

Different coating Options

Option No. 1: Polymer Modified Bitumen (System No 229A/236)

Option No. 2: Three Layer Polyethylene (System No 228/235)

Option No. 3: Rigid Polyurethane (System No 229B/237)

Description			
	Option 1	Option 2	Option 3
PART A: BILL 1: PRELIMINARY & GENERAL			
BILL 2: CIVIL WORKS			
PART B: ABSTRACTION WORKS			
PART B1: VLIËËPOORT DIVERSION WEIR			
PART B1.1: Preliminary and General (Secondary)			
PART B1.2: TEMPORARY WORKS (Temporary works designed by the contractor)			
PART B1.3: Earthworks: Foundation			
PART B1.4: Weir structures			
PART B1.5: Landscaping and Rehabilitation			
PART B1.6: Ancillary works			
PART B2: DIVERSION WORKS AND LOW-LIFT PUMPING STATION			
PART B2.1.1: Preliminary and General (Secondary)			
PART B2.1.2: Permanent access road and pipeline platform			
PART B2.1.3: Earthworks			
PART B2.1.4: Pump station structures and channels			
PART B2.1.5: Ancillary works			
PART B2.1.6: Landscaping and Rehabilitation			
PART C: LOW LIFT RISING MAIN			
PART C1: Preliminary and General (Secondary)			
PART C2: Pipe Supply, Delivery and Installation			
PART C3: Pipeline Earthworks			
PART C.4: Valve installations and chambers			
PART C5: Crossings			
PART C6: Landscaping and Rehabilitation			
PART C7: Fencing			
PART C8: Fibre Earthworks			
PART D: BALANCING RESERVOIR & SEDIMENTATION WORKS			
PART D1: SEDIMENTATION WORKS			
PART D1.1: Preliminary and General (Secondary)			
PART D1.2: Earthworks			
PART D1.3: Structure			
PART D1.4: Pipework			
PART D1.5: Desilting chute			
PART D1.6: Ancillary works			

Description			
	Option 1	Option 2	Option 3
PART D2: BALANCING RESERVOIR			
PART D2.1: Preliminary and General (Secondary)			
PART D2.2: Earthworks			
PART D2.3: Concrete Structures			
PART D2.4: Lining			
PART D2.5: Pipework			
PART D2.6: Landscaping and Rehabilitation			
PART D2.7: Borrow pits and Spoil Areas			
PART D2.8: Ancillary Works			
PART E: HIGH-LIFT PUMPING STATION			
PART E1.1: Preliminary and General (Secondary)			
PART E1.2: Earthworks			
PART E1.3: Pump station structures			
PART E1.4: Access road and parking			
PART E1.5: Ancillary works			
PART E1.6: Landscaping and Rehabilitation			
PART E1.7: Pipe Supply, Delivery and Installation			
PART E1.8: Pipeline Earthworks			
PART E1.9: Valve installations, chambers and manifolds			
PART E1.10: Fibre Earthworks			
PART F: HIGH LIFT RISING MAIN			
PART F1: Preliminary and General (Secondary)			
PART F2: Permanent Access Track			
PART F3: Pipe supply, delivery, installation and testing			
PART F4: Pipeline Earthworks			
PART F5: Valve installations and chambers			
PART F6: Crossings			
PART F7: Landscaping and Rehabilitation			
PART F8: Fencing			
PART F9: Borrow pits and Spoil Areas			
PART F10: Ancillary works			
PART F11: Fibre Earthworks			
PART G: BREAK PRESSURE RESERVOIR			
PART G1: Preliminary and General (Secondary)			
PART G2: Earthworks			
PART G3: Structures			
PART G4: Lining			
PART G5: Landscaping and Rehabilitation			
PART G6: Ancillary Works			

Description			
	Option 1	Option 2	Option 3
PART H: GRAVITY MAINS			
PART H1: BPR TO OFF TAKE C			
PART H1.1: Preliminary and General (Secondary)			
PART H1.2: Permanent Access Track			
PART H1.3: Pipe supply, delivery, installation and testing			
PART H1.4: Pipeline Earthworks			
PART H1.5: Valve installations and chambers			
PART H1.6: Crossings			
PART H1.7: Landscaping and Rehabilitation			
PART H1.8: Fencing			
PART H1.9: Borrow pits and Spoil Areas			
PART H1.10: Ancilliary Works			
PART H1.11: Fibre Earthworks			
PART H2: OFF TAKE C TO OFF TAKE B			
PART H2.1: Preliminary and General (Secondary)			
PART H2.2: Permanent Access Track			
PART H2.3: Pipe supply, delivery, installation and testing			
PART H2.4: Pipeline Earthworks			
PART H2.5: Valve installations and chambers			
PART H2.6: Crossings			
PART H2.7: Landscaping and Rehabilitation			
PART H2.8: Fencing			
PART H2.9: Borrow pits and Spoil Areas			
PART H2.10: Ancilliary Works			
PART H2.11: Fibre Earthworks			
PART H3: OFF TAKE B TO OFF TAKE A			
PART H3.1: Preliminary and General (Secondary)			
PART H3.2: Permanent Access Track			
PART H3.3: Pipe supply, delivery, installation and testing			
PART H3.4: Pipeline Earthworks			
PART H3.5: Valve installations and chambers			
PART H3.6: Crossings			
PART H3.7: Landscaping and Rehabilitation			
PART H3.8: Fencing			
PART H3.9: Borrow pits and Spoil Areas			
PART H3.10: Ancilliary Works			
PART H3.11: Fibre Earthworks			
BILL 3: MECHANICAL			
A3: PRELIMINARY AND GENERAL (SECONDARY)			
PART B2.2: DIVERSION WORKS AND LOW-LIFT PUMPING STATION			
PART D1: SEDIMENTATION WORKS TOTAL			
PART E: HIGH-LIFT PUMPING STATION			

Description			
	Option 1	Option 2	Option 3
BILL 4: ELECTRICAL			
PART A4: PRELIMINARY AND GENERAL (SECONDARY)			
PART B2: DIVERSION WORKS AND LOW-LIFT PUMPING STATION			
PART D: BALANCING RESERVOIR & SEDIMENTATION WORKS			
PART E: HIGHLIFT PUMPING STATION			
PART F12: HIGH LIFT RISING MAIN			
PART G7: BREAK PRESSURE RESERVOIR			
PART H: GRAVITY MAINS			
PART H1.12: GRAVITY MAINS BPR TO OFF TAKE C			
PART H2.12: GRAVITY MAINS OFF TAKE C TO OFF TAKE B			
PART H3.12: GRAVITY MAINS OFF TAKE B TO OFF TAKE A			
BILL 5: CONTROL AND INSTRUMENTATION, COMMUNICATION AND SECURITY			
PART A5: PRELIMINARY AND GENERAL (SECONDARY)			
PART B2.2: DIVERSION WORKS AND LOW-LIFT PUMPING STATION			
PART C: LOW LIFT RISING MAIN			
PART D1: SEDIMENTATION WORKS			
PART D2: BALANCING RESERVOIR			
PART E: HIGH-LIFT PUMPING STATION			
PART F: HIGH LIFT RISING MAIN			
PART G: BREAK PRESSURE RESERVOIR			
PART H1: BPR TO OFF TAKE C			
PART H2: OFF TAKE C TO OFF TAKE B			
PART H3: OFF TAKE B TO OFF TAKE A			
BILL 6: CATHODIC PROTECTION AND AC MITIGATION			
PART A6: PRELIMINARY AND GENERAL (SECONDARY)			
PART B2: DIVERSION WORKS AND LOW-LIFT PUMPING STATION			
PART C: LOW LIFT RISING MAIN			
PART D2: BALANCING RESERVOIR			
PART E: HIGH-LIFT PUMPING STATION			
PART F: HIGH LIFT RISING MAIN			
PART G: BREAK PRESSURE RESERVOIR			
PART H: GRAVITY MAINS			
PART H1: BPR TO OFF TAKE C			
PART H2: OFF TAKE C TO OFF TAKE B			
PART H3: OFF TAKE B TO OFF TAKE A			
BILL 7: TESTS ON COMPLETION COMMISSIONING, TRIAL OPERATION AND DEFECTS NOTIFICATION PERIOD			
PART B1: VLIEËPOORT DIVERSION WEIR			
PART B2: DIVERSION WORKS AND LOW-LIFT PUMPING STATION			
PART C: LOW LIFT RISING MAIN			

Description			
	Option 1	Option 2	Option 3
PART D1: SEDIMENTATION WORKS			
PART D2: BALANCING RESERVOIR			
PART E: HIGH-LIFT PUMPING STATION			
PART F: HIGH LIFT RISING MAIN			
PART G: BREAK PRESSURE RESERVOIR			
PART H1: BPR TO OFF TAKE C			
PART H2: OFF TAKE C TO OFF TAKE B			
PART H3: OFF TAKE B TO OFF TAKE A			
PLANT SPARES REQUIRED BY THE EMPLOYER			

BILL 8: PROVISIONAL SUMS & DAYWORKS

Sub-Total			
Provisional sum: Allowance for Contract Price Adjustment (14.00% of Sub-Total)			
Sub-Total all Portions			
Provisional sum: Allowance for Contingencies (15% of Sub-Total all Portions)			
Sub-Total incl. Contingencies			
Minimum Contract Skills Development Goal (CSDG) sum = CE (0.25% x Sub-Total incl. Contingencies)			
Total Construction Cost			
Value Added Tax at 15%			
Total Amount of Tender Carried Forward to Form of Offer and Acceptance			

Variance with Option No. 1: Polymer Modified Bitumen (System No 229A/236) In %

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
1				PART A: BILL 1: PRELIMINARY & GENERAL				
	A			PRELIMINARY AND GENERAL (PRIMARY)				
	A	1.001		FIXED CHARGES - GENERAL OBLIGATIONS				
1.1	A		X	Performance Security	Sum	1		
1.2	A		X	Supplementary performance security	Sum	1		
1.3	A		X	Insurance and deductibles	Sum	1		
1.4	A		X	Head Office Contract Management and Overheads	Sum	1		
1.5	A		X	General Site Supervision and Overheads	Sum	1		
1.6	A		X	Escrow documents	Sum	1		
1.7	A		X	Method statements (1.10.1)	Sum	1		
1.8	A		X	Competency training (1.10.2.4)	Sum	1		
1.9	A		X	Contractor returns and reporting (1.10.3)	Sum	1		
1.10	A		X	Management meetings (1.10.4)	Sum	1		
1.11	A		X	Integration management (1.10.5)	Sum	1		
1.12	A		X	Mass haul planning	Sum	1		
	A			Programming Requirements (1.9)				
1.13	A		X	Initial programme (1.9.4)	Sum	1		
1.14	A		X	Contract programme (1.9.5)	Sum	1		
1.15	A		X	Other Programming Requirement (Not covered elsewhere)	Sum	1		
	A			Quality Management (1.10.2)				
1.16	A		X	Quality Management System (1.10.2.1)	Sum	1		
1.17	A		X	Project Quality Plan (1.10.2.1)	Sum	1		
1.18	A		X	Approved Inspection Authority (AIA) (1.10.2.6)	Sum	1		
1.19	A		X	Other Quality Management (Not covered elsewhere)	Sum	1		
	A			Social Management, Socio-Economic Development Requirements and Socio-Economic Targets and Penalties (1.11)				
1.20	A		X	Social Management (3.3)	Sum	1		
1.21	A		X	Socio-Economic Development (SED) (3.4)	Sum	1		
1.22	A		X	Employment (3.5)	Sum	1		
1.23	A		X	Project Social Interface Team & Project Liaison Committee (3.6)	Sum	1		
1.24	A		X	Resources (3.7)	Sum	1		
1.25	A		X	Socio-Economic Development (SED) Management Principles (50.2)	Sum			
1.26	A		X	Employment (50.3)	Sum			
1.27	A		X	Preferential Procurement (50.4)	Sum			
1.28	A		X	Enterprise and Supplier Development (ESD) (50.5)	Sum			
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
1.29	A		X	Training and Skills Development (50.6)	Sum			
1.30	A		X	Corporate Social Investment (CSI) (50.7)	Sum			
1.31	A		X	Resources (50.8)	Sum			
1.32	A		X	Method Statements (50.9)	Sum			
1.33	A		X	Other Social Management, Socio-Economic Development Requirements and Socio-Economic Targets and Penalties (Not covered elsewhere)	Sum	1		
	A			Occupational Health and Safety (1.12)				
1.34	A		X	Occupational Health and Safety Plan (2.2)	Sum	1		
1.35	A		X	Occupational Health and Safety File (2.3)	Sum	1		
1.36	A		X	Hazard and Risk Management (2.4)	Sum	1		
1.37	A		X	Occupational Health and Hygiene (2.5)	Sum	1		
1.38	A		X	Audits (2.6)	Sum	1		
1.39	A		X	Subcontractor OH&S Management (2.7)	Sum	1		
1.40	A		X	Training and Competency (2.8)	Sum	1		
1.41	A		X	Safe Systems of Work (2.9)	Sum	1		
1.42	A		X	Incident Management (2.10)	Sum	1		
1.43	A		X	Site Management/ Monitoring (2.11)	Sum	1		
1.44	A		X	Borrow Pits & Quarries (2.12)	Sum	1		
1.45	A		X	Corona Virus/ Covid-19 Requirements (2.13)	Sum	1		
1.46	A		X	Asbestos (2.14)	Sum	1		
1.47	A		X	Other Occupational Health and Safety (Not covered elsewhere)	Sum	1		
	A			Environmental Requirements (1.13)				
1.48	A		X	Environmental Management System Objectives (4.3.1)	Sum	1		
1.49	A		X	Legal and General Obligations (4.3.2)	Sum	1		
1.50	A		X	Environmental Method Statement (4.3.3)	Sum	1		
1.51	A		X	Key Resources (4.3.4)	Sum	1		
1.52	A		X	Documentation (4.3.5)	Sum	1		
1.53	A		X	Compliance Monitoring (4.3.6)	Sum	1		
1.54	A		X	ISO 14001:2015 Auditing (4.3.7)	Sum	1		
1.55	A		X	Management Review (4.3.8)	Sum	1		
1.56	A		X	Incident Preparedness and Reporting (4.3.9)	Sum	1		
1.57	A		X	Site Meetings (4.3.10)	Sum	1		
1.58	A		X	Non-conformance (4.3.11)	Sum	1		
1.59	A		X	Contractor's Method Statements (4.3.12)	Sum	1		
1.60	A		X	Roles and Responsibilities (4.3.13)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
1.61	A		X	Servitude Zones and Their Special Requirements (4.4)	Sum	1		
1.62	A		X	Environmental Awareness Creation and Training (4.5)	Sum	1		
1.63	A		X	Non-Hazardous and Hazardous Substances, Pollution and Waste (4.6)	Sum	1		
1.64	A		X	Management of Site (4.7)	Sum	1		
1.65	A		X	Other Environmental Requirements (Not covered elsewhere)	Sum	1		
	A			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
1.66	A		X	.....	Sum	1		
1.67	A		X	.....	Sum	1		
1.68	A		X	.....	Sum	1		
1.69	A		X	.....	Sum	1		
	A	1.003 & 1.004		FIXED CHARGES - FACILITIES FOR THE ENGINEER (1.7)				
	A			Interim Facilities (1.7.2)				
1.70	A		X	Offices and other facilities (1.7.2.2)	Sum	1		
1.71	A		X	Services (1.7.2.3)	Sum	1		
1.72	A		X	Assistance to the Engineer (1.7.2.4)	Sum	1		
	A			Long Term Facilities (1.7.3)				
1.73	A		X	Engineer's office at main establishment (1.7.3.2)	m2	1792		
1.74	A		X	Engineer's office at each work front (1.7.3.2)	m2	132		
1.75	A		X	Outbuildings (1.7.3.3)	m2	80		
1.76	A		X	Laboratory (1.7.3.4)	Sum	1		
1.77	A		X	Carports (1.7.3.5)	No	93		
1.78	A		X	Washbay (1.7.3.5)	Sum	1		
1.79	A		X	Engineer's facilities after completion of the works (1.7.3.6)	nth	6		
1.80	A		X	Assistant to the Engineer (1.7.4)	Sum	1		
1.81	A		X	Medical (1.7.5)	Sum	1		
1.82	A		X	Fire control (1.7.6)	Sum	1		
1.83	A		X	Fencing and Security (1.7.7)	Sum	1		
1.84	A		X	Sanitation and cleaning (1.7.8)	Sum	1		
1.85	A		X	Electrical power (1.7.9)	Sum	1		
1.86	A		X	Water supply (1.7.10)	Sum	1		
1.87	A		X	Sewerage and sewage treatment (1.7.11)	Sum	1		
1.88	A		X	Construction establishment access roads (1.7.12)	Sum	1		
1.89	A		X	Communications (1.7.13)	Sum	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
1.90	A		X	Telephone (1.7.13.1 & 1.7.13.3)	Sum	1		
1.91	A		X	Data, mail and internet connection (1.7.13.1)	Sum	1		
1.92	A		X	Site Communication Radio's (1.7.13.2)	Sum	1		
1.93	A		X	Site equipment(1.7.14)	Sum	1		
1.94	A		X	Factory Acceptance Testing (FAT) and quality monitoring outside the borders of South Africa (1.7.15)	Sum	1		
	A			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
1.95	A		X	.....	Sum	1		
1.96	A		X	.....	Sum	1		
1.97	A		X	.....	Sum	1		
1.98	A		X	.....	Sum	1		
	A	1.003 & 1.004		FIXED CHARGES - FACILITIES FOR THE CONTRACTOR (1.8)				
1.99	A		X	Records and Handovers (1.8.1.1)	Sum	1		
1.100	A		X	Layouts and details (1.8.1.2)	Sum	1		
1.101	A		X	Clearing, Maintenance and Rehabilitation (1.8.1.3)	Sum	1		
1.102	A		X	Transport of Staff and Labour (1.8.1.4)	Sum	1		
	A			Interim Facilities (1.8.2)				
1.103	A		X	Offices and other facilities (1.8.2.2)	Sum	1		
1.104	A		X	Services (1.8.2.3)	Sum	1		
	A			Long Term Facilities (1.8.3)				
	A			General Engineering Services				
1.105	A		X	Construction Establishment Fencing (1.8.3.1)	Sum	1		
1.106	A		X	Lighting of Construction Establishment Areas (1.8.3.2)	Sum	1		
1.107	A		X	Construction Establishment Access/Haul Roads (1.8.3.3)	Sum	1		
1.108	A		X	Electrical power and distribution (1.8.3.4)	Sum	1		
1.109	A		X	Standby power (1.8.3.4)	Sum	1		
1.110	A		X	Water supply (1.8.3.5)	Sum	1		
1.111	A		X	Sewage Treatment and Disposal (1.8.3.6)	Sum	1		
1.112	A		X	Communications (1.8.3.7)	Sum	1		
	A			Office, Accommodation and Other Site facilities				
1.113	A		X	Accommodation for staff and workforce (1.8.3.8b)	Sum	1		
1.114	A		X	Offices (1.8.3.8c)	Sum	1		
1.115	A		X	Other establishment facilities (1.8.3.8d)	Sum	1		
1.116	A		X	Storage (1.8.3.8e)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	A			Other services				
1.117	A		X	Laboratory (1.8.3.9)	Sum	1		
1.118	A		X	Name boards and signs (1.8.3.10)	Sum	1		
1.119	A		X	Weather measurements (1.8.3.11)	Sum	1		
1.120	A		X	Medical (1.8.3.12)	Sum	1		
1.121	A		X	Sanitation and Cleaning (1.8.3.13)	Sum	1		
1.122	A		X	Access control and security (1.8.3.14)	Sum	1		
1.123	A		X	Fire control (1.8.3.15)	Sum	1		
	A			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
1.124	A		X	.....	Sum	1		
1.125	A		X	.....	Sum	1		
1.126	A		X	.....	Sum	1		
1.127	A		X	.....	Sum	1		
	A	1.005		TIME RELATED CHARGES - GENERAL OBLIGATIONS				
1.128	A		X	Performance Security (Duration Weeks)	Sum	1		
1.129	A		X	Supplementary performance security (Duration Weeks)	Sum	1		
1.130	A		X	Insurance and deductibles (Duration Weeks)	Sum	1		
1.131	A		X	Head Office Contract Management and Overheads (Duration Weeks)	Sum	1		
1.132	A		X	General Site Supervision and Overheads (Duration Weeks)	Sum	1		
1.133	A		X	Escrow documents (Duration Weeks)	Sum	1		
1.134	A		X	Method Statements (1.10.1) (Duration Weeks)	Sum	1		
1.135	A		X	Competency training (1.10.2.4) (Duration Weeks)	Sum	1		
1.136	A		X	Contractor returns and reporting (1.10.3) (Duration Weeks)	Sum	1		
1.137	A		X	Management meetings (1.10.4) (Duration Weeks)	Sum	1		
1.138	A		X	Integration management (1.10.5) (Duration Weeks)	Sum	1		
1.139	A		X	Mass haul planning (Duration Weeks)	Sum	1		
	A			Programming Requirements (1.9)				
1.140	A		X	Initial programme (1.9.4) (Duration Weeks)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
1.141	A		X	Contract programme (1.9.5) (Duration .....Weeks)	Sum	1		
1.142	A		X	Other Programming Requirements (Not covered elsewhere) (Duration .....Weeks)	Sum	1		
	A			Quality Management (1.10.2)				
1.143	A		X	Quality Management System (1.10.2.1) (Duration Weeks)	Sum	1		
1.144	A		X	Project Quality Plan (1.10.2.1) (Duration Weeks)	Sum	1		
1.145	A		X	Approved Inspection Authority (AIA) (1.10.2.6) (Duration Weeks)	Sum	1		
1.146	A		X	Other Quality Assurance Management (Not covered elsewhere) (Duration .....Weeks)	Sum	1		
	A			Social Management, Socio-Economic Development Requirements and Socio-Economic Targets and Penalties (1.11)				
1.147	A		X	Social Management (3.3) (Duration Weeks)	Sum	1		
1.148	A		X	Socio-Economic Development (SED) (3.4) (Duration Weeks)	Sum	1		
1.149	A		X	Employmentt (3.5) (Duration Weeks)	Sum	1		
1.150	A		X	Project Social Interface Team & Project Liaison Committee (3.6) (Duration Weeks)	Sum	1		
1.151	A		X	Resources (3.7) (Duration Weeks)	Sum	1		
1.152	A		X	Socio-Economic Development (SED) Management Principles (50.2) (Duration Weeks)	Sum	1		
1.153	A		X	Employment (50.3) (Duration Weeks)	Sum	1		
1.154	A		X	Preferential Procurement (50.4) (Duration Weeks)	Sum	1		
1.155	A		X	Enterprise and Supplier Development (ESD) (50.5) (Duration Weeks)	Sum	1		
1.156	A		X	Training and Skills Development (50.6) (Duration Weeks)	Sum	1		
1.157	A		X	Corporate Social Investment (CSI) (50.7) (Duration Weeks)	Sum	1		
1.158	A		X	Resources (50.8) (Duration Weeks)	Sum	1		
1.159	A		X	Method Statements (50.9) (Duration Weeks)	Sum	1		
1.160	A		X	Other Social Management, Socio-Economic Development Requirements and Socio-Economic Targets and Penalties (Not covered elsewhere) (Duration .....Weeks)	Sum	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	A			Occupational Health and Safety (1.12)				
1.161	A	X		Occupational Health and Safety Plan (2.2) (Duration Weeks)	Sum	1		
1.162	A	X		Occupational Health and Safety File (2.3) (Duration Weeks)	Sum	1		
1.163	A	X		Hazard and Risk Management (2.4) (Duration Weeks)	Sum	1		
1.164	A	X		Occupational Health and Hygiene (2.5) (Duration Weeks)	Sum	1		
1.165	A	X		Audits (2.6) (Duration Weeks)	Sum	1		
1.166	A	X		Subcontractor OH&S Management (2.7) (Duration Weeks)	Sum	1		
1.167	A	X		Training and Competency (2.8) (Duration Weeks)	Sum	1		
1.168	A	X		Safe Systems of Work (2.9) (Duration Weeks)	Sum	1		
1.169	A	X		Incident Management (2.10) (Duration Weeks)	Sum	1		
1.170	A	X		Site Management/ Monitoring (2.11) (Duration Weeks)	Sum	1		
1.171	A	X		Borrow Pits & Quarries (2.12) (Duration Weeks)	Sum	1		
1.172	A	X		Corona Virus/ Covid-19 Requirements (2.13) (Duration Weeks)	Sum	1		
1.173	A	X		Asbestos (2.14) (Duration Weeks)	Sum	1		
1.174	A	X		Other Occupational Health and Safety (Not covered elsewhere) (Duration Weeks)	Sum	1		
	A			Environmental Management Systems (1.13)				
1.175	A	X		Environmental Management System Objectives (4.3.1) (Duration Weeks)	Sum	1		
1.176	A	X		Legal and General Obligations (4.3.2) (Duration Weeks)	Sum	1		
1.177	A	X		Environmental Method Statement (4.3.3) (Duration Weeks)	Sum	1		
1.178	A	X		Key Resources (4.3.4) (Duration Weeks)	Sum	1		
1.179	A	X		Documentation (4.3.5) (Duration Weeks)	Sum	1		
1.180	A	X		Compliance Monitoring (4.3.6) (Duration Weeks)	Sum	1		
1.181	A	X		ISO 14001:2015 Auditing (4.3.7) (Duration Weeks)	Sum	1		
1.182	A	X		Management Review (4.3.8) (Duration Weeks)	Sum	1		
1.183	A	X		Incident Preparedness and Reporting (4.3.9) (Duration Weeks)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
1.184	A		X	Site Meetings (4.3.10) (Duration Weeks)	Sum	1		
1.185	A		X	Non-conformance (4.3.11) (Duration Weeks)	Sum	1		
1.186	A		X	Contractor's Method Statements (4.3.12) (Duration Weeks)	Sum	1		
1.187	A		X	Roles and Responsibilities (4.3.13) (Duration Weeks)	Sum	1		
1.188	A		X	Servitude Zones and Their Special Requirements (4.4) (Duration Weeks)	Sum	1		
1.189	A		X	Environmental Awareness Creation and Training (4.5) (Duration Weeks)	Sum	1		
1.190	A		X	Non-Hazardous and Hazardous Substances, Pollution and Waste (4.6) (Duration Weeks)	Sum	1		
1.191	A		X	Management of Site (4.7) (Duration Weeks)	Sum	1		
1.192	A		X	Other Environmental Requirements (Not covered elsewhere) (Duration Weeks)	Sum	1		
	A			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
1.193	A		X	.....	Sum	1		
1.194	A		X	.....	Sum	1		
1.195	A		X	.....	Sum	1		
1.196	A		X	.....	Sum	1		
	A	1.007 & 1.008		TIME RELATED CHARGES - FACILITIES FOR THE ENGINEER				
	A			Interim Facilities (1.7.2)				
1.197	A		X	Offices and other facilities (1.7.2.2) (Duration Weeks)	Sum	1		
1.198	A		X	Services (1.7.2.3) (Duration Weeks)	Sum	1		
1.199	A		X	Assistance to the Engineer (1.7.2.4) (Duration Weeks)	Sum	1		
	A			Long Term Facilities (1.7.3)				
1.200	A		X	Engineer's office at main establishment (1.7.3.2) (Duration Weeks) for 1792m ² as indicated under the Fixed Charges - Facilities for the Engineer	Sum	1		
1.201	A		X	Engineer's office at each work front (1.7.3.2) (Duration Weeks) for 132m ² as indicated under the Fixed Charges - Facilities for the Engineer	Sum	1		
1.202	A		X	Outbuildings (1.7.3.3) (Duration Weeks) for 80m ² as indicated under the Fixed Charges - Facilities for the Engineer	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
1.203	A		X	Laboratory (1.7.3.4) (Duration Weeks)	Sum	1		
1.204	A		X	Carports (1.7.3.5) (Duration Weeks) for 93 in number as indicated under the Fixed Charges - Facilities for the Engineer	Sum	1		
1.205	A		X	Washbay (1.7.3.5) (Duration Weeks)	Sum	1		
1.206	A		X	Engineer's facilities after completion of the works (1.7.3.6)	nth	6		
1.207	A		X	Assistant to the Engineer (1.7.4) (Duration Weeks)	Sum	1		
1.208	A		X	Medical (1.7.5) (Duration Weeks)	Sum	1		
1.209	A		X	Fire control (1.7.6) (Duration Weeks)	Sum	1		
1.210	A		X	Fencing and Security (1.7.7) (Duration Weeks)	Sum	1		
1.211	A		X	Sanitation and cleaning (1.7.8) (Duration Weeks)	Sum	1		
1.212	A		X	Electrical power (1.7.9) (Duration Weeks)	Sum	1		
1.213	A		X	Water supply (1.7.10) (Duration Weeks)	Sum	1		
1.214	A		X	Sewerage and sewage treatment (1.7.11) (Duration Weeks)	Sum	1		
1.215	A		X	Construction establishment access roads (1.7.12) (Duration Weeks)	Sum	1		
1.216	A		X	Communications (1.7.13)	Sum	1		
1.217	A		X	Telephone (1.7.13.1 & 1.7.13.3) (Duration Weeks)	Sum	1		
1.218	A		X	Data, mail and internet connection (1.7.13.1) (Duration Weeks)	Sum	1		
1.219	A		X	Site Communications Radio's (1.7.13.2) (Duration Weeks)	Sum	1		
1.220	A		X	Site equipment(1.7.14) (Duration Weeks)	Sum	1		
1.221	A		X	Factory Acceptance Testing (FAT) and quality monitoring outside the borders of South Africa (1.7.15) (Duration Weeks)	Sum	1		
	A			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("nil" to be entered if not required)				
1.222	A		X	.....	Sum	1		
1.223	A		X	.....	Sum	1		
1.224	A		X	.....	Sum	1		
1.225	A		X	.....	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount	
		Reference							
							Brought Forward		
	A	1.007 & 1.008		TIME RELATED - FACILITIES FOR THE CONTRACTOR (1.8)					
1.226	A		X	Records and Handovers (1.8.1.1) (Duration Weeks)	Sum	1			
1.227	A		X	Layouts and details (1.8.1.2) (Duration Weeks)	Sum	1			
1.228	A		X	Clearing, Maintenance and Rehabilitation (1.8.1.3) (Duration Weeks)	Sum	1			
1.229	A		X	Transport of Staff and Labour (1.8.1.4) (Duration Weeks)	Sum	1			
	A			Interim Facilities (1.8.2)					
1.230	A		X	Offices and other facilities (1.8.2.2) (Duration Weeks)	Sum	1			
1.231	A		X	Services (1.8.2.3) (Duration Weeks)	Sum	1			
	A			Long Term Facilities (1.8.3)					
	A			General Engineering Services					
1.232	A		X	Construction Establishment Fencing (1.8.3.1) (Duration Weeks)	Sum	1			
1.233	A		X	Lighting of Construction Establishment Areas (1.8.3.2) (Duration Weeks)	Sum	1			
1.234	A		X	Construction Establishment Access/Haul Roads (1.8.3.3) (Duration Weeks)	Sum	1			
1.235	A		X	Electrical power and distribution (1.8.3.4) (Duration Weeks)	Sum	1			
1.236	A		X	Standby power (1.8.3.4) (Duration Weeks)	Sum	1			
1.237	A		X	Water supply (1.8.3.5) (Duration Weeks)	Sum	1			
1.238	A		X	Sewage Treatment and Disposal (1.8.3.6) (Duration Weeks)	Sum	1			
1.239	A		X	Communications (1.8.3.7) (Duration Weeks)	Sum	1			
	A			Office, Accommodation and Other Site facilities					
1.240	A		X	Accommodation for staff and workforce (1.8.3.8b) (Duration Weeks)	Sum	1			
1.241	A		X	Offices (1.8.3.8c) (Duration Weeks)	Sum	1			
1.242	A		X	Other establishment facilities (1.8.3.8d) (Duration Weeks)	Sum	1			
1.243	A		X	Storage (1.8.3.8e) (Duration Weeks)	Sum	1			
	A			Other services					
1.244	A		X	Laboratory (1.8.3.9) (Duration Weeks)	Sum	1			
								Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount	
							Brought Forward		
1.245	A		X	Name boards and signs (1.8.3.10) (Duration Weeks)	Sum	1			
1.246	A		X	Weather measurements (1.8.3.11) (Duration Weeks)	Sum	1			
1.247	A		X	Medical (1.8.3.12) (Duration Weeks)	Sum	1			
1.248	A		X	Sanitation and Cleaning (1.8.3.13) (Duration Weeks)	Sum	1			
1.249	A		X	Access control and security (1.8.3.14) (Duration Weeks)	Sum	1			
1.250	A		X	Fire control (1.8.3.15) (Duration Weeks)	Sum	1			
	A			Survey and Setting Out					
1.251	A	5.001	X	Internal survey consistency check	Sum	1			
1.252	A	5.002	X	Protection of beacons outside servitude	No	76			
1.253	A	5.003	X	Site based laser terrestrial surveys	Sum	1			
	A			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)					
1.254	A		X	.....	Sum	1		
1.255	A		X	.....	Sum	1		
1.256	A		X	.....	Sum	1		
1				PART A: BILL 1: PRELIMINARY & GENERAL - Carried forward to Summary of Bills					

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
2				BILL 2: CIVIL WORKS				
	B			PART B: ABSTRACTION WORKS				
	B1			PART B1: VLIEËPOORT DIVERSION WEIR				
	B1			PART B1.1: Preliminary and General				
	B1			PRELIMINARY AND GENERAL (SECONDARY)				
	B1	1.002		FIXED CHARGES - GENERAL OBLIGATIONS				
2.B1.1.1	B1		X	Head Office Contract Management and Overheads	Sum	1		
2.B1.1.2	B1		X	General Site Supervision and Overheads	Sum	1		
2.B1.1.3	B1		X	Method statements (1.10.1)	Sum	1		
2.B1.1.4	B1		X	Competency training (1.10.2.4)	Sum	1		
2.B1.1.5	B1		X	Returns and reporting (1.10.3)	Sum	1		
2.B1.1.6	B1		X	Management meetings (1.10.4)	Sum	1		
2.B1.1.7	B1		X	Integration management (1.10.5)	Sum	1		
2.B1.1.8	B1		X	Programming Requirements (1.9)	Sum	1		
2.B1.1.9	B1		X	Quality Management (1.10.2)	Sum	1		
2.B1.1.10	B1		X	Socio Economic Requirements (1.11)	Sum	1		
2.B1.1.11	B1		X	Occupational Health and Safety Requirements (1.12)	Sum	1		
2.B1.1.12	B1		X	Environmental Requirements (1.13)	Sum	1		
	B1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("nil" to be entered if not required)				
2.B1.1.13	B1		X	.....	Sum	1		
2.B1.1.14	B1		X	.....	Sum	1		
2.B1.1.15	B1		X	.....	Sum	1		
2.B1.1.16	B1		X	.....	Sum	1		
	B1	1.003 & 1.004		FIXED CHARGES - FACILITIES FOR THE CONTRACTOR (1.8)				
2.B1.1.17	B1		X	Transport of Staff and Labour (1.8.1.4)	Sum	1		
2.B1.1.18	B1		X	Construction Establishment Fencing (1.8.3.1)	Sum	1		
2.B1.1.19	B1		X	Lighting of Construction Establishment Areas (1.8.3.2)	Sum	1		
2.B1.1.20	B1		X	Electrical power and distribution (1.8.3.4)	Sum	1		
2.B1.1.21	B1		X	Standby power (1.8.3.4)	Sum	1		
2.B1.1.22	B1		X	Communications (1.8.3.7)	Sum	1		
	B1			Office, Accommodation and Other Site facilities				
2.B1.1.23	B1		X	Accommodation for staff and workforce (1.8.3.8b)	Sum	1		
2.B1.1.24	B1		X	Offices (1.8.3.8c)	Sum	1		
2.B1.1.25	B1		X	Other establishment facilities (1.8.3.8d)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.B1.1.26	B1		X	Storage (1.8.3.8e)	Sum	1		
	B1			Other services				
2.B1.1.27	B1		X	Medical (1.8.3.12)	Sum	1		
2.B1.1.28	B1		X	Sanitation and Cleaning (1.8.3.13)	Sum	1		
2.B1.1.29	B1		X	Access control and security (1.8.3.14)	Sum	1		
	B1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.B1.1.30	B1		X	.....	Sum	1		
2.B1.1.31	B1		X	.....	Sum	1		
2.B1.1.32	B1		X	.....	Sum	1		
2.B1.1.33	B1		X	.....	Sum	1		
	B1	1.004		FIXED CHARGES - SPECIFIC EQUIPMENT				
2.B1.1.34	B1		X	Equipment for construction and maintenance of the Contractor's work areas	Sum	1		
2.B1.1.35	B1		X	Minor equipment and small tools	Sum	1		
2.B1.1.36	B1		X	Equipment for dust and emissions control and monitoring in compliance with environmental requirement	Sum	1		
2.B1.1.37	B1		X	Construction services including electrical power, compressed air, water, communications, etc.	Sum	1		
2.B1.1.38	B1		X	Equipment for blasting and rock support	Sum	1		
2.B1.1.39	B1		X	Equipment for earthworks, trenching and backfilling	Sum	1		
2.B1.1.40	B1		X	Equipment for borrowing, processing of materials, transport of materials and spoiling of materials	Sum	1		
2.B1.1.41	B1		X	Equipment for crange, winches, lifting and pipe handling	Sum	1		
2.B1.1.42	B1		X	Equipment for welding, weld testing and coatings	Sum	1		
2.B1.1.43	B1		X	Equipment for site transporting, lifting, placing and fixing of structural steel work	Sum	1		
2.B1.1.44	B1		X	Equipment for site transporting, placing, fixing and finishing of concrete work, formwork and reinforcement	Sum	1		
2.B1.1.45	B1		X	Equipment for processing concrete (Batch plant)	Sum	1		
2.B1.1.46	B1		X	Equipment for dealing with water	Sum	1		
2.B1.1.47	B1	1.004(b)	X	Equipment for jet grouting	Sum	1		
2.B1.1.48	B1	1.004(c)	X	General fixed charges for temporary de-establish and re-establish of Jet Grouting Equipment due to flooding	No	10		
	B1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("nil" to be entered if not required)				
2.B1.1.49	B1		X	.....	Sum	1		
2.B1.1.50	B1		X	.....	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.B1.1.51	B1		X	.....	Sum	1		
2.B1.1.52	B1		X	.....	Sum	1		
	B1	1.006		TIME RELATED CHARGES - GENERAL OBLIGATIONS				
2.B1.1.53	B1		X	Head Office Contract Management and Overheads (Duration Weeks)	Sum	1		
2.B1.1.54	B1		X	General Site Supervision and Overheads (Duration Weeks)	Sum	1		
2.B1.1.55	B1		X	Method Statements (1.10.1) (Duration Weeks)	Sum	1		
2.B1.1.56	B1		X	Competency training (1.10.2.4) (Duration Weeks)	Sum	1		
2.B1.1.57	B1		X	Returns and reporting (1.10.3) (Duration Weeks)	Sum	1		
2.B1.1.58	B1		X	Management meetings (1.10.4) (Duration Weeks)	Sum	1		
2.B1.1.59	B1		X	Integration management (1.10.5) (Duration Weeks)	Sum	1		
2.B1.1.60	B1		X	Programming Requirements (1.9) (Duration Weeks)	Sum	1		
2.B1.1.61	B1		X	Quality Management (1.10.2) (Duration Weeks)	Sum	1		
2.B1.1.62	B1		X	Socio Economic Requirements (1.11) (Duration Weeks)	Sum	1		
2.B1.1.63	B1		X	Occupational Health and Safety (1.12) (Duration Weeks)	Sum	1		
2.B1.1.64	B1		X	Environmental Requirements (1.13) (Duration Weeks)	Sum	1		
2.B1.1.65	B1	1.006(b)	X	Equipment for jet grouting (Duration Weeks)	Sum	1		
2.B1.1.66	B1	1.006(c)	X	Jet grouting general obligations during standing time due to flooding	Day	180		
	B1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("nil" to be entered if not required)				
2.B1.1.67	B1		X	.....	Sum	1		
2.B1.1.68	B1		X	.....	Sum	1		
2.B1.1.69	B1		X	.....	Sum	1		
	B1	1.007 & 1.008		TIME RELATED CHARGES - FACILITIES FOR THE CONTRACTOR (1.8)				
2.B1.1.70	B1		X	Transport of Staff and Labour (1.8.1.4) (Duration Weeks)	Sum	1		
2.B1.1.71	B1		X	Construction Establishment Fencing (1.8.3.1) (Duration Weeks)	Sum	1		
2.B1.1.72	B1		X	Lighting of Construction Establishment Areas (1.8.3.2) (Duration Weeks)	Sum	1		
2.B1.1.73	B1		X	Electrical power and distribution (1.8.3.4) (Duration Weeks)	Sum	1		
2.B1.1.74	B1		X	Standby power (1.8.3.4) (Duration Weeks)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.B1.1.75	B1		X	Communications (1.8.3.7) (Duration Weeks)	Sum	1		
	B1			Office, Accommodation and Other Site facilities				
2.B1.1.76	B1		X	Accommodation for staff and workforce (1.8.3.8b)(Duration Weeks)	Sum	1		
2.B1.1.77	B1		X	Offices (1.8.3.8c) (Duration Weeks)	Sum	1		
2.B1.1.78	B1		X	Other establishment facilities (1.8.3.8d) (Duration Weeks)	Sum	1		
2.B1.1.79	B1		X	Storage (1.8.3.8e) (Duration Weeks)	Sum	1		
	B1			Other services				
2.B1.1.80	B1		X	Medical (1.8.3.12) (Duration Weeks)	Sum	1		
2.B1.1.81	B1		X	Sanitation and Cleaning (1.8.3.13) (Duration Weeks)	Sum	1		
2.B1.1.82	B1		X	Access control and security (1.8.3.14) (Duration Weeks)	Sum	1		
2.B1.1.83	B1	1.007(b)	X	Facilities for jet grouting (Duration Weeks)	Sum	1		
2.B1.1.84	B1	1.007(c)	X	Jet grouting facilities during standing time due to flooding	Day	180		
	B1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.B1.1.85	B1		X	.....	Sum	1		
2.B1.1.86	B1		X	.....	Sum	1		
2.B1.1.87	B1		X	.....	Sum	1		
2.B1.1.88	B1		X	.....	Sum	1		
	B1	1.008		TIME RELATED CHARGES - SPECIFIC EQUIPMENT				
2.B1.1.89	B1		X	Equipment for construction and maintenance of the Contractor's work areas (Duration Weeks)	Sum	1		
2.B1.1.90	B1		X	Minor equipment and small tools (Duration Weeks)	Sum	1		
2.B1.1.91	B1		X	Equipment for dust and emissions control and monitoring in compliance with environmental requirement (Duration Weeks)	Sum	1		
2.B1.1.92	B1		X	Construction services including electrical power, compressed air, water, communications, etc. (Duration Weeks)	Sum	1		
2.B1.1.93	B1		X	Equipment for blasting and rock support (Duration Weeks)	Sum	1		
2.B1.1.94	B1		X	Equipment for earthworks, trenching and backfilling (Duration Weeks)	Sum	1		
2.B1.1.95	B1		X	Equipment for borrowing, processing of materials, transport of materials and spoiling of materials (Duration Weeks)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.B1.1.96	B1		X	Equipment for cramage, winches, lifting and pipe handling (Duration Weeks)	Sum	1		
2.B1.1.97	B1		X	Equipment for welding, weld testing and coatings (Duration Weeks)	Sum	1		
2.B1.1.98	B1		X	Equipment for site transporting, lifting, placing and fixing of structural steel work (Duration Weeks)	Sum	1		
2.B1.1.99	B1		X	Equipment for site transporting, placing, fixing and finishing of concrete work, formwork and reinforcement (Duration Weeks)	Sum	1		
2.B1.1.100	B1		X	Equipment for processing concrete (Batch plant) (Duration Weeks)	Sum	1		
2.B1.1.101	B1		X	Equipment for dealing with water (Duration Weeks)	Sum	1		
2.B1.1.102	B1	1.008(b)	X	Equipment for jet grouting (Duration Weeks)	Sum	1		
2.B1.1.103	B1	1.008(c)	X	Jet grouting equipment during standing time due to flooding	Day	180		
	B1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("nil" to be entered if not required)				
2.B1.1.104	B1		X	.....	Sum	1		
2.B1.1.105	B1		X	.....	Sum	1		
2.B1.1.106	B1		X	.....	Sum	1		
2.B1.1.107	B1		X	.....	Sum	1		
	B1			PART B1.1: Preliminary and General (Carried forward to Summary of Bills)				

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
	B1			PART B1.2: TEMPORARY WORKS (Temporary works designed by the contractor)				
	B1			PART B1.2.1 ACCESS PLATFORMS AND RIVER CROSSING STRUCTURES				
2.B1.2.1.1	B1	1.017		Design, supply and construct access platforms as of when required for the duration of the contract	sum	1		
2.B1.2.1.2	B1	1.018		Design, supply and install temporary river crossing structures as of when required for the duration of the contract	sum	1		
	B1			PART B1.2.2 RIVER DIVERSION				
	B1			PART B1.2.2.1 DESIGN				
2.B1.2.2.1	B1	1.012		Design of the diversion and temporary river works	sum	1		
	B1			PART B1.2.2.2 CLEARING				
2.B1.2.2.2	B1	7.001(a)		Clearing	ha	1.2		
2.B1.2.2.3	B1	7.001(b)		Removal of boulders	m3	300		
2.B1.2.2.4	B1	7.002		Grubbing and removal of trees of girth up to 1m	ha	1.2		
2.B1.2.2.5	B1	7.003		Grubbing and removal of trees of girth over 1m	No	21		
	B1			Removal of topsoil				
2.B1.2.2.6	B1	7.004(b)		For work areas, temporary stockpiling	m3	2250		
	B1			Removal of fertile soil				
2.B1.2.2.7	B1	7.005(b)		For work areas, temporary stockpiling	m3	5600		
	B1			Overhaul				
2.B1.2.2.8	B1	7.006		b) Between 3km up to and including 5km	m3	2355		
2.B1.2.2.9	B1	7.006		c) Between 5km up to and including 7km	m3	5495		
2.B1.2.2.10	B1	7.009		Mulching	ha	1.2		
	B1			PART B1.2.2.3 EARTHWORKS				
2.B1.2.2.11	B1	9.001		Excavation in all materials to spoil	m3	24 750		
2.B1.2.2.12	B1	9.003		Excavation in all materials to temporary stockpile (at Balancing Reservoir)	m3	24 750		
2.B1.2.2.13	B1	9.003		Excavation in all materials to temporary stockpile adjacent to work area (for coffer dam CD-3)	m3	11 280		
2.B1.2.2.14	B1	9.005		Additional excavation in all materials	m3	500		
	B1			Selected filling from excavation material, compacted to 93% AASHTO density				
2.B1.2.2.15	B1	1.013		Infilling between sandbags to form coffer dam as per drawing No. 2B-C3-002	m3	1300		
	B1			In-situ treatment of foundations				
2.B1.2.2.16	B1	9.009(a)		Compaction of in-situ material	m2	5 000		
	B1			Overhaul				
2.B1.2.2.17	B1	9.011(b)		b) Between 3km up to and including 5km	m3	30 890		
2.B1.2.2.18	B1	9.011(c)		c) Between 5km up to and including 7km	m3	30 890		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	B1			Sandbag coffer dam construction				
2.B1.2.2.19	B1	1.014		Supply, fill with excavated material and place 2.2m x 1.4m x 0.4m geotextile fabric sandbags (as per Fibertex nonwovens or approved similar) up to 12m high as per drawing No. 2B-C3-002 at location CD3	No	7 000		
2.B1.2.2.20	B1	17.005		Supply and install 1,0mm HDPE liner on outer side of coffer dam as per drawing No. 2B-C3-002, including tucking in of liner to the underside of sand bags on every 5th layer	m2	5 750		
2.B1.2.2.21	B1	1.015		Move sandbags from CD3 to new location within freehaul	No	4000		
2.B1.2.2.22	B1	1.016		Remove and discard sandbags into temporary bypass canal	No	7 000		
	B1			DEALING WITH WATER For all works included in PART B1 for River diversion (temporary works)				
2.B1.2.2.23	B1	8.001		Dealing with water	Sum	1		
2.B1.2.2.24	B1	8.002		Treatment of water	Sum	1		
2.B1.2.2.25	B1	8.003		Water monitoring	Sum	1		
2.B1.2.2.26	B1	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	B1			PART B1.2.3 TRAFFIC MANAGEMENT (on the western bank)				
	B1			TEMPORARY TRAFFIC CONTROL FACILITIES				
2.B1.2.3.1	B1	25.007(a)		Flagmen	sum	1		
2.B1.2.3.2	B1	25.007(b)		Road signs	sum	1		
2.B1.2.3.3	B1	25.007(c)		Flicker lights	sum	1		
2.B1.2.3.4	B1	25.007(d)		Delineators	sum	1		
2.B1.2.3.5	B1	25.007(e)		Barricading	sum	1		
2.B1.2.3.6	B1	25.007(f)		Two-way communication devices	sum	1		
2.B1.2.3.7	B1	25.007(g)		Personnel to manage and maintain temporary traffic-control facilities	sum	1		
2.B1.2.3.8	B1	25.007(h)		All other items not listed above	sum	1		
				PART B1.2.4 ITEMS NOT LISTED ABOVE				
				The Tenderer to specify and price below all additional items not listed above that could be required for Temporary Works				
2.B1.2.4.1	B1			.....	Sum	1		
2.B1.2.4.2	B1			.....	Sum	1		
2.B1.2.4.3	B1			.....	Sum	1		
2.B1.2.4.4	B1			.....	Sum	1		
2.B1.2.4.5	B1			.....	Sum	1		
	B1			PART B1.2: TEMPORARY WORKS (Temporary works designed by the contractor) <i>(Carried forward to Summary of Bills)</i>				

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
	B1			PART B1.3: Earthworks: Foundation				
	B1			PART: B1.3.1: SITE CLEARANCE				
	B1			Clearing				
2.B1.3.1.1	B1	7.001(a)		Clearing	ha	2		
2.B1.3.1.2	B1	7.001(b)		Removal of boulders	m3	300		
2.B1.3.1.3	B1	7.002		Grubbing and removal of trees of girth up to 1m	ha	2		
2.B1.3.1.4	B1	7.003		Grubbing and removal of trees of girth over 1m	No	20		
	B1			Removal of topsoil				
2.B1.3.1.5	B1	7.004(b)		For work areas, temporary stockpiling	m3	3550		
	B1			Removal of fertile soil				
2.B1.3.1.6	B1	7.005(b)		For work areas, temporary stockpiling	m3	11900		
	B1			Overhaul				
2.B1.3.1.7	B1	7.006		b) Between 3km up to and including 5km	m3	4635		
2.B1.3.1.8	B1	7.006		c) Between 5km up to and including 7km	m3	10815		
2.B1.3.1.9	B1	7.009		Mulching	ha	2		
	B1			PART: B1.3.2: EARTHWORKS				
2.B1.3.2.1	B1	9.001	X	Excavation in all materials to spoil	m3	48 600		
2.B1.3.2.2	B1	9.003	X	Excavation in all materials to stockpile	m3	48 600		
2.B1.3.2.3	B1	9.005		Additional excavation in all materials	m3	500		
2.B1.3.2.4	B1	9.006	X	Extra-Over items 9.001 to 9.005 for: Hard Excavation (blasting)	m3	16 100		
2.B1.3.2.5	B1	9.007	X	Extra-Over items 9.001 to 9.005 for: Hard Excavation (by non-explosive means)	m3	4 000		
	B1			In-situ treatment of foundations				
2.B1.3.2.6	B1	9.009(a)		Compaction of in-situ material	m2	5 300		
	B1			Overhaul				
2.B1.3.2.7	B1	9.011(b)	X	b) Between 3km up to and including 5km	m3	48 850		
2.B1.3.2.8	B1	9.011(c)	X	c) Between 5km up to and including 7km	m3	48 850		
	B1			Backfilling				
2.B1.3.2.9	B1	15.14(a)		Backfill and compact to 93% Mod AASHTO of selected excavation material behind Left Flank Retaining Wall	m3	16 800		
	B1			SUBSOIL DRAINAGE				
2.B1.3.2.10	B1	21.002		Surface preparation for drainage layer under scour apron	m2	5 300		
2.B1.3.2.11	B1	21.005		Synthetic-fibre filter blanket Type A6 wrapped around 100mm stone encasing with 1000mm sides, including stitching (overlaps shall be included within the rate)	m2	12 100		
2.B1.3.2.12	B1	15.014(b)		100mm diameter crushed stone - 1000mm layer thickness	m3	5 300		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.B1.3.2.13	B1	15.008(d)		100 x 100 PC Grid	m2	5 300		
	B1			DEALING WITH WATER For all works included in PART B1, excluding Jet Grouting				
2.B1.3.2.14	B1	8.001		Dealing with water	Sum	1		
2.B1.3.2.15	B1	8.002		Treatment of water	Sum	1		
2.B1.3.2.16	B1	8.003		Water monitoring	Sum	1		
2.B1.3.2.17	B1	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	B1			PORTION: B1.3.3: CONVENTIONAL JET GROUTING				
	B1			Setting up of drilling equipment for grout and drainage holes				
2.B1.3.3.1	B1	18.001(a)	X	Rotary Percussion Drilling	No	250		
2.B1.3.3.2	B1	18.001(b)	X	Rotary Diamond Core Drilling	No	65		
				Drilling of grout and drainage holes				
2.B1.3.3.3	B1	18.002(a)		Rotary Percussion Drilling in Soil	m	100		
2.B1.3.3.4	B1	18.002(b)		Rotary Percussion Drilling in Jet Grouted Columns	m	900		
2.B1.3.3.5	B1	18.002(c)		Rotary Percussion Drilling in Bedrock	m	300		
2.B1.3.3.6	B1	18.002(d)		Rotary Diamond Core Drilling in Soil	m	100		
2.B1.3.3.7	B1	18.002(e)		Rotary Diamond Core Drilling in Jet Grouted Columns	m	300		
2.B1.3.3.8	B1	18.002(f)		Rotary Diamond Core Drilling in Bedrock	m	300		
	B1			Re-drilling of grouted holes				
2.B1.3.3.9	B1	18.003(a)	X	Re-drilling with Rotary Percussion Drilling	m	450		
2.B1.3.3.10	B1	18.003(b)	X	Re-drilling with Rotary Diamond Core Drilling	m	50		
	B1			Temporary drill hole casings				
2.B1.3.3.11	B1	18.004(a)	X	Rotary Percussion holes	m	50		
2.B1.3.3.12	B1	18.004(b)	X	Rotary Diamond Core holes	m	50		
	B1			Extra over for permanent casings				
2.B1.3.3.13	B1	18.005(a)	X	Rotary Percussion holes	m	50		
2.B1.3.3.14	B1	18.005(b)	X	Rotary Diamond Core holes	m	50		
2.B1.3.3.15	B1	18.007	X	Cavity grouting	m3	20		
	B1			Grouting materials				
2.B1.3.3.16	B1	18.009(a)	X	CEM I Class 52.5N or 42.5R (RHPC or UFC)	t	10 782		
2.B1.3.3.17	B1	18.009(b)	X	Cement extenders GGCS, GGBS and CSF	t	1 078		
2.B1.3.3.18	B1	18.009(c)	X	Bentonite	t	1 078		
2.B1.3.3.19	B1	18.010	X	Grouting additives	Prov sum	1		25 230.00
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	B1			Water pressure tests				
2.B1.3.3.20	B1	18.011(a)	X	Five-minute test (Clause 18.8.1)	No	275		
2.B1.3.3.21	B1	18.011(b)	X	Fifteen-minute test (Clause 18.8.2)	No	20		
2.B1.3.3.22	B1	18.011(c)	X	Comprehensive Lugeon test (Clause 18.8.3)	No	20		
	B1			DEALING WITH WATER For conventional jet grouting				
2.B1.3.3.23	B1	8.001		Dealing with water	Sum	1		
2.B1.3.3.24	B1	8.002		Treatment of water	Sum	1		
2.B1.3.3.25	B1	8.003		Water monitoring	Sum	1		
2.B1.3.3.26	B1	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	B1			PORTION: B1.3.4: HAMMERHEAD JET GROUTING				
	B1			Setting up of drilling equipment for grout and drainage holes				
2.B1.3.4.1	B1	18.017(a)	X	Rotary Probe Drilling (Conventional Jet Grouting)	No	3 730		
2.B1.3.4.2	B1	18.017(b)	X	High Pressure Hammer Action (Jet Grouting)	No	2 800		
	B1			Drilling of grout holes				
2.B1.3.4.3	B1	18.018(a)	X	Rotary Probe Drilling in Alluvium	m	58 800		
2.B1.3.4.4	B1	18.018(b)	X	High Pressure Hammer Action in Alluvium	m	33 600		
2.B1.3.4.5	B1	18.018(c)	X	High Pressure Hammer Action in Cobbles & Boulders and Weathered Rock	m	38 600		
2.B1.3.4.6	B1	18.018(d)	X	High Pressure Hammer Action in Bedrock	m	1 560		
	B1			Re-drilling of grouted holes				
2.B1.3.4.7	B1	18.019(a)	X	Re-drilling by Rotary Percussion Drilling	m	1 050		
2.B1.3.4.8	B1	18.019(b)	X	Re-drilling of rotary Diamond Core Drilling	m	50		
	B1			Jet grouting				
2.B1.3.4.9	B1	18.022(a)	X	Rotary Probe Jet Grouting in Alluvium	m	58 800		
2.B1.3.4.10	B1	18.022(b)	X	High Pressure Hammer Action Jet Grouting in Alluvium, Cobbles & Boulders and Weathered Rock	m	72 200		
2.B1.3.4.11	B1	18.022(c)	X	High Pressure Hammer Action Jet Grouting in Bedrock	m	1 560		
	B1			Grouting materials				
2.B1.3.4.12	B1	18.025(a)	X	CEM I Class 52.5N or 42.5R (RHPC or UFC)	t	26 500		
2.B1.3.4.13	B1	18.025(b)	X	Cement extenders GGCS, GGBS and CSF	t	2 600		
2.B1.3.4.14	B1	18.025(c)	X	Bentonite	t	2 600		
2.B1.3.4.15	B1	18.026	X	Grouting additives	Prov sum	1		7 233 550.00
2.B1.3.4.16	B1	9.001	X	Handling and disposal of Jet grouting sludge	m3	36 000		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
				Overhaul				
2.B1.3.4.17	B1	9.011(b)		Between 3 km up to and including 5 km	m3	36000		
	B1			DEALING WITH WATER For hammerhead jet grouting				
2.B1.3.4.18	B1	8.001		Dealing with water	Sum	1		
2.B1.3.4.19	B1	8.002		Treatment of water	Sum	1		
2.B1.3.4.20	B1	8.003		Water monitoring	Sum	1		
2.B1.3.4.21	B1	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	B1			PART 1.3.5: FENCING				
	B1			FENCING (NON SECURITY TYPE - STOCKPROOF)				
2.B1.3.5.1	B1	6.001		Clearing the fence line, 1m wide strip	m	1 500		
	B1			Remove fencing and disposing of material				
2.B1.3.5.2	B1	6.004(c)		Twenty-one strand game proof fencing (2.4m high)	m	1 500		
	B1			Removal of gates				
2.B1.3.5.3	B1	6.007		All types of gates	No	6		
	B1			Supply, erect and maintain during contract period new fencing material for new fences				
2.B1.3.5.4	B1	6.002(c)		Twenty-one strand game proof fencing (2.4m high) as per drawing 2A-C6-102	m	1 500		
	B1			Supply, erect and maintain gates during contract period				
2.B1.3.5.5	B1	6.005(c)		2.4m high gates for game fences	No	6		
	B1			PART B1.3: Earthworks: Foundation (Carried forward to Summary of Bills)				

