

NB

1. The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.

2. Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on [http://www.thdti.gov.za/industrial development/ip.jsp](http://www.thdti.gov.za/industrial%20development/ip.jsp). Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. **Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below.** Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned _____ (full names),
do hereby declare, in my capacity as _____
of _____ (name of bidder entity),
the following:

(a) The facts contained herein are within my own personal knowledge.

(b) I have satisfied myself that:

- (i) the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011; and
- (ii) the declaration templates have been audited and certified to be correct.

(c) The local content percentage (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C:

Bid price, excluding VAT	R
Imported content (x), as calculated in terms of SATS 1286:2011	R
Stipulated minimum threshold for local content (paragraph 3 above)	
Local content %, as calculated in terms of SATS 1286:2011	

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If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above.

The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.

(d) I accept that the Procurement Authority / Institution has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.

(e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Institution imposing any or all of the remedies as provided for in Regulation 13 of the Preferential Procurement Regulations, 2011 promulgated under the Preferential Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

SIGNATURE: _____

DATE: _____

WITNESS No. 1 _____

DATE: _____

WITNESS No. 2 _____

DATE: _____

Annex C

Local Content Declaration - Summary Schedule

(C1) **Tender No.** 19/1/19/1/ TB (22)

(C2) **Tender description:** Supply, Installation, Replacement and Maintenance of Standby Generators and General Electrical Services for Northern Cape Region 01

(C3) **Designated product(s)** Electrical cables and lights

(C4) **Tender Authority:** South African Police Service

(C5) **Tendering Entity name:**

(C6) **Tender Exchange Rate:**

(C7) **Specified local content %**

Pula EU GBP

Note: VAT to be excluded from all calculations

Tender item no's	List of items	Calculation of local content						Tender summary			
		Tender price - each (excl VAT)	Exempted imported value	Tender value- net of exempted imported content	Imported value	Local value	Local content % (per item)	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C17)	(C18)	(C19)
1	PVC non sheathed copper conductor/cable low voltage single core stranded 1.5mm ²										
2	PVC non sheathed copper conductor/cable low voltage single core stranded 2.5mm ²										
3	PVC non sheathed copper conductor/cable low voltage single core stranded 4mm ²										
4	PVC non sheathed copper conductor/cable low voltage single core stranded 6mm ²										
5	PVC non sheathed copper conductor/cable low voltage single core stranded 10mm ²										
6	PVC non sheathed copper conductor/cable low voltage single core stranded 16mm ²										
7	PVC non sheathed copper conductor/cable low voltage single core stranded 25mm ²										
8	Surfex cable low voltage 3 core PVC Cu in ground/ducts/air 1.5mm ²										
9	Surfex cable low voltage 3 core PVC Cu in ground/ducts/air 2.5mm ²										
10	XLPE cable low voltage 3 core PVC/SWA SHEATHED Cu in ground/ducts/air 4mm ²										
11	XLPE cable low voltage 3 core PVC/SWA SHEATHED Cu in ground/ducts/air 6mm ²										

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[illegible]

[illegible]

[illegible]

(D1)	Tender No.	
(D2)	Tender description:	
(D3)	Designated Products:	
(D4)	Tender Authority:	
(D5)	Tendering Entity name:	
(D6)	Tender Exchange Rate:	Pula

Note: VAT to be excluded from all calculations

EU	R 9,00
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GBP R 12,00

[illegible]

(D19) Total exempt imported value	R 0
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This total must correspond with
Annex C - C21

[illegible]

(D32) Total imported value by tenderer	R 0
--	-----

[illegible]

(D45) Total imported value by 3rd party	R O
---	-----

[illegible]

(D52) Total of foreign currency payments declared by tenderer and/or 3rd party

(D53) Total of imported content & foreign currency payments - (D32), (D45) & (D52) above

This total must correspond with
Annex C - C.23

Date: _____

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Annex E

Local Content Declaration - Supporting Schedule to Annex C

(E1)	Tender No.	
(E2)	Tender description:	
(E3)	Designated products:	
(E4)	Tender Authority:	
(E5)	Tendering Entity name:	

Note: VAT to be excluded from all calculations

Local Products (Goods, Services and Works)	Description of items purchased	Local suppliers	Value
	(E6)	(E7)	(E8)
(E9) Total local products (Goods, Services and Works)			R 0

(E10) **Manpower costs** (Tenderer's manpower cost) R 0

(E11) **Factory overheads** (Rental, depreciation & amortisation, utility costs, consumables etc.) R 0

(E12) **Administration overheads and mark-up** (Marketing, insurance, financing, interest etc.) R 0

(E13) **Total local content** R 0

This total must correspond with Annex C - C24

Signature of tenderer from Annex B

Date: _____

BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

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

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

2. Bidder's declaration

- 2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest¹ in the enterprise, employed by the state? **YES/NO**

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

Full Name	Identity Number	Name of State institution

- 2.2 Do you, or any person connected with the bidder, have a relationship

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.

with any person who is employed by the procuring institution? YES/NO

2.2.1 If so, furnish particulars:

.....

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

2.3.1 If so, furnish particulars:

.....

3 DECLARATION

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

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

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.

institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.

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

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

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

.....
Signature

.....
Date

.....
Position

.....
Name of bidder

**APPOINTMENT OF A CONTRACTOR FOR THE SUPPLY,
INSTALLATION, REPLACEMENT AND MAINTENANCE OF
STANDBY GENERATORS AND GENERAL ELECTRICAL
SERVICES IN NORTHERN CAPE PROVINCE REGION ONE (01):
TWELVE (12) DEVOLVED POLICE STATIONS FOR THE PERIOD
OF THREE (3) YEARS**

BID: 19/1/9/1/116TB (22)

PART C

CONTRACT

PART C1

AGREEMENTS AND CONTRACT DATA

Tender* no: 19/1/9/1/116TB(22)

OFFER

The Employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the acquisition of: **APPOINTMENT OF A CONTRACTOR FOR THE SUPPLY, INSTALLATION, REPLACEMENT AND MAINTENANCE OF STANDBY GENERATORS AND GENERAL ELECTRICAL SERVICES IN NORTHERN CAPE PROVINCE REGION ONE (01): TWELVE (12) DEVOLVED POLICE STATIONS FOR THE PERIOD OF THREE (3) YEARS**

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

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

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS:

Rand (in words):	
Rand in figures:	R

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

Signature(s)			
Name(s)			
Capacity			
for tenderer			
	(Name and address of tenderer)		
Name and signature of witness		Date	

Acceptance

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

The terms of the contract, are contained in:

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

Part C2 Pricing data

Part C3 Scope of work

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

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as listed in the returnable schedules as well as any changes to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this

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

**Any reference to the words "payment reduction" herein shall be construed to have the same meaning as the word "retention"

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For Internal & External Use

Effective date November 2019 HR

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form of offer and acceptance. No amendments to or deviations from said documents are valid unless contained in this schedule.

Tender no: 19/1/9/1/116TB(22)

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

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy of this document, including the schedule of deviations (if any). Unless the tenderer (now contractor) within five (5) working days of the date of such receipt notifies the employer in writing of any reason why he/she cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.¹

Signature(s)			
Name(s)			
Capacity			
for the Employer	South-African Police Service 117 Creswell road Silverton 0184		
	Private Bag X 254 Pretoria 0001		
	(Name and address of employer)		
Name and signature of witness		Date	

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

**Any reference to the words "payment reduction" herein shall be construed to have the same meaning as the word "retention"

Tender no: 19/1/9/1/116TB(22)

Schedule of Deviations

Notes:

1. The extent of deviations from the tender documents issued by the employer before the tender closing date is limited to those permitted in terms of the conditions of tender.
2. A tenderer's covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid, become the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.
3. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the Parties becomes an obligation of the contract shall also be recorded here.
4. Any change or addition to the tender documents arising from the above agreements and recorded here, shall also be incorporated into the final draft of the Contract.

1 Subject _____

Details _____

2 Subject _____

Details _____

3 Subject _____

Details _____

4 Subject _____

Details _____

By the duly authorised representatives signing this agreement, the employer and the tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the tender data and addenda thereto as listed in the returnable schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance.

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

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

**Any reference to the words "payment reduction" herein shall be construed to have the same meaning as the word "retention"

C1.2: CONTRACT DATA (GCC (2004) 1st EDITION: 2004)

CONTRACT DATA: APPOINTMENT OF CONTRACTOR FOR SUPPLY, INSTALLATION, REPLACEMENT AND MAINTENANCE OF STANDBY GENERATORS AND GENERAL ELECTRICAL SERVICES: NORTHERN CAPE PROVINCE REGION ONE (01): TWELVE (12) DEVOLVED STATIONS FOR THE PERIOD OF THREE (3) YEARS

Tender no: 19/1/9/1/ TB (22)

	PART 1: DATA PROVIDED BY THE EMPLOYER
	CONDITIONS OF CONTRACT
	The General Conditions of Contract for Construction Works (2004) [hereinafter referred to as GCC 2004], published by the South African Institution of Civil Engineering, is applicable to this Contract.
	CONTRACT SPECIFIC DATA
	The following contract specific data; amendments; additions; or omissions are applicable to this Contract.
CLAUSES	Compulsory Data
1.1.14	"Employer" means the Government of the Republic of South Africa in its South African Police Service.
1.2.2	The addresses of the Employer, where the Employer shall receive notices, are as follows: Physical Address: 117 Cresswell Rd Silverton 0127 Postal Address: Private Bag X254 Pretoria 0001 Facsimile: 012-8417495 Telephone: 012-8417424
1.1.15	The name of the Engineer is: Captain L Mtshweni
1.2.2	The address of the Engineer, where the Engineer shall receive notices, are as follows: Physical Address: SAPS Expert Services De Haveland Crescent Persequor Techno park Pretoria Postal Address: SAPS SCM Expert Services Private Bag X254, Pretoria 0001 Facsimile: 012 845 8762 Telephone: 012 349 6058

