

CONTRACT: UBU-B-07/01/20
CONTRACT TITLE: Bethal Electrification

Section	INDEX	PAGE
BILL 01	Bethal Electrification	11
1	PRELIMINARY AND GENERAL	11
2	MV AND LV RETICULATION	13
3	MV AND LV ANCHORS	14
4	MV TRANSFORMERS	16
5	MV OVERHEAD SYSTEM	19
6	OVERHEAD SUPPORTS	110
7	LV INFRASTRUCTURE	112
8	HOUSE CONNECTIONS	115

CONTRACT: UBU-B-07/01/20
CONTRACT TITLE: Bethal Electrification
BILL: 01 Bethal Electrification
SECTION: 1 PRELIMINARY AND GENERAL

BILL OF QUANTITIES

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
1.1		FIXED CHARGE ITEMS				
1.1.1		Site Office complete as per works information	Sum	1		
1.2		Stores	Sum	1		
1.3		Water, Sanitation and Electricity	Sum	1		
1.4		Communication	Sum	1		
1.5		Construction Name Board	Sum	1		
1.6		Staff Accommodation	Sum	1		
1.7		Provide for insurance as specified.	Sum	1		
1.8		As-built Drawings				
1.9		Allow for the marking up of prints for the production of as-built records by the engineer	Sum	1		
		Fences	Sum			
1.10		All fencing dismantled or damaged during construction/installation will be re-instated to Engineers approval	Sum	1		
1.11		Removal of site establishment on completion of the Contract	Sum	1		
1.12		TIME RELATED ITEMS				
1.12.1		Outages				
1.13		Contractors must allow for outages being done of weekends.				
1.14		Provide detailed breakdown of outage scope complete with time allocations to be handed to the Project Co-ordinator at the outage planning meeting prior to the outage - [minimum of 48 hours]	No	1		
		Programme and Planning				
1.15		Contractors must allow for the preparation of a detailed programme reflecting the outage dates.	Mnths	1		
		Site Establishment				
1.16		Office complete as per works information	Mnths	2		
1.17		Staff Accommodation	Mnths	2		
1.18		Stores	Mnths	2		
1.19		Water, Sanitation and Electricity	Mnths	2		
1.20		Communication	Mnths	2		
CARRIED FORWARD						

CONTRACT: UBU-B-07/01/20
CONTRACT TITLE: Bethal Electrification
BILL: 01 Bethal Electrification
SECTION: 1 PRELIMINARY AND GENERAL

BILL OF QUANTITIES

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
		BROUGHT FORWARD				
1.21		Supervision	Mnths	2		
1.22		Site Security as per works information	Mnths	2		
1.23		Plant and Equipment	Mnths	2		
1.24		Cost for Health and Safety measures	Mnths	2		
1.25		Other time related charges (specify hereunder):	Mnths	2		
1.26		Social Facilitation	PC Sum	1	70 000.00	70 000.00
1.27		CLO	Mnths	2		
		Survey	PC Sum	1	6 000.00	6 000.00
1.28		Detail Marketing (PCS File)	PC Sum	50	75.00	3 750.00
1.29		Allowance for Engineer site representative	PC Sum	1	65 000.00	65 000.00
TOTAL FOR SECTION 1 CARRIED FORWARD TO SUMMARY						

CONTRACT: UBU-B-07/01/20
CONTRACT TITLE: Bethal Electrification
BILL: 01 Bethal Electrification
SECTION: 2 MV AND LV RETICULATION

