



E: HumanSettlement.Tenders@capetown.gov.za

30 APRIL 2024

NOTICE TO TENDERERS NO. 2
Page 1 of 44

TENDER NO: 240Q/2023/24

BOX NO: 134

CLOSING DATE: 30 May 2024

DESCRIPTION: CONSTRUCTION OF 126 TOP STRUCTURES, ELECTRICAL ENGINEERING SERVICES AND STREET LIGHTING FOR 126 ERVEN, SIDEWALKS AND LANDSCAPING FOR THE EDWARD AVENUE HOUSING PROJECT

This Notice to tenderers forms an integral part of the Contract and is an addendum to be bound into the Project Document. Tenderers are therefore requested to:

PAGES 55 TO 97 OF THE BILL OF QUANTITIES – PAGES NOT INCLUDED IN THE ADVERTISE DOCUMENT

Tenderers to note that pages 55 to 97 of the Bill of Quantities was omitted from the advertised tender document

Pages 55 to 97 are now included with this Notice 2.

Tenderers MUST acknowledge receipt of Notice 2 and must include pages 56 to 96 with the tender submission prior to tender closing.

Kind Regards,

Human Settlements Tenders and Contracts Practitioner
.....
Director: Supply Chain Management

Tenderers must acknowledge receipt of Notice 1 in Schedule 24 of the tender document and must return the signed notice with their tender submission.

ACKNOWLEDGEMENT OF RECEIPT FOR AND ON BEHALF OF THE TENDERER: TENDER NO 240Q/2023/24

On this Day of.....2024

Signature:

Name of Signatory:

(In ink and capitals)

TENDERER:

(Name of firm in ink and capitals)

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 2: DISTRIBUTION AND STREETLIGHT INFRASTRUCTURE

SECTION 2: TRENCHING AND EXCAVATIONS

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
2		SECTION 2: TRENCHING AND EXCAVATIONS				
2.1		EXCAVATIONS: Excavation of cable trenches (450mm wide unless specified otherwise) to depths and in material conditions as classified below These rates for trenching and excavations shall include for all shoring necessary for support and all pumping necessary to remove water from the trenches and excavations				
2.1.1		800mm deep trenches in Class 1 normal pickable soil (Soft rock and earth)	m ³	641		
2.1.2		800mm deep trenches in Class 2 difficult soil (Hard rock) with the aid of a compressor	m ³	Rate Only		
2.1.3		800mm deep trenches in Class 3 soil (Very hard rock) with the aid of blasting	m ³	Rate Only		
2.1.4		1000mm deep trenches in Class 1 normal pickable soil (Soft rock and earth)	m ³	38		
2.1.5		1000mm deep trenches in Class 2 difficult soil (Hard rock) with the aid of a compressor	m ³	Rate Only		
2.1.6		1000mm deep trenches in Class 3 soil (Very hard rock) with the aid of blasting	m ³	Rate Only		
2.1.7		Extra over for trenching through intermediate material (big boulders, calcrete etc. that is hard to loosen by pick or cannot be removed by shovel)	m ³	Rate Only		
2.1.8		Extra over for trenching through concrete, paved and tarred road surfaces	m	Rate Only		
2.1.9		Excavations of pilot holes and cross trenches to expose existing services including backfilling and compaction of trenches and reinstatement of trench surface	m	Rate Only		
2.1.10		Removal of waste material, handling cost included	m ³	338		
2.2		PLACEMENT OF IMPORTED BEDDING AND BLANKET SAND: These rates shall include all transport cost and preparation of soil by removing stones and sharp objects (sifting through a 6mm mesh where required) and compaction of trench				
2.2.1		Supply and placement of bedding sand in bottom of trench before installation of cable (layer of 100mm deep for full width of trench)	m ³	85		
2.2.2		Supply and placement of blanket sand on top of cable after installation of cable (blinding layer of 300mm deep for full width of trench)	m ³	253		
Total Carried Forward					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 2: DISTRIBUTION AND STREETLIGHT INFRASTRUCTURE

SECTION 2: TRENCHING AND EXCAVATIONS

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
Brought Forward						R
2.3		BACKFILL OF TRENCH WITH ROUGH MATERIAL: These rates shall include preparation of rough excavated material by removing all stones and sharp objects with a size over 75mm and compaction of trenches in layers not exceeding 150 mm				
2.3.1		Backfilling with rough material and compaction and reinstatement of trench surface	m ³	344		
2.4		PVC WARNING TAPE:				
2.4.1		Supply and install orange plastic warning sheet in trench 300mm above cables	m	1862		
2.5		REPAIRS AND REINSTATEMENT OF ROAD SURFACES:				
2.5.1		Repairs and Reinstatement of concrete and paved road surfaces	m ²	6		
2.5.2		Repairs and Reinstatement of premixed road surfaces	m ²	6		
2.6		ROAD CROSSING SLEEVES:				
		Supply and install Class 4 PVC sleeves complete with steel draw wire				
2.6.1		50mmø	m	Rate Only		
2.6.2		75mmø	m	Rate Only		
2.6.3		110mmø	m	420		
2.6.4		160mmø	m	84		
2.7		DIRECTIONAL DRILLING AT ROAD CROSSINGS:				
		Directional Drilling/Thrustboring for road crossings complete including site establishment, launching and receiving pits and uPVC sleeves with steel draw wire				
2.7.1		110mmø	m	9		
2.7.2		160mmø	m	Rate Only		
2.8		FIBRE DUCT:				
		Supply and install HDPE duct for future installation of fibre optic cable				
2.8.1		32mmø HDPE duct in any colour	m	Rate Only		
2.8.2		Compression couplings for jointing of duct	No.	Rate Only		
2.9		COMPACTION TESTS:				
2.9.1		Compaction tests & the provision of a compaction certificates for proof of trench compaction to specification	Sum	1		
Total Carried Forward To Summary						R

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 2: DISTRIBUTION AND STREETLIGHT INFRASTRUCTURE

SECTION 3: MINIATURE SUBSTATIONS AND RMU'S

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3		SECTION 3: MINIATURE SUBSTATIONS AND RMU'S				
3.1		TYPE C MINIATURE SUBSTATIONS: Supply and install 11.66 kV/420 Volt, Dyn7, Type C, 3 phase miniature substations complete with MV switchgear (3-way SafeRing type CCF SF6 RMU) and an LV switch compartment (supply and installation of LV circuit breakers listed under separate item). Note: All miniature substations shall comply with the latest City of Cape Town specifications.				
3.1.1		200kVA	Sum	Rate Only		
3.1.2		315kVA	Sum	Rate Only		
3.1.3		500kVA	Sum	1		
3.1.4		800kVA	Sum	Rate Only		
3.2		PRECAST CONCRETE PLINTH FOR MINIATURE SUBSTATION: Supply and install pre-cast concrete plinth for miniature substations as per the latest City of Cape Town specifications including site preparation				
3.2.1		Pre-cast concrete plinth for Type C miniature substations (200kVA to 800kVA)	Sum	1		
3.3		LV FEEDER MCCB's Supply and install hydraulic-magnetic technology 3-pole moulded case circuit breakers in the LV switch compartment of new or existing miniature substations complete with cable jumpers in compliance with the latest City of Cape Town specifications.				
3.3.1		63A	Sum	1		
3.3.2		125A	Sum	Rate Only		
3.3.3		160A	Sum	Rate Only		
3.3.4		200A	Sum	1		
3.3.5		225A	Sum	Rate Only		
3.3.6		250A	Sum	2		
3.3.7		300A	Sum	1		
3.3.8		350A	Sum	Rate Only		
3.4		FREESTANDING OUTDOOR RING MAIN UNITS (RMU's): Supply and install 12kV metal-enclosed SF6 insulated Ring Main Units for outdoor installations complete with 3CR12 arc-vented weatherproof kiosk. Note: All RMU's shall comply with the latest City of Cape Town specifications.				
Total Carried Forward					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 2: DISTRIBUTION AND STREETLIGHT INFRASTRUCTURE