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
	B1			PART B1.4: Weir structures				
	B1			PART B1.4.1 CONCRETE WORKS				
	B1			CONCRETE WORKS (STRUCTURAL)				
	B1			ROUGH FORMWORK				
	B1			Vertical surfaces				
2.B1.4.1.1	B1	20.001		Sides of apron slab	m2	1 027		
2.B1.4.1.2	B1	20.001		Left Flank Retaining Walls Vertical up to 5m high	m2	1 145		
2.B1.4.1.3	B1	20.001		Left Flank Retaining Walls Vertical up to 10m high	m2	785		
2.B1.4.1.4	B1	20.001		Left Flank Retaining Walls Vertical above 10m high	m2	100		
2.B1.4.1.5	B1	20.001		Weir	m2	2 100		
2.B1.4.1.6	B1	20.001		Left Flank Retaining Walls Sloping between 10 and 85 degrees up to 5m high (vertical height)	m2	1 245		
2.B1.4.1.7	B1	20.001		Left Flank Retaining Walls Sloping between 10 and 85 degrees up to 10m high (vertical height)	m2	1245		
2.B1.4.1.8	B1	20.001		Left Flank Retaining Walls Sloping between 10 and 85 degrees above 10m high (vertical height)	m2	1540		
2.B1.4.1.9	B1	20.001		Footing for training walls	m2	100		
	B1			SMOOTH FORMWORK				
	B1			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.B1.4.1.10	B1	20.002		Exposed sides of apron slab	m2	620		
2.B1.4.1.11	B1	20.002		Sides of upstream training walls	m2	400		
2.B1.4.1.12	B1	20.002		Left Flank Retaining Walls Vertical up to 10m high	m2	360		
2.B1.4.1.13	B1	20.002		Left Flank Retaining Walls Vertical above 10m high	m2	2 765		
2.B1.4.1.14	B1	20.002		Weir	m2	1 230		
2.B1.4.1.15	B1	20.002		Weir Sloping 1:2	m2	418		
2.B1.4.1.16	B1	20.002		Fishway walls and between weir walls	m2	1 385		
				SPECIAL SMOOTH, REPAIRED AND RUBBED				
2.B1.4.1.17	B1	20.003		Fishway: Curved baffle in slots per sections F8 and F9 drawing 2B-C7-604	no	40		
2.B1.4.1.18	B1	20.003		Fishway: Shutters to form baffle per detail F2 drg 2B-C7-604	no	1		
2.B1.4.1.19	B1	20.003		Fishway: Vertical to inlet slot per detail F1 drg 2B-C7-604	no	1		
2.B1.4.1.20		20.003		Fishway: eelway per detail F4 drawing 2B-C7-604	m	325		
				NARROW WIDTHS UP TO 500mm WIDE				
2.B1.4.1.21	B1	20.005		Fishway: vertical to sides of slots including 75mm chamfers on each edge	m2	36		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	B1			BOX OUT/FORM VOIDS				
	B1			2500mm wide x 1400mm high x 200mm deep key joint per joint detail W2 drawing 2B-C7-450				
2.B1.4.1.22	B1	20.006(d)		Weir	No	30		
	B1			REINFORCEMENT				
	B1			Steel bars (irrespective of grade or diameter)				
2.B1.4.1.23	B1	20.007(a)		Weir	t	12		
2.B1.4.1.24	B1	20.007(a)		Retaining wall	t	100		
2.B1.4.1.25	B1	20.007(a)		Training walls	t	38		
2.B1.4.1.26	B1	20.007(a)		Fishway	t	125		
2.B1.4.1.27	B1	20.007(b)		Extra over for bars of nominal sizes larger than 25mm	t	1		
2.B1.4.1.28	B1	20.007(a)		Dowel bars 16 dia, epoxied 300mm into concrete (rebar to be measured elsewhere)	no	300		
2.B1.4.1.29	B1	20.008		Mesh ref 395 high-tensile welded mesh	m2	3210		
	B1			CONCRETE				
	B1			CONCRETE 15MPa (56 days)/38mm F60 in:				
2.B1.4.1.30	B1	20.010	X	Weir: Nominal 300mm layer thickness including levelling and floating.	m3	13 800		
2.B1.4.1.31	B1	20.010	X	Scour apron: Nominal 300mm layer thickness including levelling and floating.	m3	12 675		
2.B1.4.1.32	B1	20.010		Grout enrichment on upstream face of weir and scour apron, assuming 20% voids	m3	250		
2.B1.4.1.33	B1	20.010		Grout enrichment on exposed face of left flank retaining walls, assuming 20% voids	m3	130		
	B1			STRENGTH OF CONCRETE, 30MPa/19mm in:				
2.B1.4.1.34	B1	20.012		Upstream training wall foundations and wall	m3	645		
	B1			CONCRETE 15MPa (56 days)/38mm F60 in:				
2.B1.4.1.35	B1	20.010	X	Left flank retaining wall	m3	15100		
	B1			PRESCRIBED MIX				
	B1			CONCRETE 35MPa/19mm (Water retaining) in:				
2.B1.4.1.36	B1	20.010		Left Flank Retaining Wall	m3	655		
2.B1.4.1.37	B1	20.010		Fishway	m3	570		
2.B1.4.1.38	B1	20.010		Crump weir and apron capping	m3	2035		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	B1			UNFORMED SURFACE FINISHES				
2.B1.4.1.39	B1	20.013(a)		Wood floated finish	m2	6 500		
2.B1.4.1.40	B1	20.013(b)		Steel floated finish to weir, apron and walls	m2	2 340		
2.B1.4.1.41	B1	20.013(b)		Steel floated finish to fishway floors and walls	m2	350		
2.B1.4.1.42	B1	20.013(c)		Power-floated finish	m2	200		
	B1			JOINTS				
	B1			Joint type W1 per drawing 2B-C7-450 including grout enrichment, 250mm wide centre bulb PVC waterstop, joints prefabricated. Shutters measured separately				
2.B1.4.1.43	B1	20.016		Weir	m	2 010		
2.B1.4.1.44	B1	20.016		Left flank retaining wall	m	246		
	B1			Joint type W3 per drawing 2B-C7-450 keyed joint in apron, including grout enrichment shutters to key and to slab edges				
2.B1.4.1.45	B1	20.016		Scour Apron	m	1 050		
	B1			PART B1.4 Weir structures (Carried forward to Summary of Bills)				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	B1			PART B1.5: Landscaping and Rehabilitation				
	B1			OVERHAUL				
2.B1.5.1	B1	7.006(a)		Between 1km up to and including 3km	m3	150		
2.B1.5.2	B1	7.006(b)		Between 3km up to and including 5km	m3	150		
2.B1.5.3	B1	7.006(c)		Between 5km up to and including 7km	m3	200		
	B1			LANDSCAPING & REHABILITATION				
2.B1.5.4	B1	47.001		Shaping	m2	2 500		
2.B1.5.5	B1	47.004		Scarifying	ha	0.25		
2.B1.5.6	B1	47.007		Furnishing and applying fertilisers	kg	80		
2.B1.5.7	B1	47.011		Preparing topsoil for seeding	m2	2 500		
2.B1.5.8	B1	47.012		Hydro-seeding	ha	0.25		
	B1			Provision of seed				
2.B1.5.9	B1	47.010		Seed type - Anthephora pubescens	kg	0.25		
2.B1.5.10	B1	47.010		Seed type - Cenchrus ciliaris	kg	0.25		
2.B1.5.11	B1	47.010		Seed type - Chloris gayana	kg	2.5		
2.B1.5.12	B1	47.010		Seed type - Cynodon dactylon	kg	0.75		
2.B1.5.13	B1	47.010		Seed type - Digitaria eriantha	kg	3		
2.B1.5.14	B1	47.010		Seed type - Eneapogon chenchroides	kg	0.25		
2.B1.5.15	B1	47.010		Seed type - Eragrostis curvula	kg	0.5		
2.B1.5.16	B1	47.010		Seed type - Eragrostis lehmanniana	kg	0.125		
2.B1.5.17	B1	47.010		Seed type - Eragrostis tef	kg	0.75		
2.B1.5.18	B1	47.010		Seed type - Heteropogon contortus	kg	0.75		
2.B1.5.19	B1	47.010		Seed type - Panicum maximum	kg	0.875		
2.B1.5.20	B1	47.010		Seed type - Pogonarthria squarrosa	kg	0.25		
2.B1.5.21	B1	47.016		Provision of temporary erosion control measures	ha	23		
2.B1.5.22	B1	47.017		Maintenance of the Temporary Erosion Control Measures	sum	1		
2.B1.5.23	B1	47.018		Maintenance of Vegetation	sum	1		
	B1			PART B1.5: Landscaping and Rehabilitation (Carried forward to Summary of Bills)				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	B1			PART B1.6: Ancillary works				
	B1			PART B1.6.1: FENCING				
	B1			SITE CLEARANCE				
	B1			CLEARING THE FENCE LINE, 1M WIDE STRIP				
2.B1.6.1.1	B1	6.001		Inner Security fencing	m	400		
2.B1.6.1.2	B1	6.001		Outer Security fencing	m	400		
2.B1.6.1.3	B1	6.001		Electric fencing	m	400		
	B1			SECURITY FENCING				
	B1			SUPPLY AND ERECT NEW FENCING MATERIAL FOR NEW FENCES.				
2.B1.6.1.4	B1	6.002(f)		Inner Security fencing as per drawing 160 592/10, 160 594/10, 160 598/10, 160 599/10	m	400		
2.B1.6.1.5	B1	6.002(g)		Outer Security fencing as per drawing 160 595/10, 160 597/10, 160 598/10, 160 599/10	m	400		
	B1			SUPPLY AND ERECT PERMANENT GATES				
2.B1.6.1.6	B1	6.005(e)		Inner Security gate as per drawing 160 593/10, 160 598/10, 160 599/10	No.	2		
2.B1.6.1.7	B1	6.005(e)		Outer Security gate as per drawing 160 596/10, 160 598/10, 160 599/10	No.	2		
	B1			ELECTRICAL FENCING				
2.B1.6.1.8	B1	45.001		Design and documentation - 400 m of electric fencing, as part of a National Key Point (NKP) security installation	Sum	1		
2.B1.6.1.9	B1	45.002		Supply and deliver to site - 400 m of electric fencing, as part of a National Key Point (NKP) security installation	Sum	1		
2.B1.6.1.10	B1	45.003		Installation of plant - 400 m of electric fencing, as part of a National Key Point (NKP) security installation	Sum	1		
	B1			PART B1.6.2: STORMWATER				
	B1			STORMWATER CHANNEL 1				
2.B1.6.2.1	B1	9.001		Excavation in earth for channels	m3	220		
2.B1.6.2.2	B1	9.006		Extra-Over items 9.001 to 9.005 for: Hard Excavation (blasting)	m3	110		
2.B1.6.2.3	B1	20.012		25MPa/19mm reinforced concrete in bottoms and sides of channels	m3	50		
2.B1.6.2.4	B1	20.011		50mm Thick blinding layer in class 15MPa concrete	m2	210		
2.B1.6.2.5	B1	20.013(b)		Finishing bottoms and sides of channels smooth with a steel trowel	m2	210		
2.B1.6.2.6	B1	20.001		Rough formwork to sides of channels	m2	265		
2.B1.6.2.7	B1	20.002		Smooth formwork to sides of channels	m2	210		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.B1.6.2.8	B1	20.016		10mm Expansion joints with softboard through concrete not exceeding 300mm high	m	138		
2.B1.6.2.9	B1	20.007(a)		Steel bars irrespective of grade and diameter	t	6		
2.B1.6.2.10	B1	15.014(a)		Selected filling from excavation material, compacted to 93% AASHTO density along side structures	m3	110		
				Overhaul				
2.B1.6.2.11	B1	9.011(a)		Between 1km up to and including 3km	m3	100		
2.B1.6.2.12	B1	9.011(b)		Between 3km up to and including 5km	m3	120		
	B1			STORMWATER CHANNEL 2 Drawing No. 2B-C3-013 and 2B-C5-010				
2.B1.6.2.13	B1	9.001		Cut to spoil in earth for channels (located behind the Low Lift Pump Station)	m3	1300		
2.B1.6.2.14	B1	9.006		Extra-Over items 9.001 to 9.005 for: Hard Excavation (blasting)	m3	750		
				In-situ treatment of foundations				
2.B1.6.2.15	B1	9.009(a)		Compaction of in-situ material	m2	780		
2.B1.6.2.16	B1	9.009(c)		In-situ treatment by blasting (max depth of 300mm)	m3	20		
				Overhaul				
2.B1.6.2.17	B1	9.011(a)		Between 1 km up to and including 3 km	m3	520		
2.B1.6.2.18	B1	9.011(b)		Between 3 km up to and including 5 km	m3	780		
				Soilcrete				
2.B1.6.2.19	B1	15.002(b)		Placing of cement stabilised soil bed and bedding cradle (placed on channel floors)	m3	20		
2.B1.6.2.20	B1	15.005(d)		Provision of soilcrete - With screening from borrow pits	m3	20		
				Overhaul				
2.B1.6.2.21	B1	15.010(a)		Between 1km up to and including 3km	m3	8		
2.B1.6.2.22	B1	15.010(b)		Between 3km up to and including 5km	m3	12		
				Gabions and Reno Mattress				
2.B1.6.2.23	B1	21.003(a)		Gabion boxes inclusive of galvanised wire mesh 80 as per sans 1580, with 100-250 mm dump rock a) 2.0 x 1.0 x 1.0m high	m3	2800		
2.B1.6.2.24	B1	21.003(c)		Renomatress inclusive of galvanised wire mesh 80 as per sans 1580, with 100-250 mm dump rock c) 2.0 x 1.0 x 0.3m high	m3	66		
2.B1.6.2.25	B1	21.005		Bidim A4 non toxic woven installed below gabion boxes, with 200mm overlaps	m2	2300		
	B1			GABION STRUCTURES ON EITHER SIDE OF LLPS Drawing No. 2B-C7-400				
				Foundation trench excavation and backfilling				
2.B1.6.2.26	B1	21.001(a)		In solid rock (material which requires blasting)	m3	1 010		
2.B1.6.2.27	B1	21.001(b)		In all other classes of material	m3	255		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
				Overhaul				
2.B1.6.2.28	B1	9.011(a)		Between 1km up to and including 3km	m3	510		
2.B1.6.2.29	B1	9.011(b)		Between 3km up to and including 5km	m3	760		
				Gabions and Reno Mattress				
2.B1.6.2.30	B1	21.002		Surface preparation for bedding the gabions	m2	1 260		
2.B1.6.2.31	B1	21.003(a)		Gabion boxes inclusive of galvanised wire mesh 80 as per sans 1580, with 100-250 mm dump rock a) 3.0 x 1.0 x 1.0m high	m3	1 260		
2.B1.6.2.32	B1	21.005		Bidim A4 non toxic woven installed below gabion boxes, with 200mm overlaps	m2	1 320		
				PART B1.6: Ancillary works (Carried forward to Summary of Bills)				
				PART B1: VLIEËPOORT DIVERSION WEIR (Carried forward to Summary of Bills)				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	B2			PART B2: DIVERSION WORKS AND LOW-LIFT PUMPING STATION				
	B2			PART B2.1.1: Preliminary and General				
	B2			PRELIMINARY AND GENERAL (SECONDARY)				
	B2	1.002		FIXED CHARGES - GENERAL OBLIGATIONS				
2.B2.1.1.1	B2		X	Head Office Contract Management and Overheads	Sum	1		
2.B2.1.1.2	B2		X	General Site Supervision and Overheads	Sum	1		
2.B2.1.1.3	B2		X	Method statements (1.10.1)	Sum	1		
2.B2.1.1.4	B2		X	Competency training (1.10.2.4)	Sum	1		
2.B2.1.1.5	B2		X	Returns and reporting (1.10.3)	Sum	1		
2.B2.1.1.6	B2		X	Management meetings (1.10.4)	Sum	1		
2.B2.1.1.7	B2		X	Integration management (1.10.5)	Sum	1		
2.B2.1.1.8	B2		X	Programming Requirements (1.9)	Sum	1		
2.B2.1.1.9	B2		X	Quality Management (1.10.2)	Sum	1		
2.B2.1.1.10	B2		X	Socio Economic Requirements (1.11)	Sum	1		
2.B2.1.1.11	B2		X	Occupational Health and Safety Requirements (1.12)	Sum	1		
2.B2.1.1.12	B2		X	Environmental Requirements (1.13)	Sum	1		
	B2			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.B2.1.1.13	B2		X	.....	Sum	1		
2.B2.1.1.14	B2		X	.....	Sum	1		
2.B2.1.1.15	B2		X	.....	Sum	1		
2.B2.1.1.16	B2		X	.....	Sum	1		
	B2	1.003 & 1.004		FIXED CHARGES - FACILITIES FOR THE CONTRACTOR (1.8)				
2.B2.1.1.17	B2		X	Transport of Staff and Labour (1.8.1.4)	Sum	1		
2.B2.1.1.18	B2		X	Construction Establishment Fencing (1.8.3.1)	Sum	1		
2.B2.1.1.19	B2		X	Lighting of Construction Establishment Areas (1.8.3.2)	Sum	1		
2.B2.1.1.20	B2		X	Electrical power and distribution (1.8.3.4)	Sum	1		
2.B2.1.1.21	B2		X	Standby power (1.8.3.4)	Sum	1		
2.B2.1.1.22	B2		X	Communications (1.8.3.7)	Sum	1		
	B2			Office, Accommodation and Other Site facilities				
2.B2.1.1.23	B2		X	Accommodation for staff and workforce (1.8.3.8b)	Sum	1		
2.B2.1.1.24	B2		X	Offices (1.8.3.8c)	Sum	1		
2.B2.1.1.25	B2		X	Other establishment facilities (1.8.3.8d)	Sum	1		
2.B2.1.1.26	B2		X	Storage (1.8.3.8e)	Sum	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	B2			Other services				
2.B2.1.1.27	B2		X	Medical (1.8.3.12)	Sum	1		
2.B2.1.1.28	B2		X	Sanitation and Cleaning (1.8.3.13)	Sum	1		
2.B2.1.1.29	B2		X	Access control and security (1.8.3.14)	Sum	1		
	B2			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("nil" to be entered if not required)				
2.B2.1.1.30	B2		X	.....	Sum	1		
2.B2.1.1.31	B2		X	.....	Sum	1		
2.B2.1.1.32	B2		X	.....	Sum	1		
2.B2.1.1.33	B2		X	.....	Sum	1		
	B2	1.004		FIXED CHARGES - SPECIFIC EQUIPMENT				
2.B2.1.1.34	B2		X	Equipment for construction and maintenance of the Contractor's work areas	Sum	1		
2.B2.1.1.35	B2		X	Minor equipment and small tools	Sum	1		
2.B2.1.1.36	B2		X	Equipment for dust and emissions control and monitoring in compliance with environmental requirement	Sum	1		
2.B2.1.1.37	B2		X	Construction services including electrical power, compressed air, water, communications, etc.	Sum	1		
2.B2.1.1.38	B2		X	Equipment for blasting and rock support	Sum	1		
2.B2.1.1.39	B2		X	Equipment for earthworks, trenching and backfilling	Sum	1		
2.B2.1.1.40	B2		X	Equipment for borrowing, processing of materials, transport of materials and spoiling of materials	Sum	1		
2.B2.1.1.41	B2		X	Equipment for cranes, winches, lifting and pipe handling	Sum	1		
2.B2.1.1.42	B2		X	Equipment for welding, weld testing and coatings	Sum	1		
2.B2.1.1.43	B2		X	Equipment for site transporting, lifting, placing and fixing of structural steel work	Sum	1		
2.B2.1.1.44	B2		X	Equipment for site transporting, placing, fixing and finishing of concrete work, formwork and reinforcement	Sum	1		
2.B2.1.1.45	B2		X	Equipment for processing concrete (Batch plant)	Sum	1		
2.B2.1.1.46	B2		X	Equipment for dealing with water	Sum	1		
2.B2.1.1.47	B2	1.004(b)	X	Equipment for jet grouting	Sum	1		
2.B2.1.1.48	B2	1.004(c)	X	General fixed charges for de-establish and re-establish of Jet Grouting Equipment due to flooding	No	10		
	B2			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.B2.1.1.49	B2		X	.....	Sum	1		
2.B2.1.1.50	B2		X	.....	Sum	1		
2.B2.1.1.51	B2		X	.....	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.B2.1.1.52	B2		X	.....	Sum	1		
	B2	1.006		TIME RELATED CHARGES - GENERAL OBLIGATIONS				
2.B2.1.1.53	B2		X	Head Office Contract Management and Overheads (Duration Weeks)	Sum	1		
2.B2.1.1.54	B2		X	General Site Supervision and Overheads (Duration Weeks)	Sum	1		
2.B2.1.1.55	B2		X	Method Statements (1.10.1) (Duration Weeks)	Sum	1		
2.B2.1.1.56	B2		X	Competency training (1.10.2.4) (Duration Weeks)	Sum	1		
2.B2.1.1.57	B2		X	Returns and reporting (1.10.3) (Duration Weeks)	Sum	1		
2.B2.1.1.58	B2		X	Management meetings (1.10.4) (Duration Weeks)	Sum	1		
2.B2.1.1.59	B2		X	Integration management (1.10.5) (Duration Weeks)	Sum	1		
2.B2.1.1.60	B2		X	Programming Requirements (1.9) (Duration Weeks)	Sum	1		
2.B2.1.1.61	B2		X	Quality Management (1.10.2) (Duration Weeks)	Sum	1		
2.B2.1.1.62	B2		X	Socio Economic Requirements (1.11) (Duration Weeks)	Sum	1		
2.B2.1.1.63	B2		X	Occupational Health and Safety (1.12) (Duration Weeks)	Sum	1		
2.B2.1.1.64	B2		X	Environmental Requirements (1.13) (Duration Weeks)	Sum	1		
2.B2.1.1.65	B2	1.006(b)	X	Equipment for jet grouting (Duration Weeks)	Sum	1		
2.B2.1.1.66	B2	1.006(c)	X	Jet grouting general obligations during standing time due to flooding	Day	90		
				Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("nil" to be entered if not required)				
2.B2.1.1.67	B2		X	.....	Sum	1		
2.B2.1.1.68	B2		X	.....	Sum	1		
2.B2.1.1.69	B2		X	.....	Sum	1		
	B2	1.007 & 1.008		TIME RELATED CHARGES - FACILITIES FOR THE CONTRACTOR (1.8)				
2.B2.1.1.70	B2		X	Transport of Staff and Labour (1.8.1.4) (Duration Weeks)	Sum	1		
2.B2.1.1.71	B2		X	Construction Establishment Fencing (1.8.3.1) (Duration Weeks)	Sum	1		
2.B2.1.1.72	B2		X	Lighting of Construction Establishment Areas (1.8.3.2) (Duration Weeks)	Sum	1		
2.B2.1.1.73	B2		X	Electrical power and distribution (1.8.3.4) (Duration Weeks)	Sum	1		
2.B2.1.1.74	B2		X	Standby power (1.8.3.4) (Duration Weeks)	Sum	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.B2.1.1.75	B2		X	Communications (1.8.3.7) (Duration Weeks)	Sum	1		
	B2			Office, Accommodation and Other Site facilities				
2.B2.1.1.76	B2		X	Accommodation for staff and workforce (1.8.3.8b)(Duration Weeks)	Sum	1		
2.B2.1.1.77	B2		X	Offices (1.8.3.8c) (Duration Weeks)	Sum	1		
2.B2.1.1.78	B2		X	Other establishment facilities (1.8.3.8d) (Duration Weeks)	Sum	1		
2.B2.1.1.79	B2		X	Storage (1.8.3.8e) (Duration Weeks)	Sum	1		
	B2			Other services				
2.B2.1.1.80	B2		X	Medical (1.8.3.12) (Duration Weeks)	Sum	1		
2.B2.1.1.81	B2		X	Sanitation and Cleaning (1.8.3.13) (Duration Weeks)	Sum	1		
2.B2.1.1.82	B2		X	Access control and security (1.8.3.14) (Duration Weeks)	Sum	1		
2.B2.1.1.83	B2	1.007(b)	X	Facilities for jet grouting (Duration Weeks)	Sum	1		
2.B2.1.1.84	B2	1.007(c)	X	Jet grouting facilities during standing time due to flooding	Day	90		
	B2			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("nil" to be entered if not required)				
2.B2.1.1.85	B2		X	.....	Sum	1		
2.B2.1.1.86	B2		X	.....	Sum	1		
2.B2.1.1.87	B2		X	.....	Sum	1		
2.B2.1.1.88	B2		X	.....	Sum	1		
	B2	1.008		TIME RELATED CHARGES - SPECIFIC EQUIPMENT				
2.B2.1.1.89	B2		X	Equipment for construction and maintenance of the Contractor's work areas (Duration Weeks)	Sum	1		
2.B2.1.1.90	B2		X	Minor equipment and small tools (Duration Weeks)	Sum	1		
2.B2.1.1.91	B2		X	Equipment for dust and emissions control and monitoring in compliance with environmental requirement (Duration Weeks)	Sum	1		
2.B2.1.1.92	B2		X	Construction services including electrical power, compressed air, water, communications, etc. (Duration Weeks)	Sum	1		
2.B2.1.1.93	B2		X	Equipment for blasting and rock support (Duration Weeks)	Sum	1		
2.B2.1.1.94	B2		X	Equipment for earthworks, trenching and backfilling (Duration Weeks)	Sum	1		
2.B2.1.1.95	B2		X	Equipment for borrowing, processing of materials, transport of materials and spoiling of materials (Duration Weeks)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.B2.1.1.96	B2		X	Equipment for crange, winches, lifting and pipe handling (Duration Weeks)	Sum	1		
2.B2.1.1.97	B2		X	Equipment for welding, weld testing and coatings (Duration Weeks)	Sum	1		
2.B2.1.1.98	B2		X	Equipment for site transporting, lifting, placing and fixing of structural steel work (Duration Weeks)	Sum	1		
2.B2.1.1.99	B2		X	Equipment for site transporting, placing, fixing and finishing of concrete work, formwork and reinforcement (Duration Weeks)	Sum	1		
2.B2.1.1.100	B2		X	Equipment for processing concrete (Batch plant) (Duration Weeks)	Sum	1		
2.B2.1.1.101	B2		X	Equipment for dealing with water (Duration Weeks)	Sum	1		
2.B2.1.1.102	B2	1.008(b)	X	Equipment for jet grouting (Duration Weeks)	Sum	1		
2.B2.1.1.103	B2	1.008(c)	X	Jet grouting equipment during standing time due to flooding	Day	90		
	B2			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.B2.1.1.104	B2		X	.....	Sum	1		
2.B2.1.1.105	B2		X	.....	Sum	1		
2.B2.1.1.106	B2		X	.....	Sum	1		
2.B2.1.1.107	B2		X	.....	Sum	1		
	B2			PART B2.1.1: Preliminary and General (Carried forward to Summary of Bills)				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	B2			PART B2.1.2: Permanent access road and pipeline platform				
	B2			PERMANENT ACCESS ROAD				
	B2			SITE CLEARANCE				
2.B2.1.2.1	B2	7.001(a)		Clearing	ha	20		
2.B2.1.2.2	B2	7.001(b)		Removal of loose surface boulders	m ³	2000		
2.B2.1.2.3	B2	7.002		Grubbing and removal of tree stumps of girth up to and including 1.0 m and excavated rocks/boulders	ha	20		
2.B2.1.2.4	B2	7.003		Grubbing and removal of trees of girth over 1.0 m	No	50		
	B2			Removal of topsoil				
2.B2.1.2.5	B2	7.004(b)		For other work areas, temporary stockpiling adjacent to the work area within freehaul distance	m ³	39 960		
	B2			Removal of fertile soil				
2.B2.1.2.6	B2	7.005(b)		For other work areas, temporary stockpiling adjacent to the work area within freehaul distance	m ³	5 500		
	B2			Sundry Items				
2.B2.1.2.7	B2	7.007		Demolishing and disposal of structures and reinforced concrete	m3	100		
2.B2.1.2.8	B2	7.008		Moving Existing Rock Stockpile from Previous Project/Phase to Provide Working Space	m3	50		
2.B2.1.2.9	B2	7.009		Mulching	ha	20.00		
2.B2.1.2.10	B2	7.010		Demolishing and disposal of buildings complete between chainage 950 and 1100	sum	1		
2.B2.1.2.11	B2	7.010		Demolishing and disposal of buildings complete at chainage 3800	sum	1		
	B2			OVERHAUL				
2.B2.1.2.12	B2	7.006(a)		Between 1km up to and including 3km	m ³	42080		
2.B2.1.2.13	B2	7.006(b)		Between 3km up to and including 5km	m ³	39580		
	B2			EARTHWORKS				
	B2			EMBANKMENT				
2.B2.1.2.14	B2	15.014(a)		Construction of road embankment, compaction as indicated on the drawings	m ³	36550		
	B2			Overhaul on material hauled in excess of 1.0 km				
2.B2.1.2.15	B2	15.016(a)		Between 1km up to and including 3km	m ³	22170		
2.B2.1.2.16	B2	15.016(b)		Between 3km up to and including 5km	m ³	14380		
	B2			BULK EXCAVATION				
2.B2.1.2.17	B2	9.001		Excavation in all materials to spoil	m ³	3570		
2.B2.1.2.18	B2	9.007		Extra-Over items 9.001 to 9.005 for: Hard Excavation (by non-explosive means) - Boulder Excavation	m ³	1785		
2.B2.1.2.19	B2	9.006		Extra-Over items 9.001 to 9.005 for: Hard Excavation (blasting)	m ³	1 785		
	B2			In situ treatment of foundations:				
2.B2.1.2.20	B2	9.009(b)		In situ treatment by ripping	m ³	4950		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.B2.1.2.21	B2	9.009(c)		In-situ treatment by blasting	m3	3300		
	B2			Provide and use of specialist team and equipment for the detection of underground services				
2.B2.1.2.22	B2	9.017(a)		Provide the team and equipment	Sum	1		
2.B2.1.2.23	B2	9.017 (b)		Use, operate and maintain equipment	day	4		
2.B2.1.2.24	B2	9.017 (c)		Remove the team and equipment	Sum	1		
	B2			Pavement layers constructed from gravel material				
2.B2.1.2.25	B2	25.001(a)		Selected layer compacted to 93% of modified AASHTO density in 150mm thick layers (G7)	m ³	3850		
2.B2.1.2.26	B2	25.001(b)		Base layer compacted to 95% of modified AASHTO density in 150mm thick layers (G5)	m ³	3825		
2.B2.1.2.27	B2	25.001(c)		Gravel Wearing Course compacted to 95% modified AASHTO density (200mm) thick layer (Type 1)	m ³	5010		
	B2			Overhaul on material hauled in excess of 1.0 km				
2.B2.1.2.28	B2	25.018 (a)		Between 1km up to and including 3km	m ³	7780		
2.B2.1.2.29	B2	25.018 (b)		Between 3km up to and including 5km	m ³	3470		
2.B2.1.2.30	B2	25.018 (g)		Distances further than 13Km	m3.km	70140		
	B2			ROAD SIGNS				
	B2			Road sign boards with painted or coloured semi-matt background. Symbols, lettering and borders in semi-matt black or in Class 1 retro-reflective material, where the sign board is constructed from:				
2.B2.1.2.31	B2	25.019(a)		Aluminium sheet (2.0mm thick) - Area not exceeding 2 m ²	m ²	30		
	B2			Extra over item (a) for using:				
2.B2.1.2.32	B2	25.019(b)		i) Background of retro-reflective material Class III (Colto)	m ²	30		
2.B2.1.2.33	B2	25.019(b)		ii) Lettering, symbols, numbers, arrows, emblems and borders of retro-reflective material Class III (Colto)	m ²	30		
	B2			Road sign supports (overhead road sign structures excluded):				
2.B2.1.2.34	B2	25.019(c)		Timber posts	m	120		
2.B2.1.2.35	B2	25.019(d)		Excavation and backfilling for road sign supports (not applicable to kilometre posts)	m ³	11		
2.B2.1.2.36	B2	25.019(e)		Extra over item (d) for cement-treated soil backfill	m ³	11		
2.B2.1.2.37	B2	25.019(f)		Extra over item (d) for rock excavation	m ³	2		
	B2			FINISHING TO SIDES OF ROADS				
2.B2.1.2.38	B2	25.020		Finishing the road and road reserve, including - Single-carriageway road	km	4.8		
	B2			GUARDRAILS				
2.B2.1.2.39	B2	25.021		Guardrails, including for all curved radiuses as per drawings 2C-C5-051 and 2C-C5-052	m	3300		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	B2			TEMPORARY TRAFFIC CONTROL FACILITIES				
	B2			Temporary traffic-control facilities				
2.B2.1.2.40	B2	25.007(a)		Flagmen	sum	1		
2.B2.1.2.41	B2	25.007(b)		Road signs	sum	1		
2.B2.1.2.42	B2	25.007(c)		Flicker lights	sum	1		
2.B2.1.2.43	B2	25.007(d)		Delineators	sum	1		
2.B2.1.2.44	B2	25.007(e)		Barricading	sum	1		
2.B2.1.2.45	B2	25.007(f)		Two-way communication devices	sum	1		
2.B2.1.2.46	B2	25.007(g)		Personnel to manage and maintain temporary traffic-control facilities	sum	1		
2.B2.1.2.47	B2	25.007(h)		All other items not listed above	sum	1		
	B2			STORMWATER DRAINAGE FOR PERMANENT ACCESS ROAD				
	B2			Catchwater Drains				
2.B2.1.2.48	B2	27.001(a)		Natural open earth drain as per drawing 2B-C5-50	m ³	1138		
2.B2.1.2.49	B2	9.001		Excavation in all materials to spoil (excavation for earth channels)	m ³	1138		
2.B2.1.2.50	B2	9.006		Extra-Over items 9.001 to 9.005 for: Hard Excavation (blasting)	m ³	569		
	B2			Overhaul on material hauled in excess of 1.0 km				
2.B2.1.2.51	B2	9.011(a)		a) Between 1km up to and including 3km	m ³	510		
2.B2.1.2.52	B2	9.011(b)		b) Between 3km up to and including 5km	m ³	188		
	B2			Lined Drift				
2.B2.1.2.53	B2	27.001(e)		Construction of Armorflex®180 (or approved equivalent) channel type C complete with geotextile, galvanised wiring and Y-fencing standard, as per drawing 2A-C6-009.	m2	400		
	B2			Bedding for prefabricated culverts				
2.B2.1.2.54	B2	27.003(d)		Concrete encasing	m ³	50		
2.B2.1.2.55	B2	27.003(e)		Cast in-situ concrete floor slabs for portal culverts (including blinding, reinforcement, formwork, joints, etc)	m ³	35		
	B2			Prefabricated Concrete Culverts				
2.B2.1.2.56	B2	27.004(b)		i) Portal culvert (1200mm x 600mm)	m	86		
2.B2.1.2.57	B2	27.004(b)		ii) Portal culvert (1500mm x 1200mm)	m	8		
2.B2.1.2.58	B2	27.004(b)		iii) Portal culvert (1500mm x 1500mm)	m	8		
2.B2.1.2.59	B2	27.004(b)		iv) Portal culvert (2100mm x 2100mm)	m	40		
	B2			Concrete Structures for Drainage Systems				
2.B2.1.2.60	B2	27.006(g)		Headwall and Wingwall structures for pipes and culverts - 1200mm x 600mm Culvert as per drawing 2A-C6-016	No	6		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.B2.1.2.61	B2	27.006(g)		Headwall and Wingwall structures for pipes and culverts - 1500mm x 1200mm Culvert as per drawing 2A-C6-016	No	2		
2.B2.1.2.62	B2	27.006(g)		Headwall and Wingwall structures for pipes and culverts - 1500mm x 1500mm Culvert as per drawing 2A-C6-016	No	2		
2.B2.1.2.63	B2	27.006(g)		Headwall and Wingwall structures for pipes and culverts - 2100mm x 2100mm Culvert as per drawing 2A-C6-016	No	10		
	B2			SLOPE PROTECTION FOR PERMANENT ACCESS ROAD				
	B2			Soil Nails				
2.B2.1.2.64	B2	13.002		6m long fully bonded and un-tensioned 22mm diameter GEWI bars or similar approved, installed at a 20 degree angle to the horizontal, with a maximum working load of 100kN	no	600		
	B2			Construction Of Stone Drain and Erosion Protection				
2.B2.1.2.65	B2	21.001(b)		In all other classes of material	m3	1 694		
2.B2.1.2.66	B2	21.002		Surface preparation for bedding the gabions	m2	3 388		
2.B2.1.2.67	B2	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	10 164		
2.B2.1.2.68	B2	21.003(a)		Galvanised gabions cages (Refer to drawings for dimensions)	m3	3 388		
	B2			Subsoils				
	B2			Perforated flexible drainage pipes				
2.B2.1.2.69	B2	27.004		50mm Pipes laid in permeable sand encasing (encasing elsewhere)	m	200		
2.B2.1.2.70	B2	27.002(a)		Natural permeable sand - plaster sand	m3	2		
2.B2.1.2.71	B2	46.011		Synthetic-fibre filter blanket wrapped around encasing with 100mm side and 100mm end lap, including stitching	m2	100		
	B2			PIPELINE PLATFORM				
	B2			BULK EXCAVATION				
2.B2.1.2.72	B2	9.001		Excavation in all materials to spoil	m ³	5 940		
2.B2.1.2.73	B2	9.007		Extra-Over items 9.001 to 9.005 for: Hard Excavation (by non-explosive means) - Boulder Excavation	m ³	4160		
2.B2.1.2.74	B2	9.006		Extra-Over items 9.001 to 9.005 for: Hard Excavation (blasting)	m3	1 782		
	B2			In situ treatment of foundations:				
2.B2.1.2.75	B2	9.009(b)		In situ treatment by ripping	m3	1685		
2.B2.1.2.76	B2	9.009(c)		In-situ treatment by blasting	m3	2530		
	B2			Overhaul on material hauled in excess of 1.0 km				
2.B2.1.2.77	B2	9.011(a)		Between 1km up to and including 3km	m ³	1 205		
2.B2.1.2.78	B2	15.016(b)		Between 3km up to and including 5km	m ³	1 100		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.B2.1.2.79	B2	9.011(c)		Between 5km up to and including 7km	m ³	3 640		
	B2			EMBANKMENT				
2.B2.1.2.80	B2	15.014(a)		Construction of road embankment, compaction as indicated on the drawings	m ³	15142		
	B2			Overhaul on material hauled in excess of 1.0 km				
2.B2.1.2.81	B2	15.016(a)		Between 1km up to and including 3km	m ³	3680		
2.B2.1.2.82	B2	15.016(b)		Between 3km up to and including 5km	m ³	2029		
2.B2.1.2.83	B2	9.011(c)		Between 5km up to and including 7km	m ³	9434		
	B2			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	B2			Foundation trench excavation and backfilling				
2.B2.1.2.84	B2	21.001(b)		In all other classes of material	m3	325		
2.B2.1.2.85	B2	21.002		Surface preparation for bedding the gabions	m2	650		
2.B2.1.2.86	B2	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	1 950		
2.B2.1.2.87	B2	21.003(a)		Galvanised gabions cages <i>(Refer to drawings for dimensions)</i>	m3	650		
	B2			PART B2.1.2: Permanent access road and pipeline platform <i>(Carried forward to Summary of Bills)</i>				

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
	B2			B2.1.3: Earthworks				
	B2			PART 2.1.3.1 SITE CLEARANCE				
	B2			Clearing				
2.B2.1.3.1.1	B2	7.001(a)		Clearing	ha	1		
2.B2.1.3.1.2	B2	7.001(b)		Removal of boulders	m3	1500		
2.B2.1.3.1.3	B2	7.002		Grubbing and removal of trees of girth up to 1m	ha	1		
2.B2.1.3.1.4	B2	7.003		Grubbing and removal of trees of girth over 1m	No	30		
	B2			Removal of topsoil				
2.B2.1.3.1.5	B2	7.004(b)		For work areas, temporary stockpiling off site	m3	2500		
	B2			Removal of fertile soil				
2.B2.1.3.1.6	B2	7.005(b)		For work areas, to spoil	m3	3500		
	B2			Overhaul				
2.B2.1.3.1.7	B2	7.006(c)		Between 5km up to and including 7km	m3	6000		
2.B2.1.3.1.8	B2	7.009		Mulching	ha	1		
	B2			PART 2.1.3.2 BULK EXCAVATIONS				
	B2			REFER TO DRAWING 2B-C7-303				
2.B2.1.3.2.1	B2	9.003	X	Excavation in all materials to stockpile (Excavation at Diversion Works)	m3	5 000		
2.B2.1.3.2.2	B2	9.003	X	Excavation in all materials to stockpile (Excavation at Low Lift Pumping Station)	m3	6 000		
2.B2.1.3.2.3	B2	9.003	X	Excavation in all materials to stockpile (Excavation at Right Flank Gravity Retaining Wall)	m3	8 000		
	B2			In-situ treatment of foundations				
2.B2.1.3.2.4	B2	9.009(a)		Compaction of in-situ material	m2	3 000		
2.B2.1.3.2.5	B2	9.009(b)		In-situ treatment by ripping	m3	900		
	B2			Overhaul				
2.B2.1.3.2.6	B2	9.011(c)	X	Between 5km up to and including 7km	m3	19 000		
	B2			DEALING WITH WATER For all works included in PART B2, excluding Jet Grouting				
2.B2.1.3.2.7	B2	8.001		Dealing with water	Sum	1		
2.B2.1.3.2.8	B2	8.002		Treatment of water	Sum	1		
2.B2.1.3.2.9	B2	8.003		Water monitoring	Sum	1		
2.B2.1.3.2.10	B2	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	B2			PORTION 2.1.3.3 CONVENTIONAL JET GROUTING AND ANCHORING				
	B2			Setting up of drilling equipment for grout and drainage holes				
2.B2.1.3.3.1	B2	18.001(a)	X	Rotary Percussion Drilling	No	275		
2.B2.1.3.3.2	B2	18.001(b)	X	Rotary Diamond Core Drilling	No	10		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	B2			Drilling of grout and drainage holes				
2.B2.1.3.3.3	B2	18.002(a)	X	Rotary Percussion Drilling in Soil	m	500		
2.B2.1.3.3.4	B2	18.002(b)	X	Rotary Percussion Drilling in Jet Grouted Columns	m	3500		
2.B2.1.3.3.5	B2	18.002(c)	X	Rotary Percussion Drilling in Bedrock	m	640		
2.B2.1.3.3.6	B2	18.002(d)	X	Rotary Diamond Core Drilling in Soil	m	100		
2.B2.1.3.3.7	B2	18.002(e)	X	Rotary Diamond Core Drilling in Jet Grouted Columns	m	300		
2.B2.1.3.3.8	B2	18.002(f)	X	Rotary Diamond Core Drilling in Bedrock	m	300		
	B2			Re-drilling of grouted holes				
2.B2.1.3.3.9	B2	18.003(a)	X	Re-drilling with Rotary Percussion Drilling	m	300		
2.B2.1.3.3.10	B2	18.003(b)	X	Re-drilling with Rotary Diamond Core Drilling	m	300		
2.B2.1.3.3.11	B2	18.007	X	Cavity grouting	m3	75		
	B2			Grouting materials				
2.B2.1.3.3.12	B2	18.009(a)	X	CEM I Class 52.5N or 42.5R (RHPC)	t	30		
2.B2.1.3.3.13	B2	18.009(b)	X	GGCS	t	3		
2.B2.1.3.3.14	B2	18.009(c)	X	Bentonite	t	3		
2.B2.1.3.3.15	B2	18.010	X	Grouting additives	Prov sum	1		8 190.00
	B2			Water pressure tests				
2.B2.1.3.3.16	B2	18.011(a)	X	Five-minute test (Clause 18.8.1)	No	310		
2.B2.1.3.3.17	B2	18.011(c)	X	Comprehensive Lugeon test (Clause 18.8.3)	No	30		
	B2			Sleeve pipes				
2.B2.1.3.3.18	B2	18.014(a)	X	Steel sleeve pipe (diameter specified)	m	50		
2.B2.1.3.3.19	B2	18.014(b)	X	PVC sleeve pipe (diameter specified)	m	50		
2.B2.1.3.3.20	B2	18.015	X	Grout stops	m	25		
	B2			Anti-floatation reinforcement anchors				
	B2			40mm dia GEWI Pile, B500B and S555/700				
2.B2.1.3.3.21	B2	13.006 a)	X	Up to 30m in length (vertical)	No	275		
	B2			DEALING WITH WATER For all works included in PART B2 for Conventional Jet Grouting and Anchoring				
2.B2.1.3.3.22	B2	8.001		Dealing with water	Sum	1		
2.B2.1.3.3.23	B2	8.002		Treatment of water	Sum	1		
2.B2.1.3.3.24	B2	8.003		Water monitoring	Sum	1		
2.B2.1.3.3.25	B2	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	B2			PORTION 2.1.3.4 HAMMERHEAD JET GROUTING				
	B2			Setting up of drilling equipment for grout and drainage holes				
2.B2.1.3.4.1	B2	18.017(a)	X	Rotary Probe Drilling (Conventional Jet Grouting)	No	5 000		
2.B2.1.3.4.2	B2	18.017(b)	X	High Pressure Hammer Action (Jet Grouting)	No	3 500		
	B2			Drilling of grout holes				
2.B2.1.3.4.3	B2	18.018(a)	X	Rotary Probe Drilling in Alluvium	m	50 000		
2.B2.1.3.4.4	B2	18.018(b)	X	High Pressure Hammer Action in Alluvium	m	33 000		
2.B2.1.3.4.5	B2	18.018(c)	X	High Pressure Hammer Action in Cobbles & Boulders ar	m	57 500		
2.B2.1.3.4.6	B2	18.018(d)	X	High Pressure Hammer Action in Bedrock	m	3 000		
	B2			Re-drilling of grouted holes				
2.B2.1.3.4.7	B2	18.019(a)	X	Re-drilling by Rotary Percussion Drilling	m	900		
2.B2.1.3.4.8	B2	18.019(b)	X	Re-drilling of rotary Diamond Core Drilling	m	50		
	B2			Temporary drill hole casings				
2.B2.1.3.4.9	B2	18.020(a)	X	Rotary Percussion holes	m	1 050		
2.B2.1.3.4.10	B2	18.020(b)	X	Rotary Diamond Core holes	m	50		
	B2			Jet grouting				
2.B2.1.3.4.11	B2	18.022(a)	X	Rotary Probe Jet Grouting in Alluvium	m	50 000		
2.B2.1.3.4.12	B2	18.022(b)	X	High Pressure Hammer Action Jet Grouting in Alluvium, Cobbles & Boulders and Weathered Rock	m	90 500		
2.B2.1.3.4.13	B2	18.022(c)	X	High Pressure Hammer Action Jet Grouting in Bedrock	m	3 000		
	B2			Grouting materials				
2.B2.1.3.4.14	B2	18.025(a)	X	CEM I Class 52.5N or 42.5R (RHPC)	t	30 000		
2.B2.1.3.4.15	B2	18.025(b)	X	GGCS	t	3 000		
2.B2.1.3.4.16	B2	18.025(c)	X	Bentonite	t	3 000		
2.B2.1.3.4.17	B2	18.026	X	Grouting additives	Prov sum	1		8 188 925.00
2.B2.1.3.4.18	B2	9.001	X	Handling and disposal of Jet grouting residu	m3	50 000		
				Overhaul				
2.B2.1.3.4.19	B1	9.011(b)		Between 3 km up to and including 5 km	m3	50000		
	B2			DEALING WITH WATER For all works included in PART B2 for Hammerhead Jet Grouting				
2.B2.1.3.4.20	B2	8.001		Dealing with water	Sum	1		
2.B2.1.3.4.21	B2	8.002		Treatment of water	Sum	1		
2.B2.1.3.4.22	B2	8.003		Water monitoring	Sum	1		
2.B2.1.3.4.23	B2	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	B2			PART B2.1.3: Earthworks (Carried forward to Summary of Bills)				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	B2			PART B2.1.4: Pump station structures and channels				
	B2			PART B2.1.4.1: EARTHWORKS				
	B2			EXCAVATIONS TO STOCKPILE				
2.B2.1.4.1.1	B2	9.003		Trenches	m3	50		
2.B2.1.4.1.2	B2	9.003		Bases and foundations	m3	25		
	B2			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.B2.1.4.1.3	B2	15.014(a)	X	Structure backfilling from stockpile compacted to 93% MOD AASHTO around Low Lift Pumping Station, Diversion Works, Retaining Wall and for Terrace Construction. See dwg 2B-C7-507	m3	46 425		
	B2			BACKFILLING AND BEDDING				
	B2			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	B2			Provision of bed material				
2.B2.1.4.1.4	B2	15.003(d)		Material with screening from borrow pits	m3	40		
	B2			Provision of bedding cradle material				
2.B2.1.4.1.5	B2	15.004(d)		Material with screening from borrow pits	m3	70		
	B2			Provision of selected fill blanket				
2.B2.1.4.1.6	B2	15.006(d)		Material with screening from borrow pits	m3	215		
	B2			Provision of main backfill material				
2.B2.1.4.1.7	B2	15.007(b)		Material with screening from borrow pits	m3	2750		
	B2			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL (alongside concrete structure)				
2.B2.1.4.1.8	B2	15.001		Bed material	m3	40		
2.B2.1.4.1.9	B2	15.001		Bedding cradle	m3	70		
2.B2.1.4.1.10	B2	15.001		Selected fill blanket	m3	215		
2.B2.1.4.1.11	B2	15.001		Main backfill	m3	2750		
	B2			Overhaul				
2.B2.1.4.1.12	B2	15.016(c)		Between 5km up to and including 7km	m3	49 500		
	B2			SOIL POISONING				
2.B2.1.4.1.13	B2	46.011		Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming (Supply of herbicide and ant poison shall be paid for in the provisional sums)	m2	700		
2.B2.1.4.1.14	B2	46.011		Ditto, but to bottoms and sides of trenches etc	m2	300		
	B2			PART B2.1.4.2: CONCRETE WORKS (STRUCTURAL)				
	B2			ROUGH FORMWORK				
	B2			Vertical surfaces				
	B2			Sides of floor slab				
2.B2.1.4.2.1	B2	20.001		Diversion Works	m2	210		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	B2			Sides of walls up to 5m (straight)				
2.B2.1.4.2.2	B2	20.001		Low Lift Pumping Station	m2	575		
2.B2.1.4.2.3	B2	20.001		Diversion Works	m2	550		
2.B2.1.4.2.4	B2	20.001		Right Flank Retaining Walls Vertical	m2	803		
2.B2.1.4.2.5	B2	20.001		Right Flank Retaining Walls Sloping between 10 and 85 degrees	m2	535		
	B2			Sides of walls up to 5m (curved)				
2.B2.1.4.2.6	B2	20.002		Right Flank Retaining Walls Vertical (up to radius 20m)	m2	126		
2.B2.1.4.2.7	B2	20.001		Right Flank Retaining Walls Sloping between 10 and 85 degrees	m2	48		
	B2			Sides of walls between 5-10m (straight)				
2.B2.1.4.2.8	B2	20.001		Low Lift Pumping Station	m2	469		
2.B2.1.4.2.9	B2	20.001		Diversion Works	m2	550		
2.B2.1.4.2.10	B2	20.001		Right Flank Retaining Walls Vertical	m2	1 305		
2.B2.1.4.2.11	B2	20.001		Right Flank Retaining Walls Sloping between 10 and 85 degrees	m2	920		
	B2			Sides of walls between 5-10m (curved)				
2.B2.1.4.2.12	B2	20.001		Right Flank Retaining Walls Sloping between 10 and 85 degrees	m2	192		
	B2			Sides of walls above 10m (straight)				
2.B2.1.4.2.13	B2	20.001		Diversion Works	m2	495		
	B2			SMOOTH FORMWORK				
	B2			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
	B2			Sides of walls up to 5m (straight)				
2.B2.1.4.2.14	B2	20.002		Low Lift Pumping Station	m2	570		
2.B2.1.4.2.15	B2	20.002		Sides of plinths	m2	137		
2.B2.1.4.2.16	B2	20.002		Sides of mass castellation	m2	90		
2.B2.1.4.2.17	B2	20.002		Diversion Works	m2	4 750		
2.B2.1.4.2.18	B2	20.002		Right Flank Retaining Walls Vertical	m2	102		
	B2			Sides of walls up to 5m (curved)				
2.B2.1.4.2.19	B2	20.002		Diversion Works (up to radius 15m)	m2	350		
	B2			Sides of walls between 5-10m (straight)				
2.B2.1.4.2.20	B2	20.002		Low Lift Pumping Station	m2	570		
2.B2.1.4.2.21	B2	20.002		Sides of mass castellation	m2	90		
2.B2.1.4.2.22	B2	20.002		Diversion Works	m2	4 750		
2.B2.1.4.2.23	B2	20.002		Right Flank Retaining Walls Vertical	m2	355		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	B2			Sides of walls between 5-10m (curved)				
2.B2.1.4.2.24	B2	20.002		Diversion Works	m2	225		
2.B2.1.4.2.25	B2	20.002		Right Flank Retaining Walls Vertical	m2	31		
	B2			Sides of walls above 10m (straight)				
2.B2.1.4.2.26	B2	20.002		Low Lift Pumping Station	m2	685		
2.B2.1.4.2.27	B2	20.002		Sides of mass castellation	m2	108		
2.B2.1.4.2.28	B2	20.002		Diversion Works	m2	4 970		
2.B2.1.4.2.29	B2	20.002		Right Flank Retaining Walls Vertical	m2	2 280		
	B2			Sides of walls above 10m (curved)				
2.B2.1.4.2.30	B2	20.002		Diversion Works	m2	220		
2.B2.1.4.2.31	B2	20.002		Right Flank Retaining Walls Vertical	m2	493		
	B2			Columns and stubs				
2.B2.1.4.2.32	B2	20.002		Low Lift Pumping Station	m2	500		
2.B2.1.4.2.33	B2	20.002		Diversion Works	m2	325		
2.B2.1.4.2.34	B2	20.002		Column end at Boulder trap retaining wall (Diameter 1600mm, height up to 6600mm)	m2	25		
	B2			To sides of beams				
2.B2.1.4.2.35	B2	20.002		Low Lift Pumping Station	m2	360		
2.B2.1.4.2.36	B2	20.002		Sides of upstands and parapets (beams)	m2	65		
2.B2.1.4.2.37	B2	20.002		Diversion Works	m2	300		
	B2			To soffits of beams				
2.B2.1.4.2.38	B2	20.002		Low Lift Pumping Station	m2	110		
2.B2.1.4.2.39	B2	20.002		Diversion Works	m2	50		
	B2			Soffits of slabs				
2.B2.1.4.2.40	B2	20.002		Low Lift Pumping Station	m2	150		
2.B2.1.4.2.41	B2	20.002		Diversion Works	m2	750		
	B2			Plinths & channel in screeds				
2.B2.1.4.2.42	B2	20.002		Low Lift Pumping Station	m2	170		
	B2			NARROW WIDTHS				
	B2			Rough formwork				
2.B2.1.4.2.43	B2	20.005		100mm to side of aprons	m	110		
	B2			Smooth formwork				
2.B2.1.4.2.44	B2	20.005		250mm to side of suspended slabs	m	40		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	B2			BOX OUT/FORM VOIDS				
	B2			Small, circular, of diameter up to and including 0.35 m				
2.B2.1.4.2.45	B2	20.006(a)		i) 0 m deep to 0.5 m deep	no	5		
2.B2.1.4.2.46	B2	20.006(a)		ii) 0.5 m deep to 1.0 m deep	no	24		
2.B2.1.4.2.47	B2	20.006(a)		iii) 1.0 m deep to 1.5 m deep	no	20		
2.B2.1.4.2.48	B2	20.006(a)		iv) 1.5 m deep to 2.0 m deep	no	1		
	B2			Small, other than circular, areas up to and including 0,1 m²				
2.B2.1.4.2.49	B2	20.006(b)		i) 0 m deep to 0.5 m deep	no	10		
2.B2.1.4.2.50	B2	20.006(b)		ii) 0.5 m deep to 1.0 m deep	no	10		
2.B2.1.4.2.51	B2	20.006(b)		iii) 1.0 m deep to 1.5 m deep	no	5		
2.B2.1.4.2.52	B2	20.006(b)		iv) 1.5 m deep to 2.0 m deep	no	1		
	B2			Large, circular, of diameter over 0.35 m up to and including 0.7 m				
2.B2.1.4.2.53	B2	20.006(c)		i) 0 m deep to 0.5 m deep	no	10		
2.B2.1.4.2.54	B2	20.006(c)		ii) 0.5 m deep to 1.0 m deep	no	10		
2.B2.1.4.2.55	B2	20.006(c)		iii) 1.0 m deep to 1.5 m deep	no	5		
2.B2.1.4.2.56	B2	20.006(c)		iv) 1.5 m deep to 2.0 m deep	no	1		
	B2			Large, other than circular, areas over 5 m2 and up to and including 15 m²				
2.B2.1.4.2.57	B2	20.006(d)		i) 0 m deep to 0.5 m deep	no	10		
2.B2.1.4.2.58	B2	20.006(d)		ii) 0.5 m deep to 1.0 m deep	no	10		
2.B2.1.4.2.59	B2	20.006(d)		iii) 1.0 m deep to 1.5 m deep	no	5		
2.B2.1.4.2.60	B2	20.006(d)		iv) 1.5 m deep to 2.0 m deep	no	1		
	B2			REINFORCEMENT				
	B2			Steel bars irrespective of grade and diameter				
	B2			Low lift pumping station				
2.B2.1.4.2.61	B2	20.007(a)		Floor	t	288		
2.B2.1.4.2.62	B2	20.007(a)		Walls	t	322		
2.B2.1.4.2.63	B2	20.007(a)		Roof slabs	t	8		
2.B2.1.4.2.64	B2	20.007(a)		Columns and beams	t	23		
2.B2.1.4.2.65	B2	20.007(a)		Plinth	t	26		
	B2			Diversion Works				
2.B2.1.4.2.66	B2	20.007(a)		Floor	t	345		
2.B2.1.4.2.67	B2	20.007(a)		Walls	t	460		
2.B2.1.4.2.68	B2	20.007(a)		Slabs and columns	t	230		
	B2			Retaining Walls				
2.B2.1.4.2.69	B2	20.007(a)		Right Flank Retaining Wall	t	228		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	B2			Extra over for bars of nominal sizes larger than 25mm				
2.B2.1.4.2.70	B2	20.007(b)		Low lift pumping station	t	32		
2.B2.1.4.2.71	B2	20.007(b)		Diversion works	t	345		
2.B2.1.4.2.72	B2	20.007(b)		Right Flank Retaining Wall	t	60		
	B2			Type 395 high-tensile welded mesh				
2.B2.1.4.2.73	B2	20.008		Ramps and surface beds	m2	50		
	B2			CONCRETE				
	B2			PRESCRIBED MIX				
	B2			CONCRETE 35MPa/19mm (Water retaining) in:				
	B2			Low lift pumping station				
2.B2.1.4.2.74	B2	20.010		Floor	m3	990		
2.B2.1.4.2.75	B2	20.010		Walls	m3	1400		
2.B2.1.4.2.76	B2	20.010		Roof slabs	m3	35		
2.B2.1.4.2.77	B2	20.010		Columns and beams	m3	120		
2.B2.1.4.2.78	B2	20.010		Plinths	m3	132		
	B2			Diversion works				
2.B2.1.4.2.79	B2	20.010	X	Floor	m3	1075		
2.B2.1.4.2.80	B2	20.010	X	Walls	m3	2050		
2.B2.1.4.2.81	B2	20.010	X	Slabs, beams and columns	m3	980		
	B2			Retaining Wall				
2.B2.1.4.2.82	B2	20.010	X	Right flank retaining wall	m3	990		
	B2			CONCRETE 15MPa (56 days)/38mm F60 in:				
2.B2.1.4.2.83	B2	20.010	X	Low Lift Pump Station: Castellation	m3	750		
2.B2.1.4.2.84	B2	20.010	X	Right flank retaining wall	m3	13805		
	B2			CONCRETE 15MPa/19mm in:				
	B2			Blinding layer of 50mm minimum thickness including levelling and floating.				
2.B2.1.4.2.85	B2	20.011(a)		Low Lift Pumping Station	m2	80		
	B2			STRENGTH CONCRETE				
	B2			Mass concrete grade 15MPa/19mm				
2.B2.1.4.2.86	B2	20.011(b)		Low Lift Pump Station: levelling concrete	m3	175		
2.B2.1.4.2.87	B2	20.011(b)		Diversion Works foundation levelling concrete	m3	330		
2.B2.1.4.2.88	B2	20.011(b)		Roof topping	m3	25		
2.B2.1.4.2.89	B2	20.011(b)		Diversion works secondary concrete	m3	1 056		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	B2			STRENGTH OF CONCRETE, 30MPa/19mm in:				
2.B2.1.4.2.90	B2	20.012		Ramps	m3	15		
2.B2.1.4.2.91	B2	20.012		Aprons	m3	15		
2.B2.1.4.2.92	B2	20.012		Basement Topping	m3	350		
	B2			UNFORMED SURFACE FINISHES				
	B2			Wood floated finish				
	B2			Low Lift Pumping Station				
2.B2.1.4.2.93	B2	20.013(a)		Basement floor	m2	500		
2.B2.1.4.2.94	B2	20.013(a)		Trenches	m2	100		
2.B2.1.4.2.95	B2	20.013(a)		Ramps and aprons	m2	150		
2.B2.1.4.2.96	B2	20.013(a)		Roof and roof topping	m2	150		
	B2			Diversion Works				
2.B2.1.4.2.97	B2	20.013(a)		Floor	m2	1 180		
	B2			Steel floated finish				
	B2			Low Lift Pumping Station				
2.B2.1.4.2.98	B2	20.013(b)		Surface beds	m2	560		
2.B2.1.4.2.99	B2	20.013(b)		Top of walls	m2	90		
2.B2.1.4.2.100	B2	20.013(b)		Top of beams	m2	115		
	B2			Diversion Works				
2.B2.1.4.2.101	B2	20.013(b)		Diversion Works	m2	250		
2.B2.1.4.2.102	B2	20.013(b)		Toppings	m2	1 200		
2.B2.1.4.2.103	B2	20.013(b)		Slabs and walkways	m2	600		
	B2			Power-floated finish				
2.B2.1.4.2.104	B2	20.013(c)		Low lift pumping station basement floor	m2	500		
	B2			AGGREGATE				
2.B2.1.4.2.105	B2	20.014		19mm Crushed Stone (Ballast) on roof	m3	10		
2.B2.1.4.2.106	B2	20.014		Basement Fill Sand with 2% Cement	m3	50		
	B2			JOINTS				
2.B2.1.4.2.107	B2	20.016		75mm deep x 10mm wide expansion joint including shutter, 10mm soft board joint filler and sealant per detail C4 drawing 2A-C6-002	m	75		
2.B2.1.4.2.108	B2	20.016		Saw cut joint consisting of 2 cuts, 3mm wide x 60mm deep and 6mm wide x 15mm deep with bond breaker strap, backing cord and polyurethane sealant as detailed on drawing (Detail as per the drawing 2A-C6-002) for Low Lift Pumping Station	m	200		
2.B2.1.4.2.109	B2	20.016		Isolation joint consisting of 150mm wide, 10mm thick closed cell polyethylene sealant with 10mm x 10mm tear off strip and 10mm x 10mm polyurethane sealant as per drawing 2A-C6-002	m	320		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.B2.1.4.2.110	B2	20.016		Joint type W1 per drawing 2B-C7-450 including 250mm wide centre bulb PVC waterstop, joints prefabricated. Shutters measured separately	m	225		
	B2			PRECAST ELEMENTS				
	B2			Trench Covers				
2.B2.1.4.2.111	B2	20.017		1 000mm x 840mm x 250mm concrete slabs with 0.21m ³ 30MPa/19mm Strength Concrete and 60kg reinforcement, smooth off shutter vertical finishes to sides, steel floated surface finish to unformed surface	No	30		
	B2			GROUTING				
2.B2.1.4.2.112	B2	20.018(a)		Under bases	m3	1		
	B2			Beam over door per drawing 2A-C6-004				
2.B2.1.4.2.113	B2	20.021(c)		330mm wide	m	5		
2.B2.1.4.2.114	B2	20.021(c)		230mm wide	m	20		
	B2			PART B2.1.4.3 BUILDING WORK				
	B2			BRICKWORK				
	B2			BRICKWORK OF NFX BRICKS (14 MPA NOMINAL COMPRESSIVE STRENGTH) IN CLASS I MORTAR				
2.B2.1.4.3.1	B2	46.004(a)		One brick walls for trenches (230mm thick)	m2	50		
2.B2.1.4.3.2	B2	46.004(a)		One brick walls for superstructures (230mm thick)	m2	350		
2.B2.1.4.3.3	B2	46.004(a)		330 cavity wall including vertical twist plate ties, perps and concrete fillet	m2	1650		
	B2			FACE BRICKWORK				
	B2			Face brickwork pointed with recessed horizontal and vertical joints. The cost for the supply and delivery of facebrick shall be paid for in Provisional Sums. All other costs related to the installation of the facebrick shall be included in this item (includes all other material). Samples of facebrick to be approved by the Engineer/Architect.				
2.B2.1.4.3.4	B2	46.004(h)		Extra over brickwork for face brickwork	m2	1 675		
2.B2.1.4.3.5	B2	46.004(h)		Extra over brickwork for lintel bands	m	20		
	B2			MASONRY REINFORCING				
2.B2.1.4.3.6	B2	46.004(f)		Fabric reinforcement and building into joints of one brick walls	m	1 675		
2.B2.1.4.3.7	B2	46.004(f)		Fabric reinforcement and building into joints of 330mm wide brick walls	m	6 400		
	B2			IN-SITU STONE CLADDING				
2.B2.1.4.3.8	B2	46.004(g)		Stone cladding sourced from Balancing Reservoir site	m2	550		
	B2			PRESTRESSED FABRICATED LINTELS				
2.B2.1.4.3.9	B2	46.003(a)		110 x 75mm Lintels	m	80		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	B2			Manufacture (or supply) and erect precast elements				
	B2			Modcon precast concrete solutions finished smooth on exposed surfaces bedded and jointed in class II mortar and pointed on all exposed surfaces. Or equal approved				
2.B2.1.4.3.10	B2	20.017		Type 006, precast concrete coping, 250mm wide x 160mm high x 96mm to tapered edge.	m	240		
2.B2.1.4.3.11	B2	20.017		Type 015, precast concrete coping, 380mm wide x 100mm high x 75mm to tapered edge.	m	40		
	B2			MOVEMENT JOINTS ETC				
	B2			Vertical expansion joints with closed cell polyethylene strip, and polyurethane sealant with 32mm x 600mm long Joluka column ties spaced every 3 brick courses between brick walls and concrete columns, complete				
2.B2.1.4.3.12	B2	20.016		330mm Masonry Wall 10mm x 300mm closed cell polyethylene strip and polyurethane sealant with 32mm x 600mm long Joluka column ties spaced every 3 brick courses	m	480		
2.B2.1.4.3.13	B2	20.016		220mm Masonry Wall 10mm x 190mm closed cell polyethylene strip and polyurethane sealant with 2 off 32mm x 600mm long Joluka column ties spaced every 3 brick courses	m	22		
	B2			Horizontal expansion joints with closed cell polyethylene strip and polyurethane sealant between brick walls and concrete slabs, complete				
2.B2.1.4.3.14	B2	20.016		330mm Masonry Wall 10mm x 300mm closed cell polyethylene strip and polyurethane sealant	m	340		
2.B2.1.4.3.15	B2	20.016		220mm Masonry Wall 10mm x 190mm closed cell polyethylene strip and polyurethane sealant	m	170		
	B2			WATERPROOFING				
2.B2.1.4.3.16	B2	46.011		Approved polyurethane sealant to roof and parapets	m2	140		
2.B2.1.4.3.17	B2	46.011		Water permeable fabric under roof ballast	m2	140		
	B2			DAMPPROOFING OF WALLS AND FLOORS				
	B2			375 Micron 'Consol Plastics Brikgrip DPC' dampproofing below walls, sills, etc. Or equal approved				
2.B2.1.4.3.18	B2	46.004(c)		330 thick walls	m	470		
2.B2.1.4.3.19	B2	46.004(c)		230mm Thick walls	m	90		
	B2			250 Micron 'Gunplas USB Green' dampproofing under solid floors. Or equal approved				
2.B2.1.4.3.20	B2	46.004(c)		Under floors	m2	700		
	B2			SEALING STRIPS, JOINT SEALANT, ETC				
	B2			Polyurethane sealant around pipe				
2.B2.1.4.3.21	B2	46.011		10mm bead in concrete	m	120		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	B2			ROOF COVERINGS ETC				
	B2			ROOF SHEETING AND SIDE CLADDING				
	B2			0.58mm Concealed Fix Klip-Lok 700, heavy industrial galvanised Z275 spelter sheeting. The profile shall be roll-formed in continuous lengths from certified steel complying with ASTM 446 Grade E (3t). Or equal approved				
2.B2.1.4.3.22	B2	46.005(f)		Roof sheeting. Continuous length. Classicoat finish to one side	m2	385		
2.B2.1.4.3.23	B2	46.005(f)		Roof sheeting. Continuous length, curved to radius of R = 25m. Classicoat finish to one side	m2	800		
2.B2.1.4.3.24	B2	46.005(f)		Side cladding, installed with flutes horizontally, including raking and cutting to follow roof profile. Classicoat finish to one side	m2	410		
	B2			Modek Kliplok 700 profile 1,25mm thick clear, Code P120 polycarbonate translucent sheeting. Fastened to supports through each crown of the profile and side stitched to adjacent sheets. Or equal approved				
2.B2.1.4.3.25	B2	46.005(f)		Side cladding	m2	92		
	B2			Flashing, 0.8 mm thick galvanised Z275 spelter, Classicoat finish to one side. Or equal approved				
2.B2.1.4.3.26	B2	46.005(f)		Apex flashing 550mm girth 3 times bent and notched on site to suit roof profile	m	75		
2.B2.1.4.3.27	B2	46.005(f)		Curved barge trim 580mm girth 3 times bent to a radius of R = 25m	m	40		
2.B2.1.4.3.28	B2	46.005(f)		Straight barge trim 580mm girth 3 times bent	m	20		
2.B2.1.4.3.29	B2	46.005(f)		Vertical straight barge trim 580mm girth 3 times bent	m	20		
2.B2.1.4.3.30	B2	46.005(f)		Gutter 1800mm girth 4 times bent . Thickness/rainwater	m	140		
2.B2.1.4.3.31	B2	46.005(f)		Drip flashing 200mm girth	m	140		
2.B2.1.4.3.32	B2	46.005(f)		Headwall flashing, including counter flashing	m	70		
2.B2.1.4.3.33	B2	46.005(f)		Sloping and vertical sidewall flashing, including counter flashing	m	10		
2.B2.1.4.3.34	B2	46.005(f)		Curved sidewall flashing, including counter flashing	m	12		
2.B2.1.4.3.35	B2	46.005(f)		Edge strip closers to the bottom of side cladding	m	180		
	B2			Insulation				
	B2			On concrete slabs:				
2.B2.1.4.3.36	B2	46.011		100mm ISO Board high density 34-36kg/m3 rigid extruded polystyrene with tongue and groove joints, or equal approved	m2	110		
	B2			Under roof sheeting				
2.B2.1.4.3.37	B2	46.011		ISO Board high density 34-36kg/m3 rigid extruded polystyrene 100% closed cell insulation board of 50mm thickness and 600mm wide (with polyethylene treated kraft slip sheet factory applied to upper surface), with tongue and groove joints, over purlin under roof sheeting or cladding installation. Or equal approved.	m2	1 185		
2.B2.1.4.3.38	B2	46.011		Ditto item above, fixed to curved roof (R = 25m)	m2	800		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	B2			CARPENTRY AND JOINERY				
	B2			DOORS ETC				
	B2			REFER TO DRAWING NUMBERS 2B-C9-125				
2.B2.1.4.3.39	B2	46.005(c) & 46.006(a)		Single Solid flush timber door, with WC type locking mechanism complete to WC door only as per drawing, size 900 x 2400 high	No	1		
2.B2.1.4.3.40	B2	46.005(c) & 46.006(a)		Single Solid flush timber door, 2hr fire rated, including handles, 4 lever cylinder lock incl master key with a escutcheon plate, sundry items, striking plates, as per drawing, size 900 x 2400 high	No	7		
2.B2.1.4.3.41	B2	46.005(c) & 46.006(a)		External Quality, Single Solid flush timber door, painted, including handles, 4 lever cylinder lock incl master key with a escutcheon plate, sundry items, striking plates, weather bars as per drawing, size 900 x 2400 high	No	4		
2.B2.1.4.3.42	B2	46.005(c) & 46.006(a)		Double Solid flush timber door, 2hr fire rated complete, including handles, 4 lever cylinder lock incl master key with a escutcheon plate (including two barrel bolts), sundry items, striking plates, etc as per drawing, size 1600 x 2700 high	No	4		
2.B2.1.4.3.43	B2	46.005(c) & 46.006(a)		External Quality , Double Solid flush timber door, complete, including ventilator inserts, handles, 4 lever cylinder lock incl master key with a escutcheon plate (including two barrel bolts), sundry items, striking plates, weather bars, etc as per drawing, size 1600 x 2400 high	No	5		
	B2			CEILINGS, PARTITIONS AND ACCESS FLOORING				
	B2			Ceilings				
2.B2.1.4.3.44	B2	46.005(e)		12mm flush plaster board ceiling fixed to suspended metal frame. Not exceeding 1m from the underside of the concrete suspended slab (control room & WC only)	m2	25		
	B2			FLOOR COVERINGS, WALL LININGS, ETC.				
	B2			Industrial non-slip coating (Light Trafficable)				
2.B2.1.4.3.45	B2	46.011		Ground Floor Slab Equipment Rooms	m2	550		
	B2			Industrial non-slip coating (Heavy Trafficable)				
2.B2.1.4.3.46	B2	46.011		Loading Bay and control room roof	m2	150		
	B2			IRONMONGERY				
2.B2.1.4.3.47	B2	46.006(a)		Door Closer: Dorma TS83	No	2		
2.B2.1.4.3.48	B2	46.006(a)		Magnetic door lock (300kg) to be incorporated into the biometric system	no	2		
	B2			Catches, Cabin Hooks, Etc				
2.B2.1.4.3.49	B2	46.006(a)		150mm SC Cabin hook and eye with eye fixed to aluminium and including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2		
	B2			Bathroom Fittings				
2.B2.1.4.3.50	B2	46.006(a)		"Franke STRX672 Stratos" automatic dispensing toilet roll holder. Or equal approved	No	1		
2.B2.1.4.3.51	B2	46.006(a)		"Franke STRX618 Stratos" o.e.a. soap dispenser. Or equal approved	No	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown Reference	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.B2.1.4.3.52	B2	46.006(a)		"Franke STRX600 Stratos" paper towel dispenser. Or equal approved	No	1		
2.B2.1.4.3.53	B2	46.006(a)		"Franke STRX605 Stratos" o.e.a. waste bin. Or equal approved	No	1		
	B2			Mirrors, etc				
	B2			Silvered float glass copper backed mirrors with polished edges, holed for and fixed with round nose chromium plated mirror screws with rubber buffers to plugs in brickwork or concrete				
2.B2.1.4.3.54	B2	46.011		600mm x 900mm bevelled all round 'GG' with four screws	No	1		
	B2			Signage				
	B2			General information signs				
2.B2.1.4.3.55	B2	46.006(a)		290 x 290mm Standard PVC safety signs to comply with SANS 1186	No	10		
	B2			Pinning Boards, Writing Boards, Projection Screens, Etc				
2.B2.1.4.3.56	B2	46.006(a)		Vitrex "Model 2500 o.e.a Wall mounted vertical sliding unit width as required, comprising two vitreous enamelled whiteboards, each independently suspended to slide vertically and supplied complete with one pair of ref. no 2510 double aluminium columns, 2900mm high, all necessary sliding gear, chalkrails and fixing components, all fixed in position to brickwork and floor. Or equal approved	No	1		
	B2			STRUCTURAL STEEL				
	B2			STRUCTURAL STEELWORK, CLADDING AND INSULATION				
	B2			SUPPLY, FABRICATION AND CORROSION PROTECTION				
	B2			Supply, fabrication and corrosion protection of steelwork complete with all the necessary cleats, brackets, gussets, packs, etc., including providing steel grade test certificates as follows, using steel to SANS 1431 Grade 350 W				
2.B2.1.4.3.57	B2	24.001(a) & 24.011		Roof painted two pack Epoxy plus top coat of recoatable Polyurethane per Specification 37	t	30		
2.B2.1.4.3.58	B2	24.001(a) & 24.011		Galvanised shelf angle per drawing 2A-C6-005	m	115		
2.B2.1.4.3.59	B2	24.001(a) & 24.011		Walkways, stairs and landings (galv)	t	3		
	B2			Using commercial grade steel (minimum yield strength 225 MPa)				
2.B2.1.4.3.60	B2	24.001(a) & 24.011		Roof	t	5		
	B2			Extra over for non-destructive testing				
2.B2.1.4.3.61	B2	24.001(b)		Roof	t	5		
2.B2.1.4.3.62	B2	24.001(b)		Walkways, stairs and landings	t	1		
	B2			Extra over for curvature of structural steel sections				
2.B2.1.4.3.63	B2	24.001(c)		Roof	m	150		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	B2			Delivery				
2.B2.1.4.3.64	B2	24.002(b)		Extra over for delivery to site of steelwork (abnormal loads)	t	15		
	B2			Erection on site				
2.B2.1.4.3.65	B2	24.003		Roof	t	35		
2.B2.1.4.3.66	B2	24.003		Walkways, stairs and landings	t	3		
	B2			Bolts (Grade 8.8) Supply (Galvanised)				
2.B2.1.4.3.67	B2	24.004 & 24.011		20mm Dia	t	0.35		
	B2			SUNDRY STEELWORK ITEMS COMPLETE, INSTALLED AND CORROSION PROTECTED (HOT DIP GALVANISED)				
	B2			Mild steel stanchions, ball type welded construction, 1050mm high, stanchion OD 42.9mm, 2.5mm wall thickness. Mentis Sales Inter-Link Handrail System or similar approved.				
2.B2.1.4.3.68	B2	24.007(b) & 24.011		Top mounted. Type MT90	m	100		
2.B2.1.4.3.69	B2	24.007(b) & 24.011		Top mounted, inclined. Type MST	m	40		
2.B2.1.4.3.70	B2	24.007(b) & 24.011		Side mounted, inclined. Type MST 30/35/40/45	m	40		
2.B2.1.4.3.71	B2	24.007(c) & 24.011		Shaped ends	no	40		
	B2			Access ladders, including SS steel mounting bolts/anchors.				
2.B2.1.4.3.72	B2	24.008 & 24.011		External and internal, Dwg Ref 2A-C6-003	t	3		
	B2			STAIRTREADS INCLUDING BOLTS, WASHERS AND NUTS. MENTIS SALES, RECTAGRID & GRIPWELD GRATING OR SIMILAR APPROVED. (HOT DIP GALVANISED)				
2.B2.1.4.3.73	B2	24.009(a) & 24.011		Stair treads for steel stair case, (1200 x 245mm) including bolts, washers and nuts. Mentis sales, Rectagrid (RS40) & Gripweld grating or similar approved.	m2	40		
	B2			Cast in frames, grids and covers				
2.B2.1.4.3.74	B2	24.009(a) & 24.011		Open grid flooring, 30 x 4.5mm bearer bars, banded on all sides. Rectagrid RS40 or similar approved.	m2	20		
2.B2.1.4.3.75	B2	24.009(b) & 24.011		VASTRAP ® flooring, 4.5mm thick	m2	20		
2.B2.1.4.3.76	B2	24.009(c) & 24.011		45 x 45 x 5mm Angle frame as per drawing 2A-C6-004 Detail C2	m	150		
	B2			METALWORK				
	B2			REFER TO DRAWING NUMBERS 2B-C9-125				
	B2			Steel windows, doors, etc				
2.B2.1.4.3.77	B2	46.005(b)		Solid Panel roller shutter door, manually operated , roller mechanism in overhead mild steel box primed and painted, padlock locking to external, size 4000 x 4500mm high (RS1). (Colour to the Architect/Engineer's approval)	No	2		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	B2			PRESSED STEEL DOOR FRAMES				
	B2			1,6mm single rebated door frame SABS approved suitable for one brickwall to suite left or right hand door complete with standard butt hinges, brace jambs with timber when building in, fixing lugs must be built into brickwork and frame filled up with cement mortar .				
2.B2.1.4.3.78	B2	46.005(c)		Door frame in 220mm wide wall for door 813 x 2332mm high as detailed on drawing no 2B-C9-125	No	12		
2.B2.1.4.3.79	B2	46.005(c)		Door frame in 220mm wide wall for door 1515 x 2620mm high as detailed on drawing no 2B-C9-125 .	No	1		
2.B2.1.4.3.80	B2	46.005(c)		Door frame in 330mm wide wall for door 1515 x 2620mm high as detailed on drawing no 2B-C9-125 .	No	8		
	B2			Aluminium windows, doors, etc				
2.B2.1.4.3.81	B2	46.006(b)		Purpose made window including double glazing, size 1200 x 1200mm high (WG2)	No	1		
	B2			Louvres				
2.B2.1.4.3.82	B2	46.011 & 24.011		1m high x 1.2m wide 3CR12 louvres per dwg no 86490/83, complete (Galvanised)	No	6		
	B2			PLASTERING				
	B2			SCREEDS				
	B2			Granolithic screed				
2.B2.1.4.3.83	B2	46.007(b)		i) 50mm Thick surface hardened granolithic screed	m2	1 270		
	B2			INTERNAL PLASTER				
	B2			Cement plaster steel trowelled, on brickwork				
2.B2.1.4.3.84	B2	46.007(a)		On walls	m2	2 700		
2.B2.1.4.3.85	B2	46.007(a)		To slab soffit	m2	150		
	B2			TILING				
	B2			WALL TILING				
	B2			Approved glazed ceramic tiles fixed with approved waterproof adhesive to plaster and flush pointed with approved grout compound (plaster elsewhere). Colour of the tiles to be approved (PC sum of R300 per m² - Budgetary allowance per a m² for tiles)				
2.B2.1.4.3.86	B2	46.007(d)		On walls	m2	20		
2.B2.1.4.3.87	B2	46.007(d)		On floors	m2	22		
2.B2.1.4.3.88	B2	46.007(d)		On narrow widths for skirting	m2	5		
	B2			Genesis				
2.B2.1.4.3.89	B2	46.011		ESA O60 PVC tile edge trim to top and side edges of wall tiling	m	20		
	B2			Dividing Strips				
2.B2.1.4.3.90	B2	46.011		30 x 3mm Flat dividing strip embedded in floor	m	35		
	B2			PLUMBING AND DRAINAGE				
2.B2.1.4.3.91	B2	46.008(b)		Plumbing and drainage installed complete as per drawing 2B-C9-100 and 101	Sum	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	B2			SANITARY FITTINGS				
	B2			All fittings butting up against wall or floor finishes are to be sealed with an approved silicone sealant to the Engineer's approval. Description of fittings shall be deemed to include the silicone sealant.				
2.B2.1.4.3.92	B2	46.008(c)		Ceramix Industries ASTRA TA01 closed-coupled washdown floor mounted WC complete with all fixations, mounting brackets and flushing mechanisms. Pan, White - TA0108A. Cistern, Front Flush White - CA0308A including resin seat Mirage Wirquin (2SM08001). Or equal approved	No	1		
2.B2.1.4.3.93	B2	46.008(c)		"Vaal Potteries" vitreous china 635 x 485 mm rounded "Lotus Basin" o.e.a. with three tap holes mounted on wall with 2 x 10mm anchor bolts (code. 8448Z0) Whb set with 31mm chromium plated whb outlet, with plug, chain, anchor and 32mm backnut complete including CP bottle trap, silico to be provided between basin & wall finish and one Cobra Watertech Gala single lever 15mm chrome single taphole basin mixer with classic handle, plug, chain and waste, flexible connection tubes and angle regulating valves (Code: GA-652). Or equal approved	No	1		
	B2			RAINWATER GOODS				
	B2			uPVC gutters and rainwater pipes				
2.B2.1.4.3.94	B2	46.008(a)		150mm Diameter rainwater pipes	m	320		
2.B2.1.4.3.95	B2	46.008(a)		Extra over rainwater pipe for bend	No	30		
2.B2.1.4.3.96	B2	46.008(a)		Extra over rainwater pipe for shoe	No	30		
2.B2.1.4.3.97	B2	46.008(a)		150 DN Cast iron domed 180 degrees roof full bore outlet (eared) cast-in	No	6		
	B2			PAINTING				
	B2			PAINTWORK, ETC TO NEW WORK				
	B2			ON INTERNAL AND EXTERNAL FLOATED PLASTER SURFACES				
	B2			One coat primer and two coats premium quality highly washable and stain resistant acrylic emulsion paint for interior or exterior use. Colour to Engineer's approval.				
2.B2.1.4.3.98	B2	46.009(a)		Walls	m2	2 700		
2.B2.1.4.3.99	B2	46.009(a)		Concrete soffits including cornices	m2	150		
	B2			Miscellaneous trades, fixtures and appliances				
2.B2.1.4.3.100	B2	46.011		Fencing to the Chillers, as per drawing 1B-C6-006	m	60		
	B2			PART B2.1.4: Pump station structures and channels <i>(Carried forward to Summary of Bills)</i>				

