



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 1:PRELIMINARY AND GENERAL

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
1	SABS1200A		PRELIMINARY AND GENERAL				
1.1	8,3		FIXED-CHARGE ITEMS				
1.1.1	8.3.1		Contractor's Contractual Requirements.	Lump Sum	1.0		
	8.3.2		Establish Facilities on the Site:				
	8.3.2.1		Facilities for Employer's Agent:				
1.1.2	PSA4.1		Establish furnished, air-conditioned offices for the Employer's Agent: deliver, install and commission the specified office accommodation, including furniture, lighting, electrical fittings, service connections and access. Size, fittings and layout shall comply with PSA 4.1	Lump Sum	1.0		
1.1.3	8.3.2.1 b) PSAB 3.1		Establish telephone and internet facilities for the Employer's Agent: supply, install, connect and test the specified communication equipment, network connections and Wi-Fi facilities, including initial activation. Provide the minimum internet speed of 6MBstated in the project specification	Lump Sum	1.0		
1.1.4	PSA4.1		Provide and commission an A3 colour printer and photocopying facility for the Employer's Agent, complete with the specified accessories, connections, drivers and initial consumables in accordance with PSA 4.1	Lump Sum	1		
1.1.5	PSA4.1		Establish an air-conditioned boardroom accommodating 30 persons, including the specified tables, chairs, lighting, electrical connections and meeting facilities. Deliver, installed and commission complete in accordance with PSA 4.1.	Lump Sum	1.0		
1.1.6	8.3.2.1 c) PSAB 4.3.2		Supply and install two project nameboards at approved positions, including approved artwork, manufacture, supporting posts, foundations, fixings and installation complete to the project specification. Obtain approval of wording and layout before manufacture	Lump Sum	1.0		
1.1.7	PSA4.1		Establish one male and one female ablution facility for the Employer's Agent, including sanitary fittings, privacy arrangements, handwashing facilities, water supply and approved wastewater or sewage connections. Deliver, connect and commission complete to PSA 4.1 specification	Lump Sum	1.0		
Total Carried Forward							

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ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
1.1.8			Conduct HIV/AIDS awareness programme workshops on site for not less than 90% of the workers inclusive of all direct and indirect cost Provide and maintain condom dispenser.Provide and maintain HIV/AIDS awareness posters	Prov Sum	1.0	R10 000.00	R10 000.00
1.1.9			Management, Overheads, Charges & Profit on Item 1.1.9	%		R10 000.00	
	8.3.2.2		Facilities for Contractor:				
1.1.10	8.3.2.2.a)		Offices and storage sheds.	Lump Sum	1.0		
1.1.11	8.3.2.2.b)		Workshops.	Lump Sum	1.0		
1.1.12	8.3.2.2.c)		Laboratories.	Lump Sum	1.0		
1.1.13	8.3.2.2.e)		Establish Contractor's ablution and latrine facilities, including sanitary fittings, washing facilities, privacy, service connections and approved sewage disposal arrangements	Lump Sum	1.0		
1.1.14	8.3.2.2.f)		Tools and equipment.	Lump Sum	1.0		
1.1.15	8.3.2.2.g)		Establish temporary water supply, electric power and communication services for the Contractor's facilities, including initial applications, connections, meters,distribution and commissioning as specified	Lump Sum	1.0		
1.1.16	8.3.2.2.h)		Control of ground water, sub-surface, stormwater or spoiled water during construction.	Lump Sum	1.0		
1.1.17	8.3.2.2.i)		Establish temporary access required for construction in accordance with subclause 5.8 and approved site arrangements. Include initial preparation of access routes, temporary crossings and protective measures within the specified scope	Lump Sum	1.0		
1.1.18	8.3.2.2.j)		Mobilise and establish construction plant required for the Works, including initial transport, delivery, assembly, installation and commissioning	Lump Sum	1.0		
1.1.19	8.3.3		Other fixed-charge obligations.	Lump Sum	1.0		
1.1.20	PSA5		Issuing of notices to consumers, also refer to C3.4.1	Prov Sum	1.0		
1.1.21	PS 8.3.5.2		OHS Act Obligations (Compilation of OHS Act file)	Lump Sum	1.0		
Total Carried Forward							

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ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
1.1.22			EMP Obligations	Lump Sum	1.0		
1.1.23	8.3.4		Remove Contractor's Site: Establishment.Dismantle and remove temporary offices, storage sheds, ablution facilities, temporary services, plant, equipment and other site establishment facilities; remove associated waste and debris; make good disturbed areas and restore the site to the Engineer's satisfaction.	Lump Sum	1.0		
1.1.24			Provide suitable and legally compliant transport for employees to,from and within the site.Including transportation between work fonts	Lump Sum	1		
1.2	8.4		TIME-RELATED ITEMS				
1.2.1	8.4.1		Contractual Requirements.	Month	36.0		
	8.4.2		Operate and maintain facilities on the Site for duration of Construction:				
	PSA 4.3		Facilities for the Employer's Agent:				
1.2.2	PSA 4.2.1.a)		Operate and maintain the Engineers office and four parking spaces for the construction period in accordance with PSA 4.2.1(a).	Month	36.0		
1.2.3	PSA4.3.1		Operate and maintain site telephone, internet and Wi-Fi facilities for the construction period to PSA 4.3.1. Include recurring subscriptions, specified usage charges, support, repairs and replacement necessary to maintain the required service	Month	36.0		
1.2.4			Operate and maintain the air-conditioned boardroom for 30 persons including cleaning, servicing, repairs and specified hygiene provisions. Payment is per month.	Month	36.0		
1.2.5			Operate and maintain the Engineers ablution facilities, including cleaning, disinfecting, consumables, water service, sewage removal where required	Month	36.0		
	8.4.2.2		Facilities for Contractor:				
1.2.6	8.4.2.2.a)		Office and storage sheds.	Month	36.0		
1.2.7	8.4.2.2.b)		Workshops.	Month	36.0		
1.2.8	8.4.2.2.c)		Laboratories.	Month	36.0		
1.2.9	8.4.2.2.e)		Operate and maintain Contractor's ablution and latrine facilities throughout construction, including cleaning, disinfecting, consumables, servicing, sewage removal where required and repairs	Month	36.0		
1.2.10	8.4.2.2.f)		Tools and equipment.	Month	36.0		
1.2.11	8.4.2.2.g)		Operate and maintain Contractor's water supply, electric power and communication services throughout construction, including recurring service charges	Month	36.0		
1.2.12	8.4.2.2.h)		Control of ground water, sub-surface, stormwater or spoiled water during construction.	Month	36.0		
Total Carried Forward							

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Brought Forward							
1.2.13	8.4.2.2.i)		Maintain temporary construction access throughout the construction period, including routine grading, repair and upkeep of the access arrangements required by the specification	Month	36.0		
1.2.14	8.4.2.2.j)		Provide and maintain construction plant availability allocated to the time-related preliminary and general item, including recurring hire, servicing and upkeep as specified	Month	36.0		
1.2.15	8.4.3		Contractor's supervision for duration of construction.	Month	36.0		
1.2.16	8.4.4		Company and Head Office overhead costs for the duration of construction.	Month	36.0		
1.2.17	PSA4.7		Provide security services in accordance with PSA 4.7 for the specified construction period, including personnel, supervision, access control, patrols, registers and incident reporting to the extent specified	Month	36.0		
1.2.18	8.4.5		Other time related obligations.	Month	36.0		
1.2.19			Operate and maintain suitable and legally compliant transport for employees to,from and within the site.Including transportation between work fonts	Month	36.0		
1.2.20	PSA 8.4.6.1		OHS Act Obligations (Compilation of OHS Act file)	Month	36.0		
1.2.21	PSA 8.4.6.4		Provision of a Health and Safety Officer	Month	36.0		
	8.5		SUMS STATED PROVISIONALLY BY THE Employer's Agent				
1.2.22			Additional testing as instructed by the Engineer	Prov Sum	1.0	R334 318.00	R334 318.00
1.2.23			Management, Overheads, Charges & Profit on Item 1.2.22	%		R334 318.00	
1.2.24			Allowance for a Community Liaison Officer for the duration of the Contract (contract duration of 36 months)	Prov Sum	1.0	R1 112 000.00	R1 112 000.00
1.2.25			Management, Overheads, Charges & Profit on Item 1.2.24	%		R1 112 000.00	
1.2.26	PSA 6.2.1		Allowance for accredited off site training of local employees including transport and accommodation of trainees	Prov Sum	1.0	R343 486.00	R343 486.00
1.2.27			Management, Overheads, Charges & Profit on Item 1.2.26	%		R343 486.00	
1.2.28	PSAB 2.1		Supply and Installation of the permanent Information board at the entrance of WTW	Prov Sum	1.0	R177 290.00	R177 290.00
Total Carried Forward							

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ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
1.2.29			Management, Overheads, Charges & Profit on Item 1.2.28	%		R177 290.00	
1.2.30			Allowance for monthly site inspections of the works by the Water site office specialist design team for the duration of the Contract (contract duration of 36 months)	Prov Sum	1.0	R540 000.00	R540 000.00
1.2.31			Management, Overheads, Charges & Profit on Item 1.2.30	%		R540 000.00	
1.2.32			Allowance for landscaping of site	Prov Sum	1.0	R2 217 415.00	R2 217 415.00
1.2.33			Management, Overheads, Charges & Profit on Item 1.2.32	%		R2 217 415.00	
1.2.34			Allowance for refurbishment of existing boundary fence around site office	Prov Sum	1.0	R2 770 064.00	R2 770 064.00
1.2.35			Management, Overheads, Charges & Profit on Item 1.2.34	%		R2 770 064.00	
1.2.36	8.5.1.a) > 8.7		Labour, materials and plant to be used during execution of dayworks.	Prov Sum	1.0	R513 705.00	R513 705.00
1.2.37			Management, Overheads, Charges & Profit on Item 1.2.36	%		R513 705.00	
1.2.38			PSC- Project Steering Committee/PSC attendance and participation(Max 10 people per sitting)	Prov Sum	1.0	R2 520 000.00	R2 520 000.00
1.2.39			Management, Overheads, Charges & Profit on Item 1.2.38	%		R2 520 000.00	
1.2.40			Removal and re-establishment of existing services by Telkom, Eskom and/or the Local Authority	"Prov. Sum"	1.0	R400 000.00	R400 000.00
1.2.41			Overheads, Charges and Profit on item 1.2.40 above	%		R400 000.00	
1.2.42			Allowance for Administration Costs for Wayleave liaison with Transnet, Sanral, Eskom etc	Prov Sum	1.0	R400 000.00	R400 000.00
1.2.43			Overheads and profits on item 1.2.42	%		R400 000.00	
1.2.44			Additional surveying requested by the Employers Agent.	Prov Sum	1.0	R275 000.00	R275 000.00
1.2.45			Overheads and profits on item 1.2.44	%		R275 000.00	
1.2.46			q) Allowance for Environmental Control Officer (ECO) to inspect, monitor, assess construction site and prepare monthly site audit reports to the client and to be appointed under the Engineer	Lump Sum	1.0		
Total Carried Forward							

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ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
1.2.47			s) Allowance for SHE Officer to inspect, monitor, assess construction site and prepare monthly site audit reports to the client and to be appointed under the Engineer	Lump Sum	1.0		
1.2.48			Provide, supply, maintain and replace PPE for employees(2x pairs), the Employer, Employer's Agent and authorised personnel, including safety helmets, protective overalls, safety boots, high-visibility vests and other PPE required for the Works, in accordance with applicable OHS requirements.	Prov Sum	1	R500 000.00	R500 000.00
1.2.49			Overheads and profits on item 1.2.48	%		R500 000.00	
1.3			TRAINING				
1.3.3			Student Allowance - Monthly Allowance payable to participating for Students/trainees	Prov Sum	1.0	R1 960 000.00	R1 960 000.00
1.3.4			Overheads, Charges and Profit on item 1.3.3 above	%		R1 960 000.00	
1.3.5			Submit detail As-built drawings of all existing services and adjustments to construction drawings at completion.	Prov Sum	1.0	R239 596.00	R239 596.00
1.3.6			Overheads, Charges and Profit on item 1.3.5 above	%		R239 596.00	
1.3.7			Provision for Contractor to Manage CPG	Prov Sum	1.0	R1 196 386.00	R1 196 386.00
1.3.8			Management, Overheads, Charges & Profit on Item 1.3.7	%		R1 196 386.00	
1.4	SANS 1200 A8.7 & DWK 5		DAYWORKS				
			Labour				
1.4.1			Foreman	hrs	200.0		
1.4.2			Skilled Labour	hrs	800.0		
1.4.3			Semi-skilled labour	hrs	800.0		
1.4.4			Unskilled labour	hrs	800.0		
1.4.5			Bricklayer	hrs	50.0		
1.4.6			Pipe Fitter	hrs	50.0		
1.4.7			Semi Skilled Labourers	hrs	50.0		
1.4.8			Construction Hand and Operator	hrs	50.0		
1.4.9			Carpenter	hrs	50.0		
1.4.10			Clerk	hrs	50.0		
1.4.11			Artisans	hrs	50.0		
1.4.12			Foreman	hrs	50.0		
Total Carried Forward							

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ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
1.4.13			Welder	hrs	40.0		
1.4.14			Painter	hrs	40.0		
1.4.15			Electrician	hrs	20.0		
	DWK4		Plant				
1.4.16			Excavator 20t	hrs	200.0		
1.4.17			Loader 12t	hrs	100.0		
1.4.18			Tipper truck 10m³	hrs	100.0		
1.4.19			Pipe Cutting Machine (steel)	hrs	50.0		
1.4.20			Welding Machine	hrs	50.0		
1.4.21			Compressor and Jack Hammer	hrs	50.0		
1.4.22			Tip Truck	hrs	50.0		
1.4.23			Water Tanker	hrs	50.0		
1.4.24			Plate Compactor	hrs	50.0		
1.5			TEMPORARY WORKS				
1.5.1	C 3.4.2		Accommodation of Traffic. (Local - Within Site Boundaries)	Lump Sum	1.0		
1.5.2	PSA 5.4		Excavate and backfill by hand in soft material to expose existing services - only on approval of Employer's Agent, within freehaul distance of 5.5km.	m³	300.0		
1.5.3	PSA 5.1		Detail setting out of the Works from survey beacons by a registered surveyor and all other survey related work.	Lump Sum	1.0		
Total Carried Forward To Summary							

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Witness 1

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
2			WATER TREATMENT WORKS, STAFF ACCOMMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING				
			SEDIMENTATION TANKS (4 No.)				
2.1	SANS1200 D		EARTHWORKS				
	8.3.1	LI	Site Preparation				
2.1.1	8.3.1.1		Clear and grub for structures as directed by the Engineer	m ²	1 200.0		
2.1.2	8.3.1.2		Remove topsoil to a nominal depth of 100mm and stockpile for reuse	m ²	1 200.0		
	8.3.2		Bulk Excavation				
2.1.3	8.3.2 a), PSD 2.1.1, PSD 2.1.2, PSD 3.3.1		Excavate in all materials to the level required for the structures (to 1m below soffit of foundations), stockpile and use for future backfill around structures. Surplus materials to be disposed of at an approved dumping site within a freehaul distance of 5.5 km, all as directed by the Engineer.	m ³	1 200.0		
	8.3.2 b)		Extra over item 2.1.3 for:				
2.1.4			a) Boulder excavation (Classes A and B)	m ³	30.0		
2.1.5			b) Hard rock excavation	m ³	30.0		
	8.3.4		Imported Fill Material				
2.1.6	8.3.4 a)		Extra over for importation of G7 fill material from commercial sources, compacted to 93% MAMDD in 150 mm thick layers (including hauling the material over an 5.5km free-haul distance)	m ³	1 100.0		
2.2	SANS1200 DM		SUBGRADE				
2.2.1	8.3.3	LI	Rip and recompact in-place material to 90% of MAMDD (100% for sand)	m ³	120.0		
2.3			SETTLED WATER SPLITTER BOX, FILTERS AND TREATMENT WORKS BUILDING				
2.4	SANS1200 D		EARTHWORKS				
	8.3.1		Site Preparation				
2.4.1	8.3.1.1		Clear and grub for structure as directed by the Engineer	m ²	950.0		
Total Carried Forward							



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Witness 1



Witness 2



Employer



Witness 1



Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
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WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.4.2	8.3.1.2		Remove topsoil to a nominal depth of 100mm and stockpile for reuse	m ²	950.0		
	8.3.2		Bulk Excavation				
2.4.3	8.3.2 a), PSD 2.1.1, PSD 2.1.2, PSD 3.3.1		Excavate in all materials to the level required for the structures and buildings (to 1m below soffit of foundations), stockpile and use for future backfill around structures and buildings. Surplus materials to be disposed of at an approved dumping site within a freehaul distance of 1.0 km, all as directed by the Engineer.	m ³	1 800.0		
	8.3.4		Imported Fill Material				
2.4.4	8.3.4 a)		Extra over for importation of G7 fill material from commercial sources, compacted to 93% MAMDD in 150 mm thick layers (including hauling the material over an unlimited free-haul distance)	m ³	1 300.0		
2.4.5		LI	Supply and plant indigenous trees around the works including provision of compost and watering until established	No.	2.0		
2.4.6		LI	Supply and plant indigenous shrubs around the works including provision of compost and watering until established	No.	20.0		
2.5	SANS1200 DM		SUBGRADE				
2.5.1	8.3.3		Rip and recompact in-place material to 90% of MAMDD (100% for sand)	m ³	95.0		
2.6			PLATFORMS AND RAMPS				
2.7	SANS1200 D		EARTHWORKS				
	8.3.1		Site Preparation				
2.7.1	8.3.1.1		Clear and grub for structure as directed by the Engineer	m ²	5 500.0		
2.7.2	8.3.1.2		Remove topsoil to a nominal depth of 100mm and stockpile for reuse	m ²	550.0		
	8.3.2		Bulk Fills				
2.7.3	8.3.2 a), PSD 2.1.1, PSD 2.1.2, PSD 3.3.1		Backfill to finished floor levels to Platforms around Sedimentation Tanks & WTW, as well as Surface Bed Level under Pumpstation floors, using G7 material imported from commercial sources. All fill materials to be compacted to 93% MAMDD, all as directed by the Engineer.	m ³	15 000.0		
			Topsoiling				
Total Carried Forward							

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WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.7.4	8.3.10,		Excavate from topsoil stockpile, placement and spreading around the structure to a nominal depth of 150mm as directed by the Engineer	m ²	5 000.0		
			Grassing				
2.7.5	8.3.11, PSD 4.1.3,	LI	Supply of grass sods including watering, maintaining etc. for the duration of the contract	m ²	5 000.0		
2.8	SANS1200 DM		SUBGRADE				
2.8.1	8.3.3		Rip and recompact in-place material to 90% of MAMDD (100% for sand)	m ³	825.0		
2.9			SLUDGE DAM				
2.10	SANS1200 D		EARTHWORKS				
	8.3.1		Site Preparation				
2.10.1	8.3.1.1		Clear and grub for structure as directed by the Engineer	m ²	750.0		
2.10.2	8.3.1.2		Remove topsoil to a nominal depth of 150mm and stockpile for reuse	m ²	113.0		
	8.3.2		Bulk Excavation				
2.10.3	8.3.2 a), PSD 2.1.1, PSD 2.1.2, PSD 3.3.1		Excavate in all materials to the level required for the structures and buildings, stockpile and use for future backfill around structures and buildings. Surplus materials to be disposed of at an approved dumping site within a freehaul distance of 1.0 km, all as directed by the Engineer.	m ³	650.0		
	SANS1200D M		Imported Fill Material				
2.10.4	8.3.4 a)		Borrow to Fill G7 fill material from commercial sources, compacted to 93% MAMDD in 150 mm thick layers (including hauling the material over an unlimited free-haul distance)	m ³	100.0		
			Topsoiling				
2.10.5	8.3.10,		Excavate from topsoil stockpile, placement and spreading around the structure to a nominal depth of 150mm as directed by the Engineer	m ²	750.0		
			Grassing				
Total Carried Forward							



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Witness 1



Witness 2



Employer



Witness 1



Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
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WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.10.6	8.3.11, PSD 4.1.3,		Supply of grass sods including watering, maintaining etc. for the duration of the contract	m ²	750.0		
2.11			GUARD HOUSE, STAFF ACCOMMODATION & CHAMBERS				
2.12	SANS1200 D		EARTHWORKS				
	8.3.1		Site Preparation				
2.12.1	8.3.1.1		Clear and grub for structure as directed by the Engineer	m ²	385.0		
2.12.2	8.3.1.2	LI	Remove topsoil to a nominal depth of 100mm and stockpile for reuse	m ²	39.0		
	8.3.2		Bulk Excavation				
2.12.3	8.3.2 a), PSD 2.1.1, PSD 2.1.2, PSD 3.3.1		Excavate in all materials to the level required for the building, stockpile and use for future backfill around building. Surplus materials to be disposed of at an approved dumping site within a freehaul distance of 1.0 km, all as directed by the Engineer.	m ³	61.0		
	8.3.2 b)		Extra over item 2.12.3 for:				
2.12.4			a) Boulder excavation (Classes A and B)	m ³	27.0		
2.12.5			b) Hard rock excavation	m ³	34.0		
	8.3.4 a)		Imported Fill Material				
2.12.6			Extra over for importation of G7 fill material from commercial sources, compacted to 93% MAMDD in 150 mm thick layers (including hauling the material over an unlimited free-haul distance)	m ³	47.0		
			Topsoiling				
2.12.7	8.3.10,		Excavate from topsoil stockpile, placement and spreading around the structure to a nominal depth of 150mm as directed by the Engineer	m ²	149.0		
			Grassing				
2.12.8	8.3.11, PSD 4.1.3,		Supply of grass sods including watering, maintaining etc. for the duration of the contract	m ²	149.0		
2.13			CONCRETE / STRUCTURAL WORKS				
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.14			SAND TRAP				
2.15	SANS1200 G		CONCRETE (STRUCTURAL)				
2.16	8.2, PSG 2.1, PSG 3.2		SCHEDULED FORMWORK ITEMS				
	8.2.2		Smooth				
			Plane vertical to:				
2.16.1			Walls	m ²	305.0		
2.16.2			Sides of exposed slabs	m ²	13.0		
2.16.3			Sides of floor slabs and footings	m ²	1.0		
	2.2.15						
	8.2.5		Narrow widths (smooth)				
2.16.4			Over 100 mm and up to 200 mm	m	20.0		
	8.2.6		Box out holes / form voids				
			Small, area up to and including 0,1 m2 for the following depths:				
2.16.5			Up to and including 0.5 m	No.	15.0		
2.17	8.1.2, 8.3, PSG 5.1.1		SCHEDULED REINFORCEMENT ITEMS				
	8.3.1, PSG 5.1.3.1		High-tensile steel bars				
2.18			Y10	kg	1 080.0		
2.19			Y12	kg	2 430.0		
2.20			Y16	kg	1 620.0		
2.21			Y20	kg	270.0		
2.22	8.4, PSG 3.5		SCHEDULED CONCRETE ITEMS				
	PSG 3.5.3.3		Blinding Layer				
2.22.1			50 mm thick blinding layer (15MPa / 19mm)	m ²	78.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
	8.4.3, PSG 5.1.2		Strength concrete				
			Grade 35 MPa /19 mm concrete to:				
2.22.2			Footings	m³	24.0		
			Grade 35 MPa /19 mm concrete (water tight) to:				
2.22.3			Walls	m³	31.0		
	8.4.4, PSG 3.5.7		Unformed surface finishes				
			Steel-floated finishes to:				
2.22.4			Narrow surfaces up to 350 mm wide	m	5.0		
2.22.5			Horizontal surfaces	m²	78.0		
2.22.6			Vertical surfaces	m²	5.0		
2.23	8.5, PSG 3.5.4, PSG 3.5.15		JOINTS				
			Designated joints as detailed on Drawing No. 325WS-S.04				
2.23.1			Joint Type F	m	41.0		
	SANS1200 HA		STRUCTURAL STEELWORK (Sundry items)				
	8.3.1		Supply all material and install complete				
2.23.2			Mentis Inter - Link Handrailing System	m	16.0		
2.23.3			Steel cover to meter chamber - 8mm Vastrap plates stiffened at midspan with 100x65x8 angles (3No. L = 3m) and 2 No. IPE160 (L = 3m). Steel cover to be hot-dip galvanised.	No.	1.0		
2.23.4			Mentis 40 x 3 Rectagrid RS40 flooring over Sand Trap inlet valves	m²	10.0		
2.23.5			65 x 50 x 6L angle recessed into channel reinforced concrete walls	m	22.0		
Total Carried Forward							



