirements / Project Manager. SAIAB reserves the right to remove such material against cost within one week after completion of the contract if the contractor fails to do so within the allotted project time frame.

16. **SECURITY**

- 16.1 Mandatories are required to report to Technical supervisor. Technical will contact the Project Manager to verify the validity of the contractor before allowing access to the facility.
- 16.2 All contractor vehicles will be subjected to a search before entry and when leaving the premises.
- 16.3 Mandatories are required to remain in their areas of operation and are not allowed to move around the facility unless authorized by the NRF/SAIAB SHER Department and Project Manager.

17. **PROCEDURES IN THE EVENT OF AN ACCIDENT**

- 17.1 The Contractors shall report any injuries sustained by his employee to the Department of Labour. The injuries and responsibilities are as defined in Section 24 of the OHSA, no. 85 of 1993.
- 17.2 All incidents shall be reported to the SAIAB Project Manager and the SHER Department. Copies of all documentation pertaining to the incident shall be provided
- 17.3 The Contractor shall report all injuries to the Compensation Commissioner using the required legal documentation as contemplated in the Occupational Health and Safety Act and Compensation for Occupational Injuries and Diseases Act.
- 17.4 In the event of an accident causing the loss of a life or the possibility of the loss of life, no person shall disturb the site at which the accident occurred or remove any objects involved in the accident before the arrival of an inspector from the Department of Labour and the South African Police Services.

18. **INDEMNITY AND INSURANCE**

- 18.1 NRF/SAIAB shall not be held liable for any loss, damage, injury or death caused by the Mandatories and their employees. The Mandatory indemnifies NRF/SAIAB and holds it harmless against all and any claims, losses,

demands, liability, costs and expenses of whatsoever nature which may arise at any time out of circumstance referred to in this agreement, provided that such loss, damage, injury or death is not caused by a willful act or omission or gross negligence of NRF/SAIAB.

18.2 The Mandatory shall therefore assume liability for any loss or damage which may be caused by the Mandatories or it's employee's negligence. The Mandatory indemnifies NRF/SAIAB from such loss or damage caused by the Mandatories breach of any terms of this Agreement.

18.3 The Mandatory undertakes to ensure that they carry the appropriate insurance cover as specified in the Contract, including third party public liability cover. This information will be provided to the NRF/SAIAB on demand or before any work is allowed to commence.

## 19. **PRECAUTIONARY MEASURES**

19.1 All Contractors must determine the degree of risks and / or hazards related to the work they have tendered for by conducting a comprehensive Risk Assessment (See Appendices 02 for guidelines) and implement the identified precautionary measures throughout the length of the contract.

19.2 SAIAB reserves the right to audit all processes related to Hazard and Risk Management at any reasonable time during the length of the contract.

## 20. **FAILURE TO COMPLY WITH PROCEDURES**

20.1 Failure to comply with the contents of this document and any provisions of the OHS Act not specifically included in this agreement could result in legal prosecution by the Department of Labour.

20.2 Non-compliance by the Mandatory with any of the requirements as stipulated in this document could result in any or all of the following actions being taken by the NRF/SAIAB:

26.2.1 The Mandatory could be requested to leave the premises and the contract for the project tendered for would become null and void. All costs incurred by NRF/SAIAB such actions would be borne by the Mandatory.

26.2.2 A specific member of contractor staff who breaches this contract could be requested to leave the premises without delay and would not be permitted to enter the premises in future. Any cost incurred would be borne by the Mandatory.

26.2.3 Equipment, which would be deemed as unsafe, would be confiscated and returned upon completion of the specific contract. Any costs incurred would be borne by the Mandatory.

## 21. **CLARIFICATION**

21.1 If any Mandatory requires clarification on any of the terms or provisions of this agreement, it should contact the NRF/SAIAB in writing and address the query to the appropriate contact person.

## 22. **DURATION OF AGREEMENT / CONTRACT**

22.1 The agreement / contract shall remain in force for the duration of the work to be performed by the Mandatory and / or whilst the Employees and / or Sub-Contractors are on the NRF/SAIAB Site.

## 23. **HEADINGS**

23.1 The headings in this Agreement are for reference purposes only. These shall not be construed as having any interpretative value in themselves, nor any indication as to the meaning of the contents of the paragraphs contained in this Agreement.

31. **ACCEPTANCE**

I, \_\_\_\_\_ (Mandatory), by signing this document, hereby warrant that I shall bear all responsibility for adherence of all Legislation and Regulations applicable to the agreed contract work and particularly for the full and proper implementation of the provisions of the Occupational Health and Safety Act, No. 85 of 1993 and all other Regulations without exception.

**Signed**

\_\_\_\_\_  
**Section 16.2 Appointment (OHSA)**

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

And / or

\_\_\_\_\_  
**Appointed Safety / Compliance Officer**

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

And / or

**APPENDICE 01: PRIMARY / SUB-CONTRACTOR COIDA INFORMATION**

Name of Firm: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Telephone: \_\_\_\_\_

Mobile: \_\_\_\_\_

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

**Type of work being performed**

\_\_\_\_\_

\_\_\_\_\_

Commencement date of work: \_\_\_\_\_

Completion date of work: \_\_\_\_\_

**For South African Primary / Sub-Contractors Only**

Is your firm registered with Compensation Commission:      Yes       No

If yes, your membership number: \_\_\_\_\_

Number of Personnel on the premises: \_\_\_\_\_

**Name of competent person on site and his contact number**

\_\_\_\_\_

\_\_\_\_\_  
Signed

\_\_\_\_\_  
Date

**Note: Attach Valid copy of Letter of Good Standing with Compensation Commission**

## **APPENDICE 02: SAFETY FILE / SAFETY PLAN GUIDELINE FOR CONTRACTORS**

### **1. PURPOSE**

The purpose of this document is to outline the requirements for a Safety File to guide contractors on both legal and SAIAB requirements.