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
	B2			PART B2.1.5: Ancillary works				
	B2			PART B2.1.5.1: FENCING				
	B2			SITE CLEARANCE				
	B2			CLEARING THE FENCE LINE, 1M WIDE STRIP				
2.B2.1.5.1.1	B2	6.001		Inner Security fencing	m	155		
2.B2.1.5.1.2	B2	6.001		Outer Security fencing	m	125		
2.B2.1.5.1.3	B2	6.001		Electric fencing	m	125		
	B2			SECURITY FENCING				
	B2			SUPPLY AND ERECT NEW FENCING MATERIAL FOR NEW FENCES.				
2.B2.1.5.1.4	B2	6.002(f)		Inner Security fencing as per drawing 160 592/10, 160 594/10, 160 598/10, 160 599/10	m	155		
2.B2.1.5.1.5	B2	6.002(g)		Outer Security fencing as per drawing 160 595/10, 160 597/10, 160 598/10, 160 599/10	m	125		
	B2			SUPPLY AND ERECT PERMANENT GATES				
2.B2.1.5.1.6	B2	6.005(e)		Inner Security gate as per drawing 160 593/10, 160 598/10, 160 599/10	No.	4		
2.B2.1.5.1.7	B2	6.005(e)		Outer Security gate as per drawing 160 596/10, 160 598/10, 160 599/10	No.	4		
	B2			ELECTRICAL FENCING				
2.B2.1.5.1.8	B2	45.001		Design and documentation - 125 m of electric fencing, as part of a National Key Point (NKP) security installation	Sum	1		
2.B2.1.5.1.9	B2	45.002		Supply and delivery to site - 125 m of electric fencing, as part of a National Key Point (NKP) security installation	Sum	1		
2.B2.1.5.1.10	B2	45.003		Installation of plant - 125 m of electric fencing, as part of a National Key Point (NKP) security installation	Sum	1		
	B2			PART B2.1.5.2: PAVING				
	B2			In situ treatment of foundations:				
2.B2.1.5.2.1	B2	9.009(b)		In situ treatment by ripping	m ³	670		
	B2			Pavement layers constructed from gravel material				
2.B2.1.5.2.2	B2	25.001(a)		Selected layer compacted to 95% of modified AASHTO density in 300mm thick layers (G7)	m ³	1360		
2.B2.1.5.2.3	B2	25.001(b)		Subbase layer compacted to 97% of modified AASHTO density in 150mm thick layers (G5)	m ³	680		
	B2			Extra over 25.001(b) for constructing a chemical stabilised layer				
2.B2.1.5.2.4	B2	25.003		Subbase layer	m ³	680		
2.B2.1.5.2.5	B2	25.004		Common cement to SANS (CEM II / B-V 32.5)	t	50		
	B2			Concrete block paving (80 mm interlocking blocks)				
2.B2.1.5.2.6	B2	25.009		Concrete block paving (25 MPa, Type S-A)	m ²	4450		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	B2			Concrete Edging & Kerbing				
2.B2.1.5.2.7	B2	25.010(a)		Cast in situ concrete edge and intermediate beams (Class 25/19)	m ³	90		
2.B2.1.5.2.8	B2	25.010(b)		Precast Figure 7 kerbs	m	200		
	B2			Approved herbicide and ant poison (Supply of herbicide and ant poison shall be paid for in the provisional sums)				
2.B2.1.5.2.9	B2	25.013		Application of approved herbicide and ant poison	m ²	4450		
	B2			Overhaul on material hauled in excess of 1.0 km				
2.B2.1.5.2.10	B2	25.018		c) Between 5km up to and including 7km	m ³	2040		
	B2			PART B2.1.5.3: SERVICES				
	B2			SEWERAGE SERVICES				
	B2			Excavate in all materials to specified levels and battered slopes, including temporary stockpiling and levelling alongside excavations within the confines of the pipe servitude				
	B2			Unclassified trench excavations:				
	B2			Within the freehaul distance				
2.B2.1.5.3.1	B2	9.012		Up to 1 m deep	m3	100		
2.B2.1.5.3.2	B2	9.012		Over 1 m and up to 2 m deep	m3	60		
2.B2.1.5.3.3	B2	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for unclassified material (blasting)	m3	32		
2.B2.1.5.3.4	B2	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance	m3	40		
	B2			OVERHAUL				
2.B2.1.5.3.5	B2	9.023(b)		Between 3km up to and including 5km	m3	152		
	B2			Placing of bedding material, selected, fertile soil and main backfill				
2.B2.1.5.3.6	B2	15.001		Placing of bedding material, selected, fertile soil and main backfill	m3	160		
	B2			Provision of selected fill blanket				
2.B2.1.5.3.7	B2	15.006		b) With screening from trench	m3	80		
2.B2.1.5.3.8	B2	15.006		d) With screening from Borrow Pits	m3	80		
	B2			Supply, Lay, Joint, Bed (Flexible Pipes) and Test Pipeline				
2.B2.1.5.3.9	B2	46.008(b)		1) 110 mm dia Class 34 uPVC	m	160		
	B2			Erf Connections complete with all necessary fittings as per detail drawing 176 220/18 Sheet 11 of 11				
2.B2.1.5.3.10	B2	46.008(b)		a) Type 1	No.	1		
2.B2.1.5.3.11	B2	46.008(b)		b) Type 2	No.	1		
2.B2.1.5.3.12	B2	46.008(b)		c) Type 3	No.	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	B2			Connect to New Sewer Septic Tank complete with all the necessary fittings as per the septic tank detail 2A-C6-026. Price to include all labour and material required for the connection:				
2.B2.1.5.3.13	B2	46.008(b)		a) 110 mm diameter connection	No.	1		
2.B2.1.5.3.14	B2	46.008(b)		Conduct Percolation Tests complete as per the SANS10400 and SANS 10252-2 requirements; prior to construction of the French Drain. Results to be supplied to Engineer for finalization of French drain detail.	No.	2		
2.B2.1.5.3.15	B2	46.008(b)		Construct French Drain complete as per detail drawing 2A-C6-026, drain to comply to SANS10400 requirements. Drain to be up to 1.8m deep. Cost to include all labour and material costs necessary to complete the septic tank detail.	m	40		
	B2			Strength concrete, 30 MPa / 19 mm				
	B2			Thrust blocks as per Drawing no. 176/219/18				
2.B2.1.5.3.16	B2	20.012		1) 30 / 19 Concrete	m ³	2		
2.B2.1.5.3.17	B2	20.001		2) Formwork	m ²	4		
2.B2.1.5.3.18	B2	20.007(a)		3) Reinforcement	t	0.5		
	B2			Miscellaneous items				
2.B2.1.5.3.19	B2	46.008(b)		1) Construct up to 2m deep manholes complete with heavy duty concrete covers, precast rings including slabs, benching approved channelling, sealing of rings and backfilling according to detail drawing no: 2A-C6-026	No.	8		
2.B2.1.5.3.20	B2	46.008(b)		2) Construct Septic Tank complete with all necessary pipes and fittings as per Detail Drawing 2A-C6-026, according to SANS10400 requirements. Cost to include all labour and material costs necessary to complete the septic tank detail.	No.	1		
	B2			Encasing of Pipes in concrete as per detail drawing 176 220/18 where specified or instructed by Engineer				
2.B2.1.5.3.21	B2	46.008(b)		110mm dia uPVC IN class 15/19 Concrete	m3	5		
	B2			WATER SERVICES				
	B2			Excavate in all materials to specified levels and battered slopes, including temporary stockpiling and levelling alongside excavations within the confines of the pipe servitude				
	B2			Unclassified trench excavations:				
	B2			Within the freehaul distance				
2.B2.1.5.3.22	B2	9.012		Potable Water Reticulation - Up to 1 m deep	m3	95		
2.B2.1.5.3.23	B2	9.012		Fire Water - Up to 1 m deep	m3	300		
2.B2.1.5.3.24	B2	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for unclassified material (blasting)	m3	80		
2.B2.1.5.3.25	B2	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance	m3	45		
	B2			OVERHAUL				
2.B2.1.5.3.26	B2	9.023(b)		Between 3km up to and including 5km	m3	250		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	B2			Placing of bedding material, selected, fertile soil and main backfill				
2.B2.1.5.3.27	B2	15.001		a) Potable Water Reticulation - Up to 1 m deep	m3	115		
2.B2.1.5.3.28	B2	15.001		b) Fire Water - Up to 1 m deep	m3	325		
	B2			Provision of selected fill blanket				
2.B2.1.5.3.29	B2	15.006		b) With screening from trench	m3	315		
2.B2.1.5.3.30	B2	15.006		d) With screening from borrow pits	m3	125		
	B2			Potable Water - Supply, Lay, Test and Bed Pipes				
2.B2.1.5.3.31	B2	46.008(b)		1) 50 mm dia PN9 uPVC	m	135		
	B2			Fire Water - Supply, Lay, Test and Bed Pipes				
2.B2.1.5.3.32	B2	46.008(b)		1) 160 mm dia PN16 uPVC	m	300		
2.B2.1.5.3.33	B2	46.008(b)		2) 110 mm dia PN16 uPVC	m	10		
2.B2.1.5.3.34	B2	46.008(b)		3) 50 mm dia PN16 uPVC	m	25		
	B2			Supply, lay, bed, test, disinfect flanged pipes complete with couplings for Class 16 PE 100 HDPe pipes of the following diameters: (All material including fittings to be SABS approved) [Connection pipework to elevated storage tank]				
2.B2.1.5.3.35	B2	46.008(b)		a) 50 mm HDPe pipe	m	45		
	B2			Extra-over item above for the Supplying, Laying and Bedding of Specials				
	B2			50 mm dia PN9 uPVC				
2.B2.1.5.3.36	B2	46.008(b)		1) 11.25 degree bend	No.	2		
2.B2.1.5.3.37	B2	46.008(b)		2) 22.5 degree bend	No.	2		
2.B2.1.5.3.38	B2	46.008(b)		3) 45 degree bend	No.	2		
2.B2.1.5.3.39	B2	46.008(b)		4) 90 degree bend	No.	7		
	B2			50 mm dia PN16 uPVC				
2.B2.1.5.3.40	B2	46.008(b)		1) 11.25 degree bend	No.	1		
2.B2.1.5.3.41	B2	46.008(b)		2) 22.5 degree bend	No.	1		
2.B2.1.5.3.42	B2	46.008(b)		3) 45 degree bend	No.	1		
2.B2.1.5.3.43	B2	46.008(b)		4) 90 degree bend	No.	1		
	B2			110 mm dia PN16 uPVC				
2.B2.1.5.3.44	B2	46.008(b)		1) 11.25 degree bend	No.	1		
2.B2.1.5.3.45	B2	46.008(b)		2) 22.5 degree bend	No.	1		
2.B2.1.5.3.46	B2	46.008(b)		3) 45 degree bend	No.	1		
2.B2.1.5.3.47	B2	46.008(b)		4) 90 degree bend	No.	1		
	B2			160mm dia PN16 uPVC				
2.B2.1.5.3.48	B2	46.008(b)		1) 11.25 degree bend	No.	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.B2.1.5.3.49	B2	46.008(b)		2) 22.5 degree bend	No.	1		
2.B2.1.5.3.50	B2	46.008(b)		3) 45 degree bend	No.	1		
2.B2.1.5.3.51	B2	46.008(b)		4) 90 degree bend	No.	12		
	B2			Supply, laying, bedding, jointing and testing of the following fittings for use on HDPE fittings: PN16 Compression Fittings as per SABS requirements [Connection pipework to elevated storage tank].				
	B2			1) Female threaded elbows (90 degrees)				
2.B2.1.5.3.52	B2	46.008(b)		a) 50 mm diameter	No.	3		
	B2			2) Reducing Coupling				
2.B2.1.5.3.53	B2	46.008(b)		a) 50 mm diameter x 40 mm diameter	No.	3		
	B2			3) 90 degree Tee				
2.B2.1.5.3.54	B2	46.008(b)		a) 50 x 50 mm	No.	1		
	B2			4) Compression flange adaptor with metal flange				
2.B2.1.5.3.55	B2	46.008(b)		a) 50 mm diameter	No.	3		
	B2			Supply, laying, bedding, jointing and testing Cast iron fittings Grade 14 according to SANS 546, bitumen dipped, socket ending for uPVC piping according to SANS 966 with rubber rings for 1600 kPa working pressure				
	B2			1) Equal T-Pieces:				
2.B2.1.5.3.56	B2	46.008(b)		a) 50 mm dia	No.	1		
2.B2.1.5.3.57	B2	46.008(b)		c) 160 mm dia.	No.	3		
	B2			2) Reducing T-Pieces for:				
2.B2.1.5.3.58	B2	46.008(b)		a) 160 mm x 110 mm dia.	No.	1		
2.B2.1.5.3.59	B2	46.008(b)		b) 160 mm x 50 mm dia.	No.	1		
	B2			3) Hydrant T-Pieces for:				
2.B2.1.5.3.60	B2	46.008(b)		a) 160 mm dia.	No.	1		
	B2			4) Reducers for:				
2.B2.1.5.3.61	B2	46.008(b)		a) 110 mm x 50 mm	No.	1		
2.B2.1.5.3.62	B2	46.008(b)		b) 160 mm x 110 mm	No.	1		
	B2			5) End caps / Stop ends for:				
2.B2.1.5.3.63	B2	46.008(b)		a) 50 mm dia. uPVC	No.	2		
2.B2.1.5.3.64	B2	46.008(b)		b) 160 mm dia. uPVC	No.	1		
	B2			6) Cast Iron Flange Adaptors				
2.B2.1.5.3.65	B2	46.008(b)		a) 50 mm diameter	No.	15		
2.B2.1.5.3.66	B2	46.008(b)		b) 110 mm diameter	No.	3		
2.B2.1.5.3.67	B2	46.008(b)		c) 160mm flange adaptor	No.	4		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	B2			Connection to bulk water main complete with all fittings:				
2.B2.1.5.3.68	B2	46.008(b)		a) 75 mm dia PN9 uPVC pipe	No.	1		
2.B2.1.5.3.69	B2	46.008(b)		b) 75 mm dia PN16 polypropylene saddle connection for uPVC	No.	3		
2.B2.1.5.3.70	B2	46.008(b)		c) 160 mm dia uPVC Class 16 pipe	No.	1		
	B2			Supply and install Jojo tank on 9m high stand complete with all the necessary fittings as per the manufacturer's specifications. The cost shall include, all standard and none standard fittings required to connect to the HDPE inlet, outlet and overflow pipes. This includes supply and installation of a float control valve. The cost shall further include the supply, handling, installation and erection of access ladder with a safety cage and all necessary fittings required for installation of a walkway around tank base.				
2.B2.1.5.3.71	B2	46.008(b)		a) 5 kl	No.	1		
	B2			Manufacture, Supply and Delivery to Site				
	B2			Class 16 clockwise closing, non-rising spindle. Spheroidal Graphite Iron Flanged Resilient Seal Gate Valves to SANS 664, of the following sizes:				
2.B2.1.5.3.72	B2	35.002		1) 50 mm dia	No.	3		
2.B2.1.5.3.73	B2	35.002		3) 160 mm dia	No.	1		
	B2			Installation and testing of valves and valve actuators				
	B2			Class 16 clockwise closing, non-rising spindle. Spheroidal Graphite Iron Flanged Resilient Seal Gate Valves to SANS 664, of the following sizes:				
2.B2.1.5.3.74	B2	35.003		1) 50 mm dia	No.	3		
2.B2.1.5.3.75	B2	35.003		3) 160 mm dia	No.	1		
	B2			Strength concrete, 30 MPa / 19 mm				
	B2			Thrust blocks as per Drawing no. 176/219/18				
2.B2.1.5.3.76	B2	20.012		1) 30 / 19 Concrete	m ³	7		
2.B2.1.5.3.77	B2	20.001		2) Formwork	m ²	21		
2.B2.1.5.3.78	B2	20.007(a)		3) Reinforcement	t	3		
	B2			Miscellaneous items				
2.B2.1.5.3.79	B2	46.008(b)		1) Valve Boxes for Resilient Seal Gate Valves complete as per Drawing no. 142 337/02 - In traffic area	No.	4		
2.B2.1.5.3.80	B2	46.008(b)		2) Valve Boxes for Resilient Seal Gate Valves complete as per Drawing no. 142 337/02 - non traffic area, outside municipal area	No.	2		
2.B2.1.5.3.81	B2	46.008(b)		3) Air valve chamber detail complete as per detail drawing 2A-C6-020	No.	2		
2.B2.1.5.3.82	B2	46.008(b)		4) Scour valve chamber as per detail	No.	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	B2			Encasing of Pipes in concrete as per detail drawing 176 220/18 where specified or instructed by Engineer				
2.B2.1.5.3.83	B2	46.008(b)		110mm dia uPVC IN class 15/19 Concrete	m3	10		
	B2			PART B2.1.5.4: GUARDHOUSE				
	B2			EARTHWORKS				
	B2			REFER TO DRAWING 2I-C9-050				
	B2			EXCAVATIONS TO STOCKPILE				
2.B2.1.5.4.1	B2	9.010		Excavation by hand	m3	50		
2.B2.1.5.4.2	B2	9.009(b)		Rip and re-compact 150mm insitu material to 93% Mod AASHTO	m2	70		
	B2			SOIL POISONING				
2.B2.1.5.4.3	B2	46.011		Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming (Supply of herbicide and ant poison shall be paid for in the provisional sums)	m2	85		
	B2			Backfilling				
2.B2.1.5.4.4	B2	15.014(a)		Selected backfilling from in-situ material compacted to 93% MOD AASHTO	m3	20		
	B2			SCHEDULED FORMWORK ITEMS				
	B2			Rough				
2.B2.1.5.4.5	B2	20.001		Sides of bases and surface beds	m2	18		
	B2			Smooth				
2.B2.1.5.4.6	B2	20.002		Vertical to slab upstands	m2	90		
2.B2.1.5.4.7	B2	20.002		Horizontal to slab soffits	m2	330		
	B2			Narrow widths				
2.B2.1.5.4.8	B2	20.005		Up to 300mm wide to columns	m	200		
2.B2.1.5.4.9	B2	20.005		350mm to slab upstand	m	109		
	B2			SCHEDULED REINFORCEMENT ITEMS				
2.B2.1.5.4.10	B2	20.007		Steel bars (irrespective of grade or diameter)	t	20		
2.B2.1.5.4.11	B2	20.008		High tensile welded mesh	m2	23		
	B2			SCHEDULED CONCRETE ITEMS				
	B2			Blinding layer in 15MPa/19mm Concrete				
2.B2.1.5.4.12	B2	20.011		50mm blinding under bases	m2	15		
	B2			Strength concrete				
2.B2.1.5.4.13	B2	20.012		Grade 15MPa/19mm mass concrete	m3	5		
2.B2.1.5.4.14	B2	20.012		Grade 15MPa/19mm topping / screed	m3	25		
	B2			Grade 30MPa/19mm structural concrete				
2.B2.1.5.4.15	B2	20.012		Slabs, columns and beams	m3	105		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.B2.1.5.4.16	B2	20.012		Strip footings and aprons	m3	8		
	B2			Unformed surface finishes				
2.B2.1.5.4.17	B2	20.013(a)		Wood float to surface beds, aprons, slabs and screeds	m2	525		
	B2			Aggregate				
2.B2.1.5.4.18	B2	20.014		Nom 19mm ballast on roof	m3	11		
	B2			Joints				
2.B2.1.5.4.19	B2	20.016		Slip joint consisting of 2 layers 0.6mm thick galvanised plate on smooth mortar on 230mm walls	m	25		
2.B2.1.5.4.20	B2	20.016		Slip joint consisting of 2 layers 0.6mm thick galvanised plate on smooth mortar on 550mm walls	m	12.5		
2.B2.1.5.4.21	B2	20.016		Construction joints, including shutters	m	35		
2.B2.1.5.4.22	B2	20.016		Expansion joint including joint filler and sealant	m	60		
	B2			Manufacture (or supply) and erect precast elements				
	B2			Modcon precast concrete solutions finished smooth on exposed surfaces bedded and jointed in class II mortar and pointed on all exposed surfaces. Or equal approved				
2.B2.1.5.4.23	B2	20.017		Type 006, precast concrete coping, 250mm wide x 160mm high x 96mm to tapered edge.	m	50		
2.B2.1.5.4.24	B2	20.017		Type 015, precast concrete coping, 380mm wide x 100mm high x 75mm to tapered edge.	m	120		
	B2			Grouting				
2.B2.1.5.4.25	B2	20.018(a)		Under steel bases	m3	0.5		
	B2			Miscellaneous items				
2.B2.1.5.4.26	B2	20.020 c)		150 DN Cast iron domed 180 degrees roof full bore outlet (eared) cast-in	No	12		
	B2			SCHEDULED STRUCTURAL STEEL ITEMS				
2.B2.1.5.4.27	B2	24.001		Supply, fabrication and corrosion protection of steel work, including fabrication drawings, delivery and erection on site. Members to be painted to specification	t	2.5		
	B2			SCHEDULED BUILDING WORKS				
	B2			Prestressed lintels (opening to be spanned stated)				
2.B2.1.5.4.28	B2	46.003(a)		1.2m span lintels (110mm x 75mm)	m	3		
2.B2.1.5.4.29	B2	46.003(a)		2m span lintels (110mm x 75mm)	m	2		
	B2			MASONRY				
	B2			Brickwork of NFX BRICKS (14 MPA NOMINAL COMPRESSIVE STRENGTH) IN CLASS I MORTAR				
2.B2.1.5.4.30	B2	46.004(a)		Half brick walls	m2	15		
2.B2.1.5.4.31	B2	46.004(a)		One brick walls	m2	70		
2.B2.1.5.4.32	B2	46.004(a)		Columns (230mm wide wall measured)	m2	35		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.B2.1.5.4.33	B2	46.004(a)		550mm wide cavity walls (length of 550mm wide wall measured). Rate to include for wall ties	m2	45		
	B2			FACE BRICKWORK				
	B2			Face brickwork pointed with recessed horizontal and vertical joints. The cost for the supply and delivery of facebrick shall be paid for in Provisional Sums. All other costs related to the installation of the facebrick shall be included in this item (includes all other material). Samples of facebrick to be approved by the Engineer/Architect.				
2.B2.1.5.4.34	B2	46.004(h)		Extra over brickwork for face brickwork	m2	75		
	B2			Damp proofing				
2.B2.1.5.4.35	B2	46.004(c)		250 micron polythene sheeting under floor	m2	65		
2.B2.1.5.4.36	B2	46.004(c)		230mm wide polythene damp proofing in walls (including surface bed level, stone wall coping and around openings)	m	90		
	B2			MASONRY REINFORCING				
2.B2.1.5.4.37	B2	46.004(f)		Fabric reinforcement and building into joints of one brick walls	m	700		
	B2			STONE CLADDING				
2.B2.1.5.4.38	B2	46.004(g)		Stone cladding using stone from the excavations (blasting) within the Balancing Reservoir area	m2	35		
	B2			ROOF SHEETING AND SIDE CLADDING				
2.B2.1.5.4.39	B2	46.005(f)		Concealed fixed, Aluminium Composite Panels by TMS cladding & Louvre solutions or similar , fixed to brickwork via aluminium extruded panel clips, on 20mm extruded mullion hooks, with 20mm shadowline detail between cladding panels, supply and fixed to supplier specification and details	m2	90		
2.B2.1.5.4.40	B2	46.005(f)		Extra over item above for 550mm wide cladding to the top of the cavity wall	m2	10		
	B2			Carpentry and joinery				
	B2			DOORS ETC				
	B2			REFER TO DRAWING NUMBER 2I-C9-050 (refer to schedules for opening and leaf sizes. Standard sizes to be used)				
2.B2.1.5.4.41	B2	46.005(c)		Single semi-solid timber door, with 100mm under-cut, with WC type locking mechanism complete as per drawing, size 900 x 2125 high	No	1		
2.B2.1.5.4.42	B2	46.005(c)		Single, solid, external, 1hr fire rated, framed, ledged, braced and battened timber door, with galvanized sheeting to external face and wrapped around corners of leaf, complete, including cylinder lock with a escutcheon plate locking mechanism, sundry items, striking plates, weather bars, handle set etc as per drawing, size 900 x 2125 high (D1)	No	2		
	B2			IRONMONGERY				
2.B2.1.5.4.43	B2	46.006(a)		Door Closer: Dorma TS83	No	2		
2.B2.1.5.4.44	B2	46.006(a)		Magnetic door lock (300kg)	no	2		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	B2			BATHROOM FITTINGS				
2.B2.1.5.4.45	B2	46.006(a)		"Franke STRX672 Stratos" automatic dispensing toilet roll holder. Or equal approved	No	1		
2.B2.1.5.4.46	B2	46.006(a)		"Franke STRX618 Stratos" o.e.a. soap dispenser. Or equal approved	No	1		
2.B2.1.5.4.47	B2	46.006(a)		"Franke STRX600 Stratos" paper towel dispenser. Or equal approved	No	1		
2.B2.1.5.4.48	B2	46.006(a)		"Franke STRX605 Stratos" o.e.a. waste bin. Or equal approved	No	1		
	B2			MIRRORS,ETC				
	B2	46.006(a)		Silvered float glass copper backed mirrors with polished edges, holed for and fixed with round nose chromium plated mirror screws with rubber buffers to plugs in brickwork or concrete				
2.B2.1.5.4.49	B2	46.006(a)		600w x 750h mm vertically orientated bevelled all round 'GG' with four screws	No	1		
	B2			Steel windows, doors, etc				
2.B2.1.5.4.50	B2	46.006(b)		Approved extruded aluminium frames to manufacturer's details, with bullet resistant glazing (fixed) as detailed on window schedules. Refer to drawing 2I-C9-050 for Guardhouse Windows, size 1200 x 1600	No	2		
2.B2.1.5.4.51	B2	46.006(b)		Approved extruded aluminium frames to manufacturer's details, with bullet resistant glazing as detailed on window schedules with central opening. Refer to drawing 2I-C9-050 for Guardhouse Windows, size 1200 x 1600	No	1		
2.B2.1.5.4.52	B2	46.006(b)		Approved extruded aluminium frames to manufacturer's details, with obscure glazing as detailed on window schedules. Refer to drawing 2I-C9-050 for Guardhouse Windows, size 600 x 900mm	No	1		
	B2			PRESSED STEEL DOOR FRAMES				
	B2			1,6mm single rebated door frame SABS approved suitable for one brickwall to suite left or right hand door complete with standard butt hinges, brace jambs with timber when building in, fixing lugs must be built into brickwork and frame filled up with cement mortar .				
2.B2.1.5.4.53	B2	46.006(b)		Frame for door 900 x 2125 high as detailed on drawing no 2I-C9-050	No	3		
	B2			PLASTER, PAVING AND TILES				
2.B2.1.5.4.54	B2	46.007(a)		On walls	m2	90		
2.B2.1.5.4.55	B2	46.007(a)		On ceilings	m2	250		
	B2			TILING				
	B2			Approved glazed ceramic wall tiles fixed with approved waterproof adhesive to plaster and flush pointed with approved grout compound (plaster elsewhere). Colour of the tiles to be approved by the Engineer				
2.B2.1.5.4.56	B2	46.007 (b)ii		Skirting (100mm cut from floor tiles)	m	30		
2.B2.1.5.4.57	B2	46.007(d)		On walls and splash backs	m2	25		
2.B2.1.5.4.58	B2	46.007(d)		On floor	m2	20		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	B2			SUNDRIES				
	B2			GENESIS				
2.B2.1.5.4.59	B2	46.011		Brushed stainless steel tile edge trim (quarter round profile) by Kirk Marketing to top and side edges of wall tiling. Or equal approved	m	30		
	B2			PLUMBING AND DRAINAGE				
2.B2.1.5.4.60	B2	46.008(b)		Plumbing and drainage installed complete	Sum	1		
	B2			SANITARY PLUMBING				
2.B2.1.5.4.61	B2	46.008(c)		Sanitary plumbing installed complete	Sum	1		
	B2			SANITARY FITTINGS				
	B2			All fittings butting up against wall or floor finishes are to be sealed with an approved silicone sealant to the Engineer's approval. Description of fittings shall be deemed to include the silicone sealant.				
2.B2.1.5.4.62	B2	46.008(c)		Ceramix Industries ASTRA TA01 closed-coupled washdown floor mounted WC complete with all fixations, mounting brackets and flushing mechanisms. Pan, White - TA0108A. Cistern, Front Flush White - CA0308A including resin seat Mirage Wirquin (2SM08001). Or equal approved	No	1		
2.B2.1.5.4.63	B2	46.008(c)		"Vaal Potteries" vitreous china 635 x 485 mm rounded "Lotus Basin" o.e.a. with three tap holes mounted on wall with 2 x 10mm anchor bolts (code. 8448Z0) Whb set with 31mm chromium plated whb outlet, with plug, chain, anchor and 32mm backnut complete including CP bottle trap, silico to be provided between basin & wall finish and one Cobra Watertech Gala single lever 15mm chrome single taphole basin mixer with classic handle, plug, chain and waste, flexible connection tubes and angle regulating valves (Code: GA-652). Or equal approved	No	1		
2.B2.1.5.4.64	B2	46.008(c)		"Franke/Citimetal" stainless steel single end bowl in-set sink Code DT 100E, size 1000 x 457mm including one Cobra Watertech Gala single lever 15mm chrome single taphole basin mixer with classic handle, plug, chain and waste, flexible connection tubes and angle regulating valves (Code: GA-652). Or equal approved	No	1		
	B2			RAINWATER GOODS				
	B2			uPVC gutters and rainwater pipes				
2.B2.1.5.4.65	B2	46.008(a)		150mm Diameter rainwater pipes	m	60		
2.B2.1.5.4.66	B2	46.008(a)		Extra over rainwater pipe for bend	No	12		
2.B2.1.5.4.67	B2	46.008(a)		Extra over rainwater pipe for shoe	No	12		
	B2			PAINTING				
	B2			PAINTWORK, ETC TO NEW WORK				
	B2			ON INTERNAL AND EXTERNAL FLOATED PLASTER SURFACES				
	B2			One coat primer and two coats premium quality highly washable and stain resistant acrylic emulsion paint for interior or exterior use. Colour to Engineer's approval. (paint with a minimum of 10 year guarantee to be used)				
2.B2.1.5.4.68	B2	46.009(a)		Walls	m2	110		
2.B2.1.5.4.69	B2	46.009(a)		On ceilings	m2	230		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	B2			Miscellaneous trades, fixtures and appliances				
2.B2.1.5.4.70	B2	46.011		Polyurethane waterproofing	m2	280		
2.B2.1.5.4.71	B2	46.011		100mm ISO Board high density 34-36kg/m3 rigid extruded polystyrene with tongue and groove joints, or equal approved	m2	60		
2.B2.1.5.4.72	B2	46.011		Waterpermeable fabric	m2	280		
2.B2.1.5.4.73	B2	46.011		Painted mild steel swing gate with Clearvu infill panels and heavy duty hinges. Complete with post, size 3 300mm wide X 2400 high	No	2		
2.B2.1.5.4.74	B2	46.011		Painted mild steel swing gate with Clearvu infill panels and heavy duty hinges. Complete with post, size 4 800mm wide X 2400 high	No	1		
2.B2.1.5.4.75	B2	46.011		3000mm wide heavy duty motorised combined spike and boom barrier, complete (Alltech Spiketech Grippa), or equal approved	no	2		
2.B2.1.5.4.76	B2	46.011		Full height heavy duty electromechanical turnstile with biometric access control (Alltech Rotatech FHD90), or equal approved	no	2		
2.B2.1.5.4.77	B2	46.011		Duct enclosure complete, including locking mechanism	no	1		
2.B2.1.5.4.78	B2	46.011		Magnetic door lock (300kg) connected to biometric system	no	2		
	B2			PART B2.1.5.5: FIRE PUMP ROOM				
	B2			REFER TO DRAWING 2B-C7-350				
	B2			EARTHWORKS				
2.B2.1.5.5.1	B2	9.010		Excavation by hand	m3	6		
2.B2.1.5.5.2	B2	9.009(b)		Rip and re-compact 150mm insitu material to 93% Mod AASHTO	m2	65		
	B2			SOIL POISONING				
2.B2.1.5.5.3	B2	46.011		Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming (Supply of herbicide and ant poison shall be paid for in the provisional sums)	m2	70		
	B2			FORMWORK				
	B2			ROUGH FORMWORK				
	B2			Narrow widths up to 300mm				
2.B2.1.5.5.4	B2	20.005		Slab edges	m	60		
	B2			SMOOTH FORMWORK				
	B2			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.B2.1.5.5.5	B2	20.002		Sides of beams	m2	15		
2.B2.1.5.5.6	B2	20.002		Vertical sides of suspended slabs	m2	7		
	B2			Horizontal surfaces for visible surface including 20mm chamfers and drip grooves on a exposed corners to:				
2.B2.1.5.5.7	B2	20.002		Soffits of slabs	m2	41		
	B2			REINFORCEMENT				
2.B2.1.5.5.8	B2	20.007		Steel bars (irrespective of grade or diameter)	t	2		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.B2.1.5.5.9	B2	20.008		Mesh ref 395 high-tensile welded mesh	m2	36		
	B2			CONCRETE				
	B2			Strength concrete grade 30/19				
2.B2.1.5.5.10	B2	20.012		Surface bed, roof slab, beams, ramp and apron	m3	27		
	B2			Unformed surface finishes				
2.B2.1.5.5.11	B2	20.013(a)		Wood floated finish	m2	105		
	B2			JOINTS				
2.B2.1.5.5.12	B2	20.016		75mm deep x 10mm wide expansion joint including shutter, 10mm soft board joint filler and sealant per detail C4 drawing 2A-C6-002	m	16		
2.B2.1.5.5.13	B2	20.016		2 Layers 0.6mm thick galvanised plate, including smooth plaster to the tops of brick walls	m2	6		
	B2			AGGREGATE				
2.B2.1.5.5.14	B2	20.014		19mm stone ballast	m3	5		
	B2			MASONRY				
	B2			Brickwork of NFX BRICKS (14 MPA NOMINAL COMPRESSIVE STRENGTH) IN CLASS I MORTAR				
2.B2.1.5.5.15	B2	46.004(a)		One brick wall	m2	75		
	B2			FACE BRICKWORK				
	B2			Face brickwork pointed with recessed horizontal and vertical joints. The cost for the supply and delivery of facebrick shall be paid for in Provisional Sums. All other costs related to the installation of the facebrick shall be included in this item (includes all other material). Samples of facebrick to be approved by the Engineer/Architect.				
2.B2.1.5.5.16	B2	46.004(h)		Extra over brickwork for face brickwork	m2	150		
2.B2.1.5.5.17	B2	46.004(f)		Masonry reinforcing (3 no R8 bars) on 230mm wall	m	8		
2.B2.1.5.5.18	B2	46.004(f)		Fabric reinforcement and building into joints of one brick walls	m	300		
	B2			METAL WORK				
	B2			Doors and door frames				
2.B2.1.5.5.19	B2	46.005(c)		Doors: double transformer door (1800mm x 2400mm) with 4 lever locking mechanism, louvres with insect proofing, barrel bolt (to ceiling and floor), striking plate, etc supplied, installed and painted as per drawing 2B-C7-350	No	1		
	B2			Aluminium windows (colour to be confirmed by the engineer/architect)				
2.B2.1.5.5.20	B2	46.006(b)		Approved extruded aluminium frames to manufacturer's details (opening frame), including clear glazing and fittings as detailed on window schedules. Refer to drawing 2B-C7-350 Windows, size 1200 x 900mm	No	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	B2			WATERPROOFING TO ROOFS				
2.B2.1.5.5.21	B2	46.011		Approved polyurethane sealant to roof and parapets	m2	50		
2.B2.1.5.5.22	B2	46.011		Water permeable fabric under roof ballast and to sides of beams	m2	35		
	B2			INSULATION				
2.B2.1.5.5.23	B2	46.011		100mm ISO Board high density 34-36kg/m3 rigid extruded polystyrene with tongue and groove joints, or equal approved	m2	35		
	B2			RAINWATER GOODS				
2.B2.1.5.5.24	B2	46.011		80 ND uPVC drainage pipes cast into 150mm wide upstand beam.	No.	9		
	B2			PART B2.1.5: Ancilliary works (Carried forward to Summary of Bills)				