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1.1.21	Not applicable to this Contract
1.1.24	Omit reference to "telex, telegram, cable, electronic communication" and "or any like communication"
1.1.25	Add the following Clause 1.1.25 "Value of Works" means the value of Works certified by the Engineer as having been satisfactorily executed and shall include the value of the work done, the value of the materials and/or goods and Contract Price Adjustments.
1.1.26	"Contract Sum" means the total of Prices provided for in the Agreement made in terms of the Form of Offer and Acceptance.
1.6 and 3.8	The special non-working days are public holidays, Saturdays, and Sundays
1.6	The year end break commences on 16 December until the first working Monday of January of the succeeding year.
2.3	<p>1. In Clauses 6.2; 11.2; 36.1; 36.2; 39.2;42.2; 43.2; 50.1; 53.3.2 and 54.4.3 all reference to the word "Engineer" must be replaced with the word "Employer", as the Employer has in terms of such Clauses retained its authority and has not given a mandate to the Engineer and the Employer shall therefore sign all documents in relation thereto.</p> <p>2. Clauses 36.2; 37.1; 40.3; 41.1; 48.5; 49.10; 51.4; and 52.1 shall be amended as follows to indicate the limitation on the Engineer's authority in respect thereof:</p> <p>Clause 36.2 – amend to read as follows:</p> <p>"... (herein referred to as a "Variation Order") by the Employer...any confirmation in writing of such oral order given by the Employer...The Contractor shall, as soon as possible... confirms it in writing to the Employer...and such order in writing is not contradicted in writing by the Employer...."</p> <p>Clause 37.1 – amend to read as follows:</p> <p>"The value of the variations ordered the Employer...Provided that, failing agreement with the Contractor, the Engineer shall determine the rate or price in accordance with the foregoing principles, obtain approval from the Employer, notify the Contractor in writing..."</p> <p>Clause 40.3 – amend to read as follows:</p> <p>"...unless such instruction is in writing, duly approved by the Employer, states explicitly..."</p> <p>Clause 41.1 – amend to read as follows:</p> <p>"... said performance has actually taken place and may be extended by the Employer at his discretion."</p> <p>Clause 48.5 – amend to read as follows:</p> <p>" Unless otherwise provided in the Contract, the Employer shall...as read with Clause 48.2, and deliver to the Contractor its written ruling on the claim...thereof allowed by the Employer...so agreed between the Contractor and the Employer...If, before the Employer's ruling on the whole claim..."</p> <p>Clause 49.10 – amend to read as follows:</p> <p>"... The Employer shall within 14 days issue to the Contractor a Final Payment Certificate..."</p>

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	<p>Clause 51.4 – amend to read as follows:</p> <p>“...the Employer shall issue to the Contractor a Certificate of Completion; Provided that the Employer, shall be...”</p> <p>Clause 52.1 – (a) amend to read as follows:</p> <p>“... shall have been delivered by the Employer to the Contractor stating the date...”</p> <p>(b) Delete the entire third paragraph under Clause 52.1</p> <p>3. Add the following paragraph under Clause 2.3:</p> <p>Provided that, notwithstanding any provisions to the contrary in the Contract, the Employer shall have the right to reverse and, should it deem it necessary, to amend any certificate, instruction, decision or valuation of the Engineer and to issue a new one, and such certificate, instruction, decision or valuation shall for the purposes of the Contract be deemed to be issued by the Engineer, provided that the Contractor shall be remunerated in the normal manner for work executed in good faith in terms of an instruction issued by the Engineer and which has subsequently been rescinded.</p>
6.6	Omit
7.	Replace the word “ GUARANTEE ” with the word “ SECURITY ”
7.1	<p>Replace in its entirety with the following:</p> <p>The Contractor shall deliver to the Employer within 21 days of the Commencement Date the form of security selected in the Contract Data and any expenditure incurred in doing so shall be borne by the Contractor.</p>
7.2	Should the Contractor fail to select the security to be provided or should the Contractor fail to provide the Employer with the selected security within 21 days from the Commencement Date, it will be deemed that the Contractor has selected a security in the form of a retention of 10% of the Value of Works (excluding of VAT)
9.1	<p>Replace in its entirety with the following:</p> <p>The Employer will become the owner of the information, documents, advice, recommendation and reports collected, furnished and/or compiled by the Contractor during the course of, and for the purposes of executing this Contract, all of which will be handed over to the Employer on request, but in any event on the termination and/or cancellation of this Contract for whatever reason. The Contractor relinquishes its retention or any other rights to which it may be entitled.</p>
9.2	<p>Add the following as 9.2:</p> <p>The copyright of all documents, recommendations and reports compiled by the Contractor during the course of and for the purposes of finalising the Works will vest in the Employer, and may not be reproduced or distributed or made available to any person outside the Employer's service, or to any institution in any way, without the prior written consent of the Employer. The Employer shall have the right to use such material for any other purpose without the approval of, information or payment to the Contractor.</p>
9.3	<p>Add the following as 9.3</p> <p>The copyright of all electronic aids, software programmes etc. prepared or developed in terms of the Contract shall vest in the Employer, who shall have the right to use such material for any other purpose without the approval of, information or payment to the Contractor.</p>

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9.4	<p>Add the following as 9.4</p> <p>In case of the Contractor providing documents, electronic aids, software programmes or like material to the Employer, the development of which has not been at the expense of the Employer, copyright shall not vest in the Employer. The Contractor shall be required to indicate to which documents, electronic aids, software programmes or like material this provision applies.</p>
9.5	<p>Add the following as 9.5</p> <p>The Contractor hereby indemnifies the Employer against any action, claim, damages or legal cost that may be instituted against the Employer on the grounds of an alleged infringement of any copyright or any other intellectual property right in connection with the Works outlined in this Contract.</p>
9.6	<p>Add the following as 9.6</p> <p>All information, documents, recommendations, programmes and reports collected or compiled must be regarded as confidential and may not be communicated or made available to any person outside the Employer's service and may not be published either during the currency of this Contract or after termination thereof without the prior written consent of the Employer.</p>
10.1	<p>Replace with the following:</p> <p>The Contractor shall, save as may be otherwise provided in the Contract or be legally or physically impossible, commence executing the Works within 14 days calculated from the date the Contractor is given access to and possession of the Site in terms of Clause 11.</p>
11.1.1	<p>Replace the words "On the Commencement Date" with the words "Within 14 days of the Contractor submitting to the Engineer an acceptable health and safety plan required in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993)"</p>
12.2	<p>The Contractor shall deliver his programme of work within 14 days from date of Site hand-over.</p>
12.3.3	<p>Amend as follows:</p> <p>"Rates of progress for the various parts of the Works taking account, inter alia, of design, acquisition, construction, testing, time risk, float, and any other necessary and relevant facts; and"</p>
13.1	<p>Amend as follows:</p> <p>"On the date possession is given to the Contractor, the Engineer shall deliver to the Contractor three (3) copies, at no cost to the Contractor, of the drawings and any instructions required for the commencement of the Works. The cost of any additional copies of such drawings and/or instructions, as may be required by the Contractor, will be for the account of Contractor.</p>
25.2	<p>Insert the words "in writing" to read as follows:</p> <p>"... unless he considers it unnecessary and advises the Contractor accordingly in writing..."</p>
26.2	<p>Replace the words "within a reasonable time" with the words "within the time period stipulated by the Engineer in such order..."</p>
28.1	<p>Add the following at the end thereof</p> <p>Such losses or damages may be recovered from the Contractor or by deducting the same from any amounts still due under this Contract or under any other contract presently or hereafter existing between the Employer and the Contractor and for this purpose all these contracts shall be considered one indivisible whole.</p>
35	<p>Replace in its entirety with the following:</p> <p>Unless otherwise stated adequate insurance is the responsibility of the Contractor. The</p>

35.1	<p>Contractor shall submit the insurance policy to the Employer for approval, if so requested.</p> <p>Damage to the Works</p> <ul style="list-style-type: none"> (a) Without in any way limiting the Contractor's obligations in terms of the Contract, the Contractor shall bear the full risk of damage to and/or destruction of the Works by whatever cause during construction of the Works and hereby indemnifies and holds harmless the Employer against any such damage. The Contractor shall take such precautions and security measures and other steps for the protection and security of the Works as he may deem necessary. (b) The Contractor shall at all times proceed immediately to remove or dispose of any debris arising from damage to or destruction of the Works and to rebuild, restore, replace and/or repair the Works. (c) The Employer shall carry the risk of damage to or destruction of the Works and material paid for by the Employer that is the result, whether direct or indirect or proximate or remote, of the excepted risks as set out in Clause 35.2. (d) Where the Employer bears the risk in terms of this Contract, the Contractor shall, if requested to do so, reinstate any damage or destroyed portions of the Works and the costs of such reinstatement shall be measured and valued in terms of Clause 44 hereof. <p>Injury to Persons or loss of or damage to Properties</p> <ul style="list-style-type: none"> (a) The Contractor shall be liable for and hereby indemnifies the Employer against any liability, loss, claim or proceeding whether arising in common law or by Statute, consequent upon personal injuries to or the death of any person whomsoever arising out of or in the course of or caused by the execution of the Works unless due to any act or neglect of any person for whose actions the Employer is legally liable. (b) The Contractor shall be liable for and hereby indemnifies the Employer against any liability, loss, claim or proceeding consequent upon loss of or damage to any moveable, or immovable or personal property or property contiguous to the Site, whether belonging to or under the control of the Employer or any other body or person, arising out of or in the course of or by reason of the execution of the Works unless due to any act or neglect of any person for whose actions the Employer is legally liable. <p>The Contractor shall upon receiving an Order in Writing from the Engineer cause the same to be made good in a perfect and workmanlike manner at his own cost and in default thereof the Employer shall be entitled to cause it to be made good and to recover the cost thereof from the Contractor or to deduct the same from amounts due to the Contractor as stated in Sub-Clause 53 (4) hereof.</p> <ul style="list-style-type: none"> (c) The Contractor shall be responsible for the protection and safety of such portions of the premises placed under his control by the Employer for the purpose of executing the Works until the issue of the Certificate of Completion. (d) Where the execution of the Works involves the risk of removal of or interference with support to adjoining properties including land or structures or any structures to be altered or added to, the Contractor, shall and will remain adequately insured or insured against the death of or injury to persons or damage to such property consequent on such removal or interference with support until such portion of the Works has been completed. (e) The Contractor shall at all times proceed immediately at his own cost to remove or dispose of any debris and to rebuild, restore, replace and/or repair such property and to execute the Works.
35 (A)	<p>HIGH RISK INSURANCE</p> <p>In the event of the project being executed in a geological area classified as a "High Risk Area", that is an area which is subject to highly unstable subsurface conditions that might result in catastrophic ground movement evident by sinkhole or do line formation the following will apply:</p>

