



SAAO

South African
Astronomical Observatory

INVITATION TO BID

BID DESCRIPTION

The appointment of a supplier for the supply, deliver, installation and commission of a new 250 kVA, prime-rated generator and the maintenance for a period of 12 months at the South African Astronomical Observatory (SAAO)

Bidder Name:		
Number:	NRF/SAAO/64/2023-24	
Closing Date	10 April 2024	
Closing Time:	11h00am	
Compulsory Briefing Session/Site Visit:	25 March 2024 at 11:00am (NO LATE COMERS WILL BE ALLOWED) SAAO Auditorium 1 Observatory Rd Observatory Cape Town 7925	
Bid Submission Address:	tenders@saa.ac.za	
Fraud Alert:	"The NRF 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 or SMS 39772."	
Enquiries are directed in writing to:		
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INTRODUCTION

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 SAAO

The South African Astronomical Observatory (SAAO) is a facility of the National Research Foundation, which operates under the South African Department of Science and Innovation. The SAAO is comprised of headquarters in the eponymous suburb of Observatory in Cape Town, and a dedicated research and observation station with several working telescopes (including SALT) outside the Karoo town of Sutherland in the Northern Cape. Founded in 1820, the SAAO is the national centre for optical and infrared astronomy in South Africa. Its primary role is to conduct fundamental research in astronomy and astrophysics by providing a world-class facility to scientists. The SAAO also promotes astronomy and astrophysics in southern Africa, by sharing research findings and discoveries, and participating in outreach activities to enthuse citizens about physics and astronomy.

THE NEED FOR THIS PROCUREMENT WITHIN SAAO

The purpose of this tender is to appoint a suitable supplier to supply, deliver, install and commission of a new 250 kVA, prime-rated generator at SAAO, 1 Observatory Road, Observatory, Cape Town. The supplier shall provide a standard 12-month, 100% comprehensive operating warranty, including all parts, labour, 24/7-hour callouts to suit both major and/or minor service intervals during the 1st year after commissioning. This will be based on the amount or operational hours the generator will be running with and without load.

THE REQUIREMENTS OF THIS BID

This bid seeks to appoint a supplier for the supply, deliver, installation and commission of a new 250 kVA, prime-rated generator and the maintenance for a period of 12 months for the period of the Contract, at the South African Astronomical Observatory (SAAO).

PART A – BID REQUIREMENTS

Support documents: Bidders must provide the requisite documents that substantiate their responses to the specifications herein. See Bid Preparation Requirements on Page 28.

EQUIPMENT AND/OR SERVICES REQUIREMENT SPECIFICATIONS

1 Supply and Delivery of Prime-rated Generator

- 1.1 The supplier shall provide a new 250 kVA, prime-rated generator, compliant with the requirements as specified in this document.
- 1.2 The supplier shall deliver to the following premises:
 - South African Astronomical Observatory (SAAO)
 - 1 Observatory Road
 - Observatory
 - Cape Town
 - 7925

2 Access, Site Security and PPE

- 2.1 The Site of the Works is within the secured area, so the supplier is responsible for the registration and administration of all personnel who enter the Facility with the SAAO.
- 2.2 Access to the Work Area is directly from the main entrance gate.
- 2.3 The supplier shall ensure that all personnel are wearing the correct PPE when on site.

3 Compliance with regulations

- 3.1 The installation shall be erected and commissioned in strict accordance with the specifications contained in:
 - 3.1.1 SANS 10142-1 2021 The wiring of premises:
 - 3.1.2 SANS/IEC 60439 Low Voltage Switchgear and Control Gear Assembly
- 3.2 On practical completion, the supplier must provide a Certificate of Compliance (CoC) for all work completed. The Certificate of Compliance is a prerequisite for Practical Completion.

4 Scope of Work

The scope of work covered by this tender invitation is briefly summarized as follows:

- 4.1 New 250 kVA, prime-rated generator and associated accessories.
- 4.2 Construction of a new concrete base to suit the location for the new Generator, as shown at the compulsory site inspection;
- 4.3 Connecting new 250 kVA, prime-rated generator and existing generator to a common Changeover Panel within the adjacent Main Intake Electrical Distribution Room
- 4.4 Supply and install a suitably rated, IP54 Enclosed, (400A), AC3 Duty, Automatic Transfer Switch which interfaces with either Generator Controller (Deep-Sea or approved equivalent). The ATS and associated control Panel to be wall mounted within the adjacent Main Intake Electrical Distribution Room.

5 Detailed Scope of work

5.1 New 250 kVA, prime-rated generator and accessories

- 5.1.1 Supply, Installation, Testing and Commissioning of a new 250 kVA, prime-rated generator complete with, Deep Sea Controller & Management System, (or approved equivalent), Weatherproof and spill-proof, Generator enclosure, residential exhaust system and internal absorption for noise attenuation. [Refer to the attached Data Sheets which must be completed and submitted with the Tender return].
- 5.1.2 The new Generator is to be located on a concrete base to be designed and constructed by the supplier, adjacent to the existing Generator. The Supplier is to inspect the existing infrastructure to determine the most practical methodology of incorporating the new generator into a common synchronised change over, with the existing Generator and with the Municipal Incomer.
- 5.1.3 The specific make and model of the equipment offered must be as detailed in the technical specifications:
 - 5.1.3.1 Generator Construction Type:
 - 5.1.3.1.1 Soundproof Containerised Set (Sound Attenuated)
 - 5.1.3.2 Exhaust System:
 - 5.1.3.2.1 Residential silencer
 - 5.1.3.2.2 Maximum noise attenuation of 75dB at 7m with 100% Load
 - 5.1.3.3 Diesel Day Tank:
 - 5.1.3.3.1 Diesel Day tank to have a maximum capacity of 1,000 litres.
 - 5.1.3.3.2 Provide an electric pump for the ease of filling the Day tank manually from drums.
 - 5.1.3.4 Generator accessories to include:
 - 5.1.3.4.1 Battery Charger
 - 5.1.3.4.2 Diesel tank low level alarm
 - 5.1.3.4.3 Radiator with low level alarm
 - 5.1.3.4.4 Starter batteries and cables
 - 5.1.3.4.5 Mains powered battery charger.
 - 5.1.3.4.6 Engine water heater
 - 5.1.3.4.7 Water Separator
 - 5.1.3.4.8 Run hour meter within the controller.
 - 5.1.3.4.9 Lighting and 15A Socket Outlet, within the Enclosure
 - 5.1.3.4.10 Electric Fuel Pump
 - 5.1.3.4.11 WebNet Gateway Facility for remote alarm occurrences.
 - 5.1.3.5 Change-Over-System
 - 5.1.3.5.1 The Deep-Sea Controller (or approved equivalent), is to be integrated with the new motorised change-over-system, complete with mechanical interlocks and all auxiliaries as required for an automatic load break transfer switch **for both Generators**.
 - 5.1.3.6 Webnet Gateway Facility configuration, **for both Generators**, shall include:
 - 5.1.3.6.1 Remote Monitoring Software (Freely issued on-line)
 - 5.1.3.6.2 Dashboard configuration / System Integration via Generator Controller
 - 5.1.3.6.3 Real time Instrumentation

- 5.1.3.6.4 Event Logging
- 5.1.3.6.5 Automatic System Alerts
- 5.1.3.6.6 Fuel Management
- 5.1.3.6.7 Maintenance Management
- 5.1.3.6.8 Fault Analysis
- 5.1.3.6.9 Creation of Password Protected User Accounts (Assume 5 off)
- 5.1.3.6.10 SMS and Email Alarm notifications
- 5.1.3.6.11 Software must be issued to the Client after Training

5.1.4 Documentation

5.1.4.1 The supplier shall provide all documentation necessary to own, operate, and maintain the new 250 kVA, prime-rated generator on delivery, including but not limited to:

- 5.1.4.1.1 Parts list and general arrangement drawings for the generator and all its functional sub-assemblies
- 5.1.4.1.2 User operating documentation, including control programme instructions.
- 5.1.4.1.3 Maintenance documentation, containing at minimum the following:
 - 5.1.4.1.4 Inspection and user-maintenance task descriptions, including the prescribed intervals.
 - 5.1.4.1.5 A list of consumables and equipment required to perform said inspections and maintenance.

5.1.4.2 The documentation shall be supplied in both hardcopy and standard electronic format.

5.1.4.3 The supplier shall provide a Certificate of Acceptance or equivalent on completion of commissioning, showing that the machine meets the requirements specified herein.

- 5.1.4.3.1 Test results shall be included where appropriate.
- 5.1.4.3.2 Commissioning and testing results shall be verified by SAAO personnel in conjunction with supplier personnel.

5.1.5 Training

5.1.5.1 The supplier shall provide on-site machine training for three (3) site personnel, on commissioning of the machine.

5.1.5.2 The supplier shall provide training material in both hardcopy and standard electronic format.

5.1.5.3 The supplier shall provide signed training attendance registers.

- 5.1.5.3.1 The supplier shall provide certificates of competency to each trainee who has demonstrated a standard of competence.

5.1.5.4 The training shall cover, at minimum, the following topics specific to the machine:

- 5.1.5.4.1 Operation
- 5.1.5.4.2 User-performed inspection and maintenance

5.2 Construction of new concrete base

5.2.1 The new 250 kVA, prime-rated generator is to be located on an Engineer designed, concrete base and constructed by the Supplier, adjacent to the existing generator.

5.2.2 The existing generator will remain in its present location and the new generator must be installed parallel with this unit.

5.2.3 The supplier is to make the necessary allowance for the craneage associated with the handling of the new generator.

- 5.2.4 The supplier is to inspect the existing infrastructure to determine the earth works and civil requirements for the design of the base and the earth bonding requirements of the new generator.
 - 5.2.5 The constructed concrete base shall be designed, taking cognisance of the centre point of gravity, weight distribution and vibration limitations and comply to the SANS 10160 – Part 1 & 2
 - 5.2.6 The Supplier's Civil Engineer is to determine the appropriate amount of Reinforcing [Rebar] for the reinforcement of the concrete base and consider the stabilisation on the soil around the perimeter of the base
- 5.3 The supplier is responsible for the connecting of a new 250 kVA, prime-rated generator and existing generator to the adjacent Main Intake Electrical Distribution Room
- 5.3.1 Supply and install a suitably rated, IP54 Enclosed, (400A), AC3 Duty, Automatic Transfer Switch which interfaces with the Deep-Sea Controller (or approved equivalent). The ATS and associated control Panel to be wall mounted on the adjacent Main Intake Electrical Distribution Room.
 - 5.3.2 Note: that the existing ATS Panel and associated SmartGen HGM 7220 Generator Controller, within the existing generator enclosure, must form part of the overall Change/Over System. The tenderer should provide the justification for a replacement controller and include the costs in their offer, should there be a need to replace this Controller with another more suitable Unit for the integration with the new and existing Generators.
 - 5.3.3 Reconfiguration of the new and existing Auto Change Over Switch to the Main Incomer Panel; Refer to Appendix 3 for pictures of the existing installation. A compulsory site visit is required to form an appreciation of the actual requirements.
 - 5.3.4 Inspect the existing infrastructure to determine the most practical methodology of incorporating the new generator into a common synchronised change over, with the existing generator and with the Municipal Incomer.
 - 5.3.5 The new Generator supply must include the first Oil fill, Coolant fill, Diesel fill and starter batteries; Transport and all delivery and crange costs of the new Generator and associated infrastructure on site; and
 - 5.3.6 Rigging and positioning of the new Generator onto new supporting Bases
 - 5.3.7 The Generator enclosure must be designed to contain 1,000 litres of diesel. Additionally, provision must be made for the ease of manual refilling of diesel from drums using an electric pump.
 - 5.3.8 Factory Acceptance Test: The supplier is to include provision for enough diesel to run the generator at 110% of the Rated Prime, Power load for 1-Hour. Tenderer should refer to Annexure 2 for the Test Sheet to be completed during Factory Acceptance Testing
 - 5.3.9 Supply, install, connect terminations, test and commission single Core, PVC Insulated, PVC bedded SWA PVC sheathed 600 / 1000 V Power cables, manufactured to SANS 1507-3 Electric cables with extruded solid dielectric insulation for fixed installations (300/500 V to 1 900/3 300 V) Part 3: PVC Distribution cables; as listed within the Schedule of Quantities.
 - 5.3.10 Supply, install, test and commission new single core black PVC insulated earth cables which are to be installed along the same route as the supply cable, from the Change-Over-Panel to the new Generator and from the Changeover Panel to the Main Distribution Board.
 - 5.3.11 All wireways external to the Generator enclosure need to be concealed. The supplier will be responsible for the provision and installation for all cable sleeves, draw-wires, trenching, backfilling, compacting and all relevant aspects required for the electrical wire-ways. On completion, as built records and drawings must be supplied by the supplier.
 - 5.3.12 Conduct soil resistivity tests and then design, supply and install of a suitable earth bonding

infrastructure for the Generator in accordance with SANS 10199 The design and installation of earth electrodes. The price for the installation of earth electrodes and interconnecting 70mm² Copper conductors shall include for all excavations, compaction, backfilling, and testing.

- 5.3.13 Generator is to be fitted with the required Fireman's Switch and all necessary signage.
- 5.3.14 Although most of the work can be performed during normal working hours, the supplier must allow for after-hours installation, testing and commissioning. Additionally, as Load shedding will occur, the supplier must make provision for their own temporary power to suit their construction requirements.
- 5.3.15 Site Acceptance Test; on completion and prior to hand-over, the supplier needs to run the new generator for 2.5-hours while recording the relevant readings similar to what is indicated the Factory Acceptance Testing (FAT) sheet. The Site Acceptance Test is to be witnessed by the Client and performed at full load, to validate the correct functionality and operation.
- 5.3.16 Half day training of on-site technical staff, to cover the basics of the installation, operation procedures, basic fault-finding checks, routine inspections and preventative maintenance that will be performed by the Client. The Supplier must make provision for signed 'training records' and a copy of the literature covered in the training which must include as a minimum an Operation Manual and a one-page operation-summary and a certificate of attendance.
- 5.3.17 Responsible for all Quality Assurance and Control Documentation, including all test reports and certification from their suppliers. Such documentation shall be compiled in a file for submission on commissioning.
- 5.3.18 Provide all As-Built-Documentation and Operation and Maintenance Manual, as 1 (one) electronic copy with 2 (two) hard copies.
- 5.3.19 Provide Certificates of Compliance (CoC) for the installation.
- 5.3.20 The battery limit for the CoC will be the outgoing LV-terminations within the existing Main Distribution Board.
- 5.3.21 The CoC will be a prerequisite for Practical Completion.
- 5.3.22 All equipment and cables should be identified with a Stainless-Steel label strapped on with cable tie or fixed within an aluminium rail pop-riveted onto the equipment (as defined in 5.3.10).
- 5.3.23 Supply, Install and configure a Deep Sea Electronics DSE890MKII WebNet Gateway -4G (GSM/Ethernet) Unit complete with Antenna: 020-1053-4G GPS and ancillary battery, for the existing and new Generator. (Refer to section 2.5.6 for further requirement)
- 5.3.24 Assume the full and sole responsibility to compile and submit the generator registrations and licensing applications to the local authorities, as might be required, on behalf of the client. The tender should include sufficient allowance for all these associated costs and allow adequate provision for liaison with all the different parties, as might be required.
- 5.3.25 The supplier shall provide a standard 1-year, 100% comprehensive operating warranty, including all parts, labour, 24/7-hour callouts. It is appreciated that due to the frequency of Load Shedding, the frequency of visits is unknown so the Supplier must quote for their standard major and/or minor service intervals during the 1st year after commissioning. This will be based on the amount or operation hours the generator will be running during the period of one year.

6 Construction Procedures

- 6.1 The SAAO Observatory operations at the facility are very sensitive to power outages. Consequently, all work effecting normal operation or placing the SAAO operation at risk, must be coordinated with SAAO Management.
- 6.2 The Schedule of Quantities makes an allowance for any work to be carried out after hours (Saturdays and Sundays) and the suppliers must price accordingly.
- 6.3 New 250 kVA, prime-rated generator [and existing generator]:
 - 6.3.1 Rigging
 - 6.3.1.1 The new generator can only be rigged in position once all possible preparatory work has been completed for the support of the new generator. The rigging and installation is to include for levelling and minor adjustments as might be necessary for the new generator.
 - 6.3.1.2 The Supplier must make provision for all work to be done by a rigging specialist, who should also supply all labour, rigging equipment and machine moving machinery.
 - 6.3.2 Installation and Commissioning of new generator
 - 6.3.2.1 The new generator needs to be connected and integrated with the existing City of Cape Town (CoCT) supply to provide prime-rated power in the event of a power failure or loadshedding.
 - 6.3.2.2 The Supplier must source and complete the Appropriate CoCT Application Forms, required for the new Generator.
 - 6.3.3 Cable Installation
 - 6.3.3.1 All cable installations between the Main Intake Electrical Room and the adjacent Generator enclosure must **not** be visible. Consequently, cables must be installed below a protected, hot dip galvanised, mesh covering or in the ground.
 - 6.3.4 Plastic Warning Tape
 - 6.3.4.1 For trenches, plastic warning tape shall be installed along the cable route at 200 mm above the cable.
 - 6.3.5 Trenching
 - 6.3.5.1 The trench shall be deep enough so that the cables are buried at a minimum of 500 mm below final ground level.
 - 6.3.5.2 The Supplier shall preferably excavate by hand and shall remove all sharp projections, which could damage the cable where the trench is excavated through rocky formations, and shall remove all loose rocks, material, etc. from the bottom of the trench.
 - 6.3.6 Disposal of Surplus Materials
 - 6.3.6.1 The Supplier shall preserve the site as far as possible.
 - 6.3.6.2 Only the minimum of trees, shrubs, rocks, etc shall be removed and cleared for the cable route.
 - 6.3.6.3 All surplus materials, unsuitable material for backfilling etc. must be disposed of.
 - 6.3.6.4 The Supplier at his own cost shall load, transport, and dispose these materials at the nearest local dump site.
 - 6.3.7 Sand Bed and Sand Cover for Cables
 - 6.3.7.1 Cables shall be installed on a sand bed layer of soft soil which is prepared at the bottom of the trench, prior to cable installation. The minimum thickness of the soil bed layer to be at least 50mm.