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
	B2			PART B2.1.6: Landscaping and Rehabilitation				
	B2			OVERHAUL				
2.B2.1.6.1	B2	7.006(a)		Between 1km up to and including 3km	m3	3375		
	B2			LANDSCAPING & REHABILITATION				
2.B2.1.6.2	B2	47.001		Shaping	m2	18 770		
2.B2.1.6.3	B2	47.004		Scarifying	ha	1.88		
2.B2.1.6.4	B2	47.007		Furnishing and applying fertilisers	kg	600		
2.B2.1.6.5	B2	47.011		Preparing topsoil for seeding	m2	18 770		
2.B2.1.6.6	B2	47.012		Hydro-seeding	ha	1.88		
	B2			Provision of seed				
2.B2.1.6.7	B2	47.010		Seed type - Anthephora pubescens	kg	1.88		
2.B2.1.6.8	B2	47.010		Seed type - Cenchrus ciliaris	kg	1.88		
2.B2.1.6.9	B2	47.010		Seed type - Chloris gayana	kg	18.8		
2.B2.1.6.10	B2	47.010		Seed type - Cynodon dactylon	kg	5.64		
2.B2.1.6.11	B2	47.010		Seed type - Digitaria eriantha	kg	22.56		
2.B2.1.6.12	B2	47.010		Seed type - Eneapogon chenchroides	kg	1.88		
2.B2.1.6.13	B2	47.010		Seed type - Eragrostis curvula	kg	3.76		
2.B2.1.6.14	B2	47.010		Seed type - Eragrostis lehmanniana	kg	0.94		
2.B2.1.6.15	B2	47.010		Seed type - Eragrostis tef	kg	5.64		
2.B2.1.6.16	B2	47.010		Seed type - Heteropogon contortus	kg	5.64		
2.B2.1.6.17	B2	47.010		Seed type - Panicum maximum	kg	6.58		
2.B2.1.6.18	B2	47.010		Seed type - Pogonarthria squarrosa	kg	1.88		
2.B2.1.6.19	B2	47.016		Provision of temporary erosion control measures	ha	1.88		
2.B2.1.6.20	B2	47.017		Maintenance of the Temporary Erosion Control Measures	sum	1		
2.B2.1.6.21	B2	47.018		Maintenance of Vegetation	sum	1		
	B2			PART B2.1.6: Landscaping and Rehabilitation Total <i>(Carried forward to Summary of Bills)</i>				
	B2			PART B2: LOW LIFT PUMP STATION TOTAL <i>(Carried forward to Summary of Bills)</i>				
				PART B: ABSTRACTION WORKS TOTAL <i>(Carried forward to Summary of Bills)</i>				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	C			PART C: LOW LIFT RISING MAIN				
	C			PART C1: Preliminary and General				
	C			PRELIMINARY AND GENERAL (SECONDARY)				
	C	1.002		FIXED CHARGES - GENERAL OBLIGATIONS				
2.C1.1	C		X	Head Office Contract Management and Overheads	Sum	1		
2.C1.2	C		X	General Site Supervision and Overheads	Sum	1		
2.C1.3	C		X	Method statements (1.10.1)	Sum	1		
2.C1.4	C		X	Competency training (1.10.2.4)	Sum	1		
2.C1.5	C		X	Returns and reporting (1.10.3)	Sum	1		
2.C1.6	C		X	Management meetings (1.10.4)	Sum	1		
2.C1.7	C		X	Integration management (1.10.5)	Sum	1		
2.C1.8	C		X	Programming Requirements (1.9)	Sum	1		
2.C1.9	C		X	Quality Management (1.10.2)	Sum	1		
2.C1.10	C		X	Socio Economic Requirements (1.11)	Sum	1		
2.C1.11	C		X	Occupational Health and Safety Requirements (1.12)	Sum	1		
2.C1.12	C		X	Environmental Requirements (1.13)	Sum	1		
	C			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.C1.13	C		X	.....	Sum	1		
2.C1.14	C		X	.....	Sum	1		
2.C1.15	C		X	.....	Sum	1		
2.C1.16	C		X	.....	Sum	1		
	C	1.003 & 1.004		FIXED CHARGES - FACILITIES FOR THE CONTRACTOR (1.8)				
2.C1.17	C		X	Transport of Staff and Labour (1.8.1.4)	Sum	1		
2.C1.18	C		X	Construction Establishment Fencing (1.8.3.1)	Sum	1		
2.C1.19	C		X	Lighting of Construction Establishment Areas (1.8.3.2)	Sum	1		
2.C1.20	C		X	Electrical power and distribution (1.8.3.4)	Sum	1		
2.C1.21	C		X	Standby power (1.8.3.4)	Sum	1		
2.C1.22	C		X	Communications (1.8.3.7)	Sum	1		
	C			Office, Accommodation and Other Site facilities				
2.C1.23	C		X	Accommodation for staff and workforce (1.8.3.8b)	Sum	1		
2.C1.24	C		X	Offices (1.8.3.8c)	Sum	1		
2.C1.25	C		X	Other establishment facilities (1.8.3.8d)	Sum	1		
2.C1.26	C		X	Storage (1.8.3.8e)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	C			Other services				
2.C1.27	C		X	Medical (1.8.3.12)	Sum	1		
2.C1.28	C		X	Sanitation and Cleaning (1.8.3.13)	Sum	1		
2.C1.29	C		X	Access control and security (1.8.3.14)	Sum	1		
	C			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("nil" to be entered if not required)				
2.C1.30	C		X	.....	Sum	1		
2.C1.31	C		X	.....	Sum	1		
2.C1.32	C		X	.....	Sum	1		
2.C1.33	C		X	.....	Sum	1		
	C	1.004		FIXED CHARGES - SPECIFIC EQUIPMENT				
2.C1.34	C		X	Equipment for construction and maintenance of the Contractor's work areas	Sum	1		
2.C1.35	C		X	Minor equipment and small tools	Sum	1		
2.C1.36	C		X	Equipment for dust and emissions control and monitoring in compliance with environmental requirement	Sum	1		
2.C1.37	C		X	Construction services including electrical power, compressed air, water, communications, etc.	Sum	1		
2.C1.38	C		X	Equipment for blasting and rock support	Sum	1		
2.C1.39	C		X	Equipment for earthworks, trenching and backfilling	Sum	1		
2.C1.40	C		X	Equipment for borrowing, processing of materials, transport of materials and spoiling of materials	Sum	1		
2.C1.41	C		X	Equipment for cranes, winches, lifting and pipe handling	Sum	1		
2.C1.42	C		X	Equipment for welding, weld testing and coatings	Sum	1		
2.C1.43	C		X	Equipment for site transporting, lifting, placing and fixing of structural steel work	Sum	1		
2.C1.44	C		X	Equipment for site transporting, placing, fixing and finishing of concrete work, formwork and reinforcement	Sum	1		
2.C1.45	C		X	Equipment for processing concrete (Batch plant)	Sum	1		
2.C1.46	C		X	Equipment for dealing with water	Sum	1		
2.C1.47	C	1.004(a)	X	Fixed related charges for relocation of pipe work front to different location as instructed by Engineer (Within 5km). Including provision for the loss of production	No	2		
	C			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.C1.48	C		X	.....	Sum	1		
2.C1.49	C		X	.....	Sum	1		
2.C1.50	C		X	.....	Sum	1		
2.C1.51	C		X	.....	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	C	1.006		TIME RELATED CHARGES - GENERAL OBLIGATIONS				
2.C1.52	C		X	Head Office Contract Management and Overheads (Duration Weeks)	Sum	1		
2.C1.53	C		X	General Site Supervision and Overheads (Duration Weeks)	Sum	1		
2.C1.54	C		X	Method Statements (1.10.1) (Duration Weeks)	Sum	1		
2.C1.55	C		X	Competency training (1.10.2.4) (Duration Weeks)	Sum	1		
2.C1.56	C		X	Returns and reporting (1.10.3) (Duration Weeks)	Sum	1		
2.C1.57	C		X	Management meetings (1.10.4) (Duration Weeks)	Sum	1		
2.C1.58	C		X	Integration management (1.10.5) (Duration Weeks)	Sum	1		
2.C1.59	C		X	Programming Requirements (1.9) (Duration Weeks)	Sum	1		
2.C1.60	C		X	Quality Management (1.10.2) (Duration Weeks)	Sum	1		
2.C1.61	C		X	Socio Economic Requirements (1.11) (Duration Weeks)	Sum	1		
2.C1.62	C		X	Occupational Health and Safety (1.12) (Duration Weeks)	Sum	1		
2.C1.63	C		X	Environmental Requirements (1.13) (Duration Weeks)	Sum	1		
2.C1.64	C	1.006(a)	X	Time related charges for relocation of pipe work front to different location as instructed by Engineer (General Obligations) (Within 5km). Including provision for the loss of production	No	2		
	C			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.C1.65	C		X	.....	Sum	1		
2.C1.66	C		X	.....	Sum	1		
2.C1.67	C		X	.....	Sum	1		
	C	1.007 & 1.008		TIME RELATED CHARGES - FACILITIES FOR THE CONTRACTOR (1.8)				
2.C1.68	C		X	Transport of Staff and Labour (1.8.1.4) (Duration Weeks)	Sum	1		
2.C1.69	C		X	Construction Establishment Fencing (1.8.3.1) (Duration Weeks)	Sum	1		
2.C1.70	C		X	Lighting of Construction Establishment Areas (1.8.3.2) (Duration Weeks)	Sum	1		
2.C1.71	C		X	Electrical power and distribution (1.8.3.4) (Duration Weeks)	Sum	1		
2.C1.72	C		X	Standby power (1.8.3.4) (Duration Weeks)	Sum	1		
2.C1.73	C		X	Communications (1.8.3.7) (Duration Weeks)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	C			Office, Accommodation and Other Site facilities				
2.C1.74	C		X	Accommodation for staff and workforce (1.8.3.8b)(Duration Weeks)	Sum	1		
2.C1.75	C		X	Offices (1.8.3.8c) (Duration Weeks)	Sum	1		
2.C1.76	C		X	Other establishment facilities (1.8.3.8d) (Duration Weeks)	Sum	1		
2.C1.77	C		X	Storage (1.8.3.8e) (Duration Weeks)	Sum	1		
	C			Other services				
2.C1.78	C		X	Medical (1.8.3.12) (Duration Weeks)	Sum	1		
2.C1.79	C		X	Sanitation and Cleaning (1.8.3.13) (Duration Weeks)	Sum	1		
2.C1.80	C		X	Access control and security (1.8.3.14) (Duration Weeks)	Sum	1		
2.C1.81	C	1.007(a)	X	Time related charges for relocation of pipe work front to different location as instructed by Engineer (Facilities) (Within 5km). Including provision for the loss of production	No	2		
	C			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("nil" to be entered if not required)				
2.C1.82	C		X	.....	Sum	1		
2.C1.83	C		X	.....	Sum	1		
2.C1.84	C		X	.....	Sum	1		
2.C1.85	C		X	.....	Sum	1		
	C	1.008		TIME RELATED CHARGES - SPECIFIC EQUIPMENT				
2.C1.86	C		X	Equipment for construction and maintenance of the Contractor's work areas (Duration Weeks)	Sum	1		
2.C1.87	C		X	Minor equipment and small tools (Duration Weeks)	Sum	1		
2.C1.88	C		X	Equipment for dust and emissions control and monitoring in compliance with environmental requirement (Duration Weeks)	Sum	1		
2.C1.89	C		X	Construction services including electrical power, compressed air, water, communications, etc. (Duration Weeks)	Sum	1		
2.C1.90	C		X	Equipment for blasting and rock support (Duration Weeks)	Sum	1		
2.C1.91	C		X	Equipment for earthworks, trenching and backfilling (Duration Weeks)	Sum	1		
2.C1.92	C		X	Equipment for borrowing, processing of materials, transport of materials and spoiling of materials (Duration Weeks)	Sum	1		
2.C1.93	C		X	Equipment for crange, winches, lifting and pipe handling (Duration Weeks)	Sum	1		
2.C1.94	C		X	Equipment for welding, weld testing and coatings (Duration Weeks)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.C1.95	C		X	Equipment for site transporting, lifting, placing and fixing of structural steel work (Duration Weeks)	Sum	1		
2.C1.96	C		X	Equipment for site transporting, placing, fixing and finishing of concrete work, formwork and reinforcement (Duration Weeks)	Sum	1		
2.C1.97	C		X	Equipment for processing concrete (Batch plant) (Duration Weeks)	Sum	1		
2.C1.98	C		X	Equipment for dealing with water (Duration Weeks)	Sum	1		
2.C1.99	C	1.008(a)	X	Time related charges for relocation of pipe work front to different location as instructed by Engineer (Specific Equipment) (Within 5km). Including provision for the loss of production	No	2		
	C			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.C1.100	C		X	.....	Sum	1		
2.C1.101	C		X	.....	Sum	1		
2.C1.102	C		X	.....	Sum	1		
2.C1.103	C		X	.....	Sum	1		
	C			PART C.1: Preliminary and General (Carried forward to Summary of Bills)				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	C			PART C2: Pipe Supply, Delivery and Installation				
2.C2.1	C	32.001 & 35.001		Pipes and pipe specials: Design and documentation (As required: For Employer Design)	Sum	1		
2.C2.2	C	37.001		Corrosion protection: PQP and other documentation	Sum	1		
	C			PIPES				
	C			MANUFACTURE AND SUPPLY OF PIPES AND DELIVERY TO STORAGE ON SITE (EXCLUDING CORROSION PROTECTION)				
	C			Grade X52; Ends prepared for site welding				
2.C2.3	C	32.002	X	1420mm OD pipe, 11mm wall thickness	m	195		
2.C2.4	C	32.002	X	1016mm OD pipe, 12mm wall thickness	m	2355		
2.C2.5	C	32.002	X	1016mm OD pipe, 7mm wall thickness	m	9185		
	C			SPARE PIPES				
	C			Grade X52; Ends prepared for site welding				
2.C2.6	C	32.002	X	1420mm OD pipe, 11mm wall thickness	m	20		
2.C2.7	C	32.002	X	1016mm OD pipe, 12mm wall thickness	m	77		
2.C2.8	C	32.002	X	1016mm OD pipe, 7mm wall thickness	m	77		
	C			EXTERNAL PIPE COATING (factory applied):				
	C			Refer to Section 37: Painting and Corrosion Protection (Clause 37.10.12.4)				
	C			Option No. 1: Polymer Modified Bitumen (System No 229A/236)				
2.C2.9	C	37.002	X	1420mm OD pipes	m	195		
2.C2.10	C	37.002	X	1420mm OD spare pipes	m	20		
2.C2.11	C	37.002	X	1016mm OD pipes	m	11540		
2.C2.12	C	37.002	X	1016mm OD spare pipes	m	154		
	C			INTERNAL PIPE LINING (factory applied)				
	C			Refer to Section 37: Painting and Corrosion Protection (Clause 37.10.12.4)				
	C			Glass flake or ceramic filled reinforced epoxy (System No 258)				
2.C2.13	C	37.003	X	1420mm OD pipes	m	195		
2.C2.14	C	37.003	X	1420mm OD spare pipes	m	20		
2.C2.15	C	37.003	X	1016mm OD pipes	m	11540		
2.C2.16	C	37.003	X	1016mm OD spare pipes	m	154		
	C			PIPE SPECIALS				
	C			MANUFACTURE AND SUPPLY OF PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	C			BEND/JOINT TYPE NO. 4: GLASS FLAKE OR CERAMIC FILLED REINFORCED EPOXY (System No 258) AND POLYMER MODIFIED BITUMEN COATING (System No 229A)				
	C			Grade X52, Ends prepared for site welding				
	C			1420mm OD pipe, 11mm wall thickness				
2.C2.17	C	32.003	X	Bend between 22.5 to and including 45 degrees	No	2		
	C			1016mm OD pipe, 12mm wall thickness				
2.C2.18	C	32.003	X	Bend between 11.25 to and including 22.5 degrees	No	4		
2.C2.19	C	32.003	X	Bend between 22.5 to and including 45 degrees	No	2		
2.C2.20	C	32.003	X	Bend between 45 to and including 90 degrees	No	4		
	C			1016mm OD pipe, 7mm wall thickness				
2.C2.21	C	32.003	X	Bend between 11.25 to and including 22.5 degrees	No	2		
2.C2.22	C	32.003	X	Bend between 22.5 to and including 45 degrees	No	8		
2.C2.23	C	32.003	X	Bend between 45 to and including 90 degrees	No	6		
	C			LAY AND WELD STEEL PIPES				
	C			Grade X52				
2.C2.24	C	33.001	X	1420mm OD pipe, 11mm wall thickness	m	195		
2.C2.25	C	33.001	X	1016mm OD pipe, 12mm wall thickness	m	2355		
2.C2.26	C	33.001	X	1016mm OD pipe, 7mm wall thickness	m	9185		
	C			INSTALLATION AND TESTING OF PIPE SPECIALS				
	C			Grade X52				
	C			1420mm OD pipe, 11mm wall thickness				
2.C2.27	C	33.007	X	Bend between 22.5 to and including 45 degrees	No	2		
	C			1016mm OD pipe, 12mm wall thickness				
2.C2.28	C	32.007	X	Bend between 11.25 to and including 22.5 degrees	No	4		
2.C2.29	C	33.007	X	Bend between 22.5 to and including 45 degrees	No	2		
2.C2.30	C	33.007	X	Bend between 45 to and including 90 degrees	No	4		
	C			1016mm OD pipe, 7mm wall thickness				
2.C2.31	C	32.007	X	Bend between 11.25 to and including 22.5 degrees	No	2		
2.C2.32	C	33.007	X	Bend between 22.5 to and including 45 degrees	No	8		
2.C2.33	C	33.007	X	Bend between 45 to and including 90 degrees	No	6		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	C			EXTRA OVER ITEM 33.001 FOR MITRE DEFLECTIONS UP TO 11.25 DEGREE TO FORM BENDS				
	C			Grade X52				
2.C2.34	C	32.002	X	1420mm OD pipe, 11mm wall thickness	No	2		
2.C2.35	C	32.002	X	1016mm OD pipe, 12mm wall thickness	No	16		
2.C2.36	C	32.002	X	1016mm OD pipe, 7mm wall thickness	No	92		
	C			SUPPLY AND INSTALL EXTERNAL COATING AND INTERNAL LINING OF PIPE JOINTS (field applied)				
	C			BEND/JOINT TYPE NO. 4: GLASS FLAKE OR CERAMIC FILLED REINFORCED EPOXY (System No 258) AND POLYMER MODIFIED BITUMEN COATING (System No 276)				
2.C2.37	C	37.004	X	1420mm OD pipe	No	20		
2.C2.38	C	37.004	X	1016mm OD pipe	No	869		
	C			BEDDING REQUIREMENT SPECIFIC FOR POLYMER MODIFIED BITUMEN COATING				
2.C2.39	C	15.013	X	Extra over 15.003(b), 15.003(d), 15.004(b), 15.004(d), 15.005(b), 15.005(d), 15.006(b) and 15.006(d) for crushing and screening of material	m3	26935		
	C			HYDROSTATIC TESTING				
2.C2.40	C	33.008(a)		1420mm OD pipe, 11mm wall thickness	km	0.2		
2.C2.41	C	33.008(a)		1016mm OD pipe, 12mm wall thickness	km	2.36		
2.C2.42	C	33.008(a)		1016mm OD pipe, 7mm wall thickness	km	9.19		
	C			PIPE LINING INTEGRITY TESTING				
2.C2.43	C	33.009		1420mm OD as specified on drawing	m	195		
2.C2.44	C	33.009		1016mm OD as specified on drawing	m	11540		
	C			PIPE COATING INTEGRITY SURVEYS				
2.C2.45	C	33.010		1420mm OD as specified on drawing	m	195		
2.C2.46	C	33.010		1016 mm OD as specified on drawing	m	11540		
	C			MARKER POSTS				
2.C2.47	C	33.012		As detailed on the drawing No 2A-C6-114	no	155		
	C			BENCHMARK AND TRIANGULATION BEACONS				
2.C2.48	C	33.013(a)		Survey	Sum	1		
2.C2.49	C	33.013(b)		Benchmark and beacons	No	154		
	C			PIPE LEVEL MONITORING PLANT				
2.C2.50	C	33.014		Pipe level monitoring plant as per dwg.2A-C6-114	no	51		
	C			PART C2: Pipe Supply, Delivery and Installation (Carried forward to Summary of Bills)				

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
	C			PART C3: Pipeline Earthworks				
	C			SITE CLEARANCE				
	C			Removal of fertile soil				
2.C3.1	C	7.005(a)		For pipelines, temporary stockpile alongside the pipeline and construction servitude	m3	11150		
	C			Overhaul				
2.C3.2	C	7.006(a)		Between 1km up to and including 3km	m3	5030		
2.C3.3	C	7.006(b)		Between 3km up to and including 5km	m3	4590		
2.C3.4	C	7.006(c)		Between 5km up to and including 7km	m3	420		
	C			DEALING WITH WATER				
				For all works included in PART C, excluding Fibre Earthworks				
2.C3.5	C	8.001		Dealing with water	Sum	1		
2.C3.6	C	8.002		Treatment of water	Sum	1		
2.C3.7	C	8.003		Water monitoring	Sum	1		
2.C3.8	C	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	C			PIPE TRENCH EXCAVATIONS				
	C			EXCAVATE IN ALL MATERIALS TO SPECIFIED LEVELS AND BATTERED SLOPES, INCLUDING TEMPORARY STOCKPILING AND LEVELLING ALONGSIDE EXCAVATIONS WITHIN THE CONFINES OF THE PIPE SERVITUDE				
	C			Classified trench excavations:				
	C			Within the freehaul distance				
2.C3.9	C	9.012	X	Over 1m and up to 2m deep	m3	180		
2.C3.10	C	9.012	X	Over 2m and up to 3m deep	m3	41 800		
2.C3.11	C	9.012	X	Over 3m and up to 4m deep	m3	3 500		
2.C3.12	C	9.012	X	Over 4m and up to 5m deep	m3	500		
	C			Unclassified trench excavations:				
	C			Within the freehaul distance				
2.C3.13	C	9.012		Over 2m and up to 3m deep	m3	215		
2.C3.14	C	9.012		Over 3m and up to 4m deep	m3	520		
2.C3.15	C	9.012		Over 4m and up to 5m deep	m3	520		
2.C3.16	C	9.014	X	Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	9900		
2.C3.17	C	9.025	X	Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (by non-explosive means), specific to rock breaking and removal within the prescribed limits of the Martial Eagle nest and the bat cave	m3	305		
2.C3.18	C	9.025	X	Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (by non-explosive means)	m3	515		
2.C3.19	C	9.020		Compaction of trench bottom	m2	24 000		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	C			EXCAVATION ANCILLARIES				
2.C3.20	C	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to designated spoil sites	m3	80		
2.C3.21	C	9.015		Excavate by hand in soft material to expose existing services	m3	70		
2.C3.22	C	9.021		Excavation by hand	m3	300		
	C			OVERHAUL				
2.C3.23	C	9.023(a)	X	Between 1km up to and including 3km	m3	12800		
2.C3.24	C	9.023(b)	X	Between 3km up to and including 5km	m3	11600		
2.C3.25	C	9.023(c)	X	Between 5km up to and including 7km	m3	8910		
	C			PROVIDE AND USE OF SPECIALIST TEAM AND EQUIPMENT FOR THE DETECTION OF UNDERGROUND SERVICES				
2.C3.26	C	9.017(a)		Provide the team and equipment	Sum	1		
2.C3.27	C	9.017(b)		Use, operate and maintain equipment	day	24		
2.C3.28	C	9.017(c)		Remove the team and equipment	Sum	1		
	C			EXISTING SERVICES THAT INTERSECT OR ADJOIN A PIPE TRENCH				
2.C3.29	C	9.018(a)		Services that intersect a pipe trench	No	12		
2.C3.30	C	9.018(b)		Services that adjoin a trench	m	850		
2.C3.31	C	9.022		Slurry trenches / curtain walls	m2	520		
2.C3.32	C	9.024		Excavation of test pits	No	235		
	C			BACKFILLING AND BEDDING				
	C			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	C			Provision of bed material				
2.C3.33	C	15.003(a)		Material without screening from trenches	m3	30		
2.C3.34	C	15.003(b)		Material with screening from trenches	m3	120		
2.C3.35	C	15.003(c)		Material from the nearest borrow pit without screening	m3	925		
2.C3.36	C	15.003(d)	X	Material from the nearest borrow pit with screening	m3	3 690		
	C			Provision of bedding cradle material				
2.C3.37	C	15.004(a)		Material without screening from trenches	m3	15		
2.C3.38	C	15.004(b)		Material with screening from trenches	m3	50		
2.C3.39	C	15.004(c)		Material from the nearest borrow pit without screening	m3	830		
2.C3.40	C	15.004(d)	X	Material from the nearest borrow pit with screening	m3	3 305		
2.C3.41	C	15.004(e)		Material from commercial sources	m3	150		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	C			Provision of soilcrete				
2.C3.42	C	15.005(a)		Material without screening from trenches	m3	40		
2.C3.43	C	15.005(b)		Material with screening from trenches	m3	45		
2.C3.44	C	15.005(c)		Material from the nearest borrow pit without screening	m3	155		
2.C3.45	C	15.005(d)		Material from the nearest borrow pit with screening	m3	70		
2.C3.46	C	15.005(e)		Material from commercial sources	m3	50		
	C			Provision of selected fill blanket				
2.C3.47	C	15.006(a)		Material without screening from trenches	m3	70		
2.C3.48	C	15.006(b)		Material with screening from trenches	m3	260		
2.C3.49	C	15.006(c)	X	Material from the nearest borrow pit without screening	m3	3 450		
2.C3.50	C	15.006(d)	X	Material from the nearest borrow pit with screening	m3	13 790		
2.C3.51	C	15.006(e)		Material from commercial sources	m3	250		
	C			Provision of main backfill material				
2.C3.52	C	15.007(a)	X	Backfill material from trench excavation	m3	7 750		
2.C3.53	C	15.007(b)	X	Backfill material from the nearest borrow pit	m3	2 890		
	C			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.C3.54	C	15.001	X	Bed material	m3	4 765		
2.C3.55	C	15.001	X	Bedding cradle	m3	4 350		
2.C3.56	C	15.001	X	Selected fill blanket	m3	17 820		
2.C3.57	C	15.001	X	Main backfill	m3	9 511		
2.C3.58	C	15.001	X	Fertile soil	m3	11 146		
2.C3.59	C	47.005	X	Top soil	m3	28 450		
2.C3.60	C	15.002(a)		Soilcrete bed and bedding cradle	m3	72		
2.C3.61	C	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	144		
2.C3.62	C	15.002(b)		Cement stabilised soil collars (soilcrete)	m3	144		
	C			PROVISION OF MATERIAL TO REPLACE UNSUITABLE MATERIAL FROM TRENCH BOTTOM OR TO PROVIDE SUPPORTING EARTHWORKS				
2.C3.63	C	15.011(b)		From borrow pits	m3	80		
	C			Placing of Material				
2.C3.64	C	15.012		Placing of material to replace unsuitable material from trench bottom or to provide supporting earthworks	m3	80		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	C			SUBSOIL DRAINAGE				
	C			Crushed stone				
2.C3.65	C	15.008(a)		Supply and place crushed stone for Layer no 1	m3	78		
2.C3.66	C	15.008(c)		Supply and place well graded compacted dump rock for Layer no 2	m3	130		
	C			Geotextile				
2.C3.67	C	15.008(b)		Supply and place geotextile for Layer no 1	m2	680		
2.C3.68	C	15.008(d)		Supply and place geotextile for Layer no 2	m2	720		
	C			ENCASING OF PIPES IN CONCRETE				
2.C3.69	C	15.009(a)		Concrete strength grade 30/19	m3	15		
2.C3.70	C	15.009(b)		Reinforcement	t	1		
	C			OVERHAUL				
2.C3.71	C	15.010(a)	X	Between 1km up to and including 3km	m3	9030		
2.C3.72	C	15.010(b)	X	Between 3km up to and including 5km	m3	10130		
2.C3.73	C	15.010(c)	X	Between 5km up to and including 7km	m3	6165		
	C			PART C3: Pipeline Earthworks Total (Carried forward to Summary of Bills)				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	C			PART C4: Valve installations and chambers				
	C			FLOW METER INSTALLATION (along the Low Lift Rising Main)				
	C			REFER TO DRAWING 2C-C5-011 and 2C-C5-012				
	C			EARTHWORKS				
	C			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS, THRUST BLOCKS, ETC				
2.C4.1	C	9.013		Excavate for valve chambers	m3	80		
2.C4.2	C	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	3		
2.C4.3	C	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance.	m3	3		
2.C4.4	C	9.020		Compaction of trench bottom (150mm thick)	m2	26		
	C			OVERHAUL				
2.C4.5	C	9.023(a)		Between 1km up to and including 3km	m3	10		
2.C4.6	C	9.023(b)		Between 3km up to and including 5km	m3	10		
	C			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	C			Provision of bed material (G5)				
2.C4.7	C	15.003(c)		Material from the nearest borrow pit without screening	m3	4		
	C			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.C4.8	C	15.001		Placing of bedding material	m3	4		
	C			OVERHAUL				
2.C4.9	C	15.010(b)		Between 3km up to and including 5km	m3	2		
2.C4.10	C	15.010(c)		Between 5km up to and including 7km	m3	2		
	C			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.C4.11	C	15.014(a)		Structure backfilling compacted	m3	75		
2.C4.12	C	15.014(a)		Embankment backfilling compacted	m3	25		
2.C4.13	C	15.014(b)		Rockfill processing and compaction	m3	3		
2.C4.14	C	15.015		Finishing of slopes	m2	41		
	C			OVERHAUL				
2.C4.15	C	15.016(a)		Between 1km up to and including 3km	m3	26		
2.C4.16	C	15.016(b)		Between 3km up to and including 5km	m3	26		
2.C4.17	C	15.016(c)		Between 5km up to and including 7km	m3	26		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	C			CONCRETE WORKS				
	C			ROUGH FORMWORK				
	C			Vertical surfaces				
2.C4.18	C	20.001		Sides of floor slab	m2	6		
2.C4.19	C	20.001		Sides of walls	m2	38		
	C			SMOOTH FORMWORK				
	C			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.C4.20	C	20.002		Underside of slabs	m2	6		
	C			SMOOTH FORMWORK				
	C			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.C4.21	C	20.002		Walls	m2	105		
2.C4.22	C	20.002		Side of Sump walls	m2	0.5		
2.C4.23	C	20.002		Plinths	m2	5		
2.C4.24	C	20.005		Narrow widths - Up to 200mm high	m	22		
	C			Box-out holes/Form voids (for sleeves only)				
	C			a) Small, circular, of diameter up to and including 0.35 m				
2.C4.25	C	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	8		
	C			REINFORCEMENT				
2.C4.26	C	20.007		Steel bars (irrespective of grade or diameter)	t	5		
	C			CONCRETE				
	C			CONCRETE 15 MPa/19mm in:				
2.C4.27	C	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	23		
2.C4.28	C	20.011(b)		Mass concrete filling where required by the engineer	m3	1		
2.C4.29	C	46.007(b)i)		100mm thick granolithic screed laid to fall to direction of sump.	m2	13		
	C			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.C4.30	C	20.010	X	Foundations, bases, floor slabs and roof slabs	m3	10		
2.C4.31	C	20.010	X	Plinths (Including grouting between the plinth and the pipes/specials where required)	m3	2		
2.C4.32	C	20.010	X	Walls	m3	22		
	C			UNFORMED SURFACE FINISHES				
2.C4.33	C	20.013(a)		Wood floated finish	m2	13		
2.C4.34	C	20.013(b)		Steel floated finish	m2	24		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	C			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	C			PN10				
2.C4.35	C	32.003		Item 1	No	1		
2.C4.36	C	36.002		Item 2	No	1		
2.C4.37	C	32.003		Item 3	No	1		
2.C4.38	C	32.003		Item 4	No	1		
	C			INSTALLATION OF VALVES AND SPECIALS				
	C			PN10				
2.C4.39	C	33.004		Item 1	No	1		
2.C4.40	C	36.003		Item 2	No	1		
2.C4.41	C	33.004		Item 3	No	1		
2.C4.42	C	33.004		Item 4	No	1		
	C			ITEMS CAST OR BUILT INTO CONCRETE				
2.C4.43	C	33.005		Steel pipe diameter 900mm up to 1500mm	No	2		
	C			SUPPLY AND ERECT PRECAST ELEMENTS				
	C			Refer to Dwg 2C-C5-011 and 2C-C5-012				
2.C4.44	C	20.017		Precast slab Type 1	No	3		
	C			ANCILLARY WORKS				
2.C4.45	C	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	1		
2.C4.46	C	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	1		
2.C4.47	C	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.C4.48	C	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.C4.49	C	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 1420mm	No	2		
2.C4.50	C	20.021 c)		Vermin mesh to be applied to opening as per drawing Reg. No. 2A-C6-125	No	2		
2.C4.51	C	20.021 c)		Sleeves to be grouted after the installation of cables to ensure no seepage 160mm diam x 0.3mm thick	No	6		
2.C4.52	C	20.021 c)		Drilling for dowels and including grouting in of dowels, per one chamber complete, as per drawing 2A-C6-125. (Dowel material included in 20.007)	No	1		
2.C4.53	C	20.021 c)		10mm Neoprene, as per drawing 2A-C6-125	m ²	1		
	C			SPECIFIC ITEMS OF WORK				
	C			SEALING STRIPS, JOINT SEALANT, ETC				
2.C4.54	C	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	16		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	C			SPLITTING OF PIPELINE (AT CH253) (along the Low Lift Rising Main)				
	C			REFER TO DRAWING 2C-C5-025 and 2C-C5-026				
	C			EARTHWORKS				
	C			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	C			PN10				
2.C4.55	C	32.003		Item 1	No	1		
2.C4.56	C	32.003		Item 2	No	1		
2.C4.57	C	32.003		Item 3	No	1		
	C			INSTALLATION OF VALVES AND SPECIALS				
	C			PN10				
2.C4.58	C	33.007		Item 1	No	1		
2.C4.59	C	33.007		Item 2	No	1		
2.C4.60	C	33.007		Item 3	No	1		
	C			NON-RETURN AND ISOLATING VALVE CHAMBER (along the Low Lift Rising Main)				
	C			REFER TO DRAWING 2C-C5-015 and 2C-C5-016				
	C			EARTHWORKS				
	C			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS, THRUST BLOCKS, ETC				
2.C4.61	C	9.013		Excavate for valve chambers	m3	260		
2.C4.62	C	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	12		
2.C4.63	C	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance.	m3	7		
2.C4.64	C	9.020		Compaction of trench bottom (150mm thick)	m2	77		
	C			OVERHAUL				
2.C4.65	C	9.023(a)		Between 1km up to and including 3km	m3	30		
2.C4.66	C	9.023(b)		Between 3km up to and including 5km	m3	30		
2.C4.67	C	9.023(c)		Between 5km up to and including 7km	m3	30		
	C			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	C			Provision of bed material (G5)				
2.C4.68	C	15.003(c)		Material from the nearest borrow pit without screening	m3	12		
	C			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.C4.69	C	15.001		Placing of bedding material	m3	12		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	C			OVERHAUL				
2.C4.70	C	15.010(b)		Between 3km up to and including 5km	m3	6		
2.C4.71	C	15.010(c)		Between 5km up to and including 7km	m3	6		
	C			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.C4.72	C	15.014(a)		Structure backfilling compacted	m3	180		
2.C4.73	C	15.014(b)		Rockfill processing and compaction	m3	7		
	C			OVERHAUL				
2.C4.74	C	15.016(a)		Between 1km up to and including 3km	m3	3		
2.C4.75	C	15.016(b)		Between 3km up to and including 5km	m3	3		
2.C4.76	C	15.016(c)		Between 5km up to and including 7km	m3	3		
	C			CONCRETE WORKS				
	C			ROUGH FORMWORK				
	C			Vertical surfaces				
2.C4.77	C	20.001		Sides of floor slab	m2	15		
2.C4.78	C	20.001		Sides of walls	m2	80		
	C			SMOOTH FORMWORK				
	C			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.C4.79	C	20.002		Underside of slabs	m2	17		
	C			SMOOTH FORMWORK				
	C			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.C4.80	C	20.002		Walls	m2	220		
2.C4.81	C	20.002		Side of Sump walls	m2	0.5		
2.C4.82	C	20.002		Plinths	m2	11		
2.C4.83	C	20.005		Narrow widths - Up to 200mm high	m	44		
	C			Box-out holes/Form voids (for sleeves only)				
	C			a) Small, circular, of diameter up to and including 0.35 m				
2.C4.84	C	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	12		
	C			REINFORCEMENT				
2.C4.85	C	20.007		Steel bars (irrespective of grade or diameter)	t	11		
	C			CONCRETE				
	C			CONCRETE 15 MPa/19mm in:				
2.C4.86	C	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	70		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.C4.87	C	20.011(b)		Mass concrete filling where required by the engineer	m3	2		
2.C4.88	C	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	43		
	C			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.C4.89	C	20.010		Foundations, bases, floor slabs and roof slabs	m3	27		
2.C4.90	C	20.010		Plinths (Including grouting between the plinth and the pipes/specials where required)	m3	2		
2.C4.91	C	20.010		Walls	m3	45		
	C			UNFORMED SURFACE FINISHES				
2.C4.92	C	20.013(a)		Wood floated finish	m2	43		
2.C4.93	C	20.013(b)		Steel floated finish	m2	72		
	C			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	C			PN10				
2.C4.94	C	32.003		Item 1	No	2		
2.C4.95	C	32.003		Item 2	No	2		
2.C4.96	C	35.002		Item 3	No	2		
2.C4.97	C	32.003		Item 4	No	2		
2.C4.98	C	35.002		Item 5	No	2		
2.C4.99	C	32.003		Item 6	No	2		
2.C4.100	C	32.003		Item 7	No	4		
2.C4.101	C	35.002		Item 8	No	2		
2.C4.102	C	32.003		Item 9	No	2		
2.C4.103	C	32.003		Item 10	No	2		
2.C4.104	C	32.003		Item 11	No	2		
2.C4.105	C	35.002		Item 12	No	4		
2.C4.106	C	35.002		Item 13	No	4		
2.C4.107	C	35.002		Item 14	No	2		
2.C4.108	C	32.003		Item 15	No	2		
2.C4.109	C	35.002		Item 16	No	2		
2.C4.110	C	32.003		Item 17	No	2		
	C			INSTALLATION OF VALVES AND SPECIALS				
	C			PN10				
2.C4.111	C	33.004		Item 1	No	2		
2.C4.112	C	33.004		Item 2	No	2		
2.C4.113	C	33.004		Item 3	No	2		
2.C4.114	C	33.004		Item 4	No	2		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.C4.115	C	33.004		Item 5	No	2		
2.C4.116	C	33.004		Item 6	No	2		
2.C4.117	C	33.004		Item 7	No	4		
2.C4.118	C	33.004		Item 8	No	2		
2.C4.119	C	33.004		Item 9	No	2		
2.C4.120	C	33.004		Item 10	No	2		
2.C4.121	C	33.004		Item 11	No	2		
2.C4.122	C	33.004		Item 12	No	4		
2.C4.123	C	33.004		Item 13	No	4		
2.C4.124	C	33.004		Item 14	No	2		
2.C4.125	C	33.004		Item 15	No	2		
2.C4.126	C	33.004		Item 16	No	2		
2.C4.127	C	33.004		Item 17	No	2		
	C			ITEMS CAST OR BUILT INTO CONCRETE				
2.C4.128	C	33.005		Steel pipe diameter 900mm up to 1500mm	No	4		
	C			SUPPLY AND ERECT PRECAST ELEMENTS				
	C			Refer to Dwg 2C-C5-015 and 2C-C5-016				
2.C4.129	C	20.017		Precast slab Type 1	No	12		
	C			ANCILLARY WORKS				
2.C4.130	C	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	2		
2.C4.131	C	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	2		
2.C4.132	C	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	2		
2.C4.133	C	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	2		
2.C4.134	C	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 1000mm	No	4		
2.C4.135	C	20.021 c)		Sleeves to be grouted after the installation of cables to ensure no seepage 160mm diam x 0.3mm thick	No	12		
2.C4.136	C	20.021 c)		Portable aluminium steps complete, as per drawing 2A-C6-125	No	2		
2.C4.137	C	20.021 c)		Drilling for dowels and including grouting in of dowels, per one chamber complete, as per drawing 2A-C6-125. (Dowel material included in 20.007)	No	2		
2.C4.138	C	20.021 c)		10mm Neoprene, as per drawing 2A-C6-125	m²	2		
	C			SPECIFIC ITEMS OF WORK				
	C			SEALING STRIPS, JOINT SEALANT, ETC				
2.C4.139	C	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	55		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	C			SINGLE SCOUR VALVE INSTALLATION (Low Lift Rising Main)				
	C			REFER TO DRAWING 2C-C5-020, 2C-C5-021 and 2C-C5-022				
	C			EARTHWORKS				
	C			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS, THRUST BLOCKS, ETC				
2.C4.140	C	9.013		Excavate for valve chambers	m3	875		
2.C4.141	C	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	540		
2.C4.142	C	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance.	m3	9		
2.C4.143	C	9.020		Compaction of trench bottom (150mm thick)	m2	91		
	C			OVERHAUL				
2.C4.144	C	9.023(a)		Between 1km up to and including 3km	m3	180		
2.C4.145	C	9.023(b)		Between 3km up to and including 5km	m3	180		
2.C4.146	C	9.023(c)		Between 5km up to and including 7km	m3	180		
	C			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	C			Provision of bed material (G5)				
2.C4.147	C	15.003(c)		Material from the nearest borrow pit without screening	m3	14		
	C			Provision of cement stabilised soil				
2.C4.148	C	15.003(d)		Material from the nearest borrow pit with screening	m3	58		
2.C4.149	C	15.003(e)		Cement for stabilisation of soil	m3	3		
	C			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.C4.150	C	15.001		Placing of bedding material	m3	14		
2.C4.151	C	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	58		
	C			OVERHAUL				
2.C4.152	C	15.010(b)		Between 3km up to and including 5km	m3	36		
2.C4.153	C	15.010(c)		Between 5km up to and including 7km	m3	36		
	C			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.C4.154	C	15.014(a)		Structure backfilling compacted	m3	610		
2.C4.155	C	15.014(a)		Embankment backfilling compacted	m3	80		
2.C4.156	C	15.014(b)		Rockfill processing and compaction	m3	9		
2.C4.157	C	15.015		Finishing of slopes	m2	134		
	C			OVERHAUL				
2.C4.158	C	15.016(b)		Between 3km up to and including 5km	m3	126		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.C4.159	C	15.016(c)		Between 5km up to and including 7km	m3	126		
	C			CONCRETE WORKS				
	C			ROUGH FORMWORK				
	C			Vertical surfaces				
2.C4.160	C	20.001		Sides of floor slab	m2	18		
2.C4.161	C	20.001		Sides of walls	m2	167		
	C			SMOOTH FORMWORK				
	C			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.C4.162	C	20.002		Underside of slabs	m2	14		
	C			SMOOTH FORMWORK				
	C			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.C4.163	C	20.002		Walls	m2	537		
2.C4.164	C	20.002		Side of Sump walls	m2	2		
2.C4.165	C	20.002		Plinths	m2	16		
2.C4.166	C	20.005		Narrow widths - Up to 250mm high (roof slabs)	m	82		
	C			Box-out holes/Form voids (for sleeves only)				
	C			a) Small, circular, of diameter up to and including 0.35 m				
2.C4.167	C	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	8		
	C			REINFORCEMENT				
2.C4.168	C	20.007		Steel bars (irrespective of grade or diameter)	t	18		
	C			CONCRETE				
	C			CONCRETE 15 MPa/19mm in:				
2.C4.169	C	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	80		
2.C4.170	C	20.011(b)		Mass concrete filling where required by the engineer	m3	4		
2.C4.171	C	46.007(b)i)		100mm thick granolithic screed laid to fall to direction of sump.	m2	46		
	C			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.C4.172	C	20.010		Foundations, bases, floor slabs and roof slabs	m3	25		
2.C4.173	C	20.010		Plinths (Including grouting between the plinth and the pipes/specials where required)	m3	4		
2.C4.174	C	20.010		Walls	m3	87		
	C			UNFORMED SURFACE FINISHES				
2.C4.175	C	20.013(a)		Wood floated finish	m2	46		
2.C4.176	C	20.013(b)		Steel floated finish	m2	78		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	C			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	C			PN10				
2.C4.177	C	32.003		Item 1	No	8		
2.C4.178	C	32.003		Item 2	No	4		
2.C4.179	C	32.003		Item 3	No	8		
2.C4.180	C	32.003		Item 4	No	0		
2.C4.181	C	32.003		Item 5	No	4		
2.C4.182	C	35.002		Item 6	No	12		
2.C4.183	C	32.003		Item 7	No	16		
2.C4.184	C	32.003		Item 8	No	4		
2.C4.185	C	32.003		Item 9	No	4		
2.C4.186	C	32.003		Item 10	No	4		
2.C4.187	C	32.003		Item 11	No	4		
2.C4.188	C	32.003		Item 12	No	4		
	C			INSTALLATION OF VALVES AND SPECIALS				
	C			PN10				
2.C4.189	C	33.004		Item 1	No	8		
2.C4.190	C	33.004		Item 2	No	4		
2.C4.191	C	33.004		Item 3	No	8		
2.C4.192	C	33.004		Item 4	No	0		
2.C4.193	C	33.004		Item 5	No	4		
2.C4.194	C	33.004		Item 6	No	12		
2.C4.195	C	33.004		Item 7	No	16		
2.C4.196	C	33.004		Item 8	No	4		
2.C4.197	C	33.004		Item 9	No	4		
2.C4.198	C	33.004		Item 10	No	4		
2.C4.199	C	33.004		Item 11	No	4		
2.C4.200	C	33.004		Item 12	No	4		
	C			ITEMS CAST OR BUILT INTO CONCRETE				
2.C4.201	C	33.005		Steel pipe diameter 200mm	No	12		
	C			SUPPLY AND ERECT PRECAST ELEMENTS				
	C			Refer to Dwg 2C-C5-020, 2C-C5-021 and 2C-C5-022				
2.C4.202	C	20.017		Precast slab Type 1	No	4		
2.C4.203	C	20.017		Precast slab Type 2	No	12		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	C			ANCILLARY WORKS				
2.C4.204	C	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	8		
2.C4.205	C	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	8		
2.C4.206	C	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	4		
2.C4.207	C	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	4		
2.C4.208	C	20.021 c)		Steel bars as per drawing Reg. No.2A-C6-125	No	4		
2.C4.209	C	20.021 c)		250mm diam uPVC pipe (Class 16) cast into concrete wall at sump x 50 meter in length with flapgate at end, all complete including trenching, bedding and backfilling.	No	2		
2.C4.210	C	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 200mm	No	12		
2.C4.211	C	20.021 c)		Sleeves to be grouted after the installation of cables to ensure no seepage 160mm diam x 0.3mm thick	No	8		
2.C4.212	C	20.021 c)		Drilling for dowels and including grouting in of dowels, per one chamber complete, as per drawing 2A-C6-125. (Dowel material included in 20.007)	No	4		
2.C4.213	C	20.021 c)		10mm Neoprene, as per drawing 2A-C6-125	m²	4		
	C			SPECIFIC ITEMS OF WORK				
	C			SEALING STRIPS, JOINT SEALANT, ETC				
2.C4.214	C	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	54		
	C			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	C			Foundation trench excavation and backfilling				
2.C4.215	C	21.001(b)		In all other classes of material	m3	116		
2.C4.216	C	21.002		Surface preparation for bedding the gabions	m2	97		
2.C4.217	C	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	93		
2.C4.218	C	21.003(a)		Galvanised gabions cages (Refer to drawings for dimensions)	m3	13		
2.C4.219	C	21.003(c)		Galvanised gabions mattresses (Refer to drawings for dimensions)	m3	12		
2.C4.220	C	27.009		Rip-rap	m3	5		
	C			SINGLE AIR VALVE INSTALLATION				
	C			REFER TO DRAWING 2A-C6-141 and 2A-C6-142				
	C			EARTHWORKS				
	C			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS, THRUST BLOCKS, ETC				
2.C4.221	C	9.013		Excavate for valve chambers	m3	130		
2.C4.222	C	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	6		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	C			OVERHAUL				
2.C4.223	C	9.023(a)		Between 1km up to and including 3km	m3	3		
2.C4.224	C	9.023(b)		Between 3km up to and including 5km	m3	3		
	C			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	C			Provision of cement stabilised soil				
2.C4.225	C	15.003(d)		Material from the nearest borrow pit with screening	m3	88		
2.C4.226	C	15.003(e)		Cement for stabilisation of soil	m3	5		
	C			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.C4.227	C	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	93		
	C			OVERHAUL				
2.C4.228	C	15.010(b)		Between 3km up to and including 5km	m3	47		
2.C4.229	C	15.010(c)		Between 5km up to and including 7km	m3	47		
	C			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.C4.230	C	15.014(a)		Structure backfilling compacted	m3	150		
2.C4.231	C	15.014(a)		Embankment backfilling compacted	m3	170		
2.C4.232	C	15.015		Finishing of slopes	m2	300		
	C			OVERHAUL				
2.C4.233	C	15.016(b)		Between 3km up to and including 5km	m3	100		
2.C4.234	C	15.016(c)		Between 5km up to and including 7km	m3	100		
	C			CONCRETE WORKS				
	C			ROUGH FORMWORK				
	C			Vertical surfaces				
2.C4.235	C	20.001		Sides of floor slab	m2	39		
2.C4.236	C	20.001		Sides of walls	m2	137		
	C			SMOOTH FORMWORK				
	C			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.C4.237	C	20.002		Underside of slabs	m2	27		
	C			SMOOTH FORMWORK				
	C			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.C4.238	C	20.002		Walls	m2	360		
2.C4.239	C	20.002		Side of Sump walls	m2	3		
2.C4.240	C	20.005		Narrow widths - Up to 200mm high	m	95		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	C			Box-out holes/Form voids (for sleeves only)				
	C			a) Small, circular, of diameter up to and including 0.35 m				
2.C4.241	C	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	24		
	C			REINFORCEMENT				
2.C4.242	C	20.007		Steel bars (irrespective of grade or diameter)	t	16		
	C			CONCRETE				
	C			CONCRETE 15 MPa/19mm in:				
2.C4.243	C	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	123		
2.C4.244	C	20.011(b)		Mass concrete filling where required by the engineer	m3	6		
2.C4.245	C	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	58		
	C			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.C4.246	C	20.010		Foundations, bases, floor slabs and roof slabs	m3	40		
2.C4.247	C	20.010		Walls	m3	62		
	C			UNFORMED SURFACE FINISHES				
2.C4.248	C	20.013(a)		Wood floated finish	m2	58		
2.C4.249	C	20.013(b)		Steel floated finish	m2	113		
	C			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	C			PN10				
2.C4.250	C	32.003		Item 1	No	12		
2.C4.251	C	32.003		Item 2	No	12		
2.C4.252	C	35.002		Item 3	No	12		
2.C4.253	C	35.002		Item 4	No	12		
	C			INSTALLATION OF VALVES AND SPECIALS				
	C			PN10				
2.C4.254	C	33.004		Item 1	No	12		
2.C4.255	C	33.004		Item 2	No	12		
2.C4.256	C	33.004		Item 3	No	12		
2.C4.257	C	33.004		Item 4	No	12		
	C			ITEMS CAST OR BUILT INTO CONCRETE				
2.C4.258	C	33.005		Steel pipe diameter 700mm	No	12		
	C			SUPPLY AND ERECT PRECAST ELEMENTS				
	C			Refer to Dwg 2A-C6-141 and 2A-C6-142				
2.C4.259	C	20.017		Precast slab Type 1	No	24		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	C			ANCILLARY WORKS				
2.C4.260	C	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	12		
2.C4.261	C	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	12		
2.C4.262	C	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	12		
2.C4.263	C	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	12		
2.C4.264	C	20.021 c)		110mm diam uPVC pipe cast into concrete wall for the sump	No	12		
2.C4.265	C	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 700mm	No	12		
2.C4.266	C	20.014		19mm aggregate/stone	m3	8		
2.C4.267	C	20.021 c)		Vermin mesh to be applied to opening as per drawing Reg. No. 2A-C6-125	No	24		
	C			SPECIFIC ITEMS OF WORK				
	C			SEALING STRIPS, JOINT SEALANT, ETC				
2.C4.268	C	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	63		
	C			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	C			Foundation trench excavation and backfilling				
2.C4.269	C	21.001(b)		In all other classes of material	m3	8		
2.C4.270	C	21.002		Surface preparation for bedding the gabions	m2	8		
2.C4.271	C	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	70		
	C			ISOLATING VALVE INSTALLATION AND MERGING OF DOUBLE PIPELINE (Sedimentation Works)				
	C			REFER TO DRAWING 2C-C5-030, 2C-C5-031 and 2C-C5-032				
	C			EARTHWORKS				
	C			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS, THRUST BLOCKS, ETC				
2.C4.272	C	9.013		Excavate for valve chambers	m3	275		
2.C4.273	C	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	66		
2.C4.274	C	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance.	m3	5		
2.C4.275	C	9.020		Compaction of trench bottom (150mm thick)	m2	58		
	C			OVERHAUL				
2.C4.276	C	9.023(a)		Between 1km up to and including 3km	m3	20		
2.C4.277	C	9.023(b)		Between 3km up to and including 5km	m3	20		
2.C4.278	C	9.023(c)		Between 5km up to and including 7km	m3	20		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	C			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	C			Provision of bed material (G5)				
2.C4.279	C	15.003(c)		Material from the nearest borrow pit without screening	m3	9		
	C			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.C4.280	C	15.001		Placing of bedding material	m3	9		
	C			OVERHAUL				
2.C4.281	C	15.010(b)		Between 3km up to and including 5km	m3	5		
2.C4.282	C	15.010(c)		Between 5km up to and including 7km	m3	5		
	C			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.C4.283	C	15.014(a)		Structure backfilling compacted	m3	215		
2.C4.284	C	15.014(b)		Rockfill processing and compaction	m3	6		
	C			OVERHAUL				
2.C4.285	C	15.016(a)		Between 1km up to and including 3km	m3	7		
2.C4.286	C	15.016(b)		Between 3km up to and including 5km	m3	7		
	C			CONCRETE WORKS				
	C			ROUGH FORMWORK				
	C			Vertical surfaces				
2.C4.287	C	20.001		Sides of floor slab	m2	13		
2.C4.288	C	20.001		Sides of walls	m2	87		
	C			SMOOTH FORMWORK				
	C			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.C4.289	C	20.002		Underside of slabs	m2	19		
	C			SMOOTH FORMWORK				
	C			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.C4.290	C	20.002		Walls	m2	238		
2.C4.291	C	20.002		Side of Sump walls	m2	1		
2.C4.292	C	20.002		Plinths	m2	8		
2.C4.293	C	20.005		Narrow widths - Up to 200mm high	m	44		
	C			Box-out holes/Form voids (for sleeves only)				
	C			a) Small, circular, of diameter up to and including 0.35 m				
2.C4.294	C	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	12		
	C			REINFORCEMENT				
2.C4.295	C	20.007		Steel bars (irrespective of grade or diameter)	t	11		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	C			CONCRETE				
	C			CONCRETE 15 MPa/19mm in:				
2.C4.296	C	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	52		
2.C4.297	C	20.011(b)		Mass concrete filling where required by the engineer	m3	2		
2.C4.298	C	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	30		
	C			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.C4.299	C	20.010		Foundations, bases, floor slabs and roof slabs	m3	22		
2.C4.300	C	20.010		Plinths (Including grouting between the plinth and the pipes/specials where required)	m3	2		
2.C4.301	C	20.010		Walls	m3	49		
	C			UNFORMED SURFACE FINISHES				
2.C4.302	C	20.013(a)		Wood floated finish	m2	30		
2.C4.303	C	20.013(b)		Steel floated finish	m2	59		
	C			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	C			PN10				
2.C4.304	C	32.003		Item 1	No	1		
2.C4.305	C	32.003		Item 2	No	1		
2.C4.306	C	32.003		Item 3	No	1		
2.C4.307	C	32.003		Item 4	No	2		
2.C4.308	C	32.003		Item 5	No	2		
2.C4.309	C	35.002		Item 6	No	2		
2.C4.310	C	32.003		Item 7	No	2		
2.C4.311	C	32.003		Item 8	No	4		
2.C4.312	C	35.002		Item 9	No	4		
2.C4.313	C	32.003		Item 10	No	4		
2.C4.314	C	35.002		Item 11	No	4		
	C			INSTALLATION OF VALVES AND SPECIALS				
	C			PN10				
2.C4.315	C	33.007		Item 1	No	1		
2.C4.316	C	33.004		Item 2	No	1		
2.C4.317	C	33.007		Item 3	No	1		
2.C4.318	C	33.007		Item 4	No	2		
2.C4.319	C	33.004		Item 5	No	2		
2.C4.320	C	33.004		Item 6	No	2		
2.C4.321	C	33.004		Item 7	No	2		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.C4.322	C	33.004		Item 8	No	4		
2.C4.323	C	33.004		Item 9	No	4		
2.C4.324	C	33.004		Item 10	No	4		
2.C4.325	C	33.004		Item 11	No	4		
	C			ITEMS CAST OR BUILT INTO CONCRETE				
2.C4.326	C	33.005		Steel pipe diameter 900mm up to 1500mm	No	4		
	C			SUPPLY AND ERECT PRECAST ELEMENTS				
	C			Refer to Dwg 2C-C5-030, 2C-C5-031 and 2C-C5-032				
2.C4.327	C	20.017		Precast slab Type 1	No	6		
	C			ANCILLARY WORKS				
2.C4.328	C	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	2		
2.C4.329	C	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	2		
2.C4.330	C	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	2		
2.C4.331	C	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	2		
2.C4.332	C	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 1016mm	No	2		
2.C4.333	C	20.021 c)		Sleeves to be grouted after the installation of cables to ensure no seepage 160mm diam x 0.3mm thick	No	12		
2.C4.334	C	20.021 c)		Portable aluminium steps complete, as per drawing 2A-C6-125	No	2		
2.C4.335	C	20.021 c)		Drilling for dowels and including grouting in of dowels, per one chamber complete, as per drawing 2A-C6-125. (Dowel material included in 20.007)	No	2		
2.C4.336	C	20.021 c)		10mm Neoprene, as per drawing 2A-C6-125	m ²	2		
	C			SPECIFIC ITEMS OF WORK				
	C			SEALING STRIPS, JOINT SEALANT, ETC				
2.C4.337	C	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	30		
	C			ACCESS CHAMBER				
	C			REFER TO DRAWING 2A-C6-146 and 2A-C6-147				
	C			EARTHWORKS				
	C			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS, THRUST BLOCKS, ETC				
2.C4.338	C	9.013		Excavate for valve chambers	m ³	92		
2.C4.339	C	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m ³	5		
	C			OVERHAUL				
2.C4.340	C	9.023(a)		Between 1km up to and including 3km	m ³	3		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.C4.341	C	9.023(b)		Between 3km up to and including 5km	m3	2		
	C			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	C			Provision of cement stabilised soil				
2.C4.342	C	15.003(d)		Material from the nearest borrow pit with screening	m3	52		
2.C4.343	C	15.003(e)		Cement for stabilisation of soil	m3	3		
	C			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.C4.344	C	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	54		
	C			OVERHAUL				
2.C4.345	C	15.010(b)		Between 3km up to and including 5km	m3	27		
2.C4.346	C	15.010(c)		Between 5km up to and including 7km	m3	27		
	C			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.C4.347	C	15.014(a)		Structure backfilling compacted	m3	105		
2.C4.348	C	15.014(a)		Embankment backfilling compacted	m3	35		
2.C4.349	C	15.015		Finishing of slopes	m2	92		
	C			OVERHAUL				
2.C4.350	C	15.016(b)		Between 3km up to and including 5km	m3	27		
2.C4.351	C	15.016(c)		Between 5km up to and including 7km	m3	27		
	C			CONCRETE WORKS				
	C			ROUGH FORMWORK				
	C			Vertical surfaces				
2.C4.352	C	20.001		Sides of floor slab	m2	23		
2.C4.353	C	20.001		Sides of walls	m2	72		
	C			SMOOTH FORMWORK				
	C			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.C4.354	C	20.002		Underside of slabs	m2	16		
	C			SMOOTH FORMWORK				
	C			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.C4.355	C	20.002		Walls	m2	190		
2.C4.356	C	20.002		Side of Sump walls	m2	2		
2.C4.357	C	20.005		Narrow widths - Up to 200mm high	m	55		
	C			Box-out holes/Form voids (for sleeves only)				
	C			a) Small, circular, of diameter up to and including 0.35 m				
2.C4.358	C	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	14		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	C			REINFORCEMENT				
2.C4.359	C	20.007		Steel bars (irrespective of grade or diameter)	t	9		
	C			CONCRETE				
	C			CONCRETE 15 MPa/19mm in:				
2.C4.360	C	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	72		
2.C4.361	C	20.011(b)		Mass concrete filling where required by the engineer	m3	4		
2.C4.362	C	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	34		
	C			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.C4.363	C	20.010		Foundations, bases, floor slabs and roof slabs	m3	23		
2.C4.364	C	20.010		Walls	m3	33		
	C			UNFORMED SURFACE FINISHES				
2.C4.365	C	20.013(a)		Wood floated finish	m2	34		
2.C4.366	C	20.013(b)		Steel floated finish	m2	66		
	C			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	C			PN10				
2.C4.367	C	32.003		Item 1	No	7		
2.C4.368	C	32.003		Item 2	No	7		
2.C4.369	C	35.002		Item 3	No	7		
2.C4.370	C	32.003		Item 4	No	7		
2.C4.371	C	35.002		Item 5	No	7		
	C			INSTALLATION OF VALVES AND SPECIALS				
	C			PN10				
2.C4.372	C	33.004		Item 1	No	7		
2.C4.373	C	33.004		Item 2	No	7		
2.C4.374	C	33.004		Item 3	No	7		
2.C4.375	C	33.004		Item 4	No	7		
2.C4.376	C	33.004		Item 5	No	7		
	C			ITEMS CAST OR BUILT INTO CONCRETE				
2.C4.377	C	33.005		Steel pipe diameter 700mm	No	7		
	C			SUPPLY AND ERECT PRECAST ELEMENTS				
	C			Refer to Dwg 2A-C6-146 and 2A-C6-147				
2.C4.378	C	20.017		Precast slab Type 1	No	14		
	C			ANCILLARY WORKS				
2.C4.379	C	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	7		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.C4.380	C	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	7		
2.C4.381	C	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	7		
2.C4.382	C	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	7		
2.C4.383	C	20.021 c)		160mm diam uPVC pipe cast into concrete wall for the sump	No	7		
2.C4.384	C	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 700mm	No	7		
2.C4.385	C	20.014		19mm aggregate/stone	m3	5		
2.C4.386	C	20.021 c)		Vermin mesh to be applied to opening as per drawing Reg. No. 2A-C6-125	No	14		
	C			SPECIFIC ITEMS OF WORK				
	C			SEALING STRIPS, JOINT SEALANT, ETC				
2.C4.387	C	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	37		
	C			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	C			Foundation trench excavation and backfilling				
2.C4.388	C	21.001(b)		In all other classes of material	m3	5		
2.C4.389	C	21.002		Surface preparation for bedding the gabions	m2	5		
2.C4.390	C	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	40		
	C			FARMER OFF-TAKE				
	C			REFER TO DRAWING 2A-C6-190 and 2A-C6-191				
	C			EARTHWORKS				
	C			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS, THRUST BLOCKS, ETC				
2.C4.391	C	9.013		Excavate for valve chambers	m3	134		
	C			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	C			Provision of cement stabilised soil				
2.C4.392	C	15.003(d)		Material from the nearest borrow pit with screening	m3	74		
2.C4.393	C	15.003(e)		Cement for stabilisation of soil	m3	4		
	C			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.C4.394	C	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	78		
	C			OVERHAUL				
2.C4.395	C	15.010(b)		Between 3km up to and including 5km	m3	40		
2.C4.396	C	15.010(c)		Between 5km up to and including 7km	m3	40		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	C			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.C4.397	C	15.014(a)		Structure backfilling compacted	m3	152		
2.C4.398	C	15.014(a)		Embankment backfilling compacted	m3	80		
2.C4.399	C	15.015		Finishing of slopes	m2	165		
	C			OVERHAUL				
2.C4.400	C	15.016(b)		Between 3km up to and including 5km	m3	47		
2.C4.401	C	15.016(c)		Between 5km up to and including 7km	m3	47		
	C			CONCRETE WORKS				
	C			ROUGH FORMWORK				
	C			Vertical surfaces				
2.C4.402	C	20.001		Sides of floor slab	m2	32		
2.C4.403	C	20.001		Sides of walls	m2	114		
	C			SMOOTH FORMWORK				
	C			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.C4.404	C	20.002		Underside of slabs	m2	23		
	C			SMOOTH FORMWORK				
	C			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.C4.405	C	20.002		Walls	m2	299		
2.C4.406	C	20.002		Side of Sump walls	m2	3		
2.C4.407	C	20.005		Narrow widths - Up to 200mm high	m	79		
	C			Box-out holes/Form voids (for sleeves only)				
	C			a) Small, circular, of diameter up to and including 0.35 m				
2.C4.408	C	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	20		
	C			REINFORCEMENT				
2.C4.409	C	20.007		Steel bars (irrespective of grade or diameter)	t	13		
	C			CONCRETE				
	C			CONCRETE 15 MPa/19mm in:				
2.C4.410	C	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	103		
2.C4.411	C	20.011(b)		Mass concrete filling where required by the engineer	m3	5		
2.C4.412	C	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	49		
	C			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.C4.413	C	20.010		Foundations, bases, floor slabs and roof slabs	m3	33		
2.C4.414	C	20.010		Walls	m3	52		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	C			UNFORMED SURFACE FINISHES				
2.C4.415	C	20.013(a)		Wood floated finish	m2	49		
2.C4.416	C	20.013(b)		Steel floated finish	m2	92		
	C			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	C			PN10				
2.C4.417	C	32.003		Item 1	No	10		
2.C4.418	C	32.003		Item 2	No	10		
2.C4.419	C	35.002		Item 3	No	10		
2.C4.420	C	32.003		Item 4	No	10		
2.C4.421	C	35.002		Item 5	No	10		
2.C4.422	C	32.003		Item 6	No	10		
	C			INSTALLATION OF VALVES AND SPECIALS				
	C			PN10				
2.C4.423	C	33.004		Item 1	No	10		
2.C4.424	C	33.004		Item 2	No	10		
2.C4.425	C	33.004		Item 3	No	10		
2.C4.426	C	33.004		Item 4	No	10		
2.C4.427	C	33.004		Item 5	No	10		
2.C4.428	C	33.004		Item 6	No	10		
	C			ITEMS CAST OR BUILT INTO CONCRETE				
2.C4.429	C	33.005		Steel pipe diameter 700mm	No	10		
	C			SUPPLY AND ERECT PRECAST ELEMENTS				
	C			Refer to Dwg 2A-C6-190 and 2A-C6-191				
2.C4.430	C	20.017		Precast slab Type 1	No	20		
	C			ANCILLARY WORKS				
2.C4.431	C	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	10		
2.C4.432	C	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	10		
2.C4.433	C	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	10		
2.C4.434	C	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	10		
2.C4.435	C	20.021 c)		160mm diam uPVC pipe cast into concrete wall for the sump	No	10		
2.C4.436	C	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 700mm	No	10		
2.C4.437	C	20.021 c)		Vermin mesh to be applied to opening as per drawing Reg. No. 2A-C6-125	No	20		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	C			SPECIFIC ITEMS OF WORK				
	C			SEALING STRIPS, JOINT SEALANT, ETC				
2.C4.438	C	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	52		
	C			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	C			Foundation trench excavation and backfilling				
2.C4.439	C	21.001(b)		In all other classes of material	m3	6		
2.C4.440	C	21.002		Surface preparation for bedding the gabions	m2	6		
2.C4.441	C	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	57		
	C			C4: Valve installations and chambers total (Carried forward to Summary of Bills)				

