

SANS MATJIESFONTEIN ELECTRICAL INSTALLATION - INFRASTRUCTURE INSTALLATION PART C1.2.3 BILL OF QUANTITIES						
ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL	
1.0	<b>BILL NO. 1</b>					
	<b>PRELIMINARIES AND GENERAL</b>					
	<b>CONDITIONS OF CONTRACT</b>					
	Provisional and General items in order to comply with the Conditions of Contract associated with the works contained in this document.					
1.1	Test, Commission and prepare As-Built drawings	Item	1	R	-	
1.2	Laminated drawings for all Plant rooms and Network rooms	Item	1	R	-	
1.3	Insurances	Item	1	R	-	
1.4	Mobilisation	Item	1	R	-	
1.5	Project Management	Item	1	R	-	
1.6	Site Tools and Instrumentation	Item	1	R	-	
1.7	Maintenance and Guarantee for 12 months after practical completion	Item	1	R	-	
1.8	Site Establishment	Item	1	R	-	
1.9	Site Running Costs	Item	1	R	-	
1.10	Demobilisation	Item	1	R	-	
1.11	Vehicles	Item	1	R	-	
1.12	Allowance to fix price for the duration of the contract	Sum	1	R	-	
	<i>The rates in the remainder of the Bill of Quantities (BOQ) must exclude these costs, as they are to be priced under this item.</i>					
1.13	Remote Location Overhead Costs	Sum	1	R	-	
	<i>Provide a lump sum cost for all additional expenses associated with working at the remote project site, located approximately 230 km from Cape Town and 5 km south of Matjiesfontein. This includes transportation of materials and personnel, accommodation, site establishment, and any other costs related to the remote nature of the location. The rates in the remainder of the Bill of Quantities (BOQ) must exclude these costs, as they are to be priced under this item.</i>					
1.14	<b>OTHER ITEMS</b>					
	<b>Any other items tenderers may wish to add of a preliminary and general nature not specifically mentioned above in order to comply with the specification and contract conditions. Please add below:</b>					
1.14.1	All underground cables to be added to As Build Drawings with surveyed GPS coordinates included on the drawings. GPS coordinate to be included at 10m intervals along the entire cable trench(s).	Sum	1	R	-	
1.14.2		Item	1	R	-	
1.14.3		Item	1	R	-	
	<b>TOTAL - BILL NO 1 CARRIED TO FINAL SUMMARY PAGE</b>			<b>R</b>	<b>-</b>	

## SANS MATJIESFONTEIN

## ELECTRICAL INSTALLATION - INFRASTRUCTURE INSTALLATION

## PART C1.2.3

## BILL OF QUANTITIES

ITEM	DESCRIPTION		UNIT	QTY	RATE	TOTAL
2.0	<b>BILL NO. 2</b>					
	<b>LOW VOLTAGE INSTALLATION</b>					
	<b>LOW VOLTAGE DISTRIBUTION BOARDS</b>					
	Supply and installation of low voltage electrical distribution boards					
2.1.1	Antenna Kiosk <i>IP43 Polycarbonate Kiosk with wooden backboard, front and back padlock lockable doors. Mains Isolator, Busbars, DIN rail and MCB's for general circuits. 1 x 350A 20kA TP Isolator for antenna supply cable termination</i>	Supply	m	2	R	-
		Install	m	2	R	-
2.1.2		Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.1.3		Supply	m	0		Rate Only
		Install	m	0		Rate Only
	<b>BULK LV CABLING AND BUSBAR</b>					
2.2	600/1000V PVC/PVC/SWA/PVC/Cu cable in shaft, sleeve, trench, on cable rack or on surface, including strapping or clamping, supports etc. Terminations and connections of 600/1000V PVC/PVC/SWA/PVC/Cu cable including drilling, bolting, lugs, number tags, core markers, gland, shroud, etc					
2.2.1	1,5mm <sup>2</sup> 4C SWA Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.2.2	2,5mm <sup>2</sup> 4C SWA Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.2.3	4mm <sup>2</sup> 4C SWA Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.2.4	6mm <sup>2</sup> 4C SWA Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.2.5	10mm <sup>2</sup> 4C SWA Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.2.6	16mm <sup>2</sup> 4C SWA Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.2.7	25mm <sup>2</sup> 4C SWA Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.2.8	35mm <sup>2</sup> 4C SWA Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.2.9	50mm <sup>2</sup> 4C SWA Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.2.10	70mm <sup>2</sup> 4C SWA Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.2.11	95mm <sup>2</sup> 4C SWA Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.2.12	120mm <sup>2</sup> 4C SWA Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.2.13	150mm <sup>2</sup> 4C SWA Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.2.14	185mm <sup>2</sup> 4C SWA Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.2.15	240mm <sup>2</sup> 4C SWA Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.2.16	2,5mm <sup>2</sup> 12C Multicore Copper Cable	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.3	600/1000V PVC/PVC/SWA/PVC/Alu cable in shaft, sleeve, trench, on cable rack or on surface, including strapping or clamping, supports etc. Terminations and connections of 600/1000V PVC/PVC/SWA/PVC/Alu cable including drilling, bolting, lugs, number tags, core markers, gland, shroud, etc					
2.3.1	25mm <sup>2</sup> 4C SWA Alu	Supply	m	160	R	-
		Install	m	160	R	-
2.3.2	35mm <sup>2</sup> 4C SWA Alu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.3.3	50mm <sup>2</sup> 4C SWA Alu	Supply	m	95	R	-
		Install	m	95	R	-
2.3.4	70mm <sup>2</sup> 4C SWA Alu	Supply	m	0		Rate Only
		Install	m	0		Rate Only

