

**O. R. TAMBO DISTRICT MUNICIPALITY****IMPLEMENTATION OF WATER CONSERVATION AND DEMAND MANAGEMENT IN THE THORNHILL WTW WATER SUPPLY SYSTEM**

ORTDM SCMU 49 - 25/26

ITEM	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>SECTION 1 : PRELIMINARY AND GENERAL</b>						
<b>1</b>	<b>SANS 1200 A</b>	<b>PRELIMINARY AND GENERAL</b>				
<b>1.1</b>	<b>8,3</b>	<b>FIXED-CHARGE AND VALUE RELATED ITEMS</b>				
1.1.1	8.3.1	Contractual Requirements	Sum	1		
	8.3.2	Establishment of Facilities on the Site				
	8.3.2.1	Facilities for Engineer				
1.1.2	PSAB 3.2	a) Furnished offices (1No.)	Sum	0		
1.1.3		b) Telephone	Sum	1		
1.1.4		c) Nameboards (1 No.)	Sum	0		
1.1.5		d) Provision of survey equipment	Sum	1		
		Facilities for Contractor				
1.1.6		(a) Offices and storage sheds	Sum	0		
1.1.7		(b) Workshops	Sum	0		
1.1.8		(c) Laboratories	Sum	0		
1.1.9		d) Living accommodation	Sum	1		
1.1.10		(e) Ablution and latrine facilities	Sum	1		
1.1.13		(h) Refuse bins	Sum	0		
1.1.14		(i) Tools and equipment	Sum	1		
1.1.15		(j) Water supplies, electric power and	Sum	1		
1.1.16		(k) Dealing with water	Sum	1		
1.1.17		(l) Access	Sum	1		
1.1.18	8.3.3	Other Fixed-charge Obligations	Sum	1		
1.1.19	8.3.4	Removal of Site Establishment	Sum	1		
	PSA 8.4.6	Compliance with the OHS Act (1993, as amended), the Construction Regulations (2014) and the Particular Safety Specification:				
1.1.20	PSHSS 6.1.2; CR 5(1)(l)	i) Preparation of the Contractor's site specific Health and Safety Plan	Sum	1		
1.1.21	CR 7(1)(b)	ii) Principal Contractor's initial obligations in respect of the Occupational Health and Safety Act and Construction Regulations	Sum	1		
		ii) OHS File preparation and monitoring	Weeks	2		
	CR 7(1)(g);	iii) Cost of medical certificates and medical surveillance	No	15		
1.1.22	PSHSS 7.2	(a) Initial (baseline) medical examinations	No	15		
1.1.23		(b) Exit medical examinations	No	15		
1.1.24		iv) Allowance for Health and Safety Officer	Sum	1		
	GSR 2; PSHSS 7.7	v) Provision of EPWP Branded SABS Personal Protective Equipment				
1.1.25		(a) Hard Hats	No	15		
<b>Carried Forward</b>						

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							Brought Forward		
SECTION 1 : PRELIMINARY AND GENERAL									
1.1.26		(b) Reflective vests	No	15					
1.1.27		(c) Protective foot wear	No	15					
1.1.28		(d) Dust masks FFP2	No	15					
1.1.29		(e) Gloves	No	15					
1.1.30	PSA 8.4.7	Compliance with EMP and EMPr	Sum	1					
<b>1.2</b>	<b>8.4</b>	<b>TIME-RELATED ITEMS</b>							
1.2.1	8.4.1	Contractual Requirements	Sum	1					
	8.4.2	Operation and Maintenance of Facilities on Site, for Duration of Construction, except where otherwise stated							
	8.4.2.1	Facilities for Engineer:							
1.2.2		a) Furnished offices (1No.)	Sum	0					
1.2.3		b) Telephone	Sum	1					
1.2.4		c) Nameboards (1 No.)	Sum	0					
1.2.5		d) Survey assistants and materials	Sum	1					
	8.4.2.2	Facilities for Contractor:							
1.2.6		a) Offices and storage sheds	Sum	0					
1.2.7		b) Workshops	Sum	0					
1.2.8		c) Laboratories	Sum	0					
1.2.9		d) Living accommodation	Day	1	R	-			Rate Only
1.2.10		e) Ablution and latrine facilities	Day	1	R	-			Rate Only
1.2.11		f) Tools and equipment	Day	1	R	-			Rate Only
1.2.12		g) Water supplies, electric power and communications	Day	1	R	-			Rate Only
1.2.13		h) Dealing with water	Day	1	R	-			Rate Only
1.2.14		i) Access	Day	1	R	-			Rate Only
1.2.15		j) Plant	Day	1	R	-			Rate Only
1.2.16	8.4.3	Contractors supervision for the duration of the contract	Sum	1					
1.2.17	8.4.5	Other Time-related Obligations	Sum	1					
1.2.18		Supervision of Subcontractor / SMMEs	Sum	1					
1.2.19		External full-time SACPCMP registered Construction Health and Safety Officer supervision for the duration of the contract	Prov. Sum	1	R	10 000,00	R	10 000,00	
1.2.20		Overheads , charges and profit on 1.2.19	%	R	10 000,00				
1.2.21		Allowance for Social Facilitation (ISD) services for the duration of the contract	Prov. Sum	1	R	20 000,00	R	20 000,00	
1.2.22		Overheads , charges and profit on 1.2.21	%	R	20 000,00				
							Carried Forward		