### **2. SCOPE**

This shall apply to all contractors scheduled to conduct work at SAIAB which can be defined as construction or listed work in accordance with the relevant legislation.

### **3. DEFINITIONS**

- OHSA – Occupational Health and Safety Act
- GNR – Government Notice Regulations
- Construction Work – Any work in connection with the construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure. Any work in connection with 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.
- Listed Work – Any work where personnel will be exposed to hazards and hazardous materials or substances and is identified by the Minister as listed work under specific conditions and/or circumstances.
- Competent Person – Any person who has, in respect of the work or task to be performed, the required knowledge, training and experience and where applicable, the qualifications, specific to that work or task.

### **4. RELEVANT LEGISLATION**

The relevant legislation shall include but not limited to:

- The Occupational Health and Safety Act, No. 85 of 1993
- The Construction Regulations GNR 84 of 2014

### **5. REQUIREMENTS**

A Safety File / Safety Plan should contain the following basic information in order to be legally compliant:

1. Mandatory Agreement with client (37.2 Agreement)
2. Letter of Good Standing (Workman's Compensation)
3. Health and Safety Plan
4. Emergency Plan and Procedures
5. Health and Safety Policies
6. PPE Issue Register
7. Toolbox Talks
8. Accident / Incident Investigation
9. Employee Details
10. Medical certificates
11. Proof of Competency (Certificates)

A more detailed breakdown of a Safety File is as follows. The list below serves as a guideline. The Health and Safety File must be specific to the task / job / project being performed:

- **Administrative**
  - Mandatory Agreements
  - Permit to do Construction Work (If applicable)
  - Notification of Construction Work (If Applicable)
  - Client Health and Safety Requirements
  - Letter of Good Standing (Workman's Compensation)

- **Plans**
  - SHE Plan
  - Emergency Plan and Procedures
  - Fall Protection Plan (If working at heights)
- **Policies**
  - OHS Policy
  - Smoking Policy
  - Environmental Policy
- **Risk Assessments**
  - Daily Safety Task Instructions
  - Hand Tool Operations
  - Portable Electric Tools
- **Legal Appointments (Delegation of duties)**
  - Safety Supervisor
  - Hand Tool Inspector
  - Portable Electric Tool Inspector
  - Ladder Inspector
- **Registers and Check sheets**
  - Hand Tool Register
  - Portable electric Tool Register
  - Portable Ladder Register
- **Employee Details**
  - Employee Register
  - I.D. Copies
  - Medical Certificates
  - Proof of Competence
- **Compensation for Occupational Injuries and Diseases (COID)**
  - Incident Register
  - Accident Incident Register
  - W.CI2 Document

## 6. RISK ASSESSMENT TEMPLATE

See Section 9 for a Risk Assessment Template which can be utilized for the completion of Base Line Risk Assessments. This template only serves as a guideline and the use of any other template is acceptable.

## 7. CONTRACTOR'S AGREEMENT

- All contractors are required to complete the SAIAB Contractual Obligation form before commencing any work on site.
- This form must be included in the Safety File under "Client Health and Safety Requirements"

## 8. REVIEW PERIOD

This procedure shall be reviewed every two (2) years or as changes to the relevant legislation take place.

**9. RISK ASSESSMENT TEMPLATE** (Note: this template serves as a guideline)

<b>Company</b>	
<b>Performed by</b>	
<b>Period Performed</b>	
<b>Review</b>	
<b>SEE LAST PAGE FOR RISK RATING AND LEGEND</b>	

Hazards Identified	Specify	Health Effects	Risk Rating					Medical Surveillance	Recommendations
			P	E	C	RR	RC		
<b>Physical</b>									

Hazards Identified	Specify	Health Effects	Risk Rating					Medical Surveillance	Recommendations
			P	E	C	RR	RC		
<b>Chemical</b>									

Hazards Identified	Specify	Health Effects	Risk Rating					Medical Surveillance	Recommendations
			P	E	C	RR	RC		
<b>Psychological</b>									

<b>LEGEND</b>			
<b>ABBREVIATION</b>	<b>DESCRIPTION</b>	<b>ABBREVIATION</b>	<b>DESCRIPTION</b>
HPD	Hearing Protective Devices	RPD	Respiratory Protective Devices
MSDS	Material Safety Data Sheet	SOP	Standard Operating Procedures
OHS	Occupational Hygiene Survey	SWP	Safe Work Procedures
PPE	Personal Protective Equipment	WRULDS	Work Related Upper Limb Disorders



## Safety Risk Assessment Legend

Probability (P)	
1	unlikely to occur
2	some chance
3	could occur
4	good chance, probable
5	will occur

Exposure (E)	
1	rarely, annually, quarterly
2	occasionally, monthly
3	often, weekly
4	frequently, daily
5	continuously

Consequence (C)	
1	Insignificant, no health effect
2	first aid only, reversible health effect, minor
3	seeking medical help, temporary
4	irreversible health effects, permanent
5	Disabled / Fatality

Total = P + E + C		
RR	Risk Rating	
RC	Risk Classification	
11 – 15	<b>High</b>	Immediate action to be taken
6 – 10	<b>Medium</b>	Corrective action to be taken
3 – 5	<b>Low</b>	Adequate control, requires monitoring

This contract is subject to the Standard Conditions of Tender as published in Annexure F of the latest CIDB Standard for Uniformity for Construction Procurement.