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
	C			PART C5: Crossings				
	C			ROAD CROSSINGS 1				
	C			ROAD CROSSINGS @ CH 1.422 km				
	C			REFER TO DRAWING NO 2C-C4-004				
	C			PATCHING OF EXISTING ROADS				
2.C5.1	C	26.019(b)		Excavation in existing pavements for patching in: Sub base layers	m3	6		
2.C5.2	C	26.020(g)		Backfilling of excavations for patching with: Selected backfill (G7 compacted to 95% of Modified AASHTO density)	m3	3		
2.C5.3	C	26.020(h)		Backfilling of excavations for patching with: Gravel Wearing Course (As specified compacted to 95% of Modified AASHTO density)	m3	4		
	C			PROVISION OF SOILCRETE/CEMENT STABILISED SOIL				
	C			Provision of cement stabilised soil				
2.C5.4	C	15.003(d)		Material from the nearest borrow pit with screening	m3	10		
2.C5.5	C	15.003(e)		Cement for stabilisation of soil	m3	1		
	C			Placing of Bedding Material, Soilcrete, Fertile Soil and Main Backfill				
2.C5.6	C	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	11		
	C			OVERHAUL				
2.C5.7	C	25.018(a)		Between 1km up to and including 3km	m3	6		
2.C5.8	C	25.018(b)		Between 3km up to and including 5km	m3	6		
2.C5.9	C	25.018(c)		Between 5km up to and including 7km	m3	6		
	C			Accommodation of traffic and maintaining temporary deviations for:				
2.C5.10	C	26.023(c)		Reinstatement of existing roads at crossings (full width deviation)	km	0.10		
	C			Relocating of traffic-control facilities for				
2.C5.11	C	25.008(b)		Full width deviations where the pipe crosses the road	Sum	1		
2.C5.12	C	25.017		Watering of temporary deviations	Sum	1		
2.C5.13	C	26.025		Treatment of old roads and temporary deviations	km	0.10		
	C			ROAD CROSSINGS 2				
	C			ROAD CROSSINGS @ CH 1.712 km				
	C			REFER TO DRAWING NO 2C-C4-004				
	C			PATCHING OF EXISTING ROADS				
2.C5.14	C	26.019(b)		Excavation in existing pavements for patching in: Sub base layers	m3	7		
2.C5.15	C	26.020(g)		Backfilling of excavations for patching with: Selected backfill (G7 compacted to 95% of Modified AASHTO density)	m3	3		
2.C5.16	C	26.020(h)		Backfilling of excavations for patching with: Gravel Wearing Course (As specified compacted to 95% of Modified AASHTO density)	m3	4		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	C			PROVISION OF SOILCRETE/CEMENT STABILISED SOIL				
	C			Provision of cement stabilised soil				
2.C5.17	C	15.003(d)		Material from the nearest borrow pit with screening	m3	8		
2.C5.18	C	15.003(e)		Cement for stabilisation of soil	m3	1		
	C			Placing of Bedding Material, Soilcrete, Fertile Soil and Main Backfill				
2.C5.19	C	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	9		
	C			OVERHAUL				
2.C5.20	C	25.018(a)		Between 1km up to and including 3km	m3	4		
2.C5.21	C	25.018(b)		Between 3km up to and including 5km	m3	6		
2.C5.22	C	25.018(c)		Between 5km up to and including 7km	m3	6		
	C			Accommodation of traffic and maintaining temporary deviations for:				
2.C5.23	C	26.023(c)		Reinstatement of existing roads at crossings (full width deviation)	km	0.10		
	C			Relocating of traffic-control facilities for				
2.C5.24	C	25.008(b)		Full width deviations where the pipe crosses the road	Sum	1		
2.C5.25	C	25.017		Watering of temporary deviations	Sum	1		
2.C5.26	C	26.025		Treatment of old roads and temporary deviations	km	0.10		
	C			ROAD CROSSINGS 3				
	C			ROAD CROSSINGS @ CH 2.173 km				
	C			REFER TO DRAWING NO 2C-C4-005				
	C			PATCHING OF EXISTING ROADS				
2.C5.27	C	26.019(b)		Excavation in existing pavements for patching in: Sub base layers	m3	7		
2.C5.28	C	26.020(g)		Backfilling of excavations for patching with: Selected backfill (G7 compacted to 95% of Modified AASHTO density)	m3	3		
2.C5.29	C	26.020(h)		Backfilling of excavations for patching with: Gravel Wearing Course (As specified compacted to 95% of Modified AASHTO density)	m3	4		
	C			PROVISION OF SOILCRETE/CEMENT STABILISED SOIL				
	C			Provision of cement stabilised soil				
2.C5.30	C	15.003(d)		Material from the nearest borrow pit with screening	m3	11		
2.C5.31	C	15.003(e)		Cement for stabilisation of soil	m3	1		
	C			Placing of Bedding Material, Soilcrete, Fertile Soil and Main Backfill				
2.C5.32	C	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	12		
	C			OVERHAUL				
2.C5.33	C	25.018(a)		Between 1km up to and including 3km	m3	6		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.C5.34	C	25.018(b)		Between 3km up to and including 5km	m3	6		
2.C5.35	C	25.018(c)		Between 5km up to and including 7km	m3	6		
	C			Accommodation of traffic and maintaining temporary deviations for:				
2.C5.36	C	26.023(c)		Reinstatement of existing roads at crossings (full width deviation)	km	0.10		
	C			Relocating of traffic-control facilities for				
2.C5.37	C	25.008(b)		Full width deviations where the pipe crosses the road	Sum	1		
2.C5.38	C	25.017		Watering of temporary deviations	Sum	1		
2.C5.39	C	26.025		Treatment of old roads and temporary deviations	km	0.10		
	C			ROAD CROSSINGS 4				
	C			ROAD CROSSINGS @ CH 2.300 km				
	C			REFER TO DRAWING NO 2C-C4-005				
	C			PATCHING OF EXISTING ROADS				
2.C5.40	C	26.019(b)		Excavation in existing pavements for patching in: Sub base layers	m3	41		
2.C5.41	C	26.020(g)		Backfilling of excavations for patching with: Selected backfill (G7 compacted to 95% of Modified AASHTO density)	m3	18		
2.C5.42	C	26.020(h)		Backfilling of excavations for patching with: Gravel Wearing Course (As specified compacted to 95% of Modified AASHTO density)	m3	24		
	C			PROVISION OF SOILCRETE/CEMENT STABILISED SOIL				
	C			Provision of cement stabilised soil				
2.C5.43	C	15.003(d)		Material from the nearest borrow pit with screening	m3	82		
2.C5.44	C	15.003(e)		Cement for stabilisation of soil	m3	5		
	C			Placing of Bedding Material, Soilcrete, Fertile Soil and Main Backfill				
2.C5.45	C	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	87		
	C			OVERHAUL				
2.C5.46	C	25.018(a)		Between 1km up to and including 3km	m3	43		
2.C5.47	C	25.018(b)		Between 3km up to and including 5km	m3	43		
2.C5.48	C	25.018(c)		Between 5km up to and including 7km	m3	43		
	C			Accommodation of traffic and maintaining temporary deviations for:				
2.C5.49	C	26.023(c)		Reinstatement of existing roads at crossings (full width deviation)	km	0.1		
	C			Relocating of traffic-control facilities for				
2.C5.50	C	25.008(b)		Full width deviations where the pipe crosses the road	Sum	1		
2.C5.51	C	25.017		Watering of temporary deviations	Sum	1		
2.C5.52	C	26.025		Treatment of old roads and temporary deviations	km	0.1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	C			ROAD CROSSINGS 5				
	C			ROAD CROSSINGS @ CH 2.593 km				
	C			REFER TO DRAWING NO 2C-C4-005				
	C			PATCHING OF EXISTING ROADS				
2.C5.53	C	26.019(b)		Excavation in existing pavements for patching in: Sub base layers	m3	14		
2.C5.54	C	26.020(g)		Backfilling of excavations for patching with: Selected backfill (G7 compacted to 95% of Modified AASHTO density)	m3	6		
2.C5.55	C	26.020(h)		Backfilling of excavations for patching with: Gravel Wearing Course (As specified compacted to 95% of Modified AASHTO density)	m3	8		
	C			PROVISION OF SOILCRETE/CEMENT STABILISED SOIL				
	C			Provision of cement stabilised soil				
2.C5.56	C	15.003(d)		Material from the nearest borrow pit with screening	m3	23		
2.C5.57	C	15.003(e)		Cement for stabilisation of soil	m3	2		
	C			Placing of Bedding Material, Soilcrete, Fertile Soil and Main Backfill				
2.C5.58	C	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	25		
	C			OVERHAUL				
2.C5.59	C	25.018(a)		Between 1km up to and including 3km	m3	13		
2.C5.60	C	25.018(b)		Between 3km up to and including 5km	m3	13		
2.C5.61	C	25.018(c)		Between 5km up to and including 7km	m3	13		
	C			Accommodation of traffic and maintaining temporary deviations for:				
2.C5.62	C	26.023(c)		Reinstatement of existing roads at crossings (full width deviation)	km	0.1		
	C			Relocating of traffic-control facilities for				
2.C5.63	C	25.008(b)		Full width deviations where the pipe crosses the road	Sum	1		
2.C5.64	C	25.017		Watering of temporary deviations	Sum	1		
2.C5.65	C	26.025		Treatment of old roads and temporary deviations	km	0.1		
	C			ROAD CROSSINGS 6				
	C			ROAD CROSSINGS @ CH 2.788 km				
	C			REFER TO DRAWING NO 2C-C4-006				
	C			TRENCH BACKFILL - COMPACTION OF MATERIAL				
	C			PATCHING OF EXISTING ROADS				
2.C5.66	C	26.019(b)		Excavation in existing pavements for patching in: Sub base layers	m3	40		
2.C5.67	C	26.020(g)		Backfilling of excavations for patching with: Selected backfill (G7 compacted to 95% of Modified AASHTO density)	m3	17		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.C5.68	C	26.020(h)		Backfilling of excavations for patching with: Gravel Wearing Course (As specified compacted to 95% of Modified AASHTO density)	m3	23		
	C			PROVISION OF SOILCRETE/CEMENT STABILISED SOIL				
	C			Provision of cement stabilised soil				
2.C5.69	C	15.003(d)		Material from the nearest borrow pit with screening	m3	38		
2.C5.70	C	15.003(e)		Cement for stabilisation of soil	m3	2		
	C			Placing of Bedding Material, Soilcrete, Fertile Soil and Main Backfill				
2.C5.71	C	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	40		
	C			OVERHAUL				
2.C5.72	C	25.018(a)		Between 1km up to and including 3km	m3	26		
2.C5.73	C	25.018(b)		Between 3km up to and including 5km	m3	27		
2.C5.74	C	25.018(c)		Between 5km up to and including 7km	m3	27		
	C			Accommodation of traffic and maintaining temporary deviations for:				
2.C5.75	C	26.023(c)		Reinstatement of existing roads at crossings (full width deviation)	km	0.1		
	C			Relocating of traffic-control facilities for				
2.C5.76	C	25.008(b)		Full width deviations where the pipe crosses the road	Sum	1		
2.C5.77	C	25.017		Watering of temporary deviations	Sum	1		
2.C5.78	C	26.025		Treatment of old roads and temporary deviations	km	0.1		
	C			ROAD CROSSINGS 7				
	C			ROAD CROSSINGS @ CH 2.924 km				
	C			REFER TO DRAWING NO 2C-C4-006				
	C			PATCHING OF EXISTING ROADS				
2.C5.79	C	26.019(b)		Excavation in existing pavements for patching in: Sub base layers	m3	17		
2.C5.80	C	26.020(g)		Backfilling of excavations for patching with: Selected backfill (G7 compacted to 95% of Modified AASHTO density)	m3	7		
2.C5.81	C	26.020(h)		Backfilling of excavations for patching with: Gravel Wearing Course (As specified compacted to 95% of Modified AASHTO density)	m3	10		
	C			PROVISION OF SOILCRETE/CEMENT STABILISED SOIL				
	C			Provision of cement stabilised soil				
2.C5.82	C	15.003(d)		Material from the nearest borrow pit with screening	m3	17		
2.C5.83	C	15.003(e)		Cement for stabilisation of soil	m3	1		
	C			Placing of Bedding Material, Soilcrete, Fertile Soil and Main Backfill				
2.C5.84	C	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	18		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	C			OVERHAUL				
2.C5.85	C	25.018(a)		Between 1km up to and including 3km	m3	11		
2.C5.86	C	25.018(b)		Between 3km up to and including 5km	m3	12		
2.C5.87	C	25.018(c)		Between 5km up to and including 7km	m3	12		
	C			Accommodation of traffic and maintaining temporary deviations for:				
2.C5.88	C	26.023(c)		Reinstatement of existing roads at crossings (full width deviation)	km	0.1		
	C			Relocating of traffic-control facilities for				
2.C5.89	C	25.008(b)		Full width deviations where the pipe crosses the road	Sum	1		
2.C5.90	C	25.017		Watering of temporary deviations	Sum	1		
2.C5.91	C	26.025		Treatment of old roads and temporary deviations	km	0.1		
	C			ROAD CROSSINGS 8				
	C			ROAD CROSSINGS @ CH 3.119 km				
	C			REFER TO DRAWING NO 2C-C4-006				
	C			PATCHING OF EXISTING ROADS				
2.C5.92	C	26.019(b)		Excavation in existing pavements for patching in: Sub base layers	m3	12		
2.C5.93	C	26.020(g)		Backfilling of excavations for patching with: Selected backfill (G7 compacted to 95% of Modified AASHTO density)	m3	5		
2.C5.94	C	26.020(h)		Backfilling of excavations for patching with: Gravel Wearing Course (As specified compacted to 95% of Modified AASHTO density)	m3	7		
	C			PROVISION OF SOILCRETE/CEMENT STABILISED SOIL				
	C			Provision of cement stabilised soil				
2.C5.95	C	15.003(d)		Material from the nearest borrow pit with screening	m3	12		
2.C5.96	C	15.003(e)		Cement for stabilisation of soil	m3	1		
	C			Placing of Bedding Material, Soilcrete, Fertile Soil and Main Backfill				
2.C5.97	C	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	13		
	C			OVERHAUL				
2.C5.98	C	25.018(a)		Between 1km up to and including 3km	m3	8		
2.C5.99	C	25.018(b)		Between 3km up to and including 5km	m3	8		
2.C5.100	C	25.018(c)		Between 5km up to and including 7km	m3	9		
	C			Accommodation of traffic and maintaining temporary deviations for:				
2.C5.101	C	26.023(c)		Reinstatement of existing roads at crossings (full width deviation)	km	0.1		
	C			Relocating of traffic-control facilities for				
2.C5.102	C	25.008(b)		Full width deviations where the pipe crosses the road	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.C5.103	C	25.017		Watering of temporary deviations	Sum	1		
2.C5.104	C	26.025		Treatment of old roads and temporary deviations	km	0.1		
	C			ROAD CROSSINGS 9				
	C			ROAD CROSSINGS @ CH 3.158 km				
	C			REFER TO DRAWING NO 2C-C4-006				
	C			PATCHING OF EXISTING ROADS				
2.C5.105	C	26.019(b)		Excavation in existing pavements for patching in: Sub base layers	m3	8		
2.C5.106	C	26.020(g)		Backfilling of excavations for patching with: Selected backfill (G7 compacted to 95% of Modified AASHTO density)	m3	4		
2.C5.107	C	26.020(h)		Backfilling of excavations for patching with: Gravel Wearing Course (As specified compacted to 95% of Modified AASHTO density)	m3	4		
	C			PROVISION OF SOILCRETE/CEMENT STABILISED SOIL				
	C			Provision of cement stabilised soil				
2.C5.108	C	15.003(d)		Material from the nearest borrow pit with screening	m3	8		
2.C5.109	C	15.003(e)		Cement for stabilisation of soil	m3	1		
	C			Placing of Bedding Material, Soilcrete, Fertile Soil and Main Backfill				
2.C5.110	C	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	9		
	C			OVERHAUL				
2.C5.111	C	25.018(a)		Between 1km up to and including 3km	m3	5		
2.C5.112	C	25.018(b)		Between 3km up to and including 5km	m3	6		
2.C5.113	C	25.018(c)		Between 5km up to and including 7km	m3	6		
	C			Accommodation of traffic and maintaining temporary deviations for:				
2.C5.114	C	26.023(c)		Reinstatement of existing roads at crossings (full width deviation)	km	0.1		
	C			Relocating of traffic-control facilities for				
2.C5.115	C	25.008(b)		Full width deviations where the pipe crosses the road	Sum	1		
2.C5.116	C	25.017		Watering of temporary deviations	Sum	1		
2.C5.117	C	26.025		Treatment of old roads and temporary deviations	km	0.1		
	C			ROAD CROSSINGS 10				
	C			ROAD CROSSINGS @ CH 3.450 km				
	C			REFER TO DRAWING NO 2C-C4-007				
	C			PATCHING OF EXISTING ROADS				
2.C5.118	C	26.019(b)		Excavation in existing pavements for patching in: Sub base layers	m3	16		
2.C5.119	C	26.020(g)		Backfilling of excavations for patching with: Selected backfill (G7 compacted to 95% of Modified AASHTO density)	m3	7		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.C5.120	C	26.020(h)		Backfilling of excavations for patching with: Gravel Wearing Course (As specified compacted to 95% of Modified AASHTO density)	m3	9		
	C			PROVISION OF SOILCRETE/CEMENT STABILISED SOIL				
	C			Provision of cement stabilised soil				
2.C5.121	C	15.003(d)		Material from the nearest borrow pit with screening	m3	16		
2.C5.122	C	15.003(e)		Cement for stabilisation of soil	m3	1		
	C			Placing of Bedding Material, Soilcrete, Fertile Soil and Main Backfill				
2.C5.123	C	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	17		
	C			OVERHAUL				
2.C5.124	C	25.018(a)		Between 1km up to and including 3km	m3	11		
2.C5.125	C	25.018(b)		Between 3km up to and including 5km	m3	11		
2.C5.126	C	25.018(c)		Between 5km up to and including 7km	m3	11		
	C			Accommodation of traffic and maintaining temporary deviations for:				
2.C5.127	C	26.023(c)		Reinstatement of existing roads at crossings (full width deviation)	km	0.1		
	C			Relocating of traffic-control facilities for				
2.C5.128	C	25.008(b)		Full width deviations where the pipe crosses the road	Sum	1		
2.C5.129	C	25.017		Watering of temporary deviations	Sum	1		
2.C5.130	C	26.025		Treatment of old roads and temporary deviations	km	0.1		
	C			ROAD CROSSINGS 11				
	C			ROAD CROSSINGS @ CH 4.445 km				
	C			REFER TO DRAWING NO 2C-C4-008				
	C			TRENCH BACKFILL - COMPACTION OF MATERIAL				
	C			PATCHING OF EXISTING ROADS				
2.C5.131	C	26.019(b)		Excavation in existing pavements for patching in: Sub base layers	m3	7		
2.C5.132	C	26.020(g)		Backfilling of excavations for patching with: Selected backfill (G7 compacted to 95% of Modified AASHTO density)	m3	3		
2.C5.133	C	26.020(h)		Backfilling of excavations for patching with: Gravel Wearing Course (As specified compacted to 95% of Modified AASHTO density)	m3	4		
	C			PROVISION OF SOILCRETE/CEMENT STABILISED SOIL				
	C			Provision of cement stabilised soil				
2.C5.134	C	15.003(d)		Material from the nearest borrow pit with screening	m3	3		
2.C5.135	C	15.003(e)		Cement for stabilisation of soil	m3	1		
	C			Placing of Bedding Material, Soilcrete, Fertile Soil and Main Backfill				
2.C5.136	C	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	4		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	C			OVERHAUL				
2.C5.137	C	25.018(a)		Between 1km up to and including 3km	m3	3		
2.C5.138	C	25.018(b)		Between 3km up to and including 5km	m3	4		
2.C5.139	C	25.018(c)		Between 5km up to and including 7km	m3	4		
	C			Accommodation of traffic and maintaining temporary deviations for:				
2.C5.140	C	26.023(c)		Reinstatement of existing roads at crossings (full width deviation)	km	0.1		
	C			Relocating of traffic-control facilities for				
2.C5.141	C	25.008(b)		Full width deviations where the pipe crosses the road	Sum	1		
2.C5.142	C	25.017		Watering of temporary deviations	Sum	1		
2.C5.143	C	26.025		Treatment of old roads and temporary deviations	km	0.1		
	C			PART C5: Crossings (Carried forward to Summary of Bills)				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	C			PART C6: Landscaping and Rehabilitation				
	C			LANDSCAPING & REHABILITATION				
2.C6.1	C	47.001		Shaping	m2	195 540		
2.C6.2	C	47.002		Ripping	ha	20		
2.C6.3	C	47.003		Trimming	m2	195 540		
2.C6.4	C	47.004		Scarifying	ha	20		
2.C6.5	C	47.007		Furnishing and applying fertilisers	kg	20 000		
2.C6.6	C	47.011		Preparing topsoil for seeding	m2	195 540		
2.C6.7	C	47.012		Hydro-seeding	ha	17		
2.C6.8	C	47.013		Hand-seeding	ha	3		
2.C6.9	C	47.015		Temporary re-vegetation	ha	2		
	C			Provision of seed				
2.C6.10	C	47.010		Seed type - Anthephora pubescens	kg	20		
2.C6.11	C	47.010		Seed type - Cenchrus ciliaris	kg	20		
2.C6.12	C	47.010		Seed type - Chloris gayana	kg	196		
2.C6.13	C	47.010		Seed type - Cynodon dactylon	kg	60		
2.C6.14	C	47.010		Seed type - Digitaria eriantha	kg	235		
2.C6.15	C	47.010		Seed type - Eriopogon chenchroides	kg	20		
2.C6.16	C	47.010		Seed type - Eragrostis curvula	kg	40		
2.C6.17	C	47.010		Seed type - Eragrostis lehmanniana	kg	10		
2.C6.18	C	47.010		Seed type - Eragrostis tef	kg	60		
2.C6.19	C	47.010		Seed type - Heteropogon contortus	kg	60		
2.C6.20	C	47.010		Seed type - Panicum maximum	kg	70		
2.C6.21	C	47.010		Seed type - Pogonarthria squarrosa	kg	20		
2.C6.22	C	47.016		Provision of temporary erosion control measures	ha	20		
2.C6.23	C	47.017		Maintenance of the Temporary Erosion Control Measures	sum	1		
2.C6.24	C	47.018		Maintenance of Vegetation	sum	1		
	C			PART C.6: Landscaping and Rehabilitation (Carried forward to Summary of Bills)				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	C			PART C7: Fencing				
	C			FENCING (NON SECURITY TYPE - STOCKPROOF)				
2.C7.1	C	6.001		Clearing the fence line, 1m wide strip	m	11695		
	C			Remove fencing and disposing of material				
2.C7.2	C	6.004(a)		Seven strand stock proof fence (1,25m high)	m	12175		
	C			Removal of gates				
2.C7.3	C	6.007		All types of gates	No	22		
	C			Supply, erect and maintain during contract period new fencing material for new fences				
2.C7.4	C	6.002(a)		Seven strand stock proof fence (1,25m high) as per drawing 2A-C6-101	m	12175		
	C			Supply, erect and maintain gates during contract period				
2.C7.5	C	6.005(a)		1.2m high gates for stock proof fences	No	22		
	C			Remove fencing installed under this contract and re-erect at another position				
2.C7.6	C	6.003(a)		Seven strand stock proof fence (1,25m high) as per drawing 2A-C6-101	m	500		
	C			Remove gates installed under this contract and re-erect at another position				
2.C7.7	C	6.006(a)		1.2m high gates for stock proof fences	No	3		
	C			PART C.7: Fencing (Carried forward to Summary of Bills)				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	C			PART C8: Fibre Earthworks				
	C			SITE CLEARANCE				
	C			Removal of fertile soil				
2.C8.1	C	7.005(a)		For pipelines, temporary stockpile alongside the pipeline and construction servitude	m3	1470		
	C			DEALING WITH WATER For all works included in PART C for Fibre Earthworks				
2.C8.2	C	8.001		Dealing with water	Sum	1		
2.C8.3	C	8.002		Treatment of water	Sum	1		
2.C8.4	C	8.003		Water monitoring	Sum	1		
2.C8.5	C	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	C			PIPE TRENCH EXCAVATIONS				
	C			EXCAVATE IN ALL MATERIALS TO SPECIFIED LEVELS AND BATTERED SLOPES, INCLUDING TEMPORARY STOCKPILING AND LEVELLING ALONGSIDE EXCAVATIONS WITHIN THE CONFINES OF THE PIPE SERVITUDE				
	C			Classified trench excavations:				
	C			Within the freehaul distance				
2.C8.6	C	9.012		Up to 1m deep	m3	630		
2.C8.7	C	9.012		Over 1m and up to 2m deep	m3	1 005		
	C			Un-Classified trench excavations:				
	C			Within the freehaul distance				
2.C8.8	C	9.012		Up to 1m deep	m3	15		
2.C8.9	C	9.012		Over 1m and up to 2m deep	m3	52		
2.C8.10	C	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	165		
2.C8.11	C	9.020		Compaction of trench bottom	m2	3 365		
	C			EXCAVATION ANCILLARIES				
2.C8.12	C	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to designated spoil sites	m3	14		
2.C8.13	C	9.015		Excavate by hand in soft material to expose existing services	m3	39		
2.C8.14	C	9.021		Excavation by hand	m3	20		
	C			OVERHAUL				
2.C8.15	C	9.023(a)		Between 1km up to and including 3km	m3	130		
2.C8.16	C	9.023(b)		Between 3km up to and including 5km	m3	15		
2.C8.17	C	9.023(c)		Between 5km up to and including 7km	m3	27		
	C			EXISTING SERVICES THAT INTERSECT OR ADJOIN A PIPE TRENCH				
2.C8.18	C	9.018(a)		Services that intersect a pipe trench	No	12		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.C8.19	C	9.018(b)		Services that adjoin a trench	m	850		
2.C8.20	C	9.022		Slurry trenches / curtain walls	m2	210		
	C			BACKFILLING AND BEDDING				
	C			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	C			Provision of bed material				
2.C8.21	C	15.003(a)		Material without screening from trenches	m3	55		
2.C8.22	C	15.003(b)		Material with screening from trenches	m3	215		
2.C8.23	C	15.003(c)		Material from the nearest borrow pit without screening	m3	15		
2.C8.24	C	15.003(d)		Material from the nearest borrow pit with screening	m3	55		
	C			Provision of selected fill blanket				
2.C8.25	C	15.006(a)		Material without screening from trenches	m3	85		
2.C8.26	C	15.006(b)		Material with screening from trenches	m3	330		
2.C8.27	C	15.006(c)		Material from the nearest borrow pit without screening	m3	20		
2.C8.28	C	15.006(d)		Material from the nearest borrow pit with screening	m3	70		
2.C8.29	C	15.006(e)		Material from commercial sources	m3	15		
	C			Provision of main backfill material				
2.C8.30	C	15.007(a)		Backfill material from trench excavation	m3	655		
2.C8.31	C	15.007(b)		Backfill material from the nearest borrow pit	m3	295		
	C			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.C8.32	C	15.001		Bed material	m3	340		
2.C8.33	C	15.001		Selected fill blanket	m3	520		
2.C8.34	C	15.001		Main backfill	m3	790		
2.C8.35	C	15.001		Fertile soil	m3	1 470		
	C			PROVISION OF MATERIAL TO REPLACE UNSUITABLE MATERIAL FROM TRENCH BOTTOM OR TO PROVIDE SUPPORTING EARTHWORKS				
2.C8.36	C	15.011(b)		From borrow pits	m3	14		
	C			Placing of Material				
2.C8.37	C	15.012		Placing of material to replace unsuitable material from trench bottom or to provide supporting earthworks	m3	14		
	C			SUBSOIL DRAINAGE				
	C			Crushed stone				
2.C8.38	C	15.008(a)		Supply and place crushed stone for Layer no 1	m3	14		
2.C8.39	C	15.008(c)		Supply and place well graded compacted dump rock for Layer no 2	m3	23		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	C			Geotextile				
2.C8.40	C	15.008(b)		Supply and place geotextile for Layer no 1	m2	250		
2.C8.41	C	15.008(d)		Supply and place geotextile for Layer no 2	m2	290		
	C			ENCASING OF PIPES IN CONCRETE				
2.C8.42	C	15.009(a)		Concrete strength grade 30/19	m3	10		
2.C8.43	C	15.009(b)		Reinforcement	t	2		
	C			OVERHAUL				
2.C8.44	C	15.010(a)		Between 1km up to and including 3km	m3	106		
2.C8.45	C	15.010(b)		Between 3km up to and including 5km	m3	200		
2.C8.46	C	15.010(c)		Between 5km up to and including 7km	m3	58		
	C			PART C8: Fibre Earthworks Total (Carried forward to Summary of Bills)				
	C			PART C: LOW LIFT RISING MAIN				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	D			PART D: BALANCING RESERVOIR & SEDIMENTATION WORKS				
	D1			PART D1: SEDIMENTATION WORKS				
	D1			PART D1.1: Preliminary and General				
	D1			PRELIMINARY AND GENERAL (SECONDARY)				
	D1	1.002		FIXED CHARGES - GENERAL OBLIGATIONS				
2.D1.1.1	D1		X	Head Office Contract Management and Overheads	Sum	1		
2.D1.1.2	D1		X	General Site Supervision and Overheads	Sum	1		
2.D1.1.3	D1		X	Method statements (1.10.1)	Sum	1		
2.D1.1.4	D1		X	Competency training (1.10.2.4)	Sum	1		
2.D1.1.5	D1		X	Returns and reporting (1.10.3)	Sum	1		
2.D1.1.6	D1		X	Management meetings (1.10.4)	Sum	1		
2.D1.1.7	D1		X	Integration management (1.10.5)	Sum	1		
2.D1.1.8	D1		X	Programming Requirements (1.9)	Sum	1		
2.D1.1.9	D1		X	Quality Management (1.10.2)	Sum	1		
2.D1.1.10	D1		X	Socio Economic Requirements (1.11)	Sum	1		
2.D1.1.11	D1		X	Occupational Health and Safety Requirements (1.12)	Sum	1		
2.D1.1.12	D1		X	Environmental Requirements (1.13)	Sum	1		
	D1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.D1.1.13	D1		X	.....	Sum	1		
2.D1.1.14	D1		X	.....	Sum	1		
2.D1.1.15	D1		X	.....	Sum	1		
2.D1.1.16	D1		X	.....	Sum	1		
	D1	1.003 & 1.004		FIXED CHARGES - FACILITIES FOR THE CONTRACTOR (1.8)				
2.D1.1.17	D1		X	Transport of Staff and Labour (1.8.1.4)	Sum	1		
2.D1.1.18	D1		X	Construction Establishment Fencing (1.8.3.1)	Sum	1		
2.D1.1.19	D1		X	Lighting of Construction Establishment Areas (1.8.3.2)	Sum	1		
2.D1.1.20	D1		X	Electrical power and distribution (1.8.3.4)	Sum	1		
2.D1.1.21	D1		X	Standby power (1.8.3.4)	Sum	1		
2.D1.1.22	D1		X	Communications (1.8.3.7)	Sum	1		
	D1			Office, Accommodation and Other Site facilities				
2.D1.1.23	D1		X	Accommodation for staff and workforce (1.8.3.8b)	Sum	1		
2.D1.1.24	D1		X	Offices (1.8.3.8c)	Sum	1		
2.D1.1.25	D1		X	Other establishment facilities (1.8.3.8d)	Sum	1		
2.D1.1.26	D1		X	Storage (1.8.3.8e)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	D1			Other services				
2.D1.1.27	D1		X	Medical (1.8.3.12)	Sum	1		
2.D1.1.28	D1		X	Sanitation and Cleaning (1.8.3.13)	Sum	1		
2.D1.1.29	D1		X	Access control and security (1.8.3.14)	Sum	1		
	D1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("nil" to be entered if not required)				
2.D1.1.30	D1		X	.....	Sum	1		
2.D1.1.31	D1		X	.....	Sum	1		
2.D1.1.32	D1		X	.....	Sum	1		
2.D1.1.33	D1		X	.....	Sum	1		
	D1	1.004		FIXED CHARGES - SPECIFIC EQUIPMENT				
2.D1.1.34	D1		X	Equipment for construction and maintenance of the Contractor's work areas	Sum	1		
2.D1.1.35	D1		X	Minor equipment and small tools	Sum	1		
2.D1.1.36	D1		X	Equipment for dust and emissions control and monitoring in compliance with environmental requirement	Sum	1		
2.D1.1.37	D1		X	Construction services including electrical power, compressed air, water, communications, etc.	Sum	1		
2.D1.1.38	D1		X	Equipment for blasting and rock support	Sum	1		
2.D1.1.39	D1		X	Equipment for earthworks, trenching and backfilling	Sum	1		
2.D1.1.40	D1		X	Equipment for borrowing, processing of materials, transport of materials and spoiling of materials	Sum	1		
2.D1.1.41	D1		X	Equipment for cranes, winches, lifting and pipe handling	Sum	1		
2.D1.1.42	D1		X	Equipment for welding, weld testing and coatings	Sum	1		
2.D1.1.43	D1		X	Equipment for site transporting, lifting, placing and fixing of structural steel work	Sum	1		
2.D1.1.44	D1		X	Equipment for site transporting, placing, fixing and finishing of concrete work, formwork and reinforcement	Sum	1		
2.D1.1.45	D1		X	Equipment for processing concrete (Batch plant)	Sum	1		
2.D1.1.46	D1		X	Equipment for dealing with water	Sum	1		
	D1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.D1.1.47	D1		X	.....	Sum	1		
2.D1.1.48	D1		X	.....	Sum	1		
2.D1.1.49	D1		X	.....	Sum	1		
2.D1.1.50	D1		X	.....	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	D1	1.006		TIME RELATED CHARGES - GENERAL OBLIGATIONS				
2.D1.1.51	D1		X	Head Office Contract Management and Overheads (Duration Weeks)	Sum	1		
2.D1.1.52	D1		X	General Site Supervision and Overheads (Duration Weeks)	Sum	1		
2.D1.1.53	D1		X	Method Statements (1.10.1) (Duration Weeks)	Sum	1		
2.D1.1.54	D1		X	Competency training (1.10.2.4) (Duration Weeks)	Sum	1		
2.D1.1.55	D1		X	Returns and reporting (1.10.3) (Duration Weeks)	Sum	1		
2.D1.1.56	D1		X	Management meetings (1.10.4) (Duration Weeks)	Sum	1		
2.D1.1.57	D1		X	Integration management (1.10.5) (Duration Weeks)	Sum	1		
2.D1.1.58	D1		X	Programming Requirements (1.9) (Duration Weeks)	Sum	1		
2.D1.1.59	D1		X	Quality Management (1.10.2) (Duration Weeks)	Sum	1		
2.D1.1.60	D1		X	Socio Economic Requirements (1.11) (Duration Weeks)	Sum	1		
2.D1.1.61	D1		X	Occupational Health and Safety (1.12) (Duration Weeks)	Sum	1		
2.D1.1.62	D1		X	Environmental Requirements (1.13) (Duration Weeks)	Sum	1		
	D1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.D1.1.63	D1		X	.....	Sum	1		
2.D1.1.64	D1		X	.....	Sum	1		
2.D1.1.65	D1		X	.....	Sum	1		
	D1	1.007 & 1.008		TIME RELATED CHARGES - FACILITIES FOR THE CONTRACTOR (1.8)				
2.D1.1.66	D1		X	Transport of Staff and Labour (1.8.1.4) (Duration Weeks)	Sum	1		
2.D1.1.67	D1		X	Construction Establishment Fencing (1.8.3.1) (Duration Weeks)	Sum	1		
2.D1.1.68	D1		X	Lighting of Construction Establishment Areas (1.8.3.2) (Duration Weeks)	Sum	1		
2.D1.1.69	D1		X	Electrical power and distribution (1.8.3.4) (Duration Weeks)	Sum	1		
2.D1.1.70	D1		X	Standby power (1.8.3.4) (Duration Weeks)	Sum	1		
2.D1.1.71	D1		X	Communications (1.8.3.7) (Duration Weeks)	Sum	1		
	D1			Office, Accommodation and Other Site facilities				
2.D1.1.72	D1		X	Accommodation for staff and workforce (1.8.3.8b)(Duration Weeks)	Sum	1		
2.D1.1.73	D1		X	Offices (1.8.3.8c) (Duration Weeks)	Sum	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.D1.1.74	D1		X	Other establishment facilities (1.8.3.8d) (Duration Weeks)	Sum	1		
2.D1.1.75	D1		X	Storage (1.8.3.8e) (Duration Weeks)	Sum	1		
	D1			Other services				
2.D1.1.76	D1		X	Medical (1.8.3.12) (Duration Weeks)	Sum	1		
2.D1.1.77	D1		X	Sanitation and Cleaning (1.8.3.13) (Duration Weeks)	Sum	1		
2.D1.1.78	D1		X	Access control and security (1.8.3.14) (Duration Weeks)	Sum	1		
	D1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("nil" to be entered if not required)				
2.D1.1.79	D1		X	.....	Sum	1		
2.D1.1.80	D1		X	.....	Sum	1		
2.D1.1.81	D1		X	.....	Sum	1		
2.D1.1.82	D1		X	.....	Sum	1		
	D1	1.008		TIME RELATED CHARGES - SPECIFIC EQUIPMENT				
2.D1.1.83	D1		X	Equipment for construction and maintenance of the Contractor's work areas (Duration Weeks)	Sum	1		
2.D1.1.84	D1		X	Minor equipment and small tools (Duration Weeks)	Sum	1		
2.D1.1.85	D1		X	Equipment for dust and emissions control and monitoring in compliance with environmental requirement (Duration Weeks)	Sum	1		
2.D1.1.86	D1		X	Construction services including electrical power, compressed air, water, communications, etc. (Duration Weeks)	Sum	1		
2.D1.1.87	D1		X	Equipment for blasting and rock support (Duration Weeks)	Sum	1		
2.D1.1.88	D1		X	Equipment for earthworks, trenching and backfilling (Duration Weeks)	Sum	1		
2.D1.1.89	D1		X	Equipment for borrowing, processing of materials, transport of materials and spoiling of materials (Duration Weeks)	Sum	1		
2.D1.1.90	D1		X	Equipment for cranes, winches, lifting and pipe handling (Duration Weeks)	Sum	1		
2.D1.1.91	D1		X	Equipment for welding, weld testing and coatings (Duration Weeks)	Sum	1		
2.D1.1.92	D1		X	Equipment for site transporting, lifting, placing and fixing of structural steel work (Duration Weeks)	Sum	1		
2.D1.1.93	D1		X	Equipment for site transporting, placing, fixing and finishing of concrete work, formwork and reinforcement (Duration Weeks)	Sum	1		
2.D1.1.94	D1		X	Equipment for processing concrete (Batch plant) (Duration Weeks)	Sum	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.D1.1.95	D1		X	Equipment for dealing with water (Duration Weeks)	Sum	1		
	D1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.D1.1.96	D1		X	.....	Sum	1		
2.D1.1.97	D1		X	.....	Sum	1		
2.D1.1.98	D1		X	.....	Sum	1		
2.D1.1.99	D1		X	.....	Sum	1		
	D1			PART D1.1: Preliminary and General (Carried forward to Summary of Bills)				

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
	D1			PART D1.2: Earthworks				
	D1			SITE CLEARANCE				
	D1			Removal of topsoil				
2.D1.2.1	D1	7.004(b)		For work areas, temporary stockpiling adjacent to the work area	m3	2790		
	D1			Overhaul				
2.D1.2.2	D1	7.006(c)		Between 5km up to and including 7km	m3	1400		
2.D1.2.3	D1	7.009		Mulching	ha	0.5		
	D1			DEALING WITH WATER				
	D1			For all works included in PART D1				
2.D1.2.4	D1	8.001		Dealing with water	Sum	1		
2.D1.2.5	D1	8.002		Treatment of water	Sum	1		
2.D1.2.6	D1	8.003		Water monitoring	Sum	1		
2.D1.2.7	D1	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	D1			EARTHWORKS				
2.D1.2.8	D1	9.003		Excavation in all materials to stockpile within overhaul distance	m3	14 215		
2.D1.2.9	D1	9.007		Extra-Over items 9.001 to 9.005 for: Hard Excavation (by non-explosive means)	m3	50		
	D1			In-situ treatment of foundations				
2.D1.2.10	D1	9.009(b)		In-situ treatment by ripping	m3	1 004		
	D1			Hand Excavation				
2.D1.2.11	D1	9.010		Excavation by hand	m3	25		
	D1			Trench excavations (Unclassified)				
2.D1.2.12	D1	9.012		Over 1m and up to 2m	m3	120		
2.D1.2.13	D1	9.012		Over 2m and up to 3m	m3	215		
	D1			BACKFILLING AND BEDDING				
	D1			Construction of embankment and structure backfill				
2.D1.2.14	D1	15.014(a)		Compaction to 93% Mod AASHTO using material from stockpile	m3	7560		
2.D1.2.15	D1	15.015		Finishing of slopes (including topsoiling)	m2	1180		
	D1			Overhaul				
2.D1.2.16	D1	15.016 a)		Overhaul between 1km up to and including 3km	m3	6651		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	D1			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	D1			Provision of bed material				
2.D1.2.17	D1	15.003(a)		Material without screening from trenches	m3	18		
	D1			Provision of selected fill blanket				
2.D1.2.18	D1	15.006(a)		Material without screening from trenches	m3	60		
	D1			Provision of main backfill material				
2.D1.2.19	D1	15.007(a)		Backfill material from trench excavation	m3	250		
	D1			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.D1.2.20	D1	15.001		Bed material	m3	18		
2.D1.2.21	D1	15.001		Selected fill blanket	m3	60		
2.D1.2.22	D1	15.001		Main backfill	m3	250		
2.D1.2.23	D1	47.005		Top soil	m3	250		
	D1			SOIL POISONING				
2.D1.2.24	D1	46.011		Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming (Supply of herbicide and ant poison shall be paid for in the provisional sums)	m2	512		
	D1			PART D1.2: Earthworks (Carried forward to Summary of Bills)				

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
	D1			PART D1.3: Structure				
	D1			CONCRETE WORKS (STRUCTURAL)				
	D1			ROUGH FORMWORK				
	D1			Vertical surfaces				
2.D1.3.1	D1	20.001		Sides of floor slab	m2	310		
2.D1.3.2	D1	20.005		Exceeding 0 and not exceeding 300mm high to sides of beams (No fines concrete, mass concrete beams and aprons)	m	1032		
	D1			SMOOTH FORMWORK				
	D1			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.D1.3.3	D1	20.002		Walls	m2	14 180		
2.D1.3.4	D1	20.002		Sides of 300mm wide x 600mm high sloping wall (chamfer to the base of channel walls)	m2	1620		
	D1			Beam (Baffle)				
2.D1.3.5	D1	20.002		To sides of beams	m2	60		
2.D1.3.6	D1	20.002		To soffits of beams	m2	17		
	D1			Slabs				
2.D1.3.7	D1	20.005		Exceeding 0 and not exceeding 300mm high to sides of slabs	m	28		
	D1			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
	D1			Slabs				
2.D1.3.8	D1	20.002		Soffits of slabs	m2	53		
	D1			Circular vertical walls				
2.D1.3.9	D1	20.002		End of walls	m2	47		
	D1			BOX OUT/FORM VOIDS				
	D1			Large, circular, of diameter over 0.35 m up to and including 0.7 m				
2.D1.3.10	D1	20.006(c)		ii) 0.5m deep to 1.0m deep	no	16		
	D1			Large, other than circular, areas over 0.1m² and up to and including 3m²				
2.D1.3.11	D1	20.006(d)		ii) 0.5m deep to 1.0m deep for sluice gates	no	10		
2.D1.3.12	D1	20.006(d)		ii) 0.5m deep to 1.0m deep for concrete pipes	no	1		
	D1			REINFORCEMENT				
2.D1.3.13	D1	20.007(a)		Steel bars irrespective of grade and diameter	t	1 862		
	D1			CONCRETE				
	D1			Prescribed mix concrete				
	D1			Grade 35MPa/19mm water retaining				
2.D1.3.14	D1	20.010		Walls	m3	5180		
2.D1.3.15	D1	20.010		Floors	m3	2684		
2.D1.3.16	D1	20.010		Beams	m3	14		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.D1.3.17	D1	20.010		Slabs	m3	23		
	D1			Prescribed mortar				
2.D1.3.18	D1	20.010		5mm thick 3:1 sand: cement mortar	m2	4463		
	D1			Blinding layer in 15MPa/19mm concrete:				
2.D1.3.19	D1	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	4 740		
	D1			Strength concrete				
2.D1.3.20	D1	20.012		Screed to fall grade 15Mpa/19mm	m3	6		
2.D1.3.21	D1	20.012		Mass concrete grade 15Mpa/19mm in strips to subfloor drainage	m3	24		
2.D1.3.22	D1	20.012		No-Fines NF19 concrete in subfloor drainage	m3	476		
2.D1.3.23	D1	20.012		Grade 30/19 in apron	m3	32		
	D1			UNFORMED SURFACE FINISHES				
2.D1.3.24	D1	20.013(a)		Wood floated finish to walkway and apron	m2	562		
2.D1.3.25	D1	20.013(c)		Power-floated finish to subfloor drainage screed	m2	4 760		
2.D1.3.26	D1	20.013(c)		Power-floated finish to floor slab	m2	4 590		
2.D1.3.27	D1	20.013(b)		Steel float to tops of walls	m2	965		
2.D1.3.28		20.013(b)		Special float to form ogee shape in desilting chute per drawing 2D-C7-007 Section 3	m	30		
	D1			ITEMS CAST OR BUILT INTO CONCRETE				
2.D1.3.29	D1	33.005		Steel pipe diameter 1300mm	No	18		
2.D1.3.30	D1	33.005		Concrete pipe diameter 1400mm	No	1		
	D1			JOINTS				
2.D1.3.31	D1	20.016		Polyurethane sealant between precast elements: 10mm wide x 150mm deep per drawing 2A-C6-002	m	500		
2.D1.3.32	D1	20.016		75mm deep x 10mm wide expansion joint including shutter, 10mm soft board joint filler and sealant per detail C4 drawing 2A-C6-002	m	580		
	D1			SUPPLY AND ERECT PRECAST ELEMENTS				
2.D1.3.33	D1	20.017		Precast concrete walkway as per drawing 2D-C7-010, 2500mm long x 1300mm wide x 250mm thick, including 150x150 upstand beams on either side, grouted in position Manhole lid measured separately	no	236		
2.D1.3.34	D1	20.017		Precast concrete cover lids (3400mm x 2600mm x 250mm thk), including 1 no 120 x 300mm key - Type A as per drawing 2D-C7-007. Manhole lid measured separately	no	2		
2.D1.3.35	D1	20.017		Precast concrete cover lids (3400mm x 2600mm x 250mm thk), including 2 no 120 x 300mm key - Type A as per drawing 2D-C7-007. Manhole lid measured separately	no	5		
2.D1.3.36	D1	20.017		Precast concrete cover lids (3400mm x 2600mm x 250mm thk), including 2 no 120 x 300mm key and access manhole- Type C as per drawing 2D-C7-007. Manhole lid measured separately	no	1		
2.D1.3.37	D1	20.017		Precast manholes complete, 2.5m deep, including benching, cover slab, access ladder, access cover, etc as per drawing 2A-C6-005	no	4		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	D1			MISCELLANEOUS ITEMS				
2.D1.3.38	D1	20.021(a)		250 Micron polythene sheet dampproofing under floors, punched with sharpened r10 rod at 1m c/c.	m2	4720		
	D1			STRUCTURAL STEEL				
2.D1.3.39	D1	24.001(a) & 24.011		Supply and install structural steel frames for supports to floor grids (Hot dipped galvanised)	t	2		
	D1			SUNDRY STEELWORK ITEMS COMPLETE, INSTALLED AND CORROSION PROTECTED (HOT DIP GALVANISED)				
	D1			Mild steel stanchions, ball type welded construction, 1050mm high, stanchion OD 42.9mm, 2.5mm wall thickness. Mentis Sales Inter-Link Handrail System or similar approved.				
2.D1.3.40	D1	24.007(b) & 24.011		i) Top mounted. Type MT90	m	1 383		
	D1			Bends & Accessories, OD 34.1mm tubing, 2.5mm wall thickness				
2.D1.3.41	D1	24.007(b) & 24.011		iii) 90 Deg long radius corner bend	No	48		
	D1			Access ladders, including SS steel mounting bolts/anchors.				
2.D1.3.42	D1	24.008 & 24.011		Galvanised external cat ladder per drawing 125769/97, H = 1.5m (no cage)	no	9		
2.D1.3.43	D1	24.008 & 24.011		Galvanised external cat ladder per drawing 125770/97, H = 6m (with cage)	no	1		
2.D1.3.44	D1	24.008 & 24.011		Galvanised external cat ladder per drawing 125770/97, H = 4m (with cage)	no	1		
	D1			Cast in frames, grids and covers				
2.D1.3.45	D1	24.009(a)		Open grid flooring, 40 x 4.5mm bearer bars, banded on all sides. Rectagrid RS40 or similar approved.	m2	115		
2.D1.3.46	D1	24.009(c)		Embedment angle with fishtail lugs per detail C13.2 drawing 2A-C6-004	m	155		
	D1			ITEMS CAST OR BUILT INTO CONCRETE				
	D1			Manhole covers and lids, complete and installed				
2.D1.3.47	D1	24.010		Manhole covers and lids per drawing 137079/01 ME to collection chambers	No	8		
	D1			DRAINAGE				
	D1			Stormwater pipes				
2.D1.3.48	D1	27.005(a)		110 ND ribbed slotted HDPE with smooth bore (Drainex or similar) (including bedding)	m	167		
2.D1.3.49	D1	27.005(a)		110 ND ribbed solid HDPE with smooth bore (Drainex or similar) installed in mass concrete under structure or as per supplier's specifications (including bedding)	m	131		
2.D1.3.50	D1	27.005(a)		160 ND ribbed solid HDPE with smooth bore (Drainex or similar approved) (including bedding)	m	155		
2.D1.3.51	D1	27.006(a)		Outlet structures: reinforced concrete head wall for subsoil drains as per dwg 2D-C7-006	no	1		
	D1			PART D1.3: Structure (Carried forward to Summary of Bills)				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	D1			PART D1.4: Pipework				
	D1			PIPE TRENCH EXCAVATIONS				
	D1			Excavate in all materials to specified levels and battered slopes, including temporary stockpiling and levelling alongside excavations within the confines of the pipe servitude				
	D1			Unclassified trench excavations:				
	D1			Trench excavations:				
2.D1.4.1	D1	9.012		Over 0m and up to 1m deep	m3	3115		
2.D1.4.2	D1	9.012		Over 1m and up to 2m deep	m3	3135		
2.D1.4.3	D1	9.012		Over 2m and up to 3m deep	m3	3100		
2.D1.4.4	D1	9.012		Over 3m and up to 4m deep	m3	2250		
2.D1.4.5	D1	9.012		Over 4m and up to 5m deep	m3	1180		
2.D1.4.6	D1	9.012		Over 5m and up to 6m deep	m3	250		
2.D1.4.7	D1	9.012		Over 6m and up to 7m deep	m3	115		
2.D1.4.8	D1	9.012		Over 7m and up to 8m deep	m3	2		
2.D1.4.9	D1	9.013		Additional excavation in all materials beyond the Payment Line for valve chambers, thrust blocks, etc.	m3	40		
2.D1.4.10	D1	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	2 645		
	D1			BACKFILLING AND BEDDING				
	D1			Provision for bedding				
2.D1.4.11	D1	15.003(b)		Material with screening from trenches	m3	415		
2.D1.4.12	D1	15.003(d)		With screening from borrow pits	m3	105		
	D1			Provision for bedding cradle material				
2.D1.4.13	D1	15.004(b)		Material with screening from trenches	m3	920		
2.D1.4.14	D1	15.004(d)		With screening from borrow pits	m3	230		
	D1			Provision for selected fill blanket material				
2.D1.4.15	D1	15.006(b)		Material with screening from trenches	m3	1 960		
2.D1.4.16	D1	15.006(d)		With screening from borrow pits	m3	490		
	D1			Provision for main back fill material				
2.D1.4.17	D1	15.007(a)		Backfill material from trench excavation	m3	7 210		
2.D1.4.18	D1	15.007(b)		Backfill material from borrow pits	m3	1800		
	D1			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.D1.4.19	D1	15.001		Bed material	m3	520		
2.D1.4.20	D1	15.001		Bedding cradle	m3	1 150		
2.D1.4.21	D1	15.001		Selected fill blanket	m3	2 450		
2.D1.4.22	D1	15.001		Main backfill	m3	9 010		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
				Overhaul				
2.D1.4.23	D1	15.010(a)		Between 1 km up to and including 3 km	m3	660		
2.D1.4.24	D1	15.010(b)		Between 3 km up to and including 5 km	m3	920		
2.D1.4.25	D1	15.010(c)		Between 5 km up to and including 7 km	m3	1050		
	D1			PIPEWORK				
	D1			DETAILING AND DOCUMENTATION				
2.D1.4.26	D1	32.001 & 35.001		Pipes and pipe specials: Design and documentation (As required: For Employer Design)	Sum	1		
2.D1.4.27	D1	37.001		Corrosion protection: PQP and other documentation	Sum	1		
	D1			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO CONTRACTOR'S SITE STORE (INCLUDING CORROSION PROTECTION)				
	D1			PN10 to Dwg Ref 2D-C5-014				
2.D1.4.28	D1	32.003		Item SW1.1 - Manifold Section, both ends plain ended	No	7		
2.D1.4.29	D1	32.003		Item SW1.2 - Manifold Section, one end plain ended and one end flanged	No	1		
2.D1.4.30	D1	32.003		Item SW1.3 - Blank Flange	No	1		
2.D1.4.31	D1	32.003		Item SW1.4 - Puddle Pipe	No	16		
2.D1.4.32	D1	32.003		Item SW1.5 - Spool Pipe	No	16		
2.D1.4.33	D1	32.003		Item SW1.6 - Puddle Pipe	No	8		
2.D1.4.34	D1	32.003		Item SW1.7 - Spool Pipe	No	8		
2.D1.4.35	D1	32.003		Item SW1.8 - 90 Degree Bend	No	24		
2.D1.4.36	D1	35.002		Item SW1.9 - Butterfly Valve	No	24		
2.D1.4.37	D1	32.003		Item SW1.10 - Dismantling Joint	No	24		
2.D1.4.38	D1	32.003		Item SW1.11 - Closure Pipe	No	1		
	D1			INSTALLATION OF VALVES AND SPECIALS				
	D1			PN10 to Dwg Ref 2D-C5-013				
2.D1.4.39	D1	33.007		Item SW1.1 - Manifold Section, both ends plain ended	No	7		
2.D1.4.40	D1	33.007		Item SW1.2 - Manifold Section, one end plain ended and one end flanged	No	1		
2.D1.4.41	D1	33.007		Item SW1.3 - Blank Flange	No	1		
2.D1.4.42	D1	33.004		Item SW1.4 - Puddle Pipe	No	16		
2.D1.4.43	D1	33.004		Item SW1.5 - Spool Pipe	No	16		
2.D1.4.44	D1	33.004		Item SW1.6 - Puddle Pipe	No	8		
2.D1.4.45	D1	33.004		Item SW1.7 - Spool Pipe	No	8		
2.D1.4.46	D1	33.007		Item SW1.8 - 90 Degree Bend	No	24		
2.D1.4.47	D1	33.004		Item SW1.9 - Butterfly Valve	No	24		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.D1.4.48	D1	33.004		Item SW1.10 - Dismantling Joint	No	24		
2.D1.4.49	D1	33.007		Item SW1.11 - Closure Pipe	No	1		
	D1			ITEMS CAST OR BUILT INTO CONCRETE				
2.D1.4.50	D1	33.005		Steel pipe diameter 500mm	No	48		
	D1			PIPE TESTING				
2.D1.4.51	D1	33.008		Hydrostatic Testing	Sum	1		
2.D1.4.52	D1	33.009		Pipe lining integrity testing	Sum	1		
2.D1.4.53	D1	33.010		Pipe coating integrity testing	Sum	1		
				STORMWATER PIPEWORK				
				Supply, lay, joint, bed (flexible pipe bedding) and test structured walled HDPE pipe manufactured to SANS 4427 and SANS 21138 for HDPE raw material and final product hot gas extrusion welded to SANS 10268-4				
2.D1.4.54	D1	27.005(a)		(a) 1400mm ID pipe (8kN/m ²)	m	1615		
2.D1.4.55	D1	27.003(d)		15/19Mpa Mass Concrete encasing in sections, including formwork as per drg 2A-C6-018	m3	265		
	D1			PART D1.4: Pipework (Carried forward to Summary of Bills)				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	D1			PART D1.5: Stilling Basin (See drawing 2D-C7-130)				
	D1			Clearing				
2.D1.5.1	D1	7.001(a)		Clearing	ha	0.02		
	D1			Removal of topsoil				
2.D1.5.2	D1	7.004(b)		For work areas, temporary stockpiling	m3	30		
	D1			Overhaul				
2.D1.5.3	D1	7.006(a)		Between 1km up to and including 3km	m3	30		
	D1			Excavation in all material to stockpile				
2.D1.5.4	D1	9.001		Excavate for structure to spoil	m3	360		
2.D1.5.5	D1	9.003		Excavation in all materials to stockpile within overhaul distance	m3	175		
2.D1.5.6	D1	9.007		Extra-Over items 9.001 to 9.005 for: Hard Excavation (by non-explosive means)	m3	53		
	D1			In-situ treatment of foundations				
2.D1.5.7	D1	9.009(a)		Compaction of insitu material to 93% Mod AASHTO	m2	115		
2.D1.5.8	D1	9.009(b)		In-situ treatment by ripping	m2	30		
	D1			Overhaul				
2.D1.5.9	D1	9.011(c)		Between 5km up to and including 7km	m3	535		
	D1			BACKFILLING AND BEDDING				
2.D1.5.10	D1	15.014(a)		Compaction to 93% Mod AASHTO using material from stockpile	m3	180		
	D1			Overhaul				
2.D1.5.11	D1	15.016 a)		Overhaul between 1km up to and including 3km	m3	180		
	D1			FORMWORK				
	D1			ROUGH FORMWORK				
	D1			Vertical surfaces				
2.D1.5.12	D1	20.005		Exceeding 0 and not exceeding 300mm high to sides of slabs and walls	m	25		
	D1			SMOOTH FORMWORK				
	D1			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.D1.5.13		20.002		Walls and baffle	m2	177		
	D1			Slabs				
2.D1.5.14		20.005		Exceeding 0 and not exceeding 300mm high to sides of baffle slab	m	26		
	D1			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
	D1			Slabs				
2.D1.5.15		20.002		Soffits of slabs	m2	4		
	D1			REINFORCEMENT				
2.D1.5.16	D1	20.007(a)		Steel bars irrespective of grade and diameter	t	11		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	D1			CONCRETE				
	D1			STRENGTH CONCRETE				
				Blinding layer in 15MPa/19mm F30 concrete:				
2.D1.5.17	D1	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	74		
2.D1.5.18	D1	20.012		Concrete grade 30MPa/19mm concrete	m3	50		
	D1			UNFORMED SURFACE FINISHES				
2.D1.5.19	D1	20.013(b)		Steel floated finish to floors and top of walls	m2	77		
				GABION & RENO MATTRESSES				
2.D1.5.20	D1	21.002		Surface preparation for bedding the gabions	m2	67		
2.D1.5.21	D1	21.003(a)		Galvanised gabion cages(2m x 1m x 0.5m)	m3	67		
2.D1.5.22	D1	21.005		Geotextile fabric (A2 non-woven needle punched geotextile)	m2	101		
	D1			PART D1.5: Scour channel/pipeline (Carried forward to Summary of Bills)				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	D1			PART D1.6: Ancillary works				
	D1			PART D1.6.1: INSTRUMENTATION HUT				
	D1			EARTHWORKS				
	D1			REFER TO DRAWING 2G-C7-150				
2.D1.6.1.1	D1	9.010		Excavation by hand	m3	3		
2.D1.6.1.2	D1	9.009(b)		Rip and re-compact 150mm insitu material to 93% Mod AASHTO	m2	40		
	D1			SOIL POISONING				
2.D1.6.1.3	D1	46.011		Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming (Supply of herbicide and ant poison shall be paid for in the provisional sums)	m2	40		
	D1			FORMWORK				
	D1			ROUGH FORMWORK				
	D1			Narrow widths up to 300mm				
2.D1.6.1.4	D1	20.005		To apron and surfacebed	m	38		
	D1			SMOOTH FORMWORK				
	D1			Horizontal surfaces for visible surface including 20mm chamfers and drip grooves on a exposed corners to:				
2.D1.6.1.5	D1	20.002		Underside of slabs (Incl. Shelf)	m2	21		
	D1			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.D1.6.1.6	D1	20.002		Upstand beams	m2	9		
2.D1.6.1.7	D1	20.002		Vertical sides of suspended slabs (incl. Shelf)	m2	4		
	D1			REINFORCEMENT				
2.D1.6.1.8	D1	20.007		Steel bars (irrespective of grade or diameter)	t	1		
2.D1.6.1.9	D1	20.008		Mesh ref 395 high-tensile welded mesh	m2	2		
	D1			CONCRETE				
	D1			Strength concrete grade 30/19				
2.D1.6.1.10	D1	20.012		Surface bed, shelf, roof, ramp and apron	m3	12		
	D1			Unformed surface finishes				
2.D1.6.1.11	D1	20.013(a)		Wood floated finish	m2	48		
2.D1.6.1.12	D1	20.013(b)		Steel floated finish (shelf & top of beams)	m2	5		
	D1			AGGREGATE				
2.D1.6.1.13	D1	20.014		19mm stone ballast	m3	0.8		
	D1			JOINTS				
2.D1.6.1.14	D1	20.016		Construction joints, including shutters to apron	m	13		
2.D1.6.1.15	D1	20.016		75mm deep x 10mm wide expansion joint including shutter, 10mm soft board joint filler and sealant per detail C4 drawing 2A-C6-002	m	22		
2.D1.6.1.16	D1	20.016		2 Layers 0.6mm thick galvanised plate, including smooth plaster to the tops of brick walls	m2	4		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	D1			MASONRY				
	D1			BRICKWORK OF NFX BRICKS (14 MPA NOMINAL COMPRESSIVE STRENGTH) IN CLASS I MORTAR				
2.D1.6.1.17	D1	46.004(a)		One brick walls for structure (230mm thick)	m2	45		
	D1			FACE BRICKWORK				
	D1			Face brickwork pointed with recessed horizontal and vertical joints. The cost for the supply and delivery of facebrick shall be paid for in Provisional Sums. All other costs related to the installation of the facebrick shall be included in this item (includes all other material). Samples of facebrick to be approved by the Engineer/Architect.				
2.D1.6.1.18	D1	46.004(h)		Extra over brickwork for face brickwork	m2	90		
	D1			MASONRY REINFORCING				
2.D1.6.1.19	D1	46.004(f)		Fabric reinforcement and building into joints of one brick walls	m	200		
2.D1.6.1.20	D1	46.004(f)		Masonry reinforcing (3 no R8 bars) on 230mm wall	m	4		
	D1			METALWORK				
	D1			Supply and fabrication of steel				
2.D1.6.1.21	D1	24.001		1000mm x 1000mm 3CR12 louvre per drawing 86490 complete including shop details, supply and installation	No	1		
2.D1.6.1.22	D1	46.005(c)		Doors: double transformer door (2400mm x 1800mm) with insect proofing and louvres, locking mechanism, supplied, installed and painted. All as per dwg. 2G-C7-150	No	1		
	D1			MISCELLANEOUS TRADES, FIXTURES AND APPLIANCES				
2.D1.6.1.23	D1	46.011		Epoxy sealant to shelf	m2	1.8		
2.D1.6.1.24	D1	46.011		110 ribbed HDPE sleeves supplied and installed per supplier's specification, including draw wire (ducting from draw box to interior of instrumentation hut)	m	15		
2.D1.6.1.25	D1	46.011		Polyurethane waterproofing	m2	23		
2.D1.6.1.26	D1	46.011		100mm ISO Board high density 34-36kg/m3 rigid extruded polystyrene with tongue and groove joints, or equal approved	m2	15		
2.D1.6.1.27	D1	46.011		Water permeable fabric	m2	23		
2.D1.6.1.28	D1	46.011		80 ND uPVC drainage pipes cast into upstand beams (Weep holes)	m	3		
2.D1.6.1.29	D1	46.012		Draw box per detail C10 drawing 2A-C6-003, complete	no	1		
	D1			FIRE				
2.D1.6.1.30	D1	46.011		Supply, delivery and installation of SABS Approved 5kg CO2 fire extinguisher complete with wall bracket and wooden backing board	No	2		
2.D1.6.1.31	D1	46.011		Supply and installation of SABS Approved 190mm x 380mm single sided, wall mounted photo luminescent safety signs	no	2		
	D1			PART D1.6: Ancillary works (Carried forward to Summary of Bills)				
	D1			PART D1: SEDIMENTATION WORKS (Carried forward to Summary of Bills)				