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## SECTION 1 : PRELIMINARY AND GENERAL

<b>1.3</b>	<b>8.5</b>	<b>SUMS STATED PROVISIONALLY BY ENGINEER (Subclause 8.1.2.1 (d))</b>					
1.3.1	PSA3	Employment of CLO for the duration of the Contract (R8500 pm plus R500 pm cellphone allowance)	Prov. Sum	1	R	18 000,00	R 18 000,00
1.3.2		Overheads , charges and profit on 1.3.1	%	R	18 000,00		
1.3.3		Allow for senior Project Manager for the full duration of the contract	Prov. Sum	1	R	30 000,00	R 30 000,00
1.3.4		Allow for full time site supervision (Resident Engineer and Assistant Resident Engineer) for the full duration of the contract	Prov. Sum	1	R	20 000,00	R 20 000,00
1.3.5		Overheads , charges and profit on 1.3.3 and 1.3.4	%	R	50 000,00		
1.3.6		Allow for Civil Engineering trainee student	Prov. Sum	1	R	19 000,00	R 19 000,00
1.3.7		Overheads , charges and profit on 1.3.6	%	R	19 000,00		
1.3.8		Allow for accommodation for site personnel for the full duration of the contract	Prov. Sum	1	R	14 000,00	R 14 000,00
1.3.9		Overheads , charges and profit on 1.3.8	%	R	14 000,00		
1.3.10		Provision of Laptop computer and printer for the use of the RE for the full duration of the contract	Prov. Sum	1	R	35 000,00	R 35 000,00
1.3.11		Overheads , charges and profit on 1.3.10	%	R	35 000,00		
1.3.12		Allow for Data and Airtime to the Engineers site personnel for the duration of the Contract	Prov. Sum	1	R	1 000,00	R 1 000,00
1.3.13		Overheads , charges and profit on 1.3.12	%	R	1 000,00		
1.3.14		Allow for the provision of the Engineer's Bakkie for the duration of the Contract. The amount allowed for is inclusive of fuel	Prov. Sum	1	R	10 000,00	R 10 000,00
1.3.15		Overheads , charges and profit on 1.3.14	%	R	10 000,00		
1.3.16		Payment of PSC members for attendance of meetings for the duration of the contract (5 No members at R500 per member per meeting)	Prov. Sum	1	R	5 000,00	R 5 000,00
1.3.17		Overheads , charges and profit on 1.3.16	%	R	5 000,00		
		<u>Temporary Works</u>					
1.3.18		Maintain all roads where construction activities will take place	Prov. Sum	1	R	10 000,00	R 10 000,00
<b>1.4</b>	<b>8.7</b>	<b><u>Dayworks</u></b>					
1.4.1		Foreman	hr	40			
1.4.2		Skilled	hr	40			
1.4.3		Semi-skilled	hr	40			
1.4.4		Unskilled	hr	40			
<b>Carried Forward</b>							

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Brought Forward

## SECTION 1 : PRELIMINARY AND GENERAL

1,6		<b>PROVISION FOR COMPLIANCE TO THE SPECIFICATION EMA : ENVIRONMENTAL MANAGEMENT</b>					
1.6.1	PSA 8.9	The sum shall cover the cost of all activities necessary to comply with the Specification EMA: Environmental Management, which have not been included in the tendered rates for the scheduled items allowed elsewhere in the bill of quantities	Sum	1	R	15 000,00	R 15 000,00
1,7		<b>SECURITY FOR EMPLOYERS AGENT</b>					
1.7.1	PSA 8.11	Armed Security on an ad-hoc basis where required or area is deemed a security risk	Prov Sum	1	R	14 000,00	R 14 000,00
<b>Total Carried Forward To Summary</b>							

