

SECTION 1: PRELIMINARY AND GENERAL						
Item	Payment Refers	Description	Unit	Quantity	Rate	Amount
1	SANS 1200 A	SECTION 1: PRELIMINARY AND GENERAL				
		GENERAL as specified in SANS 1200 A and in the Scope of Work				
1.1	8.3	SCHEDULED FIXED-CHARGE AND VALUE RELATED ITEMS:				
1.1.1	8.3.1 PSA 8.3.1	Contractual requirements	Sum	-	-	
	8.3.2	Establishment of facilities on the site:				
	8.3.2.1 PSA 8.3.2.1	(a) Facilities for Employer's Agent :				
1.1.2		(i) One Contract nameboard	Prov Sum	-	-	R 8,000.00
1.1.3	8.3.2.2 PSA 8.3.2.2	(b) Facilities for Contractor	Sum	-	-	
1.1.4	8.3.3	Other fixed-charge obligations	Sum	-	-	
1.1.5	8.3.4	Removal of site establishment	Sum	-	-	
1.2	8.4	SCHEDULED TIME RELATED ITEMS : (Refer PSA 8.1.2.1 and PSA 8.2.2)				
1.2.1	8.4.1 PSA 8.4.1	Contractual requirements	Sum	-	-	
	8.4.2	Operation and maintenance of facilities on site for duration of construction :				
	8.4.2.2 PSA 8.4.2.2	(b) Facilities for Contractor				
1.2.2	8.4.3	Supervision for duration of construction	Sum	-	-	
1.2.3	8.4.4	Company and head office overhead costs for the duration of the contract	Sum	-	-	
1.2.4	8.4.5	Other time related obligations	Sum	-	-	
	8.4.6 PSA 8.4.6	Compensation in terms of clauses 5.12.2.4 and 9.1.4 of the Conditions of Contract for delays incurred:				
1.2.5		(a) Plant	Sum/day	4		
1.2.6		(b) Labour	Sum/day	4		
1.2.7		(c) Supervision	Sum/day	4		
1.2.8		(d) Other services, facilities etc. not covered by 1.2.5 through to 1.2.7	Sum/day	4		
1.3	PSA 8.5	SUMS STATED PROVISIONALLY BY THE ENGINEER:				
	PSA 8.5.1	(a) Works Executed by the Contractor				
1.3.1		Allowance for electrical works by Kouga Municipality	Prov Sum	-	-	R 200,000.00
1.3.2		Allowance for additional survey work	Prov Sum	-	-	R 20,000.00
TOTAL CARRIED FORWARD						

SECTION 1: PRELIMINARY AND GENERAL						
Item	Payment Refers	Description	Unit	Quantity	Rate	Amount
BROUGHT FORWARD						
	PSA 8.5.2	(b) Works Executed and performed by the Selected Subcontractors in Consultation with the Employer				
1.3.3		Telemetry installation	Prov Sum	-	-	R 150,000.00
1.3.4		Overheads, charges and profits on 1.3.3	%	R 150,000		
1.4	PSA 8.6	PRIME COST SUMS:				
1.4.1	PSA 8.6.1 (a)	Allowance for acceptance control testing by Employer's Agent (not for process control testing to be carried out by the Contractor)	PC Sum	-	-	R 10,000.00
1.4.2	PSA 8.6.1 (b)	Overheads, charges and profit on 1.4.1 above	%	R 10,000		
1.4.3	PSA 8.6.1 (a)	Allowance for payment of a Community Liaison Officer employed by Contractor	PC Sum	-	-	R 50,000.00
1.4.4	PSA 8.6.1 (b)	Overheads, charges and profit on 1.4.3 above	%	R 50,000		
1.5	8.7 PSA 8.7	DAYWORK				
		(a) Labour: (rates shall include for on costs)				
1.5.1		(i) Unskilled	hour	24		
1.5.2		(ii) Semi-skilled	hour	16		
1.5.3		(iii) Ganger	hour	8		
1.5.4		(iv) Artisan	hour	16		
		(b) Materials:				
1.5.5		Allow Provisional sum for materials based on their nett cost	Prov Sum	-	-	R 30,000.00
1.5.6		Charge required by Contractor on 1.5.5 above	%	R 30,000		
		(c) Plant: (Rates shall include for on costs)				
1.5.7		(i) Rubber tyred front-end loader minimum 90 kW (Caterpillar 908 or equivalent) State make and model	hour	8		
1.5.8		(ii) Backhoe Loader minimum 60 kW (Caterpillar 416D or equivalent) State make and model	hour	24		
1.5.9		(iii) Motor grader minimum 123 kW (Caterpillar 140H or equivalent) State make and model	hour	4		
1.5.10		(iv) Bull dozer minimum 108 kW (Caterpillar D6 or equivalent) State make and model	hour	4		
1.5.11		(vi) Excavator minimum 20 tons 103 kW (Caterpillar 302C or equivalent) State make and model	hour	8		
TOTAL CARRIED FORWARD						

