## SCHEDULE A: PRELIMINARY AND GENERAL

ltem	Payment					
No	Refers	Description	Unit	Qty	Rate	Amount
A .1	8,3	FIXED-CHARGED ITEMS				
A .1.1	8.3.1	Contractual Requirements	Sum	1		
A.1.2	8.3.2	Establish Facilities on the site				
A.1.2.1	8.3.2.1	Facilities for Engineer				
		(a) Nameboards (Number 1)	Sum	1		
		(b)Compliance with the OHS specifications	Sum	1		
A.1.2.2	8.3.2.2	Facilities for Contractor				
		(a) Offices and Storage sheds	Sum	1		
		(b) Workshops	Sum	1		
		(c) Laboratories	Sum	1		
		(d) Living accommodation	Sum	1		
		(e) Ablution and latrine facilities	Sum	1		
		(f) Tools and equipment	Sum	1		
		(g) Water supplies, electrical power, communication facilities	Sum	1		
		(h) Dealing with water	Sum	1		
		(i) Access	Sum	1		
		(j) Plant	Sum	1		
A.1.3	8.3.3	Other fixed-charge obligations(Specify)	Sum	1		
A.1.4	8.3.4	Removal of site establishment on completion of works	Sum	1		
A.1.5	SD 26	Health and Safety Plan: submit for approval	Sum	1		
	1	TOTAL CARRIED FORWARD	ı			

Item	Payment					
No	Refers	Description	Unit	Qty	Rate	Amount
		BROUGHT FORWARD	1		1	
A .2	8,4	TIME-RELATED ITEMS				
			_			
A .2.1	8.4.1	Contractual requirements Operate and maintenance of facilities on site	Sum	1		
A.2.2	8.4.2	Operate and maintenance of facilities of site				
A .2.2.1	8.4.2.1	Facilities for Engineer for duration of Contract				
		(a) Nameboards (Number 1)	Sum	1		
A.2.2.2	8.4.2.2	Facilities for Contractor for duration of Contract				
		(a) Offices and Storage sheds	Sum	1		
		(b) Workshop	Sum	1		
		(c) Laboratories	Sum	1		
		(d) Living accommodation	Sum	1		
				I		
		(e) Ablution and latrine facilities	Sum	1		
		(f) Tools and equipment	Sum	1		
		(g) Water supplies, Electrical power, Communication facilities	Sum			
		(3)		1		
		(h) Dealing with water	Sum	1		
		(i) Access	Sum	1		
		(i) Plant	Sum			
		(j) Plant	Sum	1		
A.2.3	8.4.5	Other time-related obligations(Specify)	Sum	1		
A .2.4	8.4.3	Supervision	Sum	1		
	0.4.4					
A .2.5	8.4.4	Company and head office overhead costs	Sum	1		
A .2.6	PS 25	Adherence to Health and Safety Plan	Sum	1		
	-	TOTAL CARRIED FORWARD				

ltem	Payment					
No	Refers	Description	Unit	Qty	Rate	Amount
		BROUGHT FORWARD				
A .3	8,5	SUMS STATED PROVISIONALLY BY THE ENGINEER (only payable on discression of the engineer)				
A .3.1	PSA 8.8	a) Additional tests required by the Engineer	Prov Sum	1	45 000,00	45 000,00
		b) Overheads and charges for item A.3.1 a) above	%			
A.3.2		a) Detection of Underground Services	Prov Sum	1	50 000,00	50 000,00
		b) Overheads and charges for item A.3.1 a) above	%			
4.3.3		a) Community Liasson Officer	Prov Sum	1	120 000,00	120 000,00
		b) Overheads and charges for item A.3.3 a) above	%			
A.3.4		a)Provision for 2 Civil Engineering Graduate Engineers and in- service training for 12 months	Prov Sum	1	288 000,00	288 000,00
		b) Overheads and charges for item A.3.4 a) above	%			
4.3.5		a)Provision for 2 OHS Graduates and in-service training for 12 months	Prov Sum	1	192 000,00	192 000,00
		b) Overheads and charges for item A.3.5 a) above	%			
A.3.6		a)Provision for 2 Environmental Graduates and in-service training for 12 months	Prov Sum	1	192 000,00	192 000,00
		b) Overheads and charges for item A.3.6 a) above	%			
A.3.7		a) Additional Survey and Benchmarks	Prov Sum	1	65 000,00	65 000,00
		b) Overheads and charges for item A.3.7 a) above	%			
A.3.8		a) Training (Accredited and Non-Accredited)	Prov Sum	1	350 000,00	350 000,00
		b) Overheads and charges for item A.3.8 a) above	%			
4.3.9		a) Exposing of Pipes to check the pipe material	Prov Sum	1	250 000,00	250 000,00
		b) Overheads and charges for item A.3.9 a) above	%			
A.3.10		a)Allow for Airtime to the Engineers site Personnel for the duration of the Contract	Prov Sum	1	12 000,00	12 000,00
		b) Overheads and charges for item A.3.10 a) above	%			
A.3.11		a)Allow for the provision of the Engineer's Tranport for the duration of the Contract	Prov. Sum	1	300 000,00	R300 000,00
		TOTAL CARRIED FORWARD				

Item	Payment					
No	Refers	Description	Unit	Qty	Rate	Amount
		BROUGHT FORWARD				
		b) Overheads and charges for item A.3.11 a) above	%			
A.3.12		a)Allow for the provision of the Engineer's Accomodation for the duration of the Contract	Prov. Sum	1	200 000,00	R200 000,00
		b) Overheads and charges for item A.3.12 a) above	%			
A.4.0	8,8	TEMPORARY WORKS				
	SPEC OHS	HEALTH AND SAFETY				
A .4.1		Health and Safety Plan - Submit for Approval	Sum	1		
A.4.2		Personal Protective Equipment				
A.4.2.1		a) Reflective bibs	No	100		
A.4.2.2		b) Protective Footwear	No	60		
A.4.2.3		c) Work Suits	No	60		
A.4.2.4		d) Gumboots	No	60		
A.4.2.5		e) Hard hats	No	120		
A.4.3		Health and Safety Training as Required	Sum	1		
A.4.3.1		Allowance for the Contractor's time related obligations with respect to adherance of the OHS Act and Construction	months	12		
A.4.3.2		Costs of medical certificates (initial and exit examinations)	No	80		
A.3.4		a) Additional Survey and Benchmarks	Prov Sum	1	65 000,00	65 000,00
		b) Overheads and charges for item A3 a) above	%			
A.3.5		a) Training (Accredited and Non-Accredited)	Prov Sum	1	450 000,00	450 000,00
		b) Overheads and charges for item A.3.3 a) above	%			
A.3.6		a) Exposing of Pipes to check the pipe material	Prov Sum	1	250 000,00	250 000,00
		b) Overheads and charges for item A.3.3 a) above				
		TOTAL CARRIED FORWARD				

ltem	Payment					
No	Refers	Description	Unit	Qty	Rate	Amount
		BROUGHT FORWARD			11	
A.3.7		a)Allow for Airtime to the Engineers site Personnel for the duration of the Contract	Prov Sum	1	12 000,00	12 000,00
		b) Overheads and charges for item A.3.5 a) above	%			
A.3.8		a)Allow for the provision of the Engineer's Tranport for the duration of the Contract	Prov. Sum	1	300 000,00	R300 000,00
		b) Overheads and charges for item A.3.6 a) above	%			
A.3.9		a)Allow for the provision of the Engineer's Accomodation for the duration of the Contract	Prov. Sum	1	200 000,00	R200 000,00
		b) Overheads and charges for item A.3.7 a) above	%			
A.4.0	8,8	TEMPORARY WORKS				
	SPEC OHS	HEALTH AND SAFETY				
A .4.1		Health and Safety Plan - Submit for Approval	Sum	1		
4.4.2		Personal Protective Equipment				
A.4.2.1		a) Reflective bibs	No	100		
4.4.2.2		b) Protective Footwear	No	60		
A.4.2.3		c) Work Suits	No	60		
4.4.2.4		d) Gumboots	No	60		
A.4.2.5		e) Hard hats	No	120		
A.4.3		Health and Safety Training as Required	Sum	1		
4.4.3.1		Allowance for the Contractor's time related obligations with respect to adherance of the OHS Act and Construction Regulations	months	12		