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## PART C1.2.3

## BILL OF QUANTITIES

ITEM	DESCRIPTION		UNIT	QTY	RATE	TOTAL
2.3.5	95mm <sup>2</sup> 4C SWA Alu	Supply	m	190	R	-
		Install	m	190	R	-
2.3.6	120mm <sup>2</sup> 4C SWA Alu	Supply	m	510	R	-
		Install	m	510	R	-
2.3.7	150mm <sup>2</sup> 4C SWA Alu	Supply	m	870	R	-
		Install	m	870	R	-
2.3.8	185mm <sup>2</sup> 4C SWA Alu	Supply	m	320	R	-
		Install	m	320	R	-
2.3.9	240mm <sup>2</sup> 4C SWA Alu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.4	<b>Cable terminations</b>					
	Terminate and connect 600/1000V PVC/PVC/SWA/PVC/Cu cable including drilling, bolting, lugs, number tags, core markers, gland, shroud, etc					
2.4.1	1,5mm <sup>2</sup> 4C SWA Cu	Supply	each	0		Rate Only
		Install	each	0		Rate Only
2.4.2	2,5mm <sup>2</sup> 4C SWA Cu	Supply	each	0		Rate Only
		Install	each	0		Rate Only
2.4.3	4mm <sup>2</sup> 4C SWA Cu	Supply	each	0		Rate Only
		Install	each	0		Rate Only
2.4.4	6mm <sup>2</sup> 4C SWA Cu	Supply	each	0		Rate Only
		Install	each	0		Rate Only
2.4.5	10mm <sup>2</sup> 4C SWA Cu	Supply	each	0		Rate Only
		Install	each	0		Rate Only
2.4.6	16mm <sup>2</sup> 4C SWA Cu	Supply	each	0		Rate Only
		Install	each	0		Rate Only
2.4.7	25mm <sup>2</sup> 4C SWA Cu	Supply	each	0		Rate Only
		Install	each	0		Rate Only
2.4.8	35mm <sup>2</sup> 4C SWA Cu	Supply	each	0		Rate Only
		Install	each	0		Rate Only
2.4.9	50mm <sup>2</sup> 4C SWA Cu	Supply	each	0		Rate Only
		Install	each	0		Rate Only
2.4.10	70mm <sup>2</sup> 4C SWA Cu	Supply	each	0		Rate Only
		Install	each	0		Rate Only
2.4.11	95mm <sup>2</sup> 4C SWA Cu	Supply	each	10	R	-
		Install	each	10	R	-
2.4.12	120mm <sup>2</sup> 4C SWA Cu	Supply	each	8	R	-
		Install	each	8	R	-
2.4.13	150mm <sup>2</sup> 4C SWA Cu	Supply	each	0		Rate Only
		Install	each	0		Rate Only
2.4.14	185mm <sup>2</sup> 4C SWA Cu	Supply	each	0		Rate Only
		Install	each	0		Rate Only
2.4.15	240mm <sup>2</sup> 4C SWA Cu	Supply	each	0		Rate Only
		Install	each	0		Rate Only
2.4.16	2,5mm <sup>2</sup> 12C Multicore Copper Cable	Supply	each	0		Rate Only
		Install	each	0		Rate Only
2.5	<b>Cable terminations</b>					
	Terminate and connect 600/1000V PVC/PVC/SWA/PVC/ALU cable including drilling, bolting, lugs, number tags, core markers, gland, shroud, etc					
2.5.1	25mm <sup>2</sup> 4C SWA Alu	Supply	m	4	R	-
		Install	m	4	R	-
2.5.2	35mm <sup>2</sup> 4C SWA Alu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.5.3	50mm <sup>2</sup> 4C SWA Alu	Supply	m	2	R	-
		Install	m	2	R	-
2.5.4	70mm <sup>2</sup> 4C SWA Alu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.5.5	95mm <sup>2</sup> 4C SWA Alu	Supply	m	2	R	-
		Install	m	2	R	-

