

MAQUASSI HILLS LOCAL MUNICIPALITY**REPLACEMENT OF ASBESTOS PIPELINE IN MAKWASSIE****CONTRACT NO. MHLM/SCM/09/2025-26****BILL 1 : PRELIMINARY & GENERAL**

ITEM NO.	REF. CI.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	SABS					
	1200A	<u>GENERAL</u>				
1.1	8.3	<u>FIXED CHARGE AND VALUE-RELATED ITEMS</u>				
1.1.1	8.3.1	Contractual Requirements	sum	1		
	8.3.2	<u>Establish facilities on site</u>				
	8.3.2.1	i) <u>Facilities for the Engineer</u>				
1.1.2		a) Name board as per Drw. No.	no	2		
	8.3.2.2	ii) <u>Facilities for Contractor</u>				
1.1.3		a) Offices and storage sheds	sum	1		
1.1.4		b) Workshops	sum	1		
1.1.5		c) Laboratories	sum	1		
1.1.6		d) Living accommodation	sum	1		
1.1.7		e) Ablution and latrine facilities	sum	1		
1.1.8		f) Tools and equipment	sum	1		
1.1.9		g) Water supplies, electric power and communications	sum	1		
1.1.10		h) Dealing with water	sum	1		
1.1.11		i) Access	sum	1		
1.1.12		j) Plant	sum	1		
1.1.13		k) Occupational Health & Safety	sum	1		
1.1.14	8.3.3	Other fixed charge obligations	sum	1		
1.1.15	8.3.4	Removal of site establishment	sum	1		
		CARRIED FORWARD				

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			BROUGHT FORWARD				
	SABS						
	1200A						
1.2	8.4	<u>TIME RELATED ITEMS</u>					
1.2.1	8.4.1	Contractual requirements		sum	1		
	8.4.2	<u>Operations and maintenance of facilities on site</u>					
	8.4.2.1	<u>Facilities for Engineer</u>					
		i)	<u>Facilities for the Engineer</u>				
1.2.2			a) One name board as per Drw. No	no	2		
	8.4.2.2	<u>Facilities for Contractor</u>					
1.2.3		a)	Offices and storage sheds	sum	1		
1.2.4		b)	Workshops	sum	1		
1.2.5		c)	Laboratories	sum	1		
1.2.6		d)	Living accommodation	month	8		
1.2.7		e)	Ablution and latrine facilities	month	8		
1.2.8		f)	Tools and equipment	month	8		
1.2.9.		g)	Water supplies, electric power and communications	month	8		
1.2.10		h)	Dealing with water	month	8		
1.2.11		i)	Access	month	8		
1.2.12		j)	Plant	month	8		
1.2.13		k)	Occupational Health & Safety	month	8		
1.2.14		l)	Supervision for duration of contract	month	8		
1.2.15	8.4.4	Company and Head Office overhead costs for the duration of the Contract		month	8		
			CARRIED FORWARD				

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CONTRACT NO. MHLM/SCM/09/2025-26
BILL 2 : DN250 BULK PIPELINE

ITEM NO.	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	SABS					
2.1	1200C	<u>SITE CLEARANCE</u>				
2.1.1	8.2.1	Clear and grub reservoir site	m ²	280		
	SABS					
2.2	1200DB	<u>EXCAVATION</u>				
2.2.1	8.3.2a)	Excavation to the required depth in all materials for trenches, backfilling, compaction and disposal of surplus unsuitable materials for the following depths:				
		a) Over 1.0 m up to 1.5 m deep for all pipes	m ³	900		
		b) Over 1.5 m up to 2.0 m deep for all pipes	m ³	50		
		c) Over 2.0 m up to 2.5 m deep for all pipes	m ³	25		
2.2.2	8.3.2b)	Extra-over item 3.2.1 for				
		a) Intermediate excavation (Provisional)	m ³	135		
		b) Hard rock excavation (Provisional)	m ³	225		
		c) Boulders excavation (Provisional)	m ³	18		
2.2.3	8.3.2c)	Excavate and dispose of unsuitable material from trench bottom (Provisional)	m ³	135		
2.2.3	8.3.4	Importation of material from an open borrow pit within 0.5 km free haul distance, place in backfill and compacted to 90% MOD AASHTO density (Prov)	m ³	225		
2.2.4	8.3.3.b)	Import backfill material from designated borrow pits (Provisional)	m ³	378		
		CARRIED FORWARD				