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.24	SANS1200 G		WATERTIGHTNESS TESTING				
2.24.1	PSG 3.5.8		Carry out watertightness testing of structure	No.	1.0		
2.24.2	PSG 3.5.8.3		Carry out disinfection of structure	No.	1.0		
2.25			RAW WATER SPLITTER BOX / FLOCCULANT DOSING ROOM				
2.26	SANS1200 G		CONCRETE (STRUCTURAL)				
2.27	8.2, PSG 2.1, PSG 3.2		SCHEDULED FORMWORK ITEMS				
	8.2.2		Smooth				
			Plane vertical to:				
2.27.1			Internal / external walls of raw water splitter box	m ²	222.0		
2.27.2			Sides of exposed slabs of raw water splitter box	m ²	15.0		
2.27.3			Sides of floor slabs and footings of raw water splitter box	m ²	10.0		
2.27.4			Sides of exposed slabs of flocculant dosing room	m ²	10.0		
			Plane horizontal to:				
2.27.5			Soffits of slabs of raw water splitter box	m ²	26.0		
2.27.6			Soffit of roof slab of flocculant dosing room	m ²	24.0		
	8.2.5		Narrow widths (smooth)				
2.27.7			Over 100 mm and up to 200 mm	m	25.0		
2.27.8			Over 200 mm and up to 300 mm	m	20.0		
	8.2.6		Box out holes / form voids				
Total Carried Forward							



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
			Small, area up to and including 0,1 m2 for the following depths:				
2.27.9			Up to and including 0.5 m	No.	5.0		
2.28	8.1.2, 8.3, PSG 5.1.1		SCHEDULED REINFORCEMENT ITEMS				
	8.3.1, PSG 5.1.3.1		High-tensile steel bars				
			Raw water splitter box				
2.29			Y10	kg	800.0		
2.30			Y12	kg	360.0		
2.31			Y16	kg	240.0		
2.32			Y20	kg	80.0		
			Flocculant dosing room				
2.33			Y10	kg	500.0		
2.34			Y12	kg	225.0		
2.35			Y16	kg	150.0		
2.36			Y20	kg	50.0		
	8.3.2		High-Tensile Welded Mesh				
			Flocculant dosing room				
2.36.1			Mesh Ref 395	m²	19.0		
2.37	8.4, PSG 3.5		SCHEDULED CONCRETE ITEMS				
	PSG 3.5.3.3		Blinding Layer				
			Raw water splitter box				
2.37.1			50 mm thick blinding layer (15MPa / 19mm)	m²	50.0		
			Flocculant dosing room				
2.37.2			50 mm thick blinding layer (15MPa / 19mm)	m²	19.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
	8.4.3, PSG 5.1.2		Strength concrete				
			Flocculant dosing room				
			Grade 35 MPa /19 mm concrete to:				
2.37.3			Footings	m³	6.0		
2.37.4			Floor slab	m³	2.0		
2.37.5			Roof	m³	5.0		
			Raw water splitter box				
			Grade 35 MPa /19 mm concrete (water tight) to:				
2.37.6			Floor slab	m³	8.0		
2.37.7			Walls (internal and external)	m³	30.0		
	8.4.4, PSG 3.5.7		Unformed surface finishes				
			Flocculant dosing room				
			Steel-floated finishes to:				
2.37.8			Narrow surfaces up to 350 mm wide	m	16.0		
2.37.9			Horizontal surfaces	m²	43.0		
			Raw water splitter box				
			Steel-floated finishes to:				
2.37.10			Narrow surfaces up to 350 mm wide	m	10.0		
2.37.11			Horizontal surfaces	m²	26.0		
2.37.12			Vertical surfaces	m²	5.0		
2.38	8.5, PSG 3.5.4, PSG 3.5.15		JOINTS				
			Designated joints as detailed on Drawing No. 325WS-S.04				
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.38.1			Joint Type F	m	38.0		
	SANS1200 HA		STRUCTURAL STEELWORK (Sundry items)				
	8.3.1		Supply all material and install complete				
			Frames / supports for grid flooring on raw water splitter box:				
2.38.2			65x50x6L angle recessed into reinforced concrete walls	m	32.0		
			Supply and install stainless steel weir plates in raw water splitter box in accordance with the details on Drawing No. 325WS-C.02				
2.38.3			Type 590	No.	4.0		
2.39	SANS1200 G		WATERTIGHTNESS TESTING				
2.39.1	PSG 3.5.8		Carry out watertightness testing of raw water splitter box	No.	1.0		
2.39.2	PSG 3.5.8.3		Carry out disinfection of raw water splitter box	No.	1.0		
2.40			SEDIMENTATION TANKS (4 NO.)				
2.41	SANS1200 G		CONCRETE (STRUCTURAL)				
2.42	8.2, PSG 2.1, PSG 3.2		SCHEDULED FORMWORK ITEMS				
	8.2.1		Rough				
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.42.1			Curved vertical to: Walls	m ²	528.0		
2.42.2			Sides of floor slabs and footings	m ²	96.0		
			Plane vertical to:				
2.42.3			Sides of floor slabs and footings	m ²	272.0		
	8.2.2		Smooth Curved vertical to:				
2.42.4			Walls	m ²	784.0		
			Plane vertical to:				
2.42.5			Sides of piers	m ²	300.0		
2.42.6			Walls	m ²	84.0		
			Plane horizontal to:				
2.42.7			Soffits of slabs	m ²	44.0		
	8.2.5		Narrow widths (smooth)				
2.42.8			Over 100 mm and up to 200 mm	m	44.0		
2.42.9			Over 200 mm and up to 300 mm	m	20.0		
	8.2.6		Box out holes / form voids				
			Small, area up to and including 0,1 m2 for the following depths:				
2.42.10			Up to and including 0.5 m	No.	4.0		
			Large, area up to and including 0,5 m2 for the following depths:				
2.42.11			Up to and including 0.5 m	No.	4.0		
			Large, area up to and including 1 m2 for the following depths:				
2.42.12			Up to and including 0.5 m	No.	4.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.43	8.1.2, 8.3, PSG 5.1.1		SCHEDULED REINFORCEMENT ITEMS				
	8.3.1, PSG 5.1.3.1		High-tensile steel bars				
2.44			Y10	kg	6 800.0		
2.45			Y12	kg	20 400.0		
2.46			Y16	kg	37 400.0		
2.47			Y20	kg	3 400.0		
	8.3.2		High-Tensile Welded Mesh				
2.47.1			Mesh Ref 193	m ²	11.0		
2.48	8.4, PSG 3.5		SCHEDULED CONCRETE ITEMS				
	PSG 3.5.3.3		Blinding Layer				
2.48.1			50 mm thick blinding layers (15MPa / 19mm)	m ²	700.0		
	8.4.3, PSG 5.1.2		Strength concrete				
			Grade 35 MPa /19 mm concrete (water tight) to:				
2.48.2			Floor slabs	m ³	168.0		
2.48.3			Walls	m ³	240.0		
2.48.4			Suspended slabs	m ³	44.0		
	8.4.4, PSG 3.5.7		Unformed surface finishes				
			Wood-floated finishes to:				
2.48.5			Horizontal surfaces	m ²	85.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.48.6			Vertical surfaces	m ²	85.0		
			Steel-floated finishes to:				
2.48.7			Narrow surfaces up to 350 mm wide	m	400.0		
2.48.8			Horizontal surfaces	m ²	700.0		
2.48.9			Vertical surfaces	m ²	50.0		
2.49	8.5, PSG 3.5.4, PSG 3.5.15		JOINTS				
			Designated joints as detailed on Drawing No. 325WS-S.04				
2.49.1			Joint Type D	m	756.0		
2.49.2			Joint Type F	m	504.0		
2.49.3			Joint Type R	m	380.0		
2.50			UNDERDRAINAGE SYSTEM				
			Nominal 120 mm thick filter bed - no fines concrete including 20 mm thick mortar skim				
2.50.1			on inclined founding surfaces	m ²	704.0		
2.50.2	SANS1200 LE,		Construct drain complete including excavation, 19 mm stone fill, geofabric blanket and 110mm dia. perforated flexible drainage pipe as shown on Drawing No. 325WS-S.03	m	315.0		
	SANS1200 HA		STRUCTURAL STEELWORK (Sundry items)				
	8.3.1		Supply all material and install complete Frames / supports for Bridge:				
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.50.3			Steel Bridge As Detailed, Comprising of 178x171x25-T Top Chord, 127x146x16-T Bottom Chord, 70x70x6-L Diagonal & Vertical Chords, 152x152x32 H Cross Beams, Q Decking and 150mm Thick Slab as well as bearings, joints and Rectagrid RS40 40x3 Flooring - as per Drawing No. 325WS-S.03	No.	4.0		
			Weir plate:				
2.50.4			Supply and install stainless steel sedimentation tank weir plate (length of 43m) in accordance with the details on Drawing No. 325WS-C.02	No.	4.0		
			Sedimentation tank cone:				
2.50.5			Fabricate, supply and install 8mm thick GRP flanged sedimentation tank cone hot dipped galvanised as per Drawing No. 325WS-C.02	No.	4.0		
2.51	SANS1200 G		WATERTIGHTNESS TESTING				
2.51.1	PSG 3.5.8		Carry out watertightness testing of structure	No.	4.0		
2.51.2	PSG 3.5.8.3		Carry out disinfection of structure	No.	4.0		
2.52			MISCELLANEOUS				
2.52.1	PSG 3.5.16,		Application of Ebsco E55 Bituminous Waterproofing Compound (or similar approved) to all earth covered concrete surfaces in accordance with the manufacturer's instructions	m²	1 000.0		
2.53			FILTERS, SETTLED WATER SPLITTER BOX, TREATMENT WORKS BUILDING AND PLATFORMS				
2.54	SANS1200 G		CONCRETE (STRUCTURAL)				
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.55	8.2, PSG 2.1, PSG 3.2		SCHEDULED FORMWORK ITEMS				
	8.2.1		Rough				
			Plane vertical to:				
2.55.1			Sides of foundation slabs & strip footings	m ²	79.0		
	8.2.2		Smooth				
			Plane vertical to:				
2.55.2			Clearwater channel walls	m ²	160.0		
2.55.3			Sides of exposed clearwater channel slabs	m ²	10.0		
2.55.4			Upstand beams to roof slab	m ²	50.0		
2.55.5			Filter walls	m ²	820.0		
2.55.6			Sides of exposed filter slabs	m ²	10.0		
2.55.7			Sides of RC staircase	m ²	20.0		
2.55.8			Backwash tank walls	m ²	760.0		
2.55.9			Sides of exposed backwash tank slabs	m ²	10.0		
2.55.10			Sides of ramps	m ²	10.0		
2.55.11			Sides of ramp columns	m ²	6.0		
2.55.12			Filter feed channel walls	m ²	122.0		
			Plane horizontal to:				
2.55.13			Soffit of treatment works building 1st Floor slab	m ²	410.0		
2.55.14			Soffit of treatment works building roof slab	m ²	455.0		
2.55.15			Soffits of filter slabs	m ²	125.0		
2.55.16			Soffit of ramps	m ²	30.0		
2.55.17			Soffit of RC staircase	m ²	20.0		
2.55.18			Soffit of clearwater channel slab	m ²	27.0		
2.55.19			Soffits of filter feed channels	m ²	42.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
	8.2.5		Narrow widths (smooth)				
2.55.20			Over 100 mm and up to 200 mm	m	150.0		
2.55.21			Over 200 mm and up to 300 mm	m	150.0		
	8.2.6		Box out holes / form voids				
			Small, area up to and including 0,1 m2 for the following depths:				
2.55.22			Up to and including 0.5 m	No.	8.0		
			Large, area up to and including 0,5 m2 for the following depths:				
2.55.23			Up to and including 0.5 m	No.	11.0		
			Large, area up to and including 1 m2 for the following depths:				
2.55.24			Up to and including 0.5 m	No.	5.0		
2.56	8.1.2, 8.3, PSG 5.1.1		SCHEDULED REINFORCEMENT ITEMS				
	8.3.1, PSG 5.1.3.1		High-tensile steel bars				
			Treatment works building				
2.57			Y10	kg	6 198.0		
2.58			Y12	kg	9 014.0		
2.59			Y16	kg	28 171.0		
2.60			Y20	kg	12 959.0		
			Filters (5 No.)				
2.61			Y10	kg	6 198.0		
2.62			Y12	kg	9 014.0		
2.63			Y16	kg	28 171.0		
2.64			Y20	kg	12 959.0		
			Settled water splitter box / Filter feed channels				
2.65			Y10	kg	6 198.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.66			Y12	kg	9 014.0		
2.67			Y16	kg	28 171.0		
2.68			Y20	kg	12 959.0		
	8.3.2		High-Tensile Welded Mesh				
			Treatment works building				
2.68.1			Mesh Ref 395	m ²	220.0		
			Platforms				
2.68.2			Mesh Ref 395	m ²	390.0		
2.69	8.4, PSG 3.5		SCHEDULED CONCRETE ITEMS				
	PSG 3.5.3.3		Blinding Layer				
			Treatment works building				
2.69.1			50 mm thick blinding layer (15MPa / 19mm)	m ²	343.0		
			Filters (5 No.)				
2.69.2			50 mm thick blinding layer (15MPa / 19mm)	m ²	222.0		
			Backwash tank				
2.69.3			50 mm thick blinding layer (15MPa / 19mm)	m ²	131.0		
			Settled water splitter box / Filter feed channels				
2.69.4			50 mm thick blinding layer (15MPa / 19mm)	m ²	70.0		
	8.4.3, PSG 5.1.2		Strength concrete				
			Treatment works building				
			Grade 30 MPa /19 mm concrete to:				
2.69.5			Floor slabs	m ³	33.0		
2.69.6			Suspended slabs	m ³	148.0		
2.69.7			Staircases	m ³	5.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.69.8			Upstand beams to roof slab	m³	6.0		
2.69.9			Ramps	m³	16.0		
2.69.10			Ramp Foundations	m³	6.0		
2.69.11			Ramp Columns	m³	1.0		
2.69.12			Strip Footings	m³	27.0		
			Grade 35 MPa /19 mm concrete (water tight) to:				
2.69.13			Walls	m³	17.0		
2.69.14			Clearwater Channel Slab	m³	4.0		
			Filters (5 No.)				
			Grade 35 MPa /19 mm concrete to:				
2.69.15			Foundation slab	m³	78.0		
			Grade 35 MPa /19 mm concrete (water tight) to:				
2.69.16			Walls	m³	101.0		
2.69.17			Suspended slabs	m³	25.0		
			Backwash tank				
			Grade 35 MPa /19 mm concrete (water tight) to:				
2.69.18			Foundation slab	m³	46.0		
2.69.19			Walls	m³	88.0		
			Settled water splitter box / Filter feed channels				
			Grade 35 MPa /19 mm concrete (water tight) to:				
2.69.20			Floor slabs	m³	7.0		
2.69.21			Walls	m³	11.0		
			Platforms				
			Grade 25 MPa /19 mm concrete to:				
Total Carried Forward							

Tenderer

Witness 1

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R	
Brought Forward								
2.69.22	8.4.4, PSG 3.5.7		Surface Beds (150mm) around sedimentation tanks and treatment works building floor as detailed on drawings	m³	59.0			
				Unformed surface finishes				
				Treatment works building				
				Wood-floated finishes to:				
2.69.23				Horizontal surfaces	m²	30.0		
2.69.24				Vertical surfaces	m²	10.0		
				Steel-floated finishes to:				
2.69.25				Horizontal surfaces	m²	865.0		
2.69.26				Vertical surfaces	m²	10.0		
			Filters (5 No.)					
			Steel-floated finishes to:					
2.69.27			Horizontal surfaces	m²	347.0			
2.69.28			Vertical surfaces	m²	10.0			
			Backwash tank					
			Steel-floated finishes to:					
2.69.29			Horizontal surfaces	m²	131.0			
2.69.30			Vertical surfaces	m²	10.0			
			Settled water splitter box / Filter feed channels					
			Steel-floated finishes to:					
2.69.31			Horizontal surfaces	m²	70.0			
2.69.32			Vertical surfaces	m²	10.0			
			Platforms					
			Wood-floated finishes to:					
Total Carried Forward								

Tenderer

Witness 1

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.69.33			Surface bed around sedimentation tanks	m ²	194.0		
2.69.34			Surface bed outside treatment works building	m ²	194.0		
			Steel-floated finishes to:				
2.69.35			Surface bed inside treatment works building	m ²	220.0		
2.70	8.5, PSG 3.5.4, PSG 3.5.15		JOINTS				
			Designated joints as detailed on Drawing No. 325WS-S.04				
			Filters (5 No.)				
2.70.1			Joint Type F	m	150.0		
2.70.2			Joint Type R	m	60.0		
			Backwash tank				
2.70.3			Joint Type F	m	80.0		
			Settled water splitter box / Filter feed channels				
2.70.4			Joint Type R	m	25.0		
			Clearwater channels				
2.70.5			Joint Type R	m	25.0		
	SANS1200 HA	LI	STRUCTURAL STEELWORK (Sundry items)				
	8.3.1		Supply all material and install complete				
			Frames / supports for banded grid flooring in treatment works building:				
2.70.6			Gripweld B60-40 Mentis Grating Floor complete with IPE160 100 x 8 Channel supports	m ²	110.0		
Total Carried Forward							

Tenderer

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.70.7			Mentis 40x3 Rectagrid RS40 Flooring	m ²	50.0		
2.70.8			65x50x6L angle recessed into channel reinforced concrete walls	m	60.0		
		LI	Handrails To Staircases & Ramps:				
2.70.9			Mentis Inter - Link Handrailing System	m	150.0		
			Frames / supports for grid flooring on settled water splitter box and filter feed channels:				
2.70.10			Mentis 40x3 Rectagrid RS40 Flooring for access to weir plates	m ²	23.0		
2.70.11			65x50x6L angle recessed into reinforced concrete walls	m	44.0		
			Weir plates:				
			Supply and install stainless steel weir plates on filter inlets in accordance with the details on Drawing No. 325WS-C.03				
2.70.12			Type 650	No.	1.0		
			Manhole hatches:				
2.70.13			GRP manhole batch (Mosden or similar) 1000 x 1000mm in chlorine vacuum room	No.	1.0		
2.70.14			600mm diameter light duty pre-cast concrete manhole lid and frame in workshop	No.	1.0		
			Crawl beam:				
2.70.15	PE 7.1		Lifting beam, 2T electrical hoist with lift and crawl capability and spreader beam	Sum	1.0		
2.71	SANS1200 G		TESTING				
2.71.1	PSG 3.5.8		Carry out watertightness testing of filters	No.	1.0		
Total Carried Forward							

Tenderer

Witness 1

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.71.2	PSG 3.5.8		Carry out watertightness testing of backwash tank	No.	1.0		
2.71.3	PSG 3.5.8		Carry out watertightness testing of settled water splitter box	No.	1.0		
2.71.4	PSG 3.5.8		Carry out watertightness testing of filter feed channels	No.	1.0		
2.71.5	PE 8.2		Carry out testing of filters (5 No.) in accordance with the specification	No.	5.0		
2.71.6	PSG 3.5.8.3		Carry out disinfection of filters	No.	1.0		
2.71.7	PSG 3.5.8.3		Carry out disinfection of backwash tank	No.	1.0		
2.71.8	PSG 3.5.8.3		Carry out disinfection of settled water splitter box	No.	1.0		
2.71.9	PSG 3.5.8.3		Carry out disinfection of filter feed channels	No.	1.0		
2.72			MISCELLANEOUS				
2.72.1	PSG 3.5.16,		Application of Ebsco E55 Bituminous Waterproofing Compound (or similar approved) to all earth covered concrete surfaces in accordance with the manufacturer's instructions	m²	265.0		
2.72.2			4mm thick "Derbigum SP 4" fully bonded torch-on water proofing system to concrete roof slabs	m²	455.0		
2.72.3			100mm diameter cast iron full bore outlet cast into concrete roof	No.	6.0		
2.72.4	PSG 3.5.17, PSG 5.1.5		Granolithic screed sloping from 200mm thickness	m²	455.0		
2.73			SETTLED WATER CHANNELS				
2.74	8.2, PSG 2.1, PSG 3.2		SCHEDULED FORMWORK ITEMS				
	8.2.2		Smooth				
			Plane vertical to:				
2.74.1			Walls	m²	70.0		
Total Carried Forward							



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.74.2			Sides of exposed slabs	m ²	9.0		
2.74.3			Sides of floor slabs and footings	m ²	9.0		
			Plane horizontal to:				
2.74.4			Soffits of slabs	m ²	26.0		
	8.2.5		Narrow widths (smooth)				
2.74.5			Over 100 mm and up to 200 mm	m	55.0		
	8.2.6		Box out holes / form voids				
			Small, area up to and including 0,1 m2 for the following depths:				
2.74.6			Up to and including 0.5 m	No.	5.0		
2.75	8.1.2, 8.3, PSG 5.1.1		SCHEDULED REINFORCEMENT ITEMS				
	8.3.1, PSG 5.1.3.1		High-tensile steel bars				
2.76			Y10	kg	883.0		
2.77			Y12	kg	397.0		
2.78			Y16	kg	309.0		
2.79			Y20	kg	44.0		
2.80	8.4, PSG 3.5		SCHEDULED CONCRETE ITEMS				
	PSG 3.5.3.3		Blinding Layer				
2.80.1			50 mm thick blinding layer (15MPa / 19mm)	m ²	26.0		
	8.4.3, PSG 5.1.2		Strength concrete				
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
			Grade 35 MPa /19 mm concrete (water tight) to:				
2.80.2			Slabs	m³	4.0		
2.80.3			Walls	m³	10.0		
	8.4.4, PSG 3.5.7		Unformed surface finishes				
			Steel-floated finishes to:				
2.80.4			Narrow surfaces up to 350 mm wide	m	55.0		
2.80.5			Horizontal surfaces	m²	26.0		
2.80.6			Vertical surfaces	m²	5.0		
2.81	8.5, PSG 3.5.4, PSG 3.5.15		JOINTS				
			Designated joints as detailed on Drawing No. 316WS-S.04				
2.81.1			Joint Type F	m	55.0		
	SANS1200 HA		STRUCTURAL STEELWORK (Sundry items)				
	8.3.1		Supply all material and install complete				
2.81.2			Mentis Inter - Link Handrailing System	m	83.0		
2.82	SANS1200 G		WATERTIGHTNESS TESTING				
2.82.1	PSG 3.5.8		Carry out watertightness testing of structure	No.	1.0		
2.82.2	PSG 3.5.8.3		Carry out disinfection of structure	No.	1.0		
2.83			SEDIMENTATION TANK SLUDGE SUMPS				
Total Carried Forward							