A.4.3.2		Costs of medical certificates (initial and exit examinations)	No	80		
		TOTAL SECTION A CARRY FORWARD TO SUMN	IARY			

ltem No	Payment Refers	Description	Unit	Qty	Rate	Amount
		SECTION B:	•			
		RETICULATION SEWERS				
B1	SABS 1200C	SITE CLEARANCE				
B1.1	8.2.1	Clear and grub 2 m wide strip along sewer pipe routes	km	22		
B1.2	8.2.1	Extra and over B1.1 for additional clearing of routes and provision of survey in natural valley sections should pipe be crossing such sections or as ordered by the Engineer.	ha	1		
B1.3	PSC 8.2	a) Take down and reinstate fence for access to sewer lines b) Temporary gates c) Permanent gates d) Fences along pipeline route	m No No m	3 000 12 5 100		
B1.4	8.2.8	Demolish and remove structures as indicated in drawings	Sum	1		
B2	SABS 1200D	EARTHWORKS				
B2.1	8.3.1.2 8.3.2	Remove topsoil to a nominal depth of 150mm, stockpile and maintain. Bulk Excavation	m²	25 200		
	0.0.2	a) Excavate in all materials to form bench and use for embankment as indicated by the Engineer on-site for cross slope 2:1 and flatter	m <sup>3</sup>	300		
		b) Excavate in all materials to form bench _as indicated by the Engineer on-site for cross slope steeper than 2 : 1	m <sup>3</sup>	200		
		Extra over a and b for excavation in hard rock. (Intermediate material is classified under a) and b) above	m³	100		
	8.3.4	Importing of Materials				
		a) Extra and over 8.3.2 (a) for importation of materials from i) from stockpile G7 material	m <sup>3</sup>	1 000		
		ii) from commercial sources G7 material	m <sup>3</sup>	25		
B2	SABS 1200DB	EARTHWORKS (pipe trenches)				
B2.1	8.3.2(a)	Excavate in all materials for trenches, backfill, compact and dispose of surplus material for sewers				
B2.1.1		200 mm dia pipe for depths: OVER - UP TO				
B2.1.1.1		0,0 m - 1,5 m	m	40		
B2.1.1.2		1,5 m - 2,0 m	m	32		
B2.1.1.3		2,0 m - 3,0 m	m	38		
B2.1.2.4		3,0 m - 4,0 m	m	45		
B2.1.2.5		4,0 m - 5,0 m	m	22		
B2.1.2.6		5,0 m - 6,0 m	m	150		
B2.1.2		160 mm dia pipe for depths:				
<b>DO</b> 1 <b>Z</b> 1		OVER - UP TO				
B2.1.2.1		0,0 m - 1,5 m	m	6 200		
B2.1.2.2		1,5 m - 2,0 m	m	5 800		
B2.1.2.3		2,0 m - 3,0 m	m	4 500		
B2.1.2.4		3,0 m - 4,0 m	m	2 100		
B2.1.2.5		4,0 m - 5,0 m	m	1 300		
B2.1.2.6		5,0 m - 6,0 m	m	800		
B2.13		110 mm dia pipe for depths:		19 900		<b></b>
		TOTAL CARRIED FORWARD				

BROUGHT FORWARD     Constraint       22.13.1     UVER 10     m	ltem No	Payment Refers	Description	Unit	011	Rate	Amount
Note and the set of the set	NO	Refers	Description	Unit	Qty	Rale	Amount
22.1.3.1 23.1.3.2 23.1.3.4 23.1.3.40.0 m - 1.5 m 1.5 m - 2.0 m 2.0 m - 3.0 m 3.0 m - 4.0 m 							
22.1.3.2 22.1.3.3 22.1.3.41.5 m - 2.0 m 2.0 m 3.0 m - 4.0 m 3.0 m 3.0 m - 4.0 m 3.0 m - 4.0 m 3.0 m - 4.0 m 3.0 m - 4.0 m 3.0 m 3.0 m 3.0 m - 4.0 m 3.0 m 3.0 m 3.0 mm m m m 3.0 m 3.0 m 3.0 m 3.0 m 3.0 m 3.0 m 3.0 m 3.0 m3.2.28.3.2 (b)Extra over item B2.1.1 to B2.1.3 for additional Compaction to 95% Mod AASHTO density in obtaine soil under roads where ordered 3.0 m ***********************************	B2131			m	80		
22.1.3.4 22.1.3.42.1.0 - 3.0 m 3.0 m - 4.0 m 4.0 m - 6.0 mm mm m mm m m22.1.3.43.0 m - 4.0 m 4.0 m - 6.0 m3.0 m - 6.0 mmmmm22.2.3.43.2.0(b)Extra over item B2.1.1 to B2.1.3.6 for excavation in hard rock mm*90022.3.43.2.0(c)Excavate unsultable material from trench bottom if ordered a) in soft materialm*80032.48.3.2(c)Excavate unsultable material from trench bottom if ordered b) in soft materialm*80032.59.3.3Extra over item B2.1.1 to B2.1.1.3 for additional Compaction to 95% Mod AASHTO density in ocheasive soil under roads where orderedm*80032.68.3.6.1Reinstate road surfaces with all coursesm*50032.78.3.5(a)Extra over item B2.1.1 to B2.1.1.3 for additional Compaction to 95% Mod AASHTO density in ocheasive soil under roads where orderedm*50032.78.3.61Reinstate road surfaces with all coursesm*12032.88.3.61Services that intersect a trenchNo65032.8SaxBS 1200EBExisting services: a bisfort water material (Provisional)m*120033.1Locate from drawings provided by the Employer and protect a) Sected granular material b) Exectical and telecommunication cablesNo5533.1SaxBS 1200EBBEDDINGm**150033.1.1NoSected granular material b) Sected granular material b) Sected granular material b) Sected granular material b) Sec	B2.1.3.2						
22.1.3 b $3.0 \text{ m} - 4.0 \text{ m}$ $4.0 \text{ m} - 5.0 \text{ m}$ $m$ <td>-</td> <td></td> <td>20m - 30m</td> <td></td> <td></td> <td></td> <td></td>	-		20m - 30m				
22.13.54.0 m - 5.0 m 5.0 m - 6.0 mm mm mm mm mm m32.20.3.2 (b)Extra over tem B2.1.1 to B2.1.3.6 for excavation in hard rockm <sup>3</sup> 90032.3PSDB 8.3.2 (b)Hand excavation and backfill where ordered by the Engineerm <sup>3</sup> 80032.40.3.2(c)Excavate unsultable material from trench bottom if ordered b) in soft materialm <sup>3</sup> 80032.53.3.3Extra over tem B2.1.1 to B2.1.3. for additional Compaction to 95% b) in soft materialm <sup>3</sup> 80032.60.3.6.1Reinstater oad surfaces with all coursesm <sup>3</sup> 50032.7SAGS 12000BExtra over tem B2.1.1 to B2.1.1.3 for additional Compaction to 95% b) in soft materialm <sup>3</sup> 50032.60.3.6.1Reinstater oad surfaces with all coursesm <sup>3</sup> 50032.88.3.5(a)Extra over tem B2.1.1 to B2.1.3. for additional Compaction to 95% b) in soft material give to mainm <sup>3</sup> 50032.88.3.5(a)Extra over tem B2.1.1 to B2.1.1.3 for additional Compaction to 95% b) in soft material give to mainm <sup>3</sup> 50032.88.3.5(a)Services that intersect a trenchNo65032.88.3.5(a)Services that adjoin a trenchmNo5532.88.3.3.4Overhaul to dispose thard rock material (Provisional)m <sup>4</sup> 150033.1Locate from drawing provided by the Employer and protect a)Sected girandar materialm <sup>4</sup> 350033.1Locate from drawing material b) Exerticel al mater			30m - 40m				
22.1.3.6 S, 0 m - 6, 0 m m 80   23.2 8.3.2 (b) Exta over item 82.1.1 to 82.1.3.6 for excavation in hard rock. m <sup>3</sup> 900   23.2 PSDB 8.3.2 (b) Hand excavation and backfill where ordered by the Engineer m <sup>4</sup> 800   23.4 8.3.2 (c) Excavate unsultable matarial from trench bottom if ordered a) in hard rock. m <sup>4</sup> 800   23.5 8.3.3.3 Excavate unsultable matarial from trench bottom if ordered a) in hard rock. m <sup>4</sup> 800   23.6 8.3.6.1 Reinstate road surfaces with all courses m <sup>4</sup> 500   23.7 8.3.6.1 Reinstate road surfaces with all courses m <sup>4</sup> 500   23.7 8.3.5(a) Existing services: EXISTING SERVICIS m <sup>4</sup> 120   23.7 8.3.5(a) Services that interact a trench No 650   23.8 8.3.5(b) Services that dipion a trench No 55   3.1 1.5.5(a) Services hard rock material (Provisional) m <sup>4</sup> 1.500   3.3.1 8.3.3.4 Overhault o dispose hard rock material (Provisional) m <sup>4</sup> 1.500   3.3.1 8.2.1 & PSLB 5.3 Provision of bedding from trench excavation m <sup>4</sup> 1.500   3.3.1 8.2.1 & PSLB 5.3 Provision of bedding from trench excava							
