

Item No		Quantity	Rate	Amount
	<u>SECTION 10</u>			
	<u>SOLAR INSTALLATION</u>			
	<u>BILL 1</u>			
	<u>BESS</u>			
	NOTE : For all TRADE NAMES and the use of alternative items, refer to Section 3: Specific Preliminaries item C3			
	<i>(CPAP Work Group No. 160 unless otherwise stated)</i>			
	This Bill of Quantities have been drawn up in accordance with the provisions of the Model Bill of Quantities for Electrical Work, published by the Association of South African Quantity Surveyors (July 1994).			
	<u>SINGLE COMPACT UNIT BATTERY</u>			
	<u>Lithium Iron Phosphate (LifeP04) with intergrated Solar BMS 250 Kwh</u>			
A	Supply	No	1	
B	Install	No	1	
	<u>DC CABLES</u>			
	<u>DC Cable Red (Welding Cable)</u>			
C	Supply	m	20	
D	Install	m	20	
	<u>DC Cable Black (Welding Cable)</u>			
E	Supply	m	20	
F	Install	m	20	
	Carried to Collection			R
	Section No. 10 Bill No. 1 BESS			<div style="font-size: 2em; font-weight: bold;">441</div> <div style="font-size: 1.5em;">MI</div> <div style="font-size: 1.5em; margin-top: 10px;">July</div> <div style="font-size: 1.5em;">R.</div>

DC CONNECTORS / TERMINATIONS

A	Supply	No	1
B	Install	No	1

BATTERY DISCONNECT SWITCHES

C	Supply	No	1
D	Install	No	1

MONITORING & METERING EQUIPMENT (ESS)

E	Supply	No	1
F	Install	No	1

MISCELLANEOUS HARDWARE & ACCESSORIES

G	Supply	No	1
H	Install	No	1

Carried to Collection

Section No. 10
Bill No. 1
BESS

R

442

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Section No. 10

Bill No. 1

BESS

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Amount

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Section No. 10

Bill No. 1

BESS

R

443

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Item No		Quantity	Rate	Amount
<u>SECTION 10</u>				
<u>ELECTRICAL WORKS</u>				
<u>BILL 2</u>				
<u>INVERTER AND POWER CONVERSION</u>				
NOTE : For all TRADE NAMES and the use of alternative items, refer to Section 3: Specific Preliminaries item C3				
<i>(CPAP Work Group No. 160 unless otherwise stated)</i>				
This Bill of Quantities have been drawn up in accordance with the provisions of the Model Bill of Quantities for Electrical Work, published by the Association of South African Quantity Surveyors (July 1994).				
<u>HYBRID INVERTER WITH SOLAR CHARGE CONTROLLER</u>				
<u>60KW</u>				
A	Supply	No	1	
B	Install	No	1	
<u>DC DISCONNECT SWITCHES</u>				
C	Supply	No	1	
D	Install	No	1	
<u>AC DISCONNECT SWITCHES</u>				
E	Supply	No	1	
F	Install	No	1	
Carried to Collection				R
Section No. 10 Bill No. 2 Inverter & Power Conversion				<div style="font-size: 2em; font-weight: bold;">444</div> <div style="font-size: 1.5em;">M</div> <div style="font-size: 1.5em;">Jm 21</div> <div style="font-size: 1.5em;">R.</div>

**MISCELLANEOUS HARDWARE &
ACCESSORIES**

A Supply

No

1

B Install

No

1

Carried to Collection

Section No. 10
Bill No. 2
Inverter & Power Conversion

R

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M

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R.

Section No. 10

Bill No. 2

Inverter & Power Conversion

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Bill No. 2

Inverter & Power Conversion

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R.

Item No		Quantity	Rate	Amount
	<u>SECTION 10</u>			
	<u>ELECTRICAL WORKS</u>			
	<u>BILL 3</u>			
	<u>LV RETICULATION</u>			
	NOTE : For all TRADE NAMES and the use of alternative items, refer to Section 3: Specific Preliminaries item C3			
	<i>(CPAP Work Group No. 160 unless otherwise stated)</i>			
	This Bill of Quantities have been drawn up in accordance with the provisions of the Model Bill of Quantities for Electrical Work, published by the Association of South African Quantity Surveyors (July 1994).			
	<u>DB</u>			
A	Supply	No	1	
B	Install	No	1	
	<u>AC CABLES</u>			
	<u>16mm² 4 Core Cu Cable PVC/PVC/SW A/PVC 600/1000V</u>			
C	Supply	m	20	
D	Install	m	20	
	<u>150mm² 4 Core Al Cable PVC/PVC/SW A/PVC 600/1000V</u>			
E	Supply	m	50	
F	Install	m	50	
	<u>AC CABLE TERMINATIONS</u>			
	Carried to Collection			R
	Section No. 10 Bill No. 3 LV Reticulation			447 M Jm/R. R.