6.3.7.2 Directly after the cables have been installed, an organic soil covering, with a minimum thickness of 100mm, shall be placed directly over the cables installed.

6.3.7.3 If the materials excavated are not suitable for the sand bed layer, then suitable soil shall be imported for this purpose and cost thereof shall be included in the unit price for the wire-ways in the Schedule of Quantities.

6.3.8 Laying of Cables

6.3.8.1 The cable shall, after the completion of the trench, be laid with a minimum delay so that the trench can be backfilled.

6.3.8.2 Sufficient lengths of cable shall be left at the beginning and end of the cable routes to allow for the termination of the cables. The Supplier shall take the necessary precautions to protect the cable ends until they are terminated. The cable ends shall be temporarily sealed by means of heat shrink sealing caps to ensure that the cable is waterproof.

6.3.9 Location and Protection of underground services

6.3.9.1 At locations where there is a reasonable possibility of unknown underground services being present, the supplier shall open trenches across such locations before commencing with excavations and, if services are found, these shall be plotted and thereafter be considered as "known services".

6.3.9.2 All known services shall be adequately protected from damage during construction operations. Any damage to known services shall be made good at the Supplier's expense. No pegs or stakes are to be driven into the ground in the vicinity of the underground services, particularly Electricity, Fibre Optic or Telkom services.

6.3.9.3 Any services or structures damaged during construction shall immediately be reported to the Project Engineer and Client, and as soon as possible after such damage a written report stating the exact circumstances of the occurrence shall be submitted to the Project Engineer and Client.

6.3.9.4 All practical measures shall be taken to effect immediate repairs, either by contacting the relevant authority, or where instructed by the Project Engineer, the Contractor shall perform temporary repairs himself.

6.3.10 Earthing

6.3.10.1 Perform Earth Resistivity readings on site and then compile a SafeGRID report and earth Mat design for the Earth Bonding for each of the Generators with a reading not more than 3 ohms. The earth electrodes and interconnecting conductors must be installed directly around the circumference of the generator bases. The electrodes must be driven into the ground and not installed in pre-drilled holes.

6.3.10.2 The earth electrode(s) to be bonded to the mains earth and to the earthing point of the generators, using 70mm², copper conductors.

6.3.10.3 One of the Local Authority officials and the Project Engineer, need to witness the earth mat reading and the earth bond to the Generators.

6.3.11 Registration of Generator

6.3.11.1 The supplier shall register the generator with the CoCT Electrical Department and provide a Certificate of Compliance as a requirement for practical completion.

DUE DILIGENCE

The following section describes requirements that the supplier shall satisfy.

7 Manufacturer's Agent

- 7.1 The supplier shall be an authorised agent of the proposed machine manufacturer in South Africa, and bidders shall provide proof thereof in their returnable document submission.
- 7.2 The bidder shall declare whether they are the sole agent of the machine manufacturer in South Africa, and provide proof thereof.

8 Lead Time

- 8.1 Supplier shall submit the lead time expected for delivery of a new 250 kVA prime-rated generator. Lead times longer than 6 months, will be disqualified.

9 Training

- 9.1 The supplier shall have (a) skilled generator operator(s) to perform demonstrations and present training.
- 9.2 The supplier shall provide the CV(s) of the proposed trainer(s), including any accreditation certificates for the proposed brand from the OEM, if applicable.

10 Sustainability – Local Support

- 10.1 On sustainability grounds (cost and workshop uptime/efficiency), the supplier shall have the capacity to provide routine and breakdown technical support based in the greater Cape Town region for all aspects of the proposed machine, including hardware, major components, and software, within the specified turnaround times.
- 10.2 Major components (e.g. Deep Sea Controller & Management System *(or approved equivalent)*) shall be supportable from within South Africa in terms of spares and expertise.
- 10.3 The supplier shall have access to the necessary technical personnel throughout the duration of this contract.
- 10.4 The bidder shall estimate the total cost of call-outs to the delivery premises (minus labour), taking into account travel and accommodation requirements.

11 Ethical requirements

- 11.1 The bidder shall confirm that there are no interests with the NRF or any other public organisation that can raise conflict of interest in executing this contract, that it has clean business practices, and has determined its bid independently from others as reflected on its submitted SBD 1, SBD 4 forms.
- 11.2 No bids will be accepted from bidders appearing on National Treasury's Restricted Suppliers list, Tender Defaulters list, or any corruption databases.

CONTRACT PERIOD

12 Contract Period

The contractual period for this contract is the sum of its two components:

- The initial delivery and associated services, commencing from the date of final signature on the SBD 7.1 Contract Signing Form, until the final handover/commissioning certificate has been signed, and
- The maintenance and spares services for ongoing servicing and preventative maintenance, commencing on acceptance of machine's commissioning, and terminating after 12 months. *Please note: This period is*

determined by the client, regardless of the running hours, but the Contractor must quote for Major and Minor services during that period.

CONTRACT MANAGEMENT

13 Bid Documents for Contract Signing

- 13.1 The supplier and the NRF agree to electronic signatures and/or physical signatures. Where the latter is chosen, the NRF will print two copies of the unedited electronic copy of this contract and both parties will sign on each copy. One copy retained by each person.
- 13.2 On signing of this contract, both parties will receive an un-editable electronic copy of the signed version.

14 Communication Channels

- 14.1 On signing of this contract, SAAO and the supplier shall provide a point of contact and communication channels for technical arrangements, and a responsible person for initial delivery acceptance.
- 14.2 On signing of this contract, SAAO and the supplier shall provide a point of contact and communication channels for administrative and financial arrangements.

15 Implementation Planning and Project Management

- 15.1 The appointed supplier will arrange an initial meeting to determine final manufacturing and delivery execution with the assigned SAAO project team in terms of the specified delivery management in this document. Both parties agree on the finalised delivery timetable stating commencement date and completion date of each stage of the implementation.
- 15.2 The appointed supplier will maintain minutes of such meetings which will be forwarded to SAAO for checking before being finalised as the final minutes of such meetings.
- 15.3 SAAO shall issue delivery purchase orders as a project control tool.

16 Managing Service Levels

- 16.1 The NRF aims to define reasonable service level expectations during execution of this contract. In the case of the supplier failing to meet the service levels defined in
- 16.2 Table 1 below, the NRF reserves the right to impose the penalties or exercise the measures as described SCC. These penalties and measures are determined in accordance with the financial or other consequences incurred due to the SAAO not meeting its set production agreements with internal and external customers.
- 16.3 Notwithstanding any other penalties declared, and any remedial action attempted, the NRF reserves the right to terminate this contract as per GCC23 if it determines that the supplier is not able to meet any, or a combination of, the performance criteria set in
- 16.4 Table 1 below, after having considered the supplier's reasons for such inability..
- 16.5 Where non-performance or delayed performance is solely and directly attributable to an act or omission of the NRF or its staff, the supplier is not held liable for that performance failure.
- 16.6 If the supplier fails to meet any performance level:
 - 16.6.1 The supplier shall investigate and report on the root causes of the performance level failure;
 - 16.6.2 Promptly correct the failure and begin meeting the set performance levels;
 - 16.6.3 Advise the NRF, to the extent requested by the NRF, of the status of remedial efforts being undertaken with respect to such performance level failure; and
 - 16.6.4 Take appropriate preventive measures to prevent the recurrence of the performance level failure.

16.7 Both parties are responsible for monitoring and measuring the performance of the supplier against the performance levels set in this document. The NRF deems failure by the supplier to measure performance with respect to the contract specifications for any measurement period as a failure to meet the stipulated performance levels.

16.8 The service performance levels are:

Table 1: Service Performance Levels

Performance being measured	Measurement	Penalty trigger level	Penalty
Late delivery of the new 250 kVa prime-rated generator	Time elapsed between appointed bidder receiving purchase order with the agreed delivery date and goods being delivered.	Delivery delay exceeding five (5) working days beyond declared delivery date on the order placement, unless motivated by the supplier and agreed to in writing by both parties	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.
Initial delivery: New 250 kVA prime-rated generator performance does not meet specification	Acceptance test sheet issued and accepted by SAAO	Failure to meet the required specification on commissioning	Supplier to rectify at zero cost to the SAAO. Penalty as per 'late delivery' from agreed delivery date applies until failure has been verified as corrected.

GENERAL AND SPECIAL 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.

GCC 1	Definitions - The following terms shall be interpreted as indicated:
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 market 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" mean 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.
GCC 2	Application
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.

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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.
GCC 3	General
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 www.treasury.gov.za
GCC 4	Standards
4.1	The goods supplied shall conform to the standards mentioned in the bidding documents and specifications.
GCC 5	Use of contract documents and information
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.
SCC5A	Copyright and Intellectual Property
	<p>Intellectual property refers to creation of the mind, such as inventions; literary and artistic works; designs; and symbols, names, images used in commerce; and includes copyright (a legal term describing the rights that creators have over their literary and artistic works including books, music, paintings, sculpture and films, to computer programs, databases, advertisements, maps and technical drawings); trademark (a legal term describing a sign capable of distinguishing the goods or services of one enterprise from those of other enterprises); and patents (a legal terms describing an exclusive right granted for an invention providing the patent owner with the right to decide how - or whether - the invention can be used by others).</p> <p>Background intellectual property is defined as the intellectual property pertaining to this contract and created and owned by any of the contracted parties to this contract prior to the effective date of this contract.</p> <p>Contract intellectual property is defined as intellectual property created by the parties to this contract for and in the execution of the contract.</p> <p>All background intellectual property (existing prior to this contract) invests in and remains the sole property of the contracted parties to this contract. Both parties disclose openly such intellectual property ownership to the parties in writing at the commencement of this contract.</p> <p>The supplier grants the purchaser a fully paid up, irrevocable, and non-exclusive licence to use its background intellectual property for the exploitation of this contract to enable the purchaser to obtain the full benefit of the contracted deliverables for this contract.</p> <p>The parties agree that all right, title, and interest in contract intellectual property created during the execution of this contract invests with the purchaser unless where agreed in writing to a different allocation of the ownership of the contract intellectual property with such allocation being an append to this contract.</p> <p>Both parties to this contract shall keep the intellectual property created during this contract confidential and shall fulfil its confidentiality obligations as set out in this document.</p> <p>The supplier agrees to assist the purchaser in obtaining statutory protection for the contract intellectual property at the expense of the purchaser wherever the purchaser may choose to obtain such statutory protection.</p> <p>The supplier shall procure where necessary the signatures of its personnel for the assignment of its respective contract intellectual property to the purchaser or as the purchaser may direct, and to support the purchaser or its nominee, in the prosecution and enforcement thereof in any country in the world.</p> <p>The supplier irrevocably appoints the purchaser to be its true and lawful agent in its own name, to do such acts, deeds, and things and to execute deeds, documents, and forms that the purchaser, in its discretion, requires in order to give effect to the terms of this clause.</p>
SCC5B	Confidentiality
	<p>Each party shall be careful and diligent as not to cause any unauthorised disclosure or use of the confidential information, in particular, during the consistency of the Contract and after termination of the Contract. Without the prior consent of the other party, each party will keep confidential and will not</p> <ul style="list-style-type: none"> • Disclose the confidential information, directly or indirectly, to any person or entity; • 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

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	<ul style="list-style-type: none"> Copy, reproduce, or otherwise publish confidentiality information except as strictly required for the execution of the contract. <p>The parties shall ensure that any employees, agents, directors, contractors, suppliers, 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</p> <ul style="list-style-type: none"> Disclose the confidential information to any third party, or Use the confidential information otherwise than as may be strictly necessary for the execution of the contract, 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. <p>The undertakings set out in this clause shall not apply to confidential information, which the parties are able to prove:</p> <ul style="list-style-type: none"> Was independently developed or in the possession of the recipient of the confidential information prior to its involvement with the other party; Is now or hereafter comes into the public domain other than by breach of this contract by any of the parties; 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 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. <p>Each party shall within one (1) month of receipt of a written request from the other party to do so, return to the party all material embodiments, whether in documentary or electronic form, of the confidential information including but not limited to:</p> <ul style="list-style-type: none"> All written disclosures; All written transcripts of confidential information disclosed verbally; and All material embodiments of the contract intellectual property. <p>The parties acknowledge that the confidential information was 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.</p> <p>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.</p> <p>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 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.</p>
SCC5C	
	The supplier hereby gives the purchaser permission, in terms of the Protection of Personal 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.
GCC6	Patent rights
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.
GCC7	Performance security
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 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.
SCC	An acceptable financial performance bond is required where an upfront deposit is paid by NRF to the same value as any such upfront deposit.
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

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	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.
GCC9	Packing
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.
SCC	No special condition applicable, unless specified elsewhere in this document.
GCC10	Delivery and Documentation
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.
SCC	No special condition applicable, unless specified elsewhere in this document.
GCC11	Insurance
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 in the manner specified in the SCC.
SCC	The supplier carries insurance of R2 million or higher for public liability, product liability, and professional indemnity, whichever is greater
GCC12	Transportation
12.1	Should a price other than an all-inclusive delivered price be required, this shall be specified in the SCC.
SCC	No special condition applicable, unless specified elsewhere in this document.
GCC13	Incidental services
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.
SCC	In the event that this document makes provision for such service elsewhere in this document, it is only valid if confirmed through the issue of a written purchase order that specifies, where applicable, quality, quantity, description, unit price, and delivery date.
GCC14	Spare parts

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14.1	<p>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> <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>14.1.2.1 Following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.</p>
SCC	In the event that this document specifies provision of spare parts elsewhere, the term "may" in GCC14 is replaced by the term "shall", the supplier provides at commencement of the contract a list of spares, whether in stock or ordered in from the OEM, their lead times for delivery to NRF and their unit prices and at each time, the list is amended, updated, or re-priced. The supplier undertakes to hold and/or make available an adequate supply of spares parts within reasonable periods upon receipt of purchase order issued by the purchaser in terms of the pricing mechanism in GCC17.
GCC15	Warranty
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 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.
SCC	The supplier is required to report on site within 24 hours of receiving such notification from purchaser. The supplier will have to provide assessment report on the findings and turnaround times for repair or replace of the defective goods or parts thereof, without costs to the purchaser.
GCC16	Payment
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 fulfilment 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.
SCC	Payment is made 30 days after receipt of invoice or claim by the purchaser to NRF which period is automatically extended by any delay occasioned by the supplier such as failure to supply a copy of the delivery note, if applicable; and/or failure to provide proof of fulfilment of other obligations stipulated in the contract
GCC17	Prices
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.
GCC18	Contract amendment
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.
GCC19	Assignment
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.
GCC20	Subcontract
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

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GCC21	Delays in supplier's performance
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.
GCC22	Penalties
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.
GCC23	Termination for default
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	If a restriction is imposed, the purchaser must, within five (5) working days of such imposition, furnish the National Treasury, with the following information: 23.6.1 the name and address of the supplier and / or person restricted by the purchaser; 23.6.2 the date of commencement of the restriction 23.6.3 the period of restriction; and 23.6.4 the reasons for the restriction. These details will be loaded in the National Treasury's central database of suppliers or persons prohibited from doing business with the public sector.
23.7	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

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	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.
GCC24	Anti-dumping and countervailing duties and rights
24.1	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
GCC25	Force Majeure
25.1	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.
25.2	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
GCC26	Termination for insolvency
26.1	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.
GCC27	Settlement of disputes
27.1	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.
27.2	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.
27.3	Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.
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.
SCC	The appointment of a mediator and the procedure shall be agreed between the parties. Regardless of the outcome of a mediation the parties shall bear their own costs concerning the mediation and equally share the costs of the mediator and related expenses.
GCC28	Limitation of liability
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.
GCC29	Governing language
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.
GCC30	Applicable law
30.1	The contract shall be interpreted in accordance with South African laws, unless otherwise specified in SCC.
GCC31	Notices
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

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GCC32	Taxes and duties
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
GCC33	National Industrial Participation Programme
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.
GCC34	Prohibition of restrictive practices
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.

PART B – PRICING (SBD 3.1)

PRICING CONDITIONS OF CONTRACT FOR THIS BID	
1	Compliant price calculation for price competition:
2	Date of unit pricing: All unit prices are quoted at the closing date of this bid.
3.	Price Quotation Basis: Unit prices are fully inclusive of all applicable taxes including VAT, less all unconditional discounts, plus all costs to deliver the services and/or goods to the specified delivery point stated in South African Rand currency. Where imported goods/services are to be used, the exchange rate to be quoted in arriving at ZAR if a firm local currency price is not quoted.
4.	Quantity estimation: as per the requirements
5.	Contract Price: The cumulative value of all purchase orders issued and paid for is the total value of the signed contract at the completion date of the contract, not the competition bid price.
6	Value Added Tax: Pricing will be adjusted for any variation in the in Value Added Tax rate as gazetted.
7	Price Adjustment Rules: The business unit will not consider any other unit price variations. The appointed bidder provides detail reasons for the submitted price variations substantiated by evidence. For foreign sourced goods, the actual exchange rate that the bidder has been charged must be provided
8	Contract Price Management during the contract: Where appropriate, SAAO will issue written purchase orders authorising the deliverables of this bid, as addendums to this contract. The purchase orders stipulate quantity, work description, delivery date, and the unit price in accordance with this contract. No invoices will be accepted without a purchase order having been issued.
9	Delivery Point is: SAAO, 1 Observatory Road, Observatory, Cape Town, 7925
	Application of Preference Points: In determining the final price + preference points for the bidder, the preference points are those in the completed Standard Bidding Document 6.1 Preference claim form.

BID PRICE SCHEDULE – FIRM PRICING (SBD 3.1)

Save pricing documents in a separate file, clearly named as per Bid Preparation Requirements on Page 28.

