

**Water & Sewer Network for Meloding, Virginia**

GENERAL

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
1	SABS 1200 A	SECTION 1: GENERAL					
1.1	8.3	FIXED-CHARGE AND VALUE RELATED ITEMS					
1.1.1	8.3.1	Contractual Requirements	Sum	1.0			
	8.3.2	Establishment of Facilities on the Site					
	8.3.2.1	Facilities for Engineer					
1.1.2		a) Furnished offices (1No.)	Sum	1.0			
1.1.3		b) Telephone	Sum	1.0			
1.1.4		c) Nameboards (2 No.)	Sum	1.0			
	8.3.2.2	Facilities for Contractor					
1.1.5		a) Offices and storage sheds	Sum	1.0			
1.1.6		b) Workshops	Sum	1.0			
1.1.7		c) Laboratories	Sum	1.0			
1.1.8		d) Living accommodation	Sum	1.0			
1.1.9		e) Ablution and latrine facilities	Sum	1.0			
1.1.10		f) Tools and equipment	Sum	1.0			
1.1.11		g) Water supplies, electric power and communications	Sum	1.0			
1.1.12		h) Dealing with water	Sum	1.0			
1.1.13		i) Access	Sum	1.0			
1.1.14		j) Plant	Sum	1.0			
1.1.15	8.3.3	Other Fixed-charge Obligations	Sum	1.0			
1.1.16		Compliance with the COVID-19 Regulations	Sum	1.0			
1.1.17	8.3.4	Removal of Site Establishment	Sum	1.0			
1.1.18	PSA 8.4.6	Compliance with the Site Specific Health and Safety Specification in conjunction with COVI-19 Occupational Health and Safety Measures in the Work Place (C19 OHS, 2020) Regulation Gazette No. 43400 dated 04 June 2020	Sum	1.0			
1.1.19	PSA 8.4.7	Compliance with EMPr requirements	Sum	1.0			
1.2	8.4	TIME-RELATED ITEMS					
1.2.1	8.4.1	Contractual Requirements	Sum	1.0			
	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	1.0			
Total Carried Forward							

## Water & Sewer Network for Meloding, Virginia

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ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
1.2.3		b) Telephone	Sum	1.0			
1.2.4		c) Nameboards (2 No.)	Sum	1.0			
1.2.5		d) Survey assistants and materials	Sum	1.0			
	8.4.2.2	Facilities for Contractor					
1.2.6		a) Offices and storage sheds	Sum	1.0			
1.2.7		b) Workshops	Sum	1.0			
1.2.8		c) Laboratories	Sum	1.0			
1.2.9		d) Living accommodation	Sum	1.0			
1.2.10		e) Ablution and latrine facilities	Sum	1.0			
1.2.11		f) Tools and equipment	Sum	1.0			
1.2.12		g) Water supplies, electric power and communications	Sum	1.0			
1.2.13		h) Dealing with water (see 5.5)	Sum	1.0			
1.2.14		i) Access (see 5.8)	Sum	1.0			
1.2.15		j) Plant	Sum	1.0			
1.2.16	8.4.3	Supervision for Duration of Construction	Sum	1.0			
1.2.17	8.4.4	Company and Head Office Overhead Costs for the Duration of the Contract	Sum	1.0			
1.2.18	8.4.5	Other Time-related Obligations	Sum	1.0			
1.2.19		Compliance wit the COVID-19 Regulations	Sum	1.0			
1.2.20	PSA 8.4.6	Compliance with the Site Specific Health and Safety Specification in conjunction with COVI-19 Occupational Health and Safety Measures in the Work Place (C19 OHS, 2020) Regulation Gazette No. 43400 dated 04 June 2020	Sum	1.0			
1.2.21	PSA 8.4.7	Compliance with EMPr requirements (EMPr attached on CD)	Sum	1.0			
	8.5	SUMS STATED PROVISIONALLY BY ENGINEER (Subclause 8.1.2.1 (d))					
1.2.22		Allowance for Community Liaison Officer	Prov. Sum			42,000	00
1.2.23		Overheads, charges and profit on 1.2.22 above	%	42,000.0			
1.2.24		Additional Tests require by Engineer	Prov. Sum			40,000	00
1.2.25		Overheads, charges and profit on 1.2.24 above	%	40,000.0			
1.2.26		Allowance for additional survey	Prov. Sum			25,000	00
Total Carried Forward							