SECTION 1: PRELIMINARY AND GENERAL						
Item	Payment Refers	Description	Unit	Quantity	Rate	Amount
BROUGHT FORWARD						
1.5.12		(vi) Excavator minimum 40 tons 103 kW (Caterpillar 302C or equivalent) State make and model	hour	4		
1.5.13		(vii) Water Tanker Truck minimum 15 m ³ capacity State make and model	hour	4		
1.5.14		(viii) Compressor complete with hand tools and attachments - minimum 250 cfm State make and model	hour	8		
1.5.15		(ix) Tip Truck - minimum truck capacity of 5m ³ State make and model	hour	4		
1.5.16		(x) Revolving drum type concrete mixer - minimum capacity 0,3 m ³ State make and model	hour	8		
1.5.17		(xi) Pedestrian type vibrating roller (Bomag BW65H or equivalent) State make and model	hour	4		
1.5.18		(xii) Compaction vibrating roller - Single Drum Smooth - Self Propelled - minimum 12 tons State make and model	hour	4		
1.5.19		(xiii) Compaction vibrating roller - Single Drum Padded or Grid - Self Propelled - minimum 12 tons State make and model	hour	4		
1.6	8.8 PSA 8.8	TEMPORARY WORKS				
	8.8.4 PSA 8.8.4 (c)	Existing services				
1.6.1		(a) Excavate by hand in soft material to expose existing services	m ³	50		
	8.8.5 PSA 8.8.5	Cost of survey in terms of Land Survey Act:				
1.6.2		(a) Locate, record and protect erf boundaries and survey pegs	Sum	-		
1.6.3		(b) Replace pegs recorded as missing at commencement of Contract as well as pegs removed in terms of PSA 5.1.2 (a), (b) and (c)	No	-		Rate Only
1.6.4		Setting out of the works as per coordinates shown on construction drawings	Sum	-	-	
1.6.5	PSA 8.8.6	Dealing with water	Sum	-	-	
1.7	PSA 8.8.7 PB	Compliance with the Occupational Health and Safety Act (Act 85 of 1993) and all relevant and applicable Regulations, especially the Construction Regulations, 2014 as promulgated on 7 February 2014 under Section 43 of the Occupational Health and Safety Act (Act 85 of 1993), as amended from time to time, for the duration of the Contract				
1.7.1		- Contractor	Sum	-	-	
1.7.2		- Subcontractors (own)	Sum	-	-	
TOTAL CARRIED FORWARD TO SUMMARY						

SECTION 2: SITE CLEARANCE						
Item	Payment Refers	Description	Unit	Quantity	Rate	Amount
2		SECTION 2: SITE CLEARANCE				
2.1	SABS 1200C	SITE CLEARANCE: as specified in SABS 1200 C and in the Scope of Work				
	8.2.1 PSC8.2.1	Clear and grub:				
2.1.1		- Clear 5.0 m wide strip along route of bulk water pipeline	m	950		
2.1.2		- Borehole kiosks	m ²	300		
	8.2.2	Remove and grub large trees and tree stumps of girth:				
2.1.3		- Up to and including 1.0 m	No	4		
2.1.4		- Over 1.0 m and up to and including 2.0 m	No	-		Rate Only
2.1.5	8.2.5 PSC 8.2.5	Take down and re-erect existing fences where ordered	m	50		
	8.2.10 PSC 8.2.10	Remove topsoil, stockpile and maintain of depths indicated:				
2.1.6		- Depth up to 150mm	m ³	1150		
2.1.7		- Depth exceeding 150mm up to 200mm	m ³	-		Rate Only
2.1.8		- Depth exceeding 200mm up to 250mm	m ³	-		Rate Only
2.1.9		- Depth exceeding 250mm up to 300mm	m ³	-		Rate Only
2.1.10	PSC 8.2.11	Final finishing and cleaning up of site	Sum	-	-	
TOTAL CARRIED FORWARD TO SUMMARY						