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
	D2			PART D2: BALANCING RESERVOIR				
	D2			PART D2.1: Preliminary and General				
	D2			PRELIMINARY AND GENERAL (SECONDARY)				
	D2	1.002		FIXED CHARGES - GENERAL OBLIGATIONS				
2.D2.1.1	D2		X	Head Office Contract Management and Overheads	Sum	1		
2.D2.1.2	D2		X	General Site Supervision and Overheads	Sum	1		
2.D2.1.3	D2		X	Method statements (1.10.1)	Sum	1		
2.D2.1.4	D2		X	Competency training (1.10.2.4)	Sum	1		
2.D2.1.5	D2		X	Returns and reporting (1.10.3)	Sum	1		
2.D2.1.6	D2		X	Management meetings (1.10.4)	Sum	1		
2.D2.1.7	D2		X	Integration management (1.10.5)	Sum	1		
2.D2.1.8	D2		X	Programming Requirements (1.9)	Sum	1		
2.D2.1.9	D2		X	Quality Management (1.10.2)	Sum	1		
2.D2.1.10	D2		X	Socio Economic Requirements (1.11)	Sum	1		
2.D2.1.11	D2		X	Occupational Health and Safety Requirements (1.12)	Sum	1		
2.D2.1.12	D2		X	Environmental Requirements (1.13)	Sum	1		
	D2			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.D2.1.13	D2		X	.....	Sum	1		
2.D2.1.14	D2		X	.....	Sum	1		
2.D2.1.15	D2		X	.....	Sum	1		
2.D2.1.16	D2		X	.....	Sum	1		
	D2	1.003 & 1.004		FIXED CHARGES - FACILITIES FOR THE CONTRACTOR (1.8)				
2.D2.1.17	D2		X	Transport of Staff and Labour (1.8.1.4)	Sum	1		
2.D2.1.18	D2		X	Construction Establishment Fencing (1.8.3.1)	Sum	1		
2.D2.1.19	D2		X	Lighting of Construction Establishment Areas (1.8.3.2)	Sum	1		
2.D2.1.20	D2		X	Electrical power and distribution (1.8.3.4)	Sum	1		
2.D2.1.21	D2		X	Standby power (1.8.3.4)	Sum	1		
2.D2.1.22	D2		X	Communications (1.8.3.7)	Sum	1		
	D2			Office, Accommodation and Other Site facilities				
2.D2.1.23	D2		X	Accommodation for staff and workforce (1.8.3.8b)	Sum	1		
2.D2.1.24	D2		X	Offices (1.8.3.8c)	Sum	1		
2.D2.1.25	D2		X	Other establishment facilities (1.8.3.8d)	Sum	1		
2.D2.1.26	D2		X	Storage (1.8.3.8e)	Sum	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	D2			Other services				
2.D2.1.27	D2		X	Medical (1.8.3.12)	Sum	1		
2.D2.1.28	D2		X	Sanitation and Cleaning (1.8.3.13)	Sum	1		
2.D2.1.29	D2		X	Access control and security (1.8.3.14)	Sum	1		
	D2			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("nil" to be entered if not required)				
2.D2.1.30	D2		X	.....	Sum	1		
2.D2.1.31	D2		X	.....	Sum	1		
2.D2.1.32	D2		X	.....	Sum	1		
2.D2.1.33	D2		X	.....	Sum	1		
	D2	1.004		FIXED CHARGES - SPECIFIC EQUIPMENT				
2.D2.1.34	D2		X	Equipment for construction and maintenance of the Contractor's work areas	Sum	1		
2.D2.1.35	D2		X	Minor equipment and small tools	Sum	1		
2.D2.1.36	D2		X	Equipment for dust and emissions control and monitoring in compliance with environmental requirement	Sum	1		
2.D2.1.37	D2		X	Construction services including electrical power, compressed air, water, communications, etc.	Sum	1		
2.D2.1.38	D2		X	Equipment for blasting and rock support	Sum	1		
2.D2.1.39	D2		X	Equipment for earthworks, trenching and backfilling	Sum	1		
2.D2.1.40	D2		X	Equipment for borrowing, processing of materials, transport of materials and spoiling of materials	Sum	1		
2.D2.1.41	D2		X	Equipment for cranes, winches, lifting and pipe handling	Sum	1		
2.D2.1.42	D2		X	Equipment for welding, weld testing and coatings	Sum	1		
2.D2.1.43	D2		X	Equipment for site transporting, lifting, placing and fixing of structural steel work	Sum	1		
2.D2.1.44	D2		X	Equipment for site transporting, placing, fixing and finishing of concrete work, formwork and reinforcement	Sum	1		
2.D2.1.45	D2		X	Equipment for processing concrete (Batch plant)	Sum	1		
2.D2.1.46	D2		X	Equipment for dealing with water	Sum	1		
	D2			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.D2.1.47	D2		X	.....	Sum	1		
2.D2.1.48	D2		X	.....	Sum	1		
2.D2.1.49	D2		X	.....	Sum	1		
2.D2.1.50	D2		X	.....	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	D2	1.006		TIME RELATED CHARGES - GENERAL OBLIGATIONS				
2.D2.1.51	D2		X	Head Office Contract Management and Overheads (Duration Weeks)	Sum	1		
2.D2.1.52	D2		X	General Site Supervision and Overheads (Duration Weeks)	Sum	1		
2.D2.1.53	D2		X	Method Statements (1.10.1) (Duration Weeks)	Sum	1		
2.D2.1.54	D2		X	Competency training (1.10.2.4) (Duration Weeks)	Sum	1		
2.D2.1.55	D2		X	Returns and reporting (1.10.3) (Duration Weeks)	Sum	1		
2.D2.1.56	D2		X	Management meetings (1.10.4) (Duration Weeks)	Sum	1		
2.D2.1.57	D2		X	Integration management (1.10.5) (Duration Weeks)	Sum	1		
2.D2.1.58	D2		X	Programming Requirements (1.9) (Duration Weeks)	Sum	1		
2.D2.1.59	D2		X	Quality Management (1.10.2) (Duration Weeks)	Sum	1		
2.D2.1.60	D2		X	Socio Economic Requirements (1.11) (Duration Weeks)	Sum	1		
2.D2.1.61	D2		X	Occupational Health and Safety (1.12) (Duration Weeks)	Sum	1		
2.D2.1.62	D2		X	Environmental Requirements (1.13) (Duration Weeks)	Sum	1		
	D2			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.D2.1.63	D2		X	.....	Sum	1		
2.D2.1.64	D2		X	.....	Sum	1		
2.D2.1.65	D2		X	.....	Sum	1		
	D2	1.007 & 1.008		TIME RELATED CHARGES - FACILITIES FOR THE CONTRACTOR (1.8)				
2.D2.1.66	D2		X	Transport of Staff and Labour (1.8.1.4) (Duration Weeks)	Sum	1		
2.D2.1.67	D2		X	Construction Establishment Fencing (1.8.3.1) (Duration Weeks)	Sum	1		
2.D2.1.68	D2		X	Lighting of Construction Establishment Areas (1.8.3.2) (Duration Weeks)	Sum	1		
2.D2.1.69	D2		X	Electrical power and distribution (1.8.3.4) (Duration Weeks)	Sum	1		
2.D2.1.70	D2		X	Standby power (1.8.3.4) (Duration Weeks)	Sum	1		
2.D2.1.71	D2		X	Communications (1.8.3.7) (Duration Weeks)	Sum	1		
	D2			Office, Accommodation and Other Site facilities				
2.D2.1.72	D2		X	Accommodation for staff and workforce (1.8.3.8b)(Duration Weeks)	Sum	1		
2.D2.1.73	D2		X	Offices (1.8.3.8c) (Duration Weeks)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.D2.1.74	D2		X	Other establishment facilities (1.8.3.8d) (Duration Weeks)	Sum	1		
2.D2.1.75	D2		X	Storage (1.8.3.8e) (Duration Weeks)	Sum	1		
	D2			Other services				
2.D2.1.76	D2		X	Medical (1.8.3.12) (Duration Weeks)	Sum	1		
2.D2.1.77	D2		X	Sanitation and Cleaning (1.8.3.13) (Duration Weeks)	Sum	1		
2.D2.1.78	D2		X	Access control and security (1.8.3.14) (Duration Weeks)	Sum	1		
	D2			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("nil" to be entered if not required)				
2.D2.1.79	D2		X	.....	Sum	1		
2.D2.1.80	D2		X	.....	Sum	1		
2.D2.1.81	D2		X	.....	Sum	1		
2.D2.1.82	D2		X	.....	Sum	1		
	D2	1.008		TIME RELATED CHARGES - SPECIFIC EQUIPMENT				
2.D2.1.83	D2		X	Equipment for construction and maintenance of the Contractor's work areas (Duration Weeks)	Sum	1		
2.D2.1.84	D2		X	Minor equipment and small tools (Duration Weeks)	Sum	1		
2.D2.1.85	D2		X	Equipment for dust and emissions control and monitoring in compliance with environmental requirement (Duration Weeks)	Sum	1		
2.D2.1.86	D2		X	Construction services including electrical power, compressed air, water, communications, etc. (Duration Weeks)	Sum	1		
2.D2.1.87	D2		X	Equipment for blasting and rock support (Duration Weeks)	Sum	1		
2.D2.1.88	D2		X	Equipment for earthworks, trenching and backfilling (Duration Weeks)	Sum	1		
2.D2.1.89	D2		X	Equipment for borrowing, processing of materials, transport of materials and spoiling of materials (Duration Weeks)	Sum	1		
2.D2.1.90	D2		X	Equipment for cranes, winches, lifting and pipe handling (Duration Weeks)	Sum	1		
2.D2.1.91	D2		X	Equipment for welding, weld testing and coatings (Duration Weeks)	Sum	1		
2.D2.1.92	D2		X	Equipment for site transporting, lifting, placing and fixing of structural steel work (Duration Weeks)	Sum	1		
2.D2.1.93	D2		X	Equipment for site transporting, placing, fixing and finishing of concrete work, formwork and reinforcement (Duration Weeks)	Sum	1		
2.D2.1.94	D2		X	Equipment for processing concrete (Batch plant) (Duration Weeks)	Sum	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.D2.1.95	D2		X	Equipment for dealing with water (Duration Weeks)	Sum	1		
	D2			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.D2.1.96	D2		X	.....	Sum	1		
2.D2.1.97	D2		X	.....	Sum	1		
2.D2.1.98	D2		X	.....	Sum	1		
2.D2.1.99	D2		X	.....	Sum	1		
	D2			PART D2.1: Preliminary and General (Carried forward to Summary of Bills)				

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
	D2			PART D2.2: Earthworks				
	D2			SITE CLEARANCE				
2.D2.2.1	D2	16.001		Clear and strip site	m2	506 590		
	D2			Remove and grub large trees (complete with stumps) or stumps only, as scheduled, of girth				
2.D2.2.2	D2	16.002(a)		Over 1 m and up to and including 2 m	No	100		
	D2			Removal of surface rocks				
2.D2.2.3	D2	16.003		Extra-over 16.001 for removal of rocks	m3	450		
	D2			Remove topsoil				
2.D2.2.4	D2	16.007		Remove topsoil to nominal depth 250 mm	m3	126 650		
	D2			In-situ treatment of foundations				
2.D2.2.5	D2	9.009(b)		In-situ treatment by ripping	m3	25 675		
	D2			EXCAVATION				
	D2			Material unsuitable for embankment				
2.D2.2.6	D2	16.008(a)		i) To spoil at designated spoil site	m3	81 850		
	D2			Material suitable for embankment from essential excavations for				
2.D2.2.7	D2	16.008(b)		(5) Cut to fill from excavation of reservoir basin for embankment walls	m3	170 860		
	D2			Extra-over items (b) (1)-(4) for excavation in:				
2.D2.2.8	D2	16.008(c)		(2) Hard rock material	m3	81 850		
	D2			Forming embankment				
	D2			Refer to drawing 2A-C6-008 & 2A-C6-010 for embankment compaction densities				
2.D2.2.9	D2	16.010(a)		i) Selected semi-pervious material: Imported material from borrow pits	m3	37 840		
2.D2.2.10	D2	16.010(a)		ii) Selected semi-pervious material: In-situ embankment excavated material	m3	3 515		
2.D2.2.11	D2	16.010(b)		i) Unselected pervious material: Imported material from borrow pits (homogeneous)	m3	228 195		
2.D2.2.12	D2	16.010(b)		ii) Unselected pervious material: In-situ embankment excavated material (homogeneous)	m3	134 265		
2.D2.2.13	D2	16.010(d)		Topsoil from stockpile to downstream slope	m3	4 800		
2.D2.2.14	D2	16.010(g)		Gravel capping	m3	2 850		
	D2			Overhaul				
2.D2.2.15	D2	16.013(a)		Between 1km up to and including 3km	m3	305 600		
2.D2.2.16	D2	16.013(b)		Between 3km up to and including 5km	m3	36 530		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.D2.2.17	D2	16.013(c)		Between 5km up to and including 7km	m3	24 750		
2.D2.2.18	D2	16.013(d)		Between 7km up to and including 9km	m3	122 240		
2.D2.2.19	D2	16.013(e)		Between 9km up to and including 11km	m3	122 240		
	D2			Prepare surface areas to be lined				
	D2			As per dwg. 2A-C6-008				
2.D2.2.20	D2	16.014		Embankment floor	m2	54 650		
2.D2.2.21	D2	16.015		Embankment slopes	m2	89 670		
	D2			DEALING WITH WATER For all works included in PART D2				
2.D2.2.22	D2	8.001		Dealing with water	Sum	1		
2.D2.2.23	D2	8.002		Treatment of water	Sum	1		
2.D2.2.24	D2	8.003		Water monitoring	Sum	1		
2.D2.2.25	D2	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	D2			PART D2.2: Earthworks (Carried forward to Summary of Bills)				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	D2			PART D2.3: Concrete Structures				
	D2			PART D2.3.1: INLET, DISCHARGE, OVERFLOW, PIPE CROSSING, UNDERDRAIN CHAMBER, ACCESS BRIDGE, ACCESS STAIRS AND BRIDGE STRUCTURES				
	D2			REFER TO DRAWING 2D-C7-100 to 106, 2A-C6-011, 2D-C7-107, 2D-C7-110 and 2D-C5-015				
	D2			EXCAVATION				
	D2			Excavation in all materials to spoil				
2.D2.3.1.1	D2	9.001		Excavate for structures	m3	1 080		
	D2			Excavation in all materials to stockpile				
2.D2.3.1.2	D2	9.003		Excavate for structures	m3	3 060		
2.D2.3.1.3	D2	9.006		Extra-Over items 9.001 to 9.005 for: Hard Excavation (by blasting)	m3	1090		
2.D2.3.1.4	D2	9.010		Excavation by hand	m3	187		
	D2			Overhaul				
2.D2.3.1.5	D2	9.011 a)		Between 1km up to and including 3km	m3	3 580		
	D2			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.D2.3.1.6	D2	15.014(a)		Structure backfilling compacted to compacted to 93% MOD AASHTO	m3	1 674		
	D2			Overhaul				
2.D2.3.1.7	D2	15.016(a)		Between 1km up to and including 3km	m3	1000		
	D2			FORMWORK				
	D2			Rough Formwork				
	D2			Vertical surfaces				
2.D2.3.1.8	D2	20.001		Sides of floor slab and coulmn bases	m2	457		
2.D2.3.1.9	D2	20.001		Sides of walls	m2	903		
	D2			Smooth Formwork				
	D2			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.D2.3.1.10	D2	20.002		Walls	m2	1 760		
2.D2.3.1.11	D2	20.002		Pipe supports	m2	15		
2.D2.3.1.12	D2	20.002		To stair treads	m2	48		
2.D2.3.1.13	D2	20.002		To columns	m2	40		
2.D2.3.1.14	D2	20.002		To liner tie beams	m2	183		
	D2			Sloping surfaces including chamfers				
2.D2.3.1.15	D2	20.002		Smooth, inclined including 20mm chamfer, to liner tie beams	m2	271		
	D2			Horizontal surfaces including chamfers				
2.D2.3.1.16	D2	20.002		Slabs	m2	74		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	D2			REINFORCEMENT				
2.D2.3.1.17	D2	20.007(a)		Steel bars irrespective of grade and diameter	t	232		
2.D2.3.1.18	D2	20.008		high-tensile welded mesh ref 311	m2	360		
	D2			CONCRETE				
	D2			Prescribed Mix Concrete				
	D2			Grade 35MPa/19mm 30F for concrete structures				
2.D2.3.1.19	D2	20.010		Inlet structures	m3	239		
2.D2.3.1.20	D2	20.010		Discharge structures	m3	174		
2.D2.3.1.21	D2	20.010		Overflow structures	m3	270		
2.D2.3.1.22	D2	20.010		Side overflow structures (between reservoirs)	m3	126		
2.D2.3.1.23	D2	20.010		Internal ramp	m3	160		
2.D2.3.1.24	D2	20.010		Culvert base & pipe plinth for pipe crossing	m3	30		
2.D2.3.1.25	D2	20.010		Underdrain chambers	m3	71		
2.D2.3.1.26	D2	20.010		Access stairs	m3	125		
2.D2.3.1.27	D2	20.010		Access bridges	m3	31		
	D2			Blinding layer in 15MPa/19mm F30 concrete:				
	D2			Blinding layer of 50mm minimum thickness including levelling and floating.				
2.D2.3.1.28	D2	20.011(a)		Discharge structures	m2	70		
2.D2.3.1.29	D2	20.011(a)		Side overflow structures (between reservoirs)	m2	320		
2.D2.3.1.30	D2	20.011(a)		Culvert base to pipe crossing	m2	50		
2.D2.3.1.31	D2	20.011(a)		Underdrain chambers	m2	53		
2.D2.3.1.32	D2	20.011(a)		Access stairs	m2	289		
2.D2.3.1.33	D2	20.011(a)		Access bridges	m2	52		
	D2			Strength Concrete				
2.D2.3.1.34	D2	20.012		Mass concrete grade 15MPa/19mm F30 concrete	m3	8		
2.D2.3.1.35	D2	20.012		Mass concrete (pumpable) grade 15MPa/6mm to Geocell	m3	2 600		
2.D2.3.1.36	D2	20.012		Grade 30MPa/19mm in pipe crossing and bases	m3	26		
	D2			Unformed Surface Finishes				
2.D2.3.1.37	D2	20.013(a)		Wood floated finish to structures	m2	2 117		
2.D2.3.1.38	D2	20.013(a)		Wood floated finish to Geocell	m2	16 600		
2.D2.3.1.39	D2	20.013(b)		Steel floated finish to top of walls, floors and beams	m2	494		
2.D2.3.1.40	D2	20.013(d)		Broomed	m2	654		
	D2			Joints				
2.D2.3.1.41	D2	20.016		10mm wide x 1200mm deep with joint filler and sealant at overflow	m	73		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.D2.3.1.42	D2	20.016		10mm wide x 250mm deep with joint filler and sealant at inlet per detail C3.2 / C3.3 dwg 2A-C6-002	m	181		
2.D2.3.1.43	D2	20.016		Key joint in culvert base slab	m	55		
2.D2.3.1.44	D2	20.016		Construction joint per Dwg 2A-C6-002 detail C7 (no water stop) in side overflows	m	35		
2.D2.3.1.45	D2	20.016		30mm deep x 250mm wide slot in base slab for culvert installation, including 1:6 packing mortar	m	75		
2.D2.3.1.46	D2	20.016		Construction joint to liner tie beam consisting of Y12 dowel (L = 350mm) epoxied 150mm into existing concrete. Dowel spacing 500mm c/c (concrete and formwork measured elsewhere)	m	605		
	D2			Manufacture (or supply) and erect precast elements				
2.D2.3.1.47	D2	20.017		Precast baffles per drawing 2D-C7-101	No	780		
	D2			Prefabricated Concrete Culverts				
2.D2.3.1.48	D2	27.004(b)		Portal culvert 2100 x 1500 rectangular	m	15		
2.D2.3.1.49	D2	27.004(b)		Portal culvert 2400 x 2100 rectangular	m	15		
	D2			Items Cast or Built Into Concrete				
2.D2.3.1.50	D2	33.005		Steel pipe diameter 800mm	No	1		
2.D2.3.1.51	D2	33.005		Steel pipe diameter 1200mm	No	3		
2.D2.3.1.52	D2	33.005		Steel pipe diameter 1400mm	No	2		
	D2			MISCELLANEOUS ITEMS				
2.D2.3.1.53	D2	17.006		75mm Geocells supplied and installed per supplier's specification. Concrete measured separately	m2	33 800		
2.D2.3.1.54	D2	20.021(c)		4mm thick diluted bitumen emulsion applied to Geocell sandwich per drawing 2D-C7-110	m2	33 800		
	D2			STRUCTURAL STEEL				
	D2			Supply and fabrication of steelwork				
2.D2.3.1.55	D2	24.001(a) & 24.011		Frame on underdrain chamber	t	0.50		
2.D2.3.1.56	D2	24.001(a) & 24.011		Access bridges and stairs	t	47		
2.D2.3.1.57	D2	24.002		Delivery to site	t	47.5		
2.D2.3.1.58	D2	24.003		Erection on site	t	47.5		
	D2			Flooring and frames, complete and installed				
2.D2.3.1.59	D2	24.009 (a) 24.011		Galvanised open grid floors complete with galvanised embedment angle frame per detail C13.2 Drawing 2A-C6-004 where applicable	m2	324		
2.D2.3.1.60	D2	24.009 (a) 24.011		Prefabricated grid treads 250mm wide x 1100mm long	no	132		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	D2			ANCILLARY WORKS				
	D2			Mild steel stanchions, ball type welded construction, 1050mm high, stanchion OD 42.9mm, 2.5mm wall thickness. Mentis Sales Inter-Link Handrail System or similar approved.				
2.D2.3.1.61	D2	24.007(b)		Top mounted. Type MT90, including fixing detail	m	228		
2.D2.3.1.62	D2	24.007(b)		Side mounted. Type MT90, including fixing detail	m	126		
2.D2.3.1.63	D2	24.007(c)		iii) Bends, end closures and accessories	No	48		
2.D2.3.1.64	D2	24.008 & 24.011		Galvanised external cat ladder per drawing 125769/97, H = 4.3m (no cage)	no	3		
	D2			Manhole covers and lids, complete and installed				
2.D2.3.1.65	D2	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	3		
	D2			PIPEWORK				
	D2			DETAILING AND DOCUMENTATION				
2.D2.3.1.66	D2	32.001 & 35.001		Pipes and pipe specials: Design and documentation (As required: For Employer Design)	Sum	1		
2.D2.3.1.67	D2	37.001		Corrosion protection: PQP and other documentation	Sum	1		
	D2			PIPEWORK				
	D2			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO CONTRACTOR'S SITE STORE (INCLUDING CORROSION PROTECTION)				
	D2			PN10 to Dwg Ref 2D-C5-050				
2.D2.3.1.68	D2	32.003		Item 1	No	3		
2.D2.3.1.69	D2	35.002		Item 2	No	3		
2.D2.3.1.70	D2	32.003		Item 3	No	3		
2.D2.3.1.71	D2	32.003		Item 4	No	3		
2.D2.3.1.72	D2	32.003		Item 5	No	3		
2.D2.3.1.73	D2	35.002		Item 6	No	1		
2.D2.3.1.74	D2	32.003		Item 7	No	1		
2.D2.3.1.75	D2	32.003		Item 8	No	1		
2.D2.3.1.76	D2	35.002		Item 9	No	1		
2.D2.3.1.77	D2	32.003		Item 10	No	1		
2.D2.3.1.78	D2	32.003		Item 11	No	1		
2.D2.3.1.79	D2	35.002		Item 12	No	1		
2.D2.3.1.80	D2	32.003		Item 13	No	1		
2.D2.3.1.81	D2	32.003		Item 14	No	1		
2.D2.3.1.82	D2	32.003		Item 15	No	1		
2.D2.3.1.83	D2	32.003		Item 16	No	1		
2.D2.3.1.84	D2	32.003		Item 17	No	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	D2			INSTALLATION OF VALVES AND SPECIALS				
	D2			PN10 to Dwg Ref 2D-C5-050				
2.D2.3.1.85	D2	32.003		Item 1	No	3		
2.D2.3.1.86	D2	35.002		Item 2	No	3		
2.D2.3.1.87	D2	32.003		Item 3	No	3		
2.D2.3.1.88	D2	32.003		Item 4	No	3		
2.D2.3.1.89	D2	32.003		Item 5	No	3		
2.D2.3.1.90	D2	33.004		Item 6	No	1		
2.D2.3.1.91	D2	32.003		Item 7	No	1		
2.D2.3.1.92	D2	32.003		Item 8	No	1		
2.D2.3.1.93	D2	33.004		Item 9	No	1		
2.D2.3.1.94	D2	32.003		Item 10	No	1		
2.D2.3.1.95	D2	32.003		Item 11	No	1		
2.D2.3.1.96	D2	33.004		Item 12	No	1		
2.D2.3.1.97	D2	32.003		Item 13	No	1		
2.D2.3.1.98	D2	32.003		Item 14	No	1		
2.D2.3.1.99	D2	32.003		Item 15	No	1		
2.D2.3.1.100	D2	32.003		Item 16	No	1		
2.D2.3.1.101	D2	32.003		Item 17	No	1		
	D2			ITEMS CAST OR BUILT INTO CONCRETE				
2.D2.3.1.102	D2	33.005		Steel pipe diameter 200mm	No	7		
	D2			PIPE TESTING				
2.D2.3.1.103	D2	33.008		Hydrostatic Testing	Sum	1		
2.D2.3.1.104	D2	33.009		Pipe lining integrity testing	Sum	1		
2.D2.3.1.105	D2	33.010		Pipe coating integrity testing	Sum	1		
	D2			PART D2.3.2: SCOUR CHAMBER (Balancing Reservoir)				
	D2			REFER TO DRAWING 2D-C5-201				
	D2			EARTHWORKS				
	D2			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS, THRUST BLOCKS, ETC				
2.D2.3.2.1	D2	9.013		Excavate for valve chambers	m3	283		
2.D2.3.2.2	D2	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	125		
2.D2.3.2.3	D2	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance.	m3	4		
2.D2.3.2.4	D2	9.020		Compaction of trench bottom (150mm thick)	m2	52		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	D2			OVERHAUL				
2.D2.3.2.5	D2	9.023(a)		Between 1km up to and including 3km	m3	42		
2.D2.3.2.6	D2	9.023(b)		Between 3km up to and including 5km	m3	42		
2.D2.3.2.7	D2	9.023(c)		Between 5km up to and including 7km	m3	42		
	D2			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	D2			Provision of bed material (G5)				
2.D2.3.2.8	D2	15.003(c)		Material from the nearest borrow pit without screening	m3	8		
	D2			Provision of cement stabilised soil				
2.D2.3.2.9	D2	15.003(d)		Material from the nearest borrow pit with screening	m3	20		
2.D2.3.2.10	D2	15.003(e)		Cement for stabilisation of soil	m3	1		
	D2			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.D2.3.2.11	D2	15.001		Placing of bedding material	m3	8		
2.D2.3.2.12	D2	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	21		
	D2			OVERHAUL				
2.D2.3.2.13	D2	15.010(b)		Between 3km up to and including 5km	m3	15		
2.D2.3.2.14	D2	15.010(c)		Between 5km up to and including 7km	m3	15		
	D2			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.D2.3.2.15	D2	15.014(a)		Structure backfilling compacted	m3	188		
2.D2.3.2.16	D2	15.014(a)		Embankment backfilling compacted	m3	26		
2.D2.3.2.17	D2	15.014(b)		Rockfill processing and compaction	m3	4		
2.D2.3.2.18	D2	15.015		Finishing of slopes	m2	44		
	D2			OVERHAUL				
2.D2.3.2.19	D2	15.016(b)		Between 3km up to and including 5km	m3	11		
2.D2.3.2.20	D2	15.016(c)		Between 5km up to and including 7km	m3	11		
	D2			CONCRETE WORKS				
	D2			ROUGH FORMWORK				
	D2			Vertical surfaces				
2.D2.3.2.21	D2	20.001		Sides of floor slab	m2	14		
2.D2.3.2.22	D2	20.001		Sides of walls	m2	91		
	D2			SMOOTH FORMWORK				
	D2			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.D2.3.2.23	D2	20.002		Underside of slabs	m2	12		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	D2			SMOOTH FORMWORK				
	D2			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.D2.3.2.24	D2	20.002		Walls	m2	308		
2.D2.3.2.25	D2	20.002		Side of Sump walls	m2	0.5		
2.D2.3.2.26	D2	20.002		Plinths	m2	4		
2.D2.3.2.27	D2	20.005		Narrow widths - Up to 250mm high (roof slabs)	m	44		
	D2			Box-out holes/Form voids (for sleeves only)				
	D2			a) Small, circular, of diameter up to and including 0.35 m				
2.D2.3.2.28	D2	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	6		
	D2			REINFORCEMENT				
2.D2.3.2.29	D2	20.007		Steel bars (irrespective of grade or diameter)	t	16.5		
	D2			CONCRETE				
	D2			CONCRETE 15 MPa/19mm in:				
2.D2.3.2.30	D2	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	48		
2.D2.3.2.31	D2	20.011(b)		Mass concrete filling where required by the engineer	m3	0.5		
2.D2.3.2.32	D2	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	27		
	D2			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.D2.3.2.33	D2	20.010		Foundations, bases, floor slabs and roof slabs	m3	28		
2.D2.3.2.34	D2	20.010		Plinths (Including grouting between the plinth and the pipes/specials where required)	m3	1		
2.D2.3.2.35	D2	20.010		Walls	m3	81		
	D2			UNFORMED SURFACE FINISHES				
2.D2.3.2.36	D2	20.013(a)		Wood floated finish	m2	27		
2.D2.3.2.37	D2	20.013(b)		Steel floated finish	m2	46		
	D2			ITEMS CAST OR BUILT INTO CONCRETE				
2.D2.3.2.38	D2	33.005		Steel pipe diameter 2000mm	No	2		
2.D2.3.2.39	D2	33.005		Steel pipe diameter 300mm	No	1		
	D2			SUPPLY AND ERECT PRECAST ELEMENTS				
	D2			Refer to Dwg 2D-C5-201				
2.D2.3.2.40	D2	20.017		Precast slab Type 1	No	6		
2.D2.3.2.41	D2	20.017		Precast slab Type 2	No	2		
	D2			ANCILLARY WORKS				
2.D2.3.2.42	D2	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	2		
2.D2.3.2.43	D2	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	2		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.D2.3.2.44	D2	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.D2.3.2.45	D2	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.D2.3.2.46	D2	20.021 c)		Steel bars as per drawing Reg. No.2A-C6-125	No	1		
2.D2.3.2.47	D2	20.021 c)		160mm diam uPVC pipe cast into concrete wall for the sump	No	2		
2.D2.3.2.48	D2	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 300mm	No	1		
2.D2.3.2.49	D2	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 200mm	No	2		
2.D2.3.2.50	D2	20.021 c)		Portable aluminium steps complete, as per drawing 2A-C6-125	No	1		
	D2			SPECIFIC ITEMS OF WORK				
	D2			SEALING STRIPS, JOINT SEALANT, ETC				
2.D2.3.2.51	D2	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	41		
	D2			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	D2			Foundation trench excavation and backfilling				
2.D2.3.2.52	D2	21.001(b)		In all other classes of material	m3	39		
2.D2.3.2.53	D2	21.002		Surface preparation for bedding the gabions	m2	32		
2.D2.3.2.54	D2	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	31		
2.D2.3.2.55	D2	21.003(a)		Galvanised gabions cages (Refer to drawings for dimensions)	m3	4		
2.D2.3.2.56	D2	21.003(c)		Galvanised gabions mattresses (Refer to drawings for dimensions)	m3	5		
2.D2.3.2.57	D2	27.009		Rip-rap	m3	5		
	D2			PART D2.3.3: OUTLET CHAMBER (Balancing Reservoir)				
	D2			REFER TO DRAWING 2D-C5-200				
	D2			EARTHWORKS				
	D2			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS, THRUST BLOCKS, ETC				
2.D2.3.3.1	D2	9.013		Excavate for valve chambers	m3	861		
2.D2.3.3.2	D2	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	269		
2.D2.3.3.3	D2	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance.	m3	13		
2.D2.3.3.4	D2	9.020		Compaction of trench bottom (150mm thick)	m2	169		
	D2			OVERHAUL				
2.D2.3.3.5	D2	9.023(a)		Between 1km up to and including 3km	m3	146		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.D2.3.3.6	D2	9.023(b)		Between 3km up to and including 5km	m3	146		
2.D2.3.3.7	D2	9.023(c)		Between 5km up to and including 7km	m3	146		
	D2			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	D2			Provision of bed material (G5)				
2.D2.3.3.8	D2	15.003(c)		Material from the nearest borrow pit without screening	m3	26		
	D2			Provision of cement stabilised soil				
2.D2.3.3.9	D2	15.003(d)		Material from the nearest borrow pit with screening	m3	62		
2.D2.3.3.10	D2	15.003(e)		Cement for stabilisation of soil	m3	3		
	D2			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.D2.3.3.11	D2	15.001		Placing of bedding material	m3	26		
2.D2.3.3.12	D2	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	65		
	D2			OVERHAUL				
2.D2.3.3.13	D2	15.010(b)		Between 3km up to and including 5km	m3	46		
2.D2.3.3.14	D2	15.010(c)		Between 5km up to and including 7km	m3	46		
	D2			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.D2.3.3.15	D2	15.014(a)		Structure backfilling compacted	m3	468		
2.D2.3.3.16	D2	15.014(a)		Embankment backfilling compacted	m3	78		
2.D2.3.3.17	D2	15.014(b)		Rockfill processing and compaction	m3	13		
2.D2.3.3.18	D2	15.015		Finishing of slopes	m2	131		
	D2			OVERHAUL				
2.D2.3.3.19	D2	15.016(b)		Between 3km up to and including 5km	m3	7		
2.D2.3.3.20	D2	15.016(c)		Between 5km up to and including 7km	m3	7		
	D2			CONCRETE WORKS				
	D2			ROUGH FORMWORK				
	D2			Vertical surfaces				
2.D2.3.3.21	D2	20.001		Sides of floor slab	m2	44		
2.D2.3.3.22	D2	20.001		Sides of walls	m2	233		
	D2			SMOOTH FORMWORK				
	D2			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.D2.3.3.23	D2	20.002		Underside of slabs	m2	37		
	D2			SMOOTH FORMWORK				
	D2			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.D2.3.3.24	D2	20.002		Walls	m2	814		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown Reference	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.D2.3.3.25	D2	20.002		Side of Sump walls	m2	2		
2.D2.3.3.26	D2	20.002		Plinths	m2	12		
2.D2.3.3.27	D2	20.005		Narrow widths - Up to 250mm high (roof slabs)	m	130		
	D2			Box-out holes/Form voids (for sleeves only)				
	D2			a) Small, circular, of diameter up to and including 0.35 m				
2.D2.3.3.28	D2	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	18		
	D2			REINFORCEMENT				
2.D2.3.3.29	D2	20.007		Steel bars (irrespective of grade or diameter)	t	46.1		
	D2			CONCRETE				
	D2			CONCRETE 15 MPa/19mm in:				
2.D2.3.3.30	D2	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	156		
2.D2.3.3.31	D2	20.011(b)		Mass concrete filling where required by the engineer	m3	1		
2.D2.3.3.32	D2	46.007(b)i)		100mm thick granolithic screed laid to fall to direction of sump.	m2	88		
	D2			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.D2.3.3.33	D2	20.010		Foundations, bases, floor slabs and roof slabs	m3	91		
2.D2.3.3.34	D2	20.010		Plinths (Including grouting between the plinth and the pipes/specials where required)	m3	3		
2.D2.3.3.35	D2	20.010		Walls	m3	213		
	D2			UNFORMED SURFACE FINISHES				
2.D2.3.3.36	D2	20.013(a)		Wood floated finish	m2	88		
2.D2.3.3.37	D2	20.013(b)		Steel floated finish	m2	150		
	D2			ITEMS CAST OR BUILT INTO CONCRETE				
2.D2.3.3.38	D2	33.005		Steel pipe diameter 1200mm	No	6		
2.D2.3.3.39	D2	33.005		Steel pipe diameter 300mm	No	3		
	D2			SUPPLY AND ERECT PRECAST ELEMENTS				
	D2			Refer to Dwg 2D-C5-201				
2.D2.3.3.40	D2	20.017		Precast slab Type 1	No	21		
2.D2.3.3.41	D2	20.017		Precast slab Type 2	No	9		
	D2			ANCILLARY WORKS				
2.D2.3.3.42	D2	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	6		
2.D2.3.3.43	D2	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	6		
2.D2.3.3.44	D2	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	3		
2.D2.3.3.45	D2	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	3		
2.D2.3.3.46	D2	20.021 c)		Steel bars as per drawing Reg. No.2A-C6-125	No	3		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.D2.3.3.47	D2	20.021 c)		160mm diam uPVC pipe cast into concrete wall for the sump	No	6		
2.D2.3.3.48	D2	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 300mm	No	3		
2.D2.3.3.49	D2	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 1200mm	No	6		
2.D2.3.3.50	D2	20.021 c)		Portable aluminium steps complete, as per drawing 2A-C6-125	No	3		
	D2			SPECIFIC ITEMS OF WORK				
	D2			SEALING STRIPS, JOINT SEALANT, ETC				
2.D2.3.3.51	D2	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	151		
	D2			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	D2			Foundation trench excavation and backfilling				
2.D2.3.3.52	D2	21.001(b)		In all other classes of material	m3	123		
2.D2.3.3.53	D2	21.002		Surface preparation for bedding the gabions	m2	102		
2.D2.3.3.54	D2	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	100		
2.D2.3.3.55	D2	21.003(a)		Galvanised gabions cages (Refer to drawings for dimensions)	m3	12		
2.D2.3.3.56	D2	21.003(c)		Galvanised gabions mattresses (Refer to drawings for dimensions)	m3	15		
2.D2.3.3.57	D2	27.009		Rip-rap	m3	10		
	D2			PART D2.3: Structures (Carried forward to Summary of Bills)				

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
	D2			PART D2.4: Lining				
	D2			Reservoir membranes and liners				
2.D2.4.1	D2	17.001		Inspection, acceptance and maintenance of surface area	m2	144 315		
2.D2.4.2	D2	17.002		Access to lining area	sum	1		
	D2			Geo-cells, Membranes and liners				
2.D2.4.3	D2	17.005		1.5mm HDPE liner (floor)	m2	54 650		
2.D2.4.4	D2	17.005		2mm HDPE liner (slopes)	m2	89 670		
2.D2.4.5	D2	17.006		150mm geocellular confinement layer filled with 5Mpa soilcrete 2A-C6-010	m2	130 185		
	D2			Anchoring to concrete structure:				
	D2			Dwg. 2A-C6-010				
2.D2.4.6	D2	17.007		a) Inlet structure	m	150		
2.D2.4.7	D2	17.007		b) Outlet structure	m	120		
2.D2.4.8	D2	17.007		c) Overflow structure	m	150		
2.D2.4.9	D2	17.008		Anchor trench for HDPE liner	m	3 190		
2.D2.4.10	D2	17.008		Anchor trench for Geocell confinement layer - 0.75m wide	m	1 600		
2.D2.4.11	D2	17.008		Anchor trench for Geocell confinement layer - 1m wide	m	810		
2.D2.4.12	D2	17.008		10mm diam edge pegs for Geocell confinement layer as per drawing 2A-C6-010	no	10 700		
	D2			Safety Items				
	D2			Dwg. Detail C18, Dwg.2A-C6-004				
2.D2.4.13	D2	17.009		Safety ropes and buoys	No.	53		
2.D2.4.14	D2	17.010		Warning signs	No.	53		
	D2			GUARDRAILS				
2.D2.4.15	D2	25.021		Guardrails, including for all curved radiuses and end terminals as per Drw Ref. 2A-C6-007	m	4120		
	D2			PART D2.4: Lining (Carried forward to Summary of Bills)				

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
	D2			PART D2.5: Pipework				
	D2			PART D2.5.1: INLET PIPEWORK AND TRENCHING				
	D2			PIPE TRENCH EXCAVATIONS				
	D2			Excavate in all materials to specified levels and battered slopes, including temporary stockpiling and levelling alongside excavations within the confines of the pipe servitude				
	D2			Unclassified trench excavations:				
	D2			Trench excavations:				
2.D2.5.1.1	D2	9.012		Up to 1m deep	m3	440		
2.D2.5.1.2	D2	9.013		Additional excavation in all materials beyond the Payment Line for valve chambers, thrust blocks, etc.	m3	100		
	D2			BACKFILLING AND BEDDING				
	D2			Provision for bedding				
2.D2.5.1.3	D2	15.003(b)		Material with screening from trenches	m3	160		
	D2			Provision for bedding cradle material				
2.D2.5.1.4	D2	15.004(b)		Material with screening from trenches	m3	280		
	D2			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.D2.5.1.5	D2	15.001		Bed material	m3	160		
2.D2.5.1.6	D2	15.001		Bedding cradle	m3	280		
	D2			INLET PIPEWORK				
	D2			DETAILING AND DOCUMENTATION				
2.D2.5.1.7	D2	32.001 &35.001		Pipes and pipe specials: Design and documentation (As required: For Employer Design)	Sum	1		
2.D2.5.1.8	D2	37.001		Corrosion protection: PQP and other documentation	Sum	1		
	D2			PIPEWORK				
	D2			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO CONTRACTOR'S SITE STORE (INCLUDING CORROSION PROTECTION)				
	D2			PN10 to Dwg Ref 2D-C5-017				
2.D2.5.1.9	D2	32.003		Item DP1.1 - Spool	No	13		
2.D2.5.1.10	D2	32.003		Item DP1.2 - Closing Piece	No	1		
2.D2.5.1.11	D2	32.003		Item DP1.3 - Tee Piece	No	1		
2.D2.5.1.12	D2	32.003		Item DP1.4 - Blank Flange	No	1		
2.D2.5.1.13	D2	32.003		Item DP1.5 - Closing Piece	No	1		
2.D2.5.1.14	D2	32.003		Item DP1.6 - Tee Piece	No	1		
2.D2.5.1.15	D2	35.002		Item DP1.7 - Butterfly Valve	No	1		
2.D2.5.1.16	D2	32.003		Item DP1.8 - Spool	No	1		
2.D2.5.1.17	D2	32.003		Item DP1.9 - Closing Piece	No	1		
2.D2.5.1.18	D2	32.003		Item DP1.10 - Tee Piece	No	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.D2.5.1.19	D2	35.002		Item DP1.11 - Butterfly Valve	No	1		
2.D2.5.1.20	D2	32.003		Item DP1.12 - Spool	No	1		
2.D2.5.1.21	D2	32.003		Item DP1.13 - Eccentric Reducer	No	1		
2.D2.5.1.22	D2	35.002		Item DP1.14 - Butterfly Valve	No	1		
2.D2.5.1.23	D2	32.003		Item DP1.15 - Dismantling Joint	No	1		
2.D2.5.1.24	D2	32.003		Item DP1.16 - Closing Piece	No	1		
2.D2.5.1.25	D2	32.003		Item DP1.17 - Spool	No	10		
2.D2.5.1.26	D2	32.003		Item DP1.18 - Tee Piece	No	1		
2.D2.5.1.27	D2	32.003		Item DP1.19 - Blank Flange	No	1		
2.D2.5.1.28	D2	32.003		Item DP1.20 - Spool	No	1		
	D2			INSTALLATION OF VALVES AND SPECIALS				
	D2			PN10 to Dwg Ref 2D-C5-015 and 2D-C5-016				
2.D2.5.1.29	D2	33.007		Item DP1.1 - Spool	No	13		
2.D2.5.1.30	D2	33.007		Item DP1.2 - Closing Piece	No	1		
2.D2.5.1.31	D2	33.007		Item DP1.3 - Tee Piece	No	1		
2.D2.5.1.32	D2	33.007		Item DP1.4 - Blank Flange	No	1		
2.D2.5.1.33	D2	33.007		Item DP1.5 - Closing Piece	No	1		
2.D2.5.1.34	D2	33.007		Item DP1.6 - Tee Piece	No	1		
2.D2.5.1.35	D2	33.007		Item DP1.7 - Butterfly Valve	No	1		
2.D2.5.1.36	D2	33.007		Item DP1.8 - Spool	No	1		
2.D2.5.1.37	D2	33.007		Item DP1.9 - Closing Piece	No	1		
2.D2.5.1.38	D2	33.007		Item DP1.10 - Tee Piece	No	1		
2.D2.5.1.39	D2	33.007		Item DP1.11 - Closure Pipe	No	1		
2.D2.5.1.40	D2	33.007		Item DP1.12 - Spool	No	1		
2.D2.5.1.41	D2	33.007		Item DP1.13 - Eccentric Reducer	No	1		
2.D2.5.1.42	D2	33.007		Item DP1.14 - Butterfly Valve	No	1		
2.D2.5.1.43	D2	33.007		Item DP1.15 - Dismantling Joint	No	1		
2.D2.5.1.44	D2	33.007		Item DP1.16 - Closing Piece	No	1		
2.D2.5.1.45	D2	33.007		Item DP1.17 - Spool	No	10		
2.D2.5.1.46	D2	33.007		Item DP1.18 - Tee Piece	No	1		
2.D2.5.1.47	D2	33.007		Item DP1.19 - Blank Flange	No	1		
2.D2.5.1.48	D2	33.007		Item DP1.20 - Spool	No	1		
	D2			ITEMS CAST OR BUILT INTO CONCRETE				
2.D2.5.1.49	D2	33.005		Steel pipe diameter 1400mm	No	1		
	D2			PIPE TESTING				
2.D2.5.1.50	D2	33.008		Hydrostatic Testing	Sum	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.D2.5.1.51	D2	33.009		Pipe lining integrity testing	Sum	1		
2.D2.5.1.52	D2	33.010		Pipe coating integrity testing	Sum	1		
	D2			PART D2.5.2: OUTLET PIPEWORK AND TRENCHING				
	D2			SITE CLEARANCE				
	D2			Removal of fertile soil				
2.D2.5.2.1	D2	7.005(b)		For pipelines, temporary stockpile alongside the pipeline and construction servitude	m3	880		
	D2			Overhaul				
2.D2.5.2.2	D2	7.006(a)		Between 1km up to and including 3km	m3	880		
	D2			PIPE TRENCH EXCAVATIONS				
	D2			EXCAVATE IN ALL MATERIALS TO SPECIFIED LEVELS AND BATTERED SLOPES, INCLUDING TEMPORARY STOCKPILING AND LEVELLING ALONGSIDE EXCAVATIONS WITHIN THE CONFINES OF THE PIPE SERVITUDE				
	D2			Unclassified trench excavations:				
	D2			Within the freehaul distance				
2.D2.5.2.3	D2	9.012		Over 3m and up to 4m deep	m3	45		
2.D2.5.2.4	D2	9.012		Over 4m and up to 5m deep	m3	4350		
2.D2.5.2.5	D2	9.012		Over 5m and up to 6m deep	m3	3350		
2.D2.5.2.6	D2	9.012		Over 6m and up to 7m deep	m3	1210		
2.D2.5.2.7	D2	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	2515		
2.D2.5.2.8	D2	9.025		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (by non-explosive means)	m3	630		
2.D2.5.2.9	D2	9.020		Compaction of trench bottom	m2	1950		
	D2			EXCAVATION ANCILLARIES				
2.D2.5.2.10	D2	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to designated spoil sites	m3	175		
2.D2.5.2.11	D2	9.021		Excavation by hand	m3	85		
	D2			OVERHAUL				
2.D2.5.2.12	D2	9.023(a)		Between 1km up to and including 3km	m3	8955		
	D2			BACKFILLING AND BEDDING				
	D2			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	D2			Provision of bed material				
2.D2.5.2.13	D2	15.003(c)		Material from the nearest borrow pit without screening	m3	315		
2.D2.5.2.14	D2	15.003(d)		Material from the nearest borrow pit with screening	m3	80		
	D2			Provision of bedding cradle material				
2.D2.5.2.15	D2	15.004(c)		Material from the nearest borrow pit without screening	m3	420		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.D2.5.2.16	D2	15.004(d)		Material from the nearest borrow pit with screening	m3	110		
	D2			Provision of selected fill blanket				
2.D2.5.2.17	D2	15.006(c)		Material from the nearest borrow pit without screening	m3	1500		
2.D2.5.2.18	D2	15.006(d)		Material from the nearest borrow pit with screening	m3	380		
	D2			Provision of main backfill material				
2.D2.5.2.19	D2	15.007(a)		Backfill material from trench excavation	m3	4240		
2.D2.5.2.20	D2	15.007(b)		Backfill material from the nearest borrow pit	m3	640		
	D2			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.D2.5.2.21	D2	15.001		Bed material	m3	395		
2.D2.5.2.22	D2	15.001		Bedding cradle	m3	530		
2.D2.5.2.23	D2	15.001		Selected fill blanket	m3	1880		
2.D2.5.2.24	D2	15.001		Main backfill	m3	4880		
2.D2.5.2.25	D2	15.001		Fertile soil	m3	880		
	D2			PROVISION OF MATERIAL TO REPLACE UNSUITABLE MATERIAL FROM TRENCH BOTTOM OR TO PROVIDE SUPPORTING EARTHWORKS				
2.D2.5.2.26	D2	15.011(b)		From borrow pits	m3	175		
	D2			Placing of Material				
2.D2.5.2.27	D2	15.012		Placing of material to replace unsuitable material from trench bottom or to provide supporting earthworks	m3	175		
	D2			SUBSOIL DRAINAGE				
	D2			Crushed stone				
2.D2.5.2.28	D2	15.008(a)		Supply and place crushed stone for Layer no 1	m3	180		
	D2			Geotextile				
2.D2.5.2.29	D2	15.008(b)		Supply and place geotextile for Layer no 1	m2	1900		
	D2			ENCASING OF PIPES IN CONCRETE				
2.D2.5.2.30	D2	15.009(a)		Concrete strength grade 30/19	m3	50		
2.D2.5.2.31	D2	15.009(b)		Reinforcement	t	7		
	D2			OVERHAUL				
2.D2.5.2.32	D2	15.010(a)		Between 1km up to and including 3km	m3	8565		
	D2			OUTLET PIPEWORK				
				VALVE AND SCOUR CHAMBER as per dwg. 2D-C5-021, 2D-C5-022 and 2D-C5-023 (Items "RD")				
				SCOUR VALVE CHAMBER as per dwg. 2D-C4-024 and 2D-C4-001 (Items "SC")				
				DISCHARGE MANIFOLD PIPEWORK as per dwg. 2D-C4-024 and 2D-C4-001 (Items "DM")				
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	D2			DETAILING AND DOCUMENTATION				
2.D2.5.2.33	D2	32.001 &35.001		Pipes and pipe specials: Design and documentation (As required: For Employer Design)	Sum	1		
2.D2.5.2.34	D2	37.001		Corrosion protection: PQP and other documentation	Sum	1		
	D2			PROCUREMENT AND DELIVERY				
				Pipes and Pipe Specials				
2.D2.5.2.35	D2	32.003		Item RD1.1, RD2.1 and RD3.1 - DN1200 PN10 plain ended Pipe Special Straight with DN1800 PN10 Bellmouth	No	3		
	D2			DN1200 PN10 plain ended Pipe Special Straight				
2.D2.5.2.36	D2	32.003		Item RD1.3, RD2.3 and RD3.3 - L = 310 mm	No	3		
2.D2.5.2.37	D2	32.003		Item RD1.4, RD2.4 and RD3.4 - L = 1790 mm	No	6		
2.D2.5.2.38	D2	32.003		Item RD1.17, RD2.17 and RD3.17 - L = 3855 mm	No	3		
2.D2.5.2.39	D2	32.003		Item RD1.15, RD2.15 and RD3.15 - L = 7980 mm	No	3		
2.D2.5.2.40	D2	32.003		Item RD1.2, RD2.2 and RD3.2 - L = 9000 mm	No	33		
2.D2.5.2.41	D2	32.003		Item RD1.5, RD2.5 and RD3.5 - DN1200 PN10 plain ended Pipe Special Straight with Restraining Flange (Insulating) and DN300 PN10 Scour Stub Flanged at End	No	3		
2.D2.5.2.42	D2	32.003		Item RD1.7, RD2.7 and RD3.7 - DN1200 PN10 Restrained Flange Adaptor (Insulating)	No	3		
2.D2.5.2.43	D2	32.003		Item RD1.8, RD2.8 and RD3.8 - DN1200 PN10 Pipe Special Straight, Flanged one End (Insulating) with DN700 Flanged Access Branch	No	3		
2.D2.5.2.44	D2	32.003		Item RD1.9, RD2.9, RD3.9 and SC1.2 - DN700 PN10 Blind Flange with DN150 DN10 Flanged Stub Pipe	No	4		
2.D2.5.2.45	D2	32.003		Item RD1.13, RD2.13, RD3.13 and SC1.8 - DN300 PN10 Dismantling Joint	No	4		
	D2			DN300 PN10 Flanged One End Pipe Special Straight with Puddle Flange				
2.D2.5.2.46	D2	32.003		Item RD1.14, RD2.14 and RD3.14 - L = 1125 mm (Outlet Isolation Valve Chamber)	No	3		
2.D2.5.2.47	D2	32.003		Item SC1.9 - L = 1310 mm (Scour Valve Chamber)	No	1		
2.D2.5.2.48	D2	32.003		Item RD1.16, RD2.16 and RD3.16 - DN1200 PN10 45 degree Medium Radius Plain Ended Pipe Special Bend	No	3		
2.D2.5.2.49	D2	32.003		Item SC1.1 - DN2000 PN10 plain ended Pipe Special Straight with DN700 Flanged Access Branch	No	1		
2.D2.5.2.50	D2	32.003		Item SC1.5 - DN2000 PN10 plain ended Pipe Special Straight with DN300 PN10 Scour Stub Flanged at End	No	1		
	D2			DN2000 PN10 plain ended Pipe Special Straight				
2.D2.5.2.51	D2	32.003		Item DM1.2 - L = 1255 mm	No	1		
2.D2.5.2.52	D2	32.003		Item SC1.6 - L = 1700 mm	No	1		
2.D2.5.2.53	D2	32.003		Item DM1.3 - L = 1875 mm	No	1		
2.D2.5.2.54	D2	32.003		Item DM1.2 - L = 6590 mm	No	1		
2.D2.5.2.55	D2	32.003		Item DM1.3 - L = 7300 mm	No	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.D2.5.2.56	D2	32.003		Item DM1.1 - L = 9000 mm	No	23		
2.D2.5.2.57	D2	32.003		Item DM1.4 - DN2000-1200 PN10 plain ended Unequal 45 deg Lateral Tee	No	3		
2.D2.5.2.58	D2	32.003		Item DM1.5 - DN2000-1600 PN10 Concentric Reducer with DN1600 PN10 flange end	No	1		
2.D2.5.2.59	D2	32.003		Item DM1.6 - DN1600 PN10 Blind Flange	No	1		
				Valves				
2.D2.5.2.60	D2	35.002		Item RD1.6, RD2.6 and RD 3.6 - DN1200 PN10 Isolating Butterfly Valve (Rubber seal, double offset)	No	3		
2.D2.5.2.61	D2	35.002		Item RD1.6, RD2.6 and RD 3.6 - Actuator and worm gearbox for Isolating B/F Valves	No	3		
2.D2.5.2.62	D2	35.002		Item RD1.10, Item RD2.10, Item RD3.10 and SC 1.3 - DN150 PN10 RSV Gate Valve for isolating Air Valve	No	4		
2.D2.5.2.63	D2	35.002		Item RD1.11, Item RD2.11, Item RD3.11 and SC 1.4 - DN150 PN10 Double Acting, Anti Shock Orifice Air Valve	No	4		
2.D2.5.2.64	D2	35.002		Item RD1.12, Item RD2.12, Item RD3.12 and SC 1.7 - DN300 PN10 Scour Wedge Gate Valve	No	8		
	D2			INSTALLATIONS				
	D2			Employer's Requirements : Mechanical (Plant installation by Contractor)				
				Pipes and Pipe Specials				
2.D2.5.2.65	D2	33.004		Item RD1.1, RD2.1 and RD3.1 - DN1200 PN10 plain ended Pipe Special Straight with Bellmouth	No	3		
	D2			DN1200 PN10 plain ended Pipe Special Straight				
2.D2.5.2.66	D2	33.007		Item RD1.3, RD2.3 and RD3.3 - L = 310 mm	No	3		
2.D2.5.2.67	D2	33.004		Item RD1.4, RD2.4 and RD3.4 - L = 1790 mm	No	6		
2.D2.5.2.68	D2	33.007		Item RD1.17, RD2.17 and RD3.17 - L = 3855 mm	No	3		
2.D2.5.2.69	D2	33.007		Item RD1.15, RD2.15 and RD3.15 - L = 7980 mm	No	3		
2.D2.5.2.70	D2	33.007		Item RD1.2, RD2.2 and RD3.2 - L = 9000 mm	No	33		
2.D2.5.2.71	D2	33.004		Item RD1.5, RD2.5 and RD3.5 - DN1200 PN10 plain ended Pipe Special Straight with Restraining Flange (Insulating) and DN300 PN10 Scour Stub Flanged at End	No	3		
2.D2.5.2.72	D2	33.004		Item RD1.7, RD2.7 and RD3.7 - DN1200 PN10 Restrained Flange Adaptor (Insulating)	No	3		
2.D2.5.2.73	D2	33.004		Item RD1.8, RD2.8 and RD3.8 - DN1200 PN10 Pipe Special Straight, Flanged one End (Insulating) with DN700 Flanged Access Branch	No	3		
2.D2.5.2.74	D2	33.004		Item RD1.9, RD2.9, RD3.9 and SC1.2 - DN700 PN10 Blind Flange with DN150 DN10 Flanged Stub Pipe	No	4		
2.D2.5.2.75	D2	33.004		Item RD1.13, RD2.13, RD3.13 and SC1.8 - DN300 PN10 Dismantling Joint	No	4		
	D2			DN300 PN10 Flanged One End Pipe Special Straight with Puddle Flange				
2.D2.5.2.76	D2	33.004		Item RD1.14, RD2.14 and RD3.14 - L = 1125 mm (Outlet Isolation Valve Chamber)	No	3		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.D2.5.2.77	D2	33.004		Item SC1.9 - L = 1310 mm (Scour Valve Chamber)	No	1		
2.D2.5.2.78	D2	33.007		Item RD1.16, RD2.16 and RD3.16 - DN1200 PN10 45 degree Medium Radius Plain Ended Pipe Special Bend	No	3		
2.D2.5.2.79	D2	33.004		Item SC1.1 - DN2000 PN10 plain ended Pipe Special Straight with DN700 Flanged Access Branch	No	1		
2.D2.5.2.80	D2	33.004		Item SC1.5 - DN2000 PN10 plain ended Pipe Special Straight with DN300 PN10 Scour Stub Flanged at End	No	1		
	D2			DN2000 PN10 plain ended Pipe Special Straight				
2.D2.5.2.81	D2	33.007		Item DM1.2 - L = 1255 mm	No	1		
2.D2.5.2.82	D2	33.004		Item SC1.6 - L = 1700 mm	No	1		
2.D2.5.2.83	D2	33.007		Item DM1.3 - L = 1875 mm	No	1		
2.D2.5.2.84	D2	33.007		Item DM1.2 - L = 6590 mm	No	1		
2.D2.5.2.85	D2	33.007		Item DM1.3 - L = 7300 mm	No	1		
2.D2.5.2.86	D2	33.007		Item DM 1.1 - L = 9000 mm	No	23		
2.D2.5.2.87	D2	33.007		Item DM1.4 - DN2000-1200 PN10 plain ended Unequal Lateral Tee	No	3		
2.D2.5.2.88	D2	33.007		Item DM1.5 - DN2000-1600 PN10 Concentric Reducer with DN1600 PN10 flange on one end	No	1		
2.D2.5.2.89	D2	33.007		Item DM1.6 - DN1600 PN10 Blind Flange	No	1		
				Valves				
2.D2.5.2.90	D2	33.004		Item RD1.6, RD2.6 and RD 3.6 - DN1200 PN10 Isolating Butterfly Valve (Rubber seal, double offset)	No	3		
2.D2.5.2.91	D2	33.004		Item RD1.6, RD2.6 and RD 3.6 - Actuator and worm gearbox for Isolating B/F Valves	No	3		
2.D2.5.2.92	D2	33.004		Item RD1.10, Item RD2.10, Item RD3.10 and SC 1.3 - DN150 PN10 RSV Gate Valve for isolating Air Valve	No	4		
2.D2.5.2.93	D2	33.004		Item RD1.11, Item RD2.11, Item RD3.11 and SC 1.4 - DN150 PN10 Double Acting, Anti Shock Orifice Air Valve	No	4		
2.D2.5.2.94	D2	33.004		Item RD1.12, Item RD2.12, Item RD3.12 and SC 1.7 - DN300 PN10 Scour Wedge Gate Valve	No	8		
	D2			ITEMS CAST OR BUILT INTO CONCRETE				
2.D2.5.2.95	D2	33.005		Steel pipe diameter 300mm	No	4		
2.D2.5.2.96	D2	33.005		Steel pipe diameter 1200mm	No	6		
2.D2.5.2.97	D2	33.005		Steel pipe diameter 2000mm	No	2		
				PIPE TESTING				
2.D2.5.2.98	D2	33.008		Hydrostatic Testing	Sum	1		
2.D2.5.2.99	D2	33.009		Pipe lining integrity testing	Sum	1		
2.D2.5.2.100	D2	33.010		Pipe coating integrity testing	Sum	1		
	D2			PART D2.5: Pipework (Carried forward to Summary of Bills)				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	D2			PART D2.6: Landscaping and Rehabilitation				
	D2			LANDSCAPING & REHABILITATION				
2.D2.6.1	D2	47.001		Shaping	m2	25 000		
2.D2.6.2	D2	47.007		Furnishing and applying fertilisers	kg	750		
2.D2.6.3	D2	47.011		Preparing topsoil for seeding	m2	25 000		
2.D2.6.4	D2	47.012		Hydro-seeding	ha	2.5		
	D2			Provision of seed				
2.D2.6.5	D2	47.010		Seed type - Anthephora pubescens	kg	2.5		
2.D2.6.6	D2	47.010		Seed type - Cenchrus ciliaris	kg	2.5		
2.D2.6.7	D2	47.010		Seed type - Chloris gayana	kg	25		
2.D2.6.8	D2	47.010		Seed type - Cynodon dactylon	kg	7.5		
2.D2.6.9	D2	47.010		Seed type - Digitaria eriantha	kg	30		
2.D2.6.10	D2	47.010		Seed type - Enneapogon chenchroides	kg	2.5		
2.D2.6.11	D2	47.010		Seed type - Eragrostis curvula	kg	5		
2.D2.6.12	D2	47.010		Seed type - Eragrostis lehmanniana	kg	1.25		
2.D2.6.13	D2	47.010		Seed type - Eragrostis tef	kg	7.5		
2.D2.6.14	D2	47.010		Seed type - Heteropogon contortus	kg	7.5		
2.D2.6.15	D2	47.010		Seed type - Panicum maximum	kg	8.75		
2.D2.6.16	D2	47.010		Seed type - Pogonarthria squarrosa	kg	2.5		
2.D2.6.17	D2	47.016		Provision of temporary erosion control measures	ha	2.5		
2.D2.6.18	D2	47.017		Maintenance of the Temporary Erosion Control Measures	sum	1		
2.D2.6.19	D2	47.018		Maintenance of Vegetation	sum	1		
	D2			PART D2.6: Landscaping and Rehabilitation (Carried forward to Summary of Bills)				