**Water & Sewer Network for Meloding, Virginia**

GENERAL

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
1.2.27		Overheads, charges and profit on 1.2.26 above	%	25,000.0			
1.2.28		Allowance for relocation of existing services	Prov. Sum			10,000	00
1.2.29		Overheads, charges and profit on 1.2.28 above	%	10,000.0			
1.2.30		Allowance for Nominated Health and Safety Officer	Prov. Sum			120,000	00
1.2.31		Overheads, charges and profit on 1.2.35 above	%	120,000.0			
1.2.32		Allowance for Nominated Environmental Control Officer	Prov. Sum			30,000	00
1.2.33		Overheads, charges and profit on 1.2.37 above	%	30,000.0			
	PSA 8.7	DAYWORK (See 8.1.2.1 (d) )					
1.2.34		a) Labour	Prov. Sum			10,000	00
1.2.35		Overheads, charges and profit on item (a) above	%	10,000.0			
1.2.36		b) Materials	Prov. Sum			10,000	00
1.2.37		Overheads, charges and profit on item (a) above	%	10,000.0			
1.2.38		c) Plant	Prov. Sum			10,000	00
1.2.39		Overheads, charges and profit on item (a) above	%	10,000.0			
	8.8	TEMPORARY WORKS (See 8.1.2.1 (d) )					
1.2.40	8.8.1	Main Access Road to Works (construct and maintain)	Sum	1.0			
1.2.41	PSA 8.8.2	Dealing with Traffic (or Accommodation of Traffic)	Sum	1.0			
1.2.42	PSA 8.8.7	Contractor to provide "Construction Record" Information	Sum	1.0			
1.2.43	PSA 8.8.8	Dealing with "Live Sewage"	Sum	1.0			
Total Carried Forward To Summary							

**Water & Sewer Network for Meloding, Virginia**

UNIT 3: SITE CLEARANCE

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
2	SABS 1200 C	UNIT 3: SITE CLEARANCE					
	8.2.1	Clear and grub					
2.1		(i) Pipeline route (2m wide strip)	m	1,570.0			
	8.2.2	Remove and grub large trees and tree stumps of girth					
2.2		a) over 1 m and up to 2 m	No.	1.0			
2.3		b) over 2 m and up to 3 m	No.	1.0			
2.4	8.2.4	Reclear surfaces (only on instructions from Engineer)	m	50.0			
2.5	PSC 8.2.5	Take down existing fences	km	1.0			
	8.2.6	Clear hedge or fence or both where not scheduled seperately					
2.6		i) Hedges up to 2m high	m	50.0			
2.7		ii) Reinstate Hedge	m	50.0			
	8.2.7	Dismantle and remove pipelines, electricity transmission lines and cables etc.					
2.8		i) Pipelines & cables	m	100.0			
	8.2.8	Demolish and remove existing structures/buildings and steelwork etc.					
2.9		i) Removal of informal housing along pipeline routes	Sum	1.0			
2.10	8.2.9	Transport materials and debris to unspecified sites and dump (Provisional)	m³.km	100.0			
Total Carried Forward To Summary							