TENDER PRICES SHALL REMAIN FIXED (NOT SUBJECT TO ESCALATION INCLUDING FOREIGN EXCHANGE ADJUSTMENTS) FOR THE DURATION OF THE CONTRACT

SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	UNIT	QTY	RATE	SUBTOTAL
1	SCHEDULE: 1				
	<u>PRELIMINARY AND GENERAL</u>				
	<u>FIXED-CHARGE ITEMS</u>				
1.1	Contractual Requirements including insurances	Sum	1		
1.2	As-built Civil & Electrical drawings and CoC documentation	Sum	1		
1.3	Safety: Safety file and site procedures (refer to Appendix 1 and Annexures A to E)	Sum	1		
1.4	Registration and Licencing of Generator at Local Municipality	Sum	1		
1.5	Earth Resistivity Tests, SAFEGRID simulation, design, of the Generator Earth Mat. Refer to Item for the supply , installation and testing	Sum	1		
SUBTOTAL SCHEDULE-1 TO CARRY OVER TO SUMMARY PAGE:					

ITEM	DESCRIPTION	UNIT	QTY	RATE	SUBTOTAL
2	SCHEDULE: 2				
	<u>NEW 250 kVA, PRIME-RATED GENERATOR</u> (Refer to Appendix 2, which must be partially completed with the tender offer Refer to Appendix 3: Photographs of the existing Unit				
2.1	Supply, install, testing and commission of new 250 kVA, prime-rated generator	Sum	1		
2.2	A new Automatic-Change-Over-System and Controller to be wall mounted on the Main Intake Electrical Distribution Room	Sum	1		
2.3	Supply and install an electric decanting pump, (A drawing and material list to be provided with the Tender submission)	Sum	1		
2.4	The crange and transportation on site of the new Generator and integrated Change Over Panel	Sum	1		
2.5	All civil work associated with the design and construction of the Generator concrete base and retaining wall, inclusive of concrete testing and soil rehabilitation around the concrete base. Refer to Appendix 5: Generator foundation	Sum	1		
2.6	Supply, Installation, and termination of adequately rated, PVC SWA PVC Cu , Low Voltage Power & Control Cables - <i>Actual measurements to be assessed during the compulsory site tender meeting</i>	Sum	1		
2.7	Allowance for the disconnection of the existing Generator Cabling, rerouting and retermination within the new Changeover Panel Refer to: Appendix 4 (Site cable route layout) & 6 Power recordings	Sum	1		
2.8	Supply and Installation of the earth electrodes and conductors for the Safety Earth Bonding of the Generators - <i>Actual measurements to be made on site prior to ordering the cable</i>	Sum	1		
	SUBTOTAL SCHEDULE 2 - CARRIED FORWARD				

SUBTOTAL SCHEDULE 2 - BROUGHT FORWARD					
2.9	All associated costs for all protective wire-ways	Sum	1		
2.10	Lighting and small power provisions within the new Generator, sound proof enclosure	Sum	1		
2.11	Supply and Install Fireman's Switch, associated cabling and Signage	Sum	1		
2.12	Supply and install a DSE WebNet Gateway, to specification, including Power Supply, earth bonding and communication Cabling to the Generator Controller	Sum	1		
2.13	Supply and install a DSE WebNet Gateway Antenna, to specification	Sum	1		
2.14	System Integration and configuration of Dash Board and remote interfaces for both Generators	Sum	1		
2.15	Training and creation of User Accounts	Sum	1		
2.16	1 Year, 100% comprehensive operating warranty inclusive of the recommended Minor and Major Service requirements, based on a Level 6 Load shedding roster.	Sum	1		
2.17	MINOR Service (Provide a summary of this specific scope of work, the frequency thereof) and the cost projection	Sum	1		
2.18	MAJOR Service (Provide a summary of this specific scope of work), the frequency thereof and the cost projection	Sum	1		
SUBTOTAL SCHEDULE-2 TO CARRY OVER TO SUMMARY PAGE:					

SCHEDULE NO.	SUMMARY PAGE : DESCRIPTION	AMOUNT (R)
1	PRELIMINARY AND GENERAL	
2	SUPPLY, INSTALLATION AND COMMISSIONING OF NEW CONTAINERISED, PRIME RATED, GENERATOR SET	
SUB-TOTAL A		
FINAL OFFER INCL. DISCOUNTS EXCL. VAT (CARRIED FWD. TO FORM OF OFFER AND ACCEPTANCE)		
<i>15% VAT:</i>		
FINAL OFFER INCL. DISCOUNTS AND VAT (CARRIED FWD. TO FORM OF OFFER AND ACCEPTANCE)		

I/(We), the undersigned, hereby tender and, should this Tender be accepted, undertake to execute the whole of this works comprised and described in this document, and to enter into the formal Agreement with the SAAO, honouring the said Conditions and Specifications, in consideration for the fixed sum of:

R..... (Including 15% VAT).

Total sum of tender in words:.....

COMPANY NAME:

TENDER COMPLETED BY:

SIGNATURE:

DATE:

PART C - RETURNS

INVITATION TO BID (SBD 1)			
Bid number		NRF/SAAO/64/2023-24	
Closing date and time		10 April 2024 at 11:00am	
The NRF recognises the date and time as recorded on its systems for closure purposes.			
SUMMARY OF BID REQUIREMENTS			
The purpose of this tender is to appoint a suitable supplier to supply, deliver, install and commission of a new Primary Generator at SAAO, 1 Observatory Road, Observatory, Cape Town.			
Number of original bid documents for contract signing		Electronic copy, 1	
Number of evaluation copies:		Electronic copy, 1	
Two envelope system		Yes, see Bid Preparation on Page 28	
Price validity period from date of closure		Ninety days (90) days	
Bidding procedure enquiries are directed in writing to:		Technical information queries are directed in writing to:	
Section	SCM	Section	Infrastructure and Projects
Contact person	Nomandla Zibaya	Contact person	Sanchia Lewis
E-mail address	tenders@sao.ac.za	E-mail address	sanchia@sao.ac.za

SUPPLIER INFORMATION			
Name Of Bidder			
Postal Address			
Street Address			
Telephone Number			
Code		Number	
Cell Phone Number			
Code		Number	

SUPPLIER INFORMATION

Facsimile Number					
Code		Number			
E-Mail Address					
VAT Registration Number					
Tax Compliance Status	Tax Compliance System PIN		OR	Central Supplier Database No.	MAAA
B-BBEE Status Level Verification Certificate	Tick Applicable Box. <input type="checkbox"/> Yes <input type="checkbox"/> No		B-BBEE Status Level Sworn Affidavit	Tick Applicable Box. <input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>[A B-BBEE status level verification certificate/sworn affidavit (for EMEs & QSEs) must be submitted in order to qualify for preference points for B-BBEE – also refer to the SBD 6.1]</p>					
Are you the accredited representative in South Africa for the goods/services/works offered?		<input type="checkbox"/> Yes <input type="checkbox"/> No [If yes enclose proof]	Are you a foreign-based supplier for the goods/services/works offered?		<input type="checkbox"/> Yes <input type="checkbox"/> No [If yes, answer the questionnaire below]
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
<p>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).</p>					
BID SUBMISSION					
1	Electronic submissions must be sent on or before the closing date and time stipulated on the SBD1 form, to tenders@saao.ac.za with the Bid Number as the subject line. Bids received after this time will NOT be accepted for consideration. SAAO will not accept responsibility for bids not received.				
2	All bids must be submitted on the official forms as provided – (not to be re-typed) or in the manner prescribed in the bid document. It is preferable that bidders complete official forms electronically and save them in a PDF searchable format.				
3	Bid submissions are to be separated into separate files/zipped folders as per the Bid Preparation Requirements on Page 28. Bid submissions should preferably be in PDF searchable format. Files or zipped folders must be titled with the bidder’s company name and file/folder title. Attachments are limited to 25 MB per e-mail. Bidders may use				

SUPPLIER INFORMATION

	WeTransfer, Dropbox, or Google Drive to submit their bid documentation. Files on cloud storage with a time stamp after the closing date and time of the bid will be considered late submissions and will not be accepted for consideration.
4	This bid is subject to the specifications and special conditions of contract pertaining to this bid, and 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.
5	The successful bidder will be required to fill in and sign the contract signature form (SBD7.1) for this contract.

TAX COMPLIANCE REQUIREMENTS

1.	Bidder 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 www.sars.gov.za .
4.	Bidders may also submit a printed TCS certificate together with the bid, available via e-filing through the SARS website www.sars.gov.za .
5.	In bids where consortial/ 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.

THE BID PREPARATION

Clarification

If the respondent wishes to clarify aspects of this request or the acquisition process, they write to the contact officials listed under the enquiries section above. The NRF distributes the response to a clarification request to all respondents that have communicated their intention to bid (i.e. briefing session attendance register) within 2 working days of receipt of the query. The NRF does not provide the origin of the request to any party.

Response preparation costs

The NRF is not liable for any costs incurred by a bidder in the process of responding to this invitation, including on-site presentations.

Counter proposals

No counter proposals are accepted.

Two envelope system

The NRF, in the interests of transparent procurement, utilises the "two-envelope" system to minimise any form of price bias in the technical eligibility evaluation phase, whereby the SBD3.1 price schedule and detailed supporting pricing documentation is separated from the rest of the bid submission.

For electronic submissions, bidders are required to save their submissions in, at minimum, the following separate files or zipped folders, clearly named:

- [Bidder Name] – Part 1A – Bid forms and compliance response
- [Bidder Name] – Part 1B – Technical response
- [Bidder Name] – Part 2 – Price Schedule

Supporting Documentation

Supporting documents and additional information shall be included as Appendices which are appropriately named, with a Table of Contents for easy reference. The Appendix number, name, or other reference to the bidders document shall be included in the Evaluation Criteria tables (Column 2) on Page 38. **Any supporting or additional pricing documentation shall be included with the price schedule, so as not to be visible during technical evaluation.**

Central Supplier Database registration

The NRF is legislatively only allowed to contract with third parties registered on the National Treasury's Central Supplier Database. Third parties include their Master Registration Number (Supplier Number) for evaluation purposes. The NRF utilises the third parties' Master Registration Number conduct due diligence through the Central Supplier Database as part of the due diligence pre-award process inclusive of tax compliance verification.

Collusion, fraud and corruption

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.

Fronting

The NRF supports the Government's broad based black economic empowerment recognising that real empowerment is through individuals and businesses conducting themselves in accordance with the Constitution and in an honest, fair, equitable, transparent, and legally compliant manner. Against this background, the NRF condemns any form of fronting. The NRF's evaluation committees conduct or initiate the enquiries/investigations to determine the accuracy of the third parties representations. The third parties have the onus of proving that fronting does not exist. Where the NRF identifies a potential breach may exist, the NRF notifies the third parties of the allegation. The third parties have a period of 7 days from date of notification to provide evidence that such potential breach does not exist. The NRF, upon confirmation of fronting, will invalidate the contract, apply for the third parties to be restricted from conducting business with the public sector for a period not exceeding 10 years, and exercise any other remedies the NRF may have against the concerned third party.

Disclaimers

The NRF 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. The NRF has no liability towards the responding third parties in connection therewith.

General definitions

"B-BBEE" means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;

"B-BBEE status level of contributor" 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;

"Bid" 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;

"Broad-Based Black Economic Empowerment Act" means the Broad-Based Black Economic Empowerment Act, 2003

(Act No. 53 of 2003);

“Contract” 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 (SBD) 7.1 which has been signed by the awarded bidder and the National Research Foundations;

“EME” 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;

“Functionality” means the ability of a bidder to provide goods and/or services in accordance with specifications as set out in these bid documents;

“Proof of B-BBEE status level of contributor” means:

B-BBEE Status level certificate issued by an authorized body or person;

A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;

Any other requirement prescribed in terms of the B-BBEE Act.

“QSE” 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.

“Equipment” means the operational unit including spares, replacement components, consumables, sub-systems, firmware and software that delivers the specified output.

“NRF” means the National Research Foundation and it is used interchangeably with its business unit managing the contract, being the South African Astronomical Observatory (SAAO).

THE BIDDER SELECTION PROCESS

Stage 1 – Verification of the ability of a bidder to provide the services in accordance with contract specifications, conditions and eligibility criteria as set out in the bid documents.

Responsive to submission requirements

Bid that meets all the submission requirements in the bid document is a responsive bid that proceeds to the next stage. The NRF’s evaluation committee will disqualify non-responsive submissions.

Meeting technical specifications

The NRF’s evaluation committee will disqualify responsive submissions that do not meet the minimum technical specifications set out in this document.

Due Diligence Research

The SAAO will conduct due diligence on a bidder by contacting the references submitted to verify the bidder’s capability to provide the goods/services required, and may conduct interviews with bidders to clarify their bid submission to the evaluation committee.

Stage 2 – Price Competition

The NRF’s evaluation committee assesses compliant bidders from the technical evaluation stage on their pricing and B-BBEE accreditation. The NRF’s evaluation committee compares each bidder’s pricing quote on an equal and fair comparison basis equitable to all bidders, taking into account all aspects of the bid’s pricing requirements. The NRF’s evaluation committee ranks the qualifying bids on points scored on the basis of both Price and B-BBEE as indicated on SBD 6.1 in accordance with the PPPFA.

Stage 3 – Award and Contract Signing

The bid evaluation committee recommends to the Bid Adjudication Committee for subsequent approval by the

Delegated Authority the bidder with the highest combined score for the contract award subject to the final verification of the bidder's tax status as set out in the SBD 1 through the CSD.

Cancellation of the bid prior to award

The NRF cancels this bid invitation prior to making an award where:

- a. Due to changed circumstances there is no need for the specified procurement in the document, or
- b. No bids meet the minimum required specification, or a material irregularity occurred in the bid process, or
- c. Where the price is too low/high in comparison to the pre-bid defined market price range with no bidder prepared to negotiate the price into the determined market price range.

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 interest¹ in the enterprise, employed by the state?

YES/NO

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

Full Name	Identity Number	Name of State institution

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

2.2.1 If so, furnish particulars:

.....

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

SBD 4 – BIDDER'S DISCLOSURE

2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract?

YES/NO

2.3.1 If so, furnish particulars:

.....
.....

3 DECLARATION

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

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

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

3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium² will not be construed as collusive bidding.

3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.

3.5 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

3.6 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.

3.7 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

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

SBD 4 – BIDDER’S DISCLOSURE

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 R 50 000 000 (all applicable taxes included)

1.2 To be completed by the organ of state

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

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

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

1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

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

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

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

SBD 6.1 - PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

envisaged in legislation;

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

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

3.1.1. THE 80/20 PREFERENCE POINT SYSTEM

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

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

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

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

3.2.1. POINTS AWARDED FOR PRICE

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

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

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:

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

SBD 6.1 - PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

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

SPECIFIC GOALS (80/20)

B-BBEE Status Level of Contributor	1	2	3	4	5	6	7	8	Non-compliant contributor 0
Contributor Number of Points for Preference (80/20) between R2000 and R50m	20	18	14	12	8	6	4	2	
Points Claimed (Bidder to complete, mark with an X)									

DECLARATION WITH REGARD TO COMPANY/FIRM

4.2. Name of company/firm.....

4.3. Company registration number:

4.4. TYPE OF COMPANY/ FIRM

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

[TICK APPLICABLE BOX]

4.5. 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;

SBD 6.1 - PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

- (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
- (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
- (e) forward the matter for criminal prosecution, if deemed necessary.

.....
SIGNATURE(S) OF TENDERER(S)

SURNAME AND NAME:

DATE:

ADDRESS:

.....

EVALUATION CRITERIA FOR THE BID

Bidders are referred to The Bidder Selection Process description on Page 30 for an explanation of how the NRF will use these tables in the evaluation of bidders' responses. Bidders are to ensure they include a reference in Column 2 to where the evaluation committee can find the document or information pertaining to the evaluation requirement in the bidder's submission.

STAGE 1 : RESPONSIVE BID EVALUATION - ELIGIBILITY					
Document description	Reference to bidder's document	Mandatory/ Optional	Acceptance Criteria (All criteria are weighted equally to each other)	Grading Scheme	SCM Verification
B-BBEE certificate or Sworn affidavit		Mandatory/Optional	Has the bidder met the minimum B-BBEE Level?	Go\ No-go	
Signed SBD 6.1		Mandatory	Is the bidder claiming preference point for the price competition?	Go\ No-go	
Signed SBD 4		Mandatory	Do the bidder and its directors have any vested interest in government?	Go\ No-go	
.Signed SBD 3.1		Mandatory	Did the bidder submit its pricing schedule in a separate envelope?	Go\ No-go	
Signed SBD 1		Mandatory	Has the bidder signed the SBD 1?	Go\ No-go	

STAGE 1: TECHNICAL BID EVALUATION – ELIGIBILITY					
Document description	Reference to bidder's document	Mandatory / Optional	Acceptance Criteria (All criteria are weighted equally to each other)	Grading Scheme	BEC Verification
<p>Lead Time</p> <p>Supplier shall submit the lead time expected for delivery of a new 250 kVA, Prime-rated Generator. Lead times longer than 6 months will be disqualified.</p> <p>Please submit a project Gantt chart, in which delivery of the new prime rated generator to SAAO Observatory, should be no longer than 6 months.</p>		Mandatory	Bidder to submit the requirements	Go/No-go	
<p>Company profile</p> <p>A comprehensive company profile indicating a minimum of five (5) years of experience in the electrical engineering industry that supports the bidders' capability and capacity to undertake a contract of this nature and size. The premises of the company should be in the greater Cape Town region (i.e. within 100km of Cape Town city).</p>		Mandatory	Bidder to submit the requirements	Go/No-go	

STAGE 1: TECHNICAL BID EVALUATION – ELIGIBILITY

Document description	Reference to bidder's document	Mandatory / Optional	Acceptance Criteria (All criteria are weighted equally to each other)	Grading Scheme	BEC Verification
<p>References letters</p> <p>Provide references letters with the company letter heads, signed from at least three (3) of the customers from the greater Cape Town region indicating the supply, installation, and commissioning of a minimum size of 200 kVA, prime-rated generator complete with, Deep Sea Controller & Management System (<i>or approved equivalent</i>) within the last 3 years.</p> <p>Each reference is assessed on its own merit. Contact details for the relevant customers shall be provided; SAAO may contact these references for clarification on any aspect of the reference given.</p>		Mandatory	Bidder to submit the requirements	Go/No-go	
<p>Technical Expertise and Competency</p> <p>i. Provide copy of CV and trade Certificate of a qualified Electrical Technician for Diesel Mechanic or Generator Maintenance with a minimum of five years' experience</p> <p>ii. Provide copy of CV and valid certificates (red seal and Elconop 1 or 2) of a Qualified electrician with a minimum of five years electrical installation experience.</p>		Mandatory	Bidder to submit the requirements	Go/No-go	
<p>Provide the company's health and safety policy signed by the head of the company business.</p>		Mandatory	Bidder to submit the requirements	Go/No-go	