The conditions of tender are available on the below link:

<http://www.cidb.org.za/wp-content/uploads/2021/04/Standard-Conditions-of-Tender.pdf>

## ANNEXURE 7 - ELECTRONIC BID SUBMISSION – GUIDELINE FOR BIDDERS

This document serves the purpose of providing the bidder with guidelines and prescripts on how to submit their bids to the NRF via e-mail.

**Conditions for electronic submissions:** This section does not apply to soft copies requested on manual submissions. It applies when email submissions are permitted. In circumstances where they are advisable, the business unit needs to ensure that they have appropriate controls and processes in place, such as:<sup>3</sup>

- Valid process of ensuring that bidder's electronic signatures complies with legislation such as The Electronic Communications and Transactions Act, 25 of 2002 (the ECT Act),
- System records exact time and date of submission in a manner that provides appropriate probity to stakeholders such as auditors,
- System to prevent unauthorised access and system to show if infringement,
- System of authorised persons to set / change dates for opening data received,
- System allows simultaneous communication,
- System of record-keeping meets legislative requirements such as The National Archives and Records Service of South Africa Act (Act. No. 43 of 1996, as amended).

### Prescripts

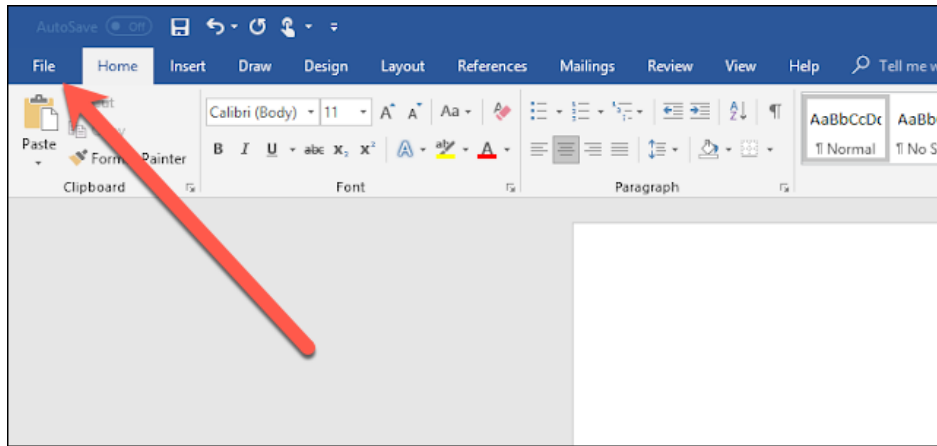
- All files must be submitted in pdf format unless otherwise stated.
- Pricing submission (including any SBDs where bidder's price is quoted) must be password protected and submitted as a separate file.
- **Two envelope system:** All bidders documents must be submitted to the email address specified on the NRF bid document and however the password to the password-protected pricing file must be submitted to a separate email stated in the email specified in the bid document.
- The NRF email size limit is 4MB, bidder must ensure that their submission is no bigger than this limit.
  - Your files must be Zipped to ensure that your submission is in line with the email size limit
- Timeline for submitting password to NRF
  - The password for pricing file must **not** be submitted before the bid closes.
  - The password may be submitted 1 minute after bid closure and no later than 2 days post bid closure. Failure to submit within 2 days may lead to bid being unable to be evaluated thus rendering them unresponsive.
- The subject of your email quote verbatim the bid name in the exact words provided in the NRF bid document.