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ITEM	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>SECTION 2 : INFRASTRUCTURE VERIFICATION</b>						
2	SANS 1200AA	<b>SITE INVESTIGATION - PIPE DETECTION, SURVEYING AND FLOW MEASUREMENT</b>				
2.1		<b>GPR Survey, pipeline and asset identification for existing water pipelines</b>				
2.1.1		GPR survey for existing asbestos cement (AC) pipeline location and depth	km	3		
2.1.2		Locate existing valves (including isolation, scour, PRV and air valves), expose buried valves and surface mark	No.	182		
2.1.4	SANS 1200D	Carefully excavate by hand or mechanical means to expose buried pipelines to a maximum depth of 1.5 m and a working nominal width of 2.0 m along the pipeline alignment	m <sup>3</sup>	1 500		
2.1.5		Maintain stability of trench walls where necessary	m	1 000		
2.1.6		Identify and record the pipe diameter and material (e.g., PVC, HDPE, steel, asbestos cement, etc.) on the form provided by the Engineer, and submit it for review.	No	50		
2.1.7		Backfill and compact excavated material in 150 mm layers to 95% MOD AASHTO density after inspection, unless otherwise specified.	m <sup>3</sup>	1 950		
2.2		<b>Supply, Installation, Commission and Flow Monitoring of Zonal and DMA Ultrasonic Clamp-On Flow Meters</b>				
2.2.1		Carefully expose existing pipelines for installation of ultrasonic clamp-on flow meters.	m <sup>3</sup>	63		
2.2.2		Supply, install, and commission ultrasonic clamp-on flow meter. Meter to provide accurate non-invasive flow measurement and data logging capability. The cost to include installation labour, commissioning and calibration.	No.	7		
2.2.3		Flow monitoring and data recording for 7 consecutive days. Include retrieval, processing, and submission of flow data report.	No	7		
2.2.4		Backfill excavated areas using suitable material (excavated or imported as required) to match pipe bedding and surrounding ground levels. Place in layers <150 mm, compact each layer to specified density. Includes trimming and shaping.	m <sup>3</sup>	82		
2.2.5		Surface restoration to original condition (grass, gravel, or paving as applicable). Includes reinstatement, cleaning, and removal of surplus material to approved disposal site.	m <sup>2</sup>	70		
<b>Carried Forward</b>						

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						Brought Forward			
<b>SECTION 2 : INFRASTRUCTURE VERIFICATION</b>									
2.3		<b>Verification of Consumer Connections - Southernwood</b>							
2.3.1		<p>Conduct a detailed field audit within the Southernwood DMA to determine the exact number and status of all consumer water connections, in accordance with guidance provided by the Engineer.. Work to include:</p> <ul style="list-style-type: none"> <li>- Physical verification of each connection point and GPS capture each connection</li> <li>- Identification of active, inactive, illegal, or bypassed connections</li> <li>- Recording of meter numbers, meter conditions, and property details</li> <li>- Compilation and submit to the Engineer</li> </ul>	No.	1 580					
2.4		<b>Zero Pressure Testing of Water Network</b>							
2.4.1		<p>Under the guidance of the Engineer, provide all labour, supervision, plant, equipment, and technical resources required to undertake zero-pressure testing on the Southernwood water distribution network. Conduct zero-pressure testing on designated sections to identify leakage paths, assess valve performance, and confirm overall network integrity. The work includes:</p> <ul style="list-style-type: none"> <li>- Isolating the test section by closing valves</li> <li>- Controlled depressurisation to zero pressure</li> <li>- Monitoring pressure behaviour and flow response to detect leakage</li> <li>- Recording all observations, anomalies, and valve performance</li> <li>- Submitting a test report with findings and recommended remedial actions</li> </ul> <p>Overheads , charges and profit on 2.4.1</p>	Prov Sum	1	R	450 000,00	R	450 000,00	
			%	R	450 000,00				
<b>Forward To Summary</b>									

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**SUMMARY OF SECTIONS**

<b>SECTION</b>	<b>DESCRIPTION</b>	<b>AMOUNT (RAND)</b>
<b>1</b>	SECTION 1 : PRELIMINARY AND GENERAL	
<b>2</b>	SECTION 2 : INFRASTRUCTURE VERIFICATION	
<b>3</b>	<b>TOTAL OF SECTIONS (VAT EXCLUDED)</b>	
<b>4</b>	ADD: CONTINGENCIES @ 10%	
<b>5</b>	<b>SUB-TOTAL</b>	
<b>6</b>	ADD: VAT @ 15%	
<b>7</b>	<b>TOTAL PROJECT COST</b>	