

<b>DINDELA AND SPEARVILLE ROAD 1, ROAD 2 AND WALKWAY LIGHTING</b>					
<b>PRICING SCHEDULE : ELECTRICAL WORKS</b>					
<b>SECTION 1 : PRELIMINARY AND GENERAL</b>					
<b>Item</b>	<b>Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate</b>	<b>Amount R</b>
1.1	<b>GENERAL</b>				
1.1.1	Allow for complying with all clauses as per tender documentation, including all Special and General conditions of Contract and Labour requirements, and for providing all works and services for which no specific items are listed in the Bills of Quantities	Sum	1		
1.1.2	Site Establishment and for providing a site office and adequate and suitable water, sanitary and first aid services	Sum	1		
1.1.3	Site Administration and for attending all inspections and site meetings	Sum	1		
1.1.4	Any additional work which the tenderer deems necessary specific to this equipment to successfully complete this section. (Tenderer to qualify in a cover letter)	Sum	1		
1.2	<b>STORAGE AND INSURANCE</b>				
1.2.1	Provide for storage of plant, materials and equipment on site including protection thereof	Sum	1		
1.2.2	Tidying up of site and removal of redundant material	Sum	1		
1.3	<b>NOTICES AND FEES</b>				
1.3.1	Allow for co-ordination with other contractors, giving notice to the Supply Authority and paying all required fees	Sum	1		
1.4	<b>GUARANTEE</b>				
1.4.1	Allow for a guarantee for a defects liability period of 12 months against defects in equipment, material and workmanship but excluding abuse, wear and tear and normal maintenance. (5% of construction cost)	Sum	1		
1.5	<b>AS-BUILT DRAWINGS AND CATALOGUES</b>				
1.5.1	Supply five full sets of as-built drawings to show the exact positions of cables, cable joints road crossings, etc. as well as instruction manuals & spare parts catalogues to spec. These as-built drawings must be handed to the Engineer on completion of the contract	Sum	1		
1.6	<b>SURVEYING</b>				
1.6.1	Surveying and setting out of pole positions and cable routes.	Sum	1		
1.7	<b>SWITCHING COST</b>				
1.7.1	Liaising with Supply Authority for isolation and disconnections, from supply points. Connection and reconnection to Supply Authority supply points	Sum	1		
1.8	<b>TESTING AND COMMISSIONING</b>				
1.8.1	Test and commission complete installation, with three copies of test results and certificates	Sum	1		
1.9	<b>MANUFACTURER'S WORKSHOP DRAWINGS</b>				
1.9.1	Provision of manufacturer's workshop drawings and technical information including data sheets and lighting distribution drawings for approval by the Engineer before ordering	Sum	1		
1.10	<b>CERTIFICATES OF COMPLIANCE</b>				
1.10.1	Final commissioning and testing in the presence of the Electrical Engineer, and provision of Certificates of Compliance	Sum	1		
<b>TOTAL FOR SECTION 1 CARRIED FORWARD TO SUMMARY PAGE</b>					