SECTION 3: PIPELINES						
Item	Payment Refers	Description	Unit	Quantity	Rate	Amount
3		SECTION 3: PIPELINES				
3.1	SANS 1200DB	EARTHWORKS (PIPE TRENCHES): as specified in SANS 1200 DB and in the Scope of Work				
	8.3.2	Excavation:				
	8.3.2a PSDB 8.3.2(a)	(a) Excavate in all materials for trenches, backfill, compact and dispose of surplus material: (i) Trenches of width 800 mm to accommodate pipe diameters up to and including 200 mm:				
3.1.1		- Depth up to 1.0m	m	-		Rate only
3.1.2		- Depth exceeding 1.0m up to 1.5m	m	900		
3.1.3		- Depth exceeding 1.5m up to 2.0m	m	50		
3.1.4		- Depth exceeding 2.0m up to 2.5m	m	-		Rate only
	8.3.2b PSDB 8.3.2 (b)	(b) Extra over Items 4.1.1 through to 4.1.4 for:				
3.1.5	PSDB8.3.2(b)2	(i) Hard rock excavation	m³	95		
3.1.6	PSDB8.3.2(b)3	(ii) Hand excavation where ordered	m³	150		
3.1.7	PSDB8.3.2(b)4	(iii) Hand backfilling machine trenches where ordered	m³	-		Rate only
3.1.8	PSDB8.3.2(b)5	(iv) Selective stockpiling of topsoil where ordered	m³	150		
3.1.9	PSDB8.3.2(b)6	(v) Disposing of spoil material on a site provided by the Contractor	m³	450		
3.1.10	PSDB8.3.2(b)7	(vi) Backfill stabilised with 5% cement where ordered	m³	-		Rate only
3.1.11	PSDB8.3.2(b)8	(vii) Soilcrete backfill where ordered	m³	-		Rate only
3.1.12	8.3.2 (c)	(c) Excavate and dispose of unsuitable material from trench bottom	m³	150		
3.1.13	8.3.2 (d)	(d) Excavate in all materials for valve chambers and the like, irrespective of depth and backfill around structures	m³	75		
	8.3.3	Excavation ancillaries				
	8.3.3.1 PSDB 8.3.3.1	Make up deficiency in backfill material:				
3.1.14		(a) From other necessary excavations on Site (b) By importation from commercial or off-site sources selected by the Contractor	m³	-		Rate Only
3.1.15		(i) Subbase quality material complying with subclause 3.5 of SABS 1200 DB and PSDB 3.5	m³	175		
3.1.16	8.3.3.3 PSDB 8.3.3.3	Compaction in road crossings (95% of modified AASHTO maximum density)	m³	50		
TOTAL CARRIED FORWARD						

SECTION 3: PIPELINES						
Item	Payment Refers	Description	Unit	Quantity	Rate	Amount
BROUGHT FORWARD						
	8.3.5	Existing services that intersect or adjoin a pipe trench				
	8.3.5a	(a) Services that intersect a trench				
3.1.17		- Cables	No	5		
3.1.18		- uPVC duct	No	1		
3.1.19		- Stormwater pipes up to 600mm diameter	No	1		
3.1.20		- Sewer pipes up to 300mm diameter	No	1		
3.1.21		- Water mains up to 300mm diameter	No	1		
3.1.22		- Water erf connections up to 32mm diameter	No	-		Rate Only
	8.3.5b	(b) Services that adjoin a trench				
3.1.23		- Cables	m	10		
3.1.24		- uPVC duct	m	10		
3.1.25		- Stormwater pipes up to 600mm diameter	m	10		
3.1.26		- Sewer pipes up to 300mm diameter	m	10		
3.1.27		- Water mains up to 300mm diameter	m	10		
3.1.28		- Water erf connections up to 32mm diameter	m	-		Rate Only
	8.3.6	Finishing:				
	8.3.6.1	Reinstate road surfaces				
	PSDB 8.3.6.1					
3.1.29		(a) Backfill using Trenchfill	m³	-		Rate Only
3.1.30		(b) Hot asphalt type IVA (min thickness 40mm)	m²	-		Rate Only
3.1.31		(c) Gravel on shoulders	m³	-		Rate Only
3.1.32		(d) Concrete Driveways and Walkways (min thickness 100mm)	m²	-		Rate Only
3.1.33		(e) Grass verges and Lawns	m²	-		Rate Only
3.1.34		(f) Paved driveways (using paving from secure area)	m²	-		Rate Only
TOTAL CARRIED FORWARD						

SECTION 3: PIPELINES						
Item	Payment Refers	Description	Unit	Quantity	Rate	Amount
BROUGHT FORWARD						
3.2	SANS 1200LB	BEDDING (PIPES) as specified in SANS 1200LB and Scope of Work				
		(a) From trench excavation:				
3.2.1		- Selected granular material	m ³	-		Rate Only
3.2.2		- Selected fill material	m ³	-		Rate Only
	8.2.2	(b) Supply only of bedding by importation:				
	8.2.2.1	(i) From other necessary excavations (Provisional)				
3.2.3		- Selected granular material	m ³	-		Rate Only
3.2.4		- Selected fill material	m ³	-		Rate Only
	8.2.2.3	(ii) From commercial sources:				
3.2.5		- Selected granular material	m ³	114		
3.2.6		- Selected fill material	m ³	-		Rate Only
3.2.7	PSLB 8.2.2.3c	- 6.7mm concrete stone to SABS 1083	m ³	75		
	PSLB 8.2.3	Concrete bedding cradle				
3.2.8		Class A, 20MPa/19, section 600x300mm, shuttered on both sides with pipes tied down to prevent floating	m ³	-		Rate Only
3.2.9	8.2.4 PSLB 8.2.4	Encasing of pipes in 20MPa/19 Concrete:	m ³	-		Rate Only
3.2.10	PSLB 8.2.6	Supply and install geofabric material (Kaytech A2 or similar approved)	m ²	500		
3.3	SANS 1200L	MEDIUM PRESSURE PIPELINES as specified in SANS 1200 L and Scope of Work				
	8.2.1 PSL 8.2.1	Supply, lay, joint, bed and test complete with couplings:				
		(a) uPVC class 12 pipes in bedding for flexible pipes of sizes stated:				
3.3.1		- 160 mm dia (OD)	m	950		
TOTAL CARRIED FORWARD						