SECTION 3: MINIATURE SUBSTATIONS AND RMU'S

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
Brought Forward						R
3.4.1		3-Way non-extensible ring main unit comprising 2 switch-disconnectors and 1 switch-fuse combination complete with 3CR12 weather proof kiosk (SafeRing type CCF or similar approved)	Sum	Rate Only		
3.4.2		3-Way non-extensible ring main unit comprising 2 switch-disconnectors and 1 circuit breaker complete with 3CR12 weather proof kiosk (SafeRing type CCV or similar approved)	Sum	Rate Only		
3.5		PRECAST CONCRETE PLINTH FOR RMU'S				
3.5.1		Supply and install pre-cast concrete plinths for the following RMU combinations as per the most recent City of Cape Town specifications including site preparation	Sum	Rate Only		
3.6		TESTING AND COMMISSIONING:				
3.6.1		Miniature substation testing and commissioning, per miniature substation	No.	1		
3.6.2		Install relay settings for over current and earth fault relay of RMU circuit breaker feeder	No.	Rate Only		
3.6.3		RMU commissioning tests including relay trip tests, CT magnetisation tests, CT ratio tests and MV pressure tests as specified, per RMU				
3.6.4		3-Way CCV RMU	No.			
3.7		MV pressure test of MV feeder cables	Sum	1		
3.7.1		SUBSTATION FENCING: Supply and install 1.8m high Galvanized Steel Betafence fencing as per City of Cape Town specifications	m	24		
3.7.2		Supply and install 0.8m wide,1.8m high Galvanized Steel gate as per City of Cape Town specifications	No.	1		
3.7.3		Supply and install kerbing blocks along perimeter fence of substation yard	m	24		
3.7.4		Supply and spread 100mm thick layer of 19mm crushed yard stone inside substation yard up to kerbing	m³	3		
3.8		LABELS AND STATUTORY SAFETY SIGNAGE:				
3.8.1		Supply and install miniature substation MV and LV engraved labels and warning signs as specified, per miniature substation	Sum	1		
3.8.2		Supply and install RMU engraved labels and warning signs as specified, per RMU	Sum	Rate Only		
3.8.3		Supply substation yard statutory safety and warning signage, per substation	Sum	1		
Total Carried Forward						R

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 2: DISTRIBUTION AND STREETLIGHT INFRASTRUCTURE

SECTION 3: MINIATURE SUBSTATIONS AND RMU'S

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
Brought Forward						R
3.9		TEMPORARY LOCKS				
3.9.1		Supply and fit temporary padlocks for miniature substations and RMU's for protection against vandalism and theft until network is taken over by Supply Authority	Sum	1		
Total Carried Forward To Summary						R

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 2: DISTRIBUTION AND STREETLIGHT INFRASTRUCTURE

SECTION 4: MV CABLE NETWORK

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
4		SECTION 4: MV CABLE NETWORK				
4.1		MEDIUM VOLTAGE CABLES Supply and install 3 core, 6.35/11kV paper insulated, individually copper taped screened, PVC bedded, galvanised steel wire armoured, PVC sheathed flame-retardant cable with water barrier (PILE 2H G DSTA 1 R) to SANS 97 Table 19, in prepared trenches or sleeves, to the most recent City of Cape Town specifications				
4.1.1		120mm ² x 3 Core Aluminium	m	260		
4.1.2		300mm ² x 3 Core Aluminium	m	Rate Only		
4.2		RELOCATE EXISTING LENGTHS OF MV CABLE: Relocate existing excavated and de-energised MV cables from old route to new excavated trenches				
4.2.1		120mm ² x 3 Core Aluminium	m	Rate Only		
4.2.2		300mm ² x 3 Core Aluminium	m	Rate Only		
4.3		MV CABLE JOINT: Jointing of MV cables including complete jointing kit with all accessories and compound				
4.3.1		120mm ² x 3 Core Aluminium	No.	2		
4.3.2		300mm ² x 3 Core Aluminium	No.	Rate Only		
4.3.3		70mm ² BCE	No.	2		
4.4		MV CABLE TERMINATION: Termination of MV cables including complete termination kit with all accessories (Type RICS 3 or similar approved)				
4.4.1		120mm ² x 3 Core Aluminium	No.	2		
4.4.2		300mm ² x 3 Core Aluminium	No.	Rate Only		
4.5		DISCONNECT EXISTING MV CABLES: Break down existing 11kV termination and disconnect cable				
4.5.1		120mm ² x 3 Core Aluminium	No.	Rate Only		
4.5.2		300mm ² x 3 Core Aluminium	No.	Rate Only		
4.6		CAP AND SEAL MV CABLE ENDS: Supply and install heat shrink end caps for cables				
4.6.1		120mm ² x 3 Core Aluminium	No.	Rate Only		
4.6.2		300mm ² x 3 Core Aluminium	No.	Rate Only		
Total Carried Forward					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 2: DISTRIBUTION AND STREETLIGHT INFRASTRUCTURE

SECTION 4: MV CABLE NETWORK

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
Brought Forward						R
4.7		PILOT AND TELEPHONE CABLES: Supply and install pilot and telephone polyethylene insulated cables				
4.7.1		1.5mm ² x 7 pair stranded pilot cable	m	Rate Only		
4.7.2		0.63mm ² 10 pair telephone cable	m	Rate Only		
4.8		PILOT AND TELEPHONE CABLE JOINTS: Complete jointing kit with all accessories				
4.8.1		1.5mm ² x 7 pair stranded pilot cable	No.	Rate Only		
4.8.2		0.63mm ² 10 pair telephone cable	No.	Rate Only		
4.9		PILOT AND TELEPHONE CABLE TERMINATIONS: Complete termination kit with all accessories				
4.9.1		1.5mm ² x 7 pair stranded pilot cable	No.	Rate Only		
4.9.2		0.63mm ² 10 pair telephone cable	No.	Rate Only		
Total Carried Forward To Summary						R

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 2: DISTRIBUTION AND STREETLIGHT INFRASTRUCTURE

SECTION 5: LV CABLE NETWORK

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
5		SECTION 5: LV CABLE NETWORK				
5.1		LV FEEDER CABLES:				
5.1.1		Supply and install 2 and 4 core 600/1000V PVC PVC SWA PVC LV cables in prepared trenches	m	Rate Only		
5.1.2		35mm ² x 4 core Aluminium	m	26		
5.1.3		70mm ² x 4 core Aluminium	m	605		
5.1.4		120mm ² x 4 core Aluminium	m	328		
5.1.5		185mm ² x 4 core Aluminium	m	114		
5.1.6		300mm ² x 4 core Aluminium	m	Rate Only		
5.1.7		10mm ² x 4 core Copper	m	Rate Only		
5.1.8		16mm ² x 4 core Copper	m	Rate Only		
5.1.9		25mm ² x 4 core Copper	m	Rate Only		
5.2		LV CABLE JOINTS:				
5.2.1		Jointing of LV cables including complete jointing kit with all accessories and compound	No.	Rate Only		
5.2.2		35mm ² x 4 core Aluminium	No.	2		
5.2.3		70mm ² x 4 core Aluminium	No.	1		
5.2.4		120mm ² x 4 core Aluminium	No.	2		
5.2.5		185mm ² x 4 core Aluminium	No.	2		
5.2.6		300mm ² x 4 core Aluminium	No.	Rate Only		
5.2.7		10mm ² x 4 core Copper	No.	Rate Only		
5.2.8		16mm ² x 4 core Copper	No.	Rate Only		
5.2.9		25mm ² x 4 core Copper	No.	Rate Only		
5.2.10		35mm ² BCE	No.	2		
5.2.11		70mm ² BCE	No.	2		
5.3		LV CABLE TERMINATIONS:				
		Termination of LV cables complete including all glands, lugs, nuts, bolts and washers				
5.3.1		35mm ² x 4 core Aluminium	No.	2		
5.3.2		70mm ² x 4 core Aluminium	No.	18		
5.3.3		120mm ² x 4 core Aluminium	No.	6		
5.3.4		185mm ² x 4 core Aluminium	No.	2		
5.3.5		300mm ² x 4 core Aluminium	No.	Rate Only		
5.3.6		10mm ² x 4 core Copper	No.	Rate Only		
5.3.7		16mm ² x 4 core Copper	No.	Rate Only		
5.3.8		25mm ² x 4 core Copper	No.	Rate Only		
Total Carried Forward					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 2: DISTRIBUTION AND STREETLIGHT INFRASTRUCTURE