BILL OF QUANTITIES

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
2.1		EXCAVATION				
		(Please Note that prices of excavations are for all types of ground condition and no extra rate will be paid for Rock Conditions)				
2.1.1		Determination of pole positions, excavate in all ground conditions as necessary, and supply a mechanical boring device if required. The rate shall include backfilling, compaction to 93% MOD AASHTO density, and where necessary the supply and transportation of suitable ground as may be required to receive the desired compaction, except where cement is specified. Any damage to existing services shall be made good by the Contractor at his own expense and to the approval or the PM(C). 40% more in all MV holes sizes is rock and their blasting is allowed separately.				
2.1.2	0332	5m Pole hole (1.2m x 0.62m x 1.4m deep)	No.	50		
2.1.3		7m Pole hole (1.2m x 0.62m x 1.5m deep)	No.	70		
2.1.4		9m Pole hole (1.2m x 0.62m x 1.5m deep)	No.	9		
2.1.5		10m Pole hole (1.2m x 0.62m x 1.6m deep)	No.	7		
2.1.6		11m Pole hole (1.2m x 0.62m x 1.8m deep)	No.	56		
2.1.7		12m Pole hole (1.2m x 0.62m x 1.8m deep)	No.	0		
2.1.8		13m Pole hole (1.2m x 0.62m x 1.8m deep)	No.	0		
2.1.9		LV Stay hole (1.2m x 0.62m x 1.3m deep)	No.	45		
2.1.10		MV Stay hole (1.2m x 0.62m x 1.6m deep)	No.	75		
2.1.11		MV Strut hole (1.2m x 0.62m x 1.8m deep)	No.	11		
2.1.12		LV Strut hole (1.2m x 0.62m x 1.3m deep)	No.	5		
2.1.13		MV Flying Stay hole (1.2m x 0.62m x 1.8m deep)	No.	0		
2.1.14		LV Flying Stay hole (1.2m x 0.62m x 1.3m deep)	No.	0		
2.1.15		Earth trench (0.45m x 0.5m deep)	m	30		
2.2		BUSH CLEARING				
		Allow for clearing of bush from the route of 6m wide. Eskom's environmental policies must be complied with. Poisoning of trees must be done by an Eskom approved specialist contractor.				
2.2.1		Bush Clearing Scattered	PC Sum	1	15 000.00	15 000.00
2.2.2		Bush Clearing Thick	PC Sum	1	15 000.00	15 000.00
TOTAL FOR SECTION 2 CARRIED FORWARD TO SUMMARY						

CONTRACT: UBU-B-07/01/20
CONTRACT TITLE: Bethal Electrification
BILL: 01 Bethal Electrification
SECTION: 3 MV AND LV ANCHORS

BILL OF QUANTITIES

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
		The unit price for a standard stay and an aerial stay shall exclude the wooden poles, but include the stay wire, stay rods, insulators, stay plate, stay guards, bitumastic paint, guy grip dead end, earthing of stay, line splice, precast concrete slabs, pole clamp, nuts bolts and washers etc. LV stay including base plate, stay rod, stay wire, guy grips, stay insulator, bracket, etc.				
3.1		Supply	No.	45		
3.2		Install	No.	45		
3.3		Dismantle	No	0		
		MV stay including pole, base plate, stay rod, stay wire, guy grips, stay insulator, bracket, etc.				
3.4		Supply	No	75		
3.5		Install	No	75		
3.6		Dismantle	No	0		
		The following struts shall be in accordance with the specifications and shall not include poles & excavation.				
	0342	MV Strut				
3.7		Supply	No	11		
3.8		Install	No	11		
	0342	LV Strut				
3.9		Supply	No	5		
3.10		Install	No	5		
		The following struts shall be in accordance with the specifications and shall not include poles & excavation.				
	0343	MV Flying Stay				
3.11		Supply	No	0		
3.12		Install	No	0		
	1168	LV Flying Stay				
3.13		Supply	No	0		
3.14		Install	No	0		
CARRIED FORWARD						

CONTRACT: UBU-B-07/01/20
CONTRACT TITLE: Bethal Electrification
BILL: 01 Bethal Electrification
SECTION: 3 MV AND LV ANCHORS

BILL OF QUANTITIES

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
		BROUGHT FORWARD				
		Supply and install pole in excavated hole, including cutting and scafing, kicking blocks, bonding, treating, etc. Excavations and compaction are measured elsewhere.				
3.15	DDT0058	5m Poles (180mm dia. top) Supply	No	50		
3.16		Install (Excavation measured elsewhere)	No	50		
3.17	DDT0050	7m Poles (120-140mm dia. top) Supply	No.	70		
3.18		Install (Excavation measured elsewhere)	No.	70		
3.19	DDT0055	9m Poles (160-180mm dia. top) Supply	No.	5		
3.20		Install (Excavation measured elsewhere)	No.	5		
3.21	DDT0051	10m Poles (160-180mm dia. top) Supply	No.	7		
3.22		Install (Excavation measured elsewhere)	No.	7		
3.23	DDT0051	11m Poles (160-180mm dia. top) Supply	No.	23		
3.24		Install (Excavation measured elsewhere)	No.	23		
3.25	DDT0051	11m Poles (180-200mm dia. top) Supply	No.	33		
3.26		Install (Excavation measured elsewhere)	No.	33		
3.27	DDT0058	11m Poles (200-220mm dia. top) Supply	No.	0		
3.28		Install (Excavation measured elsewhere)	No.	0		
3.29	DDT0058	12m Poles (180-200mm dia. top) Supply	No.	0		
3.30		Install (Excavation measured elsewhere)	No.	0		
3.31	DDT0058	13m Poles (180-200mm dia. top) Supply	No.	0		
3.32		Install (Excavation measured elsewhere)	No.	0		
TOTAL FOR SECTION 3 CARRIED FORWARD TO SUMMARY						