<sup>3</sup> SANS 10845-1 paragraph 4.7

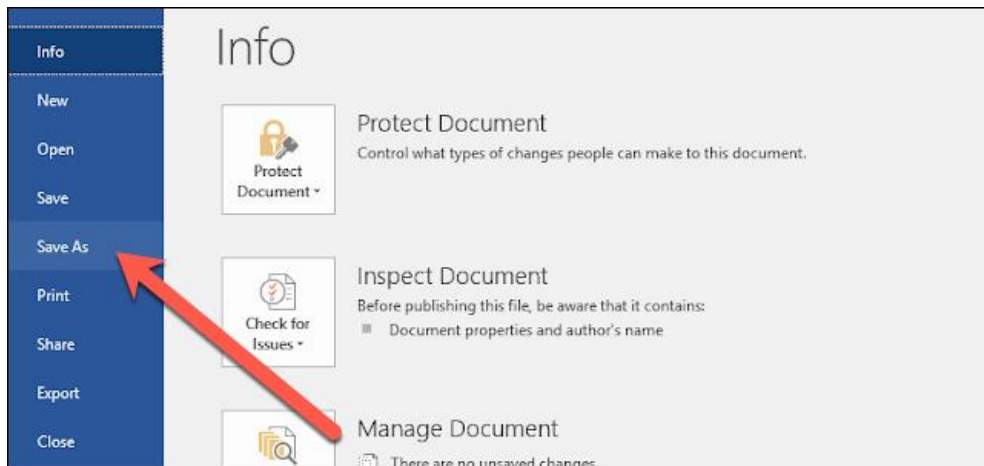
## Guidelines

### Converting to pdf

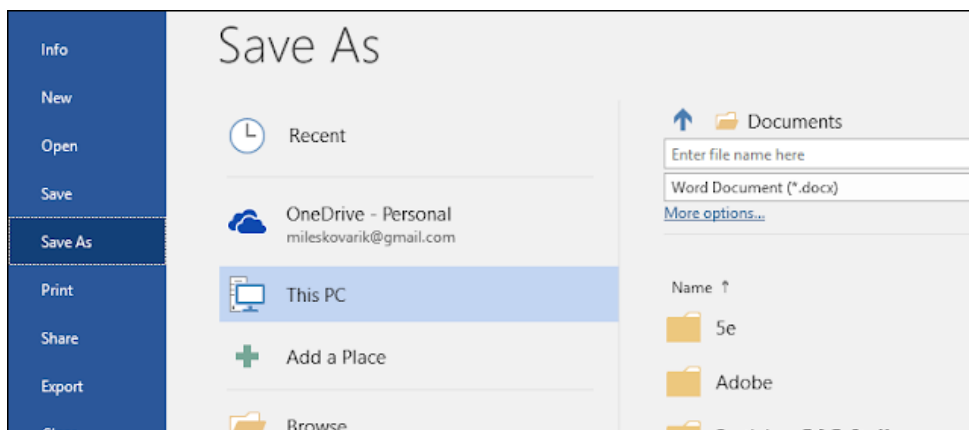
- If you have the desktop version of Microsoft Word, the easiest way to convert your document to PDF is right in Word itself.
- Open the document you want to convert, and then click the “File” tab.



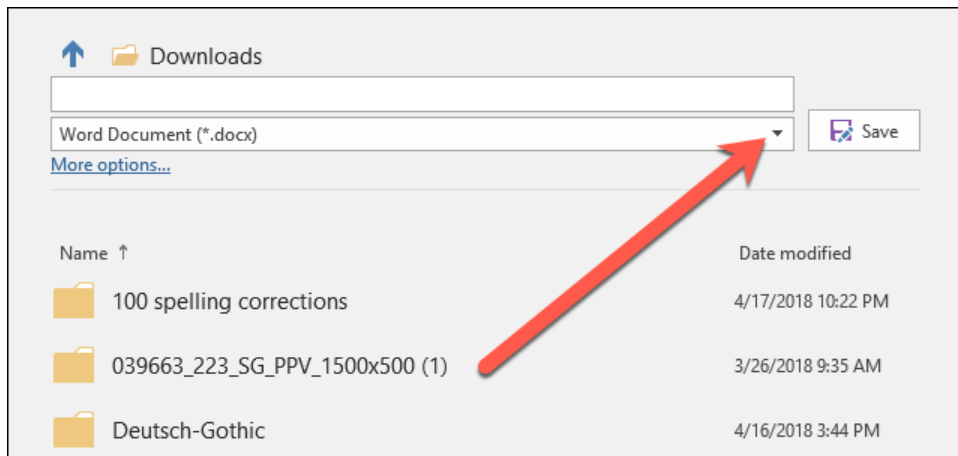
- On the backstage screen, select “Save As” from the list on the left.



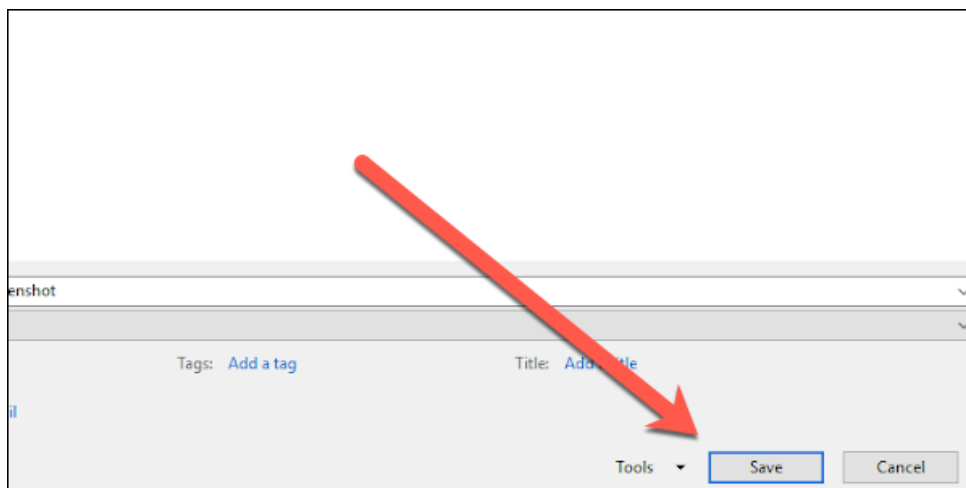
- On the Save As screen, select where you would like the PDF to be saved (OneDrive, This PC, a particular folder, or wherever).