22.28.3.2(b)Extra over item B2.1.1 to B2.1.3.6 for excavation in hard rock $m^4$ 90022.3PSDB 8.3.2 (b)Hand excavation and backfill where ordered by the Engineer $m^3$ 80032.4 $3.2$ (c)Excavate unsullable material from trench bottom if ordered a) in hard rock (b) in soch material $m^3$ 80032.5 $3.3.3$ Extra over item B2.1.1 to B2.1.1.3 for additional Compaction to 95% (b) ASSTO density in cohesive soil under roads where ordered $m^2$ $300$ 32.6 $3.3.3$ Extra over item B2.1.1 to B2.1.1.3 for additional Compaction to 95% (b) and ASSTO density in cohesive soil under roads where ordered $m^2$ $300$ 32.7 $8.3.6$ (a)Reinstate road surfaces with all courses $m^2$ $500$ 32.8 $3.3.4$ Extra over item B2.1.1 to B2.1.10 SERVICES $m^2$ $500$ 32.9 $8.5$ (a)Services that infersect a trenchNo $650$ 32.9Services that adjoin a trench $m$ $1250$ 32.8 $3.3.4$ Overhaul to dispose hard rock material (Provisional) $m^3$ $500$ 33.1 $2.1.4$ PSLB 5.3Provision of badding from trench excavation $m^3$ $1500$ 33.1.1 $2.1.4$ PSLB 5.3including for screening a) $m^3$ $1500$ 33.1.2 $2.1.4$ PSLB 5.3including for material (b) Selected fill material (blanket) $m^3$ $500$ 33.1.1 $2.1.4$ PSLB 5.3including for screening a) $m^3$ $500$ 33.3.1 $2.1.4$ PSLB 5.3including from concension sources (Provisional) b	B2.1.3.6						
92.3   PSDB 8.3.2 (b)   Hand excavation and backfill where ordered by the Engineer   m <sup>3</sup> 800     92.4   8.3.2 (c)   Excavate unsulfable material from trench bottom if ordered a) in hard rock   m <sup>3</sup> 800     92.5   8.3.3 (c)   Excavate unsulfable material from trench bottom if ordered a) in hard rock   m <sup>3</sup> 800     92.6   8.3.3 (c)   Extra over item 52.1.1 to 52.1.1.3 for additional Compaction to 95% Mod AASHTC density in collesive soil under roads where ordered   m <sup>2</sup> 120     92.7   8.3.6 (a) 8.3.6 (a) 8.3.6 (a) 8.3.6 (a) 8.4.5 (b) 8.4.5 (b) 8.5.5 (b							
32.4   8.3.2(c)   Excavate unsuitable material from trench bottom if ordered a) in hard rock b) in soft material   m <sup>3</sup> 8000 10000     32.5   8.3.3.0   Extra over item B2.1.1.1 to B2.1.1.3 for additional Compaction to 95% Mod AASHTO density in cohesive soil under roads where ordered   m <sup>3</sup> 120     32.6   8.3.6.1   Reinstate road surfaces with all courses   m <sup>4</sup> 500     32.7   8.3.6(a) SARS 12000B   Existing services: EXISTING SERVICES   m <sup>4</sup> 500     32.7   8.3.5(a) SARS 12000B   Existing services: EXISTING SERVICES   No   650     32.9   Sarting services that adjoin a trench   No   650     32.9   Sarting water mains b) Electrical and telecommunication cables   No   555     32.1   Sarting water mains b) Electrical and telecommunication cables   No   55     33.1   8.2.1 & PSLB 5.3   Provision of packing provided by the Employer and protect a) Existing water mains b) Selected fill material (blanket)   m <sup>3</sup> 1500     33.1.1   8.2.1 & PSLB 5.3   Provision of packing provided by the Employer and the communication cables   m <sup>3</sup> 1500     33.1.1   8.2.1 & PSLB 5.3   Provision of paccoreningi a) Selected fill material (blanket)	B2.2	8.3.2(b)	Extra over item B2.1.1 to B2.1.3.6 for excavation in hard rock	m³	900		
a) in hard rock b) in soft materialm³800 m³22.58.3.3.3Extra over term B2.1.1.1 for 2.1.1.1 for additional Compaction to 95% Mod AASHTO density in cohesive soil under roads where orderedm³12032.68.3.6.1Reinstate road surfaces with all coursesm²50032.78.3.5(a) SABS 12000BExisting services: EXISTING SERVICESm³12030.18.3.5(a) Services that intersect a trenchNo65030.28.3.5(a) Services that intersect a trenchm125010.2Existing services: EXISTING SERVICESNo55530.18.3.5(a) Services that intersect a trenchNo65030.28.3.5(a) Services that intersect a trenchNo55530.3Services that intersect a trenchNo55532.78.3.3.4Overhaul to dispose hard rock material (Provisional)m'Nm90032.88.3.3.4Overhaul to dispose hard rock material (Provisional)m'Nm90033.18.2.1 & PSLB 5.3Provision of bedding from trench excavationm³150033.1.28.2.1 & PSLB 5.3Provision of bedding from commercial sources (Provisional)m³150033.28.2.2.3Subtected fill material (blanket)m³2033.3.4Subtected fill material (blanket)m³12033.48.2.1 & PSLB 5.3Subtected fill material (blanket)m³30033.48.2.1 & PSLB 5.3Subtected fill material (blanket)m³120 <t< td=""><td>B2.3</td><td>PSDB 8.3.2 (b5)</td><td>Hand excavation and backfill where ordered by the Engineer</td><td>m³</td><td>800</td><td></td><td></td></t<>	B2.3	PSDB 8.3.2 (b5)	Hand excavation and backfill where ordered by the Engineer	m³	800		
a) in hard rock b) in soft materialm³800 m³22.58.3.3.3Extra over term B2.1.1.1 for 2.1.1.1 for additional Compaction to 95% Mod AASHTO density in cohesive soil under roads where orderedm³12032.68.3.6.1Reinstate road surfaces with all coursesm²50032.78.3.5(a) SABS 12000BExisting services: EXISTING SERVICESm³12030.18.3.5(a) Services that intersect a trenchNo65030.28.3.5(a) Services that intersect a trenchm125010.2Existing services: EXISTING SERVICESNo55530.18.3.5(a) Services that intersect a trenchNo65030.28.3.5(a) Services that intersect a trenchNo55530.3Services that intersect a trenchNo55532.78.3.3.4Overhaul to dispose hard rock material (Provisional)m'Nm90032.88.3.3.4Overhaul to dispose hard rock material (Provisional)m'Nm90033.18.2.1 & PSLB 5.3Provision of bedding from trench excavationm³150033.1.28.2.1 & PSLB 5.3Provision of bedding from commercial sources (Provisional)m³150033.28.2.2.3Subtected fill material (blanket)m³2033.3.4Subtected fill material (blanket)m³12033.48.2.1 & PSLB 5.3Subtected fill material (blanket)m³30033.48.2.1 & PSLB 5.3Subtected fill material (blanket)m³120 <t< td=""><td>B2 /</td><td>8 3 2(c)</td><td>Excavate unsuitable material from trench bottom if ordered</td><td></td><td></td><td></td><td></td></t<>	B2 /	8 3 2(c)	Excavate unsuitable material from trench bottom if ordered				