**DINDELA AND SPEARVILLE ROAD 1, ROAD 2 AND WALKWAY LIGHTING**

**PRICING SCHEDULE : ELECTRICAL WORKS**

**SECTION 2 : RETICULATION SYSTEM**

Item	Description	Unit	Qty	Rate	Amount R
2.1	<b>RETICULATION SYSTEM</b> Supply 12 Way LV kiosk as per specifications, complete with plinth and electronic access control system as per specifications				
2.1.1	Supply	No	2		
2.1.2	Install	No	2		
2.2	<b>LOW VOLTAGE CABLES</b> 600/1000V PVC/ECC Aluminium cable laid in open trenches, drawn in sleeves as necessary. Cable terminations to include glands, shrouds, lugs, connections and commissioning per cable end NOTE: Notwithstanding the fact that the lengths of cables as given in the Bill of Quantities have been measured from scaled drawings, the contractor shall check such lengths on site before ordering the cable as he/she will not be paid for excess cable after the completion of the service. Any allowance for off-cuts shall be made in the unit rates. The final measurements shall be based on the nett route length of the cable concerned.				
2.2.1	<b>25 mm<sup>2</sup> PVC AL LV 4 Core ECC Armoured Cable</b>				
2.2.1.1	Supply	m	4000		
2.2.1.2	Install	m	4000		
2.2.1.3	Termination	No	80		
2.2.1.4	Through Joint	No			Rate Only
2.2.2	<b>70mm<sup>2</sup> PVC AL LV 4 Core ECC Armoured Cable</b>				
2.2.2.1	Supply	m	200		
2.2.2.2	Install	m	200		
2.2.2.3	Termination	No	6		
2.2.2.4	Through Joint	No			Rate Only
2.2.3	<b>120mm<sup>2</sup> PVC AL LV 4 Core ECC Armoured Cable</b>				
2.2.3.1	Supply	m	100		
2.2.3.2	Install	m	100		
2.2.3.3	Termination	No	4		
2.2.3.4	Through Joint	No			Rate Only
2.3	<b>ENCASING LV CABLE IN SOILCRETE</b> Encasing electrical cabling and other services in a 200mm X300mm trench using 20MPa soilcrete				
	Supply	m	200		
	Install	m	200		

2.4	<b>EXCAVATIONS</b> Excavations for cable and sleeve trench including temporary support of sides, keeping excavation dry, bedding material, backfilling, soilcrete and compacting as specified. Where required, the removal of excess material from site shall be included in the rates below				
2.4.1	Excavation in soft material	m	3800		
2.4.2	Excavation in intermediate material	m	300		
2.4.3	Excavation in hard rock	m	400		
2.4.4	Extra over for using backfill material obtained from sources provided by the Contractor	m <sup>3</sup>	400		
2.4.5	Bedding under and filling around cables comprising sifted sand and soilcrete	m <sup>3</sup>	4900		
2.5	<b>SLEEVE PIPES</b> Supply and install cable sleeves and associated accessories and manholes as specified				
2.5.1	150mmø Flexible uPVC underground sleeves suitable for electrical cables to be cast into concrete encasement				
2.5.1.1	Supply	m	500		
2.5.1.2	Install	m	500		
2.5.2	<b>PVC Warning Tape</b> Supply and install PVC electrical danger tape in trench above cables or sleeves				
2.5.2.1		m	4080		
2.5.3	<b>Draw Wire</b> Supply and install draw wire or 6 mm diameter nylon draw cord in sleeve & sleeve end as required				
2.5.3.1		m	2000		
2.6	<b>MANHOLES</b> Provide 600X600X600 Deep cable sleeves manhole, complete with steel covers.				
2.6.1		No	10		
2.6.2	Provide 1000x1000x1000 deep cable Electrical sleeves manhole, complete with covers	No	4		
<b>TOTAL FOR SECTION 2 CARRIED FORWARD TO SUMMARY PAGE</b>					