Tenderer

Witness 1

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Witness 1

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.84	8.2, PSG 2.1, PSG 3.2		SCHEDULED FORMWORK ITEMS				
	8.2.2		Smooth				
			Plane vertical to:				
2.84.1			Walls	m ²	92.0		
2.84.2			Sides of exposed slabs	m ²	9.6		
2.84.3			Sides of floor slabs and footings	m ²	10.4		
			Plane horizontal to:				
2.84.4			Soffits of slabs	m ²	14.0		
	8.2.5		Narrow widths (smooth)				
2.84.5			Over 100 mm and up to 200 mm	m	26.0		
	8.2.6		Box out holes / form voids				
			Small, area up to and including 0,1 m2 for the following depths:				
2.84.6			Up to and including 0.5 m	No.	8.0		
2.85	8.1.2, 8.3, PSG 5.1.1		SCHEDULED REINFORCEMENT ITEMS				
	8.3.1, PSG 5.1.3.1		High-tensile steel bars				
2.86			Y10	kg	112.0		
2.87			Y12	kg	336.0		
2.88			Y16	kg	281.0		
2.89			Y20	kg	37.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.90	8.4, PSG 3.5		SCHEDULED CONCRETE ITEMS				
	PSG 3.5.3.3		Blinding Layer				
2.90.1			50 mm thick blinding layer (15MPa / 19mm)	m ²	14.0		
	8.4.3, PSG 5.1.2		Strength concrete				
			Grade 35 MPa /19 mm concrete (water tight) to:				
2.90.2			Slabs	m ³	3.0		
2.90.3			Walls	m ³	5.0		
	8.4.4, PSG 3.5.7		Unformed surface finishes				
			Steel-floated finishes to:				
2.90.4			Narrow surfaces up to 350 mm wide	m	25.0		
2.90.5			Horizontal surfaces	m ²	14.0		
2.90.6			Vertical surfaces	m ²	3.0		
	SANS1200 HA		STRUCTURAL STEELWORK (Sundry items)				
	8.3.1		Supply all material and install complete				
2.90.7			Mentis Inter - Link Handrailing System	m	18.0		
2.91	SANS1200 G		WATERTIGHTNESS TESTING				
2.91.1	PSG 3.5.8		Carry out watertightness testing of structure	No.	1.0		
2.91.2	PSG 3.5.8.3		Carry out disinfection of structure	No.	1.0		
2.92			GUARD HOUSE				
Total Carried Forward							



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.93	SANS1200 G		CONCRETE (STRUCTURAL)				
2.94	8.2, PSG 2.1, PSG 3.2		SCHEDULED FORMWORK ITEMS				
	8.2.1		Rough				
			Vertical to:				
2.94.1			Strip footings	m ²	5.0		
2.95	8.1.2, 8.3, PSG 5.1.1		SCHEDULED REINFORCEMENT ITEMS				
	8.3.1, PSG 5.1.3.1		High-tensile steel bars				
2.95.1			10 mm dia	kg	150.0		
2.95.2			12 mm dia	kg	150.0		
	8.3.2		High-Tensile Welded Mesh				
2.95.3			Mesh Ref 193	m ²	8.0		
2.96	8.4, PSG 3.5		SCHEDULED CONCRETE ITEMS				
	PSG 3.5.3.3		Blinding Layer				
2.96.1			50 mm thick blinding layer (15MPa / 19mm)	m ²	8.0		
	8.4.3, PSG 5.1.2		Strength concrete				
			Grade 25 MPa /19 mm concrete to:				
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.96.2			Footings	m³	3.0		
2.96.3			Surface Bed	m³	1.0		
	8.4.4, PSG 3.5.7		Unformed surface finishes				
			Wood-floated finishes to:				
2.96.4			Horizontal surfaces	m²	8.0		
			Steel-floated finishes to:				
2.96.5			Horizontal surfaces	m²	8.0		
2.97			STAFF ACCOMMODATION				
2.98	SANS1200 G		CONCRETE (STRUCTURAL)				
2.99	8.2, PSG 2.1, PSG 3.2		SCHEDULED FORMWORK ITEMS				
	8.2.1		Rough				
			Vertical to:				
2.99.1			Strip footings	m²	24.0		
2.100	8.1.2, 8.3, PSG 5.1.1		SCHEDULED REINFORCEMENT ITEMS				
	8.3.1, PSG 5.1.3.1		High-tensile steel bars				
2.101			Y10	kg	150.0		
2.102			Y12	kg	50.0		
	8.3.2		High-Tensile Welded Mesh				
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.102.1			Mesh Ref 193	m ²	70.0		
2.103	8.4, PSG 3.5		SCHEDULED CONCRETE ITEMS				
	PSG 3.5.3.3		Blinding Layer				
2.103.1			50 mm thick blinding layer (15MPa / 19mm)	m ²	43.0		
	8.4.3, PSG 5.1.2		Strength concrete				
			Grade 25 MPa /19 mm concrete to:				
2.103.2			Footings	m ³	11.0		
2.103.3			Surface Bed	m ³	7.0		
	8.4.4, PSG 3.5.7		Unformed surface finishes				
			Wood-floated finishes to:				
2.103.4			Horizontal surfaces	m ²	6.0		
			Steel-floated finishes to:				
2.103.5			Horizontal surfaces	m ²	62.0		
2.104			RAW WATER AND CLEARWATER METER CHAMBERS				
2.105	SANS1200 G		CONCRETE (STRUCTURAL)				
2.106	8.2, PSG 2.1, PSG 3.2		SCHEDULED FORMWORK ITEMS				
	8.2.1		Rough				
			Vertical to:				
2.106.1			Foundation slab - raw water meter chamber	m ²	7.0		
2.106.2			Foundation slab - clearwater meter chamber	m ²	7.0		
	8.2.2		Smooth				
			Plane vertical to:				
2.106.3			Walls - raw water meter chamber	m ²	62.0		
2.106.4			Walls - clearwater meter chamber	m ²	62.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

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Witness 1

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.107	8.1.2, 8.3, PSG 5.1.1		SCHEDULED REINFORCEMENT ITEMS				
	8.3.1, PSG 5.1.3.1		High-tensile steel bars				
			Raw water meter chamber				
2.108			Y10	kg	1 279.0		
2.109			Y12	kg	512.0		
2.110			Y16	kg	384.0		
2.111			Y20	kg	63.0		
			Clearwater meter chamber				
2.112			Y10	kg	1 279.0		
2.113			Y12	kg	512.0		
2.114			Y16	kg	384.0		
2.115			Y20	kg	63.0		
2.116	8.4, PSG 3.5		SCHEDULED CONCRETE ITEMS				
	PSG 3.5.3.3		Blinding Layer				
			Raw water meter chamber				
2.116.1			50 mm thick blinding layer (15MPa / 19mm)	m ²	22.0		
			Clearwater meter chamber				
2.116.2			50 mm thick blinding layer (15MPa / 19mm)	m ²	22.0		
	8.4.3, PSG 5.1.2		Strength concrete				
			Raw water meter chamber				
			Grade 35 MPa /19 mm concrete to:				
2.116.3			Footings	m ³	7.0		
2.116.4			Walls	m ³	7.0		
			Clearwater meter chamber				
			Grade 35 MPa /19 mm concrete to:				
2.116.5			Footings	m ³	7.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.116.6			Walls	m³	7.0		
	8.4.4, PSG 3.5.7		Unformed surface finishes				
			Steel-floated finishes to:				
2.116.7			Horizontal surfaces - raw water meter chamber	m²	22.0		
2.116.8			Horizontal surfaces - clearwater meter chamber	m²	22.0		
2.117			PIPELINES				
2.118	SANS1200 DB		EARTHWORKS (PIPE TRENCHES)				
	8.3.1		Site Clearance and Removal of Topsoil				
2.118.1	8.3.1 a),		Clear and grub vegetation in strip 2m wide along pipe route. Rate to include for removal of trees of girth up to and including 1m	m	470.0		
2.118.2	8.3.1 c),		Remove topsoil to trench width and a depth of 150mm, stockpile, maintain and replace once trench has been backfilled	m	470.0		
	8.3.2		Excavation				
2.118.3	8.3.2 a), PSD 2.1,		Excavate in all materials for trenches, backfill, compact and dispose of surplus / unsuitable material, for pipes:				
			Up to and including 110 mm diam for trench depth:				
2.118.4			Exceeding 0,0 m but not exceeding 1,0m	m	264.0		
2.118.5			Exceeding 1,0 m but not exceeding 2 m	m	66.0		
			Over 110 mm diam for trench depth:				
2.118.6			Exceeding 0,0 m but not exceeding 1,0m	m	112.0		
2.118.7			Exceeding 1,0 m but not exceeding 2 m	m	28.0		
	8.3.2 b)		Extra over items 2.72.6 to 2.72.7 for:				
2.118.8			Hard rock excavation	m³	71.0		
2.118.9			Boulder excavation (Classes A and B)	m³	118.0		
2.119	SANS1200 LB		BEDDING				
Total Carried Forward							



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
	PSLB 4.1.1		Provision of bedding from commercial sources (Provisional)				
2.119.1	8.2.2.3 a)		Selected granular material	m³	80.0		
2.119.2	8.2.2.3 b)		Selected fill material	m³	80.0		
2.120	SANS 1200 L		MEDIUM-PRESSURE PIPELINES				
2.121			CLEARWATER PIPELINE TO CLEARWATER METER CHAMBER				
	8.2.1, PSL 2.2.1, PSL 3.1.1		Supply, handle, lay, bed, test and disinfect uPVC pipes to SANS 966-1:2013 of the following diameters:				
2.121.1			400 mm Class 9	m	30.0		
2.122			BACKWASH AND WASTEWATER PIPELINES				
	8.2.1, PSL 2.2.1, PSL 3.1.1		Supply, handle, lay, bed, test and disinfect uPVC pipes to SANS 966-1:2013 of the following diameters:				
2.122.1			110 mm Class 9	m	70.0		
2.122.2			315 mm Class 9	m	30.0		
2.122.3			400 mm Class 9	m	80.0		
2.123			DOMESTIC WATER SUPPLY RISING MAIN				
	8.2.1, PSL 2.2.2, PSL 3.1.1.1		Supply, handle, lay, bed, test and disinfect HDPE PE63 PN10 pipes to SANS ISO 4427 of the following diameters:				
2.123.1			75 mm (including couplings)	m	110.0		
2.124			DOMESTIC WATER SUPPLY GRAVITY MAINS				
	8.2.1, PSL 2.2.2, PSL 3.1.1.1		Supply, handle, lay, bed, test and disinfect HDPE PE63 PN10 pipes to SANS ISO 4427 of the following diameters:				
2.124.1			32 mm (including couplings)	m	60.0		
2.124.2			50 mm (including couplings)	m	100.0		
2.124.3			75 mm (including couplings)	m	20.0		
Total Carried Forward							



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
	8.2.2, PC		Specials and fittings				
			Extra over items 2.78.1 to 2.78.3 for supplying, bedding, jointing, testing and disinfecting the following fittings and specials complete. Cutting of pipes and fittings included:				
			Bends: 110 mm PVC Class 16				
2.125			11.25°	No.	2.0		
2.126			22.5°	No.	2.0		
2.127			45°	No.	2.0		
2.128			90°	No.	2.0		
			Bends: 315 mm PVC Class 16				
2.129			11.25°	No.	1.0		
2.130			22.5°	No.	1.0		
2.131			45°	No.	1.0		
2.132			90°	No.	1.0		
			400mm Ø Steel medium-radius bends flanged to SANS 1123 Table 1600/3				
2.133			11.25°	No.	3.0		
2.134			22.5°	No.	3.0		
2.135			45°	No.	3.0		
2.136			90°	No.	3.0		
			Steel Reducing Tees				
2.136.1			400 x 300 mm Ø MS flanged equal tee	No.	1.0		
2.136.2			400 x 100 mm Ø MS flanged equal tee	No.	2.0		
			Flange Adaptors (Viking Johnson or similar approved) of the following diameters:				
2.136.3			100 mm	No.	2.0		
2.136.4			300 mm	No.	2.0		
2.136.5			400 mm	No.	2.0		
2.137			RAW WATER METER CHAMBER AND SAND TRAP PIPEWORK				
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
	8.2.5, PC, PH		Supply and install raw water meter and sand trap pipework, fittings and valves as per Drawing No. 325WS-C.02. Rate to include for galvanising and painting in accordance with the specifications.				
2.137.1			Item 1.1 - 350mm Ø Viking Johnson (or similar approved) flange adaptor	No.	1.0		
2.137.2			Item 1.2 - 350mm Ø MS straight pipe flanged one end, plain one end with puddle flange welded approx. 100mm from plain end, length = 460mm F/F	No.	11.0		
2.137.3	PB		Item 1.3 - 350mm Ø Class 16 flanged resilient seal gate valve (AVK Series 43/60 or similar approved) with non-rising spindle	No.	10.0		
2.137.4			Item 1.4 - 350mm Ø MS straight pipe length, flanged both ends, with puddle flange welded 300mm from one end, length = 660mm F/F	No.	5.0		
2.137.5			Item 1.5 - 350mm Ø MS 90 deg bend, flanged both ends	No.	5.0		
2.137.6			Item 1.6 - 350mm Ø MS flanged cross piece	No.	1.0		
2.137.7			Item 1.7 - 350mm Ø MS straight pipe length, flanged both ends, length = 855mm F/F	No.	2.0		
2.137.8			Item 1.8 - 350mm Ø MS straight pipe length, flanged both ends, length = 2436mm F/F	No.	1.0		
2.137.9			Item 1.9 - 350mm Ø MS straight pipe length, flanged both ends, length = 1075mm F/F	No.	1.0		
2.137.10			Item 1.10 - 350mm Ø MS flanged equal tee	No.	2.0		
2.137.11			Item 1.11 - 350mm Ø MS straight pipe length, flanged both ends, length = 3950mm F/F	No.	1.0		
2.137.12			Item 1.12 - 350mm Ø MS straight pipe length, flanged both ends, length = 1745mm F/F	No.	1.0		
2.137.13			Item 1.13 - 350mm Ø electro magnetic flow meter flanged (SAFMAG or similar approved)	No.	1.0		
2.137.14			Item 1.14 - 350mm Ø MS straight pipe length, flanged both ends, length = 695mm F/F	No.	1.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.137.15	PB		Item 1.15 - 350mm Ø flanged resilient seal gate valve (AVK Series 43/60 or similar approved) with non-rising spindle fitted with Rotok actuator	No.	1.0		
2.137.16			Item 1.16 - 350mm Ø MS straight pipe length, flanged both ends, length = 449mm F/F	No.	1.0		
2.137.17			Item 1.17 - 350mm Ø MS straight pipe length, flanged both ends, length = 6545mm F/F	No.	1.0		
2.137.18			Item 1.18 - 200mm Ø MS straight pipe flanged one end, plain one end with puddle flange welded approx. 100mm from plain end, length = 1060mm F/F	No.	1.0		
2.137.19			Item 1.19 - 200mm Ø MS straight pipe flanged one end, plain one end with puddle flange welded approx. 100mm from plain end, length = 690mm F/F	No.	1.0		
2.137.20			Item 1.20 - 200mm Ø MS straight pipe flanged one end, plain one end with puddle flange welded approx. 100mm from plain end, length = 320mm F/F	No.	1.0		
2.137.21			Item 1.21 - 200mm Ø MS 90 degree bend, flanged both ends	No.	3.0		
2.137.22			Item 1.22 - 200mm Ø MS straight pipe flanged both ends, with puddle flange welded approx. 300mm from one end, length = 3928mm F/F	No.	1.0		
2.137.23			Item 1.23 - 200mm Ø MS straight pipe flanged both ends, with puddle flange welded approx. 300mm from one end, length = 2353mm F/F	No.	1.0		
2.137.24			Item 1.24 - 200mm Ø MS straight pipe flanged both ends, with puddle flange welded approx. 300mm from one end, length = 778mm F/F	No.	1.0		
2.137.25	PB		Item 1.25 - 200mm Ø Class 16 flanged resilient seal gate valve (AVK Series 43/60 or similar approved) with non-rising spindle	No.	3.0		
2.137.26			Item 1.26 - 200mm Ø MS straight pipe flanged one end, plain one end with puddle flange welded approx. 100mm from plain end, length = 473mm F/F	No.	4.0		
2.137.27			Item 1.27 - 200mm Ø Viking Johnson (or similar approved) flange adaptor	No.	1.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.138			SEDIMENTATION TANK FEED PIPEWORK				
	8.2.5, PC, PH		Supply and install sedimentation tank feed pipework, fittings and valves as per Drawing No. 325WS-C.02. Rate to include for galvanising and painting in accordance with the specifications.				
2.138.1			Item 2.1 - 250mm Ø MS straight pipe flanged one end, plain one end with puddle flange welded approx. 100mm from plain end, length = 430mm F/F	No.	4.0		
2.138.2	PB		Item 2.2 - 250mm Ø Class 16 flanged resilient seal gate valve (AVK Series 43/60 or similar approved) with non-rising spindle	No.	4.0		
2.138.3			Item 2.3 - 250mm Ø MS 45 degree flanged bend	No.	4.0		
2.138.4			Item 2.4 - 250mm Ø MS straight pipe length, flange both ends, length = 4258mm F/F	No.	2.0		
2.138.5			Item 2.5 - 250mm Ø MS straight pipe flanged both ends, with puddle flange welded approx. 372mm from one end, length = 1400mm F/F	No.	4.0		
2.138.6			Item 2.6 - 250mm Ø MS straight pipe length, flanged both ends, length = 6237mm F/F	No.	4.0		
2.138.7			Item 2.7 - 250mm Ø MS straight pipe length, flanged both ends, length = 4258mm F/F	No.	6.0		
2.138.8			Item 2.8 - 250mm Ø MS straight pipe length, length = 5345mm F/F	No.	2.0		
2.139			SEDIMENTATION TANK SLUDGE DRAW-OFF PIPEWORK				
	8.2.5, PC, PH		Supply and install sedimentation tank sludge draw-off pipework, fittings and valves as per Drawing No. 325WS-C.02. Rate to include for galvanising and painting in accordance with the specifications.				
2.139.1			Item 3.1 - 250mm Ø MS straight pipe flanged one end, plain one end with puddle flange welded approx. 152mm from plain end, length = 6387mm F/F	No.	4.0		
Total Carried Forward							



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.139.2			Item 3.2 - 250mm Ø MS 65 deg flanged bend	No.	4.0		
2.139.3			Item 3.3 - 250mm Ø MS straight pipe flanged both ends, length = 2878mm F/F	No.	4.0		
2.139.4			Item 3.4 - 250mm Ø MS 72 deg flanged bend	No.	4.0		
2.139.5	PB		Item 3.5 - 250mm Ø Class 16 flanged resilient seal gate valve (AVK Series 43/60 or similar approved) with non-rising spindle	No.	4.0		
2.139.6			Item 3.6 - 250mm Ø MS straight pipe flanged one end, plain one end with puddle flange welded approx. 70mm from plain end, length = 300mm F/F	No.	6.0		
2.139.7			Item 3.7 - 250mm Ø Viking Johnson (or similar approved) flange adaptor	No.	2.0		
2.140			FILTER FEED PIPEWORK				
	8.2.5, PC, PH		Supply and install filter feed pipework, fittings and valves as per Drawing No's. 325WS-C.03. Rate to include for galvanising and painting in accordance with the specifications.				
2.140.1			Item 4.1 - 250mm Ø MS straight pipe flanged one end, plain one end with puddle flange welded approx. 100mm from plain end, length = 430mm F/F	No.	5.0		
2.140.2	PB		Item 4.2 - 250mm Ø Class 16 flanged resilient seal gate valve (AVK Series 43/60 or similar approved) with non-rising spindle	No.	5.0		
2.140.3			Item 4.3 - 250mm Ø MS 90 deg flanged bend	No.	5.0		
2.140.4			Item 4.4 - 250mm Ø MS straight pipe length, flanged both ends, length = 2280mm F/F	No.	5.0		
2.140.5			Item 4.5 - 250mm Ø MS 90 deg, one end flanged, one end plain	No.	5.0		
2.141			FILTERED WATER OUTLET PIPEWORK				
Total Carried Forward							



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
	8.2.5, PC, PH		Supply and install filtered water outlet pipework, fittings and valves as per Drawing No's. 325WS-C.03. Rate to include for galvanising and painting in accordance with the specifications.				
2.141.1			Item 5.1 - 300mm Ø MS straight pipe flanged one end, plain one end with puddle flange welded approx. 139mm from plain end, length = 916mm F/F	No.	5.0		
2.141.2			Item 5.2 - 300mm Ø cross piece flanged	No.	5.0		
2.141.3	PB		Item 5.3 - 300mm Ø butterfly valve (wafer type - AMRI-KSB ISORIA 16 series or similar approved). Valves to be supplied with 5500mm long extended spindles and pedestals	No.	5.0		
2.141.4			Item 5.4 - 300 x 200mm Ø MS flanged concentric reducer	No.	5.0		
2.141.5			Item 5.5 - 200mm Ø MS straight pipe length, flanged both ends, length = 736mm F/F	No.	5.0		
2.141.6			Item 5.6 - 200mm Ø MS 90 deg flanged bend	No.	5.0		
2.141.7			Item 5.7 - 200mm Ø MS straight pipe length, flanged one end, plain one end, with puddle flange welded approx. 421mm from plain end, length = 1565mm F/F	No.	5.0		
2.142			BACKWASH DELIVERY PIPEWORK				
	8.2.5, PC, PH		Supply and install backwash delivery pipework, fittings and valves as per Drawing No's. 325WS-C.03. Rate to include for galvanising and painting in accordance with the specifications.				
2.142.1			Item 6.1 - 300 x 150mm Ø MS flanged concentric reducer	No.	2.0		
2.142.2	PB		Item 6.2 - 300mm Ø Class 16 flanged resilient seal gate valve (AVK 43/60 or similar approved) with non-rising spindle	No.	2.0		
2.142.3	PB		Item 6.3 - 300mm Ø flanged non-return valve (AVK IPV Series 6143 or similar approved)	No.	2.0		
2.142.4			Item 6.4 - 300mm Ø MS flanged segmented equal tee	No.	1.0		
Total Carried Forward							