SECTION 5: LV CABLE NETWORK

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
Brought Forward						R
5.4		12-WAY DUAL DOOR METERING KIOSK: Supply and install ground mounted 12-Way, Dual Door 3CR12 stainless steel metering kiosks including all internal wiring, bus bars, DIN-rail mounted 5kA curve 1 single pole circuit breakers and accessories as specified. Kiosks must be prewired for split prepayment meters as specified by City of Cape Town. Note: Kiosk shall comply fully with drawings DR3169A sheet 1 and 2 as well as the latest City of Cape Town specifications.				
5.4.1		6 Used with 60Amp mcb's	No.	Rate Only		
5.4.2		6 Used with 80Amp mcb's	No.	Rate Only		
5.4.3		8 Used with 60Amp mcb's	No.	Rate Only		
5.4.4		8 Used with 80Amp mcb's	No.	Rate Only		
5.4.5		9 Used with 60Amp mcb's	No.	Rate Only		
5.4.6		9 Used with 80Amp mcb's	No.	Rate Only		
		12 Way				
5.4.7		6 Used with 60Amp mcb's	No.	1		
5.4.8		7 Used with 50Amp mcb's	No.	1		
5.4.9		7 Used with 3 x 50Amp and 4 x 60Amp mcb's	No.	1		
5.4.10		8 Used with 50Amp mcb's	No.	1		
5.4.11		9 Used with 50Amp mcb's	No.	1		
5.4.12		10 Used with 50Amp mcb's	No.	3		
5.4.13		12 Used with 50Amp mcb's	No.	5		
5.4.14		12 Used with 80Amp mcb's	No.	Rate Only		
5.4.15		Fit and wire split prepayment meters supplied by City of Cape Town	No.	Rate Only		
5.4.16		Supply, fit and wire 60Amp DIN-rail mounted 5kA curve 1 single pole miniature circuit breaker	No.	Rate Only		
5.4.17		Supply, fit and wire 80Amp DIN-rail mounted 5kA curve 1 single pole miniature circuit breaker	No.	Rate Only		
5.4.18		Supply, fit and wire 40Amp three pole miniature circuit breaker	No.	Rate Only		
5.4.19		Supply, fit and wire 60Amp three pole miniature circuit breaker	No.	Rate Only		
5.4.20		Supply, fit and wire 80Amp three pole miniature circuit breaker	No.	Rate Only		
Total Carried Forward						R

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 2: DISTRIBUTION AND STREETLIGHT INFRASTRUCTURE

SECTION 5: LV CABLE NETWORK

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
Brought Forward						R
5.5		FUSE PILLAR BOX: Supply and install ground mounted 3CR12 stainless steel fuse pillar boxes including all internal wiring and bus bars complete with four (4) HRC LV strip fuse switch disconnecter pillars of the "on-load switching" type as specified. Note: Fuse pillars shall comply fully with drawings SK3844 sheet 1 and 2 as well as the latest City of Cape Town specifications.				
5.5.1		Fuse pillar box complete with 4x HRC LV strip-type fuse disconnecter pillars rated at 400A	No.	Rate Only		
5.5.2		Supply and install 200Amp NH-2 LV HRC fuses	No.	Rate Only		
5.5.3		Supply and install 400Amp NH-2 LV HRC fuses	No.	Rate Only		
5.5.4		Supply, fit and wire HRC LV strip-type double break fuse switch disconnecter pillars of the "on-load switching" type rated at 400Amp	No.	Rate Only		
5.6		STREETLIGHT CONTROL KIOSK: Supply and install Streetlight Control Kiosk (6-Way Polyethylene Kiosk) complete including all internal wiring, bus bars and streetlight control gear as specified. Note: Kiosk shall comply fully with drawing DR3055 as well as the latest City of Cape Town specifications.				
5.6.1		Ground mounted double door kiosk	No.	Rate Only		
5.6.2		Pole mounted single door kiosk	No.	1		
5.6.3		Supply and install 2m long x 75mm diameter steel "kicker" pipe for cable routing from ground level to pole mounted box complete with stainless steel bandit straps	No.	1		
5.7		LABELS AND STATUTORY SAFETY SIGNAGE:				
5.7.1		Supply and install engraved labels for each circuit breaker	Sum	1		
5.7.2		Supply and install engraved labels for each feeder cable as specified	Sum	1		
5.7.3		Supply kiosk safety and warning signage, for each kiosk	Sum	1		
5.8		TEMPORARY LOCKS:				
5.8.1		Supply and fit temporary padlocks for kiosks and fuse pillar boxes for protection against vandalism and theft until network is taken over by Supply Authority	No.	14		
5.8.2		Electrical Certificate of Compliance for each of the kiosks installed	No.	14		
Total Carried Forward To Summary						R

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 2: DISTRIBUTION AND STREETLIGHT INFRASTRUCTURE

SECTION 6: SERVICE CONNECTIONS

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
6		SECTION 6: SERVICE CONNECTIONS				
6.1		SERVICE CONNECTION CABLES: Supply and install 2 and 4 core 600/1000V PVC PVC SWA PVC LV cables in prepared trenches				
6.1.1		10mm ² x 2 core Copper with 2x 1mm ² stranded pilot wires	m	3202		
6.1.2		16mm ² x 2 core Copper with 2x 1mm ² stranded pilot wires	m	276		
6.1.3		Extend cable coil through 'kicker' pipe up to DB inside house on completion of house construction	No.	116		
6.2		SERVICE CONNECTION CABLE JOINTS: Jointing of service connection cables including complete jointing kit with all accessories and compound				
6.2.1		10mm ² x 2 core Copper with 2x 1mm ² stranded pilot wires	No.	116		
6.2.2		16mm ² x 2 core Copper with 2x 1mm ² stranded pilot wires	No.	10		
6.2.3		10mm ² BCE	No.	116		
6.2.4		16mm ² BCE	No.	10		
6.3		SERVICE CONNECTION CABLE TERMINATIONS: Termination of service connection cables complete including all glands, lugs, nuts, bolts and washers				
6.3.1		10mm ² x 2 core Copper with 2x 1mm ² stranded pilot wires	No.	116		
6.3.2		16mm ² x 2 core Copper with 2x 1mm ² stranded pilot wires	No.	10		
6.4		CAP AND SEAL SERVICE CONNECTION CABLE ENDS: Supply and install heat shrink end caps for cables				
6.4.1		10mm ² x 2 core Copper with 2x 1mm ² stranded pilot wires	No.	116		
6.4.2		16mm ² x 2 core Copper with 2x 1mm ² stranded pilot wires	No.	10		
6.4.3		10mm ² BCE	No.	116		
6.4.4		16mm ² BCE	No.	10		
6.5		INFORMAL DWELLING PREPAYMENT METER INSTALLATIONS: Supply and install Ready Board complete including Bulkhead fitted on common Backboard				
6.5.1		Fit and wire Customer Interface Unit supplied by City of Cape Town	No.	Rate Only		
Total Carried Forward					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 2: DISTRIBUTION AND STREETLIGHT INFRASTRUCTURE

SECTION 6: SERVICE CONNECTIONS

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
Brought Forward						R
6.6		SERVICE CONNECTION ADMINISTRATION:				
6.6.1		Completion of consumer information form with beneficiary list information and GPS coordinates and other applicable.	No.	Rate Only		
6.6.2		Coordinate issue of Customer Interface Units to house wiring contractor for installation in completed houses	No.	Rate Only		
Total Carried Forward To Summary						R