**16mm² 4 Core Cu Cable PVC/PVC/SW A/PVC
600/1000V**

A	Supply	m	4
B	Install	m	4

**150mm² 4 Core Al Cable PVC/PVC/SW A/PVC
600/1000V**

C	Supply	m	2
D	Install	m	2

**EARTH CABLES - BLACK PVC INSULATED CU
CABLE**

16mm² Insulated Earth Cable (Black)

E	Supply	m	20
F	Install	m	20

25mm² Insulated Earth Cable (Black)

G	Supply	m	50
H	Install	m	50

EARTH CABLE TERMINATIONS

16mm² Insulated Earth Cable (Black)

J	Supply	m	4
K	Install	m	4

25mm² Insulated Earth Cable (Black)

L	Supply	m	2
M	Install	m	2

SLEEVE

Carried to Collection

Section No. 10
Bill No. 3
LV Reticulation

R

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R.

50mm²

A	Supply	m	23
B	Install	m	23

LABELLING

C	Supply	No	1
D	Install	No	1

MISCELLANEOUS HARDWARE & ACCESSORIES

E	Supply	No	1
F	Install	No	1

Carried to Collection

Section No. 10
Bill No. 3
LV Reticulation

R

449

M

July

R.

Section No. 10

Bill No. 3

LV Reticulation

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Section No. 10

Bill No. 3

LV Reticulation

R

M 450

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R.

Item No	<u>SECTION 10</u>	Quantity	Rate	Amount
	<u>ELECTRICAL WORKS</u>			
	<u>BILL 4</u>			
	<u>GRID INTEGRATION</u>			
	NOTE : For all TRADE NAMES and the use of alternative items, refer to Section 3: Specific Preliminaries item C3			
	<i>(CPAP Work Group No. 160 unless otherwise stated)</i>			
	This Bill of Quantities have been drawn up in accordance with the provisions of the Model Bill of Quantities for Electrical Work, published by the Association of South African Quantity Surveyors (July 1994).			
	<u>TIE IN MOTORISED CIRCUIT BREAKERS</u>			
	<u>60A 3P 400V 10kA</u>			
A	Supply	No	1	
B	Install	No	1	
	<u>150A 3P 400V 20kA</u>			
C	Supply	No	1	
D	Install	No	1	
	<u>LOAD CIRCUIT BREAKERS</u>			
	<u>60A 3P 400V 10kA</u>			
E	Supply	No	1	
F	Install	No	1	
	Carried to Collection			R
	Section No. 10 Bill No. 4 Grid Integration			M 451 July R.

<u>150A 3P 400V 20kA</u>		
A	Supply	No 1
B	Install	No 1
<u>AC COMBINERS/ ISOLATION DB'S COMPLETE - ROOF</u>		
C	Supply	No 1
D	Install	No 1
<u>GRID SYNCHRONIZATION DEVICES</u>		
E	Supply	No 1
F	Install	No 1
<u>POWER QUALITY CONDITIONING EQUIPMENT</u>		
G	Supply	No 1
H	Install	No 1
<u>MISCELLANEOUS HARDWARE & ACCESSORIES</u>		
J	Supply	No 1
K	Install	No 1

Carried to Collection

Section No. 10
 Bill No. 4
 Grid Integration

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Section No. 10

Bill No. 4

Grid Integration

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Bill No. 4

Grid Integration

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M 453

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R.

Item No		Quantity	Rate	Amount
	<u>SECTION 10</u>			
	<u>ELECTRICAL WORKS</u>			
	<u>BILL 5</u>			
	<u>PROTECTION AND SAFETY</u>			
	NOTE : For all TRADE NAMES and the use of alternative items, refer to Section 3: Specific Preliminaries item C3			
	<i>(CPAP Work Group No. 160 unless otherwise stated)</i>			
	This Bill of Quantities have been drawn up in accordance with the provisions of the Model Bill of Quantities for Electrical Work, published by the Association of South African Quantity Surveyors (July 1994).			
	<u>OVER & UNDER PROTECTION DEVICES</u>			
A	Supply	No	3	
B	Install	No	3	
	<u>AC SURGE PROTECTION DEVICES - TYPE 1</u>			
C	Supply	No	3	
D	Install	No	3	
	<u>GROUND FAULT DETECTION EQUIPMENT</u>			
E	Supply	No	1	
F	Install	No	1	
	<u>GROUND FAULT DETECTION EQUIPMENT</u>			
G	Supply	No	1	
H	Install	No	1	
	Carried to Collection			
	Section No. 10 Bill No. 5 Protection & Safety			R

M 454
 R.