**Water & Sewer Network for Meloding, Virginia**

UNIT 3: PIPE TRENCHES

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
4	SABS 1200 DB	UNIT 3: PIPE TRENCHES					
	PSDB 8.3.1C	Site clearance and (if specified) removal of topsoil					
4.1		c) Remove topsoil (150mm depth)	m <sup>2</sup>	3,140.0			
	8.3.2	Excavation					
		a) Excavate in all materials for trenches, backfill, compact, and dispose of surplus material					
		For pipes:					
		Over 0mm up to and including 125 mm diam. for total trench depth:					
4.2		Over 0 m and up to 1 m	m	585.0			
4.3		Over 1 m and up to 2 m	m	125.0			
4.4		Over 2 m and up to 3 m	m	10.0			
		Over 125 mm up to and including 700 mm diam. for total trench depth:					
4.5		Over 0 m and up to 1 m	m	10.0			
4.6		Over 1 m and up to 2 m	m	610.0			
4.7		Over 2 m and up to 3 m	m	250.0			
4.8		Over 3 m and up to 4 m	m	10.0			
		b) Extra-over item 2.5 to above for:					
4.9		1) Intermediate excavation	m <sup>3</sup>	10.0			
4.10		2) Hard rock excavation	m <sup>3</sup>	10.0			
4.11		c) Excavate and dispose of unsuitable material from trench bottom (provisional)	m <sup>3</sup>	100.0			
	8.3.3	Excavation Ancillaries					
	8.3.3.1	Make up deficiency in backfill material (provisional)					
4.12		a) from other necessary excavations on site	m <sup>3</sup>	50.0			
4.13		c) by importation from commercial or off-site sources selected by the Contractor	m <sup>3</sup>	100.0			
4.14	PSDB 8.3.3.1.D	d) Stabilised Backfill (4% cement)	m <sup>3</sup>	50.0			
4.15	8.3.3.3	Compaction in road reserves	m <sup>3</sup>	20.0			
	8.3.3.4	Overhaul					
4.16		a) Limited overhaul (provisional)	m <sup>3</sup>	50.0			
4.17		b) Long overhaul (provisional)	m <sup>3</sup> .km	250.0			
Total Carried Forward							

**Water & Sewer Network for Meloding, Virginia**

UNIT 3: PIPE TRENCHES

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
	8.3.4	Particular Items					
		a) Shore trench opposite structure or service					
4.18		i) opposite existing houses and structures	m	50.0			
4.19		ii) opposite existing water services as required	m	10.0			
	8.3.5	Existing services that Intersect or Adjoin a Pipe Trench					
		a) Services that intersect a trench					
4.20		i) Telkom Cables	No.	5.0			
4.21		ii) Electrical Cables	No.	5.0			
4.22		iii) Water mains up to 250 mm diam.	No.	5.0			
4.23		iv) Stormwater pipes up to 600 mm diam	No.	5.0			
		b) Services that adjoin a trench					
4.24		i) Telkom Cables	m	10.0			
4.25		ii) Electrical Cables	m	10.0			
4.26		iii) Water mains up to 250 mm diam.	m	10.0			
4.27		iv) Stormwater pipes up to 600 mm diam	m	10.0			
	8.3.6	Finishings					
	8.3.6.1	Reinstate road surfaces complete with all courses					
4.28		a) Gravel on shoulders and wearing course	m <sup>2</sup>	20.0			
Total Carried Forward To Summary							