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.142.5			Item 6.5 - 300mm Ø MS straight pipe length, flanged both ends, length = 918mm F/F	No.	1.0		
2.142.6			Item 6.6 - 300mm Ø MS flanged s-piece	No.	1.0		
2.142.7			Item 6.7 - 300mm Ø MS straight pipe length, flanged both ends, length = 2256mm F/F	No.	1.0		
2.142.8			Item 6.8 - 300mm Ø MS flanged equal tee	No.	6.0		
2.142.9			Item 6.9 - 300mm Ø MS straight pipe length, flanged both ends, length = 2062mm F/F	No.	1.0		
2.142.10			Item 6.10 - 300mm Ø MS straight pipe length, flanged both ends, length = 1548mm F/F	No.	1.0		
2.142.11			Item 6.11 - 300mm Ø MS straight pipe length, flanged both ends, length = 4230mm F/F	No.	3.0		
2.142.12			Item 6.12 - 300mm Ø MS 90 deg flanged bend	No.	10.0		
2.142.13	PB		Item 6.13 - 300mm Ø butterfly valve (wafer type - AMRI-KSB ISORIA 16 series or similar approved). Valves to be supplied with 5500mm long extended spindles and pedestals	No.	5.0		
2.142.14			Item 6.14 - 300mm Ø blank flange	No.	2.0		
2.143			BACKWASH SUCTION PIPEWORK				
	8.2.5, PC, PH		Supply and install backwash suction pipework, fittings and valves as per Drawing No's. 325WS-C.04. Rate to include for galvanising and painting in accordance with the specifications.				
2.143.1			Item 7.1 - 300 x 150mm Ø MS flanged steel reducer	No.	4.0		
2.143.2	PB		Item 7.2 - 300mm Ø Class 16 flanged resilient seal gate valve (AVK Series 43/60 or similar approved) with non-rising spindle	No.	4.0		
2.143.3			Item 7.3 - 300mm Ø MS straight pipe length, flanged both ends, length = 1025mm F/F	No.	4.0		
2.143.4			Item 7.4 - 300mm Ø MS flanged equal tee	No.	4.0		
Total Carried Forward							



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.143.5			Item 7.5 - 300mm Ø MS blank flange	No.	1.0		
2.143.6			Item 7.6 - 300mm Ø MS straight pipe length, flanged both ends, length = 2519mm F/F	No.	1.0		
2.143.7			Item 7.7 - 300mm Ø MS straight pipe length, flanged both ends, length = 1441mm F/F	No.	2.0		
2.143.8			Item 7.8 - 300mm Ø MS straight pipe length, flanged both ends, length = 4288mm F/F	No.	1.0		
2.143.9			Item 7.9 - 450 x 300mm Ø MS flanged steel reducer	No.	1.0		
2.143.10			Item 7.10 - 450mm Ø MS flanged segmented equal tee	No.	2.0		
2.143.11			Item 7.11 - 450mm Ø MS blank flange	No.	2.0		
2.143.12			Item 7.12 - 450mm Ø MS straight pipe length, flanged both ends, length = 690mm F/F	No.	1.0		
2.143.13			Item 7.13 - 450mm Ø straight pipe flanged both ends, with puddle flange welded approx. 320mm from one end, length = 1169mm F/F	No.	1.0		
2.143.14			Item 7.14 - 450mm Ø 90 deg flanged segmented bend	No.	1.0		
2.143.15			Item 7.15 - 450mm Ø straight pipe flanged one end, bellmouth other end, length = 1855mm F/F	No.	1.0		
2.144			<i>FILTER BACKWASH OUTLET PIPEWORK</i>				
	8.2.5, PC, PH		Supply and install filter backwash outlet pipework, fittings and valves as per Drawing No. 325WS-C.04. Rate to include for galvanising and painting in accordance with the specifications.				
2.144.1			Item 8.1 - 300mm Ø MS straight pipe flanged one end, plain one end with puddle flange welded approx. 112mm from plain end, length = 392mm F/F	No.	5.0		
2.144.2	PB		Item 8.2 - 300mm Ø MS knife gate valve (wafer type - Orbinox or similar approved), with non-rising spindle. Valves to be supplied with 4600mm long extended spindles and pedestals	No.	5.0		
2.144.3			Item 8.3 - 300mm Ø flanged equal tee	No.	5.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.144.4			Item 8.4 - 300mm Ø MS straight pipe length, flanged both ends, length = 4230mm F/F	No.	4.0		
2.144.5			Item 8.5 - 300mm Ø MS straight pipe length, flanged both ends, length = 1784mm F/F	No.	2.0		
2.144.6			Item 8.6 - 300mm Ø MS straight pipe flanged both ends with puddle flange welded centrally, length = 650mm F/F	No.	2.0		
2.144.7			Item 8.7 - 300mm Ø MS 90 deg segmented flanged bend	No.	1.0		
2.144.8			Item 8.8 - 300mm Ø MS straight pipe flanged one end, bellmouth other end, length = 792mm F/F	No.	1.0		
2.144.9			Item 8.9 - 300mm Ø Viking Johnson (or similar approved) flange adaptor	No.	1.0		
2.145			BACKWASH TANK OUTLET PIPEWORK				
	8.2.5, PC, PH		Supply and install backwash tank outlet pipework, fittings and valves as per Drawing No. 325WS-C.04. Rate to include for galvanising and painting in accordance with the specifications.				
2.145.1			Item 9.1 - 350mm Ø Viking Johnson (or similar approved) flange adaptor	No.	1.0		
2.145.2			Item 9.2 - 350mm Ø MS straight pipe flanged both ends with puddle flange welded approx. 325mm from one end, length = 770mm F/F	No.	1.0		
2.145.3	PB		Item 9.3 - 350mm Ø Class 16 flanged resilient seal gate valve (AVK series 43/60 or similar approved) with non-rising spindle	No.	1.0		
2.145.4			Item 9.4 - 350mm Ø MS straight pipe flanged both ends with puddle flange welded centrally, length = 650mm F/F	No.	1.0		
2.145.5			Item 9.5 - 350mm Ø MS 90 deg segmented flanged bend	No.	1.0		
2.145.6			Item 9.6 - 350mm Ø MS straight pipe flanged one end, bellmouth other end, length = 380mm F/F	No.	1.0		
2.146			FILTER PLENARY FLOOR ACCESS MANHOLE PIPEWORK				
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
	8.2.5, PC, PH		Supply and install filter plenary floor access manhole pipework, fittings and valves as per Drawing No. 325WS-C.03. Rate to include for galvanising and painting in accordance with the specifications.				
2.146.1			Item 10.1 - 450mm Ø MS straight pipe flanged one end, plain one end with puddle flange welded approx. 125mm from plain end, length = 450mm F/F	No.	5.0		
2.146.2			Item 10.2 - 450mm Ø MS blank flange	No.	5.0		
2.147			BACKWASH AIR PIPEWORK				
	8.2.5, PC, PH		Supply and install backwash air pipework, fittings and valves as per Drawing No. 325WS-C.03. Rate to include for galvanising and painting in accordance with the specifications.				
2.147.1			Item 11.1 - 300 x 150mm Ø MS flanged concentric reducer	No.	5.0		
2.147.2	PB		Item 11.2 - 150mm Ø butterfly valve (wafer type - AMRI-KSB ISORIA 16 series or similar approved). Valves to be supplied with 4600mm long extended spindles and pedestals	No.	5.0		
2.147.3			Item 11.3 - 150mm Ø MS 90 deg flanged bend	No.	15.0		
2.147.4			Item 11.4 - 150mm Ø MS straight pipe length, flanged both ends, length = 368mm F/F	No.	5.0		
2.147.5			Item 11.5 - 150mm Ø MS straight pipe length, flanged both ends, length = 3388mm F/F	No.	3.0		
2.147.6			Item 11.6 - 150mm Ø MS flanged equal tee	No.	4.0		
2.147.7			Item 11.7 - 150mm Ø MS straight pipe length, flanged both ends, length = 3379mm F/F	No.	2.0		
2.147.8			Item 11.8 - 150mm Ø MS straight pipe length, flanged both ends, length = 4166mm F/F	No.	1.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.147.9			Item 11.9 - 150mm Ø MS straight pipe length, flanged both ends, length = 4511mm F/F	No.	2.0		
2.147.10			Item 11.10 - 150mm Ø MS straight pipe length, flanged both ends, length = 4504mm F/F	No.	1.0		
2.147.11			Item 11.11 - 150mm Ø MS straight pipe length, flanged both ends, length = 5080mm F/F	No.	1.0		
2.147.12			Item 11.12 - 150mm Ø MS straight pipe length, flanged both ends, length = 2548mm F/F	No.	1.0		
2.147.13			Item 11.13 - 150mm Ø MS straight pipe length, flanged both ends, length = 446mm F/F	No.	2.0		
2.147.14	PB		Item 11.14 - 150mm Ø flanged non-return valve (AVK IPV Series 6143 or similar approved)	No.	2.0		
2.147.15			Item 11.15 - 150mm Ø MS straight pipe length, flanged both ends, length = 150mm F/F	No.	4.0		
2.147.16	PB		Item 11.16 - 150mm Ø butterfly valve (wafer type - AMRI-KSB ISORIA 16 series or similar approved) with non-rising spindle	No.	2.0		
2.148			PIPE GALLERY DRAIN PIPEWORK				
	8.2.5, PC, PH		Supply and install pipe gallery drain pipework, fittings and valves as per Drawing No. 325WS-C.04. Rate to include for galvanising and painting in accordance with the specifications.				
2.148.1			Item 12.1 - 100mm Ø MS straight pipe flanged one end, plain one end with puddle flange welded approx. 125mm from plain end, length = 525mm F/F	No.	1.0		
2.148.2	PB		Item 12.2 - 100mm Ø wafer single door check valve (AVK IPV series 6143 or similar approved)	No.	1.0		
2.148.3			Item 12.3 - 100mm Ø Viking Johnson (or similar approved) flange adaptor	No.	1.0		
2.149			BACKWASH TANK SCOUR PIPEWORK				
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
	8.2.5, PC, PH		Supply and install backwash tank scour pipework, fittings and valves as per Drawing No. 325WS-C.04. Rate to include for galvanising and painting in accordance with the specifications.				
2.149.1			Item 13.1 - 100mm Ø MS straight pipe flanged one end, plain one end with puddle flange welded approx. 125mm from plain end, length = 525mm F/F	No.	1.0		
2.149.2	PB		Item 13.2 - 100mm Ø Class 16 flanged resilient seal gate valve (AVK Series 43/60 or similar approved) with non-rising spindle	No.	1.0		
2.149.3			Item 13.3 - 100mm Ø Viking Johnson (or similar approved) flange adaptor	No.	1.0		
2.150			BACKWASH TANK AIR VENTS				
	8.2.5, PC		Supply and install backwash tank air vents as per Drawing No. 325WS-C.04. Rate to include for galvanising in accordance with the specifications.				
2.150.1			Item 14.1 - 250mm Ø MS straight pipe flanged one end, plain one end with puddle flange welded centrally, length = 550mm F/F	No.	2.0		
2.150.2			Item 14.2 - 250mm Ø MS 90 deg flanged bend with mesh bolted onto open end	No.	2.0		
2.151			CLEARWATER METER CHAMBER PIPEWORK				
	8.2.5, PC, PH		Supply and install clearwater meter chamber pipework, fittings and valves as per Drawing No. 325WS-C.04. Rate to include for galvanising and painting in accordance with the specifications.				
2.151.1			Item 15.1 - 350mm Ø Viking Johnson (or similar approved) flange adaptor	No.	2.0		
2.151.2			Item 15.2 - 350mm Ø MS straight pipe length, flanged both ends, with puddle flange welded 300mm from one end, length = 660mm F/F	No.	2.0		
2.151.3			Item 15.3 - 350mm Ø MS flanged equal tee	No.	2.0		
Total Carried Forward							



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.151.4	PB		Item 15.4 - 350mm Ø Class 16 flanged resilient seal gate valve (AVK series 43/60 or similar approved) with non-rising spindle	No.	4.0		
2.151.5			Item 15.5 - 350mm Ø MS 90 deg bend, flanged both ends	No.	2.0		
2.151.6			Item 15.6 - 350mm Ø MS straight pipe length, flanged both ends, length = 3950mm F/F	No.	1.0		
2.151.7			Item 15.7 - 350mm Ø MS straight pipe length, flanged both ends, length = 1745mm F/F	No.	1.0		
2.151.8			Item 15.8 - 350mm Ø electro magnetic flow meter flanged (SAFMAG or similar approved)	No.	1.0		
2.151.9			Item 15.9 - 350mm Ø MS straight pipe length, flanged both ends, length = 695mm F/F	No.	1.0		
2.151.10	PB		Item 15.10 - 350mm Ø flanged resilient seal gate valve (AVK Series 43/60 or similar approved) with non-rising spindle fitted with Rotok actuator	No.	2.0		
2.151.11			Item 15.11 - 350mm Ø MS straight pipe length, flanged both ends, length = 449mm F/F	No.	1.0		
			DOMESTIC WATER SUPPLY TANK INLET PIPEWORK (2 No.)				
	8.2.5, PC, PH		Supply and install domestic water supply tank inlet pipework, fittings and valves as per Drawing No. 325WS-C.05. Rate to include for galvanising and painting in accordance with the specifications.				
2.151.12			Item 16.2 - 80mm Ø Viking Johnson (or similar approved) flange adaptor	No.	2.0		
2.151.13			Item 16.3 - 80mm x 50mm Ø flanged steel reducer	No.	2.0		
2.151.14			Item 16.4 - 50mm Ø MS straight pipe length, flanged both ends, length = 500mm F/F	No.	4.0		
2.151.15	PB		Item 16.5 - 50mm Ø AVK Series 43/60 (or similar approved) Class 16 flanged resilient seal gate valve with handwheel and non-rising spindle	No.	2.0		
Total Carried Forward							



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.151.16			Item 16.6 - 50mm Ø Viking Johnson (or similar approved) dismantling joint	No.	2.0		
2.151.17			Item 16.7 - 50mm Ø MS 90 degree flanged elbow	No.	4.0		
2.151.18			Item 16.8 - 50mm Ø MS straight pipe length, flanged both ends, approx. length = 1381mm F/F	No.	2.0		
2.151.19			Item 16.9 - 50mm Ø MS blank flange, drilled and fitted with 40mm Ø BSP female thread	No.	2.0		
2.151.20			Item 16.10 - 40mm Ø PVC tank adaptor (threaded)	No.	2.0		
2.151.21	PB		Item 16.11 - 40mm Ø Cobra (or similar approved) brass float valve	No.	2.0		
2.152			DOMESTIC WATER SUPPLY TANK OUTLET PIPEWORK				
	8.2.5, PC, PH		Supply and install domestic water supply tank outlet pipework, fittings and valves as per Drawing No. 325WS-C.05. Rate to include for galvanising and painting in accordance with the specifications.				
2.152.1			Item 17.1 - 40mm Ø PVC tank adaptor (threaded)	No.	2.0		
2.152.2			Item 17.2 - 40mm Ø MS straight pipe length, threaded both ends, approx. length = 280mm	No.	2.0		
2.152.3			Item 17.3 - 50mm Ø MS blank flange, drilled and fitted with 40mm Ø BSP female thread	No.	2.0		
2.152.4			Item 17.4 - 50mm Ø Viking Johnson (or similar approved) dismantling joint	No.	2.0		
2.152.5			Item 17.5 - 50mm Ø MS straight pipe length, flanged both ends, length = 500mm F/F	No.	4.0		
2.152.6	PB		Item 17.6 - 50mm Ø AVK Series 43/60 (or similar approved) Class 16 flanged resilient seal gate valve with handwheel and non-rising spindle	No.	2.0		
2.152.7			Item 17.7 - 80mm x 50mm Ø flanged steel reducer	No.	2.0		
Total Carried Forward							



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.152.8			Item 17.8 - 80mm Ø Viking Johnson (or similar approved) flange adaptor	No.	1.0		
2.153			DOMESTIC WATER SUPPLY PIPEWORK				
	8.2.5		Supply and install domestic water supply pipework, fittings and valves as per Drawing No. 325WS-C.06				
2.153.1			Item 18.2 - 75mm Ø Plasson (or similar approved) PN10 equal compression tee	No.	1.0		
2.153.2			Item 18.3 - 75 x 50mm Ø Plasson (or similar approved) PN10 compression male adaptor	No.	2.0		
2.153.3	PB		Item 18.4 - 50mm Ø Cobra (or similar approved) brass gate valve	No.	4.0		
2.153.4			Item 18.5 - 50mm Ø Plasson (or similar approved) PN10 compression male adaptor	No.	6.0		
2.153.5			Item 18.7 - 50mm Ø Plasson (or similar approved) PN10 equal compression tee	No.	1.0		
2.153.6			Item 18.8 - 50 x 32mm Ø Plasson (or similar approved) PN10 reducing tee with threaded male offtake	No.	4.0		
2.153.7	PB		Item 18.9 - 32mm Ø Cobra (or similar approved) brass gate valve	No.	6.0		
2.153.8			Item 18.10 - 32mm Ø Plasson (or similar approved) PN10 compression male adaptor	No.	6.0		
2.153.9			Item 18.12 - 50 x 32mm Ø Plasson (or similar approved) PN10 compression reducing 90 degree elbow (32mm connection male threaded)	No.	1.0		
2.153.10			Item 18.13 - 50 x 32mm Ø Plasson (or similar approved) PN10 compression male adaptor	No.	1.0		
	8.2.5, PC		Supply and install standpipe pipework, fittings and valves as per Drawing No. 325WS-C.07				
2.153.11			Item 19.2 - 32 x 20mm Ø Plasson (or similar approved) PN10 female adaptor	No.	3.0		
2.153.12			Item 19.3 - 20mm Ø MS straight pipe length, threaded, length = 500mm	No.	3.0		
2.153.13			Item 19.4 - 20mm Ø MS 90 degree bend, threaded	No.	6.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.153.14			Item 19.5 - 20mm Ø MS straight pipe length, threaded, length = 1250mm	No.	3.0		
2.153.15			Item 19.6 - 20mm Ø MS straight pipe length, threaded, length = 120mm	No.	3.0		
2.153.16			Item 19.7 - 20mm Ø MS socket, threaded	No.	3.0		
2.153.17			Item 19.8 - 20mm Ø Cobra (or similar approved) heavy duty brass bib hose tap	No.	3.0		
2.154	8.2.13	LI	CHAMBERS				
2.154.1			Supply and install isolating valve chamber complete as per Drawing No. XX-XX	No.	3.0		
2.155			ANCILLARY CONCRETE WORKS				
2.155.1	8.2.11,		Concrete grade 15/19 thrust blocks and anchors to tees and bends complete, including all labour work, formwork etc.	m³	5.0		
			DOMESTIC WATER SUPPLY ANCILLARIES (See Drawing No. 325WS-C.05)				
2.155.2			Supply and install 4750l domestic water supply Jo-Jo tank (or similar approved)	No.	2.0		
2.155.3	SANS1200 C, 8.2.1,		Clear and grub for tank base	m²	10.0		
2.155.4	SANS1200 DA, 8.3.1,		Excavate, backfill and compact in all materials for tank base	m³	2.0		
2.155.5	SANS1200 GA, 8.1.4,		Construct tank base from grade 25/19 concrete complete including one layer of Ref 395 weld mesh and formwork	m³	1.0		
		LI	STANDPIPES (See Drawing No. 325WS-C.07)				
2.155.6	SANS1200 C, 8.2.1,		Clear and grub for standpipe apron slab	m²	6.0		
2.155.7	SANS1200 DA, 8.3.1,		Excavate, backfill and compact in all materials for standpipe apron slab	m³	1.2		
2.155.8	SANS1200 GA, 8.1.4,		Construct concrete upstand complete including reinforcing as detailed and use of 160mm Ø uPVC pipe shutter 1400mm long. Shutter to be stripped after casting.	No.	3.0		
2.155.9	SANS1200 GA, 8.1.4,		Construct standpipe base from grade 20/19 concrete complete including one layer of Ref 193 weld mesh and formwork	No.	3.0		
2.156		LI	PIPE SUPPORT BRACKETS				
Total Carried Forward							



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.156.1			Supply and install wall-mounted steel pipe support brackets as detailed on Drawing No. 325WS-C.08. Refer to Drawing No's. 325WS-C.03 and C.04 for proposed positions within the treatment works building.	No.	4.0		
2.156.2			Supply and install floor-mounted steel pipe support brackets as detailed on Drawing No. 325WS-C.08. Refer to Drawing No. 325WS-C.03 and C.04 for proposed positions within the treatment works building.	No.	10.0		
2.157			FILTER ANCILLARIES				
2.157.1	PE 8.3		Supply and installation of media for rapid gravity sand filters as per specification	m³	70.0		
2.157.2	PE 8.1		Supply and install filter nozzles complete with sleeves in accordance with the specification	No.	3 600.0		
2.158	PD		BUILDING WORKS				
2.159			TREATMENT WORKS BUILDING				
2.160	PD 2,		BRICKWORK				
2.160.1	PD 9.1		230 mm thick brick wall in facebrick	m²	100.0		
2.160.2	PD 9.1		230 mm thick brick wall with facebrick exterior and non-facing engineering bricks interior	m²	497.0		
2.160.3	PD 9.1		230 mm thick brick wall with non-facing engineering bricks interior	m²	65.0		
2.160.4	PD 9.1		280 mm thick cavity wall with facebrick exterior and non-facing engineering bricks interior	m²	11.0		
2.160.5	PD 9.1		115 mm thick half brick interior non-facing engineering brick walls	m²	141.0		
2.160.6			229 x 152mm clay vermin proof air bricks	No.	20.0		
2.161	PD 2.3,		PLASTERWORK				
			15 mm thick steel-float finish to:				
2.161.1	PD 9.2		Brick walls	m²	1 009.0		
2.162			TILES				
			Supply and lay white porcelain tile complete with tile adhesive and grouting to:				
2.162.1			Walls	m²	70.0		
Total Carried Forward							