	<p>(1) Damage to the Works</p> <p>The Contractor shall, from the Commencement Date of the Works until the date of the Certificate of Completion, bear the full risk of and hereby indemnifies and holds harmless the Employer against any damage to and/or destruction of the Works consequent upon a catastrophic ground movement as mentioned above. The Contractor shall take such precautions and security measures and other steps for the protection of the Works as he may deem necessary.</p> <p>When instructed to do so by the Engineer, the Contractor shall proceed immediately to remove and/or dispose of any debris arising from damage to or destruction of the Works and to rebuild, restore, replace and/or repair the Works, at the Contractor's own costs.</p> <p>(2) Injury to Persons or Loss of or damage to Properties</p> <p>The Contractor shall be liable for and hereby indemnifies and holds harmless the Employer against any liability, loss, claim or proceeding arising at any time during the Contract Period whether arising in common law or by Statute, consequent upon personal injuries to or the death of any person whomsoever resulting from, arising out of or caused by a catastrophic ground movement as mentioned above.</p> <p>The Contractor shall be liable for and hereby indemnifies the Employer against any and all liability, loss, claim or proceeding consequent upon loss of or damage to any moveable, or immovable or personal property or property contiguous to the Site, whether belonging to or under the control of the Employer or any other body or person whomsoever arising out of or caused by a catastrophic ground movement, as mentioned above, which occurred during the Contract Period.</p> <p>(3) It is the responsibility of the Contractor to ensure that he has adequate insurance to cover his risk and liability as mentioned in Clauses 35 (A) (1) and 35 (A) (2) above. Without limiting the Contractor's obligations in terms of the Contract, the Contractor shall, within 21 days of the Commencement Date but before commencement of the Works, submit to the Employer proof of such insurance policy, if requested to do so.</p> <p>(4) The Employer shall be entitled to recover any and all losses and/or damages of whatever nature suffered or incurred consequent upon the Contractor's default of his obligations as set out in Clauses 35 (A) (1), 35 (A) (2) and (3). Such losses or damages may be recovered from the Contractor or by deducting the same from any amounts still due under this Contract or under any other contract presently or hereafter existing between the Employer and the Contractor and for this purpose all these contracts shall be considered one indivisible whole.</p>
36.4	Delete
37.2.2.3	The percentage allowance to cover the overhead charges is 33%, except on material cost where the percentage allowance is 10%
40.2	<p>Add the following to the end of the second paragraph:</p> <p>"which costs may be deducted from any payments due to the Contractor in terms of the Contract or any other Contract, now or in the future, existing between the Employer and the Contractor and for this purpose all these contracts shall be considered one indivisible whole."</p>
42.1	<p>The Works shall be completed within:</p> <p>Duration of contract: 36 Calendar Months. Phase 1: New Installation & Replacement: 02 Months after Handover Phase 2: Maintenance: 03 Years</p>

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43.1	The penalty for failing to complete the Works is 0.05% Per Calendar Day of the contract amount per calendar day.
46.2	Contract Price Adjustment (CPA) will be applicable Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
47.5	<p>Add the following Clause 47.5</p> <p>If during the time for completion of the Works or any extension thereof abnormal rainfall or wet conditions occurs, then the formula below shall be used to calculate separately the delay for each calendar month or part thereof. It shall be calculated each month during the period referred to in Clause 42.1 as the time for the completion of the Works and any extension time in accordance with Clause 42 that may have been granted by the Employer, or until the issue date of the certificate of practical completion, whichever is the shorter period. The delay calculated for a given month shall be used to determine the interim extension of time granted for the month. At the end of the applicable period referred to above, the aggregate of the monthly delays will be taken into account for the final determination of the total extension of time for the Contract:</p> $V = (Nw - Nn) + \frac{(Rw - Rn)}{X}$ <p>If any value of V is negative and its absolute value exceeds Nn, then V shall be taken as equal to minus Nn.</p> <p>The delay for a part of a month shall be calculated by substituting pro-rata values for the variables in the equation.</p> <p>The symbols shall have the following meanings:</p> <p>V = Delays due to rain in calendar days in respect of the calendar month under consideration.</p> <p>Nw = Actual number of days during the calendar month on which a rainfall of Y mm or more per day has been recorded</p> <p>Rw = Actual rainfall in mm for the calendar month under consideration.</p> <p>Nn = Average number of days in the relevant calendar month (as derived from existing rainfall records provided in the project specifications) on which a rainfall of Y mm or more per day has been recorded.</p> <p>Rn = Average rainfall in mm for the calendar month, as derived from the rainfall records supplied in the project specifications.</p> <p>X = 20, unless otherwise provided in the project specifications.</p> <p>Y = 10, unless otherwise provided in the project specifications.</p> <p>The total delay that will be taken into account for the determination of the total extension of time for the Contract shall be the algebraic sum of the monthly totals for the period under consideration. But if the grand total is negative, the time for completion shall not be reduced on account of abnormal rainfall. The total extension of time for any calendar month shall not exceed (Nc - Nn) calendar days, where Nc = number of days calendar days in the month under consideration</p> <p>The factor (Nw - Nn) shall be considered to represent a fair allowance for variations from the average number of days during which rainfall equals or exceeds Y mm per day.</p> <p>The factor (Rw - Rn) ÷ X shall be considered to represent a fair allowance for variations from the average for the number of days during which rainfall does not equal or exceed Y mm per day, but when wet conditions prevent or disrupt work.</p> <p>This formula does not take into account any flood damage, which could cause further or concurrent delays and which should be treated separately in so far as extension of time is concerned.</p>

	<p>Accurate rain gauging shall be taken at a suitable point on the site daily at 08:00 unless otherwise agreed to by the engineer, and the Contractor shall, at his own expense, take all necessary precautions to ensure that the rain gauges cannot be interfered with by unauthorized persons.</p> <p>Information regarding existing rainfall records, if available from a suitable rainfall station near the site, will be supplied in the project specifications, together with calculations of rain delays for previous years in accordance with the above formula. The average of these delays will be regarded as normal rain delays which the Contractor shall accommodate in his programme, and for which no extension of time will be considered.</p>
48.3.4	Replace the word "conclusive" with the words "prima facie"
8.3.6	Delete
48.6	<p>Add the following Clause 48.6</p> <p>"If the Employer fails to give his ruling within the period referred to in Clause 48.5, he shall be deemed to have given a ruling dismissing the claim."</p>
49.1.2	Replace the word "Schedule" with the word "Bill"
49.1.5	The percentage advance on materials not yet built into the Permanent Works is 85%
49.3	<p>Replace with the following:</p> <p>Payment of the amounts referred to in Clause 49.1.1, 49.1.2, 49.1.3 and 49.1.4 shall, save to the extent otherwise provided in Clause 49.6, be subject to a retention, if applicable in terms of clause 7.1, by the Employer of an amount (herein after called the "retention money"), being the percentage, stated in Part 2 of the Contract Data of the said amounts due to the Contractor.</p>
49.5	<p>Replace Clause 49.5 with the following</p> <p>In respect of contracts up to R1 million and in respect of contracts above R1 million where the Contractor elects a security by means of a 10% retention of the Value of the Works (excl. VAT), 50% of the retention shall be released to the Contractor when the Engineer issues the last Certificate of Completion in terms of clause 51.4. The remaining 50% of the retention shall be released in accordance with the provisions of the conditions of contract and will become due and payable within 14 days of the issue of the last Final Approval Certificate.</p> <p>Or</p> <p>In respect of contracts above R1 million, where the Contractor elects a security by means of a cash deposit or fixed guarantee of 5% of the Contract Sum (excl. VAT) and a 5% retention of the Value of the Works (excl. VAT), the cash deposit or fixed guarantee, whichever is applicable, shall be refunded to the Contractor or released to the guarantor, respectively, when the Engineer issues the last Certificate of Completion in terms of Clause 51.4. The 5% retention of the Value of the Works (excl. VAT) shall become due and payable within 14 days of the issue of the last Final Approval Certificate.</p> <p>Or</p> <p>In respect of contracts above R1 million, where the Contractor elects a security by means of a cash deposit or a variable guarantee of 10% of the Contract Sum (excl. VAT), the cash deposit or the variable guarantee, whichever is applicable, will be reduced to 5% of the Value of the Works (excl. VAT) when the Engineer issues the last Certificate of Completion in terms of Clause 51.4. The balance of the cash deposit shall become due and payable within 14 days of the issue of the last Final Approval Certificate or the variable guarantee shall expire upon the issue of the last Final Approval Certificate.</p>
49.6	A Retention Money Guarantee is not permitted. 82
49.7.2	Replace the words "prime overdraft rate certified by the Contractor's banker" with the words "interest rate as determined by the Minister of Finance, from time to time, in terms of section 80(1)(b) of the Public Finance Management Act, 1999 (Act No. 1 of 1999), will apply"