**Water & Sewer Network for Meloding, Virginia**

UNIT 3: MEDIUM-PRESSURE PIPELINES

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
6	SABS 1200 L	UNIT 3: MEDIUM PRESSURE PIPELINES					
	8.2.1	Supply, Lay and Bed Pipes Complete with Couplings					
6.1		a) 50mm diam. HDPE CL12 to SABS 533	m	320.0			
6.2		b) 75mm diam. uPVC CL12 to SABS 966	m	390.0			
	8.2.2	Extra-Over 8.2.1 for the Supplying, Laying and Bedding of Specials Complete with Couplings					
		a) uPVC Double Socketed Bends CL12					
6.3		1) 75mmØ 11¼° bend	No.	1.0			
6.4		2) 75mmØ 22½° bend	No.	2.0			
6.5		3) 75mmØ 45° bend	No.	2.0			
6.6		4) 75mmØ 90° bend	No.	1.0			
		b) Socketed Tee uPVC Class 12					
6.7		1) 75mmØ x 50mmØ x 75mmØ	No.	3.0			
		c) Flange Adapter uPVC Class 12					
6.8		1) 50mmØ	No.	3.0			
		d) Compression Flange Adapter HDPE Class 12					
6.9		1) 50mmØ	No.	3.0			
		e) HDPE Bends CL12					
6.10		1) 50mmØ 45° bend	No.	1.0			
6.11		2) 50mmØ 90° bend	No.	1.0			
		f) Compression Tee HDPE Class 12					
6.12		1) 50mmØ x 50mmØ x 50mmØ	No.	3.0			
	8.2.3	Extra-over 8.2.1 for the Supplying, Fixing and Bedding of Valves					
6.13		1) 50mmØ ND PN16, Isolating Valve assemblies complete as per detail on drawing no. WP2319-MNA-FT-WA-401	No.	4.0			
6.14		2) 80mmØ ND PN16, Isolating Valve assemblies complete as per detail on drawing no. WP2319-MNA-FT-WA-401	No.	2.0			
6.15		3) 80mmØ ND PN16, Hydrant assemblies complete as per detail on drawing no. WP2319-MNA-FT-WA-401	No.	1.0			
	8.2.11	Anchor/Thrust Blocks and Pedestals					
6.16		b) Concrete Grade 25MPa / 19mm	m³	5.0			
6.17		b) Formwork	m²	20.0			
Total Carried Forward							

**Water & Sewer Network for Meloding, Virginia**

UNIT 3: MEDIUM-PRESSURE PIPELINES

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
	8.2.13	Valves and Hydrant Chambers, etc.					
6.18		1) 50mmØ ND PN16, Isolating Valve chamber complete as per detail on drawing no. WP2319-MNA-FT-WA-401	No.	4.0			
6.19		2) 80mmØ ND PN16, Isolating Valve chamber complete as per detail on drawing no. WP2319-MNA-FT-WA-401	No.	2.0			
6.20		3) 80mmØ ND PN16, Hydrant chamber complete as per detail on drawing no. WP2319-MNA-FT-WA-401	No.	1.0			
6.21	PSL 8.2.18	Tie into existing 75mmØ uPVC pipeline	Sum	5.0			
6.22	PSL 8.2.18	Tie into existing 90mmØ uPVC pipeline	Sum	3.0			
		Sundry Items					
		Marker Posts					
6.23		i) Valve Marker as per detail on drawing no. WP2319-MNA-FT-WA-401	No.	2.0			
		Supply, lay, bed and install concrete pipe sleeves for road crossings, inclusive of all items (viz. skids etc) necessary for pipe support through sleeves. Class 100D, Spigot and Socket type for:					
		Sleeves					
6.24		i) 110mm diam. uPVC CL16 sleeve for 50mm. diam HDPE Pipe	m	10.0			
6.25		ii) 110mm diam. uPVC CL16 sleeve for 75mm. diam HDPE Pipe	m	10.0			
Total Carried Forward To Summary							

**Water & Sewer Network for Meloding, Virginia**

UNIT 3: BEDDING (PIPES)