SECTION 3: PIPELINES						
Item	Payment Refers	Description	Unit	Quantity	Rate	Amount
BROUGHT FORWARD						
	8.2.2 PSL 8.2.2	Extra over Item 4.3.1 for the supplying, laying, jointing, bedding and testing of specials (complete with ancillaries and couplings): (a) uPVC fittings: (i) Socket ended uPVC bends of diameter, degrees and class stated: 3.3.2 - 160mm x 11.25 ⁰ bend, class 16 3.3.3 - 160mm x 22.5 ⁰ bend, class 16 3.3.4 - 160mm x 45 ⁰ bend, class 16 3.3.5 - 160mm x 90 ⁰ bend, class 16 (ii) Repair couplings of diameters stated: 3.3.6 - 160mm dia (OD) (b) Cast iron fittings: (i) Socket ended end caps for uPVC pipes of outside diameters stated: 3.3.7 - 160mm dia (OD) (ii) Flanged adaptors for uPVC pipes of outside diameters 3.3.8 - 160mm dia (OD) (c) Steel fittings: (i) Valve spindle extension pieces: 3.3.9 - 600mm long (ii) Medium duty steel reducers, flanged both ends, for pipes of outside diameters stated: 3.3.10 - 150mm NB x 65mm NB 3.3.11 - 150mm NB x 80mm NB (d) Specials and fittings for assembly in air valve chamber complete as detailed on drawings: 3.3.12 - 160mm Viking Johnson flanged adaptor for uPVC pipes 3.3.13 - 160mm Cast Iron Flanged Adaptors for uPVC pipes 3.3.14 - 150mm NB x 100mm NB medium duty steel reducing Tee, Flanged all ends 3.3.15 - 100mm NB x 50mm NB medium duty steel reducer, flanged both ends, 169.7 mm face to face 3.3.16 - 50mm class 16 flanged gate valve 3.3.17 - 50mm Ø Variant LN Series Anti-Theft Air Valve				
TOTAL CARRIED FORWARD						

SECTION 3: PIPELINES						
Item	Payment Refers	Description	Unit	Quantity	Rate	Amount
BROUGHT FORWARD						
3.3.18	8.2.3 PSL 8.2.3 					

SECTION 3: PIPELINES						
Item	Payment Refers	Description	Unit	Quantity	Rate	Amount
BROUGHT FORWARD						
	8.2.13 PSL 8.2.13	Chambers:				
	PSL 8.2.13a	(a) Valve chambers, etc.:				
3.3.35		- Valve chambers outside carriageways to details shown on drawings	No	1		
3.3.36		- Air valve chambers to details shown on drawings	No	2		
3.3.37		- Scour valve chambers to details shown on drawings	No	2		
3.3.38		- Flowmeter chambers to details shown on drawings	No	1		
	PSL 8.2.13b	(b) Extra over for chambers of depth exceeding 1.5m				
		(i) Air valve chamber				
3.3.39		- Depth 1.5m up to 2.0m	No	2		
		(ii) Scour valve chamber				
3.3.40		- Depth 1.5m up to 2.0m	No	-		Rate only
		(iii) Flowmeter valve chamber				
3.3.41		- Depth 1.5m up to 2.0m	No	1		
	PSL 8.2.16	Supply and install valve, hydrant and pipeline markers				
3.3.42		- Valve markers to details on drawings	No	2		
3.3.43		- Pipeline markers to details on drawings	No	10		
TOTAL CARRIED FORWARD TO SUMMARY						