ANTI- ISLANDING PROTECTION DEVICES

A	Supply	No	1
B	Install	No	1

FIREMAN'S SWITCH

C	Supply	No	3
D	Install	No	3

LIGHTING PROTECTION & EARTHING

Bonding & Earthing of pv panels, mounting structures, cable trunking and equipment

E	Supply	No	1
F	Install	No	1

LIGHTING PROTECTION & EARTHING

G	Supply	No	1
H	Install	No	1

MISCELLANEOUS HARDWARE & ACCESSORIES

J	Supply	No	1
K	Install	No	1

Carried to Collection

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Protection & Safety

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Section No. 10

Bill No. 5

Protection & Safety

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Protection & Safety

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Item No		Quantity	Rate	Amount
	<u>SECTION 10</u>			
	<u>ELECTRICAL WORKS</u>			
	<u>BILL 6</u>			
	<u>ENERGY MANAGEMENT AND CONTROL</u>			
	NOTE : For all TRADE NAMES and the use of alternative items, refer to Section 3: Specific Preliminaries item C3			
	<i>(CPAP Work Group No. 160 unless otherwise stated)</i>			
	This Bill of Quantities have been drawn up in accordance with the provisions of the Model Bill of Quantities for Electrical Work, published by the Association of South African Quantity Surveyors (July 1994).			
	<u>GENERATOR INTEGRATION</u>			
	<u>For 70kVA Generator</u>			
A	Supply	No	1	
B	Install	No	1	
	<u>MONITORING, MEASUREMENT & CONTROL SOFTWARE/HARDWARE</u>			
	<u>(Including Web Interface)</u>			
C	Supply	No	1	
D	Install	No	1	
	<u>PROTECTION RELAYS</u>			
E	Supply	No	1	
F	Install	No	1	
	Carried to Collection			
	Section No. 10 Bill No. 6 Energy Management & Control			R

R
 457
 R.

**ELECTRONIC METERS FOR GRID,
GENERATOR, PV AND BATTERY POWER
MONITORING C/W CT'S & COMMS CABLES**

Grid Meters c/w 1000/5A CT's

A	Supply	m	2
B	Install	m	2

Generator meters c/w 300/5A CT's

C	Supply	m	2
D	Install	m	2

PV Inverter meters c/w 100/5A CT's

E	Supply	m	2
F	Install	m	2

Battery Inverter meters c/w 100/5A CT's

G	Supply	m	1
H	Install	m	1

**MISCELLANEOUS HARDWARE &
ACCESSORIES**

J	Supply	No	1
K	Install	No	1

Carried to Collection

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Energy Management & Control

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Energy Management & Control

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Energy Management & Control

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M 459

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Item No	Unit	Quantity	Rate	Amount	
<u>SECTION 11</u>					
<u>BILL NO. 1</u>					
<u>PROJECT ASSESSMENT SCHEME (PROVISIONAL)</u>					
<u>SUPPLEMENTARY PREAMBLE</u>					
Tenderer is advised to carefully price this section of the bills of quantities in conjunction with C1.2: Contract Data, C2.1: Pricing Assumptions and C3: Scope of Work incorporated in the tender documents for this tender					
The profit and attendance priced herein under is inclusive of associated costs to the contractor for implementation. The profit and attendance % is to remain unchanged for the duration of contract - refer to C2.1 Pricing Assumptions					
<u>TARGETED ENTERPRISE DEVELOPMENT CPG</u>					
<u>Enterprise Development of Targeted Enterprise or JV Partners</u>					
A	Needs Analysis and Enterprise Development Plan per Targeted Enterprise	No	3	5 000.00	15 000.00
B	Monitoring and Interim reporting per Targeted Enterprise (Enterprise Development Co-ordinator and mentor)	PerQ	8	60 000.00	480 000.00
C	Project Completion report per Targeted Enterprise	No	3	5 000.00	15 000.00
SUB-TOTAL				R	510 000.00
Carried to Collection				R	510 000.00
Section No. 11 Bill No. 1 Project Assessment Scheme (Provisional)					

