

Umzimvubu LM/ Installation of 50 Solar Streetlights
Section 1 Bill of Quantities

PRELIMINARY AND GENERAL

Section	Item Description	Unit	Qty	Rate		Amount
	BILL NO 1.0					
1.0	GENERAL REQUIREMENTS AND PROVISIONS					
1.1	Name boards					
1.1.1	Supply, Install Contract name board as per drawing	No	1			
1.2	Relocating and/or Protecting of Existing services					
1.2.1	Payment for the relocation and/or protecing of existing Services	No	30.0			
1.3	Community Liaison Office (CLO)					
1.3.1	Remuneration of the CLO for the duration of the contract	Mnth	3	R	5,000.00	R 15,000.00
1.4	Project Steering Committee (PSC):					
1.4.1	Payment of expenses/disbursements to members of the PSC	Prov Sum	1.0	R	5,000.00	R 5,000.00
	Handling costs and profit in respect of 1.4.1	%	1.0		10%	R 500.00
1.5	Site Establishment					
	Provide a Site office, storage for plant - material- equipment, ablutions , drinkable water on site in accordance to contract terms	Sum	1.0			
1.6	Works Guarantee					
1.6.1	Allow for guarantee period of 12 months against defects in equipment, material & workmanship, but excluding abuse, wear and tear and normal maintenance. Cover all sureties and insurances called for in this contract.	Mnth	12.0			
1.7	Safety Regulations					
	The Electrical Contractor is to invoke adequate allowances to abide by the OHS ACT 85 of 1993.This will include the services of a competent safety officer that will ensure that all requirements pertaining to the construction regulations have been met for the duration of the contract.					
1.7.1	Make provision for staff PPE	Sum	1.0			
1.7.2	Fall arrest system / ladders / Safety Signage..etc	Sum	1.0			
1.7.3	Make Provision for a Health & Safety Officer	Mnth	2.0			
1.7.4	Health & safety plan, file & requirements as per OHS ACT 85 of 1993	Sum	1.0			
1.8	Works Completion Documentation					
1.8.1	Allow for the marking up, annotating of a set of drawings to accurately represent the constructed works. Supply As-Built drawings to the Engineer upon completion of works	Sum	1.0			
1.8.2	Submit Operation and Maintenance Manuals of the installations to the engineer	Sum	1.0			
1.9	Security Officer					
1.9.1	Provision of Security Service for Site Storage for duration of contract	Mnth	3.0	R	6,000.00	R 18,000.00
Total Carried Forward To Summary						

STREETLIGHT POLES

Section	Item Description	Unit	Qty	Rate	Amount
	BILL NO.2				
2.0	INSTALLATION OF 30 STREETLIGHT POLES Tenderer to submit manufacturers technical data sheet with reference to the proposed 9.2m streetlight pole.				
2.1	Delivery of 9.2m Streetlight Poles to Site				
	Allow for design, manufacture, supply and delivery of 50 x 9.2m streetlight poles to storage site as specified complete with spigots, luminaire carriage, etc (excluding the luminaires)				
2.1.1	Supply of 9.2m streetlight Poles for the Project	No	50		
2.1.2	Allow for Loading and Offloading of Pole Material / Site	No	50		
2.1.3	Allow for delivery of 50 streetlight poles to the installation area	No	50		
2.2	Pole Excavations				
2.2.1	Excavate 1.2m Holes for Placing the Streetlight Poles. The 9.2m Pole, must be Installed in the Hole at a Depth of 1.2m. The Diameter of the Hole must be Twice Diameter of the Pole	No	50		
2.2.2	Allow for Leveling of All Poles into an Upright 90 Deg Vertical Position	No	50		
2.2.3	Allow For Re-Pegging for Design Adjustment	Sum	1	R 20,000.00	R 20,000.00
2.3	Pole Test Certificates		1		
	Allow for Manufacturers Pole Strength Test Certificates				
2.3.1	Testing and Certificates	No	50		
2.4	Provision for Sourcing Reinforcement Material				
	Allow for Sourcing, crushed Rock , Silt and Cement e.t.c for Backfilling in Wet Areas				
2.4.1	Reinforcement Material	Sum	1	R 40,000.00	R 40,000.00
2.5	Earthing and Lightning Protection				
2.5.1	Supply and install all earthing materials per Streetlight Pole	No	50		
2.5.2	Supply and install earthing system, test and confirm compliance with 10Ω earth resistance, complete with 1 X 70mm ² (30m long) bare copper earth wire,	No	50		
2.6	Labelling of Streetlight Poles				
2.6.1	Labelling of Streetlight Poles as specified by the Engineer	No	50		
Total Carried Forward To Summary					

SOLAR STREETLIGHTS

Section	Item Description	Unit	Qty	Rate	Amount
3.0	BILL NO.3 SUPPLY AND INSTALLATION OF SOLAR STREETLIGHTS Tenderer Must Supply Solar Streetlights as Specified. The Solar LED Lights Must have a Compact Encasing that Houses the Solar Panel, Battery Storage, Charge Controller and LED to Make one Compact Solar Light Fitting				
3.1	Solar Streetlight				
3.1.1	Supply and install solar LED Lights complete with Solar panels, charge controller and energy storage. (Specify total number of lights for the entire project)	No	50		
3.1.2	Deliver solar Streetlights from manufacturer to site store	Sum	1		
3.1.3	Deliver 50 Solar Streetlights to the installation Site	No	50		
3.1.4	Test functionality of the lights in the presence of the engineer on all 50 Streetlights (Solar Light Mounting Height is 9.5m)	No	50		
3.2	Earthing System				
3.2.1	Bond all metallic surfaces of the lights to the streetlight Pole to create an equipotential zone via the earthing of the Streetlight pole	No	50		
3.3	Illumination Test Results				
3.3.1	Allow for testing and measuring of Solar light illumination against submitted photometric data and submit measurement results to engineer	No	50		
3.4	Commissioning				
3.4.1	Allow for commissioning of all lights on all new 50 x 9.2m Streetlight poles in Emaxesibeni area, supply all test certificates and certificates of compliance	No	50		
Total Carried Forward To Summary					

SUMMARY OF SECTIONS

SECTIONS	DESCRIPTIONS	AMOUNTS
BILL NO.1	GENERAL REQUIREMENTS AND PROVISIONS	
BILL NO.2	INSTALLATION OF STREETLIGHT POLES	
BILL NO.3	INSTALLATION OF SOLAR STREETLIGHTS	
	SUB-TOTAL A	
	PROVISIONAL SUM FOR CONTINGENCIES (5% OF SUB-TOTAL A)	
	SUB-TOTAL B	
	VALUE ADDED TAX (15% OF SUB-TOTAL B)	
	TOTAL CARRIED FORWARD TO FORM OF OFFER AND ACCEPTANCE	R -