- Next, click the dropdown arrow on the right side of the “Save as type” box, and select “PDF (\*.pdf)” from the dropdown menu.



- If you want to, you can change the filename at this time. When you're ready, click the “Save” button.

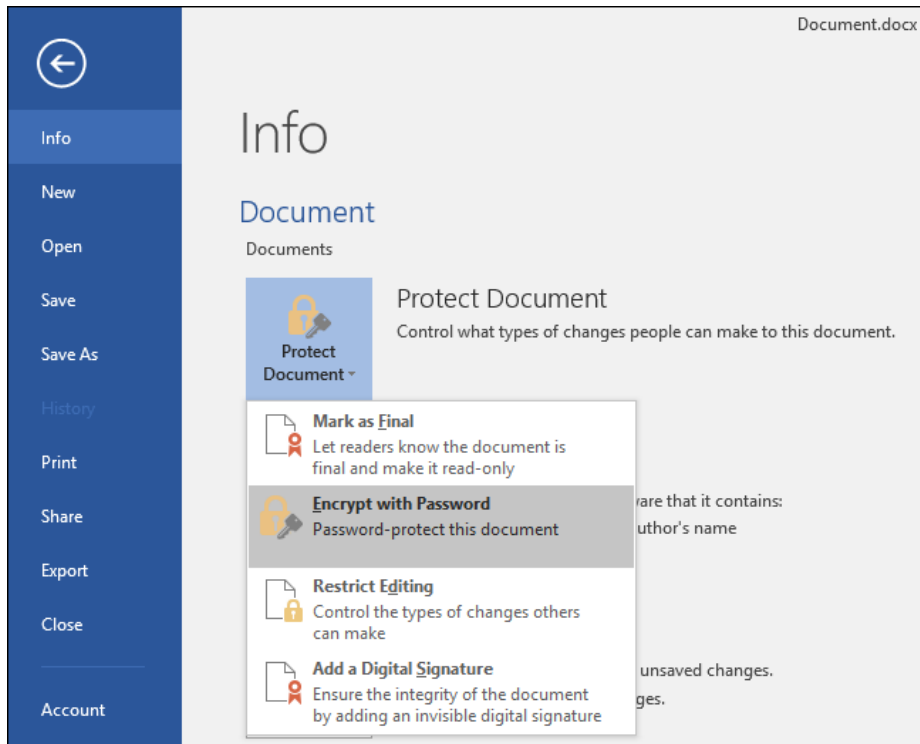


- After saving the PDF, you'll be returned to your Word document, and the new PDF will open automatically in your default PDF viewer.

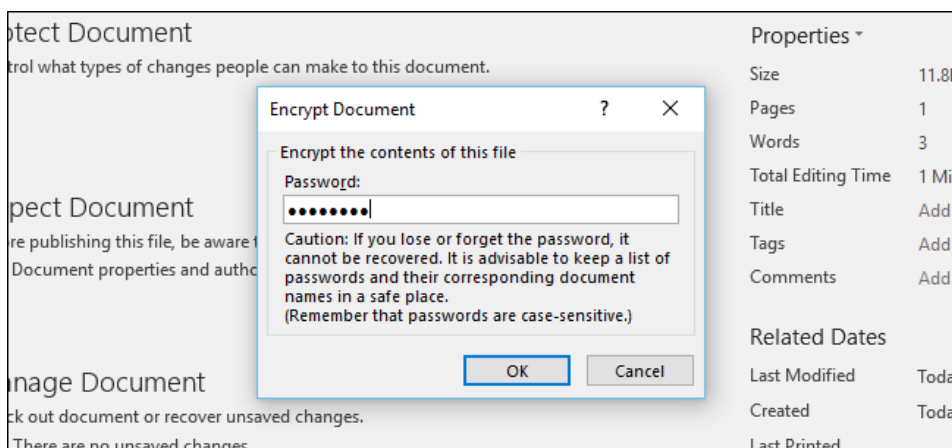
## Password protecting files

- To password protect an Office document, first open it in Word, Excel, PowerPoint, or Access. Click the “File” menu at the top-left corner of the screen. On the Info pane, click the “Protect Document” button and select “Encrypt with Password.”
- The button is only named “Protect Document” in Microsoft Word, but it's named something similar in other apps. Look for “Protect Workbook” in Microsoft Excel and “Protect Presentation” in Microsoft PowerPoint. In Microsoft Access, you'll just see an “Encrypt with Password” button on the Info tab. The steps will otherwise work the same.

- NOTE: If you only want to restrict editing of the document, you can choose “Restrict Editing” here, but as we said, that is not very secure and can easily be bypassed. You’re better off encrypting the entire document, if you can.