49.11	Add Clause 49.11 as follows: In respect of any amount owed by the Contractor to the Employer, the Contractor shall pay the Employer interest at the rate as determined by the Minister of Finance, from time to time, in terms of section 80(1)(b) of the Public Finance Management Act, 1999 (Act No. 1 of 1999), will apply
50.	Amend the percentage from 15 per cent to 20 per cent in the title, the Clause and in the sideline comment.
52.2	Amend as follows: "...of the Contract or any part thereof, nor of the accuracy of any claim made by the Contractor, nor shall any other certificate exclude ...powers of the Engineer and/or the Employer"
53.1	The Defects Liability Period is 12 months
55.1.6	Amend as follows "Has, to the detriment of good workmanship or without the written approval of the Employer or in defiance of the Engineer's instructions to the contrary, sublet any part of the Contract, or"
56.2.2	Delete the following words "without prejudice to his lien on the Employer's property"
56.3	Add the following at the end After cancellation of the Contract by the Contractor, the Contractor, when requested by the Employer to do so, shall not be entitled to refuse to withdraw from the Works on the grounds of any lien or a right of retention or on the grounds of any right whatsoever.
57.1	Amend as follows: "... Clauses 48 or 58.7 or in respect of any matter in terms of which the Employer has issued a certificate or instruction or has made a ruling, determination, decision or valuation, or in respect of any matter in terms of which the Employer has given effect to the proviso in Clause 2.3, the Contractor shall have the right by written notice with supporting particulars to the Engineer and Employer to require..."
58.1.1	Delete the words "Clause 48 or"
58.1.2	Delete the words "48.5 or" and replace the word "Clauses" with the word "Clause"
58.1.3	Amend as follows: "... and the Engineer or Employer, as applicable, or by the Mediator's opinion to the extent that it has become binding in terms of Clause 58.2.6
58.2	Dispute resolution is to be by means of mediation.
58.4	Disputes are to be referred for final settlement to litigation.
59	Add the following Clause 59 "No amendments of this Contract or of any provisions or terms hereof and no waiver or relaxation or suspension of any of the provisions or terms of this Contract shall be of any force or effect unless reduced to writing and signed by both the parties hereto."

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PART 2: DATA PROVIDED BY THE CONTRACTOR	
1.8	<p>The name of the Contractor is</p> <p>.....</p> <p>(insert the legal name of the Contractor, as well as the Contractor's registration number, if applicable)</p>
1.2.2	<p>The addresses of the Contractor, where the Contractor shall receive notices, are as follows:</p> <p>Physical Address:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Postal Address:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Facsimile: _____ Telephone: _____</p>
7.1	<p>The security to be provided by the Contractor:</p> <p>(a) in respect of contracts up to R1 million, the security to be submitted by the Contractor to the Employer will be a retention of 5% of the Value of Works (excluding VAT)</p> <p>(b) in respect of contracts above R1 million, the Contractor will provide, as security, one of the following:</p> <p>(1) cash deposit of 10 % of the Contract Sum (excluding VAT) Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>(2) variable construction guarantee of 10 % of the Contract Sum (excluding VAT) Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>(3) retention of 10% of the Value of Works (excluding VAT) Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>(4) cash deposit of 5% of the Contract Sum (excluding. VAT) and a retention of 5% of the Value of Works (excluding. VAT) Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>(5) fixed construction guarantee of 5% of the Contract Sum (excluding VAT) and a retention of 5% of the Value of Works (excluding VAT) Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>NB. Guarantees submitted must be issued by either an insurance company duly registered in terms of the Short-Term Insurance Act, 1998 (Act 35 of 1998) or by a bank duly registered in terms of the Banks Act, 1990 (Act 94 of 1990) on the pro-forma referred to above. No alterations or amendments of the wording of the pro-forma will be accepted.</p>

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**APPOINTMENT OF A CONTRACTOR FOR THE SUPPLY,
INSTALLATION, REPLACEMENT AND MAINTENANCE OF STANDBY
GENERATORS AND GENERAL ELECTRICAL SERVICES IN NORTHERN
CAPE PROVINCE REGION ONE (01): TWELVE (12) DEVOLVED POLICE
STATIONS FOR THE PERIOD OF THREE (3) YEARS**

BID: 19/1/9/1/116TB(22)

PART C

CONTRACT

PART C.2

**SCOPE OF WORK, GENERAL REQUIREMENTS AND SPECIFICATION
AND PRICING DATA**



SOUTH AFRICAN POLICE SERVICE

**SUPPLY, INSTALLATION, REPLACEMENT AND
MAINTENANCE OF STANDBY GENERATORS
AND GENERAL ELECTRICAL SERVICES**

NORTHERN CAPE PROVINCE: REGION - 01

(VARIOUS FACILITIES: 12 STATIONS)

Engineering Contract: 36 Months

**COMPILED BY: SAPS: Division: Supply Chain Management
July 2022**

Chief Engineer: Col M Mulaudzi
Tell: 012 845 8925
E-Mail: MulaudziMD@saps.gov.za

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PART C 2: Contract: Supply, Installation, Replacement & Maintenance Of Standby Generators and General Electrical Services

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PART C 2: Contract: Supply, Installation, Replacement & Maintenance Of Standby Generators and General Electrical Services

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S.M.
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1. INTRODUCTION

The South African Police Service under Supply Chain Management Division has a requirement to Supply, Install Replace and Maintain Standby Generators and General Electrical Services at various facilities in Northern Cape Province, Region one (01), for a contract period of 36 months.

2. SCOPE OF WORKS

This specification covers the SAPS minimum requirements for supply, installing, replacing, servicing and maintaining of existing generators and electrical reticulation, at various facilities in Northern Cape Province, Region one (01).

Bidders shall be responsible for the supply, delivery, testing and installation of new equipment including accessories and work specified within this document. All equipment installed on site shall have minimum guarantee of 3 years on a workmanship.

- The successful Contractor shall carry out a 240 hour type or at a six monthly interval service and 480 hour type or at 12 months service (depending on whichever occurs first from date of handover).
- The contractor shall be responsible for unplanned maintenance on all generators and electrical reticulation for the contract period.
- A check list and job card of each inspection and service must be completed and it must be countersigned by the SCM representative of the SAPS after completion.
- The Contractor shall ensure to be conversant with the technical specification and applicable standards.
- The successful contractor must take note that the supply, delivery and replenishment of diesel tanks are the responsibility of the Station Commander: SAPS.

The Contractor shall provide all equipment, labour, material and transportation to supply and replace the components and sundries, tests, etc. required to bring the installations to the intended working condition, compliance and guarantee.

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3. NORMATIVE REFERENCES

The entire installation shall be carried out to the satisfaction of the SAPS, Facility Management, and shall be carried out in accordance with the following Standard Specifications and Regulations.

- ISO 9000/9001 Quality Management Systems.
- SANS 342 Automotive diesel fuel
- SANS 1186 Symbolic safety signs
- SANS 1507 Electric cables with extruded solid dielectric insulation for fixed installations
- SANS 1632 Batteries
- SANS 1652 Battery chargers – industrial type
- SANS 8528-1 Reciprocating internal combustion engine driven alternating current generating sets (all parts)
- SANS 10140 Identification colour marking
- SANS 60034 Rotating electrical machines
- SANS 60529 Degrees of protection provided by enclosures
- SANS 60947 Low-voltage switchgear and control gear – Part 7-1: Ancillary equipment – Terminal blocks for copper conductors
- SANS 10142-1 Wiring of Premises
- SANS 62-1 Steel pipes Part 1
- SANS 301-12 Palisade fence
- SANS 10198-8 Cable laying and Installation
- SANS 10131 Petroleum products, above ground storage and tanks.
- SANS 60947 All low voltage switchgear and control gear assemblies
- SANS 10400 Building regulations
- SANS 61084-1-2 Electrical Installation Ducting and Trunking Systems on walls and ceilings
- SANS 61305-1-2.4 Electrical Installation Conduit Fittings
- SANS 767- 1-2 Electrical Earth Leakage Protection units
- SANS 45001 Occupational Health and Safety Act No. 85 of 1993
- The municipal by-laws and any specific requirements of the Local Supply Authority of the area or district concerned.
- Local Fire Regulations

4. DETAIL REQUIREMENTS

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This particular specification must be read with, and shall form part of the Technical Specification contained in this document. **Bidders may submit quotes for standard equipment which comply as closely as possible with the specification.**

Handwritten signatures and initials: JM, L.D., BN, R.M., SW, SM, and others.



PART C 2: Contract: Supply, Installation, Replacement & Maintenance Of Standby Generators and General Electrical Services

Any deviation from the specification must be fully defined. All connections, installations and terminations of the required cabling and switch gear will form part this contract. The diesel-electrical generators may be connected to Uninterrupted Power Supplies (UPS) systems, radio communication systems and dedicated power outlets and interrelated circuitry. All equipment shall be intergraded with existing infrastructure and therefore additional care should be taken to protect all equipment in terms of excessive voltage spikes, over current protection, lightning protection and voltage drops. When all conductors of an AC installation are carrying their design load, the difference in voltage between the point of supply and any point of outlet or terminals of fixed appliances should not exceed 5% of the standard or declared voltage. In the case of a 230/400 V system, the voltage drop for single-phase circuits should not exceed 11.5 V (5% of 230 V) and the voltage drop for three-phase circuits should not exceed 20V (5% of 400V).

5. TRANSPORT COST

Transport cost will include the cost of wages and overheads for personnel during transport to the site and running cost of the vehicle.

Transport cost will be calculated from De Aar (As a Central Point) at Northern Cape to the site (Stations) specified. Transport cost involved for any additional instructions executed on the same day or at the station will be calculated from point "A" (the first station) to point "B" (second station) to point "C" (third station) etc. Under no circumstances will separate transport costs for instructions executed on the same day or at the same station in the same areas be allowed.

The Contractor shall make the necessary arrangements to have the required material or equipment available to execute the repairs, therefore no claims for delivery cost or transport cost to collect material or equipment shall be accepted.

