

ITEM NO.	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
1	SANS	PRELIMINARY AND GENERAL				
1.1	8.3	Scheduled Fixed-Charge and Value-Related Items				
1.1.1	8.3.1	Contractual Requirements	Sum	1		
		Provision for the site facilities:				
1.1.2	8.3.2.1	a) Facilities for the Engineer	Sum	1		
1.1.3	8.3.2.2	b) Facilities for the Contractor	Sum	1		
1.1.4	8.3.3	General responsibilities and other fixed charge obligations.	Sum	1		
1.1.5	8.3.4	Removal of site establishment on completion of the project	Sum	1		
1.1.6		Compliance with the OHS Act regulations (Rate to include for risk assessment of Ependemic and other adjustments to ensure compliance for the assignment including maintenance of a register for workers contacts.)	Sum	1		
1.1.7		Preparation of a OHS Plan	Sum	1		
		Costs of medical certificate and Medical Surveillance including Screenings of Employees.				
1.1.8		a) Initial (baseline) medical examinations	No.	30		
1.1.9		b) Exit examinations	No.	30		
		Environmental Managemant				
1.1.10		a) Compliance with Environmental Management plan including waste management Bins	Sum	1		
1.2	8.4	Scheduled Time-Related Items				
1.2.1	8.4.1	Contractual requirements	Sum	1		
1.2.2	8.4.2	Occupation and maintainance of the site facilities				
1.2.3	8.4.2.1	a) Facilities for the Engineer	Sum	1		
1.2.4	8.4.2.2	b) Facilities for the Contractor	Sum	1		
1.2.5		General responsibilities and other time related abligations .	Sum	1		
1.2.6		Compliance with the OHS Act regulations (Rate to include risk assessment for Ependemic and other adjustments to ensure compliance for the assignment including maintenance of a register for workers contacts.)	Sum	1		
Carried Forward						

ITEM NO.	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward						
1.2.7		Contractors supervision for the duration of the contract	Sum	1		
1.2.8		Full time Health and Safety Officer for the duration of the contract	Sum	1		
1.3		Sums Stated Provisionally by the Engineer				
1.3.1		Employment of CLO for the duration of the Contract (R9000 pm plus R500 pm cellphone allowance)	Prov. Sum	1	R85 500,00	R85 500,00
1.3.2		Contractors markup on item 1.3.1	%	R85 500,00		
1.3.5		Allow for 3x Civil Engineering trainee	Prov. Sum	1	R270 000,00	R270 000,00
1.3.6		Contractors markup on item 1.3.5	%	R270 000,00		
1.3.7		Allow for accommodation for site personnel for the full duration of the contract	Prov. Sum	1	90 000,00	R90 000,00
1.3.8		Contractors markup on item 1.3.7	%	R90 000,00		
1.3.9		Provision of Laptop computers and printer for the use of the RE and ARE for the full duration of the contract	Prov. Sum	1	60 000,00	R60 000,00
1.3.10		Contractors markup on item 1.3.9	%	R60 000,00		
1.3.11		Allow for Data and Airtime to the Engineers site personnel for the duration of the Contract	Prov. Sum	1	R18 000,00	R18 000,00
1.3.12		Contractors markup on item 1.3.11	%	R18 000,00		
1.3.13		Provision of Engineering Survey as instructed by the Engineer	Prov. Sum	1	R30 000,00	R30 000,00
1.3.14		Contractors markup on item 1.3.13	%	R30 000,00		
1.3.15		Allow for the provision of the Engineer's Bakkie for the duration of the Contract. The amount allowed for is inclusive of fuel	Prov. Sum	1	R270 000,00	R270 000,00
1.3.16		Contractors markup on item 1.3.15	%	R270 000,00		
1.3.17		Payment of PSC members for attendance of meetings for the duration of the contract (10 No members at R500 per member per meeting)	Prov. Sum	1	R45 000,00	R45 000,00
1.3.18		Contractors markup on item 1.3.17	%	R45 000,00		
1.3.19		Amount provisionally allowed for the procurement and management of SMME contractors	Prov. Sum	1	R100 000,00	R100 000,00
Carried Forward						