SECTION 4: BOREHOLE KIOSKS						
Item	Payment Refers	Description	Unit	Quantity	Rate	Amount
4		SECTION 4: BOREHOLE KIOSKS				
4.1	SABS 1200DA	EARTHWORKS (SMALL WORKS) as specified in SABS 1200DA and in the Scope of Work				
	8.3.1	Excavation				
4.1.1		a) Excavate in all materials and use for embankment or backfill or dispose, as ordered.	m ³	40		
	8.3.4	Importing of Materials from Commercial Sources or from Borrow Pits				
4.1.2		a) Bottom 150mm insitu material compacted to 93% MOD AASHTO	m ³	18		
4.1.3		b) G7 material compacted to 93% MOD AASHTO in 150mm layers	m ³	18		
4.1.4		c) G5 material compacted to 95% MOD AASHTO in 150mm layers	m ³	16		
4.2	SABS 1200GA	CONCRETE (SMALL WORKS) as specified in SABS 1200GA and in the Scope of Work				
		Reinforcement				
4.2.1	8.3.2	High Tensile Welded Mesh - Ref 254	m ²	66		
	8.4	Concrete Items				
	8.4.3	Strength Concrete, Grade 25/19				
4.2.2		- Borehole Chamber & Kiosk Raft Foundation	m ³	10		
4.2.3		Thrust Blocks for Puddle Pipes including steel reinforcing as per Drawing and Engineers detail	No	4		
	8.4.4	Uniformed Surface Finishes				
4.2.4		a) Steel Floated Finish	m ²	66		
4.3		WATERPROOFING				
4.3.1		a) Damp proof course in walls	m	90		
4.3.2		b) Damp proof membrane under floors	m ²	100		
4.3.3		c) 10mm Jointex with high elasticity self leveling silicone sealant (ABE DOW Corning 890-SI or similar approved)	m	6		
TOTAL CARRIED FORWARD						

SECTION 4: BOREHOLE KIOSKS						
Item	Payment Refers	Description	Unit	Quantity	Rate	Amount
BROUGHT FORWARD						
4.4	PE 10	BUILDING WORK as specified in particular specification PE				
	PE 10.1	Brickwork, 14 Mpa NFX facing complete with 75mm brickforce every third layer and wall cavity ties				
4.4.1		230mm Facebrick wall for Borehole Chamber and Kiosk (maximum height 3m)	m ²	160		
4.4.2		Precast concrete lintels 1500mmx108mmx70mm	No	2		
4.4.3		Install facebrick headercourse above pedestrian door (brick trimmed to suit and on edge)	m	8		
4.4.4		Lockable Steel Door including 500mmx500mm Louvre	No	4		
4.4.5		Louvres 700mmx150mm	No	4		
4.4.6		40mm PE 80 PN12,5 black HDPE pipes in bedding for flexible pipes	m	12		
		Plaster				
4.4.7		One coat 15mm thick smooth cement plaster narrow widths to top of walls	m ²	200		
4.5	SANS1200G 8.1	CONCRETE (STRUCTURAL) SCHEDULED FORMWORK ITEMS				
4.5.1	8.1.1	Rough: Vertical to sides of raft foundation in narrow widths (300mm high)	m ²	16		
4.5.2	8.2.2	Smooth: Horizontal to soffit of roof slab at a height of maximum 3.0m	m ²	16		
		Smooth formwork Special :				
4.5.3		25x25 chamfer to exposed concrete edges	m	36		
4.5.4		20mm dia half round drip groove to soffit of concrete roof slabs	m	56		
4.6	8.3	SCHEDULED REINFORCEMENT ITEMS				
4.6.1	8.3.1	Mild and high tensile steel bars in the following: All diameters	t	0.8		
4.7	8.4	SCHEDULED CONCRETE ITEMS				
4.7.1	8.4.2	Blinding layer: 20mm thick screed layer of Class 15MPa/19mm on Borehole Kiosk concrete plinth	m ²	46		
TOTAL CARRIED FORWARD						

SECTION 4: BOREHOLE KIOSKS						
Item	Payment Refers	Description	Unit	Quantity	Rate	Amount
BROUGHT FORWARD						
4.7.2	PSG 8.4.3	Strenght concrete: Class 30MPa/19mm concrete in roof slab	m ³	10		
4.7.3	PSG 8.4.4	Unformed surface finishes(steel floated finishes): Finishing concrete smooth with a steel float to plinths and slabs	m ²	66		
4.8	8.5	SCHEDULED EXTRA OVER ITEMS Supply and Install Roof Extras:				
4.8.1		a) Borehole Kiosk - Waterproofing on concrete plinth comprising of Debrigum Torch on SP4	m ²	46		
4.8.2		b) Borehole Kiosk - Slip Joint compromising of 2 layers of tempered masonite	m ²	16		
4.8.3		c) Borehole Chamber - Slip Joint compromising of 2 layers of Malthoid	m ²	10		
4.9		FENCING				
4.9.1		Clear Vu 'Invisible' Fencing as per drawing, or similar approved	m	140		
4.9.2		Clear Vu Sliding Gate 3,000 mm wide, or similar approved, including gate track	No	2		
4.9.3		Construct gate beam as indicated on the design drawing	m ³	2		
TOTAL CARRIED FORWARD TO SUMMARY						