6. NOTICE TO BIDDER

This Tender is for supply, installation, replacement and maintenance of standby generators and electrical reticulation, at various facilities, occupied by the South African Police Service (SAPS). Facilities that are not equipped or having a need to replace outmoded equipment with new standby generators, decommissioning of outmoded equipment will form part of this contract. All decommissioned equipment will remain the property of the SAPS. Particulars regarding decommissioned generators and new generators will be updated on the Asset Register by the Section Head: Asset Operations Management. The contractor will be obligated in terms of this contract to ensure first delivery per generator installation within a period of 8 weeks (56 days), after receiving an official order form and/or in terms of the approved Program of Works. The contractor shall fully acquaint themselves with the nature of the work carried out, the locality of the plant and any possible hindrances in the execution of the installation, services and maintenance and to allow for these entire factors in their price, as any later claim based on unforeseen events

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PART C 2: Contract: Supply, Installation, Replacement & Maintenance Of Standby Generators and General Electrical Services

or knowledge will not be entertained. The contractor shall be entirely responsible for referencing all relevant standard specification of the SAPS and SANS or other applicable published standard whether such standard is referenced in this document or not and ensuring compliance with the Engineering Works therewith. The references in this document to standard specification shall not be constructed as limiting, and are given merely as a guide for basic reference. Where SABS is stated, the applicable SANS shall apply. It is a specific condition that if it is necessary to replace any equipment, (not part of this contract) that the SAPS reserve the right to source additional quotations and to accept a specific quotation, in term of the SAPS Procurement prescripts and standards. The SAPS further reserve the right to accept or decline such variations. Any equipment or part of the equipment shall not be removed from devolved facility for repairs or otherwise unless permission is granted by police station in consultation with either Province and/or SCM Head Office: Facility Management, Programme and Project Management. If it happen that such equipment or part of the equipment is removed without the permission, such equipment or part of the equipment will be returned to where it was taken at no cost to SAPS.

NB: The successful contractor must take note that all equipments that have guarantee will be maintained and serviced by service provider who has installed them for a period of 12 months, even if they are part of the contract. The contractor will only be allowed to service or maintain such equipments after 12 months or approved period. (Refer to Schedule of quantities Item 105(a), 105 (b) and 105(c)).

NB: The following two Police Stations namely (Norvalspont and Philipstown) are currently under existing maintenance contract which will expire in March 2023, and maintenance thereof will commence after expiring of that contract (depending on award date).

7. GENERAL REQUIREMENTS AND SPECIFICATION

STATE UNDER PARTICULAR OF TENDER AGAINST EACH REQUIREMENT WHETHER THE TENDER <u>COMPLY OR DO NOT COMPLY</u> WITH THE REQUIREMENT OF THE SPECIFICATION, FAILURE TO THAT WILL DISQUALIFY YOUR BID. (Please do not tick)		COMPLY /DO NOT COMPLY
7.1	This Tender is for supply, installation, replacement and maintenance of standby generators and electrical reticulation, at various facilities in Northern Cape Province, Region 01, occupied by the South African Police Service (SAPS). Decommissioned of outmoded equipment will remain the property of the SAPS (as specified in this document).	
7.2	The contractor will be obligated, in terms of this contract, to ensure first delivery per generator installation within a period of 8 weeks (56 days). The Contractor shall fully acquaint themselves with the nature of the work to be carried out, the locality of the plant and any possible hindrances in the execution of the installation, services and maintenance, and to allow for all of these factors in their prices, as any later claim bases on unforeseen events or knowledge will not be entertained. (as specified in this document)	
7.3	All generator sets shall be installed on newly constructed plinth or in existing generator plant rooms, which will form part of this contract. Generators will vary in capacity; water or air cooled, stand-by generators, mounted on newly constructed plinths, and rated for single step full load application is required. Inclusive of	

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	Automatic Mains Failure (AMF) control panel, battery, exhaust and integrated fuel tank. All cabling connection and related works included in contract. The Bidder shall guarantee that the diesel/governor and alternator/AVR combination will be compatible with the site loads. The fuel tank shall be an integral part of the base frame of the generator set, with a minimum capacity of 220 liters, including filters, Gauges, Removable inspection cover, Drain, Filler cap, Low level and extra low shutdown/alarm sensors. Fuel pipe-work is to be in accordance with SANS 62-1: 2003. (as specified in this document)	
7.4	Supply and install symbolic safety signs in compliance with SANS 1186-4: 2004. Ensure that all required warning signs on the outside of the building are to be in position. The signs on the outside must be fixed onto the doors of the emergency generator room. The lettering must be readable and visible and in a good state. (as specified in this document)	
7.5	Service and Maintenance – The successful Contractor shall carry out a 240 hours Type service at six month interval and a 480 hour type service at twelve months. Final Delivery will not be taken unless proof can be provided, by means of signed job cards by the responsible official on the site, indicating that such services were carried out. All job cards will be certified and sign-off by the relevant Station Commanders/SCM Representatives. All original job-cards must be attached to the applicable invoices, for payment purposes. The applicable documentation, such as load test certificates, COC, and photo's, should be attached to the job-cards, as part of the supporting documentation. The contractor will supply job cards in accordance with the example included herein. The job card must be completely legibly in black ink after completion of each service and/or maintenance. Any errors in the compilation of the job card or account discovered at a later stage, shall be rectified and the over payment recovered by the SAPS all in accordance with applicable prescripts.	
7.6	Operation and Maintenance Manuals – The contractor shall hand over, at the completion of the works one (1) original and two (2) copies of the necessary operating and maintenance manuals, required for all plant and equipment supplied and installed by him or her as part of the works. A complete description of all operating procedures and safety measures shall be included in the manual. A basic "Fault Finding Guide" shall also be included. (as specified in this document)	
7.7	Maintenance Requirement – The manufacturer's recommendation with regard to the routine servicing and maintenance of all equipment shall be included in the manual. This data shall include the recommended service interval and the estimated hours required for each type of service, and equipment. When a fault is logged the contractor must test run the generator for a period of at least a half an hour. During the test run the proper functioning of all parts, including the electrical gear, protective cut outs, fault indicators, change-over equipment and battery must be checked, as well as the load on each phase. (as specified in this document)	
7.8	Electrical Connections – Electrical connections to the AMF panel form part of this contract. Wiring must be designed and installed as prescribed by SANS 10142 wiring of premises. (as specified in this document)	
7.9	Throughout the work shall be executed to the highest standards and to the entire satisfaction of the SAPS Representative who shall interpret the meaning of the Contract Document and shall have the authority to reject any work and materials, which, in his judgment, are not in full accordance therewith. <u>All condemned material and workmanship shall be replaced or rectified as directed and approved by the SAPS.</u> All work shall be executed in a first-class manner by qualified tradesman. The Contractor shall warrant that the materials and workmanship shall be of the highest grade, that the equipment shall be installed in a practical and first-class manner in accordance with the best practices, ready and complete for full operation. It is specifically intended that all material or labour which is usually provided as part of such equipment as is called for and which is necessary for its proper completion and	

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	operation shall be provided without additional cost whether or not shown or described in the Contract Document.	
7.10	The Contractor shall comply with the requirements of the Health & Safety Specification and applicable regulations. The contractor shall refer to the site information, and the specifications describing the scope of the Engineering Works, for information about the type of environment in which the work is to be executed. Notwithstanding anything stated in this document the contractor shall be responsible for determining the safety requirements of the site. (as specified in this document)	
7.11	The plinth shall be constructed. The generator set shall be mounted on a reinforced concrete plinth. Plinth shall be cast on site. The top of the plinth shall protrude at least 200mm above the final surrounding, ground level. The concrete plinth shall protrude approximately 100mm beyond the edges of the generator set to form an apron. The concrete apron and plinth shall be wood float finished and shall slope from the base to permit rain water runoff. Cable ducts shall be providing in the plinth to accommodate all the incoming and outgoing supply cables. The cable ducts shall be sealed to prevent entry of rodents. The earth mat will be installed at a minimum depth of 1200mm below the plinth, with earth spikes, or as per the required ground impedance. (as specified in this document)	
7.12	Outdoor Generators to be enclosed with palisade fencing and matching gate. All palisade fencing, gates and components shall be galvanized to SABS ISO 14621 standards. All poles and horizontal bearers shall be manufactured from 2mm cold rolled steel formed material. All pales shall be fixed with anti-vandal bolts and fastened with shear off nuts. Complete installations shall be of a minimum height of 1800mm. Posts shall be fitted within concrete foundations of minimum of 500x500x500mm. The swing gate will be manufactured to match the palisade accordingly. (as specified in this document)	
7.13	The engine and generator shall be mounted on one common steel-supporting frame manufactured of channel iron or other equivalent steelwork to provide a rigid and solid foundation. The main frame shall be of "skid" base type. If no "skid" base is provided, suitable for free standing, holding down bolts and vibration eliminators to the generator set manufacturer's specification must be provided. This sub-frame shall be supported from a main frame by anti-vibration mountings. Duplex anti-vibration mounts shall be used. The inner frame and its support shall be of sufficient height above floor level to permit installation of a drip tray and for drainage of engine oil. The drip tray must be sloped and made of mild steel. It must be fixed in the frame beneath the engine and alternator and a drip pipe fitted with a plug must be extended from the lowest point of the drip tray to beyond the frame in an easily accessible position. The outer casing of the alternator, the engine, the sub-frame and main base frame shall be bonded together electrically and connected to the earth via a connection to the earth bar in the control panel and from there to an earth mat. (as specified in this document)	
7.14	Speed governing shall be by a solid state, asynchronous electronic speed governor conforming to Class 0 of BS 5514 (latest amendments). The SAPS reserves the right to inspect the locally available stock of spares prior to granting approval for the use of any particular type of speed regulator. The speed regulation (droop) of the governor shall be adjustable between 0% and 15%, and the steady state speed band 0, 25% asynchronous control. The operating voltage for the governor shall be the nominal voltage of the starting battery (normally 24 volts). Speed variation of the set between no load and full load may not exceed 4%. Engines must be fitted with flywheels correctly sized to eliminate visible flicker of lights fed by the generator set. Cyclic irregularity must be as stipulated in BS 5514 (last amendments).	
7.15	Exhaust gas shall be piped, the piping being fitted with expansion joints and silencer and discharged to atmosphere. The expansion joints shall be of the stainless steel, concertina type, flexible, flanged and bolted to the exhaust manifold or turbo-charger outlet as applicable. Stainless steel bolts and nuts of the appropriate size must be used. Care must be exercised that exhaust pipe and silencer supports at the	