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.162.2			Filtered water chamber walls and floor slab using approved grout and tiles suitable for continual immersion	m ²	67.0		
2.162.3			Extra-over items 2.7.8 & 2.7.9 for rounded edging for tiling	m	60.0		
2.163	PD 8,	LI	PAINTWORK				
			Apply one coat primer and two coats water based enamel paint (type 4):				
2.163.1	PD 9.7		Plastered walls	m ²	1 009.0		
2.163.2	PD 9.7		Wooden doors and frames	No.	11.0		
			Apply one coat primer and two coats PVA paint (type 3):				
2.163.3	PD 9.7		Internal smooth concrete ceilings	m ²	806.0		
2.164	PD 3, PD 4, PD 5	LI	DOORS AND WINDOWS				
2.164.1	PD 9.4		Heavy duty galvanised steel transformer double panel door and frame with louvred vent fitted with SABS approved commercial grade 4 lever mortice lockset and padlatch to fit 1810 W x 2110 H mm opening	No.	1.0		
2.164.2	PD 9.4		Heavy duty galvanised steel transformer double panel door and frame with louvred vent fitted with SABS approved commercial grade 4 lever mortice lockset and padlatch to fit 2200 W x 3500 H mm opening	No.	1.0		
2.164.3	PD 9.4		Heavy duty galvanised steel combination standard size single panel door and frame to fit 910 W x 2110 H mm opening, fitted with SABS approved commercial grade 4 lever mortice lockset and padlatch	No.	6.0		
2.164.4	PD 9.4		Heavy duty galvanised steel combination standard size single panel door and frame to fit 1010 W x 2110 H mm opening, fitted with SABS approved commercial grade 4 lever mortice lockset and padlatch	No.	1.0		
2.164.5	PD 9.4, PD 9.6		Hardwood (Meranti) door frame 53 x 86 mm complete with Hardwood (Meranti) solid BB door and SABS approved commercial grade 3 lever mortice lockset to fit 910 W x 2110 H mm opening	No.	6.0		
2.164.6	PD 9.4, PD 9.6		Hardwood (Meranti) door frame 53 x 86 mm complete with Hardwood (Meranti) solid BB door and SABS approved commercial grade 3 lever mortice lockset to fit 1010 W x 2110 H mm opening	No.	2.0		
Total Carried Forward							



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.164.7	PD 9.4, PD 9.6		Hardwood (Meranti) door frame 53 x 86 mm complete with Hardwood (Meranti) solid BB door and SABS approved commercial grade 3 lever mortice lockset to fit 810 W x 2110 H mm opening	No.	3.0		
2.164.8	PD 9.4		2440Wx2050H Roller Shutter Door	No.	1.0		
			Rolled mild steel industrial window frames (FX7)				
2.164.9	PD 9.4		Steel window size 600mm W x 600mm high, with 2no. vert. x 2no. hor. panes. Painted two coats white NS4 paint or similar approved prior to installation	No.	4.0		
2.164.10	PD 9.4		Steel window size 910 mm x 910 mm high h, with 1no. vert. x 1no. hor. panes. Painted two coats white NS4 paint or similar approved prior to installation	No.	1.0		
2.164.11	PD 9.4		Steel window size 1500mm W x 1200mm high, with 3no. vert. x 2no. hor. panes. Painted two coats white NS4 paint or similar approved prior to installation	No.	2.0		
2.164.12	PD 9.4		Steel window size 1800mm W x 1200mm high, with 4no. vert. x 2no. hor. panes. Painted two coats white NS4 paint or similar approved prior to installation	No.	8.0		
2.164.13	PD 9.4		Steel window size 3160mm W x 2100mm high, with 4no. vert. x 3no. hor. panes. Painted two coats white NS4 paint or similar approved prior to installation	No.	5.0		
2.165	PD 5		CARPENTRY AND JOINERY				
2.165.1	PD 5.3.6		19 x 76mm Meranti skirtings including 20mm quadrant bead nailed	m	113.0		
2.165.2			Provisional sum for kitchen cupboards and counter tops	Prov Sum	1.0	R50 000.00	R50 000.00
2.165.3			Management, Overheads, Charges & Profit on Item 2.7.28	%		R50 000.00	
2.166	SANS1200 LD		SEWER				
	8.2.1		Supply, handle, lay and bed uPVC Class 34 sewer pipes to SANS 791:2014 of the following diameters:				
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.166.1			From toilets to conservancy tank (160mm dia) - position of tank to be confirmed on site by Engineer during construction	m	50.0		
2.166.2			Grey water from kitchens & showers to sludge dam (110mm dia)	m	50.0		
	8.2.2		Specials and fittings				
			Extra-over uPVC sewer pipes for fittings:				
2.166.3			110mm uPVC bend 87.5°	No.	2.0		
2.166.4			110mm uPVC bend 1/16	No.	2.0		
2.166.5			110mm uPVC bend 1/8	No.	2.0		
2.166.6			110mm uPVC junction 45°	No.	2.0		
2.166.7			100mm Ø uPVC rodding eye complete	No.	4.0		
2.166.8			160mm uPVC bend 87.5°	No.	2.0		
2.166.9			160mm uPVC bend 1/16	No.	2.0		
2.166.10			160mm uPVC bend 1/8	No.	2.0		
2.166.11			160mm uPVC junction 45°	No.	2.0		
	8.2.3,		Manholes				
			Construction of manhole complete from precast 1m diameter concrete manhole rings (Rocla or similar approved), step irons at 300cc, including benching, lockable cover and frame, for depths:				
2.166.12			Up to 3 m	No.	4.0		
2.167			CONSERVANCY TANK				
2.167.1			Supply and install to manufacturers specifications 1 x 9500l SABS or Agreement Certified Calcamite or similar approved Rotamoulded Underground modular Conservancy Tank (Including excavation, backfill and compaction in soft material)	No.	1.0		
2.168	PD 7		PLUMBING				
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.168.1			Franke Quinline QLX622 stainless steel sink or similar approved with Cobra 296/15 star single hole sink mixer or similar approved including angle regulating valves, 2 No. Cobra 316 wastes, plugs & chains, double flexi combination mini P-trap and pipes/braided connectors and 15mm Ballostop valves (incl all 50mm uPVC pipework to external 110mm wastepipe)	No.	1.0		
2.168.2			Franke SIRX Stainless Steel wall mounted wash trough or similar approved for laboratory including angle regulating valves, 2 No. Cobra 316 wastes, plugs & chains, double flexi combination mini P-trap and pipes/braided connectors and 15mm Ballostop valves (incl all 50mm uPVC pipework to external 110mm waste pipe)	No.	1.0		
2.168.3			Vaal Hibiscus (7050) white vitreous china basin bolted to wall, two Cobra 211/15 star pillar taps with basin waste, plug & chain, 1 Cobra 350 bottle trap, service pipes/braided connectors, 15mm Ballostop valves (incl 50mm uPVC pipework to external 110mm waste pipe)	No.	2.0		
2.168.4			Vaal Aquasave (755499) or similar approved white vitreous china low level suite complete with flushing mechanism and fittings, flush pipe connector, 15mm Ballostop valve, service pipe/braided connector and A1 heavy duty seat and lid	No.	3.0		
2.168.5			Vaal Flatback vitreous china wall urinal (8127ZO) including 2 hanger brackets, Cobra 8787Z0 domical grating, Cobra 360 bottle trap, Cobra 8543 spreader, Flushmaster FJ6 flush valve and FJT5.5 flush pipe (incl all 50mm uPVC pipework to reducing junction)	No.	1.0		
2.168.6			Brass Bibtap for outside use, positioned above gully and securely attached to wall	No.	3.0		
2.168.7			Allow for complete hot and cold water installation using 15mm copper pipes (Class 0) with capillary fittings, chased into walls and including isolating stopcock on external wall and connection to 40mm HDPE mains supply pipe measured elsewhere	Sum	1.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.168.8			Allow for complete 110 PVC SV discharge pipework to exterior of building including branch connections and vented discharge stacks conforming to SANS 10400 requirements. To be connected into 110 sewer line at base of building	Sum	1.0		
2.168.9			Supply and install 150l Class B Geyser (SANS 151) complete with pressure control and safety valves, vacuum breakers and inlet/outlet/discharge pipework. Installation conforming to SANS 10525-1 and SANS 10254	No.	1.0		
2.168.10			Fire hose reel (SABS) with 50 m hose	No.	2.0		
2.168.11			Fire water pipework reticulation to fire hose reel including all bends, etc (from connection point on outside of external wall up to fire hose reel)	Sum	1.0		
2.169			DRAINAGE				
			Rainwater drainage:				
2.169.1			Supply and install complete 150mm industrial aluminium guttering to roof with 5 funnel outlets	No.	5.0		
2.169.2			Supply and install 6.6m x 110mm diameter PVC SV rainwater downpipes (SABS) including connection to gutter outlet, bends, heavy duty galvanised holderbat brackets and discharge shoe	No.	5.0		
2.170			MISCELLANEOUS ITEMS				
2.170.1			Provisional sum for the equipment of the boardroom, offices, laboratory, mens and ladies locker rooms and kitchen with furniture, appliances, signage and other accessories	Sum	1.0		
2.170.2			4,5 kg DCP fire extinguisher	No.	4.0		
2.171			GUARD HOUSE				
2.172	PD 2,	LI	BRICKWORK				
2.172.1	PD 9.1		230 mm thick brick wall in facebrick	m²	38.0		
2.172.2			229 x 152mm clay vermin proof air bricks	No.	2.0		
2.173	PD 8,		PAINTWORK				
			Apply one coat primer and two coats water based enamel paint (type 4):				
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.173.1	PD 9.7		Wooden doors and frames Apply one coat primer and two coats PVA paint (type 3):	No.	1.0		
2.173.2	PD 9.7		Rhinoboard ceilings	m²	9.0		
2.173.3	PD 9.7		Nutec fascias	m²	4.0		
2.174	PD 3, PD 4, PD 5	LI	DOORS AND WINDOWS				
2.174.1	PD 9.4, PD 9.6		Hardwood (Meranti) frame 53 x 86 mm complete with 813 x 2032 mm Hardwood (Meranti) solid BB door and SABS approved commercial grade 3 lever mortice lockset	No.	1.0		
			Rolled mild steel industrial window frames (FX7)				
2.174.2	PD 9.4		Steel window size 1511 mm x 1245 mm high (Type D4). Painted two coats white NS4 paint or similar approved prior to installation	No.	2.0		
2.174.3	PD 9.4		Steel window size 533 mm x 654 mm high (Type E1). Painted two coats white NS4 paint or similar approved prior to installation	No.	2.0		
2.175	PD 6		ROOF SHEETING				
2.175.1			Supply and install "Kliplok 700" Zinalume concealed fix roof sheeting 0.53mm minimum thickness on Sisalation FR405 underlay, 38 x 50mm battens, prefabricated structural grade CCA treated timber gangnail trusses complete by specialist. Engineers certificate to be provided for completed roof.	m²	18.0		
2.175.2			Supply and install 225 x 12mm Nutec fibre cement fascias	m	9.0		
2.175.3			Supply and install Zinalume 462 barge flashing to match roof sheeting	m	9.0		
2.176	PD 5,		CARPENTRY AND JOINERY				
2.176.1	PD 5.3.8		9.5mm Gypsum Rhinoboard flush plastered ceilings including brandering, approved eco friendly blanket insulation conforming to SANS 1381-1 and 10400, cornices and trap doors	m²	18.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.176.2	PD 5.3.6		19 x 76mm Meranti skirtings including 20mm quadrant bead nailed	m	20.0		
2.177			DRAINAGE				
			Rainwater drainage:				
2.177.1			Supply and install complete 150mm industrial aluminium guttering to roof with 5 funnel outlets	m	4.0		
2.177.2			Supply and install 6.6m x 110mm diameter PVC SV rainwater downpipes (SABS) including connection to gutter outlet, bends, heavy duty galvanised holderbat brackets and discharge shoe	No.	1.0		
2.178			MISCELLANEOUS ITEMS				
2.178.1			4,5 kg DCP fire extinguisher	No.	1.0		
2.178.2			Provisional sum for the equipment of the bedrooms, lounge, kitchen and bathroom with furniture, appliances, signage and other accessories	Prov Sum	1.0	R25 000.00	R25 000.00
2.178.3			Management, Overheads, Charges & Profit on Item 2132.2	%		R25 000.00	
2.179			FLOCCULANT DOSING ROOM				
2.180	PD 2,		BRICKWORK				
2.180.1	PD 9.1		230 mm thick brick wall in facebrick	m²	28.0		
2.180.2			229 x 152mm clay vermin proof air bricks	No.	2.0		
2.181	PD 8,		PAINTWORK				
			Apply one coat primer and two coats water based enamel paint (type 4):				
2.181.1	PD 9.7		Wooden doors and frames	No.	1.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
			Apply one coat primer and two coats PVA paint (type 3):				
2.181.2	PD 9.7		Concrete ceilings	m²	20.0		
2.182	PD 3, PD 4, PD 5		DOORS AND WINDOWS				
2.182.1	PD 9.4		Heavy duty galvanised steel combination standard size single panel door and frame to fit 910 W x 2110 H mm opening, fitted with SABS approved commercial grade 4 lever mortice lockset and padlatch	No.	1.0		
2.182.2			2440Wx2050H Roller Shutter Door	No.	1.0		
			Rolled mild steel industrial window frames (FX7)				
2.182.3	PD 9.4		Steel window size 1800 mm x 600 mm high . Painted two coats white NS4 paint or similar approved prior to installation	No.	2.0		
2.183	PD 5, LI		CARPENTRY AND JOINERY				
2.183.1	PD 5.3.6		19 x 76mm Meranti skirtings including 20mm quadrant bead nailed	m	18.0		
2.184			MISCELLANEOUS ITEMS				
2.184.1			4,5 kg DCP fire extinguisher	No.	1.0		
2.185			STAFF ACCOMMODATION				
2.186	PD 2,	LI	BRICKWORK				
2.186.1	PD 9.1		230 mm thick brick wall with facebrick exterior and non-facing engineering bricks interior	m²	150.0		
2.186.2	PD 9.1		115 mm thick half brick interior non-facing engineering brick walls	m²	45.0		
2.186.3			229 x 152mm clay vermin proof air bricks	No.	10.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.187	PD 2.3,	LI	PLASTERWORK 15 mm thick steel-float finish to:				
2.187.1	PD 9.2		Brick walls	m ²	200.0		
2.188			TILES Supply and lay white porcelain tile complete with tile adhesive and grouting to:				
2.188.1			Walls	m ²	20.0		
2.188.2			Extra-over items 5.3.5 for rounded edging for tiling	m	10.0		
2.189	PD 8,	LI	PAINTWORK Apply one coat primer and two coats water based enamel paint (type 4):				
2.189.1	PD 9.7		Plastered walls	m ²	200.0		
2.189.2	PD 9.7		Wooden doors and frames	No.	4.0		
			Apply one coat primer and two coats PVA paint (type 3):				
2.189.3	PD 9.7		Rhinoboard ceilings	m ²	60.0		
2.189.4	PD 9.7		Nutec fascias	m	40.0		
2.190	PD 3, PD 4, PD 5	LI	DOORS AND WINDOWS				
2.190.1	PD 9.4, PD 9.6		Hardwood (Meranti) door frame 53 x 86 mm complete with Hardwood (Meranti) solid BB door and SABS approved commercial grade 3 lever mortice lockset to fit 810 W x 2110 H mm opening	No.	4.0		
			Rolled mild steel industrial window frames (FX7)				
2.190.2	PD 9.4		Steel window size 1511 mm x 1245 mm high (Type ND4). Painted two coats white NS4 paint or similar approved prior to installation	No.	3.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.190.3	PD 9.4		Steel window size 1022 mm x 949 mm high (Type NC7). Painted two coats white NS4 paint or similar approved prior to installation	No.	2.0		
2.190.4	PD 9.4		Steel window size 1511 mm x 654 mm high (Type NC7). Painted two coats white NES4 paint or similar approved prior to installation	No.	4.0		
2.191	PD 6		ROOF SHEETING				
2.191.1			Supply and install "Kliplok 700" Zinalume concealed fix roof sheeting 0.53mm minimum thickness on Sisalation FR405 underlay, 38 x 50mm battens, prefabricated structural grade CCA treated timber gangnail trusses complete by specialist. Engineers certificate to be provided for completed roof.	m ²	110.0		
2.191.2			Supply and install 225 x 12mm Nutec fibre cement fascias	m	40.0		
2.191.3			Supply and install Zinalume 462 barge flashing to match roof sheeting	m	11.0		
2.192	PD 5		CARPENTRY AND JOINERY				
2.192.1	PD 5.3.6		19 x 76mm Meranti skirtings including 20mm quadrant bead nailed	m	80.0		
2.192.2			Provisional sum for kitchen cupboards and counter tops	Prov Sum	1.0	R40 000.00	R40 000.00
2.192.3			Management, Overheads, Charges & Profit on Item 2.9.19	%		R40 000.00	
2.193	SANS1200 LD	LI	SEWER				
	8.2.1		Supply, handle, lay and bed uPVC Class 34 sewer pipes to SANS 791:2014 of the following diameters:				
2.193.1			From toilets to conservancy tank (160mm dia) - position of tank to be confirmed on site by Engineer during construction	m	100.0		
2.193.2			Grey water from kitchens & showers to sludge dam (110mm dia)	m	30.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
	8.2.2		Specials and fittings				
			Extra-over uPVC sewer pipes for fittings:				
2.193.3			110mm uPVC bend 87.5°	No.	1.0		
2.193.4			110mm uPVC bend 1/16	No.	1.0		
2.193.5			110mm uPVC bend 1/8	No.	1.0		
2.193.6			110mm uPVC junction 45°	No.	1.0		
2.193.7			100mm Ø uPVC rodding eye complete	No.	2.0		
2.193.8			160mm uPVC bend 87.5°	No.	1.0		
2.193.9			160mm uPVC bend 1/16	No.	1.0		
2.193.10			160mm uPVC bend 1/8	No.	1.0		
2.193.11			160mm uPVC junction 45°	No.	1.0		
	8.2.3,	LI	Manholes				
			Construction of manhole complete from precast 1m diameter concrete manhole rings (Rocla or similar approved), step irons at 300cc, including benching, lockable cover and frame, for depths:				
2.193.12			Up to 3 m	No.	2.0		
2.194	PD 7		PLUMBING				
2.194.1			Franke Quinline QLX622 stainless steel sink or similar approved with Cobra 296/15 star single hole sink mixer or similar approved including angle regulating valves, 2 No. Cobra 316 wastes, plugs & chains, double flexi combination mini P-trap and pipes/braided connectors and 15mm Ballostop valves (incl all 50mm uPVC pipework to external 110mm wastepipe)	No.	1.0		
2.194.2			Vaal Hibiscus (7050) white vitreous china basin bolted to wall, two Cobra 211/15 star pillar taps with basin waste, plug & chain, 1 Cobra 350 bottle trap, service pipes/braided connectors, 15mm Ballostop valves (incl 50mm uPVC pipework to external 110mm waste pipe)	No.	1.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.194.3			Vaal Aquasave (755499) or similar approved white vitreous china low level suite complete with flushing mechanism and fittings, flush pipe connector, 15mm Ballstop valve, service pipe/braided connector and A1 heavy duty seat and lid	No.	1.0		
2.194.4			Brass Bibtap for outside use, positioned above gully and securely attached to wall	No.	2.0		
2.194.5			Allow for complete hot and cold water installation using 15mm copper pipes (Class 0) with capillary fittings, chased into walls and including isolating stopcock on external wall and connection to 40mm HDPE mains supply pipe measured elsewhere	Sum	1.0		
2.194.6			Allow for complete 110 PVC SV discharge pipework to exterior of building including branch connections and vented discharge stacks conforming to SANS 10400 requirements. To be connected into 110 sewer line at base of building	Sum	1.0		
2.194.7			Supply and install 150l Class B Geyser (SANS 151) complete with pressure control and safety valves, vacuum breakers and inlet/outlet/discharge pipework. Installation conforming to SANS 10525-1 and SANS 10254	No.	1.0		
2.194.8			Fire hose reel (SABS) with 50 m hose	No.	1.0		
2.194.9			Fire water pipework reticulation to fire hose reel including all bends, etc (from connection point on outside of external wall up to fire hose reel)	Sum	1.0		
2.195			DRAINAGE				
			Rainwater drainage:				
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.195.1			Supply and install complete 150mm industrial aluminium guttering to roof with 4 funnel outlets	m	40.0		
2.195.2			Supply and install 6.6m x 110mm diameter PVC SV rainwater downpipes (SABS) including connection to gutter outlet, bends, heavy duty galvanised holderbat brackets and discharge shoe	No.	4.0		
2.196			MISCELLANEOUS ITEMS				
2.196.1			Provisional sum for the equipment of the bedrooms, lounge, kitchen and bathroom with furniture, appliances, signage and other accessories	Prov Sum	1.0	R100 000.00	R100 000.00
2.196.2			Management, Overheads, Charges & Profit on Item 2.9.44	%		R100 000.00	
2.196.3			4,5 kg DCP fire extinguisher	No.	1.0		
2.197			ROAD WORKS AND STORMWATER				
2.198	SANS1200 C		SITE CLEARANCE				
2.198.1	"8.2.1"		Site clearance to road reserves	m ²	1 266.0		
2.198.2							
2.198.3	"8.2.10"		Remove 100 mm topsoil from road reserves to stockpile and maintain	m ³	127.0		
2.199	SANS1200 DM		SUBGRADE				
2.199.1	8.3.3		Rip and recompact in-place material to 90% of MAMDD (100% for sand)	m ³	188.0		
2.199.2	8.3.4		Cut to fill and compact to 90% of MAMDD	m ³	10.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.199.3	8.3.4		Borrow to fill G7 Material from commercial sources (including hauling the material over an unlimited free-haul distance) and compact to 90% of MAMDD	m³	10.0		
	"8.3.7"		Cut to spoil from:				
2.199.4			Soft and intermediate excavation	m³	336.0		
2.199.5			Hard rock excavation	m³	20.0		
2.199.6			Boulder excavation, Class A	m³	20.0		
2.200			LAYERWORKS				
2.201	SANS1200 ME		SUBBASE				
2.201.1	8.3.3		Construct subbase 150 mm thick with G7 material from commercial sources (including hauling the material over an unlimited free-haul distance) compacted to 95% MAMDD	m³	121.0		
2.202	SANS1200 MF	LI	BASE				
2.202.1	8.3.3		Construct G2 base 200 mm thick with material obtained from commercial sources (including hauling the material over an unlimited free-haul distance) compacted to 98% of MAMDD	m³	155.0		
2.202.2			Construct G7 base 150 mm thick with material obtained from commercial sources (including hauling the material over an unlimited free-haul distance) compacted to 95% of MAMDD to gravel lay-down areas	m³	62.0		
		LI	Stabilization				
2.202.3	8.3.5 (d)		Process subbase material by stabilization	m²	121.0		
Total Carried Forward							



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.202.4	8.3.8		Stabilizing agent Supply of cement (3% of MDD)	t	7.0		
2.203	SANS1200 MJ		SEGMENTED PAVING				
	8.2.2		Construction of pavement complete				
2.203.1			Class 35 (35MPa) 80mm interlocking block pavers on 20mm bedding sand	m²	780.0		
2.203.2	"8.3.10, "		Topsoil Placing of topsoil 100 mm thick on verges and banks	m²	158.0		
2.203.3	"8.3.11, "		Grassing Grassing of embankments and verges	m²	158.0		
2.204	SANS1200 MK	LI	KERBING				
2.204.1	"8.2.1"		Precast concrete kerbing, semi-mountable Kerb, SANS Figure 7 in Grade 25 MPa/19 mm concrete bedding and backing complete	m	190.0		
2.204.2	"8.2.6.1"		Transition kerbs - cast insitu using 30 MPa/19 mm concrete	m	20.0		
2.205	SANS1200 MM		PERMANENT ROAD SIGNS				
2.205.1	8.3.6		Statutory signs, street names and the like supplied and erected complete				
2.205.2			Regulatory signs (R series)	No.	4.0		
2.206	SANS1200 A	LI	ANCILLARY ROADWORKS				
2.206.1	8.5		Tests ordered by the Engineer	Prov Sum	1.0	R25 000.00	R25 000.00
Total Carried Forward							