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 2: DISTRIBUTION AND STREET LIGHT INFRASTRUCTURE

SECTION 7: STREET LIGHTING

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
7		SECTION 7: STREET LIGHTING				
7.1		STREET LIGHT LUMINAIRES: Supply, install and connect LED streetlight luminaires as specified. Luminaires shall comply with the latest City of Cape Town specifications.				
7.1.1		LED-Lume MAXI 128LED 279W 5094 / 5345	No.	Rate Only		
7.1.2		LED Lume MIDI 64LED 144W 5118 / 5345	No.	Rate Only		
7.1.3		LED-Lume MIDI 48LED 108W 5103 / 5345	No.	Rate Only		
7.1.4		LED-Lume MINI 16LED 26W 5345	No.	22		
7.1.5		ZELA 24LED 55W post top Luminaire	No.	Rate Only		
7.2		STREET LIGHT POLES: Supply and install galvanised steel pole complete with access opening cover, gland plate, back plate, 5KA circuit breakers, fuses and fuse holders, all internal wiring (red, black and green/yellow 2,5mm ² x 1 core copper) and connections and base plate. Streetlight poles shall comply with the latest City of Cape Town specifications.				
7.2.1		Galvanised steel pole - 13.5m total length (11.8m mounting height) as per drawing SL33	No.	Rate Only		
7.2.2		Galvanised steel pole - 11m total length (9.5m mounting height) as per drawing SL 11	No.	Rate Only		
7.2.3		Galvanised steel pole - 7.2m total length (6m mounting height) as per drawing SL 37	No.	22		
7.2.4		Galvanised steel pole - 5.2m total length (4m mounting height) as per drawing SL 37	No.	Rate Only		
7.3		OUTREACH ARMS: Supply and install galvanised steel short steel adaptor as per City of Cape Town drawing SL36 and latest specifications				
7.3.1		Single short steel adaptor	No.	22		
7.3.2		Double short steel adaptor	No.	1		
7.4		EXCAVATE POLE HOLES: Excavate pole holes for new streetlight poles including backfill and compaction				
7.4.1		1000mm deep (soft rock and earth)	No.	22		
7.4.2		1000mm deep (hard rock)	No.	Rate Only		
7.4.3		1200mm deep (soft rock and earth)	No.	Rate Only		
7.4.4		1200mm deep (hard rock)	No.	Rate Only		
Total Carried Forward					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 2: DISTRIBUTION AND STREET LIGHT INFRASTRUCTURE

SECTION 7: STREET LIGHTING

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
Brought Forward						R
7.5		STREET LIGHT CABLING: Supply and install 2 and 4 core 600/1000V PVC PVC SWA PVC LV cables in prepared trenches				
7.5.1		25mm ² x 4 core Aluminium	m	777		
7.5.2		35mm ² x 4 core Aluminium	m	26		
7.5.3		16mm ² x 4 core Copper	m	Rate Only		
7.6		LV CABLE JOINTS: Jointing of LV cables including complete jointing kit with all accessories and compound				
7.6.1		25mm ² x 4 core Aluminium	m	1		
7.6.2		35mm ² x 4 core Aluminium	m	Rate Only		
7.6.3		16mm ² x 4 core Copper	m	Rate Only		
7.7		LV CABLE TERMINATIONS: Termination of LV cables complete including all glands, lugs, nuts, bolts and washers and Dinkie connectors as required				
7.7.1		25mm ² x 4 core Aluminium	m	44		
7.7.2		35mm ² x 4 core Aluminium	m	2		
7.7.3		16mm ² x 4 core Copper	m	Rate Only		
7.8		RELOCATE STREET LIGHT POLES: Remove existing streetlight pole and relocate to new position complete including all excavations and reinstatement				
7.8.1		13.5m steel pole	Sum	Rate Only		
7.8.2		11m steel pole	Sum	Rate Only		
7.8.3		7.2m steel pole	Sum	Rate Only		
7.9		OVERHEAD LINE STREET LIGHT CONNECTION: Supply and install weatherproof box complete with 10Amp 5kA mcb mounted on pole adjacent to luminaire including installation of 2.5mm ² Copper cables from luminaire to mcb and mcb to ABC with all IPCs, cable ties and all terminations				
7.9.1			No.	Rate Only		
Total Carried Forward To Summary						R

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 2: DISTRIBUTION AND STREET LIGHT INFRASTRUCTURE

SECTION 8: EARTHING

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
8		SECTION 8: EARTHING				
8.1		SUBSTATION AND KIOSK EARTHING:				
8.1.1		Supply and install miniature substation earth mat as specified complete with 70mm ² bare copper earth wire, cad welding, lugs and stainless steel bolts, nuts and washers for termination to minisub earth bar	No.	1		
8.1.2		Supply and install RMU earth mat as specified complete with 70mm ² bare copper earth wire, cad welding, lugs and stainless steel bolts, nuts and washers for termination to RMU earth bar	No.	Rate Only		
8.1.3		Supply and install Kiosk earthing complete including 2 x 1.8m earth spikes with interconnecting 16mm ² bare copper earth wire, cad welding, lugs and stainless steel bolts, nuts and washers for termination to kiosk earth bar	No.	13		
8.1.4		Earth resistance test per earth mat installation	Sum	1		
8.2		BARE COPPER EARTH CONDUCTOR:				
		Supply and install bare stranded copper conductor along with low voltage cables in same trench				
8.2.1		10 mm ²	m	3202		
8.2.2		16 mm ²	m	276		
8.2.3		35 mm ²	m	631		
8.2.4		50 mm ²	m	Rate Only		
8.2.5		70 mm ²	m	534		
8.2.6		95 mm ²	m	114		
8.2.7		120 mm ²	m	Rate Only		
8.2.8		185 mm ²	m	Rate Only		
8.3		TERMINATE BARE COPPER EARTH CONDUCTOR:				
		Terminate bare copper earth conductor including all lugs, bolts, nuts and washers				
8.3.1		10 mm ²	No.	116		
8.3.2		16 mm ²	No.	10		
8.3.3		35 mm ²	No.	20		
8.3.4		50 mm ²	No.	Rate Only		
8.3.5		70 mm ²	No.	8		
8.3.6		95 mm ²	No.	2		
8.3.7		120 mm ²	No.	Rate Only		
8.3.8		185 mm ²	No.	Rate Only		
Total Carried Forward					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 2: DISTRIBUTION AND STREET LIGHT INFRASTRUCTURE

SECTION 8: EARTHING

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
Brought Forward						R
8.4		EARTH ELECTRODE: Supply and install 16mm diameter steel reinforced copper earth spike complete with brass couplings and driving cap				
8.4.1		1 800mm	No.	14		
8.4.2		2 400mm	No.	Rate Only		
8.4.3		3 600mm	No.	Rate Only		
Total Carried Forward To Summary						R

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 2: DISTRIBUTION AND STREET LIGHT INFRASTRUCTURE

		SUMMARY OF SECTIONS
SECTION	DESCRIPTION	AMOUNT (R)
2	SECTION 2: TRENCHING AND EXCAVATIONS	
3	SECTION 3: MINIATURE SUBSTATIONS AND	
4	SECTION 4: MV CABLE NETWORK	
5	SECTION 5: LV CABLE NETWORK	
6	SECTION 6: SERVICE CONNECTIONS	
7	SECTION 7: STREET LIGHTING	
8	SECTION 8: EARTHING	
Total Carried Forward to Summary of Schedules		R

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 3: SINGLE STOREY FREE-STANDING UNIT

SECTION 9: SINGLE STOREY FREE-STANDING UNIT

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
9		SECTION 9: SINGLE STOREY FREE-STANDING UNIT				
9.1		Site Works	No.	15		
9.2		Foundation and Floor Slab	No.	15		
9.3		Superstructure brickwork up to wallplate height, excluding wallplate, but including window and door frames	No.	15		
9.4		Roof structure, roof coverings including barge boards and fascias	No.	15		
9.5		External plumbing, drainage, electrical conduits	No.	15		
9.6		Plaster internal and external	No.	15		
9.7		Ceilings complete including cornices	No.	15		
9.8		Internal plumbing, drainage and electrical (DB, wiring, plugs, switches and fittings)	No.	15		
9.9		Doors, glazing and ironmongery, painting completed	No.	15		
9.10		Apron completed	No.	15		
Total Carried Forward to Summary of Schedules					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 4: SINGLE STOREY SEMI-DETACHED UNIT