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ITEM	DESCRIPTION		UNIT	QTY	RATE	TOTAL
2.5.6	120mm <sup>2</sup> 4C SWA Alu	Supply	m	12	R	-
		Install	m	12	R	-
2.5.7	150mm <sup>2</sup> 4C SWA Alu	Supply	m	14	R	-
		Install	m	14	R	-
2.5.8	185mm <sup>2</sup> 4C SWA Alu	Supply	m	16	R	-
		Install	m	16	R	-
2.5.9	240mm <sup>2</sup> 4C SWA Alu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.6	<b>Earth conductors</b>					
	<b>Copper earth conductor in trench or sleeve, on racking, steelwork or strapped to cable.</b>					
2.6.1	1,5mm <sup>2</sup> 1C BLACK Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.6.2	2,5mm <sup>2</sup> 1C BLACK Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.6.4	4mm <sup>2</sup> 1C BLACK Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.6.5	6mm <sup>2</sup> 1C BLACK Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.6.6	10mm <sup>2</sup> 1C BLACK Cu	Supply	m	160	R	-
		Install	m	160	R	-
2.6.7	16mm <sup>2</sup> 1C BLACK Cu	Supply	m	95	R	-
		Install	m	95	R	-
2.6.8	25mm <sup>2</sup> 1C BLACK Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.6.9	35mm <sup>2</sup> 1C BLACK Cu	Supply	m	190	R	-
		Install	m	190	R	-
2.6.10	50mm <sup>2</sup> 1C BLACK Cu	Supply	m	350	R	-
		Install	m	350	R	-
2.6.11	70mm <sup>2</sup> 1C BLACK Cu	Supply	m	2 540	R	-
		Install	m	2 540	R	-
2.6.12	95mm <sup>2</sup> 1C BLACK Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.6.13	120mm <sup>2</sup> 1C BLACK Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only
2.6.14	150mm <sup>2</sup> 1C BLACK Cu	Supply	m	80	R	-
		Install	m	80	R	-
2.6.15	185mm <sup>2</sup> 1C BLACK Cu	Supply	m	430	R	-
		Install	m	430	R	-
2.6.16	240mm <sup>2</sup> 1C BLACK Cu	Supply	m	0		Rate Only
		Install	m	0		Rate Only