ITEM NO.	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward						
1.3.20		Management fee on item 1.3.19	%	R100 000,00		
1.3.21		Additional allowance for full time site supervision (Assistant Resident Engineer) for the full duration of the contract	Prov. Sum	1	R1 039 554,00	R1 039 554,00
1.3.22		Contractors markup on item 1.3.21	%	R1 039 554,00		
1.3.23		Additional Allowance for Occupational Health and Safety Agent Monitoring for the duration of the contract	Prov. Sum	1	R225 000,00	R225 000,00
1.3.24		Handling costs and profit in respect of 1.3.23	%	R225 000,00		
1.3.25		Additional Allowance for Institutional Social Development (ISD Agent) Services for the duration of the Contract	Prov. Sum	1	R225 000,00	R225 000,00
1.3.26		Handling costs and profit in respect of 1.3.25	%	R225 000,00		
1.3.27		Additional Allowance for Environmental Control Officer as instructed by Engineer	Prov. Sum	1	R225 000,00	R225 000,00
1.3.28		Handling costs and profit in respect of 1.3.27	%	R225 000,00		
		<u>Temporary Works</u>				
1.3.29		Maintain all roads where construction activities will take place	Prov. Sum	1	R50 000,00	R50 000,00
1.4	8.7	<u>Dayworks</u>				
1.4.1		Foreman	hr	75		
1.4.2		Skilled	hr	75		
1.4.3		Semi-skilled	hr	75		
1.4.4		Unskilled	hr	75		
Total Carried Forward To Summary						

ITEM NO.	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
2	SANS 1200 C & PSC	SITE CLEARANCE				
2.1		<u>Clear Site</u>				
2.1.1	8.2.1	Clear and grub vegetation in strip 2m wide on pipe route. Rate to include for trees of girth up to and including 1m.	m	12 253		
2.1.2	8.2.2	<u>Where instructed remove and grub large trees and tree stumps of girth:</u>				
2.1.2.1	8.2.2(a)	over 1m and up to 2m.	No.	10		
2.1.3	8.2.10	Remove topsoil in 600mm wide strip to depth of 150mm, stockpile, maintain and reinstate.	m ³	1 287		
2.1.4	PSC 8.2.13	<u>Remove existing gravel layer works to stockpile and maintain (for use as selected layers) as instructed by the Engineer.</u>				
2.1.4.1		Gravel layer works to District Roads.	m ³	150		
2.1.4.2		Fill material	m ³	75		
2.1.4.3		Relocation of existing fences	km	1		
2.1.4.4		Working adjacent to existing services (stormwater pipes, stormwater v-drains, water pipes and electrical and telecommunication services)	m	613		
2.1.4.5		Working parallel to existing services (stormwater pipes, stormwater v-drains, water pipes and electrical and telecommunication services)	No	100		
Total Carried Forward To Summary						

ITEM NO.	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
3	SANS 1200 D & 200 DB	PIPE TRENCHES				
3.1	PSDB 8.3.2	<u>Excavation</u>				
3.1.1	8.3.2(a)	<u>Excavate in all materials for trenches backfill, compact, and dispose of surplus/unsuitable material, for pipes:</u>				
3.1.1.1		<u>Up to and including 200mm ND for total trench depth:</u>				
3.1.1.1.1		Exceeding 0,0m but not exceeding 1.5m	m ³	12 955		
3.1.1.1.2		Exceeding 1.5m but not exceeding 3.5m	m ³	3 870		
3.1.1.1.3		Extra over item for intermediate excavation (Prov)	m ³	1 290		
3.1.1.1.4		Extra over item for 3.1.1.1.1 for hard rock (Prov)	m ³	3 880		
3.1.1.1.5		Extra over item for 3.1.1.1.1 for bolder excavation (Prov)	m ³	1 290		
3.1.1.1.6		Extra over item for 3.1.1.1.1 for blasting to remove rock	Prov Sum	1	R 180 000,00	R180 000,00
3.2		<u>Slope Protection (Provisional)</u>				
3.2.1		Earth diversion berms as instructed by the Engineer	No.	102		
Total Carried Forward to Summary						