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
	D2			PART D2.7: Borrow pits and Spoil Areas				
	D2			BORROW PIT B				
	D2			OPENING OF BORROW AREAS				
2.D2.7.1	D2	14.001		Opening of borrow areas and access roads	Sum	1		
	D2			Removal of agricultural material and overburden				
2.D2.7.2	D2	14.002		Removal and replacement of topsoil	m3	159 100		
2.D2.7.3	D2	14.003		Removal and replacement of fertile soil	m3	318 100		
2.D2.7.4	D2	14.004		Removal and replacement of overburden	m3	159 100		
	D2			Handling of imported materials at the borrow and spoil areas prior to the commencement of finishing processes as per Clause 14.5.				
2.D2.7.5	D2	14.006		Spoiling of: Rock/boulders, material unsuitable for structural backfilling and surplus excavated material	m3	366 000		
	D2			Removal of existing services				
2.D2.7.6	D2	7.012		Removal of services relating to pivot irrigation system, to be handed over to the Engineer	m	500		
	D2			DEALING WITH WATER				
2.D2.7.7	D2	8.001		Dealing with water	Sum	1		
2.D2.7.8	D2	8.002		Treatment of water	Sum	1		
2.D2.7.9	D2	8.003		Water monitoring	Sum	1		
2.D2.7.10	D2	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	D2			FENCING (NON SECURITY TYPE - STOCKPROOF)				
2.D2.7.11	D2	6.001		Clearing the fence line, 1m wide strip	m	4 920		
	D2			Remove fencing and disposing of material				
2.D2.7.12	D2	6.004(a)		Seven strand stock proof fence (1,25m high)	m	4 920		
2.D2.7.13	D2	6.004(c)		Twenty-one strand game proof fencing (2.4m high)	m	4 550		
	D2			Removal of gates				
2.D2.7.14	D2	6.007		All types of gates	No	7		
	D2			Supply, erect and maintain during contract period new fencing material for new fences				
2.D2.7.15	D2	6.002(a)		Seven strand stock proof fence (1,25m high) as per drawing 2A-C6-101	m	4 920		
2.D2.7.16	D2	6.002(c)		Twenty-one strand game proof fencing (2.4m high) as per drawing 2A-C6-102	m	3 900		
	D2			Supply, erect and maintain gates during contract period				
2.D2.7.17	D2	6.005(a)		1.2m high gates for stock proof fences	No	4		
2.D2.7.18	D2	6.005(c)		2.4m high gates for game fences	No	3		
	D2			Remove fencing installed under this contract and re-erect at another position				
2.D2.7.19	D2	6.003(a)		Seven strand stock proof fence (1,25m high) as per drawing 2A-C6-101	m	800		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	D2			Remove gates installed under this contract and re-erect at another position				
2.D2.7.20	D2	6.006(a)		1.2m high gates for stock proof fences	No	2		
	D2			LANDSCAPING & REHABILITATION				
2.D2.7.21	D2	47.001		Shaping	m2	636 015		
2.D2.7.22	D2	47.002		Ripping	ha	63.6		
2.D2.7.23	D2	47.003		Trimming	m2	636 015		
2.D2.7.24	D2	47.004		Scarifying	ha	63.6		
2.D2.7.25	D2	47.007		Furnishing and applying fertilisers	kg	63 605		
2.D2.7.26	D2	47.011		Preparing topsoil for seeding	m2	636 015		
2.D2.7.27	D2	47.012		Hydro-seeding	ha	57.2		
2.D2.7.28	D2	47.013		Hand-seeding	ha	6.4		
2.D2.7.29	D2	47.015		Temporary re-vegetation	ha	6.4		
	D2			Provision of seed				
2.D2.7.30	D2	47.010		Seed type - Anthephora pubescens	kg	64		
2.D2.7.31	D2	47.010		Seed type - Cenchrus ciliaris	kg	64		
2.D2.7.32	D2	47.010		Seed type - Chloris gayana	kg	636		
2.D2.7.33	D2	47.010		Seed type - Cynodon dactylon	kg	191		
2.D2.7.34	D2	47.010		Seed type - Digitaria eriantha	kg	764		
2.D2.7.35	D2	47.010		Seed type - Enneapogon chenchroides	kg	64		
2.D2.7.36	D2	47.010		Seed type - Eragrostis curvula	kg	128		
2.D2.7.37	D2	47.010		Seed type - Eragrostis lehmanniana	kg	32		
2.D2.7.38	D2	47.010		Seed type - Eragrostis tef	kg	191		
2.D2.7.39	D2	47.010		Seed type - Heteropogon contortus	kg	191		
2.D2.7.40	D2	47.010		Seed type - Panicum maximum	kg	225		
2.D2.7.41	D2	47.010		Seed type - Pogonarthria squarrosa	kg	64		
2.D2.7.42	D2	47.016		Provision of temporary erosion control measures	ha	63.6		
2.D2.7.43	D2	47.017		Maintenance of the Temporary Erosion Control Measures	sum	1		
2.D2.7.44	D2	47.018		Maintenance of Vegetation	sum	1		
	D2			PART D2.7: Borrow pits and Spoil Areas (Carried forward to Summary of Bills)				

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
	D2			PART D2.8: Ancillary Works				
	D2			PART D2.8.1: FENCING (NON SECURITY TYPE - STOCKPROOF)				
2.D2.8.1.1	D2	6.001		Clearing the fence line, 1m wide strip	m	3 300		
	D2			SECURITY FENCING				
	D2			Supply and Erect New Fencing Material for New Fences				
2.D2.8.1.2	D2	6.002(g)		Outer Security fencing as per drawing 167 766/13, 167 768/13 and 167 769/13	m	3 300		
	D2			Supply and Erect Permanent Gates				
2.D2.8.1.3	D2	6.005(e)		Outer Security gate as per drawing 167 767/13, 167 768/13 and 167 769/13	No	2		
	D2			PART D2.8.2: STORMWATER				
	D2			STORMWATER CHANNELS (Between current and future reservoir and at the overflow channel)				
2.D2.8.2.1	D2	9.001		Excavation in all materials to spoil (Excavation for lined channels)	m3	2 145		
2.D2.8.2.2	D2	9.003		Excavation in all materials to stockpile (Excavation for lined channels)	m3	12 125		
2.D2.8.2.3	D2	9.006		Extra-Over items 9.001 to 9.005 for: Hard Excavation for unclassified material (by blasting)	m3	1 075		
2.D2.8.2.4	D2	9.007		Extra-Over items 9.001 to 9.005 for: Hard Excavation for unclassified material (by non-explosive means)	m3	1 075		
	D2			Overhaul				
2.D2.8.2.5	D2	9.011(a)		Between 1km up to and including 3km	m3	9 275		
2.D2.8.2.6	D2	9.011(b)		Between 3km up to and including 5km	m3	2 855		
2.D2.8.2.7	D2	9.011(c)		Between 5km up to and including 7km	m3	2 140		
	D2			Catchwater Drains				
2.D2.8.2.8	D2	27.001 (e)		Construction of 180 kg/m ² x 115mm thick segmented flexible, interlocking matrix cellular concrete blocks of uniform size, shape and weight for erosion control. Including geotextile, galvanised wiring and Y-fencing standard, as per drawing 2A-C6-018 (typical detail) and 2D-C5-007 and 2D-C5-008 (chainage profiles)	m2	9 900		
2.D2.8.2.9	D2	27.001 (e)		Ditto item above, but for Drift in accordance to drawing 2A-C6-019 (typical detail) and 2D-C5-007 and 2D-C5-008 (chainage profiles)	m2	8 645		
2.D2.8.2.10	D2	27.001 (e)		Ditto item above, but for overflow channel in accordance to drawing 2A-C6-019 (typical detail)	m2	2 415		
	D2			STORMWATER DRAINAGE (From silt trap transition to the river)				
2.D2.8.2.11	D2	9.001		Excavation in all materials to spoil (Excavation for stilling basin)	m3	191		
2.D2.8.2.12	D2	9.003		Excavation in all materials to stockpile (Excavation for stilling basin)	m3	41		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	D2			Construction of Stone Drain and Erosion Protection (stormwater canal outlet)				
	D2			Foundation trench excavation and backfilling				
2.D2.8.2.13	D2	21.001(a)		In solid rock (material which requires blasting)	m3	35		
2.D2.8.2.14	D2	21.001(b)		In all other classes of material	m3	300		
2.D2.8.2.15	D2	21.002		Surface preparation for bedding the gabions	m2	95		
2.D2.8.2.16	D2	21.003(a)		Galvanised gabions cages (Refer to drawings 2D-C5-07)	m3	223		
2.D2.8.2.17	D2	21.005		Geotextile fabric (type and grade indicated on the Drawings: 2D-C5-07)	m2	250		
				Overhaul				
2.D2.8.2.18	D2	9.011(a)		Between 1 km up to and including 3 km	m3	135		
2.D2.8.2.19	D2	9.011(b)		Between 3 km up to and including 5 km	m3	200		
	D2			SUBSOIL DRAINAGE (Below the balancing reservoir)				
	D2			Pipe Trench Excavations				
	D2			Excavate in all materials to specified levels and battered slopes, including temporary stockpiling and levelling alongside excavations within the confines of the pipe servitude				
	D2			Unclassified trench excavations: Within the freehaul distance				
2.D2.8.2.20	D2	9.012		Up to 1m deep	m3	2 865		
2.D2.8.2.21	D2	9.012		Over 1m and up to 2m deep	m3	430		
2.D2.8.2.22	D2	9.012		Over 2m and up to 3m deep	m3	105		
2.D2.8.2.23	D2	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	1 700		
	D2			Overhaul				
2.D2.8.2.24	D2	9.023(a)		Between 1km up to and including 3km	m3	2 210		
2.D2.8.2.25	D2	9.023(b)		Between 3km up to and including 5km	m3	1 190		
				Bedding, Backfilling and Geotextile				
2.D2.8.2.26	D2	21.005		Synthetic-fibre filter blanket wrapped around 19mm stone encasing, including stitching	m2	16 200		
2.D2.8.2.27	D2	27.002(a)		Natural permeable sand - plaster sand	m3	375		
2.D2.8.2.28	D2	27.002(c)		19mm Crushed stone	m3	1 990		
				SCHEDULED CONCRETE ITEMS				
2.D2.8.2.29	D2	20.012		Strength concrete, grade 30/19 Mpa pipe encasement	m3	128		
				SCHEDULED REINFORCING ITEMS				
2.D2.8.2.30	D2	15.009(b)		Steel bars irrespective of grade and diameter	t	20		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	D2			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	D2			Provision of bed material				
2.D2.8.2.31	D2	15.003(d)		Material from the nearest borrow pit with screening	m3	150		
	D2			Provision of bedding cradle material				
2.D2.8.2.32	D2	15.004(d)		Material from the nearest borrow pit with screening	m3	210		
	D2			Provision of selected fill blanket				
2.D2.8.2.33	D2	15.006(d)		Material from the nearest borrow pit with screening	m3	445		
	D2			Provision of main backfill material				
2.D2.8.2.34	D2	15.007(a)		Backfill material from trench excavation	m3	50		
	D2			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.D2.8.2.35	D2	15.001		Bed material	m3	150		
2.D2.8.2.36	D2	15.001		Bedding cradle	m3	210		
2.D2.8.2.37	D2	15.001		Selected fill blanket	m3	445		
2.D2.8.2.38	D2	15.001		Main backfill	m3	50		
	D2			OVERHAUL				
2.D2.8.2.39	D2	15.010(a)		Between 1km up to and including 3km	m3	805		
	D2			PIPEWORK				
	D2			Perforated flexible drainage pipes				
2.D2.8.2.40	D2	27.005		110mm pipes laid in stone encasing (encasing elsewhere) 2D-C5-005	m	4 985		
	D2			uPVC drainage pipes				
2.D2.8.2.41	D2	27.005		200mm uPVC-L class 34 solid wall pipes (SANS 791) laid in trench 2D-C5-005	m	1 460		
2.D2.8.2.42	D2	27.005		200mm solid wall pipes encased in concrete 2D-C5-005	m	210		
	D2			Steel drainage pipes				
2.D2.8.2.43	D2	27.005		DN110mm steel return pipe as per drawing 2D-C5-005 (corrosion protection as per specification 37.10)	m	60		
	D2			PART D2.8.3: ROAD (Between provincial road and the high lift pump station and the road surrounding the balancing reservoir)				
	D2			SITE CLEARANCE				
2.D2.8.3.1	D2	7.001(a)		Clearing	ha	4		
2.D2.8.3.2	D2	7.001(b)		Removal of loose surface boulders	m ³	490		
2.D2.8.3.3	D2	7.002		Grubbing and removal of tree stumps of girth up to and including 1.0 m and excavated rocks/boulders	ha	2		
2.D2.8.3.4	D2	7.003		Grubbing and removal of trees of girth over 1.0 m	No	10		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	D2			Removal of topsoil				
2.D2.8.3.5	D2	7.004(b)		For other work areas, temporary stockpiling adjacent to the work area within freehaul distance	m ³	3 700		
	D2			OVERHAUL				
2.D2.8.3.6	D2	7.006(a)		Between 1km up to and including 3km	m ³	6045		
	D2			EARTHWORKS				
	D2			Bulk Excavation				
2.D2.8.3.7	D2	9.002		Excavation in all materials to fill	m ³	5300		
2.D2.8.3.8	D2	9.001		Excavation in all materials to spoil	m ³	3000		
2.D2.8.3.9	D2	9.007		Extra-Over items 9.001 to 9.005 for: Hard Excavation (by non-explosive means) - Boulder Excavation	m ³	415		
	D2			In situ treatment of foundations:				
2.D2.8.3.10	D2	9.009(b)		In situ treatment by ripping	m ³	3820		
	D2			Provide and use of specialist team and equipment for the detection of underground services				
2.D2.8.3.11	D2	9.017(a)		Provide the team and equipment	Sum	1		
2.D2.8.3.12	D2	9.017(b)		Use, operate and maintain equipment	day	4		
2.D2.8.3.13	D2	9.017(c)		Remove the team and equipment	Sum	1		
	D2			Pavement layers constructed from gravel material				
2.D2.8.3.14	D2	25.001(e)		Insitu-Layer compacted to 93% of modified AASHTO density in 150mm thick layers	m ³	5300		
2.D2.8.3.15	D2	25.001(a)		Selected layer compacted to 93% of modified AASHTO density in 150mm thick layers (G7)	m ³	1985		
2.D2.8.3.16	D2	25.001(b)		Base layer compacted to 95% of modified AASHTO density in 150mm thick layers (G5)	m ³	1985		
2.D2.8.3.17	D2	25.001(c)		Gravel Wearing Course compacted to 95% modified AASHTO density (200mm) thick layer (Type 1)	m ³	5095		
	D2			Overhaul on material hauled in excess of 1.0km				
2.D2.8.3.18	D2	25.018		a) Between 1km up to and including 3km	m ³	6970		
2.D2.8.3.19	D2	25.018		d) Between 7km up to and including 9km	m ³	5095		
	D2			Subsoil Drains				
2.D2.8.3.20	D2	27.005(a)		50mm Diameter HDPE Perforated Drainage Pipe	m	2000		
2.D2.8.3.21	D2	27.002(c)		19.0 mm crushed stone	m ³	180		
2.D2.8.3.22	D2	21.005		Synthetic-Fibre Filter Fabric Grade 1	m ²	3000		
	D2			FINISHING TO SIDES OF ROADS				
2.D2.8.3.23	D2	25.020		Finishing the road and road reserve, including - Single-carriageway road	km	4.5		
	D2			TEMPORARY TRAFFIC CONTROL FACILITIES				
	D2			Temporary traffic-control facilities				
2.D2.8.3.24	D2	25.007(a)		Flagmen	sum	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.D2.8.3.25	D2	25.007(b)		Road signs	sum	1		
2.D2.8.3.26	D2	25.007(c)		Flicker lights	sum	1		
2.D2.8.3.27	D2	25.007(d)		Delineators	sum	1		
2.D2.8.3.28	D2	25.007(e)		Barricading	sum	1		
2.D2.8.3.29	D2	25.007(f)		Two-way communication devices	sum	1		
2.D2.8.3.30	D2	25.007(g)		Personnel to manage and maintain temporary traffic-control facilities	sum	1		
2.D2.8.3.31	D2	25.007(h)		All other items not listed above	sum	1		
	D2			ROAD SIGNS				
	D2			Road sign boards with painted or coloured semi-matt background. Symbols, lettering and borders in semi-matt black or in Class 1 retro-reflective material, where the sign board is constructed from:				
2.D2.8.3.32	D2	25.019(a)		Aluminium sheet (2.0mm thick) - Area not exceeding 2 m ²	m ²	10		
	D2			Extra over item (a) for using:				
2.D2.8.3.33	D2	25.019(b)		i) Background of retro-reflective material Class III (Colto)	m ²	10		
2.D2.8.3.34	D2	25.019(b)		ii) Lettering, symbols, numbers, arrows, emblems and borders of retro-reflective material Class III (Colto)	m ²	10		
	D2			Road sign supports (overhead road sign structures excluded):				
2.D2.8.3.35	D2	25.019(c)		Timber posts	m	30		
2.D2.8.3.36	D2	25.019(d)		Excavation and backfilling for road sign supports (not applicable to kilometre posts)	m ³	3		
2.D2.8.3.37	D2	25.019(e)		Extra over item (d) for cement-treated soil backfill	m ³	3		
2.D2.8.3.38	D2	25.019(f)		Extra over item (d) for rock excavation	m ³	1		
	D2			PART D2.8: Ancillary Works (Carried forward to Summary of Bills)				
	D2			PART D2: BALANCING RESERVOIR (Carried forward to Summary of Bills)				
				PART D: BALANCING RESERVOIR & SEDIMENTATION WORKS				
				<i>(Carried forward to Summary of Bills)</i>				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	E1			PART E: HIGH-LIFT PUMPING STATION				
	E1			PART E1.1: Preliminary and General				
	E1			PRELIMINARY AND GENERAL (SECONDARY)				
	E1	1.002		FIXED CHARGES - GENERAL OBLIGATIONS				
2.E1.1.1	E1		X	Head Office Contract Management and Overheads	Sum	1		
2.E1.1.2	E1		X	General Site Supervision and Overheads	Sum	1		
2.E1.1.3	E1		X	Method statements (1.10.1)	Sum	1		
2.E1.1.4	E1		X	Competency training (1.10.2.4)	Sum	1		
2.E1.1.5	E1		X	Returns and reporting (1.10.3)	Sum	1		
2.E1.1.6	E1		X	Management meetings (1.10.4)	Sum	1		
2.E1.1.7	E1		X	Integration management (1.10.5)	Sum	1		
2.E1.1.8	E1		X	Programming Requirements (1.9)	Sum	1		
2.E1.1.9	E1		X	Quality Management (1.10.2)	Sum	1		
2.E1.1.10	E1		X	Socio Economic Requirements (1.11)	Sum	1		
2.E1.1.11	E1		X	Occupational Health and Safety Requirements (1.12)	Sum	1		
2.E1.1.12	E1		X	Environmental Requirements (1.13)	Sum	1		
	E1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.E1.1.13	E1		X	.....	Sum	1		
2.E1.1.14	E1		X	.....	Sum	1		
2.E1.1.15	E1		X	.....	Sum	1		
2.E1.1.16	E1		X	.....	Sum	1		
	E1	1.003 & 1.004		FIXED CHARGES - FACILITIES FOR THE CONTRACTOR (1.8)				
2.E1.1.17	E1		X	Transport of Staff and Labour (1.8.1.4)	Sum	1		
2.E1.1.18	E1		X	Construction Establishment Fencing (1.8.3.1)	Sum	1		
2.E1.1.19	E1		X	Lighting of Construction Establishment Areas (1.8.3.2)	Sum	1		
2.E1.1.20	E1		X	Electrical power and distribution (1.8.3.4)	Sum	1		
2.E1.1.21	E1		X	Standby power (1.8.3.4)	Sum	1		
2.E1.1.22	E1		X	Communications (1.8.3.7)	Sum	1		
	E1			Office, Accommodation and Other Site facilities				
2.E1.1.23	E1		X	Accommodation for staff and workforce (1.8.3.8b)	Sum	1		
2.E1.1.24	E1		X	Offices (1.8.3.8c)	Sum	1		
2.E1.1.25	E1		X	Other establishment facilities (1.8.3.8d)	Sum	1		
2.E1.1.26	E1		X	Storage (1.8.3.8e)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown Reference	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	E1			Other services				
2.E1.1.27	E1		X	Medical (1.8.3.12)	Sum	1		
2.E1.1.28	E1		X	Sanitation and Cleaning (1.8.3.13)	Sum	1		
2.E1.1.29	E1		X	Access control and security (1.8.3.14)	Sum	1		
	E1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("nil" to be entered if not required)				
2.E1.1.30	E1		X	.....	Sum	1		
2.E1.1.31	E1		X	.....	Sum	1		
2.E1.1.32	E1		X	.....	Sum	1		
2.E1.1.33	E1		X	.....	Sum	1		
	E1	1.004		FIXED CHARGES - SPECIFIC EQUIPMENT				
2.E1.1.34	E1		X	Equipment for construction and maintenance of the Contractor's work areas	Sum	1		
2.E1.1.35	E1		X	Minor equipment and small tools	Sum	1		
2.E1.1.36	E1		X	Equipment for dust and emissions control and monitoring in compliance with environmental requirement	Sum	1		
2.E1.1.37	E1		X	Construction services including electrical power, compressed air, water, communications, etc.	Sum	1		
2.E1.1.38	E1		X	Equipment for blasting and rock support	Sum	1		
2.E1.1.39	E1		X	Equipment for earthworks, trenching and backfilling	Sum	1		
2.E1.1.40	E1		X	Equipment for borrowing, processing of materials, transport of materials and spoiling of materials	Sum	1		
2.E1.1.41	E1		X	Equipment for cranes, winches, lifting and pipe handling	Sum	1		
2.E1.1.42	E1		X	Equipment for welding, weld testing and coatings	Sum	1		
2.E1.1.43	E1		X	Equipment for site transporting, lifting, placing and fixing of structural steel work	Sum	1		
2.E1.1.44	E1		X	Equipment for site transporting, placing, fixing and finishing of concrete work, formwork and reinforcement	Sum	1		
2.E1.1.45	E1		X	Equipment for processing concrete (Batch plant)	Sum	1		
2.E1.1.46	E1		X	Equipment for dealing with water	Sum	1		
	E1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.E1.1.47	E1		X	.....	Sum	1		
2.E1.1.48	E1		X	.....	Sum	1		
2.E1.1.49	E1		X	.....	Sum	1		
2.E1.1.50	E1		X	.....	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1	1.006		TIME RELATED CHARGES - GENERAL OBLIGATIONS				
2.E1.1.51	E1		X	Head Office Contract Management and Overheads (Duration Weeks)	Sum	1		
2.E1.1.52	E1		X	General Site Supervision and Overheads (Duration Weeks)	Sum	1		
2.E1.1.53	E1		X	Method Statements (1.10.1) (Duration Weeks)	Sum	1		
2.E1.1.54	E1		X	Competency training (1.10.2.4) (Duration Weeks)	Sum	1		
2.E1.1.55	E1		X	Returns and reporting (1.10.3) (Duration Weeks)	Sum	1		
2.E1.1.56	E1		X	Management meetings (1.10.4) (Duration Weeks)	Sum	1		
2.E1.1.57	E1		X	Integration management (1.10.5) (Duration Weeks)	Sum	1		
2.E1.1.58	E1		X	Programming Requirements (1.9) (Duration Weeks)	Sum	1		
2.E1.1.59	E1		X	Quality Management (1.10.2) (Duration Weeks)	Sum	1		
2.E1.1.60	E1		X	Socio Economic Requirements (1.11) (Duration Weeks)	Sum	1		
2.E1.1.61	E1		X	Occupational Health and Safety (1.12) (Duration Weeks)	Sum	1		
2.E1.1.62	E1		X	Environmental Requirements (1.13) (Duration Weeks)	Sum	1		
	E1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.E1.1.63	E1		X	.....	Sum	1		
2.E1.1.64	E1		X	.....	Sum	1		
2.E1.1.65	E1		X	.....	Sum	1		
	E1	1.007 & 1.008		TIME RELATED CHARGES - FACILITIES FOR THE CONTRACTOR (1.8)				
2.E1.1.66	E1		X	Transport of Staff and Labour (1.8.1.4) (Duration Weeks)	Sum	1		
2.E1.1.67	E1		X	Construction Establishment Fencing (1.8.3.1) (Duration Weeks)	Sum	1		
2.E1.1.68	E1		X	Lighting of Construction Establishment Areas (1.8.3.2) (Duration Weeks)	Sum	1		
2.E1.1.69	E1		X	Electrical power and distribution (1.8.3.4) (Duration Weeks)	Sum	1		
2.E1.1.70	E1		X	Standby power (1.8.3.4) (Duration Weeks)	Sum	1		
2.E1.1.71	E1		X	Communications (1.8.3.7) (Duration Weeks)	Sum	1		
	E1			Office, Accommodation and Other Site facilities				
2.E1.1.72	E1		X	Accommodation for staff and workforce (1.8.3.8b)(Duration Weeks)	Sum	1		
2.E1.1.73	E1		X	Offices (1.8.3.8c) (Duration Weeks)	Sum	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.E1.1.74	E1		X	Other establishment facilities (1.8.3.8d) (Duration Weeks)	Sum	1		
2.E1.1.75	E1		X	Storage (1.8.3.8e) (Duration Weeks)	Sum	1		
	E1			Other services				
2.E1.1.76	E1		X	Medical (1.8.3.12) (Duration Weeks)	Sum	1		
2.E1.1.77	E1		X	Sanitation and Cleaning (1.8.3.13) (Duration Weeks)	Sum	1		
2.E1.1.78	E1		X	Access control and security (1.8.3.14) (Duration Weeks)	Sum	1		
	E1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("nil" to be entered if not required)				
2.E1.1.79	E1		X	.....	Sum	1		
2.E1.1.80	E1		X	.....	Sum	1		
2.E1.1.81	E1		X	.....	Sum	1		
2.E1.1.82	E1		X	.....	Sum	1		
	E1	1.008		TIME RELATED CHARGES - SPECIFIC EQUIPMENT				
2.E1.1.83	E1		X	Equipment for construction and maintenance of the Contractor's work areas (Duration Weeks)	Sum	1		
2.E1.1.84	E1		X	Minor equipment and small tools (Duration Weeks)	Sum	1		
2.E1.1.85	E1		X	Equipment for dust and emissions control and monitoring in compliance with environmental requirement (Duration Weeks)	Sum	1		
2.E1.1.86	E1		X	Construction services including electrical power, compressed air, water, communications, etc. (Duration Weeks)	Sum	1		
2.E1.1.87	E1		X	Equipment for blasting and rock support (Duration Weeks)	Sum	1		
2.E1.1.88	E1		X	Equipment for earthworks, trenching and backfilling (Duration Weeks)	Sum	1		
2.E1.1.89	E1		X	Equipment for borrowing, processing of materials, transport of materials and spoiling of materials (Duration Weeks)	Sum	1		
2.E1.1.90	E1		X	Equipment for cranes, winches, lifting and pipe handling (Duration Weeks)	Sum	1		
2.E1.1.91	E1		X	Equipment for welding, weld testing and coatings (Duration Weeks)	Sum	1		
2.E1.1.92	E1		X	Equipment for site transporting, lifting, placing and fixing of structural steel work (Duration Weeks)	Sum	1		
2.E1.1.93	E1		X	Equipment for site transporting, placing, fixing and finishing of concrete work, formwork and reinforcement (Duration Weeks)	Sum	1		
2.E1.1.94	E1		X	Equipment for processing concrete (Batch plant) (Duration Weeks)	Sum	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.E1.1.95	E1		X	Equipment for dealing with water (Duration Weeks)	Sum	1		
	E1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("nil" to be entered if not required)				
2.E1.1.96	E1		X	.....	Sum	1		
2.E1.1.97	E1		X	.....	Sum	1		
2.E1.1.98	E1		X	.....	Sum	1		
2.E1.1.99	E1		X	.....	Sum	1		
	E1			PART E1.1: Preliminary and General (Carried forward to Summary of Bills)				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	E1			PART E1.2: Earthworks				
	E1			SITE CLEARANCE				
	E1			Clearing				
2.E1.2.1	E1	7.001(a)		Clearing	ha	4		
2.E1.2.2	E1	7.001(b)		Removal of boulders	m3	50		
2.E1.2.3	E1	7.002		Grubbing and removal of trees of girth up to 1m	ha	4		
2.E1.2.4	E1	7.003		Grubbing and removal of trees of girth over 1m	No	10		
	E1			Removal of topsoil				
2.E1.2.5	E1	7.004(b)		For other work areas, temporary stockpiling adjacent to the work area within free haul distance	m3	10000		
	E1			Draining of existing farm dam				
2.E1.2.6	E1	7.011		Farm dam to be drained, decommissioned and demolished - estimated dam water volume is 1520m ³ , including the removal of vegetation and material on dam basin surface (sludge) to spoil site (filling of farm dam measured elsewhere)	Sum	1		
	E1			Disconnecting existing services to the farm dam, and including demolishing irrigation pumphouse and surrounding structures				
2.E1.2.7	E1	7.013		Disconnecting existing services (services relating to pivot irrigation system and the pumphouse) to the farm dam and hand over to the Engineer, and including demolishing irrigation pumphouse and surrounding structures which shall be disposed of at a commercial dump site.	Sum	1		
	E1			OVERHAUL				
2.E1.2.8	E1	7.006(a)		Between 1km up to and including 3km	m3	15500		
	E1			DEALING WITH WATER For all works included in PART E, excluding pipeline and fibre earthworks				
2.E1.2.9	E1	8.001		Dealing with water	Sum	1		
2.E1.2.10	E1	8.002		Treatment of water	Sum	1		
2.E1.2.11	E1	8.003		Water monitoring	Sum	1		
2.E1.2.12	E1	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	E1			EARTHWORKS				
	E1			In-situ treatment of foundations				
2.E1.2.13	E1	9.009(c)		In-situ treatment by blasting	m3	555		
	E1			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
	E1			Structure backfilling compacted to compacted to 95% MOD AASHTO				
2.E1.2.14	E1	15.014(a)		i) OCC Platform	m3	978		
2.E1.2.15	E1	15.014(a)		ii) ESKOM Substation	m3	2722		
2.E1.2.16	E1	15.014(a)		iii) Fill basin of demolished farm dam	m3	2450		
2.E1.2.17	E1	15.015		Finishing of slopes	m2	185		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.E1.2.18	E1 E1	15.016(a)		OVERHAUL Between 1km up to and including 3km	m3	4550		
	E1			PART E1.2: Earthworks (Carried forward to Summary of Bills)				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	E1			PART E1.3: Pump station structures				
	E1			EARTHWORKS				
	E1			REFER TO DRAWING 2E-C5-001				
	E1			Removal of fertile soil				
2.E1.3.1	E1	7.005(b)		For work areas, temporary stockpiling adjacent to the work area	m3	2000		
	E1			Bulk Excavations to Pump Station				
2.E1.3.2	E1	9.001		Excavation in all materials to spoil	m3	18 400		
2.E1.3.3	E1	9.003		Excavation in all materials to stockpile	m3	13 750		
2.E1.3.4	E1	9.006		Extra-Over items 9.001 to 9.005 for: Hard Excavation (blasting)	m3	14 700		
2.E1.3.5	E1	9.007		Extra-Over items 9.001 to 9.005 for: Hard Excavation (by non-explosive means)	m3	3 700		
	E1			Unclassified excavation to stockpile				
2.E1.3.6	E1	9.003		Trenches	m3	80		
2.E1.3.7	E1	9.003		Column Foundations	m3	21		
2.E1.3.8	E1	9.003		Chiller and Generator Slab	m3	130		
2.E1.3.9	E1	9.003		Mechanical Plinths	m3	55		
	E1			Rip and recompact 150mm insitu material to 93% Mod AASHTO				
2.E1.3.10	E1	9.009(b)		Trenches	m2	22		
2.E1.3.11	E1	9.009(b)		Column Foundations	m2	6		
2.E1.3.12	E1	9.009(b)		Cable Vault Floor	m2	140		
2.E1.3.13	E1	9.009(b)		Base of pump station	m2	2975		
2.E1.3.14	E1	9.009(b)		Chiller, Generator Slabs and mechanical plinths	m2	100		
2.E1.3.15	E1	9.009(b)		Ramps	m2	105		
	E1			Overhaul				
2.E1.3.16	E1	9.011(a)		Between 1km up to and including 3km	m3	32 450		
	E1			BACKFILLING AND BEDDING				
	E1			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	E1			Provision of bed material				
2.E1.3.17	E1	15.003(a)		Material without screening from trenches	m3	110		
	E1			Provision of bedding cradle material				
2.E1.3.18	E1	15.004(a)		Material without screening from trenches	m3	190		
	E1			Provision of selected fill blanket				
2.E1.3.19	E1	15.006(a)		Material without screening from trenches	m3	575		
	E1			Provision of main backfill material				
2.E1.3.20	E1	15.007(a)		Backfill material from trench excavation	m3	3065		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL (alongside concrete structure)				
2.E1.3.21	E1	15.001		Bed material	m3	110		
2.E1.3.22	E1	15.001		Bedding cradle	m3	190		
2.E1.3.23	E1	15.001		Selected fill blanket	m3	575		
2.E1.3.24	E1	15.001		Main backfill	m3	3065		
	E1			OVERHAUL				
2.E1.3.25	E1	15.010(a)		Between 1km up to and including 3km	m3	3940		
	E1			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.E1.3.26	E1	15.014(a)		Structure backfilling from stockpile compacted to 93% MOD AASHTO, including over and around manifold	m3	6500		
2.E1.3.27	E1	15.014(a)		Structure backfilling from stockpile compacted to 90% MOD AASHTO (Topping to basement floor), including stabilization of 2% portland cement	m3	450		
	E1			OVERHAUL				
	E1	15.016 a)		Between 1km up to and including 3km		6950		
	E1			SOIL POISONING				
2.E1.3.28	E1	46.011		Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming (Supply of herbicide and ant poison shall be paid for in the provisional sums)	m2	500		
2.E1.3.29	E1	46.011		Ditto, but to bottoms and sides of trenches etc	m2	55		
	E1			CONCRETE WORKS (STRUCTURAL)				
	E1			ROUGH FORMWORK				
	E1			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.E1.3.30	E1	20.001		Basement Floor	m2	305		
2.E1.3.31	E1	20.001		Sumps (Additional)	m2	75		
2.E1.3.32	E1	20.001		Basement Walls (heights up to 4m)	m2	1050		
2.E1.3.33	E1	20.001		Basement Walls (heights exceeding 4m)	m2	1070		
2.E1.3.34	E1	20.001		Cable Room Floor	m2	30		
2.E1.3.35	E1	20.001		Cable room walls	m2	195		
2.E1.3.36	E1	20.001		Chiller & Generator Slab	m2	40		
2.E1.3.37	E1	20.001		Outside Trench	m2	100		
2.E1.3.38	E1	20.001		Ramps	m2	60		
2.E1.3.39	E1	20.001		Ground Floor Slab	m2	55		
2.E1.3.40	E1	20.001		Foundations	m2	16		
2.E1.3.41	E1	20.001		Mechanical Plinths	m2	65		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	E1			SMOOTH FORMWORK				
	E1			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.E1.3.42	E1	20.002		Sumps (Additional)	m2	65		
2.E1.3.43	E1	20.002		Basement Walls (heights up to 4m)	m2	1030		
2.E1.3.44	E1	20.002		Basement Walls (heights exceeding 4m)	m2	1300		
2.E1.3.45	E1	20.002		Cable Room Floor	m2	30		
2.E1.3.46	E1	20.002		Cable Room walls (h = 3m approx.)	m2	365		
2.E1.3.47	E1	20.002		Trench	m2	95		
2.E1.3.48	E1	20.002		Ground Floor Slab	m2	90		
2.E1.3.49	E1	20.002		Roof Level 1 (H = 6m approx.) (Incl. sides of upstand and downstand beams)	m2	1120		
2.E1.3.50	E1	20.002		Roof Level 2 (H = 20m approx.) (Incl. sides of upstand and downstand beams)	m2	1350		
2.E1.3.51	E1	20.002		Columns and stubs	m2	2100		
2.E1.3.52	E1	20.002		Pipe Supports	m2	350		
2.E1.3.53	E1	20.002		Pump Plinths	m2	165		
2.E1.3.54	E1	20.002		Ring Beams	m2	510		
2.E1.3.55	E1	20.002		Control room roof slab	m2	3		
	E1			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.E1.3.56	E1	20.002		Ground Floor Slab (H = 8.7m approx.)	m2	875		
2.E1.3.57	E1	20.002		Cable room roof (H = 2m approx.)	m2	320		
2.E1.3.58	E1	20.002		Roof Level 1 (H = 6m approx.)	m2	1125		
2.E1.3.59	E1	20.002		Roof Level 2 (H = 20m approx.)	m2	800		
2.E1.3.60	E1	20.002		Ring Beams (H = 6m approx.)	m2	380		
2.E1.3.61	E1	20.002		Concrete Staircase (inclined)	m2	5		
2.E1.3.62	E1	20.002		Control room roof slab	m2	22		
	E1			Sloping horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.E1.3.63	E1	20.002		Corbels, including to vertical sides	m2	20		
	E1			NARROW WIDTHS (VERTICAL)				
	E1			Rough				
2.E1.3.64	E1	20.005		200mm to side of aprons	m	285		
	E1			Smooth				
2.E1.3.65	E1	20.005		250mm to inner masonry columns	m	1050		
2.E1.3.66	E1	20.005		Up to 350mm to concrete stair risers and sides	m	28		
2.E1.3.67	E1	20.005		150mm to basement topping	m	740		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			BOX OUT/FORM VOIDS				
	E1			Small, circular, of diameter up to and including 0.35 m				
2.E1.3.68	E1	20.006(a)		ii) 0.5 m deep to 1.0 m deep	no	12		
2.E1.3.69	E1	20.006(a)		iii) 1.0 m deep to 1.5 m deep	no	1		
	E1			Small, other than circular, areas up to and including 0,1 m²				
2.E1.3.70	E1	20.006(b)		ii) 0.5 m deep to 1.0 m deep	no	1		
2.E1.3.71	E1	20.006(b)		iii) 1.0 m deep to 1.5 m deep	no	1		
	E1			Large, circular, of diameter over 0.35 m up to and including 0.7 m				
2.E1.3.72	E1	20.006(c)		i) 0 m deep to 0.5 m deep	no	2		
2.E1.3.73	E1	20.006(c)		ii) 0.5 m deep to 1.0 m deep	no	1		
2.E1.3.74	E1	20.006(c)		iii) 1.0 m deep to 1.5 m deep	no	10		
	E1			Large, other than circular, areas over 1 m2 and up to and including 5 m²				
2.E1.3.75	E1	20.006(d)		i) 0 m deep to 0.5 m deep	no	13		
2.E1.3.76	E1	20.006(d)		iii) 1.0 m deep to 1.5 m deep	no	9		
	E1			REINFORCEMENT				
	E1			Steel bars irrespective of grade and diameter				
2.E1.3.77	E1	20.007(a)		Basement Floor	t	865		
2.E1.3.78	E1	20.007(a)		Sumps (Additional)	t	10		
2.E1.3.79	E1	20.007(a)		Pump Plinths	t	41		
2.E1.3.80	E1	20.007(a)		Basement Walls	t	506		
2.E1.3.81	E1	20.007(a)		Cable Room Floor	t	9		
2.E1.3.82	E1	20.007(a)		Chiller & Generator Slab	t	16		
2.E1.3.83	E1	20.007(a)		Trench	t	4		
2.E1.3.84	E1	20.007(a)		Ground Floor Slab	t	120		
2.E1.3.85	E1	20.007(a)		Roof Level 1 (Incl. upstand and downstand beams)	t	154		
2.E1.3.86	E1	20.007(a)		Roof Level 2 (Incl. upstand and downstand beams)	t	210		
2.E1.3.87	E1	20.007(a)		Columns	t	54		
2.E1.3.88	E1	20.007(a)		Pipe Supports	t	9		
2.E1.3.89	E1	20.007(a)		Concrete Staircase	t	1		
2.E1.3.90	E1	20.007(a)		Ring Beams	t	48		
2.E1.3.91	E1	20.007(a)		Mechanical Plinths	t	17		
2.E1.3.92	E1	20.007(a)		Control Room Roof Slab	t	1		
	E1			Extra over for bars of nominal sizes larger than 25mm				
2.E1.3.93	E1	20.007(b)		Basement Floor	t	130		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.E1.3.94	E1	20.007(b)		Basement Walls	t	115		
2.E1.3.95	E1	20.007(b)		Columns	t	60		
	E1			Type 395 high-tensile welded mesh				
2.E1.3.96	E1	20.008		Ramps	m2	105		
	E1			CONCRETE				
	E1			PRESCRIBED MIX CONCRETE 35MPa/19mm in:				
2.E1.3.97	E1	20.010		Basement Floor	m3	3 600		
2.E1.3.98	E1	20.010		Sumps (Additional)	m3	55		
2.E1.3.99	E1	20.010		Pump Plinths	m3	230		
2.E1.3.100	E1	20.010		Basement Walls	m3	2 160		
2.E1.3.101	E1	20.010		Cable Room Floor	m3	90		
2.E1.3.102	E1	20.010		Cable Trench Floors and Walls	m3	30		
2.E1.3.103	E1	20.010		Ground Floor Slab	m3	520		
2.E1.3.104	E1	20.010		Roof Level 1 (Incl. upstand and downstand beams)	m3	620		
2.E1.3.105	E1	20.010		Roof Level 2 (Incl. upstand and downstand beams)	m3	820		
2.E1.3.106	E1	20.010		Columns	m3	270		
2.E1.3.107	E1	20.010		Pipe Supports	m3	55		
2.E1.3.108	E1	20.010		Concrete Staircase	m3	3		
2.E1.3.109	E1	20.010		Ring Beams & Corbel	m3	240		
2.E1.3.110	E1	20.010		Control room roof slab	m3	4		
	E1			CONCRETE 15MPa/19mm in:				
	E1			Blinding layer of 50mm Min including levelling and floating				
2.E1.3.111	E1	20.011(a)		Cable Room Floor	m2	160		
2.E1.3.112	E1	20.011(a)		Chiller & Generator Slab	m2	285		
2.E1.3.113	E1	20.011(a)		Cable trench	m2	24		
2.E1.3.114	E1	20.011(a)		Columns	m2	5		
2.E1.3.115	E1	20.011(a)		Mechanical Plinths	m2	160		
	E1			STRENGTH CONCRETE				
	E1			Mass concrete 15MPa/19mm				
2.E1.3.116	E1	20.012		Mass concrete foundation levelling layer on rock excavation	m3	600		
2.E1.3.117	E1	20.012		Additional mass concrete under cable vault	m3	40		
2.E1.3.118	E1	20.012		Roof Topping - Level 1	m3	92		
2.E1.3.119	E1	20.012		Roof Topping - Level 2	m3	65		
	E1			STRENGTH OF CONCRETE, 30MPa/19mm in:				
2.E1.3.120	E1	20.012		Chiller & Generator Slab	m3	110		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.E1.3.121	E1	20.012		Ramps	m3	50		
2.E1.3.122	E1	20.012		Aprons	m3	29		
2.E1.3.123	E1	20.012		Basement Topping	m3	170		
2.E1.3.124	E1	20.012		Mechanical Plinths	m3	95		
	E1			UNFORMED SURFACE FINISHES				
	E1			Wood floated finish				
2.E1.3.125	E1	20.013(a)		Basement Floor	m2	3000		
2.E1.3.126	E1	20.013(a)		Chiller & Generator Slab	m2	285		
2.E1.3.127	E1	20.013(a)		Ramps	m2	105		
2.E1.3.128	E1	20.013(a)		Ground Floor Slab	m2	1220		
2.E1.3.129	E1	20.013(a)		Roof topping	m2	1900		
2.E1.3.130	E1	20.013(a)		Aprons	m2	300		
2.E1.3.131	E1	20.013(a)		Concrete Staircase	m2	4		
	E1			Steel Floated Finish				
2.E1.3.132	E1	20.013(b)		Sumps (Additional)	m2	8		
2.E1.3.133	E1	20.013(b)		Pump Plinths	m2	165		
2.E1.3.134	E1	20.013(b)		Basement Walls	m2	220		
2.E1.3.135	E1	20.013(b)		Ring Beams & Corbel	m2	400		
2.E1.3.136	E1	20.013(b)		Mechanical Plinths	m2	160		
2.E1.3.137	E1	20.013(b)		Pipe Supports	m2	45		
2.E1.3.138	E1	20.013(b)		Columns Stub columns	m2	20		
2.E1.3.139	E1	20.013(b)		Trench	m2	16		
2.E1.3.140	E1	20.013(b)		Upstand beams and parapets	m2	610		
	E1			Power floated finish				
2.E1.3.141	E1	20.013(c)		Cable Room Floor	m2	290		
2.E1.3.142	E1	20.013(c)		Basement Topping	m2	1150		
	E1			AGGREGATE				
2.E1.3.143	E1	20.014		19mm ballast on roof	m3	110		
	E1			JOINTS				
2.E1.3.144	E1	20.016		Isolation joint consisting of 150mm wide,10mm thick closed cell polyethylene sealant with 10mm x 10mm tear off strip and 10mm x 10mm polyurethane sealant as per drawing 2A-C6-002	m	880		
2.E1.3.145	E1	20.016		Saw Cut joint consisting 2 cuts, 3mm wide x 60mm deep and 6mm wide x 15mm deep with bond breaker strip, backing cord and polyurethane sealant as per drawing 2A-C6-002	m	325		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			PRECAST ELEMENTS				
	E1			Trench Covers				
2.E1.3.146	E1	20.017		1 000mm x 840mm x 250mm concrete slabs with 0.21m ³ 30MPa/19mm Strength Concrete and 60kg reinforcement, smooth off shutter vertical finishes to sides, steel floated surface finish to unformed surface	No	20		
	E1			Access Covers in Cable Vault to the Cable Trenches				
2.E1.3.147	E1	20.017		1 000mm x 1000mm x 250mm concrete slabs with 0.25m ³ 30MPa/19mm Strength Concrete and 60kg reinforcement, smooth off shutter vertical finishes to sides, steel floated surface finish to unformed surface	No	2		
	E1			GROUTING				
2.E1.3.148	E1	20.018(a)		Under bases	m3	2.5		
2.E1.3.149	E1	20.018(b)		Box outs for pipes	m3	30		
	E1			ITEMS CAST OR BUILT INTO CONCRETE				
2.E1.3.150	E1	33.005		Steel pipe diameter 1000mm	No	4		
2.E1.3.151	E1	33.005		Steel pipe diameter 1400mm	No	1		
	E1			HOLDING DOWN BOLTS				
2.E1.3.152	E1	20.019		Chemical adhesive Grade 8.8 anchors irrespective of diameter (complete)	t	1		
	E1			BRICKWORK				
	E1			SUPERSTRUCTURE				
	E1			Brickwork of NFX Bricks (14 MPA Nominal Compressive Strength) in Class I Mortar				
	E1			One brick walls				
2.E1.3.153	E1	46.004(a)		Basement screed retaining wall	m2	28		
2.E1.3.154	E1	46.004(a)		Trenches in basement	m2	250		
2.E1.3.155	E1	46.004(a)		Superstructure	m2	1 150		
2.E1.3.156	E1	46.004(a)		Cable openings	m2	30		
	E1			330 cavity wall including vertical twist plate ties, perps and concrete fillet				
2.E1.3.157	E1	46.004(a)		Superstructure, including galvanised vertical twist plate ties	m2	2 550		
	E1			Face Brickwork				
	E1			Face brickwork pointed with recessed horizontal and vertical joints. The cost for the supply and delivery of facebrick shall be paid for in Provisional Sums. All other costs related to the installation of the facebrick shall be included in this item (includes all other material). Samples of facebrick to be approved by the Engineer/Architect.				
2.E1.3.158	E1	46.004(h)		Extra over brickwork for face brickwork	m2	1 850		
2.E1.3.159	E1	46.004(a)		Extra over brickwork for lintel bands	m	30		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			Masonry Reinforcing				
2.E1.3.160	E1	46.004(f)		Fabric reinforcement and building into joints of one brick walls	m	5 300		
2.E1.3.161	E1	46.004(f)		Fabric reinforcement and building into joints of 330mm wide brick walls	m	10 000		
	E1			In-Situ Stone Cladding				
	E1			In-situ stone cladding in random pattern with recessed mortar joints				
2.E1.3.162	E1	46.004(g)		Stone cladding sourced from site	m2	310		
	E1			Prestressed Fabricated Lintels				
2.E1.3.163	E1	46.003(a)		110 x 75mm Lintels	m	90		
	E1			Manufacture (or supply) and erect precast elements				
	E1			Modcon precast concrete solutions finished smooth on exposed surfaces bedded and jointed in class II mortar and pointed on all exposed surfaces. Or equal approved				
2.E1.3.164	E1	20.017		Type 006, precast concrete coping, 250mm wide x 160mm high x 96mm to tapered edge.	m	500		
2.E1.3.165	E1	20.017		Type 154A, precast concrete coping, 460mm wide x 90mm high x 50mm to tapered edge.	m	280		
	E1			MOVEMENT JOINTS ETC				
	E1			Vertical expansion joints with closed cell polyethylene strip, and polyurethane sealant with 32mm x 600mm long Joluka column ties spaced every 3 brick courses between brick walls and concrete columns, complete				
2.E1.3.166	E1	20.016		330mm Masonry Wall 10mm x 300mm closed cell polyethylene strip and polyurethane sealant with 32mm x 600mm long Joluka column ties spaced every 3 brick courses per drawing 2A-C6-003	m	1 000		
2.E1.3.167	E1	20.016		220mm Masonry Wall 10mm x 190mm closed cell polyethylene strip and polyurethane sealant with 2 off 32mm x 600mm long Joluka column ties spaced every 3 brick courses per drawing 2A-C6-003	m	580		
	E1			Horizontal expansion joints with closed cell polyethylene strip and polyurethane sealant between brick walls and concrete slabs, complete				
2.E1.3.168	E1	20.016		330mm Masonry Wall 10mm x 300mm closed cell polyethylene strip and polyurethane sealant per drawing 2A-C6-005	m	550		
2.E1.3.169	E1	20.016		220mm Masonry Wall 10mm x 190mm closed cell polyethylene strip and polyurethane sealant per drawing 2A-C6-005	m	200		
	E1			WATERPROOFING				
2.E1.3.170	E1	46.011		Approved polyurethane sealant to roof and sides of upstand beams	m2	3200		
2.E1.3.171	E1	46.011		Water permeable fabric under roof ballast and sides of upstand beams	m2	3200		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			Dampproofing of Walls and Floors				
	E1			375 Micron 'Consol Plastics Brikgrip DPC' dampproofing below walls, sills, etc. Or equal approved				
2.E1.3.172	E1	46.004(c)		230mm Thick walls	m	175		
2.E1.3.173	E1	46.004(c)		330mm Thick walls	m	245		
	E1			Sealing Strips, Joint Sealant, Etc				
	E1			Polyurethane sealant around pipe				
2.E1.3.174	E1	46.011		10mm bead in concrete	m	20		
	E1			ROOF COVERINGS ETC				
	E1			Roof Sheeting and Side Cladding				
	E1			0.58mm Concealed Fix Klip-Lok 700, heavy industrial galvanised Z275 spelter sheeting. The profile shall be roll-formed in continuous lengths from certified steel complying with ASTM 446 Grade E (3t). Or equal approved				
2.E1.3.175	E1	46.005(f)		Car ports and canopies. Classicoat finish to one side. Colour to Engineer's approval	m2	35		
2.E1.3.176	E1	46.005(f)		Roof sheeting. Continuous length, curved to radius of R = 25m. Classicoat finish to one side	m2	1 230		
2.E1.3.177	E1	46.005(f)		Side cladding, installed with flutes horizontally. Classicoat finish to one side	m2	250		
2.E1.3.178	E1	46.005(f)		Side cladding, installed with flutes horizontally, including raking and cutting to follow roof profile. Classicoat finish to one side	m2	725		
2.E1.3.179	E1	46.005(f)		Cut opening for eletro mechanical roof ventilator (Size of opening shall be in accordance to the size of the Contractor's design)	no	10		
	E1			Modek Kliplik 700 profile 1,25mm thick clear, Code P120 polycarbonate translucent sheeting. Fastened to supports through each crown of the profile and side stitched to adjacent sheets. Or equal approved				
2.E1.3.180	E1	46.005(f)		Side cladding	m2	215		
	E1			Flashing, 0.8 mm thick galvanised Z275 spelter, Classicoat finish to one side. Or equal approved				
2.E1.3.181	E1	46.005(f)		Apex Flashing 550mm girth 3 times bent and notched on site to suit roof profile	m	100		
2.E1.3.182	E1	46.005(f)		Vertical straight barge trim 616mm girth 3 times bent	m	45		
2.E1.3.183	E1	46.005(f)		Curved Barge Trim 580mm girth 3 times bent to a radius of R = 25m	No	120		
2.E1.3.184	E1	46.005(f)		Drip Flashing 250mm girth	m	100		
2.E1.3.185	E1	46.005(f)		Flashing, including Counter Flashing to the surrounds of the of the concrete slabs and side cladding	m	110		
2.E1.3.186	E1	46.005(f)		Headwall Flashing, including Counter Flashing	m	100		
2.E1.3.187	E1	46.005(f)		Edge strip closers to the bottom of side cladding	m	215		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			Side cladding				
2.E1.3.188	E1	46.005(f)		Concealed fixed, Aluminium Composite Panels by TMS cladding & Louvre solutions or similar , fixed to brickwork via aluminium extruded panel clips, on 20mm extruded mullion hooks, with 20mm shadowline detail between cladding panels, supply and fixed to supplier specification and details	m2	330		
	E1			INSULATION				
	E1			On concrete slabs:				
2.E1.3.189	E1	46.011		100mm ISO Board high density 34-36kg/m3 rigid extruded polystyrene with tongue and groove joints, or equal approved	m2	1 800		
	E1			Under roof sheeting				
2.E1.3.190	E1	46.011		ISO Board high density 34-36kg/m3 rigid extruded polystyrene 100% closed cell insulation board of 50mm thickness and 600mm wide (with polyethylene treated kraft slip sheet factory applied to upper surface), with tongue and groove joints, over purlin under roof sheeting or cladding installation. Or equal approved.	m2	1 230		
2.E1.3.191	E1	46.011		Ditto item above, fixed to curved roof (R = 25m)	m2	1 230		
	E1			CARPENTRY AND JOINERY				
	E1			Doors Etc				
	E1			Refer To Drawing Numbers 2E-C9-125				
2.E1.3.192	E1	46.005(c) & 46.006(a)		External Quality, Single Solid flush timber door (2hr fire rated), painted, including handles, 4 lever cylinder lock incl. master key with a escutcheon plate, sundry items, striking plates, weather bars as per drawing, size 900 x 2400 high	No	2		
2.E1.3.193	E1	46.005(c) & 46.006(a)		Internal Quality, Single Solid flush timber door (2hr fire rated), painted, including handles, 4 lever cylinder lock incl. master key with a escutcheon plate, sundry items, striking plates, as per drawing, size 900 x 2400 high	No	12		
2.E1.3.194	E1	46.005(c) & 46.006(a)		External Quality Double Solid flush timber door (2hr fire rated) complete, including handles, 4 lever cylinder lock incl. master key with a escutcheon plate (including two barrel bolts), sundry items, striking plates, weather bars, etc as per drawing, size 1600 x 2700 high	No	4		
	E1			CEILINGS, PARTITIONS AND ACCESS FLOORING				
	E1			Ceilings				
2.E1.3.195	E1	46.005(e)		i) Proprietary suspended grid ceiling system with 9mm thick tapered edge plasterboard, with shadowline perimeter	m2	18		
	E1			FLOOR COVERINGS, WALL LININGS, ETC.				
	E1			Industrial non-slip epoxy coating (Light Trafficable)				
2.E1.3.196	E1	46.011		Ground Floor Slab Equipment Rooms	m2	1000		
	E1			Industrial non-slip epoxy coating (Heavy Trafficable)				
2.E1.3.197	E1	46.011		Loading Bay	m2	175		
	E1			IRONMONGERY				
2.E1.3.198	E1	46.006(a)		Door Closer: Dorma TS83	No	2		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.E1.3.199	E1	46.006(a)		Magnetic door lock (300kg) to be incorporated into the biometric system	no	1		
	E1			Catches, Cabin Hooks, Etc				
2.E1.3.200	E1	46.006(a)		150mm SC Cabin hook and eye with eye fixed to aluminium and including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2		
	E1			Bathroom Fittings				
2.E1.3.201	E1	46.006(a)		"Franke STRX672 Stratos" automatic dispensing toilet roll holder. Or equal approved	No	1		
2.E1.3.202	E1	46.006(a)		"Franke STRX618 Stratos" o.e.a. soap dispenser. Or equal approved	No	1		
2.E1.3.203	E1	46.006(a)		"Franke STRX600 Stratos" paper towel dispenser. Or equal approved	No	1		
2.E1.3.204	E1	46.006(a)		"Franke STRX605 Stratos" o.e.a. waste bin. Or equal approved	No	2		
	E1			Mirrors, etc				
	E1			Silvered float glass copper backed mirrors with polished edges, holed for and fixed with round nose chromium plated mirror screws with rubber buffers to plugs in brickwork or concrete				
2.E1.3.205	E1	46.011		600mm x 900mm bevelled all round 'GG' with four screws	No	1		
	E1			Signage				
	E1			General information signs				
2.E1.3.206	E1	46.006(a)		290 x 290mm Standard PVC safety signs to comply with SANS 1186	No	20		
	E1			Pinning Boards, Writing Boards, Projection Screens, Etc				
2.E1.3.207	E1	46.006(a)		Vitrex "Model 2500 o.e.a Column mounted vertical sliding unit width as required, comprising two vitreous enamelled whiteboards, each independently suspended to slide vertically and supplied complete with one pair of ref. no 2510 double aluminium columns, 2900mm high, all necessary sliding gear, chalkrails and fixing components, all fixed in position to brickwork and floor. Or equal approved	No	1		
	E1			STRUCTURAL STEEL				
	E1			SUPPLY, FABRICATION AND CORROSION PROTECTION				
	E1			Supply, fabrication and corrosion protection of steelwork complete with all the necessary cleats, brackets, gussets, packs, etc., including providing steel grade test certificates as follows, using steel to SANS 1431 Grade 350 W:				
2.E1.3.208	E1	24.001(a) & 24.011		Roof painted with two pack Epoxy plus top coat of recoatable Polyurethane per Specification 37	t	45		
2.E1.3.209	E1	24.001(a) & 24.011		Staircases and walkways galvanised per Specification 27	t	45		
2.E1.3.210	E1	24.001(a) & 24.011		Mechanical Equipment Canopies and car ports with light industrial paint system to drawing no 2A-C6-006	t	2.50		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			Using commercial grade steel (minimum yield strength 225 MPa) (Galvanised as per Specification 27)				
2.E1.3.211	E1	24.001(a) & 24.011		Roof	t	25		
2.E1.3.212	E1	24.001(a) & 24.011		Mechanical Equipment Canopies and car ports	t	0.50		
	E1			Extra over for non-destructive testing				
2.E1.3.213	E1	24.001(b)		Roof	t	45		
2.E1.3.214	E1	24.001(b)		Staircases and walkways	t	45		
2.E1.3.215	E1	24.001(b)		Mechanical Equipment Canopies and car ports	t	0.50		
	E1			Extra over for curvature of structural steel sections				
2.E1.3.216	E1	24.001(c)		Roof	m	355		
	E1			Delivery to site				
2.E1.3.217	E1	24.002(b)		Extra over for abnormal delivery	t	50		
	E1			Erection on site				
2.E1.3.218	E1	24.003		Roof	t	70		
2.E1.3.219	E1	24.003		Staircases and walkways	t	45		
2.E1.3.220	E1	24.003		Mechanical equipment canopies and car ports	t	3		
	E1			Erection bolts				
2.E1.3.221	E1	24.004 & 24.011		Grade 4.8	t	1.5		
2.E1.3.222	E1	24.004 & 24.011		Grade 8.8	t	2.5		
2.E1.3.223	E1	24.005		Site welding	m	185		
	E1			SUNDRY STEELWORK ITEMS COMPLETE, INSTALLED AND CORROSION PROTECTED PER SPECIFICATION 37 (HOT DIP GALVANISED)				
	E1			Mild steel stanchions, ball type welded construction, 1050mm high, stanchion OD 42.9mm, 2.5mm wall thickness. Mentis Sales Inter-Link Handrail System or similar approved.				
2.E1.3.224	E1	24.007(b) & 24.011		Top mounted. Type MT90. Complete	m	535		
2.E1.3.225	E1	24.007(b) & 24.011		Top mounted, inclined at approximately 40 degrees. Type MTA 30/35/40/45 per drawing 2E-C7-112 and 113. Complete	m	210		
2.E1.3.226	E1	24.007(b) & 24.011		Side mounted, inclined at approximately 40 degrees. Type MST 30/35/40/45. Complete	m	10		
2.E1.3.227	E1	24.007(b) & 24.011		Shaped ends	No	55		
	E1			Access ladders, including SS steel mounting bolts/anchors galvanised per specification 37				
2.E1.3.228	E1	24.008		External and internal, Dwg Ref DWS 125769 to 126771	t	2		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.E1.3.229	E1	24.009(a) & 24.011		Stair treads to steel stair cases(1200 x 245mm) including bolts, washers and nuts. Mentis sales, Rectagrid (RS40) & Gripweld grating or similar approved. (Hot Dip Galvanised)	m2	265		
2.E1.3.230	E1	24.009(a) & 24.011		Open grid flooring, 40 x 4.5mm bearer bars, banded on all sides. Rectagrid RS40 or similar approved.	m2	440		
2.E1.3.231	E1	24.009(c) & 24.011		45 x 45 x 5mm Angle frame as per drawing 2A-C6-004 Detail C2	m	660		
	E1			METALWORK				
	E1			REFER TO DRAWING NUMBERS 2E-C9-125				
	E1			Steel windows, doors, etc				
2.E1.3.232	E1	46.005(c)		Solid Panel roller shutter door, manually operated , roller mechanism in overhead mild steel box primed and painted, padlock locking to external, size 4000 x 4500mm high (RS1). Colour to the Architect/Engineer's approval	No	4		
2.E1.3.233	E1	46.005(c)		Solid Panel roller shutter door, manually operated , roller mechanism in overhead mild steel box primed and painted, padlock locking to external, size 5000 x 4500mm high (RS2) Colour to the Architect/Engineer's approval	No	1		
	E1			Beam over door per drawing 2A-C6-004				
2.E1.3.234	E1	24.001(a) & 24.011		for 330mm thick wall, including hot dip galvanizing	m	20		
2.E1.3.235	E1	24.001(a) & 24.011		for 220mm thick wall, including hot dip galvanizing	m	6		
	E1			Pressed Steel Door Frames				
	E1			1,6mm single rebated door frame SABS approved suitable for one brickwall to suite left or right hand door complete with standard butt hinges, brace jambs with timber when building in, fixing lugs must be built into brickwork and frame filled up with cement mortar .				
2.E1.3.236	E1	46.005(c)		Frame in 220mm wide wall for door 813 x 2332mm high as detailed on drawing no 2E-C9-125	No	12		
2.E1.3.237	E1	46.005(c)		Frame in 330mm wide wall for door 813 x 2332mm high as detailed on drawing no 2E-C9-125	No	2		
2.E1.3.238	E1	46.005(c)		Frame in 330mm wide wall for door 1600 x 2720mm high as detailed on drawing no 2E-C9-125	No	4		
	E1			Aluminium windows, doors, etc				
2.E1.3.239	E1	46.006(b)		Purpose made window including double glazing, size 2990 x 1200mm high (WG1)	No	1		
2.E1.3.240	E1	46.006(b)		Purpose made window including double glazing, size 1410 x 1200mm high (WG2)	No	1		
	E1			PLASTERING				
	E1			Granolithic screed				
2.E1.3.241	E1	46.007(b)		50mm Thick surface hardened granolithic screed	m2	2 500		
	E1			Cement plaster steel trowelled, on brickwork				
2.E1.3.242	E1	46.007(a)		On walls	m2	4 800		
2.E1.3.243	E1	46.007(a)		Slab soffits	m2	1 320		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	E1			TILING				
	E1			Wall Tiling				
	E1			300 x 300 x 6mm Glazed ceramic wall tiles fixed with approved waterproof adhesive to plaster and flush pointed with Super White Grout compound (plaster elsewhere). Colour of the tiles to be approved by the Engineer (PC sum of R300 per m² - Budgetary allowance per a m² for tiles)				
2.E1.3.244	E1	46.007(d)		On walls	m2	25		
2.E1.3.245	E1	46.007(d)		On floors	m2	18		
2.E1.3.246	E1	46.007(d)		On narrow widths for skirting	m	22		
	E1			Genesis				
2.E1.3.247	E1	46.011		ESA O60 PVC tile edge trim to top and side edges of wall tiling	m	22		
	E1			Dividing Strips				
2.E1.3.248	E1	46.011		30 x 3mm Flat dividing strip embedded in floor	m	50		
	E1			PLUMBING AND DRAINAGE				
2.E1.3.249	E1	46.008(b)		Plumbing and drainage installed complete as per drawing 2E-C9-100 and 2E-C9-101	Sum	1		
	E1			SANITARY FITTINGS				
	E1			All fittings butting up against wall or floor finishes are to be sealed with an approved silicone sealant to the Engineer's approval. Description of fittings shall be deemed to include the silicone sealant.				
2.E1.3.250	E1	46.008(c)		Ceramix Industries ASTRA TA01 closed-coupled washdown floor mounted WC complete with all fixations, mounting brackets and flushing mechanisms. Pan, White - TA0108A. Cistern, Front Flush White - CA0308A including resin seat Mirage Wirquin (2SM08001). Or equal approved	No	1		
2.E1.3.251	E1	46.008(c)		"Vaal Potteries" vitreous china 635 x 485 mm rounded "Lotus Basin" o.e.a. with three tap holes mounted on wall with 2 x 10mm anchor bolts (code. 8448Z0) Whb set with 31mm chromium plated whb outlet, with plug, chain, anchor and 32mm backnut complete including CP bottle trap, silico to be provided between basin & wall finish and one Cobra Watertech Gala single lever 15mm chrome single taphole basin mixer with classic handle, plug, chain and waste, flexible connection tubes and angle regulating valves (Code: GA-652). Or equal approved	No	1		
	E1			RAINWATER GOODS				
	E1			uPVC gutters and rainwater pipes				
2.E1.3.252	E1	46.008(a)		150mm Diameter rainwater pipes	m	300		
2.E1.3.253	E1	46.008(a)		Extra over rainwater pipe for bend	No	50		
2.E1.3.254	E1	46.008(a)		Extra over rainwater pipe for shoe	No	40		
	E1			Roof Drainage				
2.E1.3.255	E1	46.008(a)		150DN Saint Gobain cast iron 90 degrees side roof outlet, centre bolt	No	44		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.E1.3.256	E1	46.008(a)		Aluminium pre-painted black 300 x 175mm x 300mm deep hopper fixed below outlet to match square rainwater pipe	No	35		
	E1			PAINTING				
	E1			Paintwork, Etc to New Work				
	E1			On Internal and External Floated Plaster Surfaces				
	E1			One coat primer and two coats premium quality highly washable and stain resistant acrylic emulsion paint for interior or exterior use. Colour to Engineer's approval.				
2.E1.3.257	E1	46.009(a)		Walls	m2	4 800		
2.E1.3.258	E1	46.009(a)		Concrete soffits including cornices	m2	1 320		
	E1			MISCELLANEOUS				
2.E1.3.259	E1	46.011		160ND ribbed HDPE cable sleeves (Nextube or similar) including draw wire, supplied and installed per manufacturer's specification. Rate to include excavation and backfill.	m	870		
	E1			PART E1.3: Pump station structures (Carried forward to Summary of Bills)				