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
7	SABS 1200 LB	UNIT 3: BEDDING: (PIPES)					
	8.2.1	Provision of Bedding from Trench Excavation					
7.1		a) Selected granular material	m <sup>3</sup>	50.0			
7.2		b) Selected fill material	m <sup>3</sup>	50.0			
	8.2.2	Supply only of Bedding by Importation					
	8.2.2.3	From commercial sources (Provisional)					
7.3		a) Selected granular material	m <sup>3</sup>	350.0			
7.4		b) Selected fill material	m <sup>3</sup>	240.0			
7.5		c) 20mm graded crushed stone	m <sup>3</sup>	5.0			
7.6	8.2.3	Concrete Bedding Cradle	m <sup>3</sup>	5.0			
	8.2.4	Encasing of Pipes in Concrete					
7.7		(i) Grade 25 MPa / 19 mm concrete	m <sup>3</sup>	1.0			
7.8	8.2.5	Overhaul of Material for Bedding Cradle and Selected Fill Blanket	m <sup>3</sup> .km	500.0			
Total Carried Forward To Summary							

**Water & Sewer Network for Meloding, Virginia**

UNIT 3: SEWERS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
8	SABS 1200 LD	UNIT 3: SEWERS					
8.1		PIPEWORK					
	8.2.1	Supply, lay, joint, bed Class flexible pipe and test pipelines					
8.1.1		ii) 160 mm diam. uPVC, Class 34HD SANS 791	m	860.0			
8.2	8.2.3	MANHOLES, ETC.					
		Manholes, 1000mm ND to Dwg No. WP2319-MNA-FT-SA-402 complete with polymer cover and frame, in accordance with SANS 1882/2003, for depths over and up to:					
8.2.1		0,0 m - 0.,5 m	No.	0.0			
8.2.2		0,5 m - 1,0 m	No.	2.0			
8.2.3		1,0 m - 1,5 m	No.	10.0			
8.2.4		1,5 m - 2,0 m	No.	15.0			
8.2.5		2,0 m - 2,5 m	No.	1.0			
8.2.6		2,5 m - 3,0 m	No.	1.0			
8.2.7		3,0 m - 3,5 m	No.	1.0			
	8.2.4	Extra-over item 5.8.13 to 5.8.15 for :					
8.2.8		i) Type 2 cast iron cover and frame, inclusive of locking mechanism in accordance with SANS 558:2016 in road areas	No.	2.0			
8.2.9		ii) Type 4 Heavy Duty to SANS 1294	No.	2.0			
		iii) Construction of backdrops and ramps including extra excavation, formwork, joints, etc., to Dwg No.WP2319-MNA-FT-SA-403 for depths over and up to :					
8.2.10		2.0m - 2.5m	No.	1.0			
8.2.11		2.5 m - 3.0m	No.	1.0			
	8.2.6	ERF Connections					
		ERF Connection complete as per Dwg. No. WP2319-MNA-FT-SA-404					
8.2.12		i) 110mm, Direct Connection to sewers up to 160mmØ on near side of road	No.	48.0			
8.2.13		ii) 110mm, Direct Connection to sewers up to 160mmØ on far side of road	No.	20.0			
8.2.14		iii) 110mm, Sloping Drop Connection to sewer up to 160mmØ on near side of road	No.	2.0			
8.2.15		iv) 110mm, Sloping Drop Connection to sewer up to 160mmØ on far side of road	No.	2.0			
Total Carried Forward							





**Water & Sewer Network for Meloding, Virginia**

UNIT 7: SITE CLEARANCE

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
10	SABS 1200 C	UNIT 7: SITE CLEARANCE					
	8.2.1	Clear and grub					
10.1		(i) Pipeline route (2m wide strip)	m	830.0			
	8.2.2	Remove and grub large trees and tree stumps of girth					
10.2		a) over 1 m and up to 2 m	No.	1.0			
10.3		b) over 2 m and up to 3 m	No.	1.0			
10.4	8.2.4	Reclear surfaces (only on instructions from Engineer)	m	50.0			
10.5	PSC 8.2.5	Take down existing fences	km	0.7			
	8.2.6	Clear hedge or fence or both where not scheduled seperately					
10.6		i) Hedges up to 2m high	m	30.0			
10.7		ii) Reinstate Hedge	m	30.0			
	8.2.7	Dismantle and remove pipelines, electricity transmission lines and cables etc.					
10.8		i) Pipelines & cables	m	100.0			
	8.2.8	Demolish and remove existing structures/buildings and steelwork etc.					
10.9		i) Removal of informal housing along pipeline routes	Sum	1.0			
10.10	8.2.9	Transport materials and debris to unspecified sites and dump (Provisional)	m <sup>3</sup> .km	100.0			
Total Carried Forward To Summary							