STAGE 1: TECHNICAL BID EVALUATION – ELIGIBILITY					
Document description	Reference to bidder's document	Mandatory / Optional	Acceptance Criteria (All criteria are weighted equally to each other)	Grading Scheme	BEC Verification
Provide a Valid insurance of at least R 2 million for public liability, product liability, and professional indemnity, whichever is greater		Mandatory	Bidder to submit the requirements	Go/No-go	
Provide CIDB registration level 1ME or 1EP or higher		Mandatory	Bidder to submit the requirements	Go/No-go	
Provide a valid Letter of Good Standing (COIDA) issue by the Department of Labour		Mandatory	Bidder to submit the requirements	Go/No-go	
BIDDER IS ABLE TO DELIVER THE SPECIFICATION?				<input type="checkbox"/> YES – PASS TO PRICING	<input type="checkbox"/> NO – DISQUALIFIED

RETURNABLE DOCUMENT CHECKLIST

(M – Mandatory); (O – Optional)	Submitted		Reference to Bidder's document
B-BBEE certificate or Sworn Affidavit	O	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Completed Procurement Invitation (SBD 1)	M	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Completed Declaration of Interest with Government (SBD 4)	M	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Completed Preference Points Claimed (SBD 6.1)	M	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>Lead Time</p> <p>Supplier shall submit the lead time expected for delivery of a new 250 kVA, Prime-rated Generator. Lead times longer than 6 months will be disqualified.</p> <p>Please submit a project Gantt chart, in which delivery of the new prime rated generator to SAAO Observatory, should be no longer than 6 months.</p>	M	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>Company profile</p> <p>A comprehensive company profile indicating a minimum of five (5) years of experience in the electrical engineering industry that supports the bidders' capability and capacity to undertake a contract of this nature and size. The premises of the company should be in the greater Cape Town region (i.e. within 100km of Cape Town city).</p>	M	<input type="checkbox"/> Yes <input type="checkbox"/> No	

RETURNABLE DOCUMENT CHECKLIST

(M – Mandatory); (O – Optional)	Submitted		Reference to Bidder's document
<p>References letters</p> <p>Provide references letters with the company letter heads, signed from at least three (3) of the customers from the greater Cape Town region indicating the supply, installation, and commissioning of a minimum size of 200 kVA, prime-rated generator complete with, Deep Sea Controller & Management System (<i>or approved equivalent</i>) within the last 3 years.</p> <p>Each reference is assessed on its own merit. Contact details for the relevant customers shall be provided; SAAO may contact these references for clarification on any aspect of the reference given.</p>	M	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>Technical Expertise and Competency</p> <p>i. Provide copy of CV and trade Certificate of a qualified Electrical Technician for Diesel Mechanic or Generator Maintenance with a minimum of five years' experience</p> <p>ii. Provide copy of CV and valid certificates (red seal and Elconop 1 or 2) of a Qualified electrician with a minimum of five years electrical installation experience.</p>	M	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Provide the company's health and safety policy signed by the head of the company business.	M	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Provide a Valid insurance of at least R 2 million for public liability, product liability, and professional indemnity, whichever is greater	M	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Provide CIDB registration level 1ME or 1EP or higher	M	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Provide a valid Letter of Good Standing (COIDA) issue by the Department of Labour	M	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Completed Pricing (SBD 3.1)	M	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Pricing schedule and addendum are saved as separate file and clearly named	M	<input type="checkbox"/> Yes <input type="checkbox"/> No	

BID SIGNATURE (SBD 1)

I hereby undertake to supply all or any of the goods, works, and services described in this procurement invitation to the NRF in accordance with the requirements and specifications stipulated in this Bid Invitation document at the price/s quoted. I confirm that I have satisfied myself as to the correctness and validity of my offer/bid in response to this Invitation, cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk. My offer remains binding upon me and open for acceptance by the NRF during the validity period indicated and calculated from the closing time of Bid Invitation. I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me in terms of this Bid Invitation as the principal liable for the due fulfilment of the subsequent contract if awarded to me.

I declare that during the bidding period did not have access to any NRF proprietary information or any other matter that may have unfairly placed our bid in a preferential position in relation to any of the other bidder(s).

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)

APPENDIX 1: SAAO SPECIFIC HEALTH AND SAFETY REQUIREMENTS

SAAO - 003714

SOUTH AFRICAN ASTRONOMICAL OBSERVATORY (SAAO)
PRIME - RATED GENERATOR AT OBSERVATORY, CAPE TOWN



Prepared by:
POLC SAFETY ADVISOR PTY LTD
OHS AGENT: CHEREEN SIEBRITZ
SEPTEMBER 2023

Health and Safety Specifications

PROJECT DETAILS

PROJECT NO.	SAAO-003714
CLIENT:	SAAO - SOUTH AFRICAN ASTRONOMICAL OBSERVATORY
CONTACT PERSON:	SANCHIA LEWIS
CONTACT NO.	021 447 0025 / 076 392 0261
PROJECT:	PRIME - RATED GENERATOR
PROJECT DESCRIPTION:	SUPPLY, INSTALLATION, AND COMMISSIONING OF A PRIME - RATED GENERATOR
SITE LOCATION:	OBSERVATORY, CAPE TOWN
DATE:	SEPTEMBER 2023

PRINCIPAL CONTRACTOR:	
POSTAL ADDRESS:	
CONTACT PERSON:	
CONTACT DETAILS:	
SITE CONTACT PERSON:	
CONTACT DETAILS:	
FULL-TIME HSE OFFICER:	(SACPCMP REGISTERED)
CONTACT DETAILS:	

CLIENT OHS AGENT:	POLC SAFETY ADVISOR (PTY) LTD
DIRECTOR:	CHEREN SIEBRITZ
CONTACT PERSONS:	CHEREEN SIEBRITZ
	RIFQAH ABDUL
CONTACT DETAILS:	082 650 5806
	074 739 6599
E-MAIL:	chereen@polcsafety.co.za / info@polcsafety.co.za / docscontroller@polcsafety.co.za

FOREWORD

This Health & Safety Specification was compiled under the guidelines of the Occupational Health & Safety Act no. 85 of 1993 as amended (the Act) and CR – Construction Regulation 2014.

It must be clear that this document is a management tool and should be used at work in order to comply with the aforementioned Act.

Should there be any contradiction between this document and the Act, the Act must take preference except where explicitly stated.

Similarly, where this document is silent on a specific health & safety requirement, the Act must be used as the minimum requirement.

Should you be unclear about anything set out in this document, please contact this office.

Ensuring you of our best intentions and service at all times.

ABBREVIATIONS, BUT NOT LIMITED TO:

OHSACT	OCCUPATIONAL HEALTH & SAFETY ACT
CR	CONSTRUCTION REGULATIONS
LR	LEAD REGULATIONS
DMR	DRIVEN MACHINERY REGULATIONS
EIR	ELECTRICAL INSTALLATIONS REGULATIONS
EMR	ELECTRICAL MACHINERY REGULATIONS
FR	FACILITIES REGULATIONS
RHCA	REGULATIONS HAZARDOUS CHEMICAL AGENTS
N-IHLR	NOISE-INDUCED HEARING LOSS REGULATIONS
LEPCR	LIFTING, ESCALATOR AND PASSENGER CONVEYOR REGULATIONS
GMR	GENERAL MACHINERY REGULATIONS
GAR	GENERAL ADMINISTRATIVE REGULATIONS
COIDA	COMPENSATION FOR OCCUPATIONAL INJURIES AND DISEASES ACT
BCEA	BASIC CONDITIONS OF EMPLOYMENT ACT
AAR	ASBESTOS ABATEMENT REGULATIONS
CVD 2019	COVID-19: CORONAVIRUS DISEASE
HBA	HAZARDOUS BIOLOGICAL AGENT
PV	PRESSURE VESSELS

PROJECT TEAM:

CLIENT:	SAAO – SOUTH AFRICAN ASTRONOMICAL OBSERVATORY
PROJECT LEADER:	
ARCHITECT & PROJECT MANAGER:	
QUANTITY SURVEYOR:	
ENGINEERS MECHANICAL:	
ENGINEERS CIVIL/STRUCTURAL:	
ENGINEERS ELECTRICAL:	
OHS AGENT:	POLC SAFETY ADVISOR PTY LTD: C. SIEBRITZ

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Acknowledgement of Receipt of the Health & Safety Specification document

1. INTRODUCTION AND BACKGROUND

1.1 Background to the Health and Safety Specification (also termed This Specification)

The Occupational Health & Safety Act No 85 of 1993 requires every employer to create a safe working environment that is free of health risks as far as is reasonably practicable. This applies to all employers in any industry including that of construction. After many years of consultation with the construction industry, the government gazetted a specific regulation for construction activities in February 2014.

Section 5 (1) (b) of the construction regulations requires the client to prepare Health & Safety specifications for any proposed construction work.

In the construction regulations, a Health & Safety Specification is defined as “a documented specification of all health & safety requirements pertaining to the associated works on a construction site, so as to ensure the health and safety of persons”.

Background to the Project – South African Astronomical Observatory (SAAO)

Supply, Installation, Testing and Commissioning of a new 250kVA, Prime Rated Generator complete with, Deep Sea Controller & Management System, (or approved equivalent), Weather proof and spill proof enclosure, residential exhaust system and internal absorption for noise attenuation.

Project Challenges:

The new Generator is to be located on the same base as the existing Generator. The Contractor is to inspect the existing infrastructure to determine the shortest practical time for changing over from the existing to the new Generator. The generator and its components can be heavy and require specialized equipment for lifting and positioning.

Indemnification

- The Principal Contractor hereby certifies that all contracting workers recognize the inherent hazards that exist on the premises/property / site of **SAAO - SOUTH AFRICAN ASTRONOMICAL OBSERVATORY**.
- The Principal Contractor enters the property entirely at his/her own risk and therefore the Principal Contractor waives any claim of whatsoever nature against **SAAO**, its employees, agents and/or mandatory in respect of any loss, damage and/or injury whether same is the result of any negligent act or omission on the part of **SAAO**, its employees, agents and/or mandatory's or other independent Principal Contractors or by a third person or by way of defective equipment or materials supplied by the company.

Hereby indemnifies SAAO employees, agents and/or mandatories against any claims from the Principal Contractor's employees and/or from any other person, arising and being caused in the manner set out above.

1.2 Purpose of the Health and Safety Specification Objectives

To set the standard for health & safety in construction work, by ensuring multi-disciplinary compliance with the requirements of the occupational health and safety act and the construction regulations contained therein.

- To form the guidelines for the contractor's health & safety plan.
- To ensure the health and safety of the persons doing construction work.
- To ensure the health and safety of the users and occupants of the premises.

The health & safety specification sets out the requirements to be followed by the Contractor, so that the health & safety of all persons (including the public) potentially at risk may receive the same priority, as other facets of the project e.g., cost, programme, environment, etc. The entire document is to be considered.

1.3 Implementation of the Health and Safety Specification

This health & safety specification forms an integral part of the contract and the Contractor is required to use it when compiling its project-specific construction phase health & safety plan. The Contractor must keep a copy of this specification in the H&S Safety file, for this said project on site.

2. HEALTH AND SAFETY SPECIFICATION

2.1 Project Description / Scope of work, but not limited to:

- **Employer's objectives**

The scope of work covered by this tender invitation is briefly summarized as follows:

Supply, Installation, Testing and Commissioning of a new 250kVA, Prime Rated Generator complete with, Deep Sea Controller & Management System, (or approved equivalent), Weather proof and spill proof enclosure, residential exhaust system and internal absorption for noise attenuation. {Refer to the attached Data Sheets, which must be completed and submitted with the Tender return}

- **Overview of the works:**

Access, Site Security And PPE;

The Site of the Works is within the secured area, so the contractor is responsible for the registration and administration of all personnel who enter the Facility.

Access to the Work Area is directly from the main entrance gate.

- **Compliance With Regulations;**

The installation shall be erected and commissioned in strict accordance with the acts and regulations stipulated in the SANS 10142-1 2017 and SANS 1973-3 2008. On practical completion, the contractor must provide a Certificate of Compliance for all work completed. The Certificate of Compliance is a prerequisite for Practical Completion.

- **Project Challenge:**

The new Generator is to be located on the same base as the existing Generator. The Contractor is to inspect the existing infrastructure to determine the shortest practical time for changing over from the existing to the new Generator

- **The extent of the works**

- **Principle contractor to demonstrate**

- **Location of the Works**

1 Observatory Road, Observatory, Cape Town, 7925

- **The contract duration:**

TBC

CLIENTS HEALTH AND SAFETY SPECIFICATIONS

This Specification covers the requirements for eliminating and mitigating incidents and injuries at project, **SAAO-003714 SOUTH AFRICAN ASTRONOMICAL OBSERVATORY**. The scope also addresses legal compliance, hazard identification and risk assessment, risk control, and promoting a health and safety culture amongst those working on the project.

The health & safety specification also makes provision for the protection of those persons other than employees.

This Specification aims to address the duties placed upon the Contractor, in terms of the Construction Regulations 2014. The initial risk assessment attached to this document is just the known pre-construction hazards identified and should be used as a starting point for the Contractor to elaborate on their own risk assessments in terms of Section 8 and General Safety Regulations 2(1).

Section 2.3 of the specification considers all the administrative requirements as well as administrative processes, which the Contractor must adhere to, or implement prior to and during the construction period. The aspects covered under this section do not introduce any unusual requirements but clearly communicate the standard administrative requirements as described in the Occupational Health & Safety Act, no.85 of 1993.

Section 2.4 of the specification describes several anticipated requirements in terms of the physical activities to be undertaken during the construction period. The Contractor is responsible for all construction-related processes, as well as the potential impact such process might have on the surroundings, including members of the public whereas

Section 2.5 covers the requirements in terms of plant and equipment.

This specification attempts to address all the anticipated concerns and requirements however where an issue, process, or plant usage is not covered, the Contractor must ensure all legal requirements are met regardless.

The Client will provide any information to the contractor that might affect the Health and Safety of any persons at the site, where construction work is being performed. See below for specific items pertaining to this contract.

A detailed Health and Safety Plan - CR 7(1a) shall be submitted before the commencement of the contract. The OHS Agent will evaluate and discuss the Health and Safety Plan of the contractor, in order to achieve plan approval.

The contractor shall make provision for any personal protective equipment and safety equipment required for the duration of the contract. The contractor at his own expense shall provide such equipment. The contractor shall apply the necessary discipline and control to ensure compliance by his workers.

The Contractor shall ensure that any sub-contractor shall comply in like manner with every requirement of this document.

2.2 Interpretations

2.2.1 Application

This specification is a compliance document drawn up in terms of the Occupational Health & Safety Act no 85 of 1993 (OHSA) and all regulations and is therefore binding. It must be read in conjunction with all other relevant legislation as noted previously.

2.2.2 Definitions

The definitions as listed in the Occupational Health & Safety Act 85/1993 the Construction Regulations (Feb 2014) all other relevant regulations shall apply.

Additional Abbreviations:

S	Section of the Occupational Health and Safety Act 85 of 1993
SAAO	South African Astronomical Observatory
PC	Principal Contractor / Contractor
C	Contractor / Sub-contractor

CR 8(1)	Construction Manager
CR 8(7)	Construction Supervisor
CR 8(8)	Assistant Construction Supervisor
CR 8(5 & 6)	CHSO - Construction Health & Safety Officer
CR 9(1)	Risk Assessor
CR 10(1)	Fall Protection Plan Developer
CR 11 (2A)	Structural Supervisor
CR12 (1-4)	Temporary Works
CR 16	Scaffolding (1-2)
CR 27	Housekeeping and Safeguarding
CR 29	Fire Precaution
CR 30	Construction Employees Facilities.... etc.
CR 11 (2A)	Structural Supervisor ... etc.

2.3 **Minimum Administrative Requirements**

2.3.1 **CR 4 – Notification of Construction Work**

The Principal Contractor will notify the provincial director in writing, in the form of an Annexure 2, as per CR 4 as listed above; at least 7 days prior to commencement of work.

The copy thereof is to **be submitted with the health & safety plan and** a copy to be placed on file.

2.3.2 **Assignment of the Contractor's Responsible Persons to Supervise Health and Safety on Site**

The Contractor shall make supervisory appointments as well as other relevant appointments in writing (as stipulated by the OHSACT and Construction Regulations 2014), prior to the commencement of work.

A written list, detailing all appointments shall be forwarded to POLC Safety Advisors (Pty) Ltd, duly signed by the contractor 's Section 16(1) or (2) appointee, at least 7 days prior to commencement of construction work for the following duties but not limited to:

The following appointments will require specialists to be appointed, based on the specialist position; ONLY the following competencies will be accepted for the project:

1. Construction (and Assistant) Managers:
 - Experience and project CV detailing years worked in construction and projects of a similar nature and values to this
 - Legal liability training
 - OHS for Managers
 - Diploma or Degree in Construction or Building Management or Mechanical
2. Construction Supervisors:
 - Experience CV detailing projects worked on of a similar nature and values
 - Proof of training on Principal Contractor's pre-task risk assessment procedure (Job Loss Analysis, Pre-Job Safety Briefings, etc.)
3. CHSO – SACPCMP Registered Construction Health & Safety Officer:
 - Letter of validation of category registration Status with SACPCMP
 - Experience CV detailing projects worked on of a similar nature and values
 - Minimum of 3 years' experience

4. Risk Assessor:
 - HIRA Certificate issued in accordance with SAQA unit standard 120330
 - Experience CV detailing projects worked on of a similar nature and values
5. Fall Protection Plan Developer:
 - Fall Protection Plan Developer certificate formal training course to SAQA unit standard 229994
6. Incident Investigator:
 - Formal training course to SAQA unit standard 259617 or 120335
7. Fire Fighting and Emergency Preparedness:
 - Attendance a course on basic firefighting

Further appointments as per the requirements of OHS Act 85/1993 and its regulations.

2.3.3 Competence of the Contractor's Appointed Competent Persons

The Contractor's competent persons for the various risk management portfolios must fulfil the criteria, as stipulated under the definition of 'Competent' in accordance with the Construction Regulations 2014. **(Proof of competence must be attached to their appointment letters, e.g. Appointees Certification and CV).**

The Contractor must note that the Construction Manager – CR 8(1) being the most senior company representative on site, is ultimately responsible for implementing the company's health & safety plan and all related procedural documents and therefore he/she must be competent in terms of safety management.