ITEM NO.	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
4	SANS 1200 DK	GABIONS AND PITCHING				
4,1	8,2	Excavate materials for gabions	m ³	30		
4,2	8.2.1	<u>Surface preparation for bedding of gabions.</u>				
4.2.1	8.2.1	Cavities filled with approved excavated material or rock (Provisional Quantity)	m ²	100		
4.2.2	8.2.1	Cavities filled with 15MPa concrete	m ²	20		
4,3	8.2.2 PSDK 3.1.2	<u>Construct gabions using double twisted hexagonal mesh type 80 with 3.4mm OD frame wire and 2.7mm OD mesh wire to SANS 1480:2005:</u>				
4.3.1		Supply and install the following rock filled gabion baskets complete :				
4.3.1.1		2 x 1 x 1m with 80 x 100mm galv. mesh	m ³	50		
4.3.1.2		3 x 2 x 1m with 80 x 100mm galv. mesh (Reno Mattress)	m ³	20		
4,4	8.2.4 PSDK 3.1.3	<u>Geotextile (Type AG 200) placed where ground water seepage occurs:</u>				
4.4.1	8.2.4	Below gabion mattresses	m ²	100		
Total Carried Forward To Summary						

ITEM NO.	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
5	SANS 1200 LB & PS LB	BEDDING				
5,1	8.2.1 & PS LB 3.1	<u>Provision of Bedding from Trench Excavation</u>				
5.1.1	8.2.1 (a)	Selected granular material	m³	4 295		
5.1.2	8.2.1 (b)	Selected fill material	m³	12 875		
5,2	8.2.2	<u>Supply only of Bedding by Importation</u>				
5.2.1	8.2.2.1	<u>From other necessary excavations (Provisional)</u>				
5.2.1.1	8.2.2.1 (a)	Selected granular material	m³	1 287		
5.2.1.2	8.2.2.1 (b)	Selected fill material	m³	3 860		
5.2.2	8.2.2.3	<u>From Commercial sources</u>				
5.2.2.1	8.2.2.3 (a)	Selected granular material	m³	440		
5.2.2.2	8.2.2.3 (b)	Selected fill material	m³	1 290		
5,3	8.2.3	<u>Concrete Bedding Cradle (Provisional)</u>				
5.3.1		15/19 Grade concrete	m³	6		
5,4	8.2.4	<u>Encasing of Pipes in Concrete (Provisional)</u>				
5.4.1		Encasement of Pipe in 25/19 Grade concrete including all formwork and reinforcement (100kg steel per m³ concrete) for water crossings. Refer to standard detail	m³	22		
5,5	8.2.4	<u>Thrust Blocks</u>				
5.5.1		Construct thrust blocks in 25/19 Grade concrete including all preparation work and formwork required. Refer to standard detail	m³	8		
Total Carried Forward To Summary						