SECTION 10: SINGLE STOREY SEMI-DETACHED UNIT

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
10		SECTION 10: SINGLE STOREY SEMI-DETACHED UNIT (CONSISTING OF 2NO. HOUSING UNITS)				
10.1		Site Works	No.	13		
10.2		Foundation and Floor Slab	No.	13		
10.3		Superstructure brickwork up to wallplate height, excluding wallplate, but including window and door frames	No.	13		
10.4		Roof structure, roof coverings including barge boards and fascias	No.	13		
10.5		External plumbing, drainage, electrical conduits	No.	13		
10.6		Plaster internal and external	No.	13		
10.7		Ceilings complete including cornices	No.	13		
10.8		Internal plumbing, drainage and electrical (DB, wiring, plugs, switches and fittings)	No.	13		
10.9		Doors, glazing and ironmongery, painting completed	No.	13		
10.10		Apron completed	No.	13		
Total Carried Forward to Summary of Schedules					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 5: DUPLEX FREE-STANDING UNIT

SECTION 11: DUPLEX FREE-STANDING UNIT

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
11		SECTION 11: DUPLEX FREE-STANDING UNIT				
11.1		Site Works	No.	2		
11.2		Foundation and Floor Slab	No.	2		
11.3		Ground Floor Superstructure brickwork up to ringbeam, including window and door frames	No.	2		
11.4		Precast Floorslabs and Staircase	No.	2		
11.5		First Floor Superstructure brickwork up to wallplate height, excluding wallplate, but including window and door frames	No.	2		
11.6		Roof structure, roof coverings including barge boards and fascias	No.	2		
11.7		External plumbing, drainage, electrical conduits	No.	2		
11.8		Plaster internal and external	No.	2		
11.9		Ceilings complete including cornices	No.	2		
11.10		Internal plumbing, drainage and electrical (DB, wiring, plugs, switches and fittings)	No.	2		
11.11		Doors, glazing and ironmongery, painting completed	No.	2		
11.12		Apron completed	No.	2		
Total Carried Forward to Summary of Schedules					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 6: DUPLEX SEMI-DETACHED UNIT

SECTION 12: DUPLEX SEMI-DETACHED UNIT

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
12		SECTION 12: DUPLEX SEMI-DETACHED UNIT (CONSISTING OF 2NO. HOUSING UNITS)				
12.1		Site Works	No.	36		
12.2		Foundation and Floor Slab	No.	36		
12.3		Ground Floor Superstructure brickwork up to ringbeam, including window and door frames	No.	36		
12.4		Precast Floorslabs and Staircase	No.	36		
12.5		First Floor Superstructure brickwork up to wallplate height, excluding wallplate, but including window and door frames	No.	36		
12.6		Roof structure, roof coverings including barge boards and fascias	No.	36		
12.7		External plumbing, drainage, electrical conduits	No.	36		
12.8		Plaster internal and external	No.	36		
12.9		Ceilings complete including cornices	No.	36		
12.10		Internal plumbing, drainage and electrical (DB, wiring, plugs, switches and fittings)	No.	36		
12.11		Doors, glazing and ironmongery, painting completed	No.	36		
12.12		Apron completed	No.	36		
Total Carried Forward to Summary of Schedules					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 7: SPECIAL NEEDS UNIT

SECTION 13: SPECIAL NEEDS UNIT

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
13		SECTION 13: DUPLEX SEMI-DETACHED UNIT (CONSISTING OF 2NO. HOUSING UNITS)				
13.1		Site Works	No.	2		
13.2		Foundations and floor slab	No.	2		
13.3		Superstructure brickwork up to wallplate height, excluding wallplate, but including window and door frames	No.	2		
13.4		Roof structure, roof coverings including barge boards and fascias	No.	2		
13.5		External plumbing, drainage, electrical conduits	No.	2		
13.6		Plaster internal and external	No.	2		
13.7		Ceilings complete including cornices	No.	2		
13.8		Internal plumbing, drainage and electrical (DB, wiring, plugs, switches and fittings)	No.	2		
13.9		Doors, glazing and ironmongery, painting completed	No.	2		
13.10		Apron and ramps completed	No.	2		
Total Carried Forward to Summary of Schedules					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 8: SPECIAL NEEDS UNIT

SECTION 14: SPECIAL NEEDS UNIT

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
14		SECTION 14: FREE STANDING UNIT				
14.1		Site Works	No.	3		
14.2		Foundations and floor slab	No.	3		
14.3		Superstructure brickwork up to wallplate height, excluding wallplate, but including window and door frames	No.	3		
14.4		Roof structure, roof coverings including barge boards and fascias	No.	3		
14.5		External plumbing, drainage, electrical conduits	No.	3		
14.6		Plaster internal and external	No.	3		
14.7		Ceilings complete including cornices	No.	3		
14.8		Internal plumbing, drainage and electrical (DB, wiring, plugs, switches and fittings)	No.	3		
14.9		Doors, glazing and ironmongery, painting completed	No.	3		
14.10		Apron and ramps completed	No.	3		
Total Carried Forward to Summary of Schedules					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 9: CIVIL ENGINEERING SERVICES

SECTION 15: SIDEWALKS

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
15		SECTION 15: SIDEWALKS				
15.1	SANS 1200 DM	SUBGRADE				
15.1.1	8.3.4	Excavate to narrow widths of less than 4 m wide to form cycling paths, sidewalks, walkways and use for bulk earthworks to shape site, sidewalks, roads and house platform. Fill material to be compacted to 95% modified AASHTO maximum dry density (or 100% in sand).	m ³	450		
15.2		SELECTED LAYERS				
15.2.1	8.3.3	Road bed preparation and compaction of material to 95% MAMDD (or 100% in sand) to a depth of 150 mm as lower selected layer under sidewalks	m ³	230		
15.2.2		Construct 150mm thick G7 selected subgrade layer with material imported from commercial sources, compacted to 95% of MAMDD (or 100% in sand)	m ³	230		
15.3	SANS 1200 ME	SUBBASE				
15.3.1	8.3.3	Supply and construct 150 mm thick subbase course with G5 material imported from commercial sources and compacted to 95% MAMDD for used under sidewalks.	m ³	190		
15.4	SANS 1200 MH	ASPHALT SURFACING				
15.4.1	8.5.1	Prime coat using MC30 grade cutback bitumen applied at a rate of 0.7 l/m ²	m ²	1300		
15.4.2	8.5.3	Tack coat using 60% stable grade bitumen emulsion diluted with water at 1:1 ratio (Provisional)	m ²	1300		
15.4.3	8.5.4 8.4.2	30 mm thick continuously graded fine (7.1mm max.) asphalt surfacing using: 60/70 penetration grade bitumen (for side walks and walkways)	m ²	1300		
15.4.4		f) Sunken edge kerbs (E1) laid on curves of radius over 1m and up to 4m	m	5		
15.4.5		laid on curves of radius over 4m and up to 20m	m	200		
15.4.6		laid on straights and curves of radius greater than 20m	m	1150		
Total Carried Forward					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 9: CIVIL ENGINEERING SERVICES

SECTION 15: SIDEWALKS

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
Brought Forward						R
15.5	SANS 1200 MM	ANCILLARY ROADWORKS				
15.5.1	8.3	PERMANENT ROAD SIGNS				
15.5.1.1	8.3.6	Statutory Signs, Street Names, and the Like, Supplied and Erected Complete				
	(i)	Stop sign (R1) - 610mm	No.	11		
	(ii)	W-Series (W401) - 150mm x 600mm	No.	14		
15.5.2	8.4	ROAD MARKINGS				
15.5.2.1	8.4.1	Non-reflectorised paint applied at a nominal rate of 0.42 l/m ² (including pre-marking): White lines (broken or unbroken)				
	(a)	White lines (broken or unbroken)				
	(i)	GM2 type (100mm wide)	m	120		
	(ii)	RTM1 type (300mm wide)	m	60		
	(iii)	RM1 type (100mm wide)	m	100		
15.5.2.2	PSMM 8.4.1(c)	(c) White characters and symbols				
		(i) Stop sign	No.	11		
15.5.2.3	8.4.4	Setting out and Premarking				
	(a)	Lines	m	280		
	(b)	Special markings				
	(i)	Stop sign	No.	11		
1.5.2.4	PSMM 8.4.5	Extra-Over for item 8.4.1 to reflectorise paint using	m ²	70		
15.5.2.5	PSMM 8.4.6	Remove existing road markings by sandblasting	m ²	50		
Total Carried Forward						R