2.3.4 Compensation for Occupational Injuries and Diseases Act 130 of 1993 (COIDA) (WCA or FEM)

The Principal Contractor and their contractors shall be in possession of valid registration with the Unemployment Insurance Fund (UIF) and submit proof of good standing with the UIF. The Contractor shall before the commencement of work on site, furnish the Client with proof of a valid registration through a certificate of good standing in terms of the Compensation for Occupational Injuries and Diseases Act (COIDA Act) 130 of 1993 and that all payments due to the Commissioner are discharged. This cover shall remain in force during the contract and shall be the responsibility of the Contractor to ensure validity. Only compensation provided by Workmen's Compensation Assurance (WCA), Federated Employees Mutual Assurance (FEMA), Rand Mutual Assurance (RMA) or another internationally recognised Workmen's Compensation fund will be accepted on this project. The Principal Contractor is to supply copies of their Contractors All-Risk and Public Liability insurance appropriate to the Contract Value.

Should the contractor await a written letter from the assessor, proof of this need to be placed on file, dated, stamped and signed.

2.3.5 Occupational Health and Safety Policy

The Contractor shall place a Health and Safety Policy signed by its Chief Executive Officer in the safety file. The Policy should outline the Employer's objectives, as well as how they will be achieved and implemented by the Employer.

2.3.6 Site Health and Safety Organogram

The Contractor shall prepare an organogram, outlining the site management health & safety structure including the relevant appointments/competent persons. In cases where appointments have not been made, the organogram shall reflect the intended positions. The organogram must be updated when there are any changes in the Site Management Structure.

2.3.7 Preliminary Hazard Identification and Risk Assessment and Progress Hazard Identification and Risk Assessment

The Contractor shall cause a hazard identification to be performed by a competent person before commencement of construction work, and during construction work, have these risk assessment performed by a competent person in writing. Existing services that might be exposed and cause a hazard to workers or the public must be identified.

The assessed risks shall form part of the construction phase health and safety plan submitted for approval by the Contractor. The risk assessment must include:

- a) The identification of the risks and hazards to which persons may be exposed;
- b) Safe work procedures (method statements) to eliminate, reduce, and/or control the risks and hazards assessed;
- c) A monitoring and review procedure of the risk assessments as the risks change.
- d) Waste management.

The following risk assessment process is to be adopted on the project by all contractors:

- a) Task specific hazard identification based off the method statement, and must follow the process from start to finish according to the method statement
- b) The identification of the hazards (incl. ergonomic) for each step of the method statement Identify the associated risks of each hazard to which persons may be exposed to;
- c) An analysis and evaluation of the risks and hazards identified based on a documented method (risk matrix);
- d) The implementation of control measures and re-evaluation of the risks based off the controls;
- e) A documented plan and applicable safe work procedures to control the risks that have been identified;
- f) A monitoring plan; and
- g) A review plan (at least monthly, change in scope of work and/or following any incident or accident).

The Contractor shall ensure that he informs, instructs and train his workers regarding any hazards, risks and related safe work procedures before any work commences and thereafter; at regular intervals as the risks change and as new risks develop. This training should be carried out in the form of toolbox health & safety talks and proof thereof should be placed on file.

The Contractor shall be responsible for ensuring that all persons who, might be negatively, affected by its operations are informed and trained according to the hazards and risks and are conversant with the safe work procedures, control measures and other related rules (toolbox talk strategy to be implemented).

- A contractor shall ensure that a copy of the risk assessment is available on site for inspection by an inspector, client, client's agent, contractor, employee, representative trade union, health and safety representative or any member of the health and safety committee.
- Every contractor shall consult with the health and safety committee or, if no health and safety committee exist, with a representative group of employees, on the development, monitoring and review of the risk assessment.
- A contractor shall ensure that all employees under his or her control be informed, instructed and trained by a competent person regarding any hazards and the related work procedures, before any work commences and thereafter at such times as may be determined in the risk assessment.
- A contractor shall ensure that all sub-contractors be informed, regarding any hazards, as stipulated in the risk assessment before any work commences and thereafter at such times as may be determined in the risk assessment.
- A contractor shall ensure that as far as reasonably practicable, ergonomic related hazards are analysed, evaluated and addressed in the risk assessment.
- No contractor shall allow or permit any employee or person to enter any site, unless such employee or person has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry.

All contractors shall ensure that all employees are in possession of and carry proof of this health and safety induction training, i.e. using of sticker method, placed on the hardhat or a laminated name card, etc.

2.3.8 Health and Safety Representative(s)

The Contractor shall ensure the appointment that a Health and Safety Representative (under consultation with the employees) and trained to carry out their functions. The appointments must be in writing. The Health and Safety Representatives shall carry out regular inspections, keep records, and report all findings to the responsible person forthwith and at health & safety meetings.

Health & safety representatives are required, as soon as an Employer has 20 employees on site (one for the first 20 employees, another for the next 30, and 1(one) more for every 50 employees thereafter). **The Health & Safety Representative must represent the labour and may therefore not hold a management position on the site.**

Due to the facility having an influx of its staff, members of the public, i.e. Scientist etc. will a Safety Rep need to be appointed to work closely with the appointed CHSO to ensure work are carried out in a safe manner at all time.

Informing his/her employer of any dangerous acts and or conditions in writing, and to ensure those reports are dealt with timeously.

2.3.9 Health and Safety Committees (where applicable)

Site Safety Meetings will be organised and chaired by the Contractor's Responsible Person and CR 8(7). **All sub-contractor's construction work supervisors and Health & Safety Representatives shall attend the monthly health & safety meeting.** Contractors shall also have their own internal health & safety committees and meetings in accordance with the OHS Act 85/1993. **Safety needs to be addressed in site meetings and minutes to be placed on file with attendance register; in this event, safety meeting need not take place, as long as proof is placed on file.**

2.3.10 Health and Safety Training

2.3.10.1 Induction

The Contractor shall ensure that all site personnel **undergo a site-specific health & safety induction training session before any worker starts.** A record of attendance shall be kept in the health & safety file.

All contractors shall ensure that **all visitors** to a construction site undergo health and safety induction pertaining to the hazards prevalent on the site and shall be provided with the necessary personal protective equipment.

2.3.10.2 Awareness

The Contractor shall ensure that on site, periodic toolbox health & safety talks take place at least once every week. These talks should deal with risks relevant to the construction work at hand, conveying safe work procedures to the employees involved. A record of attendance must be kept in the health & safety file.

The system is intended to educate employees in terms of hazards, hazardous situations and the correct procedures to be followed, to ensure the safety of all and should be presented as and when deemed necessary or where certain aspects need to be re-addressed as opposed to a weekly ritual.

2.3.10.3 Competence

All competent persons must have the knowledge, experience, training, and qualifications specific to the work they have been appointed to supervise, control, and carry out. Competence will have to be assessed on a regular basis e.g., training, evaluation, and periodic audits by the Contractor, progress meetings, etc. The Contractor is responsible to ensure that he appoints competent persons to carry out construction work.

Where the OHS Act prescribes certification of competency of persons performing certain tasks, proof of such certification shall be provided; prior to signing of contract.

The Principal Contractor shall ensure that all sub-contractor shall comply in like manner with every requirement of this

document.

2.3.11 General Record Keeping

The Contractor shall keep and maintain Health and Safety records to demonstrate compliance with this Specification, with the OHS Act 85/1993, and with the Construction Regulations (Feb. 2014). The Contractor shall ensure that all records of incidents/accidents, emergency procedures training, inspections, audits, etc. are kept in a health & safety file held in the site office. The Contractor must ensure that he maintains the file and makes it available on request (the file must include the Contractor's health & safety plan).

These records are crucial for inclusion in the Contractor's consolidated health & safety file, for handover to the client on completion of construction work.

The Contractor is ultimately responsible to ensure that all inspection registers are updated, as required.

The following template shows the frequency of inspections required for various plant and equipment, where applicable:

No	Item to be inspected	Type of Inspection	Frequency
1	Lifting Machinery	Performance Test	12-monthly & after erection
		Thorough Inspection of all parts	6-monthly
		Visual Inspections	Daily
2	Scaffolds	Hand-over	Before the scaffold is used.
		Thorough Inspection	Once per week and immediately after bad weather
		Visual Inspection	Daily
3	Excavations	Stability	Before every shift and after rain
4	Chain Slings, Wire Ropes, Slings, Hooks and Shackles	Pre-Issue	Daily or as required
		Thorough Visual Inspection	Monthly
		Load testing	3-monthly
5	Chain Blocks and Lever Hoists	Full Test and Inspection	6-monthly
6	Gantry	Thorough inspection of all parts	6-monthly
7	Builder's / Material Hoist	General Check	Daily
		Full Inspection	Monthly
8	Fire Extinguishing Equipment	Visual Inspection	Monthly
		Full Service	12-monthly
9	Gas Welding and Cutting Equipment	Visual	Weekly
		Full Inspection	3 Monthly
10	Ladders	Visual	Daily or on Issue
		Full Inspection	Monthly
11	Electrical Equipment in Hazardous Locations	Full Inspection	3-monthly
12	Portable Electric Tools and Leads	Visual	Daily or when in use
		Full Inspection	
13	Earth Leakage	Test and Overload Test	3-monthly
14	Explosive Power Tools	Visual	Daily or on issue
		Full Inspection	Monthly
15	Mobile Machinery and Site Plant (e.g. concrete mixer, brick cutter, teleporter, excavators, etc.)	Visual Operator Check – recorded in writing	Daily
		Load Test and Servicing	3-monthly

16	Batch Plant / concrete mixer	Full Inspection	Monthly
17	Vessels Under Pressure	Full Inspection – compressors	36-months
18	Temporary Works (Formwork) & Support work	Full Inspection	Before, During and After placement of concrete
		Full Inspection	Daily

2.3.12 Health & Safety Audits, Monitoring and Reporting

The Contractor will appoint a **part-time SACPCMP registered Health & Safety Officer**, with a minimum of 3 years' experience who will on his behalf conduct once a month health & safety inspection of the work operations, including a full audit of physical site activities, as well as an audit of the administration of health & safety on all sub-contractors on site.

The Contractor's appointed Health & Safety Officer shall ensure that all registers are kept up to date.

Client

- The Client's HSE Agent will evaluate the PC H&S File and other procedures prior to commencement on site,
- The Client HSE Agent will conduct monthly audits of the Principal Contractor's health & safety management system in terms of this specification and legal requirements
- Attended project progress meetings
- Ensure that all incidents and accidents documentation are adequately completed by the PC when required.

Principal Contractors:

Evaluate, discuss, agree and approve all contractors/sub-contractors H&S Plans

- Conduct monthly audits of all contractors and ensure these audits are on file, on site
- Conduct weekly formal inspections of their health & safety activities on the project and provide these reports to the Client H&S Agent upon the monthly audits
- Monthly internal audits of his/her health & safety file
- Conduct daily inspections of the site and record these in a health & safety daily diary or equivalent
- Provide a monthly stats report of the project to the client's health & safety agent which shall include at least:
 - **Injuries and accidents for the project – Total to date and for month**
 - **Man hours**
 - **Non-compliance/conformances – Total to date and for month**
 - **Current number of employees on site**
 - **Current number of contractors on site**
 - **Average compliance level achieved to date on the project**

2.3.13 Emergency Procedures

The Contractor must prepare a detailed Emergency Procedure prior to commencement on site. The procedure are to be aligned with SAAO facilities procedure where possible, and shall detail the response plan including the following key elements:

- List of key competent personnel;
- Details of emergency services;
- Actions or steps to be taken in the event of specific types of emergencies;
- Information on any hazardous material/situations.

Emergency procedure(s) shall include, but not be limited to fire; injury to employees; injury to the public due to construction work; damage to material/equipment/plant; use of hazardous substances; major incidents/accidents; etc.

The Contractor shall advise in writing to the client forthwith, of any emergencies, together with a record of action taken. A contact list of all service providers (Fire Department, Ambulance, Police, Medical and Hospital, etc.) must be maintained and available to site personnel.

Emergency procedures must consider the site location, existing procedures, exit points, and emergency services accessibility.

The client's end user procedures must form the basis of the site emergency procedure.

Every contractor shall ensure that:

- A group of 3 trained workers should be assigned to the emergency/ evacuation team
- All appropriate measures are taken to avoid the risk of fire;
- Sufficient and suitable storage is provided for flammable liquids, solids and gases;
- Smoking is prohibited and notices in this regard are prominently displayed in all places containing readily combustible or flammable materials;
- Combustible materials do not accumulate on the construction site;
- Welding, flame cutting, and other hot work are done only after the appropriate precautions as required have been taken to reduce the risk of fire;
- Suitable and sufficient fire-extinguishing equipment is provided, as per the requirement of SABS 0400;
- The fire equipment is inspected by a competent person;
- A sufficient number of workers are trained in the use of fire-extinguishing equipment;
- Where appropriate, suitable visual signs are provided to clearly indicate the escape routes in the case of a fire;
- The means of escape are kept clear at all times;
- There is an effective evacuation plan in accordance with the hospital's procedure
- Adequate provision made to sound an alarm in the event of a fire;
- First aid facilities must be provided as per requirements of the Occupational Health & Safety Act. This includes:
 - A trained first aider and first aid resources on-site at all times whilst construction is taking place;
 - A standard that must be drafted for the management of injuries on duty and investigations thereof.

All media and other interested parties must be directed to the Contractor. No persons may comment on any incident on site.

2.3.14 First Aid Boxes and First Aid Equipment

The Principal Contractor shall appoint a First Aider(s) in writing, once he has more than 10 personnel on site; up to 5 personnel on site then the contractor must have a fully stocked first aid box onsite as per GSR 3, however each Contractor shall have a full-time first aider and a first aid box on site, at all times, irrespective of the number of employees.

The appointed person(s)/ first aider must be a permanent member of the on-site team. The appointed First Aider(s) must have a valid competence first aid certificate. Copies of valid certificates are to be kept on site/file. The Contractor must provide an on-site First Aid Station with first aid facilities, including at least 1 (one) first aid box adequately stocked at all times.

2.3.15 Incident / Injury Reporting and Investigation

Injuries are to be categorised into a near miss, first aid, medical, medical lost time, disabling and fatal. The Contractor must stipulate in its health & safety plans how it will handle each of these categories. When reporting injuries to the client's appointed safety agent, these categories shall be used. The Contractor must investigate injuries and incidents involving his employees within seven days of the incident in the form of Annexure 1 (General Administrative Regulations) and forward a copy of the investigation report to the client's OHS Agent

All reportable incidents in terms of the provisions of Section 24 of the OHS Act, 1993 must be reported to the local Dept. of Labour in the prescribed manner.

2.3.16 Hazards and Potentially Hazardous Situations

The Contractor shall immediately notify his contractors of any hazardous or potentially hazardous situations that may arise during the performance of construction activities.

2.3.17 Personal Protective Equipment (PPE) and Clothing

The Contractor shall ensure that personal protective equipment needs analysis is conducted and incorporated into the risk assessment. A Contractor shall ensure that SANS approved personal protective equipment or clothing is provided to personnel. Safety shoes should be anti-slip and oil/chemical resistant.

Employers must provide effective personal protective equipment and facilities free of charge. The equipment should be properly selected, maintained, cleaned, undamaged and properly used. Some manufacturers of respirators give specific instructions in this regard.

The Contractor shall clearly outline procedures to be taken when PPE or Clothing is:

- Lost or stolen;
- Worn out or damaged.

Every Contractor is responsible for supplying the necessary PPE to its own employees however; the responsibility to enforce compliance in this regard remains that of the Contractor's. PPE, i.e. overalls and reflector vests to have the company's branding / name / logo reflecting and that of his sub-contractors

2.3.18 Occupational Health and Safety (OHS) Signage

The Principal Contractor must provide adequate on-site OHS signage. Including but not limited to:

- 'No unauthorized entry'
- 'Report to site office'
- 'Direction to site office'
- 'Beware of overhead work'
- 'Hard hat area'
- 'Covid-19' - Wearing of face mask & dust mask where required
- Covid-19 screening & sanitization stations
- 'No smoking' – to be posted up at all site entrances
- 'First aid (location and name of first aider)
- 'Fire extinguishers'
- Evacuation meeting point.... etc.

Signage must also be posted up on site in strategic locations e.g., access routes, entrances to structures and buildings, scaffolding, and other potential risk areas/operations such as exposed edges and openings and trenches/excavations where applicable. Health & safety signage are to be well maintained, including weekly inspections, cleaning, replacement and repair.

2.3.19 Permits – where applicable

Permits may include the following:

- Traffic diversion for deliveries
- Closure of the road leading to the client's facility.
- Hot works (welding, soldering, grinding) etc;

All permits must be kept in the site health & safety file.

2.3.20 Contractors and Sub-contractors

All Contractors must appoint every Sub-contractor in writing and copies of these appointments must be kept on file. The Contractor shall ensure that all sub-contractors appointed, comply with this Specification, the OHS Act 85/1993, Construction Regulations 2014, and all other relevant legislation that may relate to the activities directly or indirectly. The Contractor, when appointing Sub-contractors, shall mutatis mutandis ensure compliance as if it was the Contractor.

The Contractor may only appoint a Sub-contractor after approving the Sub-contractor's health & safety plan. The Contractor must audit each of its Sub-contractor on a monthly basis, with audit reports filed in the health & safety file on site. The audit must include an administrative assessment as well as a physical inspection of the contractor's health & safety system.

The Contractor must stop any Sub-contractor from carrying out construction work that is not in accordance with his health & safety plan or if there is an immediate threat to the health and safety of persons.

The Contractor shall take all reasonable steps necessary to ensure co-operation between all Sub-contractors, to enable each of those Sub-contractors comply with the provisions of these regulations.

The Contractor shall take all reasonable steps to ensure that each contractor's health and safety plan is implemented and maintained on the construction site.

The Contractor must ensure that all sub-contractor's is registered and in good standing with a recognised compensation fund or with a licensed compensation insurer prior to work commencing on site;

The Contractor must ensure that potential sub-contractors submitting tenders have made provision for the cost of health and safety measures during the construction process.