**Water & Sewer Network for Meloding, Virginia**

UNIT 7: PIPE TRENCHES

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
12	SABS 1200 DB	UNIT 7: PIPE TRENCHES					
	PSDB 8.3.1C	Site clearance and (if specified) removal of topsoil					
12.1		c) Remove topsoil (150mm depth)	m <sup>2</sup>	1,660.0			
	8.3.2	Excavation					
		a) Excavate in all materials for trenches, backfill, compact, and dispose of surplus material					
		For pipes:					
		Over 0mm up to and including 125 mm diam. for total trench depth:					
12.2		Over 0 m and up to 1 m	m	180.0			
12.3		Over 1 m and up to 2 m	m	40.0			
12.4		Over 2 m and up to 3 m	m	10.0			
		Over 125 mm up to and including 700 mm diam. for total trench depth:					
12.5		Over 0 m and up to 1 m	m	10.0			
12.6		Over 1 m and up to 2 m	m	500.0			
12.7		Over 2 m and up to 3 m	m	100.0			
12.8		Over 3 m and up to 4 m	m	10.0			
		b) Extra-over item 2.5 to above for:					
12.9		1) Intermediate excavation	m <sup>3</sup>	10.0			
12.10		2) Hard rock excavation	m <sup>3</sup>	10.0			
12.11		c) Excavate and dispose of unsuitable material from trench bottom (provisional)	m <sup>3</sup>	100.0			
	8.3.3	Excavation Ancillaries					
	8.3.3.1	Make up deficiency in backfill material (provisional)					
12.12		a) from other necessary excavations on site	m <sup>3</sup>	50.0			
12.13		c) by importation from commercial or off-site sources selected by the Contractor	m <sup>3</sup>	100.0			
12.14	PSDB 8.3.3.1.D	d) Stabilised Backfill (4% cement)	m <sup>3</sup>	50.0			
12.15	8.3.3.3	Compaction in road reserves	m <sup>3</sup>	20.0			
	8.3.3.4	Overhaul					
12.16		a) Limited overhaul (provisional)	m <sup>3</sup>	50.0			
12.17		b) Long overhaul (provisional)	m <sup>3</sup> .km	250.0			
Total Carried Forward							

**Water & Sewer Network for Meloding, Virginia**

UNIT 7: PIPE TRENCHES

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
	8.3.4	Particular Items					
		a) Shore trench opposite structure or service					
12.18		i) opposite existing houses and structures	m	50.0			
12.19		ii) opposite existing water services as required	m	10.0			
	8.3.5	Existing services that Intersect or Adjoin a Pipe Trench					
		a) Services that intersect a trench					
12.20		i) Telkom Cables	No.	5.0			
12.21		ii) Electrical Cables	No.	5.0			
12.22		iii) Water mains up to 250 mm diam.	No.	5.0			
12.23		iv) Stormwater pipes up to 600 mm diam	No.	5.0			
		b) Services that adjoin a trench					
12.24		i) Telkom Cables	m	10.0			
12.25		ii) Electrical Cables	m	10.0			
12.26		iii) Water mains up to 250 mm diam.	m	10.0			
12.27		iv) Stormwater pipes up to 600 mm diam	m	10.0			
	8.3.6	Finishings					
	8.3.6.1	Reinstate road surfaces complete with all courses					
12.28		a) Gravel on shoulders and wearing course	m <sup>2</sup>	20.0			
Total Carried Forward To Summary							