b) in soft materialm <sup>2</sup> 1 00032.58.3.3.3Extra over item B2.1.1 to B2.1.1.3 for additional Compaction to 95% Mod AASHTO density in cohesive soil under roads where orderedm <sup>2</sup> 12032.68.3.6.1Reinstate road surfaces with all coursesm <sup>2</sup> 50032.78.3.5(a)Existing services: EXISTING SERVICESm50039.18.3.5(a)Services that intersect a trenchNo65039.28.3.5(b)Services that adjoin a trenchm1250Locate from drawings provided by the Employer and protect a) Existing water mains b) Electrical and telecommunication cablesNo5532.88.3.3.4Overhaul to dispose hard rock material (Provisional)m*Km90033.18.2.1.8 PSLB 5.3Provision of bedding from trench excavationm**150033.1.1.2.1.8 PSLB 5.3Including for screening a) Selected film aterial (banket)m**2033.1.28.2.1.8 PSLB 5.3Including for commercial sources (Provisional) a) Selected film aterial (banket)m**20033.2.18.2.1.8 PSLB 5.3Including for commercial sources (Provisional) a) Selected film aterial (banket)m**350033.38.2.2.3Including for paralar material b) Selected film aterial (banket)m**30033.40.2.2.3Existing water material b) Selected film aterial (banket)m**30033.48.2.3.3Including for commercial sources (Provisional) a) Selected film aterial (banket)m**30033.40.2.3<	02.4	0.0.2(0)		m <sup>3</sup>	800		
32.5   8.3.3.3   Extra over item B2.1.1 to B2.1.1.3 for additional Compacion to 95% Mod AASHTO density in cohesive soil under roads where ordered   m*   120     32.6   8.3.6.1   Reinstate road surfaces with all courses   m*   500     32.7   8.3.5(a)   Existing services: EXISTING SERVICES   m*   500     33.1   8.3.5(a)   Services that intersect a trench   No   650     33.2   8.3.5(b)   Services that adjoin a trench   m   1200     Locate from drawings provided by the Employer and protect: a) Existing water mans b) Electrical and telecommunication cables   No   55     33.4   Overhaul to dispose hard rock material (Provisional)   m*   900     33.1   8.2.1 & PSLB 5.3   Provision of bedding from trench excavation   m*   1500     33.1.1   8.2.1 & PSLB 5.3   Including for screening a) Selected film anterial (Banket)   m*   1500     33.1.2   8.2.1 & PSLB 5.3   Including for commercial sources (Provisional) a) Selected film anterial (Banket)   m*   5000     33.1.1   B.2.1 & PSLB 5.3   Including from commercial sources (Provisional) a) Selected film anterial (Banket)   m*   5000     33.2.2   8.2.1 & PSLB 5.3   Including			,				
32.6   8.3.6.1   Reinstate road surfaces with all courses   m <sup>2</sup> 500     32.7   8.3.5(a)   Existing services: EXISTING SERVICES   m <sup>2</sup> 500     3.8.1   8.3.5(a)   Services that intersect a trench   No   650     3.8.2   8.3.5(a)   Services that adjoin a trench   m   1200     3.8.2   8.3.5(b)   Services that adjoin a trench   m   1250     b. Electrical and telecommunication cables   No   655     3.2.8   8.3.3.4   Overhaul to dispose hard rock material (Provisional)   m <sup>3</sup> / <sub>1</sub> 900     33.1   8.2.1 & PSLB 5.3   Provision of bedding from trench excavation   m <sup>3</sup> / <sub>1</sub> 1500     33.1.1   Selected firmaterinal (blanket)   m <sup>3</sup> / <sub>2</sub> 1500     33.1.2   8.2.1 & PSLB 5.3   Including for screening a) Selected firmaterial (blanket)   m <sup>3</sup> / <sub>2</sub> 200     33.1.2   8.2.1 & PSLB 5.3   Including for screening a) Selected firmaterial (blanket)   m <sup>3</sup> / <sub>2</sub> 5000     33.1.2   8.2.1 & PSLB 5.3   Including for screening a) Selected firmaterial (blanket)   m <sup>3</sup> / <sub>2</sub> 5000     33.2.3   8.2.1 & PSLB 5.3   Including for screening a) Selected firmaterin					1 000		
32.6   8.3.6.1   Reinstate road surfaces with all courses   m <sup>2</sup> 500     32.7   8.3.5(a)   Existing services: EXISTING SERVICES   m <sup>2</sup> 500     3.8.1   8.3.5(a)   Services that intersect a trench   No   650     3.8.2   8.3.5(a)   Services that adjoin a trench   m   1200     3.8.2   8.3.5(b)   Services that adjoin a trench   m   1250     b. Electrical and telecommunication cables   No   655     3.2.8   8.3.3.4   Overhaul to dispose hard rock material (Provisional)   m <sup>3</sup> / <sub>1</sub> 900     33.1   8.2.1 & PSLB 5.3   Provision of bedding from trench excavation   m <sup>3</sup> / <sub>1</sub> 1500     33.1.1   Selected firmaterinal (blanket)   m <sup>3</sup> / <sub>2</sub> 1500     33.1.2   8.2.1 & PSLB 5.3   Including for screening a) Selected firmaterial (blanket)   m <sup>3</sup> / <sub>2</sub> 200     33.1.2   8.2.1 & PSLB 5.3   Including for screening a) Selected firmaterial (blanket)   m <sup>3</sup> / <sub>2</sub> 5000     33.1.2   8.2.1 & PSLB 5.3   Including for screening a) Selected firmaterial (blanket)   m <sup>3</sup> / <sub>2</sub> 5000     33.2.3   8.2.1 & PSLB 5.3   Including for screening a) Selected firmaterin	B2.5	8.3.3.3	Extra over item B2.1.1 to B2.1.1.3 for additional Compaction to 95%	m³			
32.68.3.6.1Reinstate road surfaces with all courses $m^2$ 50032.78.3.5(a)Existing services: EXISTING SERVICESNo65038.18.3.5(a)Services that intersect a trenchNo65038.28.3.5(a)Services that adjoin a trenchm125038.28.3.5(b)Services that adjoin a trenchm125032.88.3.3.4Overhaul to dispose hard rock material (Provisional)m <sup>1</sup> / <sub>2</sub> 90032.88.3.3.4Overhaul to dispose hard rock material (Provisional)m <sup>1</sup> / <sub>2</sub> 90033.1.1Services that intersect a trenchm <sup>2</sup> 150033.1.1Services that intersect of consensing a) Selected framity material b) Selected fill material (blanket)m <sup>3</sup> 150033.1.28.2.1 & PSLB 5.3Provision of bedding from trench excavationm <sup>3</sup> 2033.1.1Selected fill material (blanket)m <sup>3</sup> 2033.2.28.2.2.3Including for screening a) Selected fill material (blanket)m <sup>3</sup> 2033.3.28.2.4Encasing of pipes in concrete 20MPa where ordered by the Engineerm <sup>3</sup> 150033.48.2.4Encasing of pipes in concrete 20MPa where ordered by the Engineerm <sup>3</sup> 120033.48.2.4Supply and piace 40 mm clean stone in bedding beneath pipe where of 200 mm diam <sup>3</sup> 120033.48.2.3Supply and piace 40 mm clean stone in bedding beneath pipe wherem <sup>3</sup> 120033.58.2.3Supply and piace 13 mm clean stone in bedding b					120		