CONTRACT: UBU-B-07/01/20
CONTRACT TITLE: Bethal Electrification
BILL: 01 Bethal Electrification
SECTION: 4 MV TRANSFORMERS

BILL OF QUANTITIES

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
4.1	3021	Pole mounted Dual phase 16kVA 11000V Transformer including all connections				
		Supply	No.	2		
4.2		Install	No.	2		
4.3		Dismantle	No.	0		
4.4	3021	Pole mounted Dual phase 32kVA 11000V Transformer including all connections				
		Supply	No.	0		
4.5		Install	No.	0		
4.6		Dismantle	No.	-		Rate Only
4.7	3021	Pole mounted Dual phase 16kVA 22000V Transformer including all connections				
		Supply	No.	4		
4.8		Install	No.	4		
4.9		Dismantle	No.	0		
4.10	3021	Pole mounted Dual phase 32kVA 22000V Transformer including all connections				
		Supply	No.	1		
4.11		Install	No.	1		
4.12		Dismantle	No.	-		Rate Only
		Supply and Install on appropriate structure and secure as required including the termination of cables and conductors, the provision of suitable lugs for 35, 50 or 70mm conductor as required. Excluding cable, conductors, and the transformer structure.				
4.13	DDT1866B	Transformer structure - Out of line, complete to D-DT-1866 (11/12m pole measured elsewhere)				
		Supply	No.	7		
4.14		Install	No.	7		
4.15	DDT1860	Transformer structure complete to D-DT-1860 (11/12m pole measured elsewhere)				
		Supply	No.	0		
4.16		Install	No.	0		
4.17		MV Sectionaliser and Links				
CARRIED FORWARD						

CONTRACT: UBU-B-07/01/20
CONTRACT TITLE: Bethal Electrification
BILL: 01 Bethal Electrification
SECTION: 4 MV TRANSFORMERS

BILL OF QUANTITIES

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
		BROUGHT FORWARD				
		Supply and install link isolators as detailed including the installation of crossarm brackets and the termination of conductors and including the drilling of holes in wooden poles as required				
4.17.1	DDT1848	Section Links solid 15k, Single Pole (2.5m X-arm) (Dual/Three phase)				
		Supply	No	10		
4.17.2		Install	No	10		
	DDT1848	SectionFuse Links 15k, Single Pole (2.5m X-arm) (Dual/Three phase)				
4.18		Supply	No.	7		
4.19		Install	No.	7		
4.20		MV Surge Arrestor				
	DDT3100	Supply, deliver, off load on site and safely store on site the following surge arrestors, complete with galvanised steel mounting brackets for securing the surge arrestor, nuts, bolts, washers and lock washers as specified. Secure the surge arrestors and brackets to the transformer as specified including the termination of conductors. Excluding the conductors and transformer.				
4.20.1	DDT0261	11kV, 10kA Surge arrestor				
		Supply	No.	4		
4.21		Install	No.	4		
	DDT0261	22kV, 10kA Surge arrestor				
4.22		Supply	No.	10		
4.23		Install	No.	10		
4.24		Neutral Surge Arrestor				
	DDT0270	Supply and install a LV Neutral surge arrestor including lugs and galvanised bolts				
4.24.1		Supply	No.	7		
4.25		Install	No.	7		
4.26		Transformer Earthing				
CARRIED FORWARD						

CONTRACT: UBU-B-07/01/20
CONTRACT TITLE: Bethal Electrification
BILL: 01 Bethal Electrification
SECTION: 4 MV TRANSFORMERS