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ITEM NO.	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		BROUGHT FORWARD				
	SABS					
2.3	1200L	<u>ANCHOR BLOCKS</u>				
	8.2.11	Concrete anchor blocks complete as indicated on Dwg. No. 1038-001-1512				
		Price to include excavation, formwork, reinforcing and concrete:				
	a)	Volume less than 0.3 m³	no	50		
	b)	Volume between 0.6 - 1.2 m³	no	50		
2.4	8.2.11	<u>Pipeline Marker</u>				
		Complete as detailed on Dwg. No.	no	5		
2.5	8.2.1	<u>Test of Pipeline</u>				
	a)	All labour, materials, water and equipment required to carry out any tests deemed necessary	m	1 400		
	b)	Purchasing of water for testing purpose	KL	420		
	c)	Sterilization Pipeline and fittings	Sum	1		
2.6	PSPB	<u>TRENCHLESS PIPE BORING CROSSING</u>				
		Construct road crossing complete for pipeline crossing under Asphalt roads. Trenchless installation				
		Rate to include for launch pit, sleeve pipe, grouting and Denso taped Pipe connections. 30m lengths	Sum	20		
	SABS					
2.7	1200L	<u>MEDIUM PRESSURE PIPELINES</u>				
		<u>uPVC Pressure Pipes and Fittings</u>				
2.7.1	8.2.1	Supply, lay, bed, disinfect, test and backfill the following				
		O-PVC pressure pipes (conforming with SABS 946 Part 1 specifications in 6 m lengths, each pipe fitted at one end with socket for Mechanical jointing, in the following dia:				
	a)	250mm dia PN16	m	1 400		
		CARRIED FORWARD				

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ITEM NO.	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		BROUGHT FORWARD				
2.7.2		<u>FITTINGS AND SPECIALS FOR FIXING ON TO</u>				
		<u>uPVC PIPES</u>				
		Fittings to be suitable for coupling directly (mechanically) onto pipes. Each fitting socketed for mechanical jointing. Fittings to be either uPVC, cast iron or epoxy-painted steel subject to Engineer's approval (flanges drilled SABS 1123-1977 Table 16)	no	5		
	SABS					
2.8	1200LB	<u>BEDDING AND BLANKET</u>				
2.8.1		<u>Selected granular material for bedding, cradle and blanket for trench excavation</u>				
	8.2.2.1	From other necessary excavations (Provisional)				
		a) Selected bedding material	m³	550		
		b) Selected blanket material	m³	550		
2.9	SABS					
	1200L	<u>MECHANICAL EQUIPMENT:</u>				
		Supply, install and build in pipework, fittings and equipment as detailed on the drawings & specified				
		In Project Specification PSL comprising of the following:				
		<u>OFF-TAKE CHAMBER</u>				
		AA STEEL PIPE LISTED ELSEWHERE	no	1		
		AB FLANGE ADAPTOR FOR STEEL PIPES	no	1		
		AC FLANGED NON-RISING SPINDLE, CLOCKWISE CLOSING WITH HANDWHEEL WATERWORKS PATTERN RESILIENT SEAL GATE VALVE ACCORDING TO SABS 664, TABLE 1000/3	no	2		
		CARRIED FORWARD				