SECTION 5: MECHANICAL WORKS						
Item	Payment Refers	Description	Unit	Quantity	Rate	Amount
5		SECTION 5: MECHANICAL WORKS				
		Works to be executed and performed by Pump Supplier and/or Mechanical Subcontractor				
5.1		Submersible borehole pumps, complete with motor, seals, coupling, etc: Supply, Install & Commission				
		Boreholes 1 to 3 (Pump installation depth - 100 m)				
5.1.1		Centrifugal borehole pump with integrated submersible motor, with sleeve (if required), with duty-point 15.31 m ³ /h at a differential head of 86.1m (Grundfos SP17-10 or similar approved). Duty head calculated based on borehole riser pipe being HDPE PE100 PN12.5, if different riser pipe to be used, duty head to be adjusted.	No	3		
5.1.2		Stainless Steel Bottom Adaptor (for specific pump and selected borehole riser pipe material supplied)	No	3		
5.1.3		Cast Iron Top Adaptor (for specific borehole riser pipe material supplied)	No	3		
5.1.4		Baseplate	No	3		
5.1.5		Borehole Riser Pipe: PE100 PN12.5 STR13.6 HDPE 63 mm (OD)	m	300		
5.1.6		Borehole Riser Pipe: Boreline (as an alternative to 5.1.5 above)	m	300		Rate only
5.1.7		Submersible borehole motor electrical cable (to match motor size)	m	330		
5.1.8		Submersible Electrical Cable Joint	No	3		
5.1.9		Duct for sensor cables: PE100 PN6 HDPE 32 mm (OD)	m	300		
5.1.10		Stainless Steel rope (to secure pump)	m	300		Rate only
5.2		Pipes and fittings to be supplied and installed in Borehole Chambers				
		Valves, instrumentation and pipework all as specified, depicted and listed on drawings.				
5.2.1		BH 1	sum	1		
5.2.2		BH 2	sum	1		
5.2.3		BH 3	sum	1		
5.3		Miscellaneous work				
5.3.1		Install water depth monitoring probes in all boreholes	sum	1		
TOTAL CARRIED FORWARD TO SUMMARY						

SECTION 6: ELECTRICAL WORKS						
Item	Payment Refers	Description	Unit	Quantity	Rate	Amount
6		SECTION 6: ELECTRICAL WORKS				
6.1		Motor Control Kiosks, Boreholes 1 to 3 complete. Factory acceptance testing for two persons included.				
6.1.1		Supply	Sum	3		
6.1.2		Install	Sum	3		
6.1.3		Testing and Commissioning	Sum	3		
6.1.4		Allow for all costs and expenses in connection with the Site Delivery of items in this section	Sum	1		
6.1.5		Pre-Commisioning Tests	Sum	1		
6.2		LV CABLES				
		Allow for all the costs and expenses in connection with the design, manufacture, routine testing, factory acceptance testing (if indicated) and supply of the following materials and equipment:				
		Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore cable with stranded conductors.				
6.2.1		2.5mm ² x 3 core	m	10		
6.2.2		2.5mm ² x 4 core	m	70		
6.2.3		4mm ² x 4 core	m	-		Rate only
6.2.4		6mm ² x 4 core	m	130		
6.2.5		10mm ² x 4 core	m	350		
6.2.6		16mm ² x 4 core	m	130		
6.2.7		25mm ² x 4 core	m	-		Rate only
6.2.8		35mm ² x 4 core	m	220		
6.2.9		50mm ² x 4 core	m	200		
6.2.10		70mm ² x 4 core	m	200		
TOTAL CARRIED FORWARD						

SECTION 6: ELECTRICAL WORKS						
Item	Payment Refers	Description	Unit	Quantity	Rate	Amount
BROUGHT FORWARD						
		Cable terminations for Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore cables, complete, including gland shroud, lugs, number tags, etc and connection.				
6.2.11		2.5mm² x 3 core	No	10		
6.2.12		2.5mm² x 4 core	No	4		
6.2.13		4mm² x 4 core	No	-		Rate only
6.2.14		6mm² x 4 core	No	10		
6.2.15		10mm² x 4 core	No	6		
6.2.16		16mm² x 4 core	No	8		
6.2.17		25mm² x 4 core	No	-		Rate only
6.2.18		35mm² x 4 core	No	4		
6.2.19		50mm² x 4 core	No	4		
6.2.20		70mm² x 4 core	No	4		
		Bare Copper Earth cable with stranded conductors.				
6.2.21		2.5mm²	m	-		Rate Only
6.2.22		4mm²	m	-		Rate Only
6.2.23		6mm²	m	10		
6.2.24		10mm²	m	220		
6.2.25		16mm²	m	220		
6.2.26		25mm²	m	200		
6.2.27		35mm²	m	200		
		Cable terminations for bare copper earth cables, complete, including gland shroud, lugs, number tags, etc and connection.				
6.2.28		2.5mm²	No	-		Rate Only
6.2.29		4mm²	No	-		Rate Only
6.2.30		6mm²	No	10		
6.2.31		10mm²	No	4		
6.2.32		16mm²	No	8		
6.2.33		25mm²	No	4		
6.2.34		35mm²	No	4		
TOTAL CARRIED FORWARD						