ITEM NO.	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
6	SANS 1200 L	MEDIUM PRESSURE PIPELINES				
6,1	8.2.1	<u>Supply, bed, lay, disinfect, join and test potable water pipelines. All works inclusive in the rate, except where specific items are provided. All activities in accordance with project specifications.:</u>				
		<u>HDPE Pipes</u>				
6.1.1		50 mm dia. PN 10	m	490		
6.1.2		50 mm dia. PN 12.5	m	3 773		
6.1.3		63 mm dia. PN 10	m	100		
6.1.4		63 mm dia. PN 12.5	m	422		
6.1.5		75 mm dia. PN 10	m	50		
6.1.6		75 mm dia. PN 12.5	m	873		
		<u>uPVC Pipes</u>				
6.1.7		90 mm dia. CL 9	m	50		
6.1.8		90 mm dia. CL 12	m	916		
6.1.9		110 mm dia. CL 9	m	1		
6.1.10		110 mm dia. CL 12	m	1 760		
6.1.11		160 mm dia. CL 9	m	1		
6.1.12		160 mm dia. CL 12	m	2 170		
6.1.13		200 mm dia. CL 9	m	1		
6.1.14		200 mm dia. CL 12	m	1		
6.1.11		250 mm dia. CL 9	m	1		
6.1.12		250 mm dia. CL 12	m	330		
6.2		Rising Main pipeline from the proposed Borehole				
6.2.1		160 mm dia. CL 20	m	2 000		
6.3	PSL 8.2.16	Pipeline Markers as per standard detail	No.	49		
6.4		Supply and install standpipe complete including HDPE reducer, 32mm HDPE pipe(20m), tap and galvanised riser pipe, concrete work including shuttering, elbows, nipples, etc, as per standard drawings. Work to be executed by a nominated SMME sub contractor	No.	65		
Carried Forward						

ITEM NO.	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward						
6.5		Install Aqua Flow limiters where instructed by the Engineer complete as per detailed drawings. Work to be executed by a nominated SMME sub contractor	No.	65		
6.6		Provision for relocation and fixing of Damaged pipeline during construction period.	Prov Sum	1	R150 000,00	R150 000,00
6.7		Connect reticulation network and bulk pipeline to existing 160kl and the new 50kl concrete reservoirs.	Prov Sum	1	R100 000,00	R100 000,00
Total Carried Forward to Summary						

ITEM NO.	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
7	SANS 1200 L	PIPE FITTINGS AND SPECIALS				
	8.2.2 PSL 8.2.4 PSL 8.2.5	<u>Extra-over 8.2.1 for the Supplying, Laying and Bedding of Specials complete with Couplings as follows:-</u>				
	8.2.4 PSL 8.2.6	<u>Supply, lay, joint and bed including cutting pipes where required for the following:</u>				
7.1.		<u>HDPE Pipe Bends (PN 16)</u>				
7.1.1		50mm dia 11.25° bends.	No.	19		
7.1.2		50mm dia 22.5° bends.	No.	19		
7.1.3		50mm dia 45° bends.	No.	8		
7.1.4		50mm dia. 90° bends.	No.	8		
7.1.5		63mm dia 11.25° bends.	No.	2		
7.1.6		63mm dia 22.5° bends.	No.	2		
7.1.7		63mm dia 45° bends.	No.	1		
7.1.8		63mm dia. 90° bends.	No.	1		
7.1.9		75mm dia 11.25° bends.	No.	4		
7.1.10		75mm dia 22.5° bends.	No.	4		
7.1.11		75mm dia 45° bends.	No.	2		
7.1.12		75mm dia. 90° bends.	No.	2		
7.2		<u>uPVC Pipe Bends (CL 16)</u>				
7.2.1		90mm dia 11.25° bends.	No.	5		
7.2.2		90mm dia 22.5° bends.	No.	5		
7.2.3		90mm dia 45° bends.	No.	2		
7.2.4		90mm dia. 90° bends.	No.	2		
7.2.5		110mm dia 11.25° bends.	No.	9		
7.2.6		110mm dia 22.5° bends.	No.	9		
7.2.7		110mm dia 45° bends.	No.	4		
7.2.8		110mm dia. 90° bends.	No.	4		
7.2.9		160mm dia 11.25° bends.	No.	11		
7.2.10		160mm dia 22.5° bends.	No.	11		
7.2.11		160mm dia 45° bends.	No.	7		
7.2.12		160mm dia. 90° bends.	No.	7		
7.2.13		200mm dia 11.25° bends.	No.	4		
Carried Forward						