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ITEM NO.	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		BROUGHT FORWARD				
		AD 200 x 200 x 100ND FLANGED STEEL TEE PIECE.				
		FITTING TO HAVE THE FOLLOWING DIMENSIONS:				
		a) CENTRE-TO-FACE INCOMING LEG = 280mm				
		b) CENTRE-TO-FACE OUTGOING LEG = 280mm				
		c) CENTRE-TO-FACE BRANCH = 280mm	no	1		
		AE FLANGED NON-RISING SPINDLE, CLOCKWISE				
		WATERWORKS PATTERN RESILIENT SEAL				
		GATE VALVE ACCORDING TO SABS 664,				
		TABLE 1000/3	no	1		
		AF FLANGED BERMAD CONTROL VALVE MODEL				
		WW-750-60 COMPLETE WITH SENSING				
		LINE TO REMOTE FLOAT IN RESERVOIR (SPRING				
		ASSISTANCE TO CLOSE) REMOTE FLOAT TO .				
		BE ENCASED WITH 4.5mm THICK GALVANISED				
		STEEL STILLING CHAMBER AS PER DETAIL 2	no	1		
		AG 500mm LONG FLANGED STEEL PIPE,	no	1		
		TABLE 1000/3				
		AH ELECTROMAGNETIC WATER METER FLANGED	no	1		
		AJ 300mm LONG FLANGED STEEL PIPE,				
		FLANGED ON ONE END TABLE 1000/3	no	1		
		AK VIKING JOHNSON' OR APPROVED SIMILAR				
		FLANGE ADAPTOR	no	1		
		AL 1200mm LONG FLANGED STEEL PIPE				
		WITH PUDDLE FLANGE 424mm FROM				
		FLANGED FACE, TABLE 1000/3	no	1		
		AM 200ND x 100ND x 500mm LONG FLANGED				
		STEEL REDUCER, TABLE 1000/3	no	1		
		AN FLANGE ADAPTOR FOR PVC PIPE	no	1		
		AP uPVC CLASS 12 PIPE LISTED ELSEWHERE	no	1		
TOTAL BILL 3 CARRIED FORWARD TO SUMMARY						

BILL 3 : MAKWASSIE WATER RETICULATION

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			BROUGHT FORWARD				
3.2.3.3	8.3.3.3	<u>From commercial sources (Provisional)</u>					
		a)	Selected bedding material	m³	1 918		
		b)	Selected blanket material	m³	1 918		
3.2.3.4	8.3.5	Overhaul of material for bedding cradle & selected fill blanket (Prov.)		m³/km	44 550		
	SABS						
3.3	1200L	<u>MEDIUM PRESSURE PIPELINES</u>					
3.3.1		<u>o-PVC Pressure Pipes and Fittings</u>					
3.3.1.1	8.3.1	Supply, lay, bed, disinfect, test and backfill the following uPVC pressure pipes (conforming with SABS 946 Part 1 specifications in 6 m lengths, each pipe fitted at one end with socket for Mechanical jointing, in the following dia:					
		a)	160mm dia PN16	m	1 040		
		b)	110mm dia PN16	m	12 025		
		c)	90mm dia PN16	m	6 217		
		d)	63mm dia PN16	m	5		
		e)	32mm dia HDPE PN12.5	m	2 475		
		f)	150mm dia HDPE PN12.5	m	600		
3.3.2		<u>FITTINGS AND SPECIALS FOR FIXING ON TO uPVC PIPES</u>					
		Fittings to be suitable for coupling directly (mechanically) onto pipes. Each fitting socketed for mechanical jointing. Fittings to be either uPVC, cast iron or epoxy-painted steel subject to Engineer's approval (flanges drilled SABS 1123-1977 Table 16)					
3.3.2.1		<u>Bends 90 degrees</u>					
		a)	160mm dia	no	4		
			CARRIED FORWARD				

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			BROUGHT FORWARD				
		b)	110mm dia	no	4		
		c)	90mm dia	no	4		
		d)	63mm dia	no	0		
3.3.2.2			<u>Bends 45 degrees</u>				
		a)	160 mm dia	no	0		
		b)	110 mm dia	no	0		
		c)	90 mm dia	no	0		
		d)	75mm dia	no	0		
3.3.2.3			<u>Bends 23.5 degrees</u>				
		a)	110mm dia	no	0		
		b)	90 mm dia	no	0		
		c)	75mm dia	no	0		
3.3.2.4			<u>Bends 11.25 degrees</u>				
		a)	110 mm dia	no	0		
		b)	90 mm dia	no	0		
		c)	75mm dia	no	0		
3.3.2.5			<u>Equal Tee</u>				
		a)	160 mm dia	no	0		
		b)	110 mm dia	no	6		
		c)	90 mm dia	no	9		
		d)	75 mm dia	no	0		
			CARRIED FORWARD				