SECTION 6: ELECTRICAL WORKS						
Item	Payment Refers	Description	Unit	Quantity	Rate	Amount
BROUGHT FORWARD						
		Allow for all costs and expenses in connection with the Site installation of the following:				
		Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore cable with stranded conductors.				
6.2.35		2.5mm² x 3 core	m	10		
6.2.36		2.5mm² x 4 core	m	70		
6.2.37		4mm² x 4 core	m	-		Rate Only
6.2.38		6mm² x 4 core	m	130		
6.2.39		10mm² x 4 core	m	350		
6.2.40		16mm² x 4 core	m	130		
6.2.41		25mm² x 4 core	m	-		Rate Only
6.2.42		35mm² x 4 core	m	220		
6.2.43		50mm² x 4 core	m	200		
6.2.44		70mm² x 4 core	m	200		
		Cable terminations for Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore cables, complete, including gland shroud, lugs, number tags, etc and connection.				
6.2.45		2.5mm² x 3 core	No	10		R0.00
6.2.46		2.5mm² x 4 core	No	4		R0.00
6.2.47		4mm² x 4 core	No	-		Rate Only
6.2.48		6mm² x 4 core	No	10		R0.00
6.2.49		10mm² x 4 core	No	6		R0.00
6.2.50		16mm² x 4 core	No	8		R0.00
6.2.51		25mm² x 4 core	No	-		Rate Only
6.2.52		35mm² x 4 core	No	4		R0.00
6.2.53		50mm² x 4 core	No	4		R0.00
6.2.54		70mm² x 4 core	No	4		R0.00
TOTAL CARRIED FORWARD						

SECTION 6: ELECTRICAL WORKS						
Item	Payment Refers	Description	Unit	Quantity	Rate	Amount
BROUGHT FORWARD						
		Bare Copper Earth cable with stranded conductors.				
6.2.55		2.5mm²	m	-		Rate Only
6.2.56		4mm²	m	-		Rate Only
6.2.57		6mm²	m	10		
6.2.58		10mm²	m	220		
6.2.59		16mm²	m	220		
6.2.60		25mm²	m	200		
6.2.61		35mm²	m	200		
		Cable terminations for bare copper earth cables, complete, including gland shroud, lugs, number tags, etc and connection.				
6.2.62		2.5mm²	No	-		Rate Only
6.2.63		4mm²	No	-		Rate Only
6.2.64		6mm²	No	10		
6.2.65		10mm²	No	4		
6.2.66		16mm²	No	8		
6.2.67		25mm²	No	4		
6.2.68		35mm²	No	4		
6.2.69		Allow for all costs and expenses in connection with the Storage and Site Delivery of items in this section	Sum	1		
6.3		EARTHWORKS (CABLE AND DUCT TRENCHES)				
		Excavate and set excavated material aside for re-use as filling for cable or sleeve trench not exceeding 1m deep				
6.3.1		In earth	m³	25		
6.3.2		In soft rock	m³	25		
6.3.3		In rock	m³	30		
6.3.4		Bedding material imported from off-site source (provisional)	m³	300		
6.3.5		Danger tape - 400 mm wide overlapping	m	250		
6.3.6		Allow for all costs and expenses in connection with the Storage and Site Delivery of items in this section	Sum	1		
TOTAL CARRIED FORWARD						

SECTION 6: ELECTRICAL WORKS						
Item	Payment Refers	Description	Unit	Quantity	Rate	Amount
BROUGHT FORWARD						
6.4		INSTRUMENTATION, CONTROL AND DATA CABLES Allow for all the costs and expenses in connection with the design, manufacture, routine testing, factory acceptance testing (if indicated) and supply of the following materials and equipment: Instrumentation Power cable Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore with stranded conductors. Cable fixed to cable tray, drawn into sleeves or laid into trenches.				
6.4.1		2.5mm² x 3 core	m	200		
		Terminations for Instrumentation Power cable Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore with stranded conductors.				
6.4.2		2.5mm² x 3 core	No	10		
		Extra low voltage instrumentation cable fixed to cable tray, drawn into sleeves or power skirting.				
6.4.3		1.5mm² 1-pair	m	250		
		Terminations for Extra low voltage instrumentation cable				
6.4.4		1.5mm² 1-pair	No	10		
		Allow for all costs and expenses in connection with the Site installation of the following: Instrumentation Power cable Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore with stranded conductors. Cable fixed to cable tray, drawn into sleeves or laid into trenches.				
6.4.5		2.5mm² x 3 core	m	200		
		Terminations for Instrumentation Power cable Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore with stranded conductors.				
6.4.6		2.5mm² x 3 core	No	5		
		Extra low voltage instrumentation cable fixed to cable tray, drawn into sleeves or power skirting.				
6.4.7		1.5mm² 1-pair	m	250		
		Terminations for Extra low voltage instrumentation cable				
6.4.8		1.5mm² 1-pair	No	10		
6.4.9		Allow for all costs and expenses in connection with the Storage and Site Delivery of items in this section	Sum	1		
TOTAL CARRIED FORWARD						