ITEM NO.	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward						
7.2.14		200mm dia 22.5° bends.	No.	1		
7.2.15		200mm dia 45° bends.	No.	1		
7.2.16		200mm dia. 90° bends.	No.	1		
7.2.17		250mm dia 11.25° bends.	No.	1		
7.2.18		250mm dia 22.5° bends.	No.	1		
7.2.19		250mm dia 45° bends.	No.	1		
7.2.20		250mm dia. 90° bends.	No.	1		
7.3		<u>Reducers (PN16)</u>				
7.3.1		250mm x 200mm	No.	1		
7.3.2		200mm x 160mm	No.	1		
7.3.3		160mm x 110mm	No.	2		
7.3.4		110mm x 90mm	No.	3		
7.3.5		90mm x 75mm	No.	3		
7.3.6		75mm x 63mm	No.	5		
7.3.7		63mm x 50mm	No.	40		
7.4		<u>Equal Tees (PN16)</u>				
7.4.1		50mm x 50mm	No.	38		
7.4.2		63mm x 63mm	No.	20		
7.4.3		75mm x 75mm	No.	15		
7.4.4		90mm x 90mm	No.	10		
7.4.5		110mm x 110mm	No.	5		
7.4.6		160mm x 160mm	No.	1		
7.4.7		200mm x 200mm	No.	1		
7.4.8		250mm x 250mm	No.	1		
7.5		<u>UN-Equal Tees (PN16)</u>				
7.5.1		50mm x 32mm	No.	38		
7.5.2		63mm x 32mm	No.	20		
Carried Forward						

ITEM NO.	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward						
7.5.3		75mm x 32mm	No.	15		
7.5.4		63mm x 50mm	No.	20		
7.5.5		75mm x 63mm	No.	15		
7.5.6		90mm x 75mm	No.	10		
7.5.7		110mm x 90mm	No.	3		
7.5.8		160mm x 110mm	No.	2		
7.5.9		200mm x 160mm	No.	1		
7.5.10		250mm x 200mm	No.	1		
Total Carried Forward To Summary						

ITEM NO.	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
8		VALVES				
8,1	8.2.3	<u>Extra-over 8.2.1 for the supplying, fixing and Bedding of Valves as indicated below:</u>				
		<u>Isolation Valves Complete (PN25)</u>				
8.1.1	PSL 3.13.2	Supply and install the following flanged Resilient seal Gate valves complete with prefabricated valve chamber, PN 25 with non-rising spindle, Clockwise closing, including all gaskets, bolts, nuts and washers as per detailed drawings.				
8.1.1.1		50mm	No.	13		
8.1.1.2		63mm	No.	4		
8.1.1.3		75mm	No.	3		
8.1.1.4		90mm	No.	3		
8.1.1.5		110mm	No.	3		
8.1.1.6		160mm	No.	3		
8.1.1.7		200mm	No.	1		
8.1.1.8		250mm	No.	1		
		<u>Air Valves Complete CL 25</u>				
8.2.1		Supply and install Air Valve assemblies Complete with valve chamber as per detailed drawings.				
8.2.1.1		90mm	No.	1		
8.2.1.2		110mm	No.	1		
8.2.1.3		160mm	No.	9		
8.2.1.4		200mm	No.	1		
8.2.1.5		250mm	No.	1		
		<u>Scour Valves Complete CL 25</u>				
8.3.1		Supply and install Scour Valve assemblies Complete with wedge gate valve and valve chamber as per detailed drawings. Rate is inclusive of valve chamber, scour pipework and headwall to scour pipe.				
8.3.1.1		90mm	No.	2		
8.3.1.2		110mm	No.	1		
8.3.1.3		160mm	No.	5		
8.3.1.4		200mm	No.	1		Rate Only
Carried Forward						