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			BROUGHT FORWARD				
	SABS						
	1200L	<u>VALVES - Supply</u>					
3.4	8.3.3	Gate Valves fitted with resilient, rubberised metal					
3.4.1		gate. Valves to comply with SABS 664, Class 10,					
		waterworks applications with cap top, plain thrust					
		collar, non-rising spindle, clockwise closing.					
		a) 63 DN	no	0			
		b) 75 DN	no	0			
		c) 90 DN	no	20			
		d) 110 DN	no	16			
	SABS						
	1200L	<u>ANCHOR/THRUST BLOCKS AND PEDESTALS</u>					
3.5	8.3.11	<u>Concrete thrust block, configuration as depicted on</u>					
3.5.1		<u>plan STC-BBR-WT-T13 in the following sizes:</u>					
		a) Concrete volume < 0,4 m³	no	45			
		b) Concrete volume 1.0 to 1.19 m³	no	10			
		c) Concrete volume 1.4 to 1.60 m³	no	0			
		<u>YARD CONNECTIONS</u>					
3.6		Supply and install HDPe Erf connections and yard					
3.6.1		connections, complete with meter, saddles, bends,					
		fittings, pipes and valves, as shown on plan no.					
		STC-BBR-WT-T10					
		a) Across road serving 2 erven = 32 DN	no	170			
		(Estimated 5600 mm HDPe pipe required)					
		b) Across road serving 1 erf = 32 DN	no	26			
		(Estimated 4700 mm HDPe pipe required)					
		c) Near-side of the road serving 2 erven= 32 DN	no	204			
		(Estimated 2800 mm HDPe pipe required)					
		CARRIED FORWARD					

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MAQUASSI HILLS LOCAL MUNICIPALITY**REPLACEMENT OF ASBESTOS PIPELINE IN MAKWASSIE****CONTRACT NO. MHLM/SCM/09/2025-26****BILL 4 : DAYWORKS**

ITEM NO.	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
4.1		<u>Dayworks Labour</u>				
		a) Contractor's Representative	hr	18		
		b) Surveyor	hr	16		
		c) Qualified artisan	hr	28		
		d) Foreman, leader-hand (9 hr/workday)	workday	20		
		e) Semi-skilled labourer (9 hr/workday)	workday	20		
		f) Labourer (9 hr/workday)	workday	75		
4.2		<u>Plant hire : Work Rates on Site</u>				
4.2.1		<u>Tipper truck (specify capacity)</u>				
		a) 5m ³ (small)	hr	16		
		b) 10m ³ (large)	hr	16		
4.2.2		<u>Flat bed truck (specify capacity)</u>				
		a) 5 ton (small)	km	800		
4.2.3		LDV	km	1 300		
4.2.4		Wheel loader: m ³ bucket (specify type)	hr	16		
4.2.5		<u>Bull dozer</u>				
		a) m ³ (small)	hr	20		
4.2.6		<u>TLB (Tractor Loader Backhoe)</u>				
		(..... m ³ bucket) (specify type)	hr	20		
4.2.7		<u>Compactor</u>				
		a) (specify applied force) kg	hr	20		
4.2.8		<u>Concrete mixer (specify dry/wet capacity)</u>				
		a) (small towable)	hr	16		
4.2.9		<u>Miscellaneous</u>				
		a) Compressor with capacity of ± 10m ³ /min	hr	16		

		b)	Water pump with 80mm outlet - diesel driven	hr	20		
TOTAL BILL 3 CARRIED FORWARD TO SUMMARY							

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SUMMARY OF BILLS

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