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A	Profit	%
B	Attendance	%
<u>CONTRACT SKILLS DEVELOPMENT GOALS - CSDG</u>		
The following allowance will be subject to adjustment based on the notional cost (see Table 3) as per Government Gazette No. 48491 of 28 April 2023 as amended in line with the training opportunity agreed with the employer .		
C	Minimum Contract Skills Development Goal (CSDG) (0.5% x "Sub total A" on the Final Summary)	%
D	Profit	%
E	Attendance	%

Carried to Collection

Section No. 11
Bill No. 1
Project Assessment Scheme (Provisional)

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Section No. 11

Bill No. 1

Project Assessment Scheme (Provisional)

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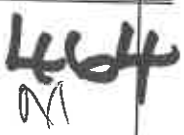
Bill No. 1

Project Assessment Scheme (Provisional)

R

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Item No	Quantity	Rate	Amount
<u>SECTION 12</u>			
<u>BILL 1</u>			
<u>PROVISIONAL SUMS</u>			
NOTE : For all TRADE NAMES and the use of alternative items, refer to Section 3: Specific Preliminaries item C3			
<u>PREAMBLES</u>			
For preambles refer to "Model Preambles for Trades"			
<u>SUPPLEMENTARY PREAMBLES</u>			
<u>General</u>			
Work for which budgetary allowances are provided will be measured and valued in accordance with clause 32 of the Principal Building Agreement and deducted in whole or in part if not required without any compensation for loss or profit on the said allowances			
Prime cost amounts and provisional sums are net. Prime cost amounts include for delivery to site of all articles concerned			
Provisional sums are for material and equipment supplied and installed complete by firms of specialists			
<u>Profit</u>			
Where stated, the contractor may allow for profit if required			
<u>Builder's work</u>			
Builder's work in connection with specialist services is given elsewhere in these bills of quantities			
<u>WORK BY CONTRACTOR</u>			
<u>SPECIALIST WORK</u>			
Carried to Collection			
Section No. 12 Bill No. 1 Provisional Sums		R	

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ATTENDANCE

General attendance on Nominated Sub-contractors' work shall be deemed to include the following:

1. Access to the site and places where the sub-contract work is to be carried out, including the reasonable use of any temporary personnel hoists erected by the contractor;
2. The provision of water and lighting and of single phase electric power to a position within 50 metres of the place where sub-contract work is to be carried out but excluding water, fuel and power for commissioning of the installation for which the sub-contractor shall be responsible;
3. The provision of an area for the sub-contractor to establish office accommodation, temporary workshops and for the storage of plant and material;
4. The use of erected scaffolding belonging to the contractor, in common with others having the like right, whilst it so remains erected upon the site;
5. The use of messrooms, latrine, health and welfare facilities and the like, where provided.
6. The use of site telephone and facsimile machine, where provided, subject to the payment by the sub-contractor for all his outgoing calls.

RELOCATION OF GRAVE

- A Allow the sum of R 500 000-00 (Five Hundred Thousand Rand) for the relocation of the grave
- B Add for profit
- C Allow for attendance

Item	500 000.00
Item	
Item	

Carried to Collection

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Section No. 12
 Bill No. 1
 Provisional Sums

SUNDRIES

BUDGETARY ALLOWANCES under this heading are for work to be executed by the Contractor and are to be used at the discretion of the Architect and deducted in whole or in part if not required. The work shall be measured and valued in accordance with the "Conditions of Contract".

.....

..

CONTRACT PRICE ADJUSTMENT PROVISIONS

A Allow the amount of R5 300 000.00 (Five Million Three Hundred Thousand Rand) for fluctuations in cost in terms of Contract Price Adjustment Provisions (CPAP)

Item

5 300 000.00

Carried to Collection

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Section No. 12
Bill No. 1
Provisional Sums

Hbb
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Jmkj
R.

Section No. 12

Bill No. 1

Provisional Sums

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	Add VAT @ 15%		R
	Carried to Form of Offer and Acceptance		R
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AT 468
July
R.

*CONSTRUCTION OF KHUBVI NEW POLICE STATION:LIMPOPO
PROVINCE*

BID: 19/1/9/1/42TB(24)

PART C:

CONTRACT

Part C3

Scope of Work

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C3: SCOPE OF WORKS

JBCC Series 2000

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