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.206.2			Management, Overheads, Charges & Profit on Item 2.10.20	%		R25 000.00	
2.207		LI	STORMWATER DRAINAGE				
2.207.1			Construct Dish Drain with Class 25/19 Concrete, 1.0m wide by 150mm thickness with Ref 395 weld mesh, to daylight stormwater at end of entrance road	m	40.0		
2.208	PG	LI	ELECTRICAL WORKS				
2.209	SANS1200 DA		EARTHWORKS (SMALL WORKS)				
	SANS1200 DA		Excavation				
	8.3.1 b),		Excavate in all materials and backfill, compact and dispose of surplus / unsuitable material, for electrical cables and poles:				
2.209.1			Cable trench 500mm deep x 300mm wide	m	650.0		
2.209.2			Cable trench 500mm deep x 600mm wide	m	20.0		
2.209.3			8m Street light pole 1000mm deep	No.	5.0		
2.209.4			Supply and install cable danger marker tape per 100m roll in accordance with the specifications	No.	3.0		
2.210		LI	POWER CABLES AND EARTHING				
			Supply and installation of 4 or 2 core PVC insulated PVC bedded SWA PVC sheathed 600/1000V cable manufactured to SANS1507-3				
2.210.1			110mm Cable PVC Flexible Sleeve x 6m length	No.	23.0		
2.210.2			50mm Cable PVC Flexible Sleeve x 6m length	No.	33.0		
2.210.3			70mm ² cu 4-core PVC SWA PVC + ECC	m	40.0		
2.210.4			50mm ² cu 4-core PVC SWA PVC + ECC	m	100.0		
2.210.5			16mm ² cu 4-core PVC SWA PVC + ECC	m	30.0		
2.210.6			10mm ² cu 2-core PVC SWA PVC + ECC	m	32.0		
2.210.7			6mm ² cu 4-core PVC SWA PVC + ECC	m	36.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.210.8			2.5mm2 cu 4-core PVC SWA PVC + ECC	m	100.0		
2.210.9			4mm2 cu 4-core PVC SWA PVC + ECC	m	30.0		
2.210.10			16mm2 cu 4-core PVC SWA PVC + ECC	m	30.0		
2.210.11			16mm2 cu 2-core PVC SWA PVC + ECC	m	1.0		
2.210.12			50mm2 bare cu ECC	m	1.0		
2.210.13			35mm2 bare cu ECC	m	1.0		
2.210.14			25mm2 bare cu ECC	m	1.0		
2.210.15			16mm2 bare cu ECC	m	1.0		
2.210.16			35mm2 cu 1-core insulated ECC	m	1.0		
2.210.17			16mm2 cu 1-core insulated ECC	m	1.0		
2.210.18			10mm2 cu 1-core insulated ECC	m	1.0		
2.210.19			6mm2 cu 2-core PVC SWA PVC + ECC	m	140.0		
2.211		LI	CABLE TERMINATIONS & SUPPORT				
			Terminations of 4 and 2 core cable including supply of lugs, glands, shrouds and all associated materials not listed				
2.211.1			95mm2 cu 4-core cable termination incl compression gland and lugs	No.	1.0		
2.211.2			70mm2 cu 4-core cable termination incl compression gland and lugs	No.	2.0		
2.211.3			50mm2 cu 4-core cable termination incl compression gland and lugs	No.	2.0		
2.211.4			10mm2 cu 4-core cable termination incl compression gland and lugs	No.	1.0		
2.211.5			10mm2 cu 2-core cable termination incl compression gland and lugs	No.	2.0		
2.211.6			16mm2 cu 4-core cable termination incl compression gland and lugs	No.	2.0		
2.211.7			2.5mm2 cu 4-core cable termination incl compression gland and lugs	No.	22.0		
2.211.8			6mm2 cu 2-core cable termination incl compression gland and lugs	No.	4.0		
2.211.9			4mm2 cu lighting cable termination incl 2 x No.2 end connectors and insulating sleeves (flood lights)	No.	1.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.211.10			Cable racking: Medium duty galvanised 150mm trays or mesh 3m lengths (incl joiner set per length)	Lengths	10.0		
2.211.11			Cable racking: Medium duty galvanised 300mm trays or mesh 3m lengths (incl joiner set per length)	Lengths	10.0		
2.211.12			Cable racking: Medium duty galvanised 600mm trays or mesh 3m lengths (incl joiner set per length)	Lengths	4.0		
2.211.13			Cable racking: Medium duty galvanised 150mm trays or mesh: bends, t-pieces, elbows etc: allow for 10 of each	Sum	1.0		
2.211.14			Cable racking: Medium duty galvanised 300mm trays or mesh: bends, t-pieces, elbows etc: allow for 10 of each	Sum	1.0		
2.211.15			Unistrut galvanised for cable racking	Lengths	10.0		
MCCs, DBs & KIOSKS							
The complete design, supply, manufacture, delivery, off-loading, installation and commissioning of switchboards and MCCs (building switchboards (DBs) measured elsewhere)							
2.211.16			Metering Kiosk-A, outdoor IP65, free standing as per specification	No.	1.0		
2.211.17			DB-B: Outdoor Kiosk 1, outdoor IP65, free standing as per specification	No.	1.0		
2.211.18			MCC-1, indoor, free standing, complete with PLC section as per specification	No.	1.0		
2.211.19			DB-D: flush wall mount indoor DB as per specification - Guard House DB	No.	1.0		
2.212			INSTRUMENTATION, CONTROL & SCADA/TELEMETRY				
2.212.1			Level Measurement and Control instrumentation incl cabling, transducers, sensors and associated hardware per Reservoir	No.	2.0		
2.212.2			Adroit SCADA system complete with PC, UPS and furniture as specified	Sum	1.0		
2.212.3			System Integrator for PLC engineering and SCADA integration incl travel and accommodation	Sum	1.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.212.4			System Integrator for PLC engineering and SCADA integration incl travel and accommodation	Sum			
2.213		LI	AREA LIGHTING				
2.213.1			Earth electrode 1.2m with coupling for earthing of masts: 3 per mast	No.	19.0		
2.213.2			8m galvanised steel pole with base plate complete with 2 x LED floodlight mounting brackets as per spec	No.	19.0		
2.213.3		LI	Pole Numbers	No.	22.0		
2.214			BUILDINGS: SMALL POWER & LIGHTING				
2.214.1			25mm ² BCE Lightning Protection Droppers Bonded onto roof sheeting, drop down in PVC conduit installed inside wall, complete with inspectio boc and 1,2m earth rod including coupling. The 25mm ² BCE conductor shall be connected to earth rod at minimum 1m away from building below fground level.All Buildings Lightning Protection by either Messrs SME Earthing & Lightning Protection or Pontins Natal	Sum	1.0		
2.214.2			50mm PVC conduit 4m length	No.	43.0		
2.214.3			32mm PVC conduit 4m length	No.	4.0		
2.214.4			20mm PVC conduit 4m length	No.	160.0		
2.214.5			20/32/50mm PVC Conduit accessories (glands/couplings/round boxes with covers etc.)	Sum	1.0		
2.214.6			Draw wire 100m roll	No.	10.0		
2.214.7			2.5mm2 cu 1-core PVC Stranded Red 100m roll	No.	32.0		
2.214.8			2.5mm2 cu 1-core PVC Stranded White 100m roll	No.	32.0		
2.214.9			2.5mm2 cu 1-core PVC Stranded Blue 100m roll	No.	32.0		
2.214.10			2.5mm2 cu 1-corePVC Stranded Black 100m roll	No.	32.0		
2.214.11			2.5mm2 cu 1-core PVC Stranded Green 100m roll	No.	32.0		
2.214.12			1.5mm2 cu 1-core PVC Stranded Red 100m roll	No.	2.0		
Total Carried Forward							

Tenderer

Witness 1

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.214.13			1.5mm2 cu 1-core PVC Stranded White 100m roll	No.	2.0		
2.214.14			4mm2 cu 1-core PVC Stranded Red 100m roll	No.	20.0		
2.214.15			4mm2 cu 1-core PVC Stranded White 100m roll	No.	20.0		
2.214.16			4mm2 cu 1-core PVC Stranded Blue 100m roll	No.	20.0		
2.214.17			4mm2 cu 1-core PVC Stranded Black 100m roll	No.	20.0		
2.214.18			4mm2 cu 1-core PVC Stranded Green 100m roll	No.	20.0		
2.214.19			4x4 galvanised socket outlet box	No.	5.0		
2.214.20			Double switched 16A socket outlet with cover: Cbi Electric incl terminations	No.	5.0		
2.214.21			IP65 32A 3-Pole isolator with cover incl terminations	No.	2.0		
2.214.22			IP65 20A 3-Pole isolator with cover incl terminations	No.	2.0		
2.214.23			IP65 40A 2-Pole isolator with cover incl terminations	No.	1.0		
2.214.24			IP65 20A 2-Pole isolator with cover incl terminations	No.	13.0		
2.215		LI	LUMINAIRES				
			All Luminaires shall bare SABS Mark and colour temperature of a minimum 4000k. Luminaires shall be similar to Regent Lighting, BEKA or any SABS Approved supplier.				
2.215.1			50W LED Floodlight with black trim	No.	1.0		
2.215.2			100W LED Floodlight with black trim	No.	5.0		
2.215.3			150W LED Floodlight with black trim	No.	22.0		
2.215.4			2x22W LED Open Channel Flourescent, 4000K, Colour: White. SABS Approved. Regent Lighting or similar.	No.	85.0		
2.215.5			2x22W LED Decorative Flourescent with an Acrylic Diffuser, 4000K, Colour: White. SABS Approved. Regent Lighing or similar.	No.	16.0		
2.215.6			2x22W LED Vapourproof Flourescent, 4000K, Colour: Grey. SABS Approved. Regent Lighing or similar.	No.	5.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.215.7			7W LED Downlighter, 50mm Dia, 4000K, Colour: White. SABS Approved. Regent Lighting or similar. Regent Lighting or similar.	No.	20.0		
2.215.8			12W Polycarbonate Round Bulkhead with White Trim, 4000K. SABS Approved. Regent Lighting or similar.	No.	25.0		
2.215.9			IP65, 24W LED, Square Die-Cast Aluminum Bulkhead with Black Trim, 4000K. SABS Approved. Brand Beka or similar	No.	44.0		
2.215.10			12W Polycarbonate Round Decorative Bulkhead with multiple colour Trim, complete with opal diffuser, 4000K. SABS Approved. Regent Lighting or similar.	No.	4.0		
		LI	Switches				
			Supply, fitting and electrical connection of a flush or surface mounted 16A switch excluding box (for surface type) conduit connections, but including coverplates.				
2.215.11			16A 1 Lever 1 way Switch	No.	16.0		
2.215.12			16A 1 Lever 2 way Switch	No.	8.0		
2.215.13			16A 2 Lever 2 way Switch	No.	6.0		
2.215.14			16A 2 Lever 1 way Switch	No.	2.0		
2.215.15			16A Photocell	No.	5.0		
			Powerskirting				
			2 Compartment PVC Powerskirting including complete Elbows/Angle (Internal & External), flat angle, End Caps. Body Joint and Solu Clip as per construction drawing. Colour (White)				
2.215.16			Powerskirting	m	150.0		
2.215.17			Elbows Internal/External	No.	12.0		
2.215.18			End Caps	No.	14.0		
2.215.19			16A Dedicated SSO's c/w cover on Powerskirting. Colour: Red	No.	16.0		
2.215.20			16A SANS 164-1 & SANS164-2 SSO's c/w cover on Powerskirting. Colour: White	No.	40.0		
2.215.21			RJ11 Connector with cradle/cover	No.	16.0		
2.215.22			RJ45 Connector with cradle/cover	No.	16.0		
		LI	Sockets On Wall				
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.215.23			16A SSO's c/w cover on wall. Colour: White	No.	6.0		
2.215.24			16A SANS 164-1 & SANS164-2 SSO's c/w cover on wall. Colour: White	No.	22.0		
			Conduit				
			Supply and installation of PVC conduit. Lengths given shall be taken as measured horizontal and vertical runs between conduit terminations. Rates quoted shall allow for wastage, offcuts, couplings, cuttings, bending, jointing, sockets, bends and tees.				
2.215.25			20mm PVC conduit	m	3 000.0		
2.215.26			25mm PVC conduit	m	1 660.0		
			Conduit Boxes and Ends (Provisional Quantities)				
			Terminate and connect one pair of conduit ends including supply and installation of box on surface or in brickwork. Either round, 50mm x 100mm, 100mm x 100mm (excluding coverplates), including holes for conduit.				
			Terminate and connect one pair of conduit ends including lock nuts, bushes, etc. connecting into board tray, wiring channel etc. including cutting holes for conduit entries, but excluding conduit box.				
2.215.27			20mm PVC conduit	No.	227.0		
2.215.28			25mm PVC conduit	No.	89.0		
			Air-conditioning				
2.215.29			9000 BTU split air conditioner - inverter driven with Bluchem coating	No.	2.0		
2.215.30			12000 BTU split air conditioner - inverter driven with Bluchem coating	No.	3.0		
2.215.31			18000 BTU split air conditioner - inverter driven with Bluchem coating	No.	1.0		
2.216			GENERAL				
Total Carried Forward							



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
			New SANS 10142 Electrical Certificate of Compliance for each building				
2.217			KIOSK-A	No.	1.0		
2.218			MCC PANEL	No.	1.0		
2.219			DB-A	No.	1.0		
2.220			DB-B	No.	1.0		
2.221			DB-C	No.	1.0		
2.222			DB-D	No.	1.0		
2.222.1			New SANS 10142 Electrical Certificate of Compliance for common and all other areas incl. exterior area lighting	No.	1.0		
2.223			ESKOM CONNECTION FEE				
2.223.1			A provisional sum has been allowed for a New 100KVA,400V,50Hz Three Phase Supply with a Conventional Meter.	Prov Sum	1.0	R200 000.00	R200 000.00
2.223.2			Plus Profit and Attendance	%		R200 000.00	
		LI	Labeling and Engraving				
			Supply and installation of labels for Distribution boards. kiosks and engraving of coverplates for light switches and socket outlets and isolator showing their circuit numbers as marked on the drawing				
2.223.3			Distribution Board	No.	6.0		
2.223.4			Engraving of light switch coverplates	No.	37.0		
2.223.5			Engraving of socket outlet coverplates	No.	89.0		
2.223.6			Handdryer Isolator	No.	2.0		
2.223.7			A/C Split Unit Isolators	No.	4.0		
			Distribution and Kiosk Legends				
			Each DB and kiosk shall contained a type legend indicating total circuits within distribution and shoe the main cables size				
2.224			KIOSK-A	No.	1.0		
2.225			MCC PANEL	No.	1.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

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Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.226			DB-A	No.	1.0		
2.227			DB-B	No.	1.0		
2.228			DB-C	No.	1.0		
2.229			DB-D	No.	1.0		
			Security				
2.229.1			Provisional Sum has been allow for security alarm system in all buildings, including remote communication to WTW control room.	Sum	1.0		
2.230			MECHANICAL WORKS				
2.231			BACKWASH PUMPS				
2.231.1	PE 4		Supply and installation of backwash pumps and motors complete as per specifications	No.	2.0		
2.231.2			Supply and installation of sump, pumps and pipeline to return backwash water to head of works	Sum	1.0		
2.232		LI	DOMESTIC WATER PUMPS				
2.232.1	PE 5.1		Supply and installation of domestic water pumps and motors complete as per specifications	Sum	1.0		
2.232.2	PE 5.2		Supply and installation of domestic water booster pump for staff accommodation complete as per specifications	Sum	1.0		
2.233			AIR BLOWERS				
2.233.1	PE 6		Supply and install rotary twin lobe blowers (including motors) complete as per specifications	No.	2.0		
2.234			CHLORINE / FLOCCULANT DOSING				
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.234.1	PE 2, PE 7.1		Supply and install chlorine dosing system in the chlorine storage and vacuum rooms by specialist supplier, complete as per specifications	Sum	1.0		
2.234.2	PE 1, PE 3		Supply, install and commission flocculant dosing system complete by specialist supplier complete as per specifications	Sum	1.0		
2.235			CHLORINE SAFETY EQUIPMENT				
	PE 7.2		Supply and install chlorine safety equipment by specialist supplier, complete as per specifications				
2.235.1			Chlorine detectors with one located in the Chlorine Storage Room and the other located in the Vacuum Room.	No.	2.0		
2.235.2			Audible alarm and visual alarm located on the external wall of the chlorine rooms	No.	2.0		
2.235.3			Two sets of breathing apparatus for emergency use	No.	2.0		
2.235.4			Ammonia torch	No.	1.0		
2.235.5			Extractor fan with elevated (2m above roof) vermin and weather proofed duct	No.	2.0		
2.235.6			"Foot activated safety shower complete with a water supply from the domestic water supply"	No.	1.0		
2.235.7			"Eye bath complete with a water supply from the domestic water supply"	No.	1.0		
2.236			RETAINER WALLS				
2.237	SANS1200 D		EARTHWORKS				
2.237.1	8.3.2		Excavate and trim to lines and grades for foundations	m³	60.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.237.2	8.3.4		Backfill behind wall from excavated material stockpile, in layers not exceeding block height, compacted to 90% MAMDD	m³	60.0		
2.237.3							
2.238	SANS1200 G		CONCRETE (STRUCTURAL)				
2.238.1	8.4.3		Supply and place 25MPa concrete in foundations as per detail	m³	16.0		
2.238.2	8.3.1		Supply and place steel reinforcement in foundations and walls	kg	1 600.0		
2.239			PATENTED EARTH RETAINING SYSTEMS				
2.239.1	SABS 1200 DK 8.2.1		Trimming of batter faces to correct angle and embankment preparation work prior to placement of retaining wall blocks and fill	m²	132.0		
2.239.2	PS DK 8.2.2		Supply and install TERRACE BLOK TYPE TB500 with a minimum constructed mass of 480kg/m² including a minimum 300mm wide coarse drainage layer (sand) behind the blocks	m²	92.0		
2.239.3	PS DK 8.2.3		Supply and install TERRACE BLOK TYPE TB300 with a minimum constructed mass of 320kg/m² including a minimum 500mm wide coarse drainage layer (sand) behind the blocks. To the top 5 courses of the wall.	m²	45.0		
2.239.4	PS DK 8.2.4		Supply, install at NGL elevation behind wall perforated drainage collection pipe (Flo-Pipe by Kaytech) & 19mm stone (0.16m³/m) to maintain gravity flow of water to outside of reinforced soil zone.	m	60.0		
2.239.5	PS DK 8.2.5		Wrap drainage collection pipe and 19mm drainage aggregate in Bidim A4 - 1.6m/m	m	60.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE, ROADWORKS AND STORMWATER, RETAINER WALLS AND FENCING

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
2.239.6	PS DK 8.2.6		Supply and lay Findrain / Wickdrain 200 mm wide at 45° angles along excavated batter at 2m centres, as per manufacturers specifications. Connect to perforated collector pipe. Pipe measured under item 4.9.9	m²	132.0		
2.240		LI	FENCING				
			Invisible Wall Fencing Category III type anti-cut and anti-climb security fence with pressed high density mesh panels formed of 4mm diameter high tensile galvanised wires with Marine fusion bonded coating and with 76,2 x 12,7mm apertures reinforced with 40 x 50mm deep "V" formation horizontal recessed bands and 2 x 75mm 70 degree flanges along sides and 2 x 30 degree flanges along top and with 100mm high "shark tooth" type spike rails and 85mm taper locking posts set in and including 400 x 400 x 600mm deep concrete base, fixed in strict accordance to the manufacturer's instructions				
2.240.1			Security fence 1.8m high	m	500.0		
2.240.2							
2.240.3			Driveway sliding gate size 5000 x 1800mm high	No.	1.0		
2.240.4			Provision for 11ML Raw water storage within the water treatment site	Prov Sum	1.0		
Total Carried Forward To Summary							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 3: PUMPSTATION

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
3							
3.1			MASOBE PUMP STATION				
	SANS 1200C		Site Clearance				
3.1.1	8.2.1		Clear and Grub Pump station site	m ²	560.0		
	8.2.2		Remove and grub large trees and tree stumps of girth:				
3.1.2			a) over 1m and up to and including 2m	No.	5.0		
3.1.3			b) over 2m and up to and including 3m	No.	5.0		
3.1.4	8.2.5		Take down existing fences	km	0.1		
3.1.5	8.2.10		Remove topsoil to a nominal depth of 150mm and stockpile	m ³	84.0		
	SANS1200D		Earthworks				
	8.3.2		Bulk Excavation				
			a) Excavate in all materials and use for embankment or backfill or dispose of as ordered for:				
3.1.6			i) For pump station platform	m ³	430.0		
			b) Extra- over for				
3.1.7			i) Intermediate excavation	m ³	90.0		
3.1.8			ii) Hard rock excavation	m ³	90.0		
	8.3.3		Restricted Excavation				
			a) Excavate for restricted foundations, footings, and pipe trenches in all materials and use for backfill or embankment or dispose for:				
3.1.9			i) Pump station	m ³	120.0		
	8.3.8		Existing Services				
3.1.10			c) Excavate by hand in soft material to expose underground services	m ³	60.0		
3.1.11	8.3.4		Importation, placing and compaction of G7 gravel to grade level to 98% MOD AASHTO (at OMC) in layers not exceeding 200mm to replace pockets or layers of unsuitable material where directed by Engineer (Prov)	m ³	270.0		
	8.3.3		Overhaul				
3.1.12			a) Limited Overhaul (Provisional)	m ³	270.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 3: PUMPSTATION

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
3.1.13			b) Long Overhaul (Provisional)	m ³ .km	270.0		
3.2	SANS 1200DM		EARTHWORKS (ROADS, SUB-GRADE) - UNDER STRUCTURE				
	8.3.3		Treatment of Roadbed (Under Structure)				
			a) Road-bed preparation and compaction of material to:				
3.2.1			i) minimum of 90% modified AASHTO maximum density	m ³	270.0		
3.3	SANS 1200ME		SUBBASE (STABILIZATION UNDER STRUCTURE) -PROVISIONAL				
	8.3.5		Process material by the following process, as relevant and use under structure on instruction by Engineer				
3.3.1			a) Screening	m ³	405.0		
3.3.2			b) Heavy grid rolling	m ³	405.0		
3.3.3			c) Stabilization (6% Cement)	m ³	205.0		
	8.3.8		Stabilising Agent				
3.3.4			a) Portland Cement	t	27.0		
3.4	SANS1200G		CONCRETE STRUCTURAL				
	8.2		Formwork				
	8.2.4		Special off form to:				
3.4.1			a) soffit to roof slab	m ²	502.0		
3.4.2			b) pump station plinths	m ²	11.0		
3.4.3			c) 20 x10 drip to roof pump station	m	26.0		
	8.2.5		Narrow widths up to 300mm wide				
3.4.4			a Pump station foundations	m	90.0		
	8.2.6		Box out Holes/ Form Voids				
			a) Small circular, of diameter up to and including 0,35m				
3.4.5			i) 250mm diameter	No.	2.0		
	8.3.1		Reinforcement				
3.4.6			a) mild steel	ton	1.0		
3.4.7			b) High tensile steel	ton	1.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 3: PUMPSTATION