**DINDELA AND SPEARVILLE ROAD 1, ROAD 2 AND WALKWAY LIGHTING**

**PRICING SCHEDULE : ELECTRICAL WORKS**

**SECTION 3: STREET LIGHTING INSTALLATION**

Item	Description	Unit	Qty	Rate	Amount R
3.1	<b>LIGHT FITTINGS</b>				
3.1.1	LED 48/162W (N5248A1G7D)				
3.1.1.1	Supply	No	82		
3.1.1.2	Install	No	82		
3.2	<b>STREET LIGHT POLES</b> All street light poles are to comply with the specifications. The cost of the street light poles, mounting flange, spigots, wiring and all other accessories, band strapping of access holes, trenching and backfilling required for the planting of the street light poles are all inclusive in the below rates				
3.2.1	<b>TAMPER PROOF TORX TOOL M6</b>				
3.2.1.1	Supply	No	1		
3.2.1.2	Install	No	1		
3.2.2	<b>10.5M MOUNTING HEIGHT (12.0M TOTAL LENGTH) GALVANISED STEEL STREETLIGHT POLE</b>				
3.2.2.1	Supply	No	82		
3.2.2.2	Install	No	82		
3.2.3	<b>1.5m STUBBY</b>				
3.2.3.1	Supply	No	82		
3.2.3.2	Install	No	82		
3.2.4	<b>SINGLE SPIGOT 500mm SIDE ENTRY</b>				
3.2.4.1	Supply	No	60		
3.2.4.2	Install	No	60		
3.2.5	<b>DOUBLE SPIGOT SIDE ENTRY 180 DEG</b>				
3.2.5.1	Supply	No	22		
3.2.5.2	Install	No	22		
3.2.6	<b>DOUBLE SPIGOT SIDE ENTRY U SHAPE</b>				
3.2.6.1	Supply	No	3		
3.2.6.2	Install	No	3		
3.2.7	<b>500MM 3-WAY SIDE ENTRY SPIGOT - 120°</b>				
3.2.6.1	Supply	No	6		
3.2.6.2	Install	No	6		
<b>TOTAL FOR SECTION 3 CARRIED OVER TO SUMMARY PAGE</b>					

**DINDELA AND SPEARVILLE ROAD 1, ROAD 2 AND WALKWAY LIGHTING****PRICING SCHEDULE : ELECTRICAL RETICULATION WORKS****SECTION 4 : TELE-MANAGEMENT SYSTEM**

<b>Item</b>	<b>Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate</b>	<b>Amount R</b>
4.1	Tele-management System				
4.1.1	Supply and Install tele-management units in each luminaire	ea	82		
4.1.2	Supply and Install tele-management Sector controllers	ea	1		
4.1.3	Supply and install GSM modems with all accessories required for full operation of the tele-management system as indicated	ea	1		
4.1.4	Supply and install at the City of Mbombela Maintenance Department a new PC, as specified, complete with all software and hardware required, to ensure full functionality of the Tele-management System	Item	1		
4.1.5	Program and commission and hand-over in full operating condition the specified Tele-management installation and system	Sum	1		
4.1.6	Provide complete training, with training material and training manuals to City of Mbombela Maintenance Department personal in respect of the operation and maintenance of the Tele-management System and Installation. (Minimum three persons)	Sum	1		
<b>TOTAL FOR SECTION 4 CARRIED OVER TO SUMMARY PAGE</b>					

**DINDELA AND SPEARVILLE ROAD 1, ROAD 2 AND WALKWAY LIGHTING****PRICING SCHEDULE : ELECTRICAL WORKS****SECTION 5 : PROVISIONAL AMOUNTS**

<b>Item</b>	<b>Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Labour</b>	<b>Amount R</b>
5,1	Municipal Costs				
5.1.1	Relocation of existing Electrical Services and connecting into the existing supply	PC Sum	1	300 000,00	300 000,00
5.1.2	Profit and Handling on item 5.1.1 above (State % in Labour Rate Column)	%			
5.1.3	Additional pipe crossings required by Municipality	PC Sum	1	50 000,00	50 000,00
5.1.4	Profit and Handling on item 5.1.3 above (State % in Labour Rate Column)	%			
<b>TOTAL FOR SECTION 5 CARRIED FORWARD TO SUMMARY PAGE</b>					

DINDELA AND SPEARVILLE ROAD 1, ROAD2 AND WALKWAY LIGHTING

PRICING SCHEDULE : ELECTRICAL WORKS

**Schedule Summary**

<b>Section</b>	<b>Description</b>	<b>Amount</b>
1	PRELIMINARY AND GENERAL	
2	RETICULATION SYSTEM	
3	STREET LIGHTING INSTALLATION	
4	TELE-MANAGEMENT SYSTEM	
5	PROVISIONAL AMOUNTS	
	<b>SUB TOTAL 1</b>	
6	<b>TOTAL ELECTRICAL TENDER SUM</b>	