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## PART C1.2.3

## BILL OF QUANTITIES

ITEM	DESCRIPTION		UNIT	QTY	RATE	TOTAL
2.7	<b>Earth conductors Terminations</b>					
	Terminate and connect earth conductor including lug, bolt, nut, etc.					
2.7.1	1,5mm <sup>2</sup> 1C BLACK Cu	Supply	each	0		Rate Only
		Install	each	0		Rate Only
2.7.2	2,5mm <sup>2</sup> 1C BLACK Cu	Supply	each	0		Rate Only
		Install	each	0		Rate Only
2.7.4	4mm <sup>2</sup> 1C BLACK Cu	Supply	each	0		Rate Only
		Install	each	0		Rate Only
2.7.5	6mm <sup>2</sup> 1C BLACK Cu	Supply	each	0		Rate Only
		Install	each	0		Rate Only
2.7.6	10mm <sup>2</sup> 1C BLACK Cu	Supply	each	4	R	-
		Install	each	4	R	-
2.7.7	16mm <sup>2</sup> 1C BLACK Cu	Supply	each	2	R	-
		Install	each	2	R	-
2.7.8	25mm <sup>2</sup> 1C BLACK Cu	Supply	each	0		Rate Only
		Install	each	0		Rate Only
2.7.9	35mm <sup>2</sup> 1C BLACK Cu	Supply	each	2	R	-
		Install	each	2	R	-
2.7.10	50mm <sup>2</sup> 1C BLACK Cu	Supply	each	0		Rate Only
		Install	each	0		Rate Only
2.7.11	70mm <sup>2</sup> 1C BLACK Cu	Supply	each	20	R	-
		Install	each	20	R	-
2.7.12	95mm <sup>2</sup> 1C BLACK Cu	Supply	each	6	R	-
		Install	each	6	R	-
2.7.13	120mm <sup>2</sup> 1C BLACK Cu	Supply	each	10	R	-
		Install	each	10	R	-
2.7.14	150mm <sup>2</sup> 1C BLACK Cu	Supply	each	6	R	-
		Install	each	6	R	-
2.7.15	185mm <sup>2</sup> 1C BLACK Cu	Supply	each	6	R	-
		Install	each	6	R	-
2.7.16	240mm <sup>2</sup> 1C BLACK Cu	Supply	each	0		Rate Only
		Install	each	0		Rate Only

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## ELECTRICAL INSTALLATION - INFRASTRUCTURE INSTALLATION

## PART C1.2.3

## BILL OF QUANTITIES

ITEM	DESCRIPTION		UNIT	QTY	RATE	TOTAL
2.8	<b>Aluminium Busbar</b>					
	<i>3C+N+E, 400V, Encapsulated Cast Resin. Busbar to be painted RED. Rates to include all joints, hangers suspension rods, installation, testing and signoff</i>					
	<b>MLV-A to Transformer A</b>					
2.8.1	3200A Busbar - Straight	Supply	m	10	R	-
		Install	m	10	R	-
2.8.2	3200A Busbar - Joint	Supply	m	4	R	-
		Install	m	4	R	-
2.8.3	3200A Busbar - 90° Bend	Supply	each	4	R	-
		Install	each	4	R	-
2.8.4	3200A Busbar - Panel Entry	Supply	each	1	R	-
		Install	each	1	R	-
2.8.5	3200A Busbar - Transformer Entry	Supply	each	1	R	-
		Install	each	1	R	-
2.8.6	3200A Busbar - Support Structure and Trapeze Brackets	Supply	each	1	R	-
		Install	each	1	R	-
2.8.7	3200A Busbar - Installation, Commissioning and related P&G		Sum	1	R	-
	<b>MLV-B to Transformer B</b>					
2.8.8	3200A Busbar - Straight	Supply	each	14	R	-
		Install	each	14	R	-
2.8.9	3200A Busbar - Joint	Supply	m	6	R	-
		Install	m	6	R	-
2.8.10	3200A Busbar - 90° Bend	Supply	each	4	R	-
		Install	each	4	R	-
2.8.11	3200A Busbar - Panel Entry	Supply	each	1	R	-
		Install	each	1	R	-
2.8.12	3200A Busbar - Transformer Entry	Supply	each	1	R	-
		Install	each	1	R	-
2.8.13	3200A Busbar - Support Structure and Trapeze Brackets	Supply	each	1	R	-
		Install	each	1	R	-
2.8.14	3200A Busbar - Installation, Commissioning and related P&G		Sum	1	R	-
	<b>Generator Sync Panel A to MLV-A</b>					
2.8.15	3200A Busbar - Straight	Supply	each	3	R	-
		Install	each	3	R	-
2.8.16	3200A Busbar - Joint	Supply	m	2	R	-
		Install	m	2	R	-
2.8.17	3200A Busbar - 90° Bend	Supply	each	2	R	-
		Install	each	2	R	-
2.8.18	3200A Busbar - Panel Entry	Supply	each	2	R	-
		Install	each	2	R	-
2.8.19	3200A Busbar - Transformer Entry	Supply	each	0		Rate Only
		Install	each	0		Rate Only
2.8.20	3200A Busbar - Support Structure and Trapeze Brackets	Supply	each	1	R	-
		Install	each	1	R	-
2.8.21	3200A Busbar - Installation, Commissioning and related P&G		Sum	1	R	-