SECTION 6: ELECTRICAL WORKS						
Item	Payment Refers	Description	Unit	Quantity	Rate	Amount
BROUGHT FORWARD						
6.4.7		Extra low voltage instrumentation cable fixed to cable tray, drawn into sleeves or power skirting. 1.5mm² 1-pair	m	250		
6.4.8		Terminations for Extra low voltage instrumentation cable 1.5mm² 1-pair	No	10		
6.4.9		Allow for all costs and expenses in connection with the Storage and Site Delivery of items in this section	Sum	1		
6.5		INSTRUMENTATION Allow for all the costs and expenses in connection with the design, manufacture, painting, supplying and installation of the following materials and equipment: Hydrostatic Level Transmitter complete including sensors, transmitters, mounting materials and stands as required.				
6.5.1		Supply	No	3		
6.5.2		Install Flow Switch complete including mounting materials and stands as required.	No	3		
6.5.3		Supply	No	3		
6.5.4		Install	No	3		
6.5.5		Pre-Commisioning Tests	Sum	1		
6.5.6		Allow for all costs and expenses in connection with the Storage and Site Delivery of items in this section	Sum	1		
TOTAL CARRIED FORWARD TO SUMMARY						

SECTION 7: BOREHOLE 1, 2 & 3						
Item	Payment Refers	Description	Unit	Quantity	Rate	Amount
7		SECTION 7: BOREHOLE 1, 2 & 3				
7.1		General				
7.1.1		Mobilization & Set-up of Plant	sum	3		
7.1.2		Interhole Move	number	2		
7.2		Drilling				
7.2.1		381 mm dia.	m	-		Rate only
7.2.2		305 mm dia.	m	20		
7.2.3		254 mm dia.	m	30		
7.2.4		230 mm dia.	m	-		Rate only
7.2.5		203 mm dia.	m	-		Rate only
7.2.6		190 mm dia.	m	200		
7.2.7		172 mm dia.	m	-		Rate only
7.2.8		165 mm dia.	m	250		
7.3		ODEX Drilling				
7.3.1		254 mm dia.	m	-		Rate only
7.3.2		219 mm dia.	m	-		Rate only
7.3.3		177 mm dia.	m	-		Rate only
7.3.4		Odex Shoe	number	-		Rate only
7.4		Casing				
7.4.1		Steel 330 mm dia.	m	-		Rate only
7.4.2		Steel 273 mm dia.	m	90		
7.4.3		Steel 219 mm dia.	m	-		Rate only
7.4.4		Steel 177 mm dia.	m	-		Rate only
7.4.5		uPVC 200 mm dia. Class 12 (threaded, flush-fit)	m	300		
7.4.6		uPVC 177 mm dia. Class 12 (threaded, flush-fit)	m	-		Rate only
7.4.7		uPVC 160 mm dia. Class 12 (threaded, flush-fit)	m	-		Rate only
7.4.8		uPVC 140 mm dia. Class 12 (threaded, flush-fit)	m	90		
7.4.9		Installation of Casing	m	480		
TOTAL CARRIED FORWARD						

SECTION 7: BOREHOLE 1, 2 & 3						
Item	Payment Refers	Description	Unit	Quantity	Rate	Amount
BROUGHT FORWARD						
7.5		Miscellaneous				
7.5.1		Gravel Pack	20l	50		
7.5.2		Grouting	bag	25		
7.5.3		Installation of pump	sum	-	-	
7.5.4		Artesian draw down	hour	24		
7.5.5		Development	hour	24		
7.5.6		Bolted Borehole Cap	no	3		
7.5.7		Blow Yield Test	hour	24		
7.5.8		Site Cleaning	sum	-	-	
7.5.9		Data Recording	sum	-	-	
7.5.10		De-Establishment	sum	-	-	
7.5.12		Yield testing	Prov sum	-	-	R 175,000.00
7.5.13		Water quality: Sampling & Testing	Prov sum	-	-	R 50,000.00
TOTAL CARRIED FORWARD TO SUMMARY						