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	expansion joints are so positioned that no strain is placed on the manifold joint, turbo-charger, piping or silencer. The silencer shall be of stainless steel, of the baffle or absorption type of a size construction such that a sound level of 75 dB absolute is not exceeded within seven meters of the exhaust. The exhaust pipe shall be of stainless steel, insulated, and sufficient size to ensure that the backpressure is acceptable within the limits of the engine manufacturer. The exhaust system shall be offset from the center line of the plant to allow for hoists or cranes to remove the engine. Stainless steel nuts and bolts must be used in assembling the exhaust system. Flanged joints are required to aid dismantling. Exhaust piping over 100mm diameter must have a minimum thickness of 1,6mm.	
7.16	A factory load test, prior to any installations, will be performed and such test certificates will be supplied to the SAPS. The contractor shall supply all fuel, lubricants, connections, consumables, etc. required for the specified testing. On successful completion of the specified testing, the generator set, panel and all equipment, fittings and materials required for the installation of the generator set, as specified shall be delivered to site and installed.	
7.17	All newly installed as well as replaced generators must be placed on SAPS Asset Register. The updating of the Asset Register is the responsibility of the Section Head: Asset Operations Management: FACILITY MANAGEMENT: Pretoria. It will be the responsibility of the appointed contractor to forward detailed descriptions, model references, fabrication, serial numbers and a COC for the purpose of upgrading the asset register.	
7.18	All electrical cables, unarmored and armored, shall be locally manufactured and shall bear the SABS stamp of approval.	
7.19	All new generators will be designed in facilities certified to ISO 9001 and manufactured in facilities certified to ISO 9001 or ISO 9002 standards.	
7.20	New equipment and material shall be supplied with a written guarantee confirming a defects liability period of 12 months from date of practical completion. These guarantees shall be furnished in favour of the SAPS.	
7.21	Equipment and material installed shall be new and unused.	
7.22	The fuel tank shall be an integral part of the base frame of the generator set, with a minimum capacity of 180 liters for 25KVA (Single Phase) and 220 liters for 30KVA to 500KVA (three phase) Generators.	
7.23	The generator canopy shall be sound attenuated (as specified in this document), weatherproof, 3 CR 12 rated, painted and fitted to generator. The roof, walls and doors shall be manufactured of steel. All panels, the roof and doors shall be suitably braced and stiffened to ensure rigidity and to prevent warping.	
7.24	Luminaires, lamps, control gear, isolators and power outlets shall bear the SABS stamp.	
7.25	The Contractor shall ensure that all safety regulations and measures are applied and enforced during repair work on cabling, wiring, distribution boards, luminaires, power points and fixed appliances.	
7.26	Transport Cost shall be calculated from De Aar (As a Central Point) at Northern Cape Region one (01) up to where service shall be rendered	

8. SITE LOCATION AND CONTACT DETAIL

The following stations will be covered by this contract (locations to be confirmed by Bidder);

No.	Station	Address	Telephone number
1	Belmont SAPS	1 Main Road, Belmont	(053) 204 0101

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2	Campbell SAPS	2 Main Road, Campbell	(053) 297 2909
3	Delporthoop SAPS	4 Scholtz Street, Delporthoop	(053) 561 0116
4	Hartswater SAPS	4 DF Malan Street, Hartswater	(053) 474 0080
5	Kuyasa SAPS	Corner Esberg, Hantam Karoo	(051) 753 9101
6	Loxton SAPS	1 Church Street, Loxton	(053) 621 5660
7	Niekershoop SAPS	3 Main Street, Niekershoop	(053) 354 0666
8	Noupoort SAPS	125 Hostel Street, Noupoort	(049) 456 2409
9	Norvalsport SAPS	1 Main Street, Norvalsport	(051) 751 5000
10	Philipstown SAPS	1 Green Street, Philipstown	(053) 665 2000
11	Strydenburg SAPS	41 Church Street, Strydenburg	(053) 621 5660
12	Victoria West SAPS	43 Church Street, Victoria West	(053) 621 2009

9. Generator Size and Services

The scope of works is for various facilities throughout the Northern Cape Province Region 01, occupied by the South African Police Service (SAPS).

NO	STATIONS	GENERATOR SIZE	NUMBER OF SERVICES	SCOPE OF WORKS GENERATORS
1	Belmont SAPS	40KVA, Three Phase	6	Service & Maintenance
2	Campbell SAPS	50KVA, Single Phase	6	Service & Maintenance
3	Delporthoop SAPS	40KVA, Three Phase	6	Service & Maintenance
4	Hartswater SAPS	50KVA, Three Phase	6	Service & Maintenance
5	Kuyasa SAPS	50KVA, Single Phase	6	Service & Maintenance
6	Loxton SAPS	50KVA, Three Phase	6	Service & Maintenance
7	Niekershoop SAPS	250KVA, Three Phase	6	Service & Maintenance
8	Noupoort SAPS	50KVA, Three Phase	6	Service & Maintenance
9	Norvalsport SAPS	70KVA, Three Phase	6	Service & Maintenance
10	Philipstown SAPS	40KVA, Three Phase	6	Service & Maintenance
11	Strydenburg SAPS	40KVA, Three Phase	5	Service & Maintenance
12	Victoria West SAPS	50KVA, Three Phase	5	New Installation, Service & Maintenance

10. Maintenance Summary

Stations	12
New Generator installation	1 x (Victoria West SAPS: 50KVA)
Total Number of Generator Services	71

The Bidder must verify the above mentioned details. It is the responsibility of the Bidder to evaluate electrical and generator conditions at all the stations, for the purpose of pricing.

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11. CONDITIONS OF CONTRACT

The Contractor shall comply with the obligations and requirements of the Agreement and Contract Data documents contained in Part C1 including the General Conditions of Contract 2004 (GCC 2004).

The Contractor shall allow for all the responsibilities and obligations in terms of the conditions of contract and contract data, including;

- Risks, costs and obligations in terms of the General Conditions of Contract, the Contract Data and of the standardized specifications, except where provision is made in the Project Specifications to cover compensation for any of these items.
- Head office and site overheads and supervision.
- Profit and financing costs.
- Sureties, employment related expenses, statutory expenses.
- Indemnities & insurances: The contractor will only be permitted to perform work on the site if a valid insurance policy document and proof of cover or premium payment have been submitted and approved.
- The Contractor shall maintain current registration and have paid the necessary fees to the Compensation Commissioner in compliance with the Compensation for Occupational Injuries and Diseases Act, 1993 (COID). The contractor will only be permitted to perform work on any site if a valid Letter of Good Standing issued by the Compensation Commissioner has been submitted and approved.
- A detailed program for the execution of the engineering works, Maintenance works and Installation works for the whole of the contract period, listing each plant, its location and fixed dates of maintenance. The contractor will be required to comply with the program at all times.
- Expenses of a general preliminary and general nature not specifically related to any item or items of permanent or temporary work.

12. FACILITIES

The following facilities shall be provided by the contractor for the duration of the contract.

8.1 Administrative Facilities, Equipment and Materials

The following administrative facilities shall be provided.

- Email and Facsimile - The use of official correspondence (e-mail and facsimile) will be used for instructions and liaison. Each generator plant will be supplied with a maintenance register (supplied by contractor).

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- Communications Facilities - Telephone (landline), fax (landline) & email services shall be provided at the contractor's offices. Such facilities shall be reliable since instructions, drawings and document will be issued electronically to the Contractor.
- Electricity & Water on Site - The employer will allow the use of water and electricity for construction free of charge. The contractor shall provide suitable temporary facilities such as electricity extension cables, water hoses & water containers as necessary while work is being performed depending on the availability.

13. DISPLAY BOARDS

Display signs shall be erected at each generating plant fixed to the plant room or container door. The panels shall be rigid A4 size and contain the following information in an approved legible format. The panel shall be weatherproof and printed by a sign writer as approved.

- Contract number
- Employer's name
- Name of project
- This plant is being maintained by Contractor's name, telephone number.
- Contract Period (From which date to which date)
- Fault reporting telephone number

14. DESCRIPTIONS OF THE WORKS RELATED TO STANDBY GENERATORS

Foundations - All outdoor generator sets shall be installed on newly constructed plinth, which will form part of this contract. Generators shall be installed with outdoor canopy, within facility precinct. Outmoded existing generators will be replaced with new equipment, either inside existing generator plant-room or external or newly constructed re-enforced concrete foundation.

Generator Set – Vary in capacity, water or air cooled, stand-by generator set, mounted on newly constructed plinths, and rated for single step full load application is required. Inclusive of AMF control panel, battery, exhaust and fuel embedded tank. All associated fuel piping and control wiring, etc. All cabling connection and related works included in this contract.

Requirements – The Bidder shall guarantee that the diesel/governor and alternator/AVR combination will be compatible with the site loads which can consist of a combination of switch mode and/or thyristor controlled rectifiers and UPS systems etc. This shall be a condition of Tender.

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Fuel Tank – The fuel tank shall be an integral part of the base frame of the generator set, with a minimum capacity of 180 liters for 25KVA (Single Phase) and 220 liters for 30KVA to 500KVA (three phase) Generators.

The tanks shall be fitted with: Filter, Gauge, Removable inspection cover, Drain, Filler cap. Low level and extra low shutdown/alarm sensors. These shall activate an audible and visible signal on the control panel. Fuel pipe-work is to be in accordance with SANS 62-1: 2003.

Factory Testing – On completion of the generator set assembly: The panel shall be tested, for compliance. The engine shall be tested with the following amendment: Load Test.

– 5 min. @ 20% load, 10 min. @ 60% load, 20 min. @ 100% load, 20 min. @ 110% load, 5 min. @ Nil load (cool down). The contractor shall supply all fuel, lubricants, connections, consumables, etc. required for the specified testing. On successful completion of the specified testing, the generator set, panel and all equipment, fittings and materials required for the installation of the generator set, as specified shall be delivered to site and installed.

Symbolic Safety Signs – Fuel Tank: Supply and install symbolic safety signs in compliance with SANS 1186-4: 2004. **Generator set:** Supply and install standard safety compliance signs:

- Standard procedure in case of electrical shock.
- "Warning – this machine may start automatically without warning."