32.7   3.3.5(a)   Existing services:   No   650     33.1   3.3.5(a)   Services that intersect a trench   No   650     3.9.2   3.3.5(a)   Services that adjoin a trench   m   1.250     2.9.2   8.3.5(b)   Services that adjoin a trench   m   1.250     2.9.2   8.3.5(b)   Services that adjoin a trench   m   1.250     2.2.8   8.3.3.4   Overhault to dispose hard rock material (Provisional)   m <sup>3</sup> /km   900     33.1   8.2.1 & PSLB 5.3   Provision of bedding from trench excavation   To   To     33.1.1   8.2.1 & PSLB 5.3   Provision of bedding from trench excavation   To   To     33.1.1   8.2.1 & PSLB 5.3   Including for screening a) Selected granular material (b) Selected fill material (blanket)   m <sup>3</sup> 20     33.1.2   8.2.1 & PSLB 5.3   Including for screening b) Selected fill material (blanket)   m <sup>3</sup> 20     33.2.1   8.2.2.3   Provision of bedding from commercial sources (Provisional) b) Selected fill material (blanket)   m <sup>3</sup> 20     33.3.2   8.2.2.3   Provision of pipes in concrete 20MPa where ordered by the Engineer   m <sup>3</sup> 120							
32.7   3.3.5(a)   Existing services:   No   650     33.1   3.3.5(a)   Services that intersect a trench   No   650     3.9.2   3.3.5(a)   Services that adjoin a trench   m   1.250     2.9.2   8.3.5(b)   Services that adjoin a trench   m   1.250     2.9.2   8.3.5(b)   Services that adjoin a trench   m   1.250     2.2.8   8.3.3.4   Overhault to dispose hard rock material (Provisional)   m <sup>3</sup> /km   900     33.1   8.2.1 & PSLB 5.3   Provision of bedding from trench excavation   To   To     33.1.1   8.2.1 & PSLB 5.3   Provision of bedding from trench excavation   To   To     33.1.1   8.2.1 & PSLB 5.3   Including for screening a) Selected granular material (b) Selected fill material (blanket)   m <sup>3</sup> 20     33.1.2   8.2.1 & PSLB 5.3   Including for screening b) Selected fill material (blanket)   m <sup>3</sup> 20     33.2.1   8.2.2.3   Provision of bedding from commercial sources (Provisional) b) Selected fill material (blanket)   m <sup>3</sup> 20     33.3.2   8.2.2.3   Provision of pipes in concrete 20MPa where ordered by the Engineer   m <sup>3</sup> 120							
39.9   SABS 12000B   EXISTING SERVICES     39.1   8.3.5(a)   Services that intersect a trench   No   650     3.9.2   8.3.5(b)   Services that adjoin a trench   m   1.250     3.9.2   8.3.5(b)   Services that adjoin a trench   m   1.250     3.9.2   8.3.5(b)   Services that adjoin a trench   m   1.250     3.9.2   8.3.5(b)   Services that adjoin a trench   No   55     No   S55   No   20     32.8   8.3.3.4   Overhault o dispose hard rock material (Provisional)   m <sup>3</sup> /km   900     33.1   8.21.8 PSLB 5.3   Provision of bedding from trench excavation   T   T     33.1.1   Selected granular material b) Selected fill material (blanket)   m <sup>3</sup> 3500     33.1.2   8.21.8 PSLB 5.3   Including for screening a) Selected granular material b) Selected fill material (blanket)   m <sup>3</sup> 20 m <sup>3</sup> 33.2   8.22.3   Provision of bedding from commercial sources (Provisional) a) Selected granular material b) Selected fill material (blanket)   m <sup>3</sup> 120     33.4   8.24.4   Encasing of pipes in concrete 20MPa where ordered by the Engineer   m <sup>3</sup>	B2.6	8.3.6.1	Reinstate road surfaces with all courses	m²	500		
39.9   SABS 12000B   EXISTING SERVICES     39.1   8.3.5(a)   Services that intersect a trench   No   650     3.9.2   8.3.5(b)   Services that adjoin a trench   m   1.250     3.9.2   8.3.5(b)   Services that adjoin a trench   m   1.250     3.9.2   8.3.5(b)   Services that adjoin a trench   m   1.250     3.9.2   8.3.5(b)   Services that adjoin a trench   No   55     No   S55   No   20     32.8   8.3.3.4   Overhault o dispose hard rock material (Provisional)   m <sup>3</sup> /km   900     33.1   8.21.8 PSLB 5.3   Provision of bedding from trench excavation   T   T     33.1.1   Selected granular material b) Selected fill material (blanket)   m <sup>3</sup> 3500     33.1.2   8.21.8 PSLB 5.3   Including for screening a) Selected granular material b) Selected fill material (blanket)   m <sup>3</sup> 20 m <sup>3</sup> 33.2   8.22.3   Provision of bedding from commercial sources (Provisional) a) Selected granular material b) Selected fill material (blanket)   m <sup>3</sup> 120     33.4   8.24.4   Encasing of pipes in concrete 20MPa where ordered by the Engineer   m <sup>3</sup>							
33.18.35(a)Services that intersect a trenchNo65039.2 $3.5(a)$ Services that adjoin a trenchm1.250 $1.92$ $1.5(a)$ Services that adjoin a trenchNo55 $1.92$ $1.5(a)$ Devines that adjoin a trenchNo55 $1.92$ $1.5(a)$ Services that adjoin a trenchNo55 $1.92$ $1.5(a)$ Devine training by Devine training training by Devine training by Devine training training by Devine training training training by Devine training training by Devine training training training training by Devine training							
39.28.3.5(b)Services that adjoin a trench Locate from drawings provided by the Employer and protect a) Existing water mains b) Electrical and telecommunication cablesm1.25032.88.3.3.4Overhaul to dispose hard rock material (Provisional)m³/km90032.88.3.3.4Overhaul to dispose hard rock material (Provisional)m³/km90033.18.2.1 & PSLB 5.3Provision of bedding from trench excavation	39	SABS 1200DB	EXISTING SERVICES				
39.28.3.5(b)Services that adjoin a trench Locate from drawings provided by the Employer and protect a) Existing water mains b) Electrical and telecommunication cablesm1.25032.88.3.3.4Overhaul to dispose hard rock material (Provisional)m³/km90032.88.3.3.4Overhaul to dispose hard rock material (Provisional)m³/km90033.18.2.1 & PSLB 5.3Provision of bedding from trench excavation							
Image: Section of parameterial (blanket)No5533.18.21.8 PSLB 5.3Provision of bedding from trench excavationm³1 50033.1.18.21.8 PSLB 5.3Provision of bedding from trench excavationm³3 50033.1.18.2.1 & PSLB 5.3Provision of bedding from trench excavationm³1 50033.1.28.2.1 & PSLB 5.3Provision of bedding from trench excavationm³3 50033.1.28.2.1 & PSLB 5.3Including for screening a) Selected granular material (b) Selected fill material (blanket)m³2033.1.28.2.1 & PSLB 5.3Including for screening a) Selected granular material (b) Selected fill material (blanket)m³2033.1.28.2.1 & PSLB 5.3Including for screening a) Selected granular material (b) Selected fill material (blanket)m³2033.3.48.2.2.3Provision of bedding from commercial sources (Provisional) a) Selected fill material (blanket)m³5000 m³33.38.2.4Encasing of pipes in concrete 20MPa where ordered by the Engineerm³120a) 110 mm dia b) 160 mm dia c) 200 mm diam³12033.48.2.2.3Supply and place 40 mm clean stone in bedding beneath pipe wherem³120033.58.2.2.3Supply and place 13 mm clean stone in bedding beneath pipe wherem³1200	3.9.1	8.3.5(a)	Services that intersect a trench	No	650		