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
	8.4		Concrete				
3.4.8			Screed - 1:3 Cement/ Sand	m³	135.0		
3.4.9			No fines Concrete to underdrain system	m³	135.0		
3.4.10			15MPa concrete to platforms, aprons, steps, pipe supports etc.	m³	135.0		
	8.4.3		Concrete, Grade 25MPa/ 19mm for:				
3.4.11			i) Pump station footings	m³	30.0		
3.4.12			ii) Pump station floor	m³	76.0		
3.4.13			iii) Pump station roof	m³	56.0		
			Unformed surface finishes				
3.4.14			a) Wood floated	m²	205.0		
3.4.15			b) Steel floated	m²	202.0		
			Joints				
			Construct construction joints for:				
3.4.16			Isolations joint at floor/wall junction	m	100.0		
3.4.17			Horizontal roof sliding joint on top of wall. Rate to include for two layers of tempered masonite and two layers or 3 ply malthoid	m	100.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 3: PUMPSTATION

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
3.4.18			Roof water proofing	m	80.0		
			Sundry Items				
3.4.19			110mm dia. uPVC sleeves long radius 90 degree	No.	5.0		
			Building Work				
3.4.20			230mm thick external Facebrick Wall - Corobrick "Firelight Satin" or similar Approved for internal / external wall of Pumpstation	m²	380.0		
3.4.21			Pump stations double doors	Sum	1.0		
3.4.22			Pump station single doors	Sum	1.0		
3.4.23			Screed to pump station roof slab	m³	2.0		
3.4.24			Windows to pump station as per drawing	No.	9.0		
3.4.25			Airbricks to pump station building and chambers	No.	16.0		
			Structural steel work (Sundry Items)				
3.4.26			Supply and install expanded metal grid including angled frames with fishtails to cast in to concrete to all floor channels on pump station	Prov Sum	1.0		
			Site Drainage				
			Supply and lay "Kaymat U14 or similar approved geotextile, including all laps, cutting and wasting				
Total Carried Forward							

Tenderer

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 3: PUMPSTATION

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
3.4.27			a) Beneath 1m wide gravel apron	m ²	80.0		
			Supply and lay to fall as indicated, drainage pipes, including all couplings cuttings and waste				
3.4.28			a) 110mm Ø uPVC pipe for stormwater drainage for pump station	m	5.0		
			Supply and erect new fencing material for pump station site				
3.4.29			i) Supply and Install 2.4m high, 40MPa Concrete Palisade Fence. Rate to include supply, delivery from source and installation	m	400.0		
3.4.30			ii) Gates	No.	2.0		
3.4.31			iii) Barbed tape concertina	m	400.0		
			Medium Pressure Pipelines				
			Supply and install pipe fittings complete with all jointing materials such as gaskets, nuts and bolts etc				
			Design, Manufacture, supply, install, connect, calibrate and commission Pump Station. The infrastructure shall be complete including compilation of operating manuals and provision of training to the WSP or scheme operators;				
3.4.32			a) DN150 steel pipe, F.B.E length=1050mm	No.	1.0		
3.4.33			b) DN150, 90 degree G.M.S, steel bend, F.B.E	No.	4.0		
Total Carried Forward							

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 3: PUMPSTATION

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
3.4.34			c) DN50 bermard Pump control valve, flanged, class 25 or similar approved model	No.	1.0		
3.4.35			d) DN150 x DN150 G.M.S Tee, with Puddle Flange. 2400mm Long Flanged Barrel with Two No. DN150 Flanged Branches. Positioned at 1165mm And 2165mm From One End Of Barrel. 250mm C/F. Puddle Flange 650mm From One End	No.	1.0		
3.4.36			e) DN150 Flanged R.S.V Gate Valve, Class 16	No.	2.0		
3.4.37			f) DN150 G.M.S Pipe, 300mm Long Both End Flanged	No.	2.0		
3.4.38			g) DN50 bermard Pump control valve, flanged, class 25 or similar approved model	No.	1.0		
3.4.39			i) DN80 x DN50 Concentric Flanged Reducer, 100mm Long	No.	2.0		
3.4.40			j) DN80 Non Return Valve, Class 25 Flanged	No.	2.0		
3.4.41			k) DN80 G.M.S Pipe ,200mm Long Both Ends Flanged	No.	2.0		
3.4.42			l) DN80 Flanged R.S.V Gate Valve, Class 25	No.	2.0		
3.4.43			m) DN80 x 90° G.M.S Bend, Flanged Both Ends	No.	4.0		
3.4.44			n) DN80 x DN150 Flanged Eccentric Reducer 200mm Long	No.	4.0		
3.4.45			o) DN150 G.M.S Pipe 540mm Long Both End Flanged	No.	2.0		
Total Carried Forward							

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 3: PUMPSTATION

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
3.4.46			p) DN 150 x 2520mm Long Flanged Pipe with three No. DN50, 45° Laterals, Positioned at 350mm, 1350mm and 2350mm from one end C/F of Laterals 250mm	No.	1.0		
3.4.47			q) DN150 x DN65 Concentric Flanged Reducer, 200mm Long	No.	2.0		
3.4.48			r) DN150 x 800mm Long Flange G.M.S Pipe with Puddle Flange	No.	1.0		
3.4.49			s) DN150 X 2645mm Long G.M.S Pipe Both Ends Flanged	No.	1.0		
3.4.50			t) DN50 Surge Anticipated Bermad 735 Valve (or Similar Approved) Completer with all pipework to make a complete installation as indicated on the drawing	No.	1.0		
Pumpsets							
Potable water pumps, to meet 80 litres per second at 70m head, together with 200kw motor at 2980rpm							
3.4.51			a) Supply pump set complete with baseplate, motor, pump and instrumentation	No.	3.0		
Motor for Pumps							
3.4.52	PM 3.7		b) Supply holding down bolts and grouting	set	3.0		
3.4.53	PM 3.8		c) Pump tests (Factory Acceptance Testing)	set	3.0		
3.4.54			d) Pump tests (Site Acceptance Testing)	set	3.0		
Total Carried Forward							

Tenderer

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 3: PUMPSTATION

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
			Supply and install 356 x 171 x 46 UB crawl beam complete as detailed:				
3.4.55			11,9m long (rate to include complete with u-bolt plate and welding in accordance	No.	1.0		
3.4.56			Supply and install fixed aluminium louvre ventilation panel 660mm high x 2200mm wide. Allow for all sealing and fixing	No.	1.0		
3.4.57			Supply and lay 50mmø HDPE drain pipe complete with 45° bend	m	50.0		
3.4.58			Supply and lay 110mmø uPVC drainage pipe complete with 110mmø equal tee and 90° bend.	m	50.0		
			All electrical panels to be 3CR12 1.6 mm thickness.				
3.5			ELECTRICAL				
3.6			TELEMETRY & SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) NETWORK				
			Telemetry and SCADA				
			Design, Manufacture, supply, install, connect, calibrate, commission, Telemetry System and SCADA Computerised System in order to ensure remote water supply scheme operation. The infrastructure shall be complete including compilation of operating manuals and provision of training to the WSP or scheme operators;-				
3.6.1			a) Hardware and Software	Sum	1.0		
Total Carried Forward							

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 3: PUMPSTATION

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
3.6.2			Test & certificate of compliance of item 3.10.1 above	Sum	1.0		
			Surge Protection system				
3.6.3			24v devices	No.	4.0		
3.6.4			240V devices	No.	6.0		
3.6.5			LEVEL control PLC include all I/O cards, programming, cable, communication convertors and surge protection	No.	3.0		
3.6.6			Ultrasonic level controller	No.	3.0		
3.6.7			Lightning Protection System	Sum	1.0		
3.6.8			Test & certificate of compliance	Sum	1.0		
			NB-Rate includes labour, materials, cable glands installation				
			Power Supply and Motor Control				
3.6.9			30kW VSD units complete with enclosures	No.	4.0		
3.6.10			Main LV panel complete	No.	3.0		
3.6.11			Cable PVCA x 4C x 50mm ²	m	100.0		
3.6.12			Cable PVCA x 3C x 16mm ²	m	100.0		
Total Carried Forward							

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 3: PUMPSTATION

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
3.6.13			Cable x 1C x 70mm ²	m	100.0		
3.6.14			Cable PVCA x 4C x 50mm ² Termination-Envirogland	No.	4.0		
3.6.15			Cable PVCA x 3C x 2 x 16mm ² Termination Envirogland	No.	8.0		
3.6.16			Cable x 2C x 4mm ² Termination Envirogland	No.	8.0		
3.6.17			Emergency stop button	No.	4.0		
3.6.18			Earthing/Bonding	Sum	3.0		
3.6.19			Earth electrode	No.	12.0		
			Surge Protection system				
3.6.20			24v devices	No.	4.0		
3.6.21			400V devices	No.	6.0		
3.6.22			Motor control PLC include all I/O cards, programming, cable, communication convertors and surge protection	No.	3.0		
3.6.23			Pressure Transducer for pump station inlet and outlet pressure monitoring	No.	4.0		
3.6.24			Pump discharge pressure switch suitably rated for the operating pressures	No.	4.0		
3.6.25			Pump discharge flow switch suitably rated for the operating flows	No.	4.0		
Total Carried Forward							

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 3: PUMPSTATION

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
			Fibre Optic Cable				
3.6.26			Fibre Optic cable - supply and install single mode fibre, 24 core, SWA.	m	200.0		
3.6.27			Dome joints splicing, single mode fibre, SWA, all cores.	No.	14.0		
3.6.28			Terminations complete at various points. All fibre to be terminated.	No.	8.0		
3.6.29			Man hole double brick with concrete cover every 2000m.	No.	18.0		
3.6.30			160mm Sleeve	m	100.0		
3.6.31			Fibre Optic to RS-485 converters. Interface with control room RTU and pumps station's RTU. Distance of fibre is 1,7 km.	No.	3.0		
3.6.32			Danger warning Tape - 300 mm wide	m	3 400.0		
			NB: The rates must include all materials and labour for the complete fibre optic cable installation and connections				
3.6.33			Test & certificate of compliance	Sum	3.0		
3.6.34			NB-Rate includes labour, materials, cable glands installation	Sum	1.0		
Total Carried Forward To Summary							

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 4:DN450 PN25 RISING MAIN

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
4			DN450 PN25 RISING MAIN				
4.1	SABS 1200C		CLEAR SITE				
4.1.1	8.2.1		Clear and grub :	m ²	78 100.0		
	8.2.2		Remove and grub large trees (including tree stumps and roots) of girth over:				
4.1.2	8.2.2 a)		and up to 1,0 m.	No.	105.0		
4.1.3	8.2.2 b)		1,0 m - 2,0 m.	No.	60.0		
4.1.4	8.2.2 c)		2,0 m - 3,0 m.	No.	50.0		
4.1.5	PSDB 3.1		Removal of Boulders Class A and B and dispose.	m ³	950.0		
4.1.6	PSC 8.2.11	LI	Take down, dispose of or re-erect existing fence as directed by Engineer	m	614.0		
4.1.7	PSC 8.2.11	LI	Construct new fencing where removed / demolished in Item 4.1.6 above. where instructed by Engineer	m	614.0		
4.2	SABS 1200 D		BULK EARTHWORKS FOR CHAMBERS				
	8.3.2		Meter Chambers:				
4.2.1		LI	Excavate by hand in all materials for foundations and pipe trenches and use for embankment or backfill or dispose, as ordered.	m ³	510.0		
	PSD 8.3.2 b)		Extra-over for:				
Total Carried Forward							

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 4:DN450 PN25 RISING MAIN

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
4.2.2	PSD 8.3.2 b) 1)		Hard rock excavation. (Blasting or Pneumatic Drilling)	m³	155.0		
4.2.3	PSD 8.3.2 b) 2)		Boulder excavation and dump, Class A and B.	m³	30.0		
Landscaping and Grassing:							
4.2.4	8.3.10		Apply topsoil obtained from stockpile from necessary excavations where ordered by the Engineer.	m³	20.0		
		LI	Supply and saw grass seeds as specified:				
4.2.5	8.3.11 a)		Buffalo grass or similar approved.	m²	100.0		
4.3	SABS 1200 DB		EARTHWORKS (PIPE TRENCHES)				
			Excavation:				
	8.3.2 a)		All excavations to be carried out using Labour Based Construction Methods unless otherwise agreed with the Engineer				
			a) Excavate in all materials for trenches, backfill, compact and dispose of surplus material for pipes: 450mm Ø for trench depth				
4.3.1			i) Exceeding 0.0m but not exceeding 1.0m	m	20.0		
4.3.2			ii) Exceeding 1.0m but not exceeding 2.0m	m	19 500.0		
4.3.3			iii) Exceeding 2.0m but not exceeding 3.0m	m	500.0		
Total Carried Forward							

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 4:DN450 PN25 RISING MAIN

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
			b) Extra Over Items 4.1.13 to 4.1.16				
4.3.4			i) Intermediate excavation (Blasting or Pneumatic Drilling)	m³	1 350.0		
4.3.5			ii) Hard rock excavation	m³	3 750.0		
4.3.6			iii) Boulder excavation Class A	m³	950.0		
4.3.7			iv) Boulder excavation Class B	m³	950.0		
4.3.8			c) Excavate and dispose of unsuitable material to spoil from trench bottom (Provisional)	m³	1 000.0		
			Restricted Excavations:				
4.3.9	PSD 8.3.3 a)		Excavate in all materials and use for embankment or backfill or dispose, as ordered by the Engineer.	m³	3 450.0		
			Overhaul:				
4.3.10	PSD 5.2.5.1		Extra-over items 4.1.17 to 4.1.21 for hauling of material in excess of the freehaul distance (5,5km), only if instructed by the Engineer.	m³.km	8 620.0		
	8.3.5.a)		Extra-over items 4.1.17 to 4.1.21 for existing services				
4.3.11			All services that adjoin the trench	m	3 000.0		
4.3.12			All services that intersect the trench	m	2 000.0		
4.4	SABS 1200 LB		BEDDING (PIPES)				
Total Carried Forward							

Tenderer

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 4:DN450 PN25 RISING MAIN

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
	8.2.1		Provision of Bedding from Trench Excavation				
4.4.1			a) Selected granular material	m³	1 890.0		
4.4.2			b) Selected fill material	m³	710.0		
	8.2.2.2		From borrow pits				
4.4.3			a) Selected granular material	m³	4 025.0		
4.4.4			b) Selected fill material	m³	3 120.0		
	8.2.2.3		From commercial sources				
4.4.5			a) Selected granular material Unit	m³	12 560.0		
4.4.6			b) Selected fill material	m³	4 685.0		
4.5			BACKFILL FROM TRANCH EXCAVATION				
4.5.1			Backfilling of all pipelines	m³	20 210.0		
	8.2.3		Subsoil drainage:				
4.5.2			Rate shall include full compensation for placing a layer of 150mm thick 19mm stone across the width of the trench, biddim, and a 110mm perforated pipe. Where instructed by the Engineer	m	200.0		
4.6	SABS 1200 L		MEDIUM PRESSURE PIPELINES				
4.7			PIPEWORK				
Total Carried Forward							

Tenderer

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 4:DN450 PN25 RISING MAIN

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
	PSL 8.2.1		Supply, handle, lay, bed on bedding for flexible pipes, join, test and disinfect, as detailed on the drawings. PVC-O potable water pipeline, complete with rubber seals and sockets				
4.8			DN 450 PVC-O PN25	m	19 000.0		
4.9			DN 450 STEEL FLANGED	m	500.0		
4.10			SPECIALS AND FITTINGS FOR PIPELINE				
	"8.2.2		Supply, lay, bed, join, incl. cut pipes to length where required, test and disinfect:				
	PSL 8.1"		PVC-O Bends, Class 25, 450mm ND:				
	8.2.2 a)						
4.11	8.2.2 a) i)		11.25°	No.	40.0		
4.12	8.2.2 a) ii)		22.5°	No.	9.0		
4.13	8.2.2 a) iii)		45°	No.	2.0		
4.14	8.2.2 a) iv)		90°	No.	1.0		
4.15	SANS 1200 L	LI	VALVES				
			Valves, Meters, Specials and Fittings				
			Supply, deliver, lay, bed and install specials and fittings (all flanges drilled to SANS1123, Table 16) suitable for:				
4.15.1			Air Valve Chambers as per drawing	No.	26.0		
4.15.2			Isolation Valve Chambers as per drawing	No.	13.0		
Total Carried Forward							

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 4:DN450 PN25 RISING MAIN

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
4.15.3			Scour Valve Chambers as per drawing	No.	4.0		
4.16			VALVES MARKERS				
4.16.1			Supply and install precast concrete valve markers. Valve makers are to be painted yellow with two coats road marking paint. The rate shall include for all cost to excavate.	No.	79.0		
4.17	"8.2.28.2.3"		SPECIALS AND FITTINGS FOR METER AND FLOW CONTROL CHAMBERS				
			Extra-over for supply, deliver, lay, bed and install specials and fittings (all flanges drilled to SANS1123, Table 16) suitable for:				
4.17.1			Inlet Chamber as per detail	No.	1.0		
4.17.2			Outlet Chamber as per detail	No.	1.0		
4.18	8.2.13	LI	VALVE CHAMBERS AND COVERS				
			Valve Chambers:				
			Construction of complete valve chambers complete with pipes and fittings as detailed on respective drawings, excluding excavation and Manhole Cover and main valve :				
4.18.1	PSL 8.2.13		a) Air Valve Chamber complete as per drawing. Size and Class as per Longitudinal Section.	No.	26.0		
4.18.2	PSL 8.2.13		b) Isolating Valve Chamber complete as per drawing. Size and Class as per Longitudinal Section.	No.	13.0		
Total Carried Forward							

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 4:DN450 PN25 RISING MAIN

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
4.18.3	PSL 8.2.13		c) Scour Valve Chamber complete as per drawing. Size and Class as per Longitudinal Section.	No.	40.0		
4.18.4	PSL 8.2.13		c) Inlet Chamber complete as per drawing	No.	1.0		
4.18.5	PSL 8.2.14		c) Outlet Chamber complete as per drawing	No.	1.0		
	PSHA 8.3.12	LI	Access, Openings and Covers:				
			Supply, deliver and install hot dipped galvanized cover as per drawing . (Rate to include anchoring in concrete or steel and all accessories required for installation, incl. SABS approved padlock).				
4.18.6	PSHA 8.3.12.a)		a) Lockable Manhole Cover for scour valve, air valve and isolation valves	No.	79.0		
4.18.7	PSHA 8.3.12.a)		b) Lockable Manhole Cover for inlet meter chamber	No.	1.0		
4.18.8	PSHA 8.3.12.b)		c) Lockable Manhole Cover for outlet meter chamber	No.	1.0		
4.18.9	PSHA 8.3.3		GMS internal cat ladder for chamber	No.	81.0		
		LI	Air Vents				
4.18.10			Supply and install galvanised air vent as shown on drawings and per clients details complete with stainless steel vermin mesh etc.	No.	81.0		
4.18.11			Supply and install galvanised 1,5m long flanged air vent extension piece as shown on drawings..	No.	81.0		
4.19	SABS1200		GABIONS AND PITCHING				
Total Carried Forward							

Tenderer

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 4:DN450 PN25 RISING MAIN

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
	DK						
	8.2.2		GABION MATRESSES (including material and delivery)				
4.19.1	8.2.1		Surface preparation for bedding of gabions	m ²	1.0		
	8.2.2		Gabions				
	8.2.2 (a)		Galvanized and PVC coated gabion boxes using 150mm stone and 80mm x 100mm x 2,5mm mesh:				
4.19.2	8.2.2 (a) (ii)		1 m x 1 m x 1 m	m ³	1.0		
			Reno Mattresses				
	8.2.2 (b)		Galvanized and PVC coated gabions boxes using 150mm stone and 80mm x 100mm x 2,5mm mesh:				
4.19.3	8.2.2 (b) (ii)		3 m x 1 m x 0,3 m	m ³	1.0		
4.19.4	8.2.2 (b) (iii)		3 m x 1 m x 0,15 m	m ³	1.0		
			Soil erosion berms / Run-off energy dissipators				
4.19.5	8.2.4		Rock berms for erosion prevention on steep embankments	m ²	1.0		
4.19.6	8.2.4		Earth berms for erosion prevention on steep embankments	m ³	1.0		
			Pitching				
4.19.7	8.2.5 (b)		Grouted stone pitching	m ²	1.0		
Total Carried Forward							

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 4:DN450 PN25 RISING MAIN

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
4.20	SABS1200LG		PIPE JACKING AND HORIZONTAL DIRECTIONAL DRILLING				
	8.2.1		Jacking/Drilling Establishment				
4.20.1	8.2.1 a)		Fixed Charged	Sum	1.0		
4.20.2	8.2.1 b)		Time Related	Days	4.0		
4.20.3	8.2.3		Jacking/Drilling of Pipes	m	25.0		
4.20.4	8.2.4		Excavation for Jacking in soft material, backfilling by hand and compacting.	m³	80.0		
4.20.5	8.2.5		Extra-Over 4.20.3 for Jacking/Drilling in hard material	m	3.0		
4.20.6	8.2.6		Extra-Over 4.20.4. for Excavation in Rock	m³	50.0		
4.20.7			Allowance Transnet Rail Supervisory Costs for Pipe Jacking activities	Sum	1.0		
4.20.9			Provisional Sum for the cost of horizontal directional drilling where highly expansive soil are encountered	Sum	1.0		
4.22			TEMPORARY WORKS				
4.22.1	PSA 5.4		Excavate and backfill by hand in soft material to expose existing services - only on approval of Employer's Agent, within freehaul distance of 5.5km.	Sum	1.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 4:DN450 PN25 RISING MAIN

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
4.22.2	PS 2.6.5		Control of ground water, sub-surface, stormwater or spoiled water during construction.	Sum	1.0		
4.20.12			b) Relocation of existing services and fences where ordered	Sum	1.0		
4.20.14			d) Inspection of materials by inspectors appointed by the Engineer	Sum	1.0		
4.20.16			f) Provisional Sum for repair to unknown services by local authority/ service provider	Sum	1.0		
4.20.26			l) Allowance for Administration Costs for Wayleave liaison with Transnet, Sanral, Eskom etc	Sum	1.0		
ANCILLARIES							
Supply and construct Anchor/Thrust blocks as detailed on drawing with class 20MPa/22mm Concrete for:							
4.23.1	PSL 8.2.11 a)		Concrete blocks up to and including 0.5m³.	No.	50.0		
4.23.2	PSL 8.2.11 b)		Over 0.5m³ up to and including 1.0m³.	No.	10.0		
4.23.3	PSL 8.2.11 c)		Over 1.0m³ up to and including 1.5m³.	No.	5.0		
4.23.4	8.6		Supply and install concrete marker block as detailed on drawings, including lettering and painting as specified, at positions indicated by the Engineer, this must be install at 100m interval of the pipe route and at every intersection and change of direction	No.	235.0		
Total Carried Forward To Summary							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 5:11.5ML COMMAND RESERVOIR