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 9: CIVIL ENGINEERING SERVICES

SECTION 15: SIDEWALKS

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
Brought Forward						R
15.6		PEDESTRIAN SLOPES				
15.6.1		Construct pedestrian slopes complete as detailed on Drg no. 23-006-01-10-600-T-00, including tactile warning indicators, tactile directional indicators, cutting tactile indicators where necessary, bedding sand, concrete, formwork. Layerworks measured elsewhere.	No.	20		
15.6.2		Construct 75 mm thick G5 subbase layer with material imported from commercial sources, compacted to 95% of MAMDD, for use under pedestrian slopes.	m ³	5		
15.6.3		Construct 150 mm thick G7 selected layer with material imported from commercial sources, compacted to 95% of MAMDD (or 100% in sand), for use under pedestrian slopes.	m ³	Rate Only		
15.7	SANS 1200 DM	VERGES				
15.7.1	8.3.3	Road bed preparation and compaction of material to 93% of modified AASHTO maximum dry density (or 100% in sand) to a depth of 150 mm as selected layer under verges	m ³	Rate Only		
15.7.2	8.3.3	Construct 75 mm thick gravel layer using material from commercial sources compacted to 95% MAMDD	m ³	Rate Only		
15.7.3	SANS 1200 ME 8.3.5	Process gravel by stabilisation	m ³	Rate Only		
Total Carried Forward to Summary of Schedules						R

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 10: HARD LANDSCAPE WORKS

SECTION 16: SITE CLEARANCE

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
16	SANS 1200C	SECTION 16: SITE CLEARANCE				
16.1		Clear and grub site including trees and stumps of girth up to 1m	m ²	Rate Only		
		Break up and remove and dispose of (at approved tip site) existing hard surfaces:				
16.2		Asphalt / concrete surfaces	m ²	Rate Only		
Total Carried Forward To Summary					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 10: HARD LANDSCAPE WORKS

SECTION 17: HARD LANDSCAPE EARTHWORKS

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
17		SECTION 17: HARD LANDSCAPE EARTHWORKS				
17.1		Grading and compaction to 98% modified AASHTO to create level surface with maximum 1:100 fall (also refer to SANS 1200D)				
17.1.1		Play park: rubber surfaces	m ²	80		
17.1.2		Retaining walls (including steps and landings)	m ²	Rate Only		
17.1.3		Pedestrian pathways: asphalt	m ²	466		
17.1.4		Remaining soft landscape areas NOTE: GRADING ONLY	m ²	1659		
17.2	SANS 1200D	BULK EXCAVATION				
17.2.1		Excavate in all materials and use for embankment or backfill or dispose, as ordered.	m ³	100		
17.3	SANS 1200D	IMPORTING OF MATERIALS				
17.3.1		Extra over for importation of suitable G7 material from commercial sources or from borrow pits	m ³	100		
Total Carried Forward To Summary					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 10: HARD LANDSCAPE WORKS

SECTION 18: FENCING

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
18		SECTION 18: FENCING				
18.1		Provide for 1.2m high Betafence or similar approved.				
18.1.1		Betaview (or equivalent) security fence panels - Size: 2900mm (w) x 1200mm (h) with apertures of 76.2mm x 12.7mm rigid security mesh panels with bends. Core wire (3mm horizontal & 4mm vertical) to be manufactured with Zinc Alu coated wire. coated wire. ZincaLu Super coated to SANS 10244-2:2003 specification (min. 275g/m ²) wire coating is a coating consisting of (95%) Zinc and (5%) Aluminium. X 2,8 lifespan of galvanising. Additional PVC Coating (3,40mm thick) Anthracite RAL 7021.	m	215		
18.1.2		Betaview (or equivalent) Secure Posts: H-shaped profile post 60mm x 80mm x 2mm wall thickness. Height: 1200mm with PVC cap. Security fixators to be used to secure the panels to the posts. Fixators to be bolted together through the post and secured using tamper proof shearnuts (no self tapping screws). All fittings to be stainless steel. Additional PVC Coating (3,40mm thick) Anthracite RAL 7021. All Foundations to be 700mm (d)x 400mm (w)x 400mm (h) concrete.	m	215		
18.2		Provide for 1,2m high Nylofor (or equivalent) Medium Fence or similar approved.				
18.2.1		Nylofor (or equivalent) Medium ® fence panels - size: 2500mm (w) x 1200mm (h) with apertures of 50mm x 100mm rigid mesh, medium security, panels. Core wire (3,65mm) to be manufactured with Zinc Alu coated wire. ZincaLu super coated to SANS 10244-2:2003 specification (min. 275g/m ²) wire coating is a coating consisting of (95%) Zinc and (5%) Aluminium. X 2,8 lifespan of galvanising Additional PVC Coating (4,05mm thick). Anthracite RAL 7021	m	215		
18.2.2		Betafix (or equivalent) Secure Posts: H - shaped profile post 70mmx 44mm x 1.6mm that allow the panels to fit inside the lip of the post. Height: 1200mm HDG with additional PVC Coating (as above). Mini spider fixators to be used to secure the panels to the posts. Fixators to be bolted together through the post and secured using tamper proof shearnuts (no self tapping screws). All fitting to be stainless steel. All Foundations to be 600mm (d) x 400mm (h) x 400mm (w) concrete.	m	215		
Total Carried Forward To Summary					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 10: HARD LANDSCAPE WORKS

SECTION 19: HARD LANDSCAPING

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
19		SECTION 19: HARD LANDSCAPING				
19.1		SELECTED LAYERS				
19.1.1		Selected layer preparation and compaction of material to 95% MAMDD (or 100% in sand) to a depth of 150mm as lower selected layer under paving	m ³	82		
19.1.2		Extra over item 18.1.1 for importation of G9 quality material from commercial sources.	m ³	5		
19.1.3		"Construct 150mm thick G7 selected subgrade layer with material imported from commercial sources, compacted to 95% of MAMDD (or 100% in sand)"	m ³	82		
19.2	SANS 1200ME	SUBBASE				
19.2.1		Supply and construct 150 mm thick subbase course with G5 material imported from commercial sources and compacted to 95% MAMDD for use under paving layer.	m ³	82		
19.3		Edging to hard / soft surfaces				
19.3.1		Supply and install E1 edging as per detail.	m	250		
19.3.2		Extra over item 18.3.1 for cutting of E1 kerb at 45°	No.	25		
19.3.3		Supply and install MK10 edging as per detail.	m	250		
19.3.4		Extra over item 18.3.3 for cutting of MK10 kerb at 45°	No.	25		
19.3.5		Supply and install BK1 edging as per detail.	m	250		
19.3.6		Extra over item 18.3.5 for cutting of BK1 kerb at 45°	No.	25		
19.4		SURFACE TREATMENT				
19.4.1		Provide for the building of seat retaining walls (including modular precast coping to detail).	m	18		
19.4.2		Paving: 200x100x70mm exposed sandstone aggregate interlocking pavers to approved sample. 6 9mm ø Table Mountain Sandstone aggregate. Layerworks to Engineer's specification.	m ²	Rate Only		
19.4.3		30mm thick medium, continuously graded asphalt surfacing using 50/70 penetration grade bitumen, including prime coat (MC 30 grade cutback bitumen) applied at a rate of 0.7l/m ² and tack coat using 60% stable grade bitumen emulsion diluted with water at a 1:1 ratio.	m ²	466		
19.4.4		Supply & installation of 1800mm (l), 500mm (w), 450mm high from FFL precast concrete bench from Ubuntu Concrete Works (or equivalent). Charcoal colour, footing and fixing as per Engineers specification.	No.	8		
Total Carried Forward					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 10: HARD LANDSCAPE WORKS