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## PART C1.2.3

## BILL OF QUANTITIES

ITEM	DESCRIPTION		UNIT	QTY	RATE	TOTAL
	<b>Generator Sync Panel B to MLV-B</b>					
2.8.15	3200A Busbar - Straight	Supply	each	3	R	-
		Install	each	3	R	-
2.8.16	3200A Busbar - Joint	Supply	m	2	R	-
		Install	m	2	R	-
2.8.17	3200A Busbar - 90° Bend	Supply	each	2	R	-
		Install	each	2	R	-
2.8.18	3200A Busbar - Panel Entry	Supply	each	2	R	-
		Install	each	2	R	-
2.8.19	3200A Busbar - Transformer Entry	Supply	each	0		Rate Only
		Install	each	0		Rate Only
2.8.20	3200A Busbar - Support Structure and Trapeze Brackets	Supply	each	1	R	-
		Install	each	1	R	-
2.8.21	3200A Busbar - Installation, Commissioning and related P&G		Sum	1	R	-
	<b>TOTAL - BILL NO 2 CARRIED TO FINAL SUMMARY PAGE</b>				<b>R</b>	<b>-</b>

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ITEM	DESCRIPTION		UNIT	QTY	RATE	TOTAL
3.0	<b>BILL NO. 3</b> <b>MEDIUM VOLTAGE INSTALLATION</b>					
3.1	<b>TRANSFORMER AND CABLING</b>					
	11kV XLPE cable complete including labelling, core markers, etc. Termination and connection of 11kV XLPE cable complete with approved termination kit, including labelling, core markers, etc. Earth conductor in trench or sleeve on racking, steelwork or strapped to cable					
3.1.1	2000kVA 400:11kV Step-up Transformer including T154 Controller	Supply	No	2	R	-
	Enclosure	Supply	No	2	R	-
	Drytype transformer including enclosure. No IP rating required. Protection to be wired out to terminals for interfacing with RMU and MLV	Install	No	2	R	-
3.1.2	11kV Ring Main Unit as per Specification	Supply	No	2	R	-
	SF6 or Vacuum RMU installed in substation with Plinth for cable entry from below. Inclusive of self powered Protection Relay. 20kA (3s) Short Circuit Withstand. 2 x 630A Isolators + 1 x 200A Circuit Breakers	Install	No	2	R	-
3.1.3	BTU (battery Tripping Unit) for transformer protection	Supply	No	1	R	-
	3A 230V:30Vdc. Include all cabling between BTU and RMU's	Install	No	1	R	-
3.1.4	70mm <sup>2</sup> x 3 core XLPE Copper - TX-A to RMU-A and TX-B to RMU-B	Supply	m	20	R	-
	Installed from Transformer to RMU on floor mounted cable ladder with top hat	Install	m	20	R	-
3.1.5	70mm <sup>2</sup> x 3 core XLPE Copper	Supply	m	1 700	R	-
	Installed in ground as per detail drawing for underground cables	Install	m	1 700	R	-
3.1.6	Termination of 70mm <sup>2</sup> , 3core XLPE Copper	Supply	No	18	R	-
		Install	No	18	R	-
3.1.7	70mm <sup>2</sup> Copper earth conductor	Supply	m	1 550	R	-
		Install	m	1 550	R	-
3.1.8	Earth Termination of 70mm <sup>2</sup> earth conductor	Supply	m	18	R	-
		Install	m	18	R	-
3.1.9	Concrete Cable Markers	Supply	Each	110	R	-
		Install	Each	110	R	-
3.1.9	Minisub 1 - 200kVA	Supply	m	1	R	-
	Minisub with RMU, Transformer, LV circuit breakers, Pre-Cast Plinth	Install	m	1	R	-
	SF6 or Vacuum RMU - 2 x Isolators 1 x Circuit Breaker					
	Transformer - 200kVA, 11kV:400V					
	LV Circuit Breaker 1 - 160A, 3P, 10kA					
	LV Circuit Breaker 2 - 63A, 3P, 10kA					
	LV Circuit Breaker 3 - 63A, 3P, 10kA					
	LV Circuit Breaker 4 - 20A, 1P, 10kA (Street Lighting)					
3.1.10	Minisub 2 - 630kVA	Supply	m	1	R	-
	Minisub with RMU, Transformer, LV circuit breakers, Pre-Cast Plinth	Install	m	1	R	-
	SF6 or Vacuum RMU - 2 x Isolators 2 x Circuit Breaker					
	Transformer - 400kVA, 11kV:400V					
	LV Circuit Breaker 1 - 500A, 3P, 30kA					
	LV Circuit Breaker 2 - 20A, 1P, 10kA (Street Lighting)(Cascade)					
3.1.11	Minisub 3 - 630kVA	Supply	m	1	R	-
	Minisub with RMU, Transformer, LV circuit breakers, Pre-Cast Plinth	Install	m	1	R	-
	SF6 or Vacuum RMU - 2 x Isolators 2 x Circuit Breaker					
	Transformer - 630kVA, 11kV:400V					
	LV Circuit Breaker 1 - 160A, 3P, 30kA					
	LV Circuit Breaker 2 - 500A, 3P, 30kA					
	LV Circuit Breaker 3 - 20A, 1P, 10kA (Street Lighting) (Cascade)					
3.1.12	Minisub 4 - 400kVA	Supply	m	1	R	-
	Minisub with RMU, Transformer, LV circuit breakers, Pre-Cast Plinth	Install	m	1	R	-
	SF6 or Vacuum RMU - 2 x Isolators 1 x Circuit Breaker					
	Transformer - 630kVA, 11kV:400V					
	LV Circuit Breaker 1 - 400A, 3P, 15kA					
	LV Circuit Breaker 2 - 350A, 3P, 15kA with Schneider PM3250 Meter					
	LV Circuit Breaker 3 - 63A, 3P, 15kA					
	LV Circuit Breaker 4 - 20A, 1P, 15kA (Street Lighting)					
3.1.13	Minisub 5 - 400kVA	Supply	m	1	R	-
	SF6 or Vacuum RMU - 2 x Isolators 1 x Circuit Breaker	Install	m	1	R	-
	RMU - 2 x Isolators 1 x Circuit Breaker					
	Transformer - 400kVA, 11kV:400V					
	LV Circuit Breaker 1 - 350A, 3P, 15kA with Schneider PM3250 Meter					
	LV Circuit Breaker 2 - 20A, 1P, 15kA (Street Lighting)					