BILL OF QUANTITIES

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
		BROUGHT FORWARD				
	DDT0627	Supply and install all materials for the complete earthing of transformers and bulk meter structures for ABC networks as specified. Included in the rate shall be all required spikes, insulated copper conductor, galvanised conduits, staples, bare copper, excavations, backfilling, etc. The rate shall allow for one MV earth electrode only, consisting of four earth spikes in accordance with the specifications. Additional earth spikes/conductor shall be measured elsewhere if required.				
4.26.1		MV Earth Transformers (Incl Aux trfr)				
4.27		Supply	No.	7		
4.28		Install	No.	7		
TOTAL FOR SECTION 4 CARRIED FORWARD TO SUMMARY						

CONTRACT: UBU-B-07/01/20
CONTRACT TITLE: Bethal Electrification
BILL: 01 Bethal Electrification
SECTION: 5 MV OVERHEAD SYSTEM

BILL OF QUANTITIES

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
5.1		MV CONDUCTOR Fox (ACSR) conductor for MV circuits including all associated materials complete (Actual Conductor Length)				
5.1.1		Supply	m	9000		
5.1.2		Install , String and Tension	m	9000		
5.1.3		Dismantle	m	0		
5.2		MV CONDUCTOR MOUNTING HARDWARE Allow for the following structures and insulator assemblies in accordance with the specifications as shown in the drawings. Include the specified crossarms, drilling of holes and treating of such holes, the provision of the U-nails and earthwire in accordance with Eskom specifications. The supply and installation of 15m of 3/3.35x1100MPa steel wire for a BIL for each pole structure as per Eskom specification. Supply and install all material as specified for the construction of the following MV structures. Including bonding of hardware and earthing. All excavations, poles, crossarms and stays are measured elsewhere				
	DDT1340B	MV angle strain (0-30 deg) complete as per specification drawing no. (D-DT-1740B)				
5.2.1		Supply	No.	21		
5.2.2		Install	No.	21		
	DDT1343	MV structure complete as per specification drawing no. (D-DT-1743)				
5.2.3		Supply	No.	10		
5.2.4		Install	No.	10		
	DDT1344	MV large angle strain (30-60 deg) complete as per specification drawing no. (D-DT-1744)				
5.2.5		Supply	No.	15		
5.2.6		Install	No.	15		
	DDT1346	MV sructure complete as per specification drawing no. (D-DT-1746)				
5.2.7		Supply	No.	6		
5.2.8		Install	No.	6		
TOTAL FOR SECTION 5 CARRIED FORWARD TO SUMMARY						

CONTRACT: UBU-B-07/01/20
CONTRACT TITLE: Bethal Electrification
BILL: 01 Bethal Electrification
SECTION: 6 OVERHEAD SUPPORTS

BILL OF QUANTITIES

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
6.1		Cross Arms				
6.1.1		2.5m X-arm wooden				
6.2		Supply	No.	68		
6.3		Install	No.	68		
6.4		6.5m X-Arm				
6.5		Supply	No	7		
6.6		Install	No	7		
	DDT1804	MV T-off structure complete as per specification drawing (Three Phase) no. (D-DT-1804)				
6.7		Supply	No.	15		
6.8		Install	No.	15		
	DDT1814	MV T-off structure complete as per specification drawing (Dual Phase) no. (D-DT-1814)				
6.9		Supply	No.	10		
6.10		Install	No.	10		
	PG	Pistol Grips				
6.11		Supply	No.	60		
6.12		Install	No.	60		
	VD	Vibration Dampers				
6.13		Supply	No.	8		
6.14		Install	No.	8		
6.15		POLE LABELS Supply and install labels on all poles in accordance with the specifications including the provision of all fixing materials 5m LV Pole labels				
6.15.1		Install Equipment label as per specification including 6mm coach screws and washers. (Trfs)	No	50		
6.16		Install Anti-climbing device	No.	15		
6.17		Supply	No.	15		
CARRIED FORWARD						

CONTRACT: UBU-B-07/01/20
CONTRACT TITLE: Bethal Electrification
BILL: 01 Bethal Electrification
SECTION: 6 OVERHEAD SUPPORTS

BILL OF QUANTITIES

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
		BROUGHT FORWARD				
6.18		Install Danger signs	No.	15		
6.19		Install Equipment labels (links)		15		
6.20		Install Transformer max fuse labels	No	12		
6.21		Install	No	6		
TOTAL FOR SECTION 6 CARRIED FORWARD TO SUMMARY						