Commissioning and Testing – On completion: commission, test and demonstrate the SAPS, Facility Management, or a representative.

The test shall include:

- Test the fuel system, pumps, float switches etc.
- Test alarms and cut-outs.
- Automatic mains failure test.
- Test plant status modern facility.

Service and Maintenance – a standard service schedules form to be supplied by successful contractor. The successful Contractor shall carry out a 240 hour type service at six month intervals and a 480 hour type service at twelve month. Final Delivery will not be taken unless proof can be provided, by means of signed job cards by the responsible official on site, indicating that such services were carried out, inclusive of six (6) monthly interval inspections, for a period of 36 months or 3000 hours. (Depending on whichever occurs first for date of acceptance or handover) The Tendered price shall be inclusive of all labour and materials required carrying out the specified service including all filters, labour, travel, consumables etc., for a period of 36 months or 3000 hours. Job cards will be signed off and certified by the Station Commander or representative.

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Unplanned maintenance

The South African Police Service will report any plant faults or breakdowns (complaints) which may occur. The SAPS personnel (appointed member at facility) will report such plant faults, breakdowns and electrical malfunction to the relevant Provincial Supply Chain Management, Section Property Management, of South African Police Service, who will log the complaint and transmit it by fax/e mail to the Contractor. The contractor shall respond to the complaint as necessary in accordance with the assigned priority level & the breakdown (complaint) shall be repaired as necessary to restore the plant and / or electrical equipment to full operation in the minimum time. On completion of the complaint remedy the contractor shall complete a Job Card and submit to the Provincial Supply Chain Management, Section Property Management with a copy of the faculty concerned. Job cards will be signed off and certified by the Station Commander or SCM representative. The particular reference number of the Occurrence Book (OB) and/or "Day-to Day" Maintenance Register (SAPS 456) number must be printed on the job card and related invoice. The Contractor shall attach to the Job Card the following documents associated with the complaint.

- Copies of vendor tax invoices for materials used, each endorsed with the Complaint Number, the Contractor's stamp and the Contractor's original signature.
- Travel log sheet for travel exclusively incurred in attending to the Compliant. If the Complaint was repaired during a scheduled service visit to the plant concerned, then the travel log for the complaint shall be appropriately endorsed.
- Further information which may be necessary or instructed.

The Provincial Supply Chain Management, Section Property Management, South African Police Service, will be responsible for closing the call. The Contractor shall be responsible for obtaining the fax number of each facility and establishing to whom the fax must be transmitted. Should the contractor not be able to complete the required breakdown repair work within the maximum down-time period allowed, it shall be his responsibility to obtain extension of down-time from the Division: SCM: Facility Management. The written report shall clearly state the reasons for the extension, as well as the actual extension required. Extension of down-time will only be granted by the SAPS if:

(a) The maximum down-time is unreasonable in relation to the scope of the repair work required.

(b) The delivery time of a new component/subassembly/machine or spares required for the repair of the defective component/subassembly do not enable the contractor to successfully complete the repair work within the maximum breakdown down-time allowed. Due to the fact that all the facilities, covered in this project, are totally reliant on Generator supply, any form of breakdown will be regarded as a fatal breakdown priority level.

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<u>Priority Level</u>	<u>Maximum Down-Time Allowed (MDTA)</u>
<u>Fatal breakdown where specified (generator plant)</u>	<u>8 hours (immediate response)</u>

“Maximum down time” shall mean the period of time allowed repairing a breakdown, and “actual down-time” shall mean the measured period from the instant when the breakdown was logged with the contractor until the installation has been repaired to its functional specification.

Operation and Maintenance Manuals – The **contractor** shall hand over, at the completion of the Works one (1) original and two (2) copies of the necessary operating and maintenance manuals, required for all plant and equipment supplied and installed by him or her as part of the Works. A complete description of all operating procedures and safety measures shall be included in the manual. A basic “Fault Finding Guide” shall also be included. **Note:** Laminated and framed copies of operating procedures, wiring diagrams, and basic fault finding guides are to be fixed to the inside of the control panel access door. Each copy of the operating and maintenance manual shall be separately bound in an acceptable manner, and shall contain the following data where applicable:

- Scope of Work
- Operating Instructions
- Normal Operation
- Safety Measures
- Fault Finding Guide
- Equipment Information
- Schedule of Information
- List of Spares and Agents
- Design Data
- As Commissioned Data
- Maintenance Requirements
- Approved Service Schedules
- Manufacturer’s Service Recommendations
- Manufacturer’s Literature
- Equipment Brochures
- Proprietary Drawings
- As Built Drawings
- Electrical Drawings
- System Layouts and Schematics
- Training Certificates

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Maintenance Requirements – The manufacturer's recommendation with regard to the routine servicing and maintenance of all equipment shall be included in the manual. This data shall include the recommended service interval and the estimated hours required for each type of service, for each item of equipment, together with a list of agents/contractors authorized to carry out service/maintenance. All equipment and workmanship will be guaranteed for a period of 36 months, whichever occurs first from date of acceptance/handover.

Electrical Connections – Electrical connections to the AMF panel forms part of this contract, and will be conducted by the appointed contractor. Wiring must be designed and installed as demanded by SANS 10142 wiring of premises.

Training – Training shall be given to two staff members at station, who shall be operating the equipment. Confirmation must be provided as proof to the Project Manager: Electrical Engineering SCM.

Dimensions – All dimensions/conditions are to be verified on site prior to ordering of fabricating any materials or equipment.

15. MATERIAL AND WORKMANSHIP

The work throughout shall be executed to the highest standards and to the entire satisfaction of the Representative/Agent who shall interpret the meaning of the Contract Document and shall have the authority to reject any work and materials, which, in his judgment, are not in full accordance therewith. All condemned material and workmanship shall be replaced or rectified as directed and approved by the SAPS, Facility Management: Pretoria. All work shall be executed in a first-class manner by qualified tradesman. The Contractor shall warrant that the materials and workmanship shall be of the highest grade, that the equipment shall be installed in a practical and first-class manner in accordance with the best practices and ready and complete for full operation. It is specifically intended that all material or labour which is usually provided as part of such equipment as is called for and which is necessary for its proper completion and operation shall be provided without additional cost whether or not shown or described in the Contract Document. The Contractor shall thoroughly acquaint himself with the work involved and shall verify on site all measurements necessary for proper installation work. The Contractor shall also be prepared to promptly furnish any information relating to his own work as may be necessary for the proper installation work and shall co-operate with and co-ordinate the work of others as may be applicable. All components and their respective adjustments, which do not form part of the equipment installation work, but influence the optimum and safe operation of the equipment shall be considered to form part of, and shall be included in the Contractor's scope of works. All control equipment and serviceable items shall be installed and positioned such that they will be accessible and maintainable. The Contractor shall make sure that all safety regulations and measures are applied and enforced during the installation and guarantee periods to ensure the safety of the

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public and the User Client. The Contractor is to include for all scaffolding and "tools of trade" required for completing the scope of work.

Safety – The Contractor shall comply with the requirements of the Health & Safety Specification referenced above. The contractor shall refer to the site information, and the specifications describing the scope of the Engineering Works, for information about the type of environment in which the work is to be executed. Notwithstanding anything stated in this document the contractor shall be responsible for determining the safety requirements of the site. The premises in which the generating plant is situated will be occupied by staff during the contract period. Working areas shall therefore be demarcated by means of suitable signs and warning tape which shall be removed on completion of work. Work in building interiors with gas torches or welding machines for joining pipe-work shall be executed with care and temporary protection for any adjacent timber, ceiling, tile roof or other flammable material shall be employed. A dry powder fire extinguisher shall be provided by the contractor in the immediate vicinity of any work involving flame or electric arc. The contractor will further supply and install one (1) x 9 kg, dry chemical powder fire extinguisher in the generator plant-room. A comprehensive H&S Plan shall be prepared and submitted for approval. A copy shall be available in the contractor's vehicle when attending any site to perform maintenance work. Asbestos risk analysis & safe work procedures shall be included if applicable.

16. STANDARD SPECIFICATION AND REGULATIONS

The entire installation shall be carried out to the satisfaction of the SAPS, Facility Management, and shall be carried out in accordance with the following Standard Specifications and Regulations.

- The Technical Specification for Diesel Driven Generator Sets, (which is included in this document).
- SANS 10131: 2004. Petroleum products, above ground storage and tanks.
- SANS 62-1: 2003. Steel pipes Part 1: Pipes suitable for treading and of nominal size not exceeding 150mm.
- All electrical work is to be carried out in accordance with SANS code of Practice for Wiring Premises, SANS 10142, and the SANS Code of Practice for Identification Color Marking, SANS 10140.
- All low voltage switchgear and control gear assemblies are to comply with SANS 60947.
- Electrical Installation Ducting and Trunking Systems on walls and ceiling to conform to SANS 61084 Part 1 to 2.
- Electrical Installation Conduit Fittings to conform to SANS 61035 Part 1 to 2.4.
- Electrical Earth Leakage Protection units to conform to SANS 767 Part 1 to 2.
- Occupational Health and Safety Act No. 85 of 1993 as amended.
- The municipal by-laws and any specific requirements of the Local Supply Authority of the area or district concerned.

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- Local Fire Regulations.
- All building works shall be in accordance with the Standard Preambles to All Trades.
- The contractor should fully familiarize himself/herself with these documents prior to quoting.

THE BIDDER MUST CHECK THE SPECIFICATION FOR ANY MISSING DUPLICATED OR INDISTINCT PAGES AS NO CLAIMS WILL BE ENTERTAINED AFTERWARDS DUE TO LACK OF KNOWLEDGE OF THE CONTENTS OF THIS SPECIFICATION

17. SCHEDULE OF EQUIPMENT

The Schedule of equipment offered shall be fully completed by the Bidder.