## SANSA MATJIESFONTEIN

## ELECTRICAL INSTALLATION - INFRASTRUCTURE INSTALLATION

## PART C1.2.3

## BILL OF QUANTITIES

ITEM	DESCRIPTION		UNIT	QTY	RATE	TOTAL
3.2	<b>MV ACCESSORIES AND MISCELLANEOUS EQUIPMENT</b>					
3.2.1	All notices as required by the law on occupational and safety	Item	Sum	1	R	-
3.2.2	9kg Dry powder fire extinguisher to complete with SANS 1152	Supply	No	0		Rate Only
		Install	No	0		Rate Only
3.2.3	First aid kit complete including mounting brackets, etc.	Supply	No	0		Rate Only
		Install	No	0		Rate Only
3.2.4	Nameplates for all Energy Centre Rooms as well as Consumer's Substations as per specification	Supply	No	1	R	-
		Install	No	1	R	-
	<b>TOTAL - BILL NO 3 CARRIED TO FINAL SUMMARY PAGE</b>				R	-

SANSA MATJIESFONTEIN

ELECTRICAL INSTALLATION - INFRASTRUCTURE INSTALLATION

PART C1.2.3

BILL OF QUANTITIES

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL
	<b>FINAL SUMMARY PAGE</b>				
	<b>BILL NO. 1</b>				
	PRELIMINARIES AND GENERAL			R	-
	<b>BILL NO. 2</b>				
	LOW VOLTAGE INSTALLATION			R	-
	<b>BILL NO. 3</b>				
	MEDIUM VOLTAGE INSTALLATION			R	-
	Any other items tenderers may wish to add of a Technical nature not specifically mentioned above in order to comply with the specification and contract conditions. Please add below:				
	<b>TOTAL CARRIED TO BILL NO. 16 ELECTRICAL INSTALLATION - INFRASTRUCTURE INSTALLATION PART C1.2.3</b>			R	-