CONTRACT: UBU-B-07/01/20
CONTRACT TITLE: Bethal Electrification
BILL: 01 Bethal Electrification
SECTION: 7 LV INFRASTRUCTURE

BILL OF QUANTITIES

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
7.1		LV CONDUCTOR The LV insulated aerial bundle conductor system shall be in accordance with SABS 1418 and insulated in accordance with SABS 0198 and the Distribution Standard Part 3. The unit rate per meter shall include the tensioning and stringing of the bundle in accordance with the sag and stress tables provided by the manufacturer with all plant, equipment and accessories required to erect an LV overhead bundled distribution line i.e. Drum trailer, winch, wind-off pulleys, pulling rope/cable with connection, dynamometer, slide-lock, sheathed synthetic-fibre belt, woven snatch belt, snatch block, tackle, shackle, etc. Supply, install and connect Single phase ABC 2 core 35mm2				
7.1		Supply	No.	3000		
7.2		Install	No.	3000		
7.3		Dismantle	No	0		
		Supply, install and connect Two phase ABC 3 core 35mm2				
7.4		Supply	No.	1200		
7.5		Install	No.	1200		
7.6		Dismantle	No	0		
7.7		LOW VOLTAGE SWITCH UNITS Pole mounted LV fused disconnecting switches [One per phase] Morsdorfer complete with fuses,including mounting brackets, coach screws, etc.				
7.8		63A				
7.8.1		Supply	No.	21		
7.9		Install	No.	21		
7.10		83A				
7.10.1		Supply	No.	7		
7.11		Install	No.	7		
7.12		LV CONDUCTOR MOUNTING HARDWARE				
CARRIED FORWARD						

CONTRACT: UBU-B-07/01/20
CONTRACT TITLE: Bethal Electrification
BILL: 01 Bethal Electrification
SECTION: 7 LV INFRASTRUCTURE

BILL OF QUANTITIES

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
		BROUGHT FORWARD				
7.12.1		Allow for the supply, assembly of the following LV strain and suspension assemblies in accordance with the specifications shown in the drawings. Including all earthing, drilling of holes and treating of drilled holes. All LV ABC hardware, line connectors, PVC cable ties, nuts, bolts, washers, lock washers shall be allowed for in the appropriate item below. Excluding the supply and planting of poles, stays and struts, which are measured elsewhere.				
7.12.2		LV STRUCTURES SINGLE PHASE				
		Supply will include brackets, bolts & nuts, washers and hardware to complete the installation				
	DDT1153	ABC Suspension Assembly 0-30				
7.12.2.1		Supply	No	28		
7.12.2.2		Install	No	28		
	DDT1154	ABC Terminal Assembly				
7.12.2.3		Supply	No	30		
7.12.2.4		Install	No	30		
	DDT1155	ABC Strain Assembly (0-60°)				
7.12.2.5		Supply	No	15		
7.12.2.6		Install	No	15		
	DDT1156	ABC Strain Assembly (60-90°)				
7.12.2.7		Supply	No	2		
7.12.2.8		Install	No	2		
	DDT1157	ABC T from Intermediate				
7.12.2.9		Supply	No	2		
7.12.2.10		Install	No	2		
	DDT1159	ABC T from Strain				
7.12.2.11		Supply	No	2		
7.12.2.12		Install	No	5		
7.12.3		LV STRUCTURES DUAL PHASE				
CARRIED FORWARD						

CONTRACT: UBU-B-07/01/20
CONTRACT TITLE: Bethal Electrification
BILL: 01 Bethal Electrification
SECTION: 7 LV INFRASTRUCTURE

BILL OF QUANTITIES

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
		BROUGHT FORWARD				
		Supply will include brackets, bolts & nuts, washers and hardware to complete the installation				
7.12.3.1	DDT1145	ABC Suspension Assembly 0-30 Supply	No	12		
7.12.3.2		Install	No	12		
7.12.3.3	DDT1146	ABC Terminal Assembly Supply	No	5		
7.12.3.4		Install	No	5		
7.12.3.5	DDT1147	ABC Strain Assembly (0-60°) Supply	No	3		
7.12.3.6		Install	No	3		
7.12.3.7	DDT1148	ABC Strain Assembly (60-90°) Supply	No	2		
7.12.3.8		Install	No	2		
7.12.3.9	DDT1149	ABC T from Intermediate Supply	No	1		
7.12.3.10		Install	No	1		
7.12.3.11	DDT1151	ABC T from Strain Supply	No	0		
7.12.3.12		Install	No	0		
TOTAL FOR SECTION 7 CARRIED FORWARD TO SUMMARY						