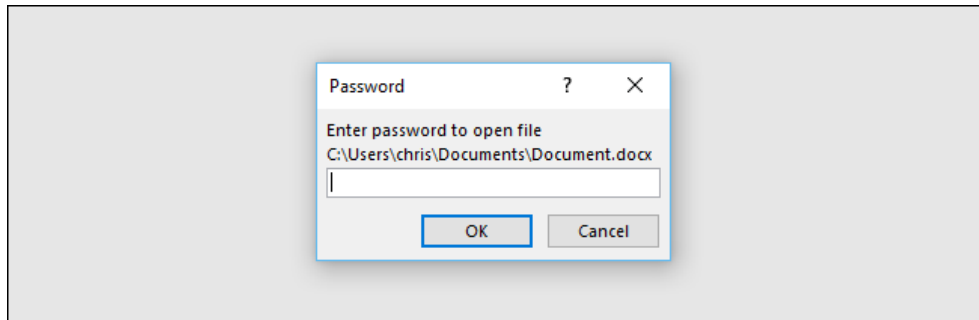


- Enter the password you want to encrypt the document with. You’ll want to choose a good password here. Weak passwords can be easily guessed by cracking software if someone gains access to the document.
- **Warning:** You’ll lose access to the document if you ever forget your password, so keep it safe! Microsoft advises you write down the name of the document and its password and keep it in a safe place.



- When a document is encrypted, you’ll see the “A password is required to open this document” message on the Info screen.

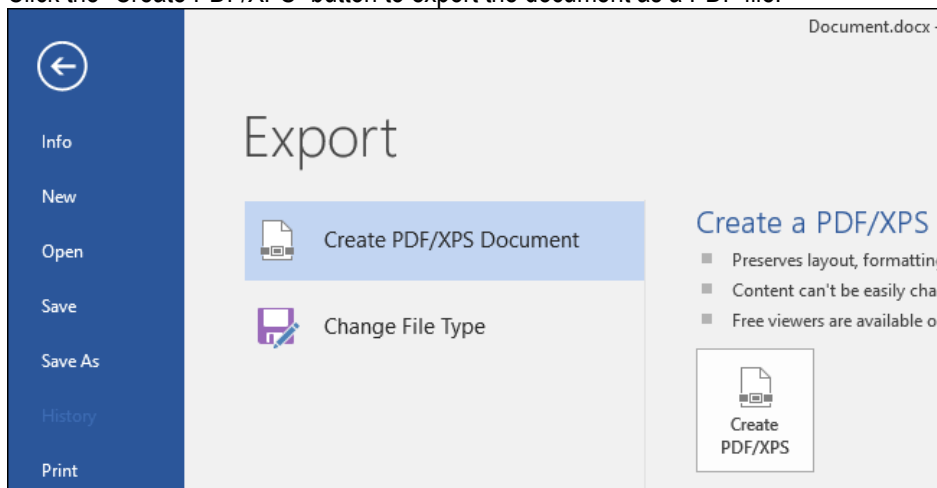
- The next time you open the document, you'll see an "Enter password to open file" box. If you don't enter the correct password, you won't be able to view the document at all.



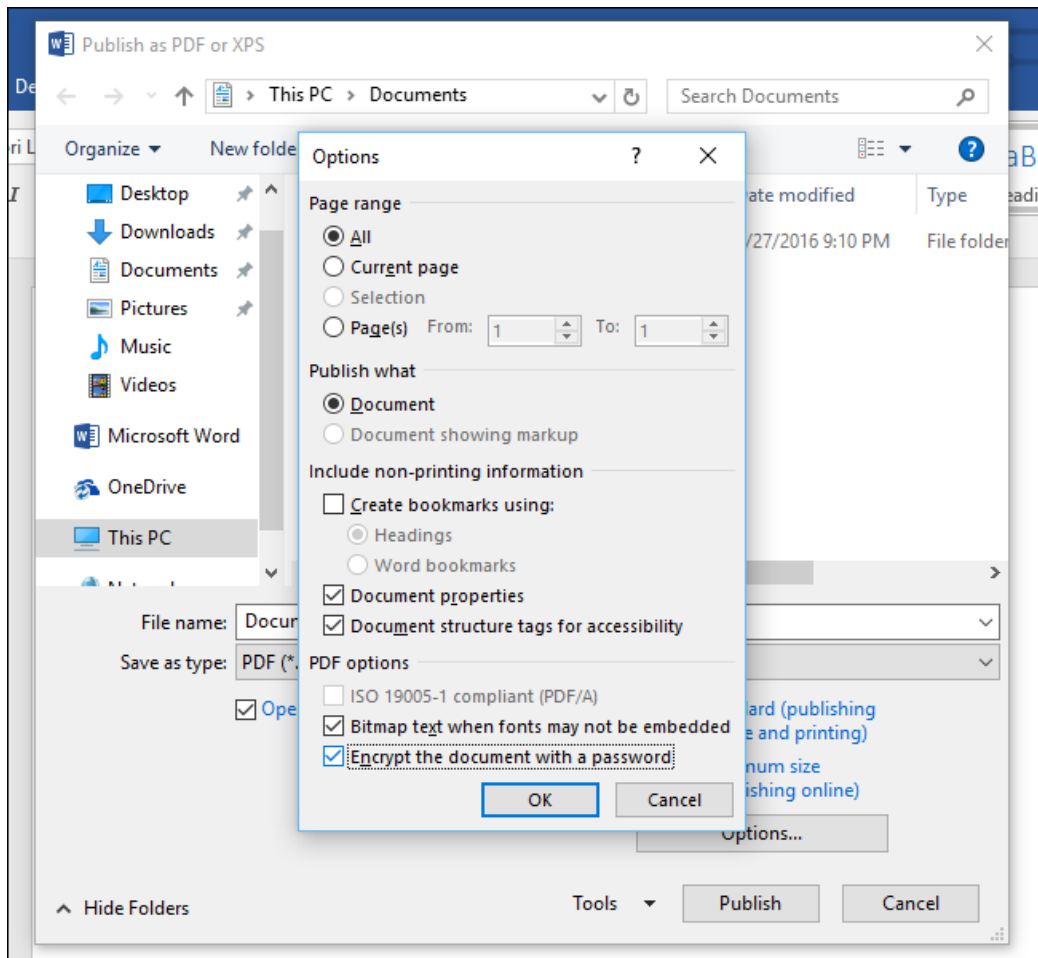
- To remove the password protection from a document, click the "Protect Document" button and select "Encrypt with Password" again. Enter a blank password and click "OK." Office will remove the password from the document.