a) Existing water mains b) Electrical and telecommunication cablesNo55 No32.88.3.3.4Overhaul to dispose hard rock material (Provisional)m³/km90033.18ABS 1200LBBEDDINGm³/km90033.18.2.1 & PSLB 5.3Provision of bedding from trench excavationm³1500 m³33.1.1Without the need for screening a) Selected granular material b) Selected fill material (blanket)m³1500 m³33.1.28.2.1 & PSLB 5.3Including for screening a) Selected granular material b) Selected fill material (blanket)m³20 m³33.2.28.2.2.3Provision of bedding from commercial sources (Provisional) a) Selected fill material (blanket)m³5000 m³33.38.2.4Encasing of pipes in concrete 20MPa where ordered by the Engineerm³1200 m³33.48.2.3.3Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineerm³120033.58.2.3Supply and place 13 mm clean stone in bedding beneath pipe where ordered by the Engineerm³1200	3.9.2	8.3.5(b)	Services that adjoin a trench	m	1 250		
a) Existing water mains b) Electrical and telecommunication cablesNo55 No32.88.3.3.4Overhaul to dispose hard rock material (Provisional)m³/km90033.18ABS 1200LBBEDDINGm³/km90033.18.2.1 & PSLB 5.3Provision of bedding from trench excavationm³1500 m³33.1.1Without the need for screening a) Selected granular material b) Selected fill material (blanket)m³1500 m³33.1.28.2.1 & PSLB 5.3Including for screening a) Selected granular material b) Selected fill material (blanket)m³20 m³33.2.28.2.2.3Provision of bedding from commercial sources (Provisional) a) Selected fill material (blanket)m³5000 m³33.38.2.4Encasing of pipes in concrete 20MPa where ordered by the Engineerm³1200 m³33.48.2.3.3Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineerm³120033.58.2.3Supply and place 13 mm clean stone in bedding beneath pipe where ordered by the Engineerm³1200							
No2032.88.3.3.4Overhaul to dispose hard rock material (Provisional)m³/km90033.1SABS 1200LBBEDDINGImage: Second Secon							
32.88.3.3.4Overhault o dispose hard rock material (Provisional)m³/km90033.18.2.1 & PSLB 5.3Provision of bedding from trench excavationm³/km90033.1.18.2.1 & PSLB 5.3Provision of bedding from trench excavationm³1.50033.1.1Without the need for screening a) Selected granular material b) Selected fill material (blanket)m³2.0033.1.28.2.1 & PSLB 5.3Including for screening a) Selected fill material (blanket)m³2.0033.2.28.2.2.3Provision of bedding from commercial sources (Provisional) a) Selected fill material (blanket)m³5.00033.38.2.4Encasing of pipes in concrete 20MPa where ordered by the Engineerm³1.500a) 110 mm dia c) 200 mm diam³1.200m³1.20033.48.2.3.3Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineerm³1.20033.58.2.3.3Supply and place 13 mm clean stone in bedding beneath pipe wherem³1.200							
B33   SABS 1200LB   BEDDING     33.1   8.2.1 & PSLB 5.3   Provision of bedding from trench excavation     3.3.1.1   Without the need for screening a) Selected granular material b) Selected fill material (blanket)   m³   1 500 m³     33.1.2   8.2.1 & PSLB 5.3   Including for screening a) Selected granular material b) Selected fill material (blanket)   m³   20 m³     33.1.2   8.2.1 & PSLB 5.3   Including for screening a) Selected granular material b) Selected fill material (blanket)   m³   20 m³     33.2   8.2.2.3   Provision of bedding from commercial sources (Provisional) a) Selected fill material (blanket)   m³   5 000 m³     33.3   8.2.4   Encasing of pipes in concrete 20MPa where ordered by the Engineer   m³   120 m³     a) 110 mm dia b) 160 mm dia c) 200 mm dia   m³   120 m³   30     33.4   8.2.2.3   Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineer   m³   1 200     33.5   8.2.2.3   Supply and place 13 mm clean stone in bedding beneath pipe where   m³   600			b) Electrical and telecommunication cables	No	20		
33.18.2.1 & PSLB 5.3Provision of bedding from trench excavationImage: mail of the match of t	B2.8	8.3.3.4	Overhaul to dispose hard rock material (Provisional)	m³/km	900		
3.3.1.1   Without the need for screening a) Selected granular material b) Selected fill material (blanket)   m³   1500 m³     33.1.2   8.2.1 & PSLB 5.3   Including for screening a) Selected fill material (blanket)   m³   20 m³     33.1.2   8.2.1 & PSLB 5.3   Including for screening a) Selected fill material (blanket)   m³   20 m³     33.2   8.2.2.3   Provision of bedding from commercial sources (Provisional) a) Selected granular material b) Selected fill material (blanket)   m³   5 000 m³     33.3   8.2.4   Encasing of pipes in concrete 20MPa where ordered by the Engineer   m³   120 m³     a) 110 mm dia b) 160 mm dia c) 200 mm dia   m³   120 m³   1200     33.4   8.2.2.3   Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineer   m³   1 200     33.5   8.2.2.3   Supply and place 13 mm clean stone in bedding beneath pipe where ordered by the Engineer   m³   1 200	B3	SABS 1200LB	BEDDING				
3.3.1.1   Without the need for screening a) Selected granular material b) Selected fill material (blanket)   m³   1500 m³     33.1.2   8.2.1 & PSLB 5.3   Including for screening a) Selected fill material (blanket)   m³   20 m³     33.1.2   8.2.1 & PSLB 5.3   Including for screening a) Selected fill material (blanket)   m³   20 m³     33.2   8.2.2.3   Provision of bedding from commercial sources (Provisional) a) Selected granular material b) Selected fill material (blanket)   m³   5 000 m³     33.3   8.2.4   Encasing of pipes in concrete 20MPa where ordered by the Engineer   m³   120 m³     a) 110 mm dia b) 160 mm dia c) 200 mm dia   m³   120 m³   1200     33.4   8.2.2.3   Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineer   m³   1 200     33.5   8.2.2.3   Supply and place 13 mm clean stone in bedding beneath pipe where ordered by the Engineer   m³   1 200							
a) Selected granular materialm³1 500b) Selected fill material (blanket)m³3 50033.1.28.2.1 & PSLB 5.3Including for screening a) Selected granular material b) Selected fill material (blanket)m³5000 m³33.38.2.4Encasing of pipes in concrete 20MPa where ordered by the Engineerm³1500a) 110 mm dia b) 160 mm dia c) 200 mm diam³120 m³3033.48.2.2.3Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineerm³1 20033.58.2.2.3Supply and place 13 mm clean stone in bedding beneath pipe wherem³600	B3.1	8.2.1 & PSLB 5.3	Provision of bedding from trench excavation				