The Contractor shall discuss and negotiate with the Sub-contractor, the contents of the health and safety plan and shall finally approve that plan for implementation.

The Contractor shall hand over a consolidated health and safety file to the client upon completion of the construction work and shall include a record of all drawings, designs, materials used and other similar information concerning the completed structure.

The Contractor shall not appoint a Sub-contractor to perform construction work unless the Contractor is reasonably satisfied that the Sub-contractor, he or she intends to appoint and has the necessary competencies and resources to perform the construction work safely.

Suppliers are deemed as sub-contractors and are to comply as listed above.

All hired construction plant and operators' companies are to comply as stipulated above.

It is required of the Principal Contractor to have a list of all sub-contractors, list to be kept on file, onsite and list to be updated accordingly.

2.3.21 Public and Site Visitor Health & Safety

The Principal Contractor shall ensure, Where and When required, that security personnel are present at all times upon entering the site area. Construction workers may not be paid in cash at the construction site.

No members of the public is permitted access to the **SAAO OBSERVATORY** site. The site will be managed and controlled so as to limit unsafe conditions of consultants and public / client visitors and staff. Warning signs at the entrance of construction areas must be clear and well visible.

Both the CONTRACTOR and the CLIENT have a duty in terms of the OHS Act 85/1993 to do all that is reasonably practicable to prevent members of the public and site visitors from being affected by the construction activities.

Site visitors must be inducted / briefed on the hazards they may be exposed to, as well as what measures are in place or should be taken to control these hazards. As per the Construction Regulations, a record of these 'inductions' must be kept on site (attendance register or visitors' book with site rules leaflet).

Where applicable:

Where required, when construction deliveries (offloading and removing) take place adjacent to public/staff walkways, parking, and other public access routes, the public/staff must be diverted or protected against any accidental injuries.

Where overhead structure should be constructed of steel scaffold boards or 45mm timber boards and where scaffolding is erected adjacent to or over public/staff areas, see **scaffold requirements 2.5.5**.

Where traffic has to be diverted, competent appointed flagmen must be assigned.

A traffic management plan/method statement will be required in this event..

Safety and security

The Principal Contractor shall ensure that security personnel are present at all times upon entering the site area. The security personnel / guards must ensure that the public (visitors) stay clear from areas where construction work is in process. Construction workers may not be paid in cash at the construction site.

No members of the public and the facility is permitted access to the **SAAO OBSERVATORY** site. The site will be managed and controlled so as to limit safety concerns of staff, the clients visitors (scientist etc) as a result of the construction activities, as well as to minimise impact of construction work. Warning signs at the entrance of construction areas must be clear and well visible.

2.3.22 Weekend work & Night Work (Before and After Hours) –

If required and agreed upon, the Contractor must ensure that adequate lighting is provided to allow work to be carried out safely. First aid care is available as well as an emergency coordinator and safety representative.

The PC to inform the relevant consultants when permitted to proceed to work 3 days prior to scheduled work

2.3.23 Transport of Workers

The Contractor shall not:

- Transport persons together with goods or tools unless there is an appropriate area or section to store the tools or equipment;
- Transport persons in a non-enclosed vehicle, e.g. truck; there must be a proper canopy (properly covering the back and top) with suitable sitting area. Workers shall not be permitted to stand or sit at the edge of the transporting vehicle.
- Transport workers in bakkies unless they are closed / covered and have the correct number of seats for the passengers.

2.3.24 Construction Health & Safety Officer

The contractor shall appoint a full- time CHSO - Construction Health & Safety Officer with a letter of validation letter of category registration status with SACPCMP and a minimum of 3 years' experience.

The CHSO duties would be as follows, but not limited to:

Health & safety inspections including administrative and physical site inspections and reports to be kept in the health & safety file;

- a) Maintain the health & safety plan and file;
- b) Assist with investigating near misses, incidents and injuries;
- c) Co-ordinate the function of reviewing the hazard identifications and risk assessments;
- d) Assisting with method statements (safe work procedures) and checking whether the responsible persons follow these procedures.
- e) Conduct site inspections & file audits including subcontractors
- f) Evaluate and approve sub-contractor's safety plans, audit their files, inspect their work ethics on site, etc.

2.3.25 Penalties /Fines

A cease work notice will be issued in the event, when:

- **A below average percentage achieved after 3 consecutive audits;**
- **A non-compliance item not rectified after 3 consecutive audits, or**
- **When a non-compliance is of a hazardous situation/condition, an immediate cease work notice**

The penalty procedure shall consist of a written notification with a compliance time frame.

A zero-tolerance approach will be adopted and work will be suspended, in terms of non-conformances related to:

- **Scaffold Safety: platforms to be adequately boarded, handrails to be in place, signage to be displayed (safe / unsafe for use), adequate bracing, stays or ties to be used to ensure structural stability and vertical access to be provided.**
- **Harnesses to be used by scaffold erectors, steel erectors and roof cladding teams.**
- **Work force competency, medical fitness, and daily inspections**
- **General PPE standards**
- **Permits, e.g., Hot work, road closures, etc**

2.4 **Physical Requirements**

The Contractor is to provide a method statement on-site establishment:

- **Specify the type of hoarding to be used where required, proposed;**
 - **16mm melamine board with height of 2750 mm with pulling for structure and bracing;**
 - **Construction of bulkhead- at least 2m work space**
 - **Signage installation (if working from a ladder) 1.5m work space**
- **Entry & exit of delivery trucks,**
- **The means of transporting materials and goods to the work area,**
- **Waste management - rubble storage and removal**
- **Site amenities (eating facilities, ablution facilities) etc.**

2.4.1 **Demolitions, Stripping etc.**

The Contractor is responsible to plan and coordinate all demolition processes. **The areas to be demolished must be cordoned off immediately to prevent uncontrolled access.** All services must be isolated prior to any demolition work and the Contractor must liaise with the Professional Team, so as to ensure that all the services are identified in advance.

To avoid electrocution, structure collapse the Contractor must plan and coordinate all demolition works. The planning must include the sequencing of the demolition process, installation of temporary support, back-propping, and any other measure deemed necessary to ensure the demolition process is as far as reasonably practicable, controlled.

All rubble and debris must be managed effectively using skips (where applicable) and should be carted away on an on-going basis to prevent the uncontrolled build-up of debris.

Hazardous Waste must be stored, managed, and disposed of as per the Department of Water Affairs and Forestry: Minimum Requirements for the Handling, Classification, and Disposal of Hazardous Materials.

All demolition works must be under close supervision.

In terms of plant usage, refer to sections 2.3.2, 2.3.3, 2.3.11 & 2.5.1

2.4.1(a) **Excavations / Trenching / Foundational Works:**

The Contractor shall make provision in their tender for shoring of any excavations/trenches as per this specification. Excavations and trenches must either be shored or battered back to a safe angle unless a competent person deems the excavation or trench to be safe (permission must be given in writing). Where any uncertainty exists, the decision of a professional engineer or professional technologist competent in excavation work will be decisive.

The Contractor shall ensure that:

- Excavations/trenches are inspected before every shift and a record of these inspections is kept;
- Safe work procedures have been communicated to the workers;
- The safe work procedures are enforced and maintained and informed by the Contractor's Responsible Persons at all times;
- Safe access is provided;
- No load, material, plant or equipment is placed or moved near the edge of any excavation or trench. A safe distance of no less than 1.5 meters from the edge of the excavation must be maintained;
- The requirements as per section 13 of the Construction Regulations are adhered to.

2.4.2 **Stacking and Storage of Materials HCA and related products - in reference to RHCA 15 & CR 28**

The Principal Contractors to provide a method statement in this regard, or include in the site establishment method statement.

2.4.3 Existing Structures (Method statement to be provided)

Every effort must be made to protect all existing structures / fixtures adjacent or aligned to the construction area.

The contractor shall ensure that, where applicable :

- All reasonably practicable steps are taken to prevent the uncontrolled collapse of any new or existing structure or any part thereof, which may become unstable or is in a temporary state of weakness or instability; due to the carrying out of construction work.
- No structure or part of a structure may be loaded in a manner which would render it unsafe.
- The contractor shall ensure that all drawings pertaining to the design of the relevant structure, are kept on site and are available on request by an inspector, contractors, client and client's agent.
- The designer of a structure shall:
 - Take into account the hazards relating to any subsequent maintenance of the relevant structure and should make provision in the design for that work to be performed to minimize the risk.
 - Carry out sufficient inspections at appropriate times of the construction work involving the design of the relevant structure, in order to ensure compliance with the design and a record of those inspections is to be kept on site.
 - Stop any contractor from executing any construction work which is not in accordance with the relevant design.
 - Conduct a final inspection of the completed structure prior to its commissioning to render it safe for commissioning and issue a completion certificate to the contractor.
 - Ensure that during commissioning, cognisance is taken of ergonomic design principles in order to minimize ergonomic related hazards in all phases of the life cycle of a structure.

2.4.4 Edge Protection, Voids and Penetrations:

The Contractor must ensure that all exposed edges and openings are guarded and demarcated at all times until permanent protection has been erected. These guards must be constructed of scaffold tubing or a material offering similar protection. Guardrails must be placed at 1m above the platform / floor. Guardrails should be distinguishable from the rest of the structure, scaffold or temporary works and painted, if necessary, to minimise the chance of them been used for purposes other than edge protection.

The Contractor's risk assessment must include the following areas:

All other openings and voids from where a person may fall.

The Contractor fall protection plans must include the management of edge protection, penetrations and fall prevention.

2.4.5 Temporary Works (known as Formwork and Support Work): Where applicable

The Contractor shall ensure that the provisions of the Construction Regulations 12 of 2014 is adhered to. These provisions must include but not be limited to, ensuring that all Temporary Works equipment used is examined for suitability before use. That a competent person inspects all Temporary Works immediately before, during and after placement of concrete or any other imposed load and thereafter on a daily basis until the Temporary Works has been removed. Records of all inspections must be kept in a register on site held by the Contractor.

Where Temporary Works operations may negatively affect the public and where there is the potential of falling objects and equipment, a fan/apron must be erected below the potentially problematic area. The public must be protected from any and all risks and alternative pedestrian and vehicle movement will be required when this risk prevails. Signs and notices posted up, advising of danger and use of opposite pavement is not sufficient and must be used together with other safety measures. A pavement gantry with a suitably strong overhead covering is the accepted option.

2.4.6 Fall Protection (Scaffolding and or Working in elevated positions – provide method statement):

Any work that takes place in an elevated position. The Contractor must submit a Site risk-specific Fall Protection Plan in accordance with the Construction Regulations (February 2014) before this work is undertaken. The Fall Protection Plan must consider (where applicable):

Scaffold work,
Temporary Works
Ladder work
Construction of base for the old generator (is required)
External façade finishes
Voids
Elevated platforms

All scaffolding must comply with the requirements of SANS 10085.

All scaffolding platforms above 2m from the ground must be complete with guard rails, toe boards and must be fully boarded, at the level from which the work will be undertaken; as per the requirements of general-purpose scaffold platforms (5-board platforms). Mobile or Tower scaffolds may not exceed 3x their minimum base width in height and must be adequately boarded as per their loading requirement (no less than 3-board wide).

Mobile scaffolds and static frame towers must be erected, as per the manufacturer's requirements (copies of these erection specifications/data sheets must be available on file). All scaffold to have adequate ties, bracing etc to prevent collapse from unexpected weather conditions (winds).

Scaffolding must be declared safe for use by a competent scaffold inspector, who must complete the scaffold hand-over certificate. Inspections must thereafter be carried out weekly, after bad weather, after any alterations, after an incident, and before dismantling. The Principal Contractor must keep all scaffold inspection registers on site/ file.

All persons working in elevated positions must have a valid occupation medical fitness certificate and be assessed/evaluated for physical and psychological fitness. Proof of these assessments/evaluations must be contained within the site safety file.

All persons working in elevated positions must be trained and records of this training must be kept on site/ file.

Work from elevated positions may only be conducted as if it were being conducted from a safe ladder or safe scaffold.

Where fall prevention or fall arrest devices are being used, the correct devices must be used for the purpose and must be properly maintained. Workers must be trained on the use and maintenance of the fall prevention and arrest equipment/devices.

No materials may be thrown down from platforms, decks or any other elevated position unless a demarcated area has been established on ground level, to prevent other employees or persons from walking out into the area to which the materials is being thrown.

2.4.7 Stacking of Materials - as per point 2.4.3 to be incorporated in the site establishment method statement

The Contractor shall ensure that there is an appointed stacking supervisor and all materials, temporary works and all equipment is stacked and stored safely, on level, compacted ground, out of access ways and no more than three times the minimum base width in height. Pallets of bricks may not be stacked more than two above each other.

Walkways must be clear of all materials.

No materials may be stacked for storage on scaffold platforms.

2.4.8 Electrical Supply, Distribution and Installations:

The Contractor must comply with the Electrical Installation Regulations

All electrical connections and installations must be performed under the supervision of a Qualified Electrician, who has been appointed in writing. The installation must be designed by the Electrical Engineer. The appointed Electrical Contractor must work according to the design details provided at all times.

COMPLIANCE WITH REGULATIONS

The installation shall be erected and commissioned in strict accordance with the acts and regulations stipulated in the SANS 10142-1 2017 and SANS 1973-3 2008. On practical completion, the contractor must provide a Certificate of Compliance for all work completed. The Certificate of Compliance is a prerequisite for Practical Completion.



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2.4.9 Regulations Hazardous Chemical Agents (RHCA) – (provide method statement) where applicable

The Contractor must provide the necessary training and information as far as the use, transport, and storage of RHCA. **The Contractor shall ensure that the use, transport, and storage of RHCA are carried out, as prescribed in the RHCA.** The Contractor shall ensure that all hazardous chemicals on site have Material Safety Data Sheets (MSDS) and the users are made aware of the hazards and precautions that need to be taken when using the chemicals.

The risk assessment must address the following items:

- The RHCA's that employees may be exposed to;
- The effects that the RHCA can have on the employee;
- Where the RHCA may be present and in what physical form;
- The route of intake;
- The nature of the work and process involved;
- The safe storage and quantities stored on site;
- Wash off of tools and persons;
- Removal of this contaminated water.

In accordance to the listed sections but not limited to:

- RHCA 3 – Information, Instruction & Training
- RHCA 4 – Duties of persons who may be exposed to hazardous chemical agents
- RHCA 11 – PPE
- RHCA 12 – Maintenance of control measures
- RHCA 16 – Disposal of hazardous chemical agents...etc

The First Aiders must be made aware of the MSDS and how to treat RHCA incidents accordingly. Flammable substances must be stored in a separate area, away from other materials.

2.5 Plant and Machinery:

2.5.1 Construction Plant

“Construction Plant” includes all types of plant including but not limited to, digger loaders, excavators, road vehicles, dumpers and all lifting machinery.

The Contractor shall ensure that all such plant complies with the requirements of the OHS Act 85/1993 and Construction Regulations (Feb. 2014) DMR - Driver Machinery Regulations. The Contractor shall inspect and keep records of inspections and load tests of the construction plant used on site. Only authorised/competent persons may use machinery and the proper supervision must be provided. Appropriate PPE and clothing must be provided and maintained in good condition, at all times.

No employees may travel as passengers on any mobile plant or construction vehicle unless they are seated in the cab.

Speed limits on site must not exceed 25km/h.

2.5.2 Pressure Vessels Regulations; (where applicable)

The Contractor shall comply with this Regulations, including:

- Providing competency and awareness training to the operators;
- Providing PPE or clothing;
- Inspect equipment regularly and keep records of inspections;
- Providing appropriate firefighting equipment (Fire Extinguishers) on hand;
- Oxygen and acetylene bottles must be secured in an upright position and must not show signs of corrosion or damage.

2.5.3 Fire Extinguishers, Fire Fighting Equipment

The Contractor to provide adequate, regularly serviced firefighting equipment located at strategic points on site, specific to the classes of fire likely to occur. The appropriate notices and signs must be posted up as required.

Class C fires involve energized electrical equipment. Extinguishers with a C rating are designed for use with fires involving energized electrical equipment.

Carbon dioxide is the best extinguishing agent for electrical fires because it doesn't conduct electricity, so it won't cause any further damage to the equipment or building.

Foam fire extinguishers ONLY work by expelling a large volume of foam, directly onto the fire. This cuts off the fire's access to oxygen.

Wherever hot work is taking place, additional fire extinguishers must be on hand. Contractor's are responsible for ensuring compliance with hot work procedures and must be in possession of method statements detailing the safe working procedures. Due to the nature of this project i.e, high risk, will a full time level 2 Fire fighter be required and a replacement should the initial fire fighter be absent.

Emergency Preparedness on Construction Sites

Every contractor shall ensure that:

- A group of 3 should be assigned as the emergency/ evacuation team
- All appropriate measures are taken to avoid the risk of fire;
- Sufficient and suitable storage is provided for flammable liquids, solids and gases;
- Smoking is prohibited and notices in this regard are prominently displayed in all places containing readily combustible or flammable materials;
- combustible materials do not accumulate on the construction site;
- Welding, flame cutting and other hot work are done only after the appropriate precautions, as required have been taken to reduce the risk of fire;
- Suitable and sufficient fire-extinguishing equipment is provided, as per the requirement of SABS 0400;
- The fire equipment is inspected by a competent person;
- A sufficient number of workers are trained in the use of fire-extinguishing equipment;
- Where appropriate, suitable visual signs are provided to clearly indicate the escape routes in the case of a fire;
- The means of escape is kept clear at all times;
- There is an effective evacuation plan;
- Adequate provision made to sound an alarm in the event of a fire;
- First aid facilities must be provided, as per requirements of the occupational health & safety act. This includes:
- A trained first aider and first aid resources on site at all times whilst construction is taking place;
- A standard that must be drawn up for the management of injuries on duty and investigations thereof.

2.5.4 Hired Plant, Machinery and Equipment/tools:

The Contractor shall ensure that any hired plant and machinery used on site is safe for use and complies with the minimum legislated requirements. The necessary requirements as stipulated by the OHS Act 85/1993 and Construction Regulations (February 2014) shall apply. The Contractor shall ensure that operators hired with machinery are competent and that certificates are kept on site in the health & safety file.