SECTION 19: HARD LANDSCAPE

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
Brought Forward						R
19.4.5		Supply & install 'Bastion' (or equivalent) square bollards from Ubuntu Concrete Works (or equivalent) supplier. Footing and fixing as per Engineer's specification.	No.	10		
19.4.6		Supply & install Street Sign - Code W308. Secured to standard galvanized steel sign pole as per CoCT's street sign standards.	No.	5		
19.5		Supply and install (rubber surfaces):				
19.5.1		Asphalt base: 30mm thick medium, continuously graded asphalt surfacing using 50/70 penetration grade bitumen, including prime coat (MC 30 grade cutback bitumen) applied at a rate of 0.7l/m ² and tack coat using 60% stable grade bitumen emulsion diluted with water at a 1:1 ratio.	m ²	80		
19.5.2		Concrete base: supply and install 100mm thick grade 25 MPa / 19mm stone mix (1:3:6 cement: sand: stone) including mesh reference 193 reinforcing.	m ²	80		
19.5.3		Supply and place 'Wetpour' (or equivalent) EPDM, 25mm thick. Base layer, (minimum 15mm thick) : black recycled tyre rubber granule (5mm diameter). Top layer (minimum 10mm thick) EPDM (1-3mm diameter) rubber crumb of homogeneous specified colours. All to manufacturer's specifications & design drawing layouts.	m ²	80		
19.5.4		Supply and place 'Wetpour' (or equivalent) EPDM, 50mm thick. Base layer, (minimum 40mm thick) : black recycled tyre rubber granule (5mm diameter). Top layer (minimum 10mm thick) EPDM (1-3mm diameter) rubber crumb of homogeneous specified colours. All to manufacturer's specifications & design drawing layouts.	m ²	80		
19.5.5		Supply and place coloured recycled tyre rubber granule (5mm diameter), 25mm thick. All to manufacturer's specifications & design drawing layouts.	m ²	80		
19.5.6		Supply and place coloured recycled tyre rubber granule (5mm diameter), 50mm thick. All to manufacturer's specifications & design drawing layouts.	m ²	80		
19.6		Supply and installation of play equipment for parks				
19.6.1		Supply and install playground 'Joy Wheel' 3m diameter as per detail. Painted with base coats and specified top colours.	No.	1		
19.6.2		Supply and install playground '2 Seater See-Saw' as per detail. Painted with base coats and specified top colours.	No.	1		
19.6.3		Basketball goal post	Sum	1		
19.6.4		Painted line: basketball court	Sum	1		
19.6.5		Painted lines: scooter track	Sum	1		
Total Carried Forward To Summary						R

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 10: HARD LANDSCAPE WORKS

		SUMMARY OF SECTIONS
SECTION	DESCRIPTION	AMOUNT (R)
16	SECTION 16: SITE CLEARANCE	
17	SECTION 17: HARD LANDSCAPE EARTHWORKS	
18	SECTION 18: FENCING	
19	SECTION 19: HARD LANDSCAPE	
Total Carried Forward to Summary of Schedules		R

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 11: SOFT LANDSCAPING WORKS

SECTION 20: SOFT LANDSCAPE EARTHWORKS

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
20		SECTION 20: SOFT LANDSCAPE EARTHWORKS				
20.1		EXCAVATE INSITU SOIL				
20.1.1		Excavate tree holes (No.39 x 250L/400L/2m palm tree & 1 x 1000L/7m palm tree) for planting in soft landscape areas - The volume is calculated from the quantity of trees by the specified size of the hole (1.2 x 1.2 x 1.2m) (=1.728m ³) & (1.5 x 1.5 x 1.5m) (=3.375m ³). Distribute unwanted material as per item 7.1.2 (40%).	m ³	71		
20.1.2		Distribute unwanted material as indicated by LA	m ³	28		
Total Carried Forward To Summary						R

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 11: SOFT LANDSCAPE WORKS

SECTION 21: PLANTING MEDIUM

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
21		SECTION 21: PLANTING MEDIUM				
21.1		Supply compost as per specification:				
21.1.1		Reliance medium compost (screened, mature product with particles not exceeding 30mm) or similar approved; to trees holes (40% of volume)	m³	28		
21.1.2		Reliance premium compost or similar approved; to trees holes (40% of volume)	m³	28		
21.1.3		Reliance medium compost (screened, mature product with particles not exceeding 30mm) or similar approved; to all shrub, groundcover & lawn areas (50mm x 1454m²)	m³	73		
21.1.4		Reliance premium compost or similar approved; to all shrub, groundcover & lawn areas (50mm x 1454m²)	m³	73		
21.1.5		Talborne Organics Vita Grow 2:3:2 (16) to all shrub, groundcover & lawn areas at 100g / m²	kg	166		
21.1.6		Gypsum to all tree holes: 1kg / m³	kg	71		
21.1.7		Bonemeal to all tree holes: 1kg / m³	kg	71		
21.1.8		500g Haifa Multicote Agri 8 Controlled Release Fertilizer	No.	39		
21.1.9		1kg Haifa Multicote Agri 12 Controlled Release Fertilizer	No.	1		
21.2		Tree Planting Preparation				
21.2.1		Supply & install Root Barrier liner to 4 sides of identified tree holes as instructed by the Landscape Architect. 'Plantex RootBarrier' from MarshallHinds or similar approved product. To be installed as per manufacturer's specifications.	m²	114		
21.2.2		Mix medium 60%-40% in-situ top soil : compost including organic fertiliser at: 1kg / m3 and place medium into tree pits	m³	71		
21.3		Shrub, groundcover & lawn planting area preparation				
21.3.1		Spread additives & compost to all shrub, groundcover & lawn planting areas & mix into soil to a depth of 300mm	m²	1659		
21.4		Post Planting				
21.4.1		Supply & spread coarse compost/mulch (screened mature product with particles not exceeding 50mm) from Reliance (50mm x 1035m²); mulch to be flush with edging- no mounts.	m³	52		
21.5		Topdressing				
21.5.1		Supply and spread topsoil / sand mix (sceened fine compost and washed sand, maximum particle size 12mm) from Reliance or similar approved (624m2 x 10mm). Spread 10mm thick on lawns, rake and roll level.	m³	6		
Total Carried Forward To Summary					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 11: SOFT LANDSCAPE WORKS

SECTION 22: PLANTING WORKS

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
22		SECTION 22: PLANTING WORKS				
		SUPPLY & PLANT (1659m ²)				
		Note: rates tendered for plants to be inclusive of supply and delivery: transport, holding, handling and mark-up. Note: numbers refers to individual plantlets and the amount of 6-packs etc. Excavate into planting fill, dust roots with bonemeal, place plant, backfill, compact and level surplus soil for:				
22.1		6pk Plantlets (365m ²)				
22.1.1		Portulacaria afra 'Prostrata'	No.	486		
22.1.2		Plectranthus neochilus	No.	486		
22.1.3		Statice perezii	No.	486		
22.1.4		Oscularia deltoides	No.	486		
22.1.5		Curio crassulifolius	No.	486		
22.1.6		Hermannia pinnata	No.	486		
22.1.7		Lobelia alata	No.	1116		
22.1.8		Monopsis lutea	No.	1116		
22.2		4L container size (465m ²)				
22.2.1		Juncus effesus	No.	186		
22.2.2		Zantedechia aetiopica	No.	186		
22.2.3		Kniphofia uvaria	No.	186		
22.2.4		Elegia nuda	No.	186		
22.3		10L container size				
22.3.1		Dovyalis caffra	No.	820		
22.3.2		Carissa macrocarpa	No.	820		
22.4		250L container size				
22.4.1		Citrus limon 'Eureka'	No.	3		
22.5		500L container size				
22.5.1		Syzygium guineense	No.	8		
22.5.2		Syzygium cordatum	No.	8		
22.5.3		Ficus rubiginosa	No.	20		
22.6		1000L container size				
22.6.1		Erythrina caffra	No.	1		
22.7		Lawn				
22.7.1		Roll-on-lawn	m ²	624		
22.7.2		Runners	m ²	624		
Total Carried Forward To Summary					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 11: SOFT LANDSCAPE WORKS

SECTION 23: SUNDRIES

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
23		SECTION 23: SUNDRIES				
23.1		Supply and place 19mm drainage stonechip underneath trees (100mm layer)	m ³	10		
23.2		Supply and place 19mm sandstone chip underneath trees (100mm layer)	m ³	10		
23.3		Supply and install tree stakes as per detail	No.	40		
Total Carried Forward To Summary						R