**Water & Sewer Network for Meloding, Virginia**

UNIT 7: MEDIUM-PRESSURE PIPELINES

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
14	SABS 1200 L	UNIT 7: MEDIUM PRESSURE PIPELINES					
	8.2.1	Supply, Lay and Bed Pipes Complete with Couplings					
14.1		a) 50mm diam. HDPE CL12 to SABS 533	m	220.0			
	8.2.2	Extra-Over 8.2.1 for the Supplying, Laying and Bedding of Specials Complete with Couplings					
		a) Socketed Reducing Tee uPVC Class 12					
14.2		1) 63mmØ x 50mmØ x 63mmØ	No.	3.0			
		b) Flange Adapter uPVC Class 12					
14.3		1) 50mmØ	No.	4.0			
		c) HDPE Bends CL12					
14.4		1) 50mmØ 45° bend	No.	1.0			
14.5		2) 50mmØ 90° bend	No.	1.0			
		d) Compression Flange Adapter HDPE Class 12					
14.6		1) 50mmØ	No.	4.0			
		e) Socketed Reduer uPVC Class 12					
14.7		1) 63mmØ x 50mmØ	No.	1.0			
	8.2.3	Extra-over 8.2.1 for the Supplying, Fixing and Bedding of Valves					
14.8		1) 50mmØ ND PN16, Isolating Valve assemblies complete as per detail on drawing no. WP2319-MNA-FT-WA-401	No.	4.0			
14.9		2) 80mmØ ND PN16, Hydrant assemblies complete as per detail on drawing no. WP2319-MNA-FT-WA-401	No.	1.0			
	8.2.11	Anchor/Thrust Blocks and Pedestals					
14.10		b) Concrete Grade 25MPa / 19mm	m <sup>3</sup>	5.0			
14.11		b) Formwork	m <sup>2</sup>	20.0			
	8.2.13	Valves and Hydrant Chambers, etc.					
14.12		1) 50mmØ ND PN16, Isolating Valve chamber complete as per detail on drawing no. WP2319-MNA-FT-WA-401	No.	4.0			
14.13		2) 80mmØ ND PN16, Hydrant chamber complete as per detail on drawing no. WP2319-MNA-FT-WA-401	No.	1.0			
14.14	PSL 8.2.18	Tie into existing 63mmØ uPVC pipeline	Sum	4.0			
14.15	PSL 8.2.18	Tie into existing 75mmØ uPVC pipeline	Sum	1.0			
		Sundry Items					
Total Carried Forward							

**Water & Sewer Network for Meloding, Virginia**

UNIT 7: MEDIUM-PRESSURE PIPELINES

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
14.16		Marker Posts i) Valve Marker as per detail on drawing no. WP2319-MNA-FT-WA-401	No.	2.0			
14.17		Sleeves i) 110mm diam. uPVC CL16 sleeve for 50mm. diam HDPE Pipe	m	10.0			
Total Carried Forward To Summary							

**Water & Sewer Network for Meloding, Virginia**

UNIT 7: BEDDING (PIPES)

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
15	SABS 1200 LB	UNIT 7: BEDDING: (PIPES)					
	8.2.1	Provision of Bedding from Trench Excavation					
15.1		a) Selected granular material	m <sup>3</sup>	50.0			
15.2		b) Selected fill material	m <sup>3</sup>	50.0			
	8.2.2	Supply only of Bedding by Importation					
	8.2.2.3	From commercial sources (Provisional)					
15.3		a) Selected granular material	m <sup>3</sup>	200.0			
15.4		b) Selected fill material	m <sup>3</sup>	130.0			
15.5		c) 20mm graded crushed stone	m <sup>3</sup>	5.0			
15.6	8.2.3	Concrete Bedding Cradle	m <sup>3</sup>	5.0			
	8.2.4	Encasing of Pipes in Concrete					
15.7		(i) Grade 25 MPa / 19 mm concrete	m <sup>3</sup>	1.0			
15.8	8.2.5	Overhaul of Material for Bedding Cradle and Selected Fill Blanket	m <sup>3</sup> .km	500.0			
Total Carried Forward To Summary							