CONTRACT: UBU-B-07/01/20
CONTRACT TITLE: Bethal Electrification
BILL: 01 Bethal Electrification
SECTION: 8 HOUSE CONNECTIONS

BILL OF QUANTITIES

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
8.1		LV POLE MOUNTED SERVICE BOXES Supply and install on a wooden and/or concrete pole a pole mounted distribution box as specified complete with pole mounting brackets, cable ties, PG clamps, miniture circuit breaker (s), neutral, phase and earth bars, insulated copper tails for connecting to LV ABC, insulation piercing connectors and factory installed cable openings. Included shall be the stainless steel strapping and buckles and terminations of the tails onto the LV ABC.				
	DDT0363	1 - 4 way pole box including PVC compression glands, live bar and neutral bar, 40A slow curve MCB, 2 meters of red and 2 meters of black 16mm UV resistant house wire including the connection and PG clamps, strapping and other relevant hardware (D-DT-0363)				
8.1.1		Supply	No.	21		
8.1.2		Install	No.	21		
		6mm ² Airdac between pole box and house				
8.1.3		Supply	m	1800		
8.1.4		Install	m	1800		
8.2		SERVICE CONNECTIONS House Connections (Type A), test and commissioning complete including IC's, supply and install house labelling, completion of PCS file, sealing of meters and as built drawings on completion. Poles and excavation are measured elsewhere.(DDT 0360)				
8.2.1		Type A	No	0		
8.2.2		House Connections (Type B), test and commissioning complete including IC's, supply and install house labelling, completion of PCS file, sealing of meters and as built drawings on completion. Poles and excavation are measured elsewhere. (DDT0361)		0		
8.2.3		Type B	No	50		
CARRIED FORWARD						

CONTRACT: UBU-B-07/01/20
CONTRACT TITLE: Bethal Electrification
BILL: 01 Bethal Electrification
SECTION: 8 HOUSE CONNECTIONS

BILL OF QUANTITIES

ITEM	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE R	AMOUNT R
		BROUGHT FORWARD				
8.3		EDU AND READYBOARD INSTALLATION				
8.3.1		SPLIT METER, DIN RAIL 20A PLC complete with CUSTOMER INTERFACE UNIT (CIU) L&G PLC.				
8.4		Supply	No.	50		
8.5		Install	No.	50		
8.6		READYBOARD, SPLIT METER 2x16A SKTS D-DT3176 SAP0229831.				
8.7		Supply	No.	50		
8.8		Install	No.	50		
8.9		TESTING & COMMISSIONING				
8.9.1		COMMISSIONING				
8.9.1.1		Complete "request for installation" forms - deliver copies to Engineer, complete with travelling cost and time. Submit Certificate of Compliance supplied with readyboard AS REQUIRED BY SABS 0142	No.	50		
8.10		TESTS				
8.10.1		Test entire transformer installation and submit test certificates for : earth resistivity, insulation resistance for LV feeders	Sum	7		
TOTAL FOR SECTION 8 CARRIED FORWARD TO SUMMARY						

CONTRACT: UBU-B-07/01/20
Bethal Electrification
BILL: 01 Bethal Electrification

BILL OF QUANTITIES

SECTION	DESCRIPTION	AMOUNT R
1	PRELIMINARY AND GENERAL	
2	MV AND LV RETICULATION	
3	MV AND LV ANCHORS	
4	MV TRANSFORMERS	
5	MV OVERHEAD SYSTEM	
6	OVERHEAD SUPPORTS	
7	LV INFRASTRUCTURE	
8	HOUSE CONNECTIONS	
	NET TOTAL OF TENDER	
	ADD CONTINGENCIES 10.00% OF NET TOTAL	
	TENDER AMOUNT	
	CONTRACT PRICE ADJUSTMENT PROVISION	
	ALLOWANCE FOR VAT AT 15.00%	
	TOTAL TENDER SUM	