### How to Create a Password Protected PDF File

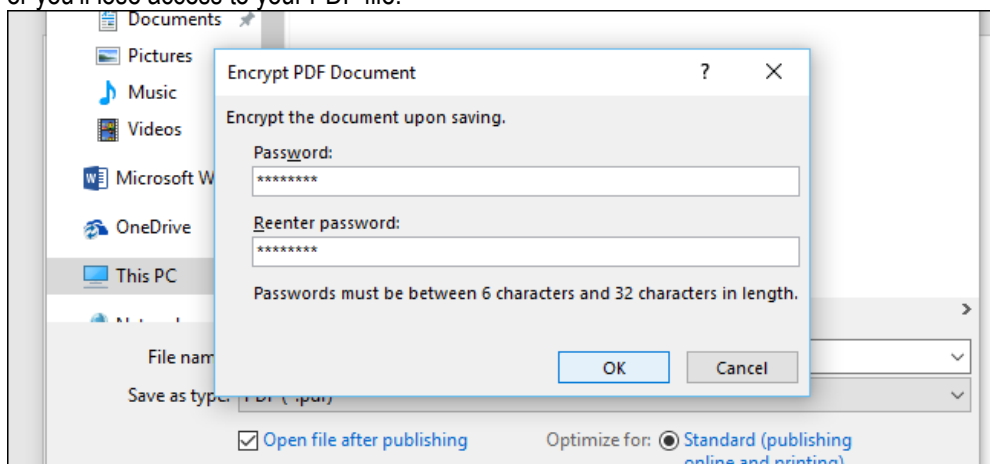
- You can also export an Office document to a PDF file and password protect that PDF file. The PDF document will be encrypted with the password you provide. This works in Microsoft Word but not Excel, for some reason.
- To do this, open the document in Microsoft Word, click the "File" menu button, and select "Export." Click the "Create PDF/XPS" button to export the document as a PDF file.



- Click the "Options" button at the bottom of the save dialog window that appears. At the bottom of the options window, enable the "Encrypt the document with a password" option and click "OK."

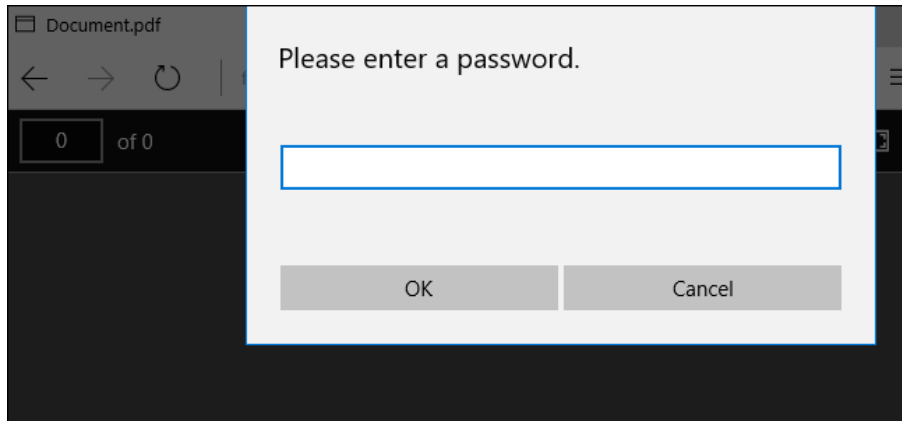


- Enter the password you want to encrypt the PDF file with and then click “OK.”
- When you’re done, enter a name for the PDF file and click the “Publish” button. Office will export the document to a password-protected PDF file.
- **Warning:** You won’t be able to view the PDF file if you forget the password. Be sure to keep track of it or you’ll lose access to your PDF file.



- You’ll have to enter the PDF file’s password when you open it. For example, if you open the PDF file in Microsoft Edge–Windows 10’s default PDF viewer–you’ll be asked to enter the password before you can view it. This also works in other PDF readers.





### **Zipping your files.**

- Put all the files into a new folder
- Right-click on the folder to be sent
- Select "Send To" and then click "Compressed (Zipped) folder"
- The files will start compressing
- After the compression process is complete, attach the compressed file with the extension .zip to your email.

### **Keeping passwords safe.**

We recommend that you store the password either as a note on a hardcopy document which is then filed or stored safely or a softcopy that is saved in the bid response folder once the bid has been submitted or in line with your document management policy.

## **ANNEXURE 8**

### **INSPECTION AND MAINTENANCE SCHEDULE**

The following document is to be used as a minimum guideline when conducting Six (6) monthly maintenance inspections and activities necessary to ensure an optimal and efficient running system.