a) Selected granular materialm³1 500b) Selected fill material (blanket)m³3 50033.1.28.2.1 & PSLB 5.3Including for screening a) Selected granular material b) Selected fill material (blanket)m³5000 m³33.38.2.4Encasing of pipes in concrete 20MPa where ordered by the Engineerm³1500a) 110 mm dia b) 160 mm dia c) 200 mm diam³120 m³3033.48.2.2.3Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineerm³1 20033.58.2.2.3Supply and place 13 mm clean stone in bedding beneath pipe wherem³600	D 2 1 1		Without the need for corresping				
B3.1.2b) Selected fill material (blanket)m³3 50033.1.28.2.1 & PSLB 5.3Including for screening a) Selected granular material b) Selected fill material (blanket)m³203.3.28.2.3Provision of bedding from commercial sources (Provisional) a) Selected granular material b) Selected fill material (blanket)m³5 000 m³3.3.38.2.4Encasing of pipes in concrete 20MPa where ordered by the Engineerm³150033.38.2.4Encasing of pipes in concrete 20MPa where ordered by the Engineerm³120 m³a) 110 mm dia b) 160 mm dia c) 200 mm diam³1200 m³120033.48.2.2.3Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineerm³1 20033.58.2.2.3Supply and place 13 mm clean stone in bedding beneath pipe wherem³600	B.3.1.1		0	m <sup>3</sup>	1 500		
33.1.2   8.2.1 & PSLB 5.3   Including for screening a) Selected granular material b) Selected fill material (blanket)   m³   20     33.2   8.2.2.3   Provision of bedding from commercial sources (Provisional) a) Selected fill material (blanket)   m³   5000 m³     33.3   8.2.4   Encasing of pipes in concrete 20MPa where ordered by the Engineer   m³   120     33.4   8.2.2.3   Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineer   m³   120     33.4   8.2.2.3   Supply and place 13 mm clean stone in bedding beneath pipe where   m³   1200							
a) Selected granular material b) Selected fill material (blanket)   m³   20 m³     3.3.2   8.2.2.3   Provision of bedding from commercial sources (Provisional) a) Selected granular material b) Selected fill material (blanket)   m³   5 000 m³     33.3   8.2.4   Encasing of pipes in concrete 20MPa where ordered by the Engineer a) 110 mm dia b) 160 mm dia c) 200 mm dia   m³   - m³   - m³     33.4   8.2.2.3   Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineer   m³   1 200     33.5   8.2.2.3   Supply and place 13 mm clean stone in bedding beneath pipe where   m³   600			b) Selected IIII material (blanket)	m	3 500		
a) Selected granular material b) Selected fill material (blanket)   m³   20 m³     3.3.2   8.2.2.3   Provision of bedding from commercial sources (Provisional) a) Selected granular material b) Selected fill material (blanket)   m³   5 000 m³     33.3   8.2.4   Encasing of pipes in concrete 20MPa where ordered by the Engineer a) 110 mm dia b) 160 mm dia c) 200 mm dia   m³   - m³   - m³     33.4   8.2.2.3   Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineer   m³   1 200     33.5   8.2.2.3   Supply and place 13 mm clean stone in bedding beneath pipe where   m³   600	B312	8 2 1 & PSI B 5 3	Including for screening				
B.3.2b) Selected fill material (blanket)m³20B.3.28.2.2.3Provision of bedding from commercial sources (Provisional) a) Selected granular material b) Selected fill material (blanket)m³5000 m³B.3.38.2.4Encasing of pipes in concrete 20MPa where ordered by the Engineerm³1500B.3.48.2.2.3Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineerm³1200B.3.58.2.3Supply and place 13 mm clean stone in bedding beneath pipe wherem³600	DJ.1.2	0.2.1 & FOLD 5.5		m <sup>3</sup>	20		
3.3.28.2.2.3Provision of bedding from commercial sources (Provisional) a) Selected granular material b) Selected fill material (blanket)m³ m³5000 n333.38.2.4Encasing of pipes in concrete 20MPa where ordered by the Engineerm³ m³1500 n3a) 110 mm dia b) 160 mm dia c) 200 mm diam³ n3120 m³33.48.2.2.3Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineerm³ m³1 200 n333.58.2.2.3Supply and place 13 mm clean stone in bedding beneath pipe where ordered by the Engineerm³ m³600							
a) Selected granular material b) Selected fill material (blanket)m³5 000 m³33.38.2.4Encasing of pipes in concrete 20MPa where ordered by the Engineerm³1 500a) 110 mm dia b) 160 mm dia c) 200 mm diam³120 m³120 m³33.48.2.2.3Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineerm³1 20033.58.2.2.3Supply and place 13 mm clean stone in bedding beneath pipe where ordered by the Engineerm³600					20		
a) Selected granular material b) Selected fill material (blanket)m³5 000 m³33.38.2.4Encasing of pipes in concrete 20MPa where ordered by the Engineerm³1 500a) 110 mm dia b) 160 mm dia c) 200 mm diam³120 m³120 m³33.48.2.2.3Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineerm³1 20033.58.2.2.3Supply and place 13 mm clean stone in bedding beneath pipe where ordered by the Engineerm³600	B.3.2	8.2.2.3	Provision of bedding from commercial sources (Provisional)				
B3.3b) Selected fill material (blanket)m³1 500B3.38.2.4Encasing of pipes in concrete 20MPa where ordered by the Engineerm³1 500a) 110 mm dia b) 160 mm dia c) 200 mm diam³B3.48.2.2.3Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineerm³1 200B3.58.2.2.3Supply and place 13 mm clean stone in bedding beneath pipe wherem³600				m³	5 000		
33.3   8.2.4   Encasing of pipes in concrete 20MPa where ordered by the Engineer   m³   -     a) 110 mm dia   in 10 mm dia   m³   -   -     b) 160 mm dia   in 120   m³   120   -     33.4   8.2.2.3   Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineer   m³   1 200     33.5   8.2.2.3   Supply and place 13 mm clean stone in bedding beneath pipe where   m³   600				m³	1 500		
a) 110 mm dia   m³   -     b) 160 mm dia   m³   120     c) 200 mm dia   m³   30     33.4   8.2.2.3   Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineer   m³   1 200     33.5   8.2.2.3   Supply and place 13 mm clean stone in bedding beneath pipe where   m³   600							
b) 160 mm dia c) 200 mm diam³ m³120 m³33.48.2.2.3Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineerm³1 20033.58.2.2.3Supply and place 13 mm clean stone in bedding beneath pipe where ordered by the Engineerm³600	B3.3	8.2.4	Encasing of pipes in concrete 20MPa where ordered by the Engineer				
b) 160 mm dia c) 200 mm diam³120 m³33.48.2.2.3Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineerm³1 20033.58.2.2.3Supply and place 13 mm clean stone in bedding beneath pipe where ordered by the Engineerm³600							
b) 160 mm dia c) 200 mm diam³120 m³33.48.2.2.3Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineerm³1 20033.58.2.2.3Supply and place 13 mm clean stone in bedding beneath pipe where ordered by the Engineerm³600				_			