ENGINE

	KVA RATING 50KVA	KVA RATING 100KVA
MAKE		
MODEL		
GOVERNOR		
TANK CAPACITY(L)		

ALTERNATOR

	KVA RATING 50KVA	KVA RATING 100KVA
MAKE		
MODEL		

ENCLOSURE

	KVA RATING 50KVA	KVA RATING 100KVA
MANUFACTURER		
MODEL		

CONTROL PANEL

	KVA RATING 50KVA	KVA RATING 100KVA
PANEL		
MANUFACTURER		

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MODEL		
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18. TECHNICAL SPECIFICATIONS

General – This technical specification is for diesel driven standby generators with automatic mains failure controls.

The Diesel Engine – This includes for all requirements of the engine, mountings, coupling, etc. up to the generator.

The Generator/Alternator – This covers the requirements of the electrical generating plant complete with automatic voltage regulation, etc.

Control Panel – This item covers the entire protection, changeover, timing sequence, etc. for both engine and generator.

Outdoor canopy specification: –

General:

The enclosure must be completely vermin-proof, removable from the generator set and must be constructed of 3CR12 stainless steel of a minimum thickness of about 1.5mm, when within 80 kilometers from the coast line, alternatively mild steel.

The enclosure must allow easy access to the engine, alternator, radiator filler cap and control cubicle for maintenance purposes.

The door will be flush with the rest of the canopy and of the side opening type. A minimum of four doors are required that is to on either side.

The door hinges and locking bars will be of a heavy duty type and manufactured on an alloy or mild steel which is hot dip galvanized and will be fitted with a grease nipple.

Suitable door restraints must be fitted to all the doors, enclosure including the control panel to prevent wind damage. The restraint will consist of a steel rod in a steel groove or slide with a spring loaded catch, which is to be manually regenerator set to close the door.

No flexible restraints will be accepted.

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The diesel fuel level indicator and alternator rating plate must be visible with the doors open.

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Unless specified, the silencers will be mounted on the roof of the enclosure.

Perforated sheeting will be fitted over all the insulating material inside the canopy of all soundproof generator sets

Rubber seals on the door will be equal to or similar to rubber pinch weld, wind lace (Max – Norton).

Design:

The enclosure must be designed to be weather-proof (IP65) and sound-proofing as specified. Rivets or self-tapping screw must be under no circumstances be allowed for fixing the various sections of the enclosure. Only cadmium coated nuts and bolts are acceptable.

The roof of the enclosure must be constructed for proper drainage of water.

Lamp fitting:

A lamp fitting and it's associated on/off door switch will be inside the enclosure for illumination of the control panel.

Sound proofing:

The sound proofing on canopy engine generator sets will be such that the maximum noise level generated by the generator set under any load condition will not exceed 75 db measured in any direction at a distance of 7meters from the center of the generator set with the doors closed.

The supply and discharge air paths will require separate attenuators on soundproof generator sets.

Padlock and keys:

Padlock and keys will be supplied for all the doors of the enclosure. The padlock will be of the A82 keyed or close to that with stainless steel shackles type.

Suitable brass metal plates will be installed behind each lock for the protection of the enclosure against scratching or damaging, where the locks are hanging.

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Concrete plinth – The plinth shall be constructed by the contractor. The generator set shall be mounted on a concrete plinth. Plinth shall be cast on site. The top of the plinth shall protrude at least 200mm above the final surrounding, from ground level. The concrete plinth shall protrude approximately 100mm beyond the edges of the generator set to form an apron. The concrete

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apron and plinth shall be wood float finished and shall slope from the base to permit rain water runoff. Cable ducts shall be provided in the plinth to accommodate all the incoming and outgoing cables. The cable ducts shall be sealed to prevent entry of rodents. The earth mat will be installed at a minimum depth of 1200 mm below the plinth with earth spikes (or in accordance with ground impedance).

Palisade fencing – To be performed by contractor. Generator set to be enclosed with palisade fencing and matching gate. All palisade fencing, gates and components shall be galvanized to SANS 301-12:2004 standards. All poles and horizontal bearers shall be manufactured from 2mm cold rolled steel formed material. All pales shall be fixed with anti-vandal bolts and fastened with shear off nuts. Complete installation shall be of a minimum height of 1800mm. Posts shall be fitted within concrete foundations of 500x500x500mm. The swing gate will be manufactured to match the palisade accordingly. The palisade fence shall surround the generator and it shall be 1.5m apart from the generator. A non-compliance Palisade Fence shall be replaced by galvanised Palisade Fence as per specification.

19. MECHANICAL PRIME MOVER – DIESEL ENGINE

Engine Specifications:

Design:	In-line, naturally aspirated (4 of 6 cylinders)
Starting Voltage:	12 volt, negative ground
Fuel System:	Direct Injection
Fuel Filter:	Spin-on fuel filters with water separator
Air Cleaner Type:	Dry replaceable element
Lube Oil Filter Type:	Spin on full flow filter
Standard Cooling System:	50°C ambient radiator with coolant Recovery System

General – The engine may be turbo-charged or naturally aspirated.

Speed and Number of Strokes – The engine must be of the four strike solid injection, compression ignition type, with running speed, for reciprocating engines up to 750kW, not exceeding 1500rpm.

Fuel Classification – The engine shall be rated for diesel fuel as normally available in the applicable area and in compliance with S.A.B.S. 342 – 1969 or B.S. 2869 – 1970, Class A1, (as amended) for diesel fuel with a minimum octane rating of 40 and net calorific value of 10000 kcal/kg, (39600kJ/kg).

Rating of Plant – The rating of the engine shall take cognizance of the site conditions, site altitude and include all auxiliary equipment such as radiator and fan, oil pump, water pump, air filters,

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governor, battery charger (generator) etc. The engine output must be re-rated in accordance with BS 5514 for the site conditions stated in the particular specification.

Overload Facility – The set shall be capable of delivering 10% overload for (1) hour in any 12-hour period of continuous running. The engine must be supplied complete with an automatic controlled rated at 40% of full load capacity of the Generator set.

Engine Appearance – The engine shall be of neat appearance and all water, lubricating and diesel oil lines, filters and stopcocks shall be of top quality and completely leak free.

Time Limits – The starting period from “switch on” until the take-over of the full load shall not exceed 10 seconds.

Service Connections – All service connections to the engine shall be flexible to prevent vibration being transmitted between plant and building, and to prevent damage to these lines and connections.

Support Framework – The engine and generator shall be mounted on one common steel-supporting frame manufactured of channel iron or other equivalent steelwork to provide a rigid and solid foundation. The main frame shall be of “skid” base type. If no “skid” base is provided, suitable for free standing, holding down bolts and vibration eliminators to the generator set manufacturer’s specification must be provided. This sub-frame shall be supported from a main frame by anti-vibration mountings. Duplex anti-vibration mounts shall be used. The inner frame and its supports shall be of sufficient height above floor level to permit installation of a drip tray and for drainage of engine oil. The drip tray must be sloped and made of mild steel. It must be fixed in the frame beneath the engine and alternator and a drip pipe fitted with a plug must be extended from the lowest point of the drip tray to beyond the frame in an easily accessible position. The outer casing of the alternator, the engine, the sub-frame and main base frame shall be bonded together electrically and connected to the earth via a connection to the earth bar in the control panel and from there to an earth mat.

Heat Protection – All engine piping, whether flexible or rigid, shall either be of the heat resistant type or adequately protected against damage by radiant heat. This also applies to any wiring attached to the engine.

Crankcase Vent Pipe – The crankcase vent pipe shall be taken to the drip tray to collect oil condensate.

Bearings – Engine bearings for the crankshaft and connection rods, big and small ends shall be of the bush type, split sleeve type, or roller type. The bearing types and metals shall be suitable for operating in the worst site conditions.

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Lubrication – The lubrication shall be by means of the force fed pressure system supplying circulating oil to all bearings, gear trains and important moving parts. A gear driven oil pump shall be incorporated with an oil-cooler if necessary. The oil cooler shall have a thermostatically controlled oil bypass valve to control the oil inlet temperature by proportionate by passing 250 Hour running time, full flow oil filters with automatic bypass and replaceable elements shall be fitted. An isolating valve shall be fitted in the oil line from the makeup tank to the sump in order to facilitate sump draining without the loss of new oil from the makeup tank.

Cooling – Air ducts shall be provided to positively exhaust hot air and to prevent re-circulation. Integral engine mounted fans are required to ensure airflow across the various components in the order listed above. Discharge ducting must be taken straight up through the roof of the plant room and must be made with strategically placed flange joints, etc. to enable the removal of the set without having to remove the ducting. Quick action type lock nuts or screws to enable quick and easy dismantling of ductwork are required. Self-tapping screws are unacceptable. The ducting must be fixed to the roof structure and must be flashed to render the exit point waterproof and must be fitted with an expanded metal bird screen at the discharge end(s).

Speed Control – Speed governing shall be by a solid state, asynchronous electronic speed governor conforming to Class 0 of BS 5514 (latest amendments). The SAPS reserves the right to inspect the locally available stock of spares prior to granting approval for the use of any particular type of speed regulator. The speed regulation (droop) of the governor shall be adjustable between 0% and 15%, and the steady state speed band 0, 25% asynchronous control. The operating voltage for the governor shall be the nominal voltage of the starting battery (normally 24 volts). Speed variation of the set between no load and full load may not exceed 4%. Engines must be fitted with flywheels correctly sized to eliminate visible flicker of lights fed by the generator set. Cyclic irregularity must be as stipulated in BS 5514 (last amendments).

Air System – The air system shall consist of two items, via the incoming combustion air and the exhaust air.

Combustion Air – Combustion air filtration shall be by means of dry type, cartridge, high efficiency air filters fitted and sized for 500 hour operation and supplied complete with a service indicator. Oil bath air filters may be fitted and used in existing plant only.

Exhaust Gas – Exhaust gas shall be piped, the piping being fitted with expansion joints and silencer and discharged to atmosphere. The expansion joints shall be of the stainless steel, concertina type, flexible, flanged and bolted to the exhaust manifold or turbo-charger outlet as applicable. Stainless steel bolts and nuts of the appropriate size must be used. Care must be exercised that exhaust pipe and silencer supports at the expansion joints are so positioned that no strain is placed on the manifold joint, turbo-charger, piping or silencer. The silencer shall be of

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