The contractor is to price the BOQ Bill 7, Item 7.1.5 in accordance with these minimum requirements, taking all equipment costs and expenses into consideration.

# SOLAR ENERGY AND BACKUP SYSTEMS INSPECTION AND MAINTENANCE SCHEDULE

**Property Details:**

<b>Client:</b>	<b>Address:</b>
<b>Cell:</b>	<b>Email:</b>

**Inverter Details:**

Inverter Brand	Inverter Rating	Input A		Input B		Output Power
	kW	V	A	V	A	A
	kW	V	A	V	A	A
	kW	V	A	V	A	A
	kW	V	A	V	A	A

**Solar Panel Details:**

PV Panel Make & Model	PV Panel Wattage	Panel Voc

Array No.	No. of Panels	Array Wattage	Array Voc
1.			
2.			
3.			
4.			
5.			

System Component	Inspect to Ensure	√ or X	Reason for Check	Inspection Notes
Array	Array is not shaded		Encroaching vegetation may shade the array	
	All debris from around or under the array is removed		The build-up of debris may result in roof corrosion from the backing up of water	

System Component	Inspect to Ensure	√ or X	Reason for Check	Inspection Notes

PV modules and arrays including mounting structures	Array is not shaded		Encroaching vegetation may shade the array	
	All debris from around or under the array is removed		The build-up of debris may result in roof corrosion from the backing up of water	
	All individual modules are clean		Dirt, grime, algae growth and bird droppings on the module may affect performance	
	No visual defects in modules		No visual defects in modules	
	No browning or discoloration		Panel discoloration may indicate an internal panel fault	
	No indication of moisture penetration		Internal moisture ingress will result in panel failure	
	No indication of corrosion on the frame or mountings		Ferrous metals may corrode, and salt laden atmospheres can increase the risk of corrosion	
	Array still firmly fixed to roof structure		Loose or missing fixings may result in wind damage	
	Individual modules still firmly fixed to array structure No loose or missing panel clamps		Loose or missing panel clamps may result in modules dislodging during wind	
	Roof penetrations adequately sealed		Inadequate sealing will lead to moisture ingress	

System Component	Inspect to Ensure	√ or X	Reason for Check	Inspection Notes
Batteries and mounting brackets	No indication of corrosion on the battery housing, mounting brackets or		Ferrous metals may corrode, and salt laden atmospheres can increase the risk	

	terminals		of corrosion	
	Remove any dirt accumulation on the top of battery		Dirt and dust may potentially cause arcing	
	Re-tighten battery connections per manufacturer's specifications		Over or under tightened battery terminals may cause arcing	
	Cell Voltages Consistent		Inconsistent cell voltage indicates cell damage	
	BMS is the latest version		Updated battery software ensures optimal performance	
	Cables not damaged		Damage to cables may cause moisture ingress or short circuits	
Inverter	No indication of corrosion		Ferrous metals may corrode, and salt laden atmospheres can increase the risk of corrosion	
	Remove any dirt accumulation on the top of the Inverter		Dirt and dust may potentially cause overheating	
	Cleanness of air intake and exhaust vents, and fans		Dirt and dust may potentially cause overheating	
	Cables and terminations are secured tightly		Lose terminations may cause arcing	
	System running status		Faulty or problematic inverter will not performed optimally	

System Component	Inspect to Ensure	√ or X	Reason for Check	Inspection Notes
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Wiring Systems and Enclosures	Conduits and cables are adequately supported		Cables and conduit in contact with the roof surface may cause abrasion	
	Conduits and cables are free of deterioration from UV or mechanical damage		Damage or deterioration to cables and conduit may cause moisture ingress or short circuits	
	Cables not damaged by stainless steel cable ties		Damage to cables may cause moisture ingress or short circuits	
	Connectors show no signs of deterioration (deterioration may be caused by poor or mismatched connectors)		Deteriorated connectors may cause overheating resulting in failure	
	Connections are not frayed, loose or corroded		Poor connections may cause overheating resulting in failure	
	Conduit ends are adequately sealed		Moisture ingress into conduits may result in cable deterioration or moisture within enclosures	
	Enclosures are adequately sealed and show no signs of moisture ingress		Moisture ingress into an enclosure may result in an unsafe failure	
	Enclosures showing no signs of internal heating internally which could create a fire risk		Enclosures that are warped or discoloured may be overheating internally which could create a fire risk	

System Component	Inspect to Ensure	√ or X	Reason for Check	Inspection Notes
Protective devices and isolators	Fuses and holders are still intact		Essential for the correct performance of the system	
	Circuit breakers and residual current devices (RCD) operate correctly		Essential for the required electrical protection	
	Earth fault protection system operates correctly		Essential for the safe operation of the system	
	Isolators function correctly, are able to be operated and are effective		Essential for the safe operation of the system	
Labeling & Signage	Disconnecting devices are adequately labelled		Indicates the devices that are required to safely shut down the system	

Responsible electrician details I have completed an inspection and maintenance of the above solar energy system and confirm that the details provided in this document are true and correct.

Full Name	Signature	Date
<b>Recommended Date of Next Inspection:</b> ...../...../.....  <b>Comments:</b>		