a.2.2.3c) 200 mm diam³30B3.48.2.2.3Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineerm³1 200B3.58.2.2.3Supply and place 13 mm clean stone in bedding beneath pipe wherem³600			,		-		
33.4   8.2.2.3   Supply and place 40 mm clean stone in bedding beneath pipe where ordered by the Engineer   m³   1 200     33.5   8.2.2.3   Supply and place 13 mm clean stone in bedding beneath pipe where m³   600							
33.5 8.2.2.3 Supply and place 13 mm clean stone in bedding beneath pipe where m³ 600			c) 200 mm dia	m²	30		
33.5 8.2.2.3 Supply and place 13 mm clean stone in bedding beneath pipe where m³ 600	B3 4	8222	Supply and place 10 mm clean stone in hadding banasth nine where	m <sup>3</sup>			
33.5 8.2.2.3 Supply and place 13 mm clean stone in bedding beneath pipe where m³ 600	55.4	0.2.2.3			1 200		
6001							
6001	B3.5	8.2.2.3	Supply and place 13 mm clean stone in bedding beneath nine where	m³			
	_0.0				600		
TOTAL CARRIED FORWARD			TOTAL CARRIED FORWARD				

ltem No	Payment Refers	Description	Unit	Qty	Rate	Amount
		BROUGHT FORWARD				
B4	SABS 1200LD	PIPELAYING FOR SEWERS				
B4.2	8.2.1	Supply,handle, lay, joint and test composite sewer - uPVC Class 34 or similar approved pipes to SABS 1601 of the following nominal diameters				
B4.2.1		a) 110 mm dia	m	-		
B4.2.2		b) 160 mm dia	m	23 100		
B4.2.3		c) 200 mm dia	m	850		
B4.2.4	8.2.2	Extra over item B4.2 for the supply, handle and installation of 110mm sewer end caps.	No	310		
B4.3	8.2.3 & PSLD 5.1	Supply, handle and construct precast concrete sewer manholes complete as per drawing, including "Medium Duty" concrete access cover and frame				
B.4.3.1		Over 0,0 m up to 1,5 m	No	250		
B.4.3.2		Over 1,5 m up to 2,0 m	No	65		
B4.3.3		Over 2,0 m up to 3,0 m	No	75		
B4.3.4		Over 3,0 m up to 4,0 m	No	35		
B4.3.5		Over 4,0 m up to 5,0 m	No	20		
B4.3.6		Over 5,0 m up to 6,0 m	No	20		
B4.3.7		Extra over items B4.3 for type "Heavy Duty" concrete manhole covers in lieu of "Medium Duty"	No	40		
B4.6	8.2.8	ANCHOR BLOCKS Construct anchor blocks on slopes of 1 : 10 or steeper, at 2 m vertical intervals along sewer line as detailed on drawing	No	65		
B4.7	PSLD 8.2.6(a)	ERF CONNECTIONS				
		Short erf connections (5m) Depth to invert level of connection for depths of 1.5m - 3m				
B.4.7.1		150mm 405mm (Type 1)	No	190		
B.4.7.2		450mm 710mm (Type 2)	No	240		
B4.7.3		710mm 1010mm (Type 3)	No	280		
B4.7.4		1015mm 1500mm (Type 4)	No	190		
B4.7.5		Greater than 1500mm (Type 5)	No	620		
B4.7.6		Extra Over Item B,4.7 for long erf connections (in excess of 2.3m).	m	8 500		
		TOTAL SECTION B CARRY FORWARD TO SUMMA	RY			

ltem	Payment					
No	Refers	Description	Unit	Qty	Rate	Amount
		SECTION C:				
	SABS	ROADS AND STORMWATER				
	1200 DM	EARTHWORKS (ROADS, SUBGRADE)				
C.1	8.3.3	TREATMENT OF ROAD-BED				
C.1.2	8.3.3(a)	Road-bed preparation and compaction of material to minimum of 93% of MAASHTO density (100% for sand)	m³	36		
	PS DM⊡ 8.3.3(b)	In situ treatment of road-bed in:				
		a) Intermediate material	m³	24		
C.1.3		b) Hard rock material	m³	20		
C.1.4	PS DM⊡ 8.3.3(c)	In situ preparation of road-bed with eight roller passes (pneumatic roller)	m²	90		
C.1.5	PS DM□ 8.3.3(d)	Variations in compaction effort (pneumatic roller)	m². pass	0		
C.2		EARTHWORKS				
C.2.1	PS DM⊡ 8.3.4	Cut to fill, compacted to 90% of MAASHTO density (100% for sand) in:				
		a) Road prism	m³	30		
C.2.2	PS DM⊡ 8.3.4	Borrow to fill, compacted to 90% of MAASHTO density (100% for sand) in:				
		b) Road prism	m³	30		
C2.3	8.3.6	Extra-over items PS DM 8.3.4 fpr excavating and breaking down material in:				
		a) Intermediate excavation	m³	30		
		b) Hard rock excavation	m³	20		
C.6.4	8.3.3	Construct wearing course with material from commercial sources compacted to 95% of MAASHTO density				
		a) 150 mm (G7 material)	m³	120		
C.6.5	8.3.5	Processing of subbase material by□ the following processes, as relevant, and use in the subbase				
		a) Heavy grid rolling	m²	90		
C.7	SANS 1200 DB	EXCAVATION				
C.7.1	SD DB 8.3.2(a)	Excavate in all materials for trenches backfill, compact, and dispose of surplus/unsuitable material, for pipes greater than 450mm and up to 900 mm diam. for total trench depth:				
		TOTAL CARRIED FORWARD				

ltem No	Payment Refers	Description	Unit	Qty	Rate	Amount
		BROUGHT FORWARD				
		(a)Exceeding 0,0 m but not exceeding 1,0 m	m	80		
		(b)Exceeding 1,0 m but not exceeding 2,0 m	m	80		
C.7.2	8.3.2(b)	Extra-over PS DB for excavation in				
	8.3.2(b)(2)	(a)Hard rock excavation	m³	20		
	0.0.2(0)(2)			20		
	SANS	BEDDING MATERIAL				
	1200 LB					
		Supply and compact bedding to 93% MOD AASHTO				
C.8.1		density with material				
		Imported from				
		1) Selected granular material	m³	25		
		2) Selected fill blanket	m³	28		
		SECTION :STORMWATER DRAINAGE SITE CLEARANCE AND EXCAVATION				
C.9	SANS⊡ 1200 LE	PIPES				
	8.2.1	Supply, handle, lay, bed (Class C Bedding) Concrete pipe				
		b) 600 mm diameter100D	m	80		
C.16		SEGMENTED PAVING				
		Construction of Paving Complete				
		80mm Class 25, Type S-C on 25 mm thick	2			
C.16.1	4.1	compacted sand bed as shown on Long Sections & Layout Plans	m²	1 600		
C.16.1	4.2	Supply and lay 60 mm bond pavers on 25 mm sand layer	m²	1 600		
C.16.2	4.3	Cutting units to Fit Edge Restraints Straight and curves	m	450		
C.16.3	4.4	Rolling to locked-up condition	m <sup>2</sup>	1 600		
	4.5			4 000		
C.16.3	4.5	100Micron HDPE Sheet	m²	1 600		
C.16.3	4.6	Sand	m³	120		
		Precast Kerbing				
		Supply and install precast kerbs along straights and				
		curves with long radii, complete and all inclusive				
C.17.1	4.7	Non-Mountable kerb (Fig.3)	m	80		
C.17.2	4.8	Mountable kerb and Chaneel (Fig.14 & Fig.8) Edge restraint - Seperation beam between paving &	m	80		
C.17.3	4.9	non paved area (Fig. 7) or alternatively grade 25/19 in-	m	40		
		situ cast.				
		TOTAL SECTION C CARRY FORWARD TO SUM				

ltem No	Payment Refers	DesDription	Unit	Qty	Rate	Amount
		SEDTION D: MECHANICAL WORKS				
D1		SDREENS				
D1.1		Supply 12mm Manual Screens	No	1		
D1.2		Installation of Manual Screens	No	1		
D1.3		Supply of flow meters (Mechanical Flow Meters)	No	2		
D1.4		Installation of Flow meters	No	2		
		TOTAL SECTION D CARRY FORWARD TO SUM	MARY			

## DESCRIPTION: WATERFALL SEWER UPGRADE PROJECT

## SUMMARY OF SCHEDULE OF QUANTITIES

Item No	Description	Amount
1		
2	Section A: Preliminary and General	
3	Section B: Sewers	
4	Section C: Roads and Stormwater	
4	Section D: Mechanical Works	
	TOTAL	
	Add Contingencies (10%)	
	Sub-total	
	Add 15% VAT	
	TOTAL VALUE OF TENDER	