**Water & Sewer Network for Meloding, Virginia**

UNIT 7: SEWERS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
16	SABS 1200 LD	UNIT 7: SEWERS					
16.1		PIPEWORK					
	8.2.1	Supply, lay, joint, bed Class flexible pipe and test pipelines					
16.1.1		ii) 160 mm diam. uPVC, Class 34HD SANS 791	m	610.0			
16.2	8.2.3	MANHOLES, ETC.					
		Manholes, 1000mm ND to Dwg No. WP2319-MNA-FT-SA-402 complete with polymer cover and frame, in accordance with SANS 1882/2003, for depths over and up to:					
16.2.1		0,0 m - 0,5 m	No.	1.0			
16.2.2		0,5 m - 1,0 m	No.	1.0			
16.2.3		1,0 m - 1,5 m	No.	8.0			
16.2.4		1,5 m - 2,0 m	No.	10.0			
16.2.5		2,0 m - 2,5 m	No.	1.0			
	8.2.4	Extra-over item 5.8.13 to 5.8.15 for :					
16.2.6		i) Type 2 cast iron cover and frame, inclusive of locking mechanism in accordance with SANS 558:2016 in road areas	No.	2.0			
16.2.7		ii) Type 4 Heavy Duty to SANS 1294	No.	2.0			
		iii) Construction of backdrops and ramps including extra excavation, formwork, joints, etc., to Dwg No. WP2319-MNA-FT-SA-403 for depths over and up to :					
16.2.8		2.0m - 2.5m	No.	1.0			
16.2.9		2.5 m - 3.0m	No.	1.0			
	8.2.6	ERF Connections					
		ERF Connection complete as per Dwg. No. WP2319-MNA-FT-SA-404					
16.2.10		i) 110mm, Direct Connection to sewers up to 160mmØ on near side of road	No.	14.0			
16.2.11		ii) 110mm, Direct Connection to sewers up to 160mmØ on far side of road	No.	7.0			
16.2.12		iii) 110mm, Sloping Drop Connection to sewer up to 160mmØ on near side of road	No.	9.0			
16.2.13		iv) 110mm, Sloping Drop Connection to sewer up to 160mmØ on far side of road	No.	2.0			
		Sundries					
16.2.14		Unblocking of existing manholes by removing debris and spoiling off site	No.	10.0			
Total Carried Forward							







**Water & Sewer Network for Meloding, Virginia**

SUMMARY OF SECTIONS

SECTION	DESCRIPTION	AMOUNT (RAND)
1	GENERAL	.....
2	UNIT 3: SITE CLEARANCE	.....
3	UNIT 3: EARTHWORKS	.....
4	UNIT 3: PIPE TRENCHES	.....
5	UNIT 3: GABIONS AND PITCHING	.....
6	UNIT 3: MEDIUM-PRESSURE PIPELINES	.....
7	UNIT 3: BEDDING (PIPES)	.....
8	UNIT 3: SEWERS	.....
9	UNIT 3: ERF CONNECTIONS (WATER)	.....
10	UNIT 7: SITE CLEARANCE	.....
11	UNIT 7: EARTHWORKS	.....
12	UNIT 7: PIPE TRENCHES	.....
13	UNIT 7: GABIONS AND PITCHING	.....
14	UNIT 7: MEDIUM-PRESSURE PIPELINES	.....
15	UNIT 7: BEDDING (PIPES)	.....
16	UNIT 7: SEWERS	.....
17	UNIT 7: ERF CONNECTIONS (WATER)	.....
	SUBTOTAL	.....
1	CONTINGENCIES	.....
	SUBTOTAL	.....
2	VAT 15%	.....
Total Carried Forward To Summary Of Schedules		.....