Any load test requirements and inspections in terms of legislation must be complied with and copies of load test certificates and inspections must be kept in the health & safety file. All relevant Contractors must ensure the same.

2.5.5 Ladders and Ladder Work

The Contractor shall ensure that all ladders are inspected monthly, are in good safe working order, are the correct height for the task, extend at least 1m above the landing, fastened and secured, and at a safe angle. Stepladders must be safe for use, must be the correct height for the task and the top two rungs may not be used. Records of inspections must be kept in a register file on site.

2.5.6 General Machinery and Lifting Machines:

The Contractor must ensure compliance with the Driven Machinery Regulations, which includes inspecting machinery regularly, appointing a competent person to inspect and ensure maintenance, issuing PPE and relevant clothing, and training those who use machinery.

Tower cranes where required, must be load tested on erection with a copy of the test certificate kept in the health & safety file. A competent person must conduct the tower crane erection, alterations, maintenance and dismantling. Intermediate safety inspections must be conducted at least every 6 months. Records of all maintenance and inspections must be kept in the health & safety file. Only trained operators who have been certified physically and psychologically fit may operate tower cranes and construction machinery.

A competent banksman who should co-ordinate all lifting and rigging operations must assist the tower crane operator.

2.5.7 Cranes (mobile, tower, track running, or stationary):

Prior to the commencement of any crane work whether mobile or tower, the contractor must ensure that all documentation is in place and available on file. The documentation must include;

Load Test or Hand-over certificate

Operator Certificate

The Operators Medical Fitness certificate

Lifting Tackle Load Test Certificates

A Crane operating/lifting procedure – specific to the site.

2.5.8 Portable Electrical Tools

The Contractor must ensure that his workers are made aware of the positions of electrical power lines (overhead).

The minimum safety distances as per the table to Electrical Machinery Regulation 19 must be complied with.

The Contractor must comply with the Electrical Installation Regulations, the Electrical Machinery Regulations and the Construction Regulations (Feb. 2014) CR 24(d) & EMR 4.

The Contractor shall carry a copy of the Certificate of Compliance for its electrical power supply. All temporary electrical installations must be inspected at least weekly. Portable electrical tools and equipment must be visually inspected daily with inspection records kept monthly. Records of these inspections must be kept on file.

All electrical tools shall be inspected daily and placed on a register, with each serial number including extension leads.

2.6 Occupational Health

2.6.1 Occupational Hygiene

Exposure of workers to occupational health hazards and risks is very common in any work environment, especially in construction. Occupational exposure is a major problem and all Contractors must ensure that proper health and hygiene measures are put in place, to prevent exposure to these hazards. Prevent inhalation, ingestion, absorption, and noise induction.

2.6.2 Welfare Facilities & Ablutions for both genders

As requested, to be demonstrated in the site establishment method statement

2.6.3 Policies

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

Any person suspected of being under the influence of alcohol or any other drugs must be sent home immediately, to report back the next day for a preliminary inquiry. The Contractor concerned must follow a full disciplinary procedure and a copy of the disciplinary action must be forwarded to the Client's H&S Agent for records.

- **H&S, HIV & AIDS, Substance Abuse, Smoking, Environmental, etc Policies & Procedures**

2.6.4 Occupational Medicals:

Medical Fitness Certification: All employees on the project must be in possession of a valid medical certificate issued by a registered Occupational Medical Practitioner -OMP, or by a certified and competent Occupational Health Nurse (OHN) working under the direction of an OMP.

The certificates must be accompanied by the Annexure 3 document (as per Construction Regulations 2014 requirements) and must be applicable to the job description of the employee.

The need for medical surveillance and the nature thereof is based on the risk assessment.

2.6.5 Environmental (fauna & flora)

The protection of all and any trees, plants, etc.

Chemical ablutions, if in use, need to be placed on a solid surface (not grass area) with adequate privacy from the client, his staff and visitors (e.g., ready fence panels with shade cloth, shutter board panel at entrance, etc.)

No open flames and fires permitted.

The Contractor must be mindful of adverse weather conditions upon the health and safety of the workforce. This includes inclement weather, strong wind, heat stress, extreme cold, high-water tables, etc. The Contractor's risk assessment process must take into account the risks associated with such weather conditions.

2.7 HAZARDOUS BIOLOGICAL AGENTS (HBA)

Hazardous biological agent, which may cause an infection, allergy, toxicity or otherwise create a risk to a human health, subdivided into groups

- HBA group 1 – Unlikely to cause human disease.
- HBA group 2 – May cause human disease and be a hazard to exposed persons, unlikely to spread to the community and for which prophylaxis treatment is available.
- HBA group 3 – May cause severe human disease which presents a serious hazard to exposed persons, which may present a risk on the community, but for which effective prophylaxis and treatment is available.
- HBA group 4 – May cause severe human disease which presents a serious hazard to exposed persons, which may present a high risk of spreading to the community, but for which no effective prophylaxis and treatment is available

Refer to HBA regulation 10 for guidance with COVID -19, along with the COVID-19 Specification drafted for this said project.

Pre-construction Administrative Requirements

ANNEXURE A

The Contractor and sub-contractors must submit compliance with Annexure A within **7 working days** of receiving its appointment /awarding. **Thereafter a 48hr final notice is applicable**

HSS Item No	Requirement	Legal Reference	Compliance Date	Accepted by auditor
A1	Health & Safety Plan	Constructions Regulations.	Within 7 working days of project awarding,	
A2	Notice of Construction Work	As per CR 4	7 days Prior to commencement on site	
A3	Assignment of Responsible Persons to Supervise Construction Work	OHS Act (section 16.2) & Construction Regulation 8 (8) & 8 (7) etc	Prior to commencement on site	
A4	Competence of Responsible Persons	OHS Act Section 16.2 & Construction Regulation 8 (1)	Together with H&S File	
A5	Compensation for Occupational Injuries and Diseases – proof of registration	COIDA	Together with H&S plan	
A6	Occupational Health and Safety Policy	OHS Act	Together with H&S File	
A7	Health and Safety Organogram	Contractor Requirement	Together with H&S Plan	
A8	Initial Baseline Hazard Identification and Risk Assessments	Construction Regulations.	Prior to commencement on site	
A9	Fall Prevention Plan & Rescue procedures	Construction Regulations	Prior to commencement on site	
A10	Principal Contractor appointed in writing - Annexure D	Construction Regulations.5(k)	Prior to commencement	

A11	Health & Safety Specification Annexure E signed by contractor	Contractor Requirements	Together with H&S File	
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Assignment of Contractor's and sub-contractors' Responsible Persons – Appointment Structures - CR-2014

ANNEXURE B

The Contractor and Contractors shall make the following appointments: (Further appointments could become necessary as the project progresses).

Item	Appointment	Legal Reference	Requirement	Accepted by Auditor
B1	C.E.O Assignee Contracts Manager Project Manager	Section 16.1 & 16.2	A competent person to assist with the on-site H&S overall responsibility – Contractor's Responsible Person	
B2	Construction Manager / Assistant Manager	CR 8(1) / CR 8(2)	A competent person to manage and be responsible of Health & Safety related issues on site. The person is appointed to assist the Contracts Manager with his/ her overall duties.	
B3	Construction Work Supervisor	CR 8(7)	A competent person to supervise and be responsible of Health & Safety related issues on site. The person is appointed to assist the Construction Manager with his/ her overall duties.	
B4	Subordinate Construction Work Supervisors	CR 8(8)	A competent person to assist with daily supervision of construction / building work. The person assists the Construction Work Supervisor.	
B5	CHSO – Full-time Health & Safety Officer	CR 8(5&6)	A competent person to manage and be responsible of Health & Safety related issues on site. The person is appointed to assist the Contracts Manager with his/ her overall duties.	
B6	Health & Safety Representative(s)	Section 17	A competent person(s) to inspect H&S in reference to plant, machinery and Health & Safety of persons in the workplace.	
B7	Health & Safety Committee Member(s)	Section 19	A competent person(s) representing the employer to assist with the on-site Health & Safety matters.	
B8	Incident Investigator	GAR 9	A competent person to investigate incidents / accidents on site and could be: Designated person Member of the H&S Committee	
B9	Risk assessment co-ordinator	CR 9	A competent person to co-ordinate all risk assessments on behalf of the Contractor. The same applies to Contractors.	
B10	Fall protection plan co-ordinator	CR 10(1)	A competent person to prepare & amend the fall protection plan.	
B11	Emergency plan co-ordinator	CR 29(l)	A competent person to co-ordinate all emergency procedures and situations.	
B12	First Aider(s)	GSR 3	A qualified person to address all on site first aid cases.	
B13	Scaffolding Inspector/supervisor	SABS 085	A competent person to inspect scaffolding before use and Every time after bad weather, etc.	

B14	Scaffolding erector	CR 16	A competent person to erect scaffolding.	
B15	Temporary Works Designer, Erector, Inspector, Supervisor (Formwork & support work inspector)	CR 12(1) 12(3a) 12(3f)	A competent person to inspect formwork & support work.	
B16	Excavation Inspector	CR 13	A competent person to inspect excavation work and ensure that approved safe working procedures are followed at all times.	
B17	Ladder Inspector	GSR 13A	A competent person to inspect ladders daily and ensure they are safe for use, keeping monthly record.	
B18	Stacking Supervisor	CR 28(a)	A competent person to supervise all stacking and storage operations	
B19	Temporary electrical installations inspector	CR 24 & EMR	A competent person to control all temporary electrical installations.	
B20	Portable Electrical Tool Inspector	CR 24(d)	A competent person to inspect portable electrical tools, leads and plugs.	
B21	Fire-fighting equipment inspector	CR 29(h-i)	A competent person to inspect fire-fighting equipment.	
B22	Hazardous Chemical Agent Assessor	RHCA 5(1)	A competent person to identify the hazards associated to specific chemicals	
B23	Construction Vehicle & Mobile Plant Inspector	CR23(1d)	A competent person to ensure that all inspections on the various plant and vehicles on site are conducted as required	
B24	Construction Vehicle & Mobile Plant Operator	CR 23(1k)	A competent operator must be appointed for each specific Plant or Vehicle in use on site.	
B25	Lifting machine & equipment inspector	DMR 18	A competent person to inspect lifting machines, equipment & tackle.	
B26	Lifting Tackle Inspector	DMR 18	A competent person appointed to conduct the necessary inspections on lifting tackle	
B27	Crane Operator	DMR 18	A competent person to operate the crane – certificate of training and fitness required	
B28	Demolition Supervisor	CR14(1)	A competent person to supervise all aspects of demolition works	
B29	Batch Plant Operator	CR20	A competent person to operate the batch plant and conduct the required inspections periodically	

On-going Administrative Compliance Records

ANNEXURE C

The Contractor and sub-contractors shall comply with but not be limited to the requirements tabled below. Report in writing on these requirements to the Contractor and sub-contractor respectively at least monthly.

Item	What	When	Output	Accepted by Principal contractor & date
C1	Construction-phase Health & Safety Plan	Monthly review	Contractor to report on status of Contractors' health & safety plans – monthly	
C2	Health & Safety File	Open file when construction begins and maintain throughout.	File on site at all times. Contractors to report on their file at monthly H & S meetings with the Contractor.	
C3	OHS Act and relevant Regulations	Monthly review	To be kept in the health & safety file on site	
C4	Induction training	Every worker before he/she starts work.	Attendance registers to be kept.	Date of last Induction:
C5	Awareness Training (Tool Box Talks)	At least weekly	Attendance registers to be kept.	Date of last toolbox talk:
C6	Health & Safety Meetings	Monthly	Meeting minutes to be kept	Date of last meeting:
C7	Health & Safety Reports	Monthly	Report covering: Incidents / injuries and investigations Non-conformances by employees & Contractors Internal H&S audit reports H&S Rep Monthly Checklist	
C8	Appointment of Subcontractors	As required	All subcontractors working directly under the Contractor, whether selected, nominated or preferred must be appointed in writing.	
C9	Principal Contractor in-house audits	Every 30 days	File audit including site inspections to be conducted by a senior safety person to the appointed safety officer	
C10	Audits on contractors	Monthly	Report covering the compliance status in terms of: H&S File/Plan FEM status Appointment letters Section 37(2) agreements Risk assessment and method statements Inspection Registers	

C11	List of Contractors	List to be updated weekly	Table list, number of workers and Company tel. numbers	
C12	Workman's Compensation	Ongoing	Copies of the subcontractors' proof of registration with workman's compensation or FEM on file.	
C13	Construction site rules & Section 37.2 Mandatory Agreements	Ongoing	Proof of agreement documents to be kept in H&S file.	
C14	Emergency procedures	Monthly evaluation of procedure	Table procedure in writing as well as tel. numbers Proof that the emergency procedures are being conveyed to the employees	
C15	H&S Notice Board	On-going	A notice board in the site office posted with the following: Signed Policy Emergency Procedure Emergency contact Nos. First Aid person's certificate Basic Site Rules Copy of FEM/WCA letter Toolbox Talk topic	
C16	Risk assessments	Updated and signed off at least monthly	Documented risk assessments	
C17	Method statements (Safe work procedures)	Drawn up and distributed before workers are exposed to the risks	Documented set of safe work procedures (method statements) reviewed and signed off.	
C18	Method Statements	Communicated to affected employees	Confirmation of communication to employees in the form of a training awareness attendance register.	
C19	Medicals (fitness certificates)	Assessment of the Psychological and Physical condition of employees	Certificates on file relating to the psychological and medical fitness of; Employees working at height Scaffold Erectors Plant operators Crane operator	
C20	General Inspections	Daily and weekly	Report OHS Act compliance: Scaffolding Excavations Portable electrical tools Formwork & support work Hand Tools – daily issue register	
C21	General Inspections	Monthly	Firefighting equipment Ladders First Aid Box contents	
C22	General Inspections	Quarterly	Oxy-acetylene cutting & welding sets Fall prevention and arrest equipment	

Contractor Appointment & 37.2 Agreement between client and PC

ANNEXURE D

The below documents will be completed and signed before the stage 5 of the construction

OCCUPATIONAL HEALTH & SAFETY ACT 85 OF 1993 & CONSTRUCTION REGULATION 2014	
APPOINTMENT AS THE PRINCIPAL CONTRACTOR- CR 5(1 k)	
I, _____ of _____ (client name) hereby appoint _____ representing _____ (Contractor Name) on _____ (site) responsible to carry out the construction work, of _____	
<p>You shall ensure that you meet all the requirements in terms of the Act and in particular in terms of the Construction Regulations. You shall also ensure that all contractors appointed by yourself and reporting to you comply with the requirements as stipulated in Construction Regulations 2014.</p> <p>You shall also ensure that all the information and specifications of the construction work is carried out in a safe manner and that carried over to all contractors appointed and reporting to you.</p> <p>You shall further ensure that all records, registers and required lists are maintained and that all persons appointed to carry out tasks as stipulated by these regulations are competent and have the necessary resources to complete their tasks effectively in such a manner that health and safety is not in any manner compromised.</p> <p>This appointment is valid until written notice thereof.</p>	
_____ SIGNED: (on behalf of client)	_____ DATE:
ACCEPTANCE OF DESIGNATION	
Kindly confirm your acceptance of this appointment by completing the following: I, _____ representing _____ understand the implications of the appointment as detailed above, and confirm my acceptance.	
_____ SIGNED: CONTRACTOR DIRECTOR – 16.1/16.2	_____ DATE:
<small>Director: C Siebritz Co Reg. Nr 2018/633287/07, Tax Clearance certificate no 9384900164, BBBEE Level 1, VAT No. 4740290723 SACPCMP Registration: Can CHSA/164/2018 SHQR certificate no: CT 0600/06, ISO 14001 CT 2985/07, Management of Contractors certificate no CT 0843/06 ; e-mail info@polcsafety.co.za</small>	

AGREEMENT WITH MANDATARY

WRITTEN AGREEMENT ENTERED INTO
AND BETWEEN

(Hereinafter referred to as the Client)

and

(Hereinafter referred to as The Principal Contractor)

Compensation Fund Number: (FEM/WCA)

THIS DOCUMENT WAS DRAFTED BY POLC SAFETY ADVISOR (PTY) LTD
Director: C Siebritz – Reg No: 2018/633287/07, BBBEE Level 1, SACPCMP Registration: Can CHSA/164/2018
SHRQR certificate no: CT 0600/06, ISO 14001 CT 2985/07, Management of Contractors certificate no CT 0843/06
e-mail info@polcsafety.co.za

Whereas the Company/ Client called, _____ under contract

_____ (“Premises”)

And whereas the contractor _____

Undertook to carry out the work and whereas the client contractor has agreed to regulate as between them and as provided for in terms of section 37(2) of the Occupational Health and Safety Act, № 85 of 1993, now therefore the undersigned agree to:

1. The Contractor warrants that all his and his contractors’ employees are covered in terms of the provisions of the Compensation for Occupational Injuries and Deceases Act 1993 (the Act) which cover shall remain in force whilst any such employees are on the premises.
2. The Contractor warrants that he is in possession of the following insurance cover which shall remain in force whilst he and/or his sub-Contractor and/or his employees are present n the premises or which shall remain in force for the duration of his contractual relationship with the client whichever period is the longest:
 - Public liability insurance covers.
 - Any other insurance cover that will adequately make provision for any possible losses and/or claims arising from his and/or his contracts and/or his Employees’ acts and/or omissions on the premises.
3. The Contractor undertakes to ensure that he and/or his contractors and/or their respective employees will at all times comply with all the requirements of the Act and without derogating from this general undertaking, also comply with the following conditions:
 - All work performed on the premises must be performed under the close supervision of the contractor’s employees who are trained to understand the hazards associated with any work that the contractor performs on the stated premises.
 - The Contractor shall assume the responsibility in terms of Section 16(1) of the Act. If the Contractor delegates any duty in terms of Section 16(2), a copy of such written delegation shall immediately be forwarded to the Client.
 - The Contractor shall ensure that he familiarizes himself with the requirements of the Act, and that he, his employees and any sub-contractor comply with them.
 - The Contractor shall conduct a hazard analysis and ensure that his and any sub-contractor employees are made aware of the hazards identified. This analysis needs to be reviewed prior to a new task is commenced.

The Contractor must provide the Client with written proof that his employees and those of the sub-contractor have been made aware of the hazards identified. The Contractor must provide the Client with updated copies of the analysis.