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 11: SOFT LANDSCAPE WORKS

SECTION 24: MAINTENANCE

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
23		SECTION 24: MAINTENANCE				
24.1		WATER METER				
24.1.1		Provide rate for the connection, supply + removal of a subwater meter to the main contractors supply	Sum	1		
24.2		IRRIGATION				
24.2.1		Allow for the hand watering of trees to ensure proper establishment as per specification.	Month	12		
24.2.2		Watering with treated affluent (price should include transport of treated affluent from nearest available waste water treatment works to water tanks at sports precinct as well as transport from water tanks to the necessary trees / landscaped areas)	Month	12		
24.3		WEEDING				
24.3.1		Allow for the manual weeding of tree, shrub and groundcover areas every second week. (1035m ²)	Month	12		
24.3.2		Allow for chemical control of weeds in all lawn areas, keeping the lawns weed free. (624m ²)	Month	12		
24.4		MOWING				
24.4.1		Mowing lawn area to maintain 20 to 30mm blade, include edge trimming. (624m ²)	Month	12		
24.5		SOIL TESTING				
24.5.1		Allow for soil testing and recommending fertilising - per sample	No.	2		
24.6		ADDITIVES AND FERTILISING				
		Grass: (624m ²)				
		Allow for supply and spread Talborne Organics fertilize:				
24.6.1		Autumn: Vita Grow 2:3:2 at 40g / m ²	kg	25		
24.6.2		Late Winter: Vita Veg 6:3:4 at 40g / m ²	kg	25		
24.6.3		Spring: Vita Veg 6:3:4 at 40g / m ²	kg	25		
24.6.4		Summer: Vita Green 5:1:5 at 40g / m ²	kg	25		
24.6.5		Loosen and aerate soil prior to topdressing	m ²	624		
24.6.6		Supply & spread a 10mm layer of lawn dressing from Reliance (a 50/50 mix of coarse sand and 12mm mature compost) every 6 months.	m ³	6		
24.7		Shrubs and Groundcovers: (1035m ²)				
24.7.1		Supply coarse compost/mulch (screened mature product with particles not exceeding 50mm) from Reliance or similar approved supplier, 50mm layer every 12 months.	m ³	10		
Total Carried Forward					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 11: SOFT LANDSCAPE WORKS

SECTION 24: MAINTENANCE

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
Brought Forward						R
24.8		Allow for supply and spread Talborne Organics fertilizer:				
24.8.1		Spring: Vita Green 5:1:5 (16) at 100g / m ²	kg	104		
24.8.2		Autumn: Vita Grow 2:3:2 at 100g / m ²	kg	104		
24.9		Trees:				
24.9.1		Supply and place 500g Haifa Multicote Agri 8 Controlled Release Fertilizer, or similar approved supplier, (39- 250L/400L/3m palm trees) or 1kg Haifa Multicote Agri 12 Controlled Release Fertilizer (1-1000L/7m palm trees) every 8 months.	No.	40		
24.10		HARD SURFACES				
24.10.1		Allow for manual weed control on all paving & asphalt areas (1367m ²)	month	12		
24.10.2		Allow for chemical weed control on all paving & asphalt areas (1367m ²) four times a year	3 months	4		
24.11		LITTER				
24.11.1		Keep planted areas clean of all litter (1659m ²)	month	12		
24.12		GENERAL				
24.12.1		Allow for all other maintenance work such as pest control, pruning of trees and palms, stake + tree guard upkeep.	month	12		
24.12.2		All administrative monitoring and reporting	month	12		
Total Carried Forward To Summary						R

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 10: SOFT LANDSCAPE WORKS

		SUMMARY OF SECTIONS
SECTION	DESCRIPTION	AMOUNT (R)
20	SECTION 20: SOFT LANDSCAPE EARTHWORKS	
21	SECTION 21: PLANTING MEDIUM	
22	SECTION 22: PLANTING WORKS	
23	SECTION 23: SUNDRIES	
24	SECTION 24: MAINTENANCE	
Total Carried Forward to Summary of Schedules		R

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 12: SITE SECURITY AND TEMPORARY FENCING

SECTION 25: SITE SECURITY

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
25		SECTION 25: SITE SECURITY				
25.1		Rate for <u>unarmed</u> security officers Monthly rate for a Security Officer working a 12-hour shift per day from Monday to Sunday both days inclusive. This rate shall apply to both day and night shifts as well as to any public holiday(s) that may fall during the period Monday to Sunday. The rate shall be for the following: The rate shall include transporting security officers to and from points of duty and one inspection per shift, per site by a senior security officer (Security Inspector/ Security Manager), perimeter patrols and guarding of units until handover. The Security Company to be PSIRA Registered.				
25.1.1		6 x Grade C Night Time Guards per month	month	12		
25.1.2		6 x Grade C Day Time Guards per month	month	12		
25.2		Security Equipment				
25.2.1		1 x Communication and/or Monitoring Device	month	12		
25.2.2		4 x Two-way Radios	month	12		
25.2.3		1 x Base radio	month	12		
25.2.4		2 x Hire of Guard Shelter ("Hut"/Sentry Box) Suitable Temporary Unit	month	12		
25.2.5		1 x Hire of Portable Toilets (Delivered, Serviced, Removed)	month	12		
Total Carried Forward To Summary					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 12: SITE SECURITY AND TEMPORARY WORKS

SECTION 26: TEMPORARY WORKS

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
26	SANS 1200 A	SECTION 25: TEMPORARY WORKS				
	8.8	Temporary Works				
26.1	8.8.2	Deal with traffic and maintain road (or accommodation of traffic)	Sum	1.0		
26.2	8.8.4	Existing services				
26.2.1		Excavate by hand in soft material to expose existing services as directed by the Engineer	m ³	106.0		
26.3		Temporary barricade fence to be used for isolating sectional completion of works:				
26.3.1		Supply and erect temporary barricade fence. Fence to consist of 2.1 m high heavy duty steel panels, panel frame to be 32 mm diameter steel sections with anti-climb 4mm diameter weld mesh infill (maximum 60 mm horizontal aperture width) or similar approved. Entire fence to be hot dipped galvanised. Rate to include for concrete fence feet, fence clamps and fence staves.	m	300.0		
26.3.2		Dismantle and re-erect temporary barricade fence	m	900.0		
26.3.3		Dismantle temporary barricade fence and remove from site	m	300.0		
Total Carried Forward To Summary					R	

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SCHEDULE 12: SITE SECURITY AND TEMPORARY WORKS

		SUMMARY OF SECTIONS
SECTION	DESCRIPTION	AMOUNT (R)
25	SECTION 25: SITE SECURITY	
26	SECTION 26: TEMPORARY WORKS	
Total Carried Forward to Summary of Schedules		R

CONSTRUCTION OF EDWARD AVENUE HOUSING DEVELOPMENT

SUMMARY OF SCHEDULES

SCHEDULE NO.	SUMMARY	PAGE NO.	AMOUNT (R)
1	PRELIMINARIES (SECTIONS A, B AND C)	53	
2	DISTRIBUTION AND STREET LIGHT INFRASTRUCTURE	71	
3	SINGLE STOREY FREE-STANDING UNIT	72	
4	SINGLE STORY SEMI-DETACHED UNIT	73	
5	DUPLEX FREE-STANDING UNIT	74	
6	DUPLEX SEMI-DETACHED UNIT	75	
7	SPECIAL NEEDS UNITS - DUPLEX SEMI-DETACHED UNIT	76	
8	SPECIAL NEEDS UNITS - FREE STANDING UNIT	77	
9	CIVIL ENGINEERING SERVICES	80	
10	HARD LANDSCAPING WORKS	86	
11	SOFT LANDSCAPING WORKS	93	
12	SITE SECURITY AND TEMPORARY WORKS	96	
	SUB-TOTAL (NETT)		R
	<u>CONTINGENCIES</u> Allow the sum of 10% (ten percent) of the above Sub-total for Contingencies to be spent as the Employer's Agent may direct and to be deducted in whole or in part If not required		R
	TOTAL (INCLUDING CONTINGENCIES)		R
	<u>VALUE ADDED TAX</u> ADD: VAT at the rate of 15%		R
	Carried to Part C1.1 Form of Offer and Acceptance		R