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
5			11.5ML COMMAND RESERVOIR				
5.1	1200 C		SITE CLEARANCE				
5.2	8.2.1		CLEAR AND GRUB SITE				
	8.2.2		Remove & Grub large trees and tree stumps of girth				
5.2.1			Over 1m and < 2m	No.	12.0		
5.2.2			Over 2m and < 3m	No.	12.0		
5.2.3	"8.2.10PSC8.1"		"Remove topsoil to nominal depth of 150 mm and stockpile"	m ²	2 500.0		
5.2.4	PSC5.1		Transport and dispose of materials to suitable dumping site	m ³ .km	3 600.0		
5.3			EARTHWORKS				
5.4	"1200D8.3.2"		BULK EXCAVATION				
5.4.1	"8.3.2(a)PSD A"		"Excavate in all materials to bulk excavation line(Reservoir Founding Level), separate general backfill from restricted backfill and stockpile within 0.2km and maintain for backfill"	m ³	8 640.0		
	8.3.2(b)		Extra-over Item 5.1.5 for excavation in :				
5.4.2	8.3.2(b)		Intermediate material	m ³	2 000.0		
5.4.3	PSD8		Hard rock material	m ³	2 400.0		
5.4.4	8.3.2(b)		Boulder material class A	m ³	600.0		
5.4.5	8.3.2(b)		"Boulder material class B"	m ³	600.0		
5.5	8.3.3		RESTRICTED EXCAVATION				
	"8.3.3(a)PSD A4"		Excavate in all materials below bulk excavation line (Reservoir Founding Level) separate general backfill from restricted backfill and stockpile within 0.2km and maintain				
5.5.1			Remaining 75 mm to final trimmed lines and levels	m ³	150.0		
5.5.2			Sump to reservoir, floor drains and other pipework below floor level	m ³	72.0		
	8.3.3(b)		Extra over items 5.1.10 and 5.1.11 for excavation in:				
5.5.3			Intermediate material	m ³	60.0		
5.5.4	PSDA		Hard rock material	m ³	60.0		
Total Carried Forward							



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 5:11.5ML COMMAND RESERVOIR

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
5.5.5	PSDA		Excavate unsuitable material from below founding level as ordered by Engineer	m³	300.0		
5.6		LI	BACKFILL				
5.6.1	PSDA		"Load restricted backfill from stockpile, place and compact in 200 mm layers in areas designated for restricted backfill to 93% Mod AASHTO density."	m³	900.0		
5.6.2	PSDA		Load general backfill from stockpile, place and compact in maximum 200mm layers in areas designated for general backfill to 93% Mod AASHTO density.	m³	900.0		
5.6.3	PSDA		Load topsoil from stockpile and place minimum 150 mm layer to top of backfill	m²	480.0		
5.6.4	PSDA		Backfill against reservoir and cut slopes compacted to 93% Mod AASHTO	m³	1 200.0		
5.6.5	PSD		Spoiling of excess/unsuitable material	m³	3 000.0		
5.7	8.3.4		IMPORTING OF MATERIALS				
5.7.1			Import approved topsoil from commercial source (provisional)	m³	300.0		
5.7.2	PSDA		"To complete benching including supply, mix and place under reservoir footings from commercial sources. G5 gravel compacted to 98% mod AASHTO density stabilised with 3% Ordinary Portland Cement where ordered by the Engineer."	m³	600.0		
5.7.3	PSDA 5.2.4.1		Import approved 25 mm stone chips (Quartzite Reflective) from commercial source, stockpile and place by hand on reservoir roof	m³	120.0		
	"SABS1200ME"		Stabilizing Agent				
5.7.4	8.3.8		Ordinary Portland Cement 3% by weight.	t	29.0		
5.8			SUBSOIL DRAINAGE				
			Supply and lay:				
5.8.1			19 mm crushed stone to reservoir perimeter	m³	108.0		
5.8.2			Sand compacted to 100% Mod AASHTO	m³	48.0		
5.8.3			"200gr/m2 needlepunched geofabric to subsurface drains"	m²	1 500.0		
5.8.4			"110mm diameter class 4 slotted drainage pipe complete with all fittings. i.e. elbows, endcaps and tee connections."	m	410.8		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

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WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 5:11.5ML COMMAND RESERVOIR

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
5.8.5			25mm proprietary drainage void former using premoulded HDPE	m ²	660.0		
5.8.6			110mm diameter class 4 drainage pipe (unslotted)	m	164.3		
5.9	1200 G		CONCRETE: PRESTRESSED RESERVOIR				
5.9.1			No-fines concrete under floor	m ³	120.0		
	PGW5.1.1		Strength concrete: 35MPa/19 mm watertight concrete with an approved waterproofing concrete additive				
5.9.2			Walls and Buttresses above footing	m ³	500.0		
5.9.3			Footings to walls including nib	m ³	150.0		
5.9.4			Floor slabs	m ³	400.0		
5.9.5			Roof slab & upstand	m ³	450.0		
5.9.6			Columns with bases	m ³	160.0		
5.9.7			Sump to reservoir and encasement to pipes	m ³	18.0		
5.9.8			Manholes (as per Drawings)	m ³	36.0		
			Strength concrete: 20 MPa/19mm				
5.9.9			Minimum thickness 75 mm blinding layer to sump	m ³	120.0		
5.9.10			Mass concrete including splash aprons from roof overflow and filling under reservoir footings (where ordered by the Engineer)	m ³	180.0		
			Strength 25MPa/19mm concrete				
5.9.11			25MPa/19mm concrete to benching chambers	m ³	6.0		
5.9.12	PSG 8.16		Crystalline Waterproofing Additive e.g. XYPEX Amix C-500 NF or similar approved in Strength Concrete: 35MPa/19 mm watertight concrete complete including product supplier technical guidance, quality control and product mixing log sheets	kg	3 360.0		
5.10	8.1.1	LI	FORMWORK				
	8.2.1		Rough vertical to degree of accuracy III				
5.10.1			Footings to walls	m ²	150.0		
5.10.2			Walls outside below ground level	m ²	1 000.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 5:11.5ML COMMAND RESERVOIR

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
5.10.3			Sump & encasement to pipes	m ²	12.0		
5.10.4			Manholes	m ²	90.0		
5.10.5			Footing ring nib at sliding joint	m ²	60.0		
	8.2.2		Smooth vertical to degree of accuracy II				
5.10.6			Walls inside & outside above ground level	m ²	1 800.0		
5.10.7			Column bases	m ²	150.0		
5.10.8			Footing at expansion joint (curved)	m ²	36.0		
5.10.9			Columns (circular)	m ²	145.0		
5.10.10			Roof slab & upstand (curved)	m ²	580.0		
5.10.11			Sump	m ²	108.0		
5.10.12			Manhole cover slab	m ²	6.0		
5.10.13			Manholes	m ²	12.0		
5.10.14			Buttresses sides including recesses for stressing anchors (extra over to walls)	m ²	84.0		
	8.2.2		Smooth horizontal to degree of accuracy II				
5.10.15			Roof soffit	m ²	1 850.0		
5.10.16			Manholes	m ²	12.0		
5.11			REINFORCEMENT				
	8.3.1		Mild steel bars				
5.11.1			R8 Basic Price	t	6.0		
	8.3.1		"Extra-over item 5.1.62 for bars of diameter:"				
5.12			"R10 & R12"	t	3.6		
5.12.1	8.3.1		High-tensile steel bars				
5.12.2			Y25 Basic Price	t	198.0		
5.12.3	8.3.1		Extra-over item 5.1.64 for bars of diameter:				
5.13			Y10	t	18.0		
5.14			Y12	t	110.0		
5.15			Y16	t	36.0		
5.16			Y20	t	12.0		
5.17	1200GF & RPD1		PRESTRESSING				
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 5:11.5ML COMMAND RESERVOIR

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
5.17.1	8.2.1		Site establishment of equipment, maintain and dismantle	Sum	1.0		
	8.2.7.1		"Design, supply and install sheathing, grout and tendons complete."				
5.17.2			Steel tendons	MN.m	4 320.0		
	8.2.7.2		Design, supply and install anchorages to suit tendons scheduled under item 5.1.70				
5.17.3			"Anchorage at jacking end"	MN	180.0		
5.18	8.4.4		UNFORMED SURFACE FINISHES				
			Wood floated to degree of accuracy II				
5.18.1			Top of reservoir wall footing (inside & outside)	m ²	180.0		
5.18.2			Reservoir roof	m ²	1 500.0		
5.18.3			Top of column bases	m ²	180.0		
5.18.4			Invert to reservoir sump	m ²	18.0		
5.18.5			Top of upstand	m	131.5		
			Steel floated to degree of accuracy II				
5.18.6			Reservoir Floor	m ²	1 380.0		
5.18.7			Top of reservoir wall.	m	49.3		
5.19	"8.5PGW5.2"		JOINTS				
5.19.1			Expansion joints in reservoir floor against wall footing complete including 350 mm wide x 2mm thick hyperlon bandage, stainless steel grade 304L strip under bandage and 250mm wide rearguard water stop as per details on drawings.	m	126.0		
5.19.2			Contraction joints in reservoir complete floor including 250 mm wide x 2 mm thick hyperlon bandage and 250mm wide rearguard waterstop as per detail on drawings.	m	191.7		
5.19.3			Horizontal construction joints in reservoir walls complete with 150mm wide by 1.6mm thick GI waterstop & 200mm wide Lanko Bandage or similar approved.	m	262.9		
5.19.4			Vertical Construction joints in reservoir walls complete with a 200mm wide Lanko Bandage or similar approved and Sikaswell swelleable hydrophilic water bar or similar approved.	m	43.8		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 5:11.5ML COMMAND RESERVOIR

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
5.19.5			Wall footing Sliding joint a 20mm closed cell high density void former or closed cell polyethelyne or similar approved; 2T 100/100 Kilcher Teflon sliding bearing 325mm wide +/- 20mm movement range or similar approved; flexible sealant and 350mm wide x 2mm thick Sika Combiflex Bandage inside and outside reservoir or similar approved. Complete as per detail on drawings.	m	136.9		
5.20	8.2.6		BOXING OUT				
5.20.1			Box out 900mm x 900mm for overflow	No.	1.0		
5.20.2			Box out 750mm x 750mm for inlet pipe into reservoir	No.	1.0		
5.21		LI	MISCELLANEOUS				
5.21.1	PGW3.4		500 micron plastic bond breaker over no-fines concrete under reservoir floor	m²	1 500.0		
5.21.2	PGW3.4		Neoprene (Kilcher or similarly approved) Teflon sliding bearing type 3T 50/75, 230mm Wide +/- 10mm movement range	m	131.5		
5.21.3	PGW3.4		Polyurethane seal between reservoir roof and walls	m	131.5		
5.21.4			Precast coping to reservoir roof complete installation including casting shuttering and placing on high strength fixing grout.	m	136.9		
5.21.5			Concrete planks to reservoir over inlet and outlet manholes to reservoir.	No.	4.0		
5.21.6			Concrete cover slab without manhole, including lifting hooks and air vents.	No.	2.0		
5.21.7			Concrete cover slab complete with manhole frame cast in, including lifting hooks and air vents. Note payment of cast iron manhole frame and cover paid seperately under item 5.1.92	No.	2.0		
5.21.8			Cast in-situ standard 1m wide v-channelling type for roads on 200gm/m2needle punched geotextile around resevoir perimeter	m	164.3		
5.21.9	PGW5.28	LI	Cleaning and sterilizing	Sum	1.0		
5.21.10			Cast iron step irons general purpose to BS1247:1975	No.	34.0		
5.21.11			Manhole cover (to SABS 558) type 9E with frame	No.	6.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 5:11.5ML COMMAND RESERVOIR

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
5.21.12			Reservoir ventilators as per detail on drawings	No.	16.0		
5.21.13			GMS manhole locking bar (as per drg) for type 9E cover & frame (excl lock)	No.	10.0		
5.21.14			Wall bracket for overflow pipe (Grade 304L Stainless Steel) fixed to wall (as per drg)	No.	2.0		
5.22			RESERVOIR STRUCTURAL WORK				
5.23	"1200 HAPSHA1-4"		STRUCTURAL STEELWORK				
	"8.3.1"		Supply, fabricate, deliver and install steelwork, to the finishes/coatings specified in the specification and on the drawings				
			Access ladder with cage Stainless steel grade 306L				
5.23.1			9 m s/steel grade 306L high ladder to reservoir inside as per detail on drawings.	No.	1.0		
			Access ladder with cage heavy duty GMS				
5.23.2			7 m high GMS ladder to reservoir outside as per detail on drawings.	No.	2.0		
5.23.3			4 m high GMS ladder to outlet manhole as per detail on drawings	No.	2.0		
5.23.4			150mm dia galvanized outlets, cut from a 150mm dia pipe with metal gauze vermin proof (GALVANISED AFTER FABRICATION) as per detail on the drawings (300mm long)	No.	8.0		
5.23.5			"50mm diameter sleeved holes in reservoir roof for level control and telemetry equipment as shown on the drawings. The steel plates detailed are to be supplied and fitted by others."	No.	4.0		
5.24			MEDIUM PRESSURE PIPELINES				
5.25	"SABS1200D B"		PIPE EXCAVATIONS				
			Excavate in all materials for trenches, backfill, compact and dispose of surplus / unsuitable material for pipes up to 300mm diameter for depths (width 850mm) :				
			Over and Up to				
5.25.1		LI	0,0m -1.5m	m	11.0		
Total Carried Forward							



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 5:11.5ML COMMAND RESERVOIR

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
5.25.2			1,5m- 2.5m	m	11.0		
5.25.3			2,5m - 3.5m	m	11.0		
			Extra over items 5.3.1 to 5.3.2 for (Prov) :				
5.25.4			Intermediate excavation	m³	12.0		
5.25.5			Hard rock excavation	m³	6.0		
5.26	1200LB		BEDDING				
	8.2.2		"Supply only of bedding byimportation fromcommercial sources"				
5.26.1			Selected granular material	m³	12.0		
5.26.2			Selected fill material	m³	24.0		
5.27	"SABS1200L"		PIPEWORK				
	"8.2.1"	LI	"Supply, handle, install and commission complete with couplings and GMS nuts and bolts and corrosion protection (all bolted connections to coatedwith Tectile mastic andbandaged with petrolatum saturatedtextile (Denso or equivalent))"				
5.28			INLET, OUTLET, SCOUR & OVERFLOW SPECIALS AND FITTINGS				
5.29			OVERFLOW & SCOUR DRAINAGE PIPELINES				
5.29.1			300mm diameter Heavy Duty Sewer Drainage Pipe	m	109.5		
5.29.2		LI	Construct headwall complete as shown on detail drawing and build-in DN600 concrete pipe	Sum	1.0		
5.29.3			P1: DN400 epoxy coated and lined mild steel short radius 90° bend. Flanged both ends. c/f 950mm and 2700mm C/F the other end.	No.	1.0		
5.29.4			P2: DN400 epoxy coated and lined mild steel short radius 90° bend. Flanged one end and DN600 bellmouth the other. 700mm c/bellmouth and 2800mm C/F	No.	1.0		
5.29.5			P3: DN400 PN16 flanged double off-set butterfly valve with gearbox and handle wheel	No.	2.0		
5.29.6			P4: DN400 VJ or similar approved flange adaptor for steel pipe.	No.	2.0		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 5:11.5ML COMMAND RESERVOIR

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
5.29.7			P5: DN400 epoxy coated and lined mild steel pipe flanged PN16 one end and plain-ended the other, with DN100 flanged branch to be located 500mm C/Plain-end and extending 300 mm C/F. Pipe barrel to be 1700mm F/F	No.	2.0		
5.29.8			P6: DN100 RS gate valve with non-rising spindle and handwheel	No.	2.0		
5.29.9			P7: DN100 multi-orifice anti-shock air valve as specified	No.	2.0		
5.29.10			P8: DN150 epoxy coated and lined mild steel short radius 90° bend. Flanged one end and DN250 bellmouth the other. 500mm c/bellmouth and 2800mm C/F	No.	1.0		
5.29.11			P9: DN150 PN10 clockwise closing non-rising spindle flanged wedge gate valve to SANS 664	No.	1.0		
5.29.12			P10: DN150 rislan coated and lined mild steel short radius 90° bend. Flanged one end and plain ended the other with standard C/F dimensions	No.	1.0		
5.29.13			P11: DN200 epoxy coated and lined mild steel 90° short radius bend. Plain one end and buttressed flanged the other end. 2800mm C/PLAIN END and 950mm C/F	No.	1.0		
5.29.14			P12: DN200 epoxy coated and lined mild steel pipe, buttressed flanged PN16 one end and DN400 bellmouth with 4 No. Anti-Vortex baffles the other end. 9200mm F/Bellmouth	No.	1.0		
5.30			OVERFLOW / SCOUR DRAINAGE				
5.31			TRENCH EXCAVATION				
5.31.1			Supply and deliver 300mm dia PN16 uPVC pipes	m	109.5		
5.31.2			Lay, bed, test DN300 uPVC pipeline	m	109.5		
5.32			RESERVOIR SITEWORKS				
5.33	1200X		RESERVOIR FENCING AND SITEWORKS				
5.34		LI	FENCING				
5.34.1			"Supply and install 2.4m High Density Welded Ripper Razor fencing complete with concrete footing and ground beam etc as per detail drawing"	m	657.3		
Total Carried Forward							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 5:11.5ML COMMAND RESERVOIR

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
5.34.2			Supply and install 5m wide GMS double gate as per detail drawing complete, including concrete footings etc as per detail drawing	Sum	1.0		
5.35	"		RESERVOIR ACCESS ROAD				
5.36	1200C"		EARTHWORKS (ROADS, SUBGRADE)				
	"SABS1200D M"		"Road-bed preparation and compaction of material"				
5.36.1	8.3.3b)		Scarify and compact in-situ material and compact to 93% Mod AASHTO density in 150 mm layer	m³	540.0		
5.37			WEARING COURSE				
5.37.1	"SABS1200M F"		Import G6 wearing course material, place and compact to 95% Mod ASHTO in a 150mm layer	m³	540.0		
5.38	8.3.3a)	LI	GABIONS AND PITCHING				
5.38.1			"Surface preparation for bedding of gabions with approved excavated material"	m²	60.0		
5.38.2	"1200DK8.2.1 a"		1mx1mx2m Gabions	m³	18.0		
5.38.3	8.2.2		230mm thick reno mattress	m²	60.0		
5.38.4	8.2.2		"200grm/m2 needle punched geofabric"	m²	60.0		
Total Carried Forward To Summary							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



SECTION 6:FLOATING ABSTRACTION

Total Carried Forward To Summary

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 7:ELECTRICAL AND INSTRUMENTATION

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
7			ELECTRICAL AND INSTRUMENTATION				
7.1			BULK POWER SUPPLY				
			Allow for all the costs and expenses in connection with the design, manufacture, routine testing, supply, delivery, offloading, storage and installation of the following materials:				
7.1.1			Abstraction pump station power supply; 22kV/420V 50kVA Pole mount transformer, including switchgear and protection, creo-treated poles, overhead lines and accessories	Sum	1.0		
7.1.2			Booster pump station 1(Raw water pump station); 22kV/420V 50kVA Pole mount transformer, including switchgear and protection, creo-treated poles, overhead lines and accessories	Sum	1.0		
7.1.3			Water Treatment Works; 22kV/420V 150kVA Pole mount transformer, including switchgear and protection, creo-treated poles, overhead lines and accessories	Sum	1.0		
7.2			LV SWITCH GEAR AND CONTROL GEAR ASSEMBLIES				
			Allow for all the costs and expenses in connection with the design, manufacture, routine testing, supply, delivery, offloading, storage and installation of the following materials:				
7.2.1			Abstraction Pump Station MCC complete (including PLC and RTU). As per drawings and specifications. Factory testing included	Sum	1.0		
7.2.2			Booster Pump Station 2 (Raw Water) MCC complete (including PLC and RTU). As per drawings and specifications. Factory testing included	Sum	1.0		
7.3			ELECTRICAL BUILDING SERVICES INSTALLATION				
			Allow for all the costs and expenses in connection with the design, manufacture, routine testing, supply, delivery, offloading, storage and installation of the following materials:				
			Lighting Installation, in accordance with Building Electrical Layout: High Lift Pump Station and Intake Tower				
7.3.1			Abtraction PS DB, Bosster PS2 DB, Potable Water PS MCC Room DB	Sum	1.0		
Total Carried Forward							



Tenderer



Witness 1



Witness 2



Employer



Witness 1



Witness 2

WESTERN HIGHVELD BULK WATER SUPPLY SCHEME
WORK PACKAGE 1

SECTION 7:ELECTRICAL AND INSTRUMENTATION

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
7.4			PROGRAMMABLE LOGIC CONTROLLER & TELEMETRY Allow for all the costs and expenses in connection with the design, manufacture, routine testing, factory acceptance testing (if indicated), supply, delivery, offloading, storage and installation of the following materials and equipment. In accordance with relevant specifications and drawings.				
7.5			TELEMETRY "Allow for all the costs and expenses in connection with the design and integration with the pump station control system of the following materials and equipment. In accordance with relevant specifications and drawings."				
7.5.1			Abstraction PS, Booster PS, Potable Water PS and Boreholes telemetry	Sum	1.0		
7.6			EARTHING AND LIGHTNING PROTECTION Allow for all the costs and expenses in connection with the design, manufacture, routine testing, factory acceptance testing (if indicated), supply, delivery, offloading, storage and installation of the following materials and equipment:				
7.6.1			Earthing and lightning protection for the abstraction pump station, booster pump station and potable water pump station MCC room,	Sum	1.0		
7.6.2			Earthing arrangement and equipotential bonding for all metallic surfaces	Sum	1.0		
7.6.3			Soil Resistivity Survey	Sum	1.0		
Total Carried Forward To Summary							

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2



SUMMARY OF SECTIONS		
SECTION	DESCRIPTION	AMOUNT R
1	PRELIMINARY AND GENERAL	
2	WATER TREATMENT WORKS, STAFF ACCOMODATION, GUARD HOUSE,	
3	PUMPSTATION	
4	DN450 PN25 RISING MAIN	
5	11.5ML COMMAND RESERVOIR	
6	FLOATING ABSTRACTION	
7	ELECTRICAL AND INSTRUMENTATION	
SUBTOTAL A		
Plus 10% for Contingencies on Sub-Total A (Compulsory)		
SUBTOTAL B		
Plus 10% for Escalation on Sub-Total B (Compulsory)		
SUBTOTAL C(Excluding VAT)		
Add 15% VAT on Sub-Total C (Compulsory)		
TOTAL TENDER PRICE		
COMPANY:		
ADDRESS:		
CELL:		
EMAIL:		
SIGNATURE:		
DATE:		

Tenderer

Witness 1

Witness 2

Employer

Witness 1

Witness 2