ITEM NO.	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward						
8.4.1	8.2.5	<u>Bulk Water Meter Complete (CL25)</u> Supply and install Bulk Water Meter assemblies complete with prefabricated meter chamber as per detailed drawings. All valve chambers will be installed by SMME contractors				
8.4.1.1		110mm	No.	2		
8.4.1.2		250mm	No.	2		
Total Carried Forward to Summary						

ITEM NO.	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
9		REFURBISHMENT OF EXISTING RESERVOIR				
9.1		Refurbishment of the existing 160kl Reinforced Concrete Reservoir	Prov Sum	1	R 250 000,00	R250 000,00
9.2		Supply and Install a clearview fencing for all the borehole pump stations. Refer to the standard detail drawing for clearview fence. Tendered rate to include all the site clearance, excavations, backfilling, concrete works and all the works as specified in the detail drawing	m	80		
9.3		Supply and Install the access gates. Refer to the standard detail drawing for clearview fence. Tendered rate to include all the site clearance, excavations, backfilling, concrete works and all the works as specified in the detail drawing	No.	1		
9.4		Contractor's mark up on Item 9.1 above	%	R250 000,00		
Total Carried Forward to Summary						

ITEM NO.	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
10		GROUNDWATER SOURCE DEVELOPMENT (BOREHOLE)				
10,1		<u>Siting and Drilling of One Production Borehole</u>				
10.1.1		Siting and drilling of Two (2) borehole to produce One (1) production borehole. The scope includes siting, drilling, yield testing, water quality testing including submission of report.	Prov Sum	1	R 758 180,00	R758 180,00
10,2		<u>Borehole Pump Station Building</u>				
10.2.1		Supply all material and labour to construct borehole pump station building complete in accordance with drawing no. P2023_11_D-422, P2023_11_D-423 and P2023_11_D-424 as directed by the Engineer. The tendered rate shall be inclusive of all earthworks and relevant tests required. All materials and workmanship to conform to specifications.	Sum	1		
		<u>Mechanical and Electrical Works (Equipping of borehole pump)</u>				
10.2.2		Supply and install electrical driven borehole pumpset including a diesel driven backup Generator as per Engineers design specifications or similar approved. The rate should include the installation of all Electrical and Mechanical works (electrical panel, all pipework, water meters, valves, pump controls, etc). The contractor will also be required to compile an operations manual and train operators as identified by the Client.	Prov Sum	1	R 1 000 000,00	R1 000 000,00
10,3		<u>Provision for Eskom Power Supply (Electrification of Borehole)</u>				
10.3.1		Provision for Eskom Electrical Supply. The rate includes application, site investigations, payment to Eskom for connection.	Prov-Sum	1	R 665 494,04	R665 494,04
10.3.2		Electrical power supply from the Eskom kiosk to the borehole pump station building.	Prov Sum	1	R 192 000,00	R 192 000,00
10,4		<u>Fencing of Borehole Pump Stations</u>				
10.4.1		Supply and Install a clearview fencing for all the borehole pump stations. Refer to the standard detail drawing for clearview fence. Tendered rate to include all the site clearance, excavations, backfilling, concrete works and all the works as specified in the detail drawing	m	80		
10.4.2		Supply and Install the access gates. Refer to the standard detail drawing for clearview fence. Tendered rate to include all the site clearance, excavations, backfilling, concrete works and all the works as specified in the detail drawing	No.	1		
Carried Forward						

ITEM NO.	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward						
10,5		Provision of access to the borehole pump station during Construction	Prov Sum	1	R200 000,00	R200 000,00
10,6		Construct of new security guard-house with Solar for Lighting at the borehole pumpstation entrance. The tendered rate shall be inclusive of all earthworks, Aluminium Gutters and all relevant tests required, components as reflected in the detail drawing. All materials and workmanship to conform to specifications.	Sum	1		
10,7		Provision of a Water Tank (10 000 L) complete with Valves, Stand with Anchor Wires and a Double Pit VIP Toilet	Sum	1		
Total Carried Forward to Summary						