 - Discipline regarding Occupational Health & Safety shall be strictly enforced.

THIS DOCUMENT WAS DRAFTED BY POLIC SAFETY ADVISOR (PTY) LTD
Director: C Siebritz – Reg No: 2018/633287/07, BBBEE Level 1, SACPCMP Registration: Can CHSA/164/2018
SHQR certificate no: CT 0600/06, ISO 14001 CT 2985/07, Management of Contractors certificate no CT 0843/06
e-mail info@policafety.co.za

- Personal Protective Equipment as defined in the Act and regulations shall be issued free of charge by the Contractor and worn as prescribed.
 - Safe work practices shall be enforced and all employees shall be made conversant with the contents of these practices.
 - No unsafe equipment/machinery and/or articles will be allowed and/or used on the premises.
 - All incidents referred to in Section 24 of the Act shall be reported by the Contractor to the Department of Labour as well as to the client. The Client shall further be provided with copies of all documentation relating to any incident.
 - The Client hereby obtains an interest in the issue of any formal inquiry conducted in terms of Section 32 of the Act into any incident involving a Contractor and/or his employees and/or his sub-contractor.
 - No use shall be made of any machinery/article/substance/personal protective equipment that belongs to the Client without prior written approval.
 - Work for which the issuing of a permit is required shall not be performed prior to the obtaining of a duly completed and approved permit.
 - No alcohol or other intoxicating substance shall be allowed on the premises. Anyone found to be or suspected of being under the influence of alcohol or any other intoxicating substance shall be removed from the premises.
 - Full participation shall be given if and when Client employees inquire into Occupational Health and Safety issues.
 - The Contractor expressly agrees to comply with the procedures and arrangements as required by the Act in the execution of the work.
4. The Contractor confirms; that he has been informed that he must report to Client Management (in writing) anything that he deems to be unhealthy and/or unsafe and that he has versed his employees and/or contractors in this regard.
5. The Contractor warrants that he shall not endanger the health and safety of any of the Client's employees in any way whilst performing any work on the premises.

1. _____
Signed by the Client , PA

Date:

2. _____
Signed by Contractor or his Authorized Representative
(PC)

Date:

THIS DOCUMENT WAS DRAFTED BY POLIC SAFETY ADVISOR (PTY) LTD
Director: C Siebritz – Reg No: 2018/633287/07, BBBEE Level 1, SACPCMP Registration: Can CHSA/164/2018
SHRQR certificate no: CT 0600/06, ISO 14001 CT 2985/07, Management of Contractors certificate no CT 0843/06
e-mail info@polsafety.co.za

Acknowledgement of Receipt of the Health & Safety Specification document

ANNEXURE E

PROJECT NO. SAAO-003714

SUPPLY, INSTALLATION, AND COMMISSIONING OF A 250kVA PRIME - RATED GENERATOR

Acknowledgement of receipt:

I, _____ representing _____
Principal, Contractor

Have received the Health and Safety Specification for the above-mentioned project, in good order and shall ensure that the Principal Contractor / Contractor / Employer and its personnel comply with all obligations / requirements / specifications in respect thereof. This document is legally binding in terms of Regulation 5(1) (b) of the Construction Regulations (2014).

Signature of Principal Contractor

Date

Signature of Client Representative

Date

Comments:

SARS-CoV-2.-COVID-19 CORONOVIRUS

INTRODUCTION:

A national state of disaster to counter the magnitude and severity of the COVID–19 outbreak was declared on 15 March 2020 in terms of section 27(1) of the Disaster Management Act, 2002 (Act No 57 of 2002).

On 29 April 2020, the Minister responsible for Cooperative Government and Traditional Affairs published Regulations in terms of section 27(2) of that Act, which Regulations were amended to respond to the changing circumstances of the pandemic. Those Regulations included measures that applied to the workplace.

On 29 April 2020, the Minister responsible for Employment and Labour Published a Direction on Occupational Health and Safety Measures in Certain Workplaces in terms of Regulation 4(10) of the Regulations, which was amended and consolidated to respond to the changing circumstances of the Pandemic.

On the expiry of the declaration of the national state of disaster, the Regulations and the Direction will cease to have legal effects, because there remains an ongoing need to prevent and mitigate the risks associated with SARS-CoV-2 exposure in the workplace. It is necessary to incorporate those provisions in the Regulations and the Direction relevant to preventing and mitigating those risks.

The Occupational Health and Safety Act, 1993 (Act No 85 of 1993) (OHSA) read with its regulations and incorporated standards, requires the employer to provide and maintain as far as reasonably practicable a working environment that is safe and without risks to the health of workers and to take such steps, as may be reasonably practicable to limit or mitigate the hazard or potential hazard.

(Such as customers, clients or contractors and their workers who enter their workplace or come into contact with their employees) are not exposed to hazards to their health and safety. This obligation also applies to self-employed persons (for example, plumbers or electricians) whose working activities bring them into contact with members of the public.

The CORONAVIRUS DISEASE 2019 has been promulgated in the OHSACT 85of 1993 and incorporated in the Regulations for Hazardous Biological Agents, 2022 (HBA Regulations) listing coronavirus as a listed hazardous biological agent, classed as Group 3.

It therefore places legal responsibilities on employers in respect of employers to limit the exposure and mitigate the risks of infection by SARS-CoV-2.

The primary obligation is to conduct a risk assessment to determine the risk of exposure and the control measures to limit Infection, and transmission an mitigate the risk of serious illness or death on the part of employees and other persons who may be directly affected by the activities of the workplace.

All contractors must familiarize themselves with all new COVID-19 legislation and guidelines, in order to ensure mitigation of the spread of COVID-19, also listed below but not limited to:

- Hazardous Biological Agents 2022
- Code of Practice: Managing Exposure To SARS – COV-2 In the workplace, issued by Economic Development & Labour Council in terms of section 203 (1) of the Labour Relations Act (Act 66 of 1995)

Occupational Health and Safety Act, Act 85 of 1993 (OHS Act):

- General Safety Regulations
- Environmental Regulations (for Workplaces,)
- Facilities Regulations

COVID 19 Legislation and guidelines are to be read in conjunction with all existing OHS legislation.

Note: It is important for contractors to provide the following, to comply with all COVID-19 Statutory requirements and the Department of Labour COVID-19 standard checklist:

1. Workplace Plan in conjunction with Section 12 of the OHSACT 85 of 1993

2. Appointment of responsible persons, e.g. but not limited to:
 - Covid-19 compliance officer
 - Supervisor
 - Risk assessor
 - Safety committee members as per Section 19 of the OHSACT 85 of 1993
3. Workplace Risk Assessment and a Health Risk Assessment including transportation
4. Complete Annexure: A (Page 10) – Summary of mandatory requirements included in this document prior to commencement on site.

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

3. **COVID-19 BASELINE RISK ASSESSMENT**
4. **ANNEXURE A: COVID-19 Occupational Health & Safety Pre-start Checklist**

A key theme of all COVID 19 notices and legislation is that all employers must conduct risk assessments which include at their workplace, to determine areas of high risk and provide adequate controls to mitigate such risk.

1. HAZARD IDENTIFICATION AND RISK ASSESSMENT

The Principal Contractor and their contractors must provide control measures regarding COVID 19, comply with all amended Legislation and must include but not limited to:

2. COVID-19 DIRECTIONS ISSUED

To ensure and maintain a safe and healthy working environment for employees and members of the public, the Principal

Contractor and their contractors must assess the workplace risks posed by the COVID-19 pandemic, giving due consideration to the response measures announced by Government.

The Principal Contractor and their contractors must therefore determine mitigation measures to minimize risk as far as reasonably practicable, allowing work to continue safely and without harm to all relevant stakeholders, including Clients, Employees, Contractors, Suppliers, Manufacturers and all interested and affected parties.

2.1 Mitigation Measures

2.1.1 Administrative Measures

The Principal Contractor must establish the following administrative measures on site:

- Conduct a risk assessment considering the specific circumstances of the workplace
- Submit a record of its risk assessment together with a written policy concerning the protection of the health and safety of its employees from COVID-19, as contemplated in section 7(1) of Occupational Health and Safety Act 85/1993

2.1.2 Sanitizers, disinfectants, and other measures

- Risk assessments must be monitored and reviewed as the risk changes

The Principal Contractor and their contractors must ensure that hand wash/sanitizers are compulsory on site and that workers use hand wash facilities prior to, during, and after each activity irrespective of how long or short the activity is.

Hand sanitizer must be one that contains a minimum of 70% alcohol and is in accordance with the recommendations of the Department of Health.

2.1.3 Surfaces

The Principal Contractor must ensure that all work surfaces and equipment are disinfected before work begins, regularly during the working period, and after work ends.

- The Principal Contractor and subcontractors to prepare and maintain a cleaning schedule for all facilities.

2.1.4 PPE

Principal Contractor must –

- Where a risk assessment indicates that PPE is required, those categories of workers must be provided with the accredited PPE in accordance with Department of Health guidelines and COVID-19 risk assessments

PPE spotters required to monitor the usage of PPE throughout the site.

2.1.5 Ventilation

The Principal Contractor must –

- Keep the workplace well ventilated by natural or mechanical means to reduce the SARS-CoV-2 viral load.

2.1.6 Waste Management

The Department of Health published a guideline on the management of COVID-19 (coronavirus) or Health Care Waste and HBA Regulation of the OHSACT 85 of 1993. The document defines two types of waste, which are applicable to the pandemic.

2.1.7 Infectious Waste

This means waste that is suspected to contain pathogens; and which normally causes or significantly contributes to the cause of increased morbidity or mortality of human beings.

2.1.8 Isolation Waste

This means waste containing discarded materials contaminated with excretion, exudates, or secretions from humans or animals or which are required to be isolated (by the infection control staff, the attending physician or surgeon, or the attending health practitioner) in order to protect others from highly communicable or zoonotic diseases.

In compliance with the guidelines published by the Department of Health; Employers must ensure the following:

- All waste management plans, classifications, and procedures to include COVID-19 waste/Isolation Waste/Health Care Waste.
- A designated area to be made available for the storage of COVID-19 waste
- Should an Employee show signs of known symptoms of COVID-19, the medical waste of that person may be kept in the isolation room established on site.
- All coronavirus waste shall be treated as isolation waste and must be double bagged in preferably red plastic inside 50 L or 142 L single-use boxes and must be labelled "SUSPECTED COVID-19" whilst the employees' status is not confirmed. The double-bagged waste can remain in the isolation room for collection.

Should the suspected patient be tested as negative; the waste must be handled as healthcare waste.

- All employees working with isolation waste shall be provided with PPE, as outlined in the highest risk category above (gloves, face shield, mask, etc.)
- Arrange with our municipal environmental health Practitioners for the collection of the waste at your facility.
- A separate waste register must be implemented to record all COVID-19 waste removed from the facility.
- All COVID-19 waste must be disposed of at a registered Health Care Risk Waste Facility (searchable on Google Maps).

2.1.9 Awareness:

The Principal Contractor must ensure that the relevant signage is clearly displayed on site, employees are kept informed and up to date with the latest news regarding COVID-19.

- Awareness Training in small groups, preferably in the open air.
- Providing workers with up-to-date education and training on COVID-19 risk factors and protective behaviors (e.g., cough etiquette and care of PPE) via a toolbox talk.

3. COMPENSATION FOR OCCUPATIONAL INJURIES AND DISEASES ACT (COIDA) 130 OF 1993.

Principle Contractor must ensure that a separate register containing the details of confirmed COVID 19 cases are kept on file and made available for inspection by any approved government authority as required by the National Disaster Act 57 of 2002.

All cases of occupationally acquired COVID 19 to be reported to the department of Labour in accordance with General Administrative Regulation 8 and Section 6 of the Notice (CF/03/2020) on Compensation for Occupationally-Acquired Novel Corona Virus Disease (COVID 19).

Occupationally- acquired COVID -19 is a disease contracted by an Employee, as defined in the COIDA Act arising out of

and in the course of his or her employment.

Reporting:

The following documentation should be submitted to the Compensation Commissioner or the employer individually liable or the mutual association concerned:

- a) Employer's Report of an Occupational Disease (W CL.1)
- b) Notice of an Occupational Disease and Claim for Compensation (W.CL.14)
- c) Exposure and Medical Questionnaire
- d) First Medical Report in respect of an Occupational Disease (W.CL 22) indicating U07.1 as the ICD -10 code for COVID -19
- e) Exposure History (W.CL. 110) and /or any other appropriate employment history which may include any information that may be helpful to the Compensation Commissioner.
- f) A medical report on the employee's symptoms that details the history, establishes a diagnosis of COVID -19 and laboratory results and chest radiographs where appropriate or any other information relevant to the claim.
- g) For each consultation, a Progress Medical Report (W.CL. 26).
- h) Final Medical Report in respect of an Occupational Disease (W.CL.26) when the employee's condition has reached Maximum Medical Improvement (MMI).
- i) An affidavit by the employee if employer cannot be traced or will not timeously supply a W.CL.1, where applicable.



COVID-19 BASELINE RISK ASSESSMENT

Note: As per H&S BASELINE COVID-19 RISK ASSESSMENT

5. ANNEXURE A: COVID 19 OCCUPATIONAL HEALTH & SAFETY PRE- START CHECKLIST

Item	Compliant (Yes, No)	Comments
1. The attendance -record system and Infrastructure		
2. The work -area of employees		
3. Canteen/eating facilities and bathroom facilities.		
4. Arrangements for the public/visitors, including sanitation and social distancing measures.		
5. Arrangements regarding site access		
6. Risk Assessments		
7. COVID-19 emergency procedures		
8. Procedures for welfare, washing and sanitizing and disinfection facilities		
9. All site personnel issued with PPE based Risk Assessments		
10. Supervision and monitoring of safety protocols		
11. Waste Management Procedure (Including COVID 19 waste) a separate waste manifest register for all COVID 19 waste disposed		
12. Procedure for investigation of COVID-19 Cases		
13. List of high-risk staff with underlying medical conditions		
14. Awareness training (inductions, toolbox talks, procedure communications)		
15. Provisions for soap and water/sanitizer (70 % alcohol)		

CR 8(1) - Name & Surname Signature		Date:
CR 8(5) - Name & Surname Signature		Date:
COVID-19 Compliance Officer - Name & Surname Signature		Date:

<https://cloudcape.saa0.ac.za/index.php/s/dzf2lwhKCyzrRy6>

APPENDIX 2: ACCEPTANCE TEST SHEET

DATE	
PROJECT NO	
SUPPLIER	
SITE	

	PRESENT AND SIGNATURE ON ACCEPTANCE:				
PROJECT ENGINEER:			SUPPLIER:		
SAAO:			SUPPLIER:		

GENERATOR:			ENGINE:		ALTERNATOR:	CONTROLLER:	
SIZE			MAKE		MAKE		MAKE
SERIAL			MODEL		MODEL		MODEL
TYPE	CANOPY	OPEN	SERIAL		SERIAL		SERIAL

	GENERATOR INFORMATION				
DETAIL	DESCRIPTION	CHECK	DETAIL	DESCRIPTION	CHECK
No of Cylinders & Turbos			Air Filter		
Electronic Governor			Oil Filter		
Cooling Type			Diesel Filter		
Injector Pump			Water Separator		
Alternator			Starting battery		
Starter			Pre-Heater (Cir Pump)		
V-Belts			Fuel Consumption (Info)		

MEASUREMENTS	0 min	10 min	20 min	30 min	40 min	50 min	60 min
Voltage - Red							
Voltage - White							
Voltage - Blue							
Current - Red							
Current - White							
Current - Blue							
Frequency							
Engine Temp							
Engine Oil Pres							

Noise in dB							
Fuel Consumption							

PROTECTION SYSTEM & ALARMS					
OFF / MANUAL / AUTO		START FAILURE		BATTERY CHARGE FAILURE	
OIL PRESSURE		EMERGENCY STOP		ENGINE TEMPERATURE	
ALTERNATOR		WATER LEVEL		MAINS ON LOAD	
OVER / UNDER SPEED		MAINS SUPPLY FAILURE		OVER / UNDER VOLTAGE	
GENERATOR ON LOAD		LOW FUEL LEVEL			
	REMARKS / NOTES:				
	1)				
	2)				
	3)				
	4)				
	5)				
	6)				
	7)				
	8)				

APPENDIX 3: PICTURES OF EXISTING GENERATOR AND ASSOCIATE CHANGEOVER PANEL

Changeover Switch – View within the Cabinet



Existing Generator View No.1



Generator Control Panel



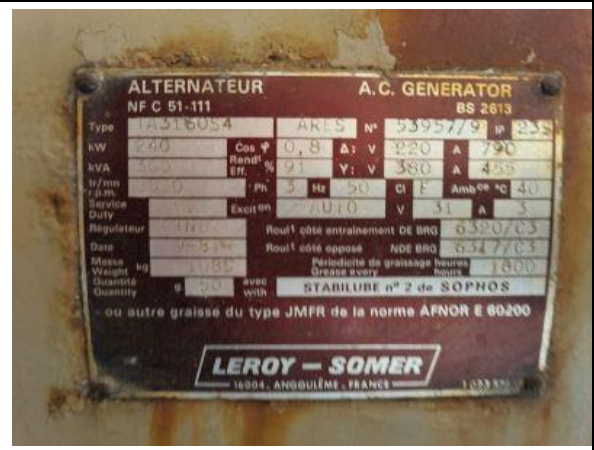
Generator Change Over Switch - Cabinet



Existing Generator View No. 2



Existing Alternator Name Plate



APPENDIX 4: SITE CABLE ROUTE LAYOUT

RO01-95001 - 01 Site Cable Route Layout

<https://cloudcape.saa.ac.za/index.php/s/GvRHEeJQBdHhog5>

APPENDIX 5: GENERATOR FOUNDATION LAYOUT

RO07-76001 - 0A Generator Foundation Layout.pdf

<https://cloudcape.saa.ac.za/index.php/s/X0ldZQouBjMUqIt>

APPENDIX 6: POWER RECORDINGS

SAAO Obs Power Recordings Dec 2019

<https://cloudcape.saa.ac.za/index.php/s/ILkOLIV0jQofucQ>

SAAO Obs Power Survey Analysis Dec 2019

<https://cloudcape.saa.ac.za/index.php/s/wmM1Uh1SLe0RTHk>