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
	E1			PART E1.4: Access road and parking				
	E1			BULK EXCAVATION				
2.E1.4.1	E1	9.001		Excavation in all materials to spoil	m ³	2025		
2.E1.4.2	E1	9.007		Extra-Over items 9.001 to 9.005 for: Hard Excavation (by non-explosive means) - Boulder Excavation	m ³	205		
	E1			In situ treatment of foundations:				
2.E1.4.3	E1	9.009(b)		In situ treatment by ripping	m ³	675		
	E1			Pavement layers constructed from gravel material				
2.E1.4.4	E1	25.001(a)		Selected layer compacted to 95% of modified AASHTO density in 150mm thick layers (G7)	m ³	1350		
2.E1.4.5	E1	25.001(b)		Subbase layer compacted to 97% of modified AASHTO density in 150mm thick layers (G5)	m ³	675		
	E1			Extra over 25.001(b) for constructing a chemical stabilised layer				
2.E1.4.6	E1	25.003		Subbase layer	m ³	675		
2.E1.4.7	E1	25.004		Common cement to SANS (CEM II / B-V 32.5)	t	50		
	E1			Overhaul on material hauled in excess of 1.0 km				
2.E1.4.8	E1	25.018		a) Between 1km up to and including 3km	m ³	2025		
	E1			Concrete block paving (80 mm interlocking blocks)				
2.E1.4.9	E1	25.009		Concrete block paving (25 MPa, Type S-A)	m ²	4000		
	E1			Concrete Edging & Kerbing				
2.E1.4.10	E1	25.010(a)		Cast in situ concrete edge and intermediate beams (Class 25/19)	m ³	90		
2.E1.4.11	E1	25.010(b)		i) Figure 3 kerb as per dwg no. 2B-C5-50 (Precast kerbing to SANS927)	m	500		
2.E1.4.12	E1	25.010(b)		ii) Figure 8c kerb as per dwg no. 2B-C5-50 (Precast kerbing to SANS927)	m	500		
	E1			Approved herbicide and ant poison (Supply of herbicide and ant poison shall be paid for in the provisional sums)				
2.E1.4.13	E1	25.013		Application of approved herbicide and ant poison	m ²	4000		
	E1			Road markings – Retro-reflective road marking paint				
2.E1.4.14	E1	25.014(a)		White lines (broken or unbroken) (100 mm)	m	2000		
2.E1.4.15	E1	25.014(c)		White lettering and symbols	m ²	50		
	E1			ROAD SIGNS				
	E1			Road sign boards with painted or coloured semi-matt background. Symbols, lettering and borders in semi-matt black or in Class 1 retro-reflective material, where the sign board is constructed from:				
2.E1.4.16	E1	25.019(a)		Aluminium sheet (2.0mm thick) - Area not exceeding 2 m ²	m ²	4		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	E1			Extra over item (a) for using:				
2.E1.4.17	E1	25.019(b)		i) Background of retro-reflective material Class III (Colto)	m ²	4		
2.E1.4.18	E1	25.019(b)		ii) Lettering, symbols, numbers, arrows, emblems and borders of retro-reflective material Class III (Colto)	m ²	4		
	E1			Road sign supports (overhead road sign structures excluded):				
2.E1.4.19	E1	25.019(c)		Timber posts	m	12		
2.E1.4.20	E1	25.019(d)		Excavation and backfilling for road sign supports (not applicable to kilometre posts)	m ³	1		
2.E1.4.21	E1	25.019(e)		Extra over item (d) for cement-treated soil backfill	m ³	1		
2.E1.4.22	E1	25.019(f)		Extra over item (d) for rock excavation	m ³	1		
	E1			FINISHING TO SIDES OF ROADS				
2.E1.4.23	E1	25.020		Finishing the road and road reserve, including - Single-carriageway road	km	1		
	E1			PART E1.4: Permanent access road (Carried forward to Summary of Bills)				

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
	E1			PART E1.5: Ancillary works				
	E1			PART E1.5.1: FENCING (Permanent)				
	E1			SITE CLEARANCE				
	E1			CLEARING THE FENCE LINE, 1M WIDE STRIP				
2.E1.5.1.1	E1	6.001		Inner Security fencing	m	760		
2.E1.5.1.2	E1	6.001		Outer Security fencing	m	705		
2.E1.5.1.3	E1	6.001		Electric fencing	m	710		
	E1			SECURITY FENCING				
	E1			SUPPLY AND ERECT NEW FENCING MATERIAL FOR NEW FENCES.				
2.E1.5.1.4	E1	6.002(f)		Inner Security fencing as per drawing 160 592/10, 160 594/10, 160 598/10, 160 599/10	m	760		
2.E1.5.1.5	E1	6.002(g)		Outer Security fencing as per drawing 160 595/10, 160 597/10, 160 598/10, 160 599/10	m	705		
	E1			SUPPLY AND ERECT PERMANENT GATES				
2.E1.5.1.6	E1	6.005(e)		Inner Security gate as per drawing 160 593/10, 160 598/10, 160 599/10	No.	4		
2.E1.5.1.7	E1	6.005(e)		Outer Security gate as per drawing 160 596/10, 160 598/10, 160 599/10	No.	4		
	E1			ELECTRICAL FENCING				
2.E1.5.1.8	E1	45.001		Design and documentation - 710 m of electric fencing, as part of a National Key Point (NKP) security installation	Sum	1		
2.E1.5.1.9	E1	45.002		Supply and delivery to site - 710 m of electric fencing, as part of a National Key Point (NKP) security installation	Sum	1		
2.E1.5.1.10	E1	45.003		Installation of plant - 710 m of electric fencing, as part of a National Key Point (NKP) security installation	Sum	1		
	E1			PART E1.5.2: SERVICES				
	E1			SEWERAGE SERVICES				
	E1			Excavate in all materials to specified levels and battered slopes, including temporary stockpiling and levelling alongside excavations within the confines of the pipe servitude				
	E1			Unclassified trench excavations:				
	E1			Within the freehaul distance				
2.E1.5.2.1	E1	9.012		Up to 1 m deep	m3	350		
2.E1.5.2.2	E1	9.012		Over 1 m and up to 2 m deep	m3	200		
2.E1.5.2.3	E1	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for unclassified material (blasting)	m3	110		
	E1			OVERHAUL				
2.E1.5.2.4	E1	9.023(b)		Between 3km up to and including 5km	m3	290		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			Placing of bedding material, selected, fertile soil and main backfill				
2.E1.5.2.5	E1	15.001		Placing of bedding material, fertile soil and main backfill	m3	550		
	E1			Provision of selected fill blanket				
2.E1.5.2.6	E1	15.006		b) With screening from trench	m3	330		
2.E1.5.2.7	E1	15.006		d) With screening from Borrow Pits	m3	220		
	E1			Supply, Lay, Joint, Bed (Flexible Pipes) and Test Pipeline				
2.E1.5.2.8	E1	46.008(b)		160 mm dia Class 34 uPVC	m	550		
	E1			Connect to New Sewer Septic Tank complete with all the necessary fittings as per the septic tank detail 2A-C6-026. Price to include all labour and material required for the connection:				
2.E1.5.2.9	E1	46.008(b)		110 mm diameter connection	No.	1		
2.E1.5.2.10	E1	46.008(b)		Conduct Percolation Tests complete as per the SANS10400 and SANS 10252-2 requirements; prior to construction of the French Drain. Results to be supplied to Engineer for finalization of French drain detail.	No.	2		
2.E1.5.2.11	E1	46.008(b)		Construct French Drain complete as per detail drawing 2A-C6-026, drain to comply to SANS10400 requirements. Drain to be up to 1.8m deep. Cost to include all labour and material costs necessary to complete the septic tank detail.	m	100		
	E1			Strength concrete, 30 MPa / 19 mm				
	E1			Thrust blocks as per Drawing no. 176/219/18				
2.E1.5.2.12	E1	20.012		1) 30 / 19 Concrete	m³	6		
2.E1.5.2.13	E1	20.001		2) Formwork	m²	12		
2.E1.5.2.14	E1	20.007(a)		3) Reinforcement	t	2		
	E1			Miscellaneous items				
2.E1.5.2.15	E1	46.008(b)		1) Construct up to 2m deep manholes complete with heavy duty concrete covers, precast rings including slabs, benching approved channelling, sealing of rings and backfilling according to detail drawing no: 2A-C6-026	No.	15		
2.E1.5.2.16	E1	46.008(b)		2) Construct Septic Tank complete with all necessary pipes and fittings as per Detail Drawing 2A-C6-026, according to SANS10400 requirements. Cost to include all labour and material costs necessary to complete the septic tank detail.	No.	1		
	E1			Encasing of Pipes in concrete as per detail drawing 176 220/18 where specified or instructed by Engineer				
2.E1.5.2.17	E1	46.008(b)		110mm dia uPVC IN class 15/19 Concrete	m3	10		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			WATER SERVICES				
	E1			Excavate in all materials to specified levels and battered slopes, including temporary stockpiling and levelling alongside excavations within the confines of the pipe servitude				
	E1			Unclassified trench excavations:				
	E1			Within the freehaul distance				
2.E1.5.2.18	E1	9.012		Potable Water Reticulation - Up to 1 m deep	m3	265		
2.E1.5.2.19	E1	9.012		Potable Water Bulk - Up to 1 m deep	m3	1 120		
2.E1.5.2.20	E1	9.012		Fire Water - Up to 1 m deep	m3	360		
2.E1.5.2.21	E1	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for unclassified material (blasting)	m3	350		
	E1			OVERHAUL				
2.E1.5.2.22	E1	9.023(b)		Between 3km up to and including 5km	m3	700		
	E1			Placing of bedding material, fertile soil and main backfill				
2.E1.5.2.23	E1	15.001		a) Potable Water Reticulation - Up to 1 m deep	m3	265		
2.E1.5.2.24	E1	15.001		b) Potable Water Bulk - Up to 1 m deep	m3	1 120		
2.E1.5.2.25	E1	15.001		c) Fire Water - Up to 1 m deep	m3	360		
	E1			Provision of selected fill blanket				
2.E1.5.2.26	E1	15.006		b) With screening from trench	m3	1 395		
2.E1.5.2.27	E1	15.006		d) With screening from borrow pits	m3	350		
	E1			Potable Water - Supply, Lay, Test and Bed Pipes				
2.E1.5.2.28	E1	46.008(b)		1) 32mm dia PN10 uPVC	m	10		
2.E1.5.2.29	E1	46.008(b)		2) 75mm dia PN9 uPVC	m	460		
	E1			Potable Water Bulk - Supply, Lay, Test and Bed Pipes				
2.E1.5.2.30	E1	46.008(b)		1) 110mm dia PN16 uPVC	m	2 000		
	E1			Fire Water - Supply, Lay, Test and Bed Pipes				
2.E1.5.2.31	E1	46.008(b)		1) 160mm dia PN16 uPVC	m	407		
2.E1.5.2.32	E1	46.008(b)		2) 110mm dia PN16 uPVC	m	25		
2.E1.5.2.33	E1	46.008(b)		3) 50mm dia PN16 uPVC	m	65		
	E1			Supply, lay, bed, test, disinfect flanged pipes complete with couplings for Class 16 PE 100 HDPE pipes of the following diameters: (All material including fittings to be SABS approved) [Connection pipework to elevated storage tank]				
2.E1.5.2.34	E1	46.008(b)		a) 50 mm HDPE pipe	m	60		
2.E1.5.2.35	E1	46.008(b)		b) 75mm HDPE pipe	m	15		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			Extra-over item above for the Supplying, Laying and Bedding of Specials				
	E1			75mm dia PN9 uPVC				
2.E1.5.2.36	E1	46.008(b)		1) 90 degree bend	No.	10		
	E1			160mm dia PN16 uPVC				
2.E1.5.2.37	E1	46.008(b)		1) 90 degree bend	No.	8		
2.E1.5.2.38	E1	46.008(b)		2) 45 degree bend	No.	2		
2.E1.5.2.39	E1	46.008(b)		3) 22.5 degree bend	No.	1		
2.E1.5.2.40	E1	46.008(b)		4) 11.25 degree bend	No.	1		
	E1			110mm dia PN16 uPVC				
2.E1.5.2.41	E1	46.008(b)		1) 90 degree bend	No.	2		
	E1			50mm dia PN16 uPVC				
2.E1.5.2.42	E1	46.008(b)		1) 90 degree bend	No.	3		
	E1			Supply, laying, bedding, jointing and testing Cast iron fittings Grade 14 according to SANS 546, bitumen dipped, socket ending for uPVC piping according to SANS 966 with rubber rings for 1600 kPa working pressure				
	E1			1) Equal T-Pieces:				
2.E1.5.2.43	E1	46.008(b)		a) 110 mm dia.	No.	1		
2.E1.5.2.44	E1	46.008(b)		b) 75 mm dia.	No.	3		
2.E1.5.2.45	E1	46.008(b)		c) 160 mm dia.	No.	3		
	E1			2) Reducing T-Pieces for:				
2.E1.5.2.46	E1	46.008(b)		a) 160 mm x 110 mm dia.	No.	5		
2.E1.5.2.47	E1	46.008(b)		b) 160 mm x 50 mm dia.	No.	4		
	E1			3) Hydrant T-Pieces for:				
2.E1.5.2.48	E1	46.008(b)		a) 160 mm dia.	No.	1		
	E1			4) Reducers for:				
2.E1.5.2.49	E1	46.008(b)		b) 160 mm x 50 mm	No.	1		
	E1			5) End caps / Stop ends for:				
2.E1.5.2.50	E1	46.008(b)		a) 75 mm dia. uPVC	No.	6		
2.E1.5.2.51	E1	46.008(b)		b) 160 mm dia. uPVC	No.	1		
	E1			6) Cast Iron Flange Adaptors				
2.E1.5.2.52	E1	46.008(b)		a) 50 mm diameter	No.	6		
2.E1.5.2.53	E1	46.008(b)		b) 110 mm diameter	No.	12		
2.E1.5.2.54	E1	46.008(b)		c) 160mm flange adaptor	No.	4		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			Supply, laying, bedding, jointing and testing of the following fittings for use on HDPE fittings: PN16 Compression Fittings as per SABS requirements [Connection pipework to elevated storage tank].				
	E1			1) Female threaded elbows (90 degrees)				
2.E1.5.2.55	E1	46.008(b)		a) 50 mm diameter	No.	5		
	E1			2) Reducing Coupling				
2.E1.5.2.56	E1	46.008(b)		a) 50 mm diameter x 40 mm diameter	No.	5		
2.E1.5.2.57	E1	46.008(b)		b) 75 mm diameter x 40 mm diameter	No.	1		
	E1			3) 90 degree Tee				
2.E1.5.2.58	E1	46.008(b)		a) 50 x 50 mm	No.	1		
	E1			4) Compression flange adaptor with metal flange				
2.E1.5.2.59	E1	46.008(b)		a) 50 mm diameter	No.	4		
2.E1.5.2.60	E1	46.008(b)		b) 75 mm diameter	No.	1		
	E1			Connection to bulk water main complete with all fittings:				
2.E1.5.2.61	E1	46.008(b)		a) 75 mm dia PN9 uPVC pipe	No.	1		
2.E1.5.2.62	E1	46.008(b)		b) 75 mm dia PN16 polypropylene saddle connection for uPVC	No.	3		
2.E1.5.2.63	E1	46.008(b)		c) 160 mm dia uPVC Class 16 pipe	No.	1		
	E1			Supply and install complete with all necessary fittings a water treatment package plant complete with a filtration system as per the manufacturer's specifications				
2.E1.5.2.64	E1	28.008		Design, procurement/manufacture, delivery to Site of complete Water Treatment Plant (WTP)	No.	1		
2.E1.5.2.65	E1	28.009		Installation and pre-commissioning of complete Water Treatment Plant (WTP)	No.	1		
	E1			Supply and install Jojo tank on 9m high stand complete with all the necessary fittings as per the manufacturer's specifications. The cost shall include, all standard and none standard fittings required to connect to the HDPE inlet, outlet and overflow pipes. This includes supply and installation of a float control valve. The cost shall further include the supply, handling, installation and erection of access ladder with a safety cage and all necessary fittings required for installation of a walkway around tank base.				
2.E1.5.2.66	E1	46.008(b)		a) 5 kl	No.	1		
2.E1.5.2.67	E1	46.008(b)		b) 10 kl	No.	1		
	E1			Manufacture, Supply and Delivery to Site				
	E1			Class 16 clockwise closing, non-rising spindle Spheroidal Graphite Iron Flanged Resilient Seal Gate Valves to SANS 664, of the following sizes:				
2.E1.5.2.68	E1	35.002		1) 50 mm dia	No.	1		
2.E1.5.2.69	E1	35.002		2) 75mm dia	No.	6		
2.E1.5.2.70	E1	35.002		3) 110 mm dia	No.	3		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.E1.5.2.71	E1	35.002		4) 160 mm dia	No.	2		
	E1			Installation and testing of valves and valve actuators				
	E1			Class 16 clockwise closing, non-rising spindle Spheroidal Graphite Iron Flanged Resilient Seal Gate Valves to SANS 664, of the following sizes:				
2.E1.5.2.72	E1	35.003		1) 50 mm dia	No.	1		
2.E1.5.2.73	E1	35.003		2) 75mm dia	No.	6		
2.E1.5.2.74	E1	35.003		3) 110 mm dia	No.	3		
2.E1.5.2.75	E1	35.003		4) 160 mm dia	No.	2		
	E1			Strength concrete, 30 MPa / 19 mm				
	E1			Thrust blocks as per Drawing no. 176/219/18				
2.E1.5.2.76	E1	20.012		1) 30 / 19 Concrete	m ³	6		
2.E1.5.2.77	E1	20.001		2) Formwork	m ²	12		
2.E1.5.2.78	E1	20.007(a)		3) Reinforcement	t	2		
	E1			Miscellaneous items				
2.E1.5.2.79	E1	46.008(b)		1) Valve Boxes for Resilient Seal Gate Valves complete as per Drawing no. 142 337/02	No.	12		
2.E1.5.2.80	E1	46.008(b)		2) Air valve chamber detail complete as per detail drawing 2A-C6-020	No.	1		
	E1			Encasing of Pipes in concrete as per detail drawing 176 220/18 where specified or instructed by Engineer				
2.E1.5.2.81	E1	46.008(b)		110mm dia uPVC in class 15/19 Concrete	m3	10		
	E1			Portable water tanker and transfer pump				
2.E1.5.2.82	E1	46.008(b)		Portable water tanker and transfer pump - to fit light delivery vehicle (LDV). 500 litre Tank manufactured from durable UV-stabilised Low-Density Polyethylene (LDPE), designed to fit LDV (preference to T-shaped tank). Skid mounted petrol water pump and frame on top of tank, with rating 100 litres per minute, to 5 bar pressure. 15 m of heavy duty hose on hose reel.	No.	1		
	E1			Potable Water Borehole				
2.E1.5.2.83	E1	46.008(b)		Establish and de-establish borehole drilling rig on site	Sum	1		
2.E1.5.2.84	E1	46.008(b)		Drill borehole - 6m at 10 inch for sanitary seal, balance at 6 inch (in accordance with SANS10299)	m	60		
2.E1.5.2.85	E1	46.008(b)		Supply and Install casing (DIN4925/8061), (temporary / permanent - full length of borehole)	m	30		
2.E1.5.2.86	E1	46.008(b)		Install slotted screens (DIN4925/8061) and sand trap	Sum	1		
	E1			Yield testing of borehole:				
2.E1.5.2.87	E1	46.008(b)		a) Step test	No.	1		
2.E1.5.2.88	E1	46.008(b)		b) Constant discharge rate test (24 hour, followed by recovery monitoring)	No.	1		
2.E1.5.2.89	E1	46.008(b)		Water quality testing analysis in accordance with SANS241	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			PART E1.5.3: STORMWATER				
	E1			STORMWATER CHANNELS (Earth channels and berms)				
2.E1.5.3.1	E1	9.001		Excavation in all material to spoil (Excavation for earth channels)	m3	580		
2.E1.5.3.2	E1	9.003		Excavation in all materials for channels and stockpile within the freehaul distance	m3	530		
2.E1.5.3.3	E1	15.014.(a)		Construct berm as per dwg. 2E-C5-082 , compacted in layers of 150mm to 93% MOD AASHTO (Berm 1)	m3	80		
2.E1.5.3.4	E1	15.014.(a)		Construct berm as per dwg. 2E-C5-082 , compacted in layers of 150mm to 93% MOD AASHTO (Berm 2)	m3	450		
2.E1.5.3.5	E1	27.009		Rip rap protection (Stone size: 100mm)	m2	200		
	E1			Overhaul				
2.E1.5.3.6	E1	9.023(a)		Between 1km up to and including 3km	m3	985		
2.E1.5.3.7	E1	9.023(b)		Between 3km up to and including 5km	m3	660		
	E1			STORMWATER DRAINAGE (concrete pipes and portal culverts)				
	E1			Pipe trench excavations				
	E1			Excavate in all materials to specified levels and battered slopes, including temporary stockpiling and levelling alongside excavations within the confines of the pipe servitude				
	E1			Unclassified trench excavations. Within the freehaul distance:				
2.E1.5.3.8	E1	9.012		Over 1m and up to 2m deep	m3	700		
2.E1.5.3.9	E1	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	210		
2.E1.5.3.10	E1	9.020		Compaction of trench bottom	m2	600		
	E1			Excavation Ancillaries				
2.E1.5.3.11	E1	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to designated spoil sites	m3	200		
	E1			BACKFILLING AND BEDDING				
	E1			Provision of Material for Bed, Bedding Cradle, Selected Fill Blanket and Main Backfill				
	E1			Provision of selected fill blanket				
2.E1.5.3.12	E1	15.006(a)		Material without screening from trenches	m3	170		
	E1			Provision of soilcrete				
2.E1.5.3.13	E1	15.005(a)		Material without screening from trenches	m3	40		
	E1			Provision of main backfill material				
2.E1.5.3.14	E1	15.007(a)		Backfill material from trench excavation	m3	350		
	E1			Placing of Bedding Material, Soilcrete, Fertile Soil and Main Backfill				
2.E1.5.3.15	E1	15.001		Selected fill blanket	m3	170		
2.E1.5.3.16	E1	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	40		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown Reference	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.E1.5.3.17	E1	15.001		Main backfill	m3	350		
	E1			PROVISION OF MATERIAL TO REPLACE UNSUITABLE MATERIAL FROM TRENCH BOTTOM OR TO PROVIDE SUPPORTING EARTHWORKS				
2.E1.5.3.18	E1	15.011(a)		From trench excavation	m3	200		
	E1			Placing of Material				
2.E1.5.3.19	E1	15.012		Placing of material to replace unsuitable material from trench bottom or to provide supporting earthworks	m3	200		
	E1			OVERHAUL				
2.E1.5.3.20	E1	15.010(a)		Between 1km up to and including 3km	m3	250		
2.E1.5.3.21	E1	15.010(b)		Between 3km up to and including 5km	m3	150		
2.E1.5.3.22	E1	15.010(c)		Between 5km up to and including 7km	m3	100		
	E1			Bedding for Prefabricated Culverts				
2.E1.5.3.23	E1	27.003		a) Class A bedding	m3	10		
2.E1.5.3.24	E1	27.003		b) Class B bedding	m3	50		
2.E1.5.3.25	E1	27.003		c) Extra over Class B bedding for construction on rock foundation	m3	10		
2.E1.5.3.26	E1	27.003		e) Cast in-situ concrete floor slabs for portal culverts (including blinding, reinforcement, formwork, joints, etc)	m3	35		
	E1			Prefabricated Concrete Culverts				
2.E1.5.3.27	E1	27.004(a)		ii) 600mm diameter socketed concrete pipe (Class D50), jointed with mortar	m	210		
2.E1.5.3.28	E1	27.004(b)		i) Portal culvert (900mm x 600mm)	m	120		
2.E1.5.3.29	E1	27.004(b)		ii) Portal culvert (1500mm x 600mm)	m	40		
	E1			Concrete structures for drainage systems				
2.E1.5.3.30	E1	27.006(g)		Headwall and Wingwall structures for pipes and culverts - 600mm Culvert as per drawing 2A-C6-016	No	2		
2.E1.5.3.31	E1	27.006(g)		Headwall and Wingwall structures for pipes and culverts - 1500mm x 600mm Culvert as per drawing 2A-C6-016	No	2		
2.E1.5.3.32	E1	27.006(f)		Standard service manhole/junction box (including covers) as per drawing 2E-C5-080 to 2E-C5-082	No	10		
2.E1.5.3.33	E1	27.006(f)		Standard service kerb inlet as per drawing 2E-C5-080 (Catchpit/junction box to be included in the item above) (6m Transition : 6m Catchpit : 6m Transition)	No	4		
	E1			PART E1.5.4: OPERATIONS & CONTROL CENTRE				
	E1			EARTHWORKS				
	E1			REFER TO DRAWING 2I-C9-002				
	E1			EXCAVATIONS TO STOCKPILE				
2.E1.5.4.1	E1	9.003		Under false floor	m3	60		
2.E1.5.4.2	E1	9.003		Stripfootings, trenches and bases	m3	255		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			Foundation preparation				
2.E1.5.4.3	E1	9.009(b)		Rip and recompact 150mm material to 93% Mod AASHTO	m2	740		
	E1			Selected filling from in-situ material, compacted 93% AASHTO density				
2.E1.5.4.4	E1	15.014		Backfilling to trenches	m3	110		
2.E1.5.4.5	E1	46.002(a)		Hardcore filling (G5) to the underside of floor slabs	m3	160		
	E1			SOIL POISONING				
2.E1.5.4.6	E1	46.011		Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming (Supply of herbicide and ant poison shall be paid for in the provisional sums)	m2	740		
	E1			FORMWORK				
	E1			ROUGH FORMWORK				
	E1			Vertical surfaces				
	E1			Sides of floor slab				
2.E1.5.4.7	E1	20.005		Narrow widths (Up to 200mm thick)	m	162		
	E1			SMOOTH FORMWORK				
	E1			Vertical surfaces including 20mm chamfers on a exposed corners to:				
2.E1.5.4.8	E1	20.002		Stub Columns	m2	5		
2.E1.5.4.9	E1	20.002		Sides of beams and slabs	m2	250		
	E1			Horizontal surfaces including 20mm chamfers on a exposed corners to:				
2.E1.5.4.10	E1	20.002		Soffits of slabs	m2	700		
	E1			REINFORCEMENT				
2.E1.5.4.11	E1	20.007		Steel bars irrespective of grade and diameter	t	55		
2.E1.5.4.12	E1	20.008		Ref 193 high-tensile welded mesh	m2	185		
2.E1.5.4.13	E1	20.008		Ref 395 high-tensile welded mesh	m2	8		
	E1			CONCRETE				
	E1			Concrete 15Mpa/19mm in:				
2.E1.5.4.14	E1	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	12		
	E1			Concrete 30Mpa/19mm in:				
2.E1.5.4.15	E1	20.012		Strip footings, foundations, column's and column bases	m3	100		
2.E1.5.4.16	E1	20.012		Surface bed	m3	65		
2.E1.5.4.17	E1	20.012		Roof slab & beams	m3	280		
2.E1.5.4.18	E1	20.012		Apron	m3	11		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	E1			Concrete, 15Mpa/19mm in:				
2.E1.5.4.19	E1	20.012		Topping (screed)	m3	60		
	E1			Screeds to floors				
2.E1.5.4.20	E1	46.007(b)		i) Screeds and granolithic	m2	580		
	E1			FLOATING AND FINISHING				
2.E1.5.4.21	E1	20.013(a)		Wood floated finish to surface beds	m2	600		
2.E1.5.4.22	E1	20.013(a)		Wood floated finish to apron	m2	120		
2.E1.5.4.23	E1	20.013(a)		Steel floated finish to roof, beams and topping	m2	700		
	E1			Aggregate				
2.E1.5.4.24	E1	20.014		19mm ballast on roof	m3	40		
	E1			MOVEMENT JOINTS ETC				
2.E1.5.4.25	E1	20.016		Slip joint consisting of 2 layers 0.6mm thick galvanised plate on smooth mortar on 230mm walls	m	330		
2.E1.5.4.26	E1	20.016		10mm roof expansion joint consisting of 10mm soft board and 10mm x 10mm polyurethane sealant with a 0.6mm thick x 800mm wide galvanised capping plate, bent twice to match roof upstand and fixed to upstand	m	60		
2.E1.5.4.27	E1	20.016		Saw-cut joints in surface bed per detail C5 drawing 2A-C6-002, complete	m	50		
2.E1.5.4.28	E1	20.016		Isolation joint per detail C4 drawing 2A-C6-002, complete	m	630		
2.E1.5.4.29	E1	20.016		Joints in apron including soft board and sealant where applicable	m	70		
	E1			PRECAST CONCRETE COPING, ETC				
	E1			Modcon precast concrete solutions finished smooth on exposed surfaces bedded and jointed in class II mortar and pointed on all exposed surfaces. Or equal approved				
2.E1.5.4.30	E1	20.017		Type 006, precast concrete coping, 250mm wide x 160mm high x 96mm to tapered edge.	m	135		
2.E1.5.4.31	E1	20.017		Type 015, precast concrete coping, 380mm wide x 100mm high x 75mm to tapered edge.	m	155		
	E1			GROUTING				
2.E1.5.4.32	E1	20.018 a)		Grouting under bases	m3	0.5		
	E1			STRUCTURAL STEEL				
2.E1.5.4.33	E1	24.001(a) & 24.011		Supply, fabricate and install galvanised 80x80x6 brick shelf angle fixed to concrete at 500mm c/c using galvanised M16 x 100 mechanical anchors, complete	m	130		
2.E1.5.4.34	E1	24.001(a) & 24.011		Supply, fabricate and install galvanised pressed steel embedment angle per detail 13.1 drawing 2A-C6-004	m	10		
2.E1.5.4.35	E1	24.009(b) & 24.011		Floor plates (6mm vastrap plate), galvanised	m2	7.5		
2.E1.5.4.36	E1	24.001(a) & 24.011		Supply, fabricate and install galvanised steel lintel plate to 230mm thick wall, complete with hangers, concrete and reinforcement per detail C17 drawing 2A-C6-004	m	8		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.E1.5.4.37	E1	24.001(a) & 24.011		Supply, fabricate and install steel car port structure, painted using light duty paint specification per drawing 2A-C6-006 using primer, undercoat and two enamel top coats	t	6		
2.E1.5.4.38	E1	24.001(c)		Extra over for curvature of structural steel sections	m	120		
2.E1.5.4.39	E1	24.006		HD bolts grade 8.8 to car ports	t	1		
	E1			BRICKWORK FOUNDATIONS				
	E1			BRICKWORK OF NFX BRICKS (14 MPA NOMINAL COMPRESSIVE STRENGTH) IN CLASS I MORTAR				
2.E1.5.4.40	E1	46.004(a)		One brick walls	m2	255		
2.E1.5.4.41	E1	46.004(a)		570mm wide wall	m2	4		
	E1			IN-SITU STONE CLADDING				
2.E1.5.4.42	E1	46.004(g)		Stone cladding sourced from site	m2	135		
	E1			SUPERSTRUCTURE				
	E1			Brickwork in common bricks with class II mortar				
2.E1.5.4.43	E1	46.004(a)		Half brick walls	m2	160		
2.E1.5.4.44	E1	46.004(a)		One brick walls	m2	1 250		
2.E1.5.4.45	E1	46.004(a)		570mm thick Solid wall	m2	10		
	E1			FACE BRICKWORK				
	E1			Face brickwork pointed with recessed horizontal and vertical joints. The cost for the supply and delivery of facebrick shall be paid for in Provisional Sums. All other costs related to the installation of the facebrick shall be included in this item (includes all other material). Samples of facebrick to be approved by the Engineer/Architect.				
2.E1.5.4.46	E1	46.004(h)		Extra over brickwork for face brickwork	m2	200		
2.E1.5.4.47	E1	46.004(h)		Extra over brickwork for brick on edge header course band one course high	m	10		
2.E1.5.4.48	E1	46.004(h)		Extra over brickwork for lintel bands	m	10		
	E1			MASONRY REINFORCING				
2.E1.5.4.49	E1	46.004(f)		Fabric reinforcement and building into joints of half brick walls	m	620		
2.E1.5.4.50	E1	46.004(f)		Fabric reinforcement and building into joints of one brick walls	m	6 400		
	E1			PRESTRESSED FABRICATED LINTELS				
2.E1.5.4.51	E1	46.003(a)		110 x 75mm Lintels	m	200		
	E1			DAMPPROOFING OF WALLS AND FLOORS				
	E1			375 Micron 'Consol Plastics Brikgrip DPC' dampproofing below walls, sills, etc. Or equal approved				
2.E1.5.4.52	E1	46.004(c)		115mm Thick walls	m2	20		
2.E1.5.4.53	E1	46.004(c)		230mm Thick walls	m2	80		
2.E1.5.4.54	E1	46.004(c)		570mm Thick walls	m2	5		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			250 Micron 'Gunplas USB Green' dampproofing under solid floors. Or equal approved				
2.E1.5.4.55	E1	46.004(c)		Under floors	m2	670		
	E1			WATERPROOFING TO ROOFS				
2.E1.5.4.56	E1	46.011		Approved polyurethane sealant to roof and parapets	m2	750		
2.E1.5.4.57	E1	46.011		Water permeable fabric under roof ballast	m2	750		
	E1			ROOF COVERINGS ETC				
	E1			ROOF SHEETING AND SIDE CLADDING				
	E1			0.58mm Concealed Fix Klip-Lok 700, heavy industrial galvanised Z275 spelter sheeting. The profile shall be roll-formed in continuous lengths from certified steel complying with ASTM 446 Grade E (3t). Or equal approved				
2.E1.5.4.58	E1	46.005(f)		Roof sheeting. Continuous length, curved to radius of R = 25m. Classicoat finish to one side	m2	310		
	E1			Flashing, 0.8 mm thick galvanised Z275 spelter, Classicoat finish to one side. Or equal approved				
2.E1.5.4.59	E1	46.005(f)		Flashing to car ports, to match sheeting	m	120		
	E1			Specialist cladding				
2.E1.5.4.60	E1	46.011		Concealed fixed, Aluminium Composite Panels by TMS cladding & Louvre solutions or similar, fixed to brickwork via aluminium extruded panel clips, on 20mm extruded mullion hooks, with 20mm shadowline detail between cladding panels, supply and fixed to specialist specification and details	m2	40		
	E1			Insulation				
2.E1.5.4.61	E1	46.011		100mm ISO Board high density 34-36kg/m3 rigid extruded polystyrene with tongue and groove joints, or equal approved	m2	700		
	E1			CARPENTRY AND JOINERY				
	E1			DOORS ETC				
	E1			REFER TO DRAWING NUMBER 2I-C9-006				
2.E1.5.4.62	E1	46.005(c) & 46.006(a)		Single, solid, 1hr fire rated, framed, ledged, braced and battened timber door, complete, including emergency exit push bar locking mechanism, sundry items, striking plates, weather bars, etc as per drawing, size 900 x 2125 high (D2)	No	10		
2.E1.5.4.63	E1	46.005(c) & 46.006(a)		Single, solid, 1hr fire rated, framed, ledged, braced and battened timber door complete, including handles, 4 lever cylinder lock incl master key with a escutcheon plate, sundry items, striking plates, etc as per drawing, size 900 x 2125 high (D3 & 9)	No	10		
2.E1.5.4.64	E1	46.005(c) & 46.006(a)		Single, solid timber door complete, including handles, 4 lever cylinder lock incl master key, with a escutcheon plate, sundry items, striking plates, 150x150mm perspex sign (detail per room), satin stainless steel kickplate 320 x 770mm high x 0.9mm thick, etc as per drawing, size 900 x 2125 high (D4)	No	10		
2.E1.5.4.65	E1	46.005(c) & 46.006(a)		Double, solid, internal, 1hr fire rated, framed, ledged, braced and battened timber door, complete, including handles, 4 lever cylinder lock incl master key with a escutcheon plate (including two barrel bolts), sundry items, striking plates, etc as per drawing, size 1600 x 2125 high (D5)	No	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.E1.5.4.66	E1	46.005(c) & 46.006(a)		Double, solid, internal, 1hr fire rated, framed, ledged, braced and battened timber door, complete, including handles, 4 lever cylinder lock incl master key with a escutcheon plate (including two barrel bolts), sundry items, striking plates, etc as per drawing, size 1600 x 2125 high (D6)	No	3		
2.E1.5.4.67	E1	46.005(c) & 46.006(a)		Single semi-solid timber door, with 100mm under-cut, with WC type locking mechanism complete as per drawing, size 900 x 2125 high (D7)	No	12		
	E1			CEILING, PARTITIONS AND ACCESS FLOORING				
	E1			Access Flooring				
2.E1.5.4.68	E1	46.011		Penta Floor FS800 Cement filled access floor system supplied and installed complete as per the manufacturers recommendation. Or equal approved	m2	100		
	E1			Ceilings				
2.E1.5.4.69	E1	46.005(e)		i) Proprietary suspended grid ceiling system with 9mm thick tapered edge plasterboard, with shadowline perimeter	m2	580		
2.E1.5.4.70	E1	46.005(e)		j) 12mm plaster board ceiling on suspended aluminium grid to bulk head, 300mm deep	m2	45		
	E1			Cornices				
	E1			Rhino gypsum plasterboard cornices. Or equal approved				
2.E1.5.4.71	E1	46.005(e)		ii) 75mm Coved cornice plugged	m	30		
	E1			IRONMONGERY				
2.E1.5.4.72	E1	46.006(a)		Door Closer: Dorma TS83, or equal approved	No	8		
2.E1.5.4.73	E1	46.006(a)		Magnetic door lock (300kg) to be incorporated into C&I / biometric system	no	2		
2.E1.5.4.74	E1	46.006(a)		"Franke" CNTXPAR or similar approved Grade 304 18/10, stainless steel 32mm diameter paraplegic grab rail with "Franke" fine grip (Code: 2510012), size 300 x 300 x 96mm deep, plugged and screwed to the wall with stainless steel screws.	no	1		
2.E1.5.4.75	E1	46.006(a)		Franke CNTXBR or similar approved Grade 304 18/10 stainless steel 32mm diameter cistern & amp; flush valve back rail with Franke fine grip (Code: 2510014), size 750 x 260mm, plugged and screwed to the wall with stainless steel screws.	no	1		
	E1			Bathroom Fittings				
2.E1.5.4.76	E1	46.006(a)		600 x 19mm Chromium plated towel rail: complete with chromium plated end brackets plugged and screwed to wall/ door	No	4		
2.E1.5.4.77	E1	46.006(a)		"Franke STRX672 Stratos" automatic dispensing toilet roll holder. Or equal approved	No	10		
2.E1.5.4.78	E1	46.006(a)		"Franke STRX618 Stratos" o.e.a. soap dispenser. Or equal approved	No	7		
2.E1.5.4.79	E1	46.006(a)		"Franke STRX600 Stratos" paper towel dispenser. Or equal approved	No	5		
2.E1.5.4.80	E1	46.006(a)		"Franke HF2400HD - Sensor operated Hand dryer . Or equal approved	No	4		
2.E1.5.4.81	E1	46.006(a)		"Franke STRX605 Stratos" o.e.a. waste bin. Or equal approved	No	6		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			Mirrors, etc				
	E1			Silvered float glass copper backed mirrors with polished edges, holed for and fixed with round nose chromium plated mirror screws with rubber buffers to plugs in brickwork or concrete				
2.E1.5.4.82	E1	46.011		600w x 900h mm vertically orientated bevelled all round 'GG' with four screws	no	2		
2.E1.5.4.83	E1	46.011		1400w x 1400h mm vertically orientated bevelled all round 'GG' with four screws	no	2		
2.E1.5.4.84	E1	46.011		1800w x 1400h mm vertically orientated bevelled all round 'GG' with four screws	no	2		
	E1			Signage				
	E1			General information signs				
2.E1.5.4.85	E1	46.006(a)		290 x 290mm Standard PVC safety signs to comply with SANS 1186	No	10		
	E1			Pinning Boards, Writing Boards, Projection Screens, etc				
2.E1.5.4.86	E1	46.006(a)		Vitrex "Model 2500 o.e.a Column mounted vertical sliding unit width as required, comprising two vitreous enamelled whiteboards, each independently suspended to slide vertically and supplied complete with one pair of ref. no 2510 double aluminium columns, 2900mm high, all necessary sliding gear, chalkrails and fixing components, all fixed in position to brickwork and floor. Or equal approved	No	7		
	E1			METALWORK				
	E1			REFER TO DRAWING NUMBERS 2I-C9-006&007				
	E1			Aluminium windows, doors, etc. (colour to be confirmed by the engineer/architect)				
2.E1.5.4.87	E1	46.005(c) & 46.006(a)		Double opening, external power coated aluminium door, with fixed side & fan lights / glazing, handles, 4 lever cylinder lock incl master key with a escutcheon plate, two flush bolt door locks, sundry items, striking plates, weather bars, etc as per drawing, size 4500 x 2550 high (D1)	No	1		
2.E1.5.4.88	E1	46.005(c) & 46.006(a)		Double opening, internal, power coated aluminium door, with fixed side lights/glazing complete, including , handles, 4 lever cylinder lock incl master key with a escutcheon plate, two flush bolt door locks, sundry items, striking plates, etc as per drawing, size 3500 x 2125 high (D8)	No	1		
2.E1.5.4.89	E1	46.006(b)		Approved extruded aluminium frames to manufacturer's details, with clear glazing as detailed on window schedules. Refer to drawing 2I-C9-007 for O&CC Windows, size 3000 x 1600mm (WG1)	No	1		
2.E1.5.4.90	E1	46.006(b)		Approved extruded aluminium frames to manufacturer's details, with clear glazing as detailed on window schedules. Refer to drawing 2I-C9-007 for O&CC Windows, size 3600 x 1600mm (WG2)	No	1		
2.E1.5.4.91	E1	46.006(b)		Approved extruded aluminium frames to manufacturer's details, with clear glazing as detailed on window schedules. Refer to drawing 2I-C9-007 for O&CC Windows, size 2400 x 1600mm (WG3)	No	1		
2.E1.5.4.92	E1	46.006(b)		Approved extruded aluminium frames to manufacturer's details, with clear glazing as detailed on window schedules. Refer to drawing 2I-C9-007 for O&CC Windows, size 9930 x 1600mm (WG4)	No	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.E1.5.4.93	E1	46.006(b)		Approved extruded aluminium frames to manufacturer's details, with clear glazing as detailed on window schedules. Refer to drawing 2I-C9-007 for O&CC Windows, size 4260 x 1600mm (WG5)	No	1		
2.E1.5.4.94	E1	46.006(b)		Approved extruded aluminium frames to manufacturer's details, with obscure glazing as detailed on window schedules. Refer to drawing 2I-C9-007 for O&CC Windows, size 2000 x 600mm (WG6)	No	2		
2.E1.5.4.95	E1	46.006(b)		Approved extruded aluminium frames to manufacturer's details, with obscure glazing as detailed on window schedules. Refer to drawing 2I-C9-007 for O&CC Windows, size 600 x 900mm (WG7)	No	1		
2.E1.5.4.96	E1	46.006(b)		Approved extruded aluminium frames to manufacturer's details, with obscure glazing as detailed on window schedules. Refer to drawing 2I-C9-007 for O&CC Windows, size 3000 x 600mm (WG8)	No	2		
2.E1.5.4.97	E1	46.006(b)		Approved extruded aluminium frames to manufacturer's details, with clear glazing as detailed on window schedules. Refer to drawing 2I-C9-007 for O&CC Windows, size 2100 x 1600mm (WG9)	No	1		
	E1			Aluminium louvres - Concealed fixed, Aerofoil, or similar approved, on light-weight aluminium sub-frame by TMS cladding, supplied and fixed to specialist specification and details. Refer to relevant plans, sections and elevations for further information and extent of proposed product. Colour to be confirmed by the engineer/architect				
2.E1.5.4.98	E1	46.011		Purpose made louvre unit complete as per drawing, size 5760 x 600mm high (L1)	No	1		
2.E1.5.4.99	E1	46.011		Purpose made louvre unit complete as per drawing, size 11460 x 600mm high (L2)	No	1		
2.E1.5.4.100	E1	46.011		Purpose made louvre unit complete as per drawing, size 3635 x 600mm high (L3)	No	1		
2.E1.5.4.101	E1	46.011		Purpose made louvre unit complete as per drawing, size 3600 x 600mm high (L4)	No	1		
2.E1.5.4.102	E1	46.011		Purpose made louvre unit complete as per drawing, size 2400 x 600mm high (L5)	No	1		
	E1			Pressed Steel Door Frames				
	E1			1,6mm single rebated door frame SABS approved suitable for one brickwall to suite left or right hand door complete with standard butt hinges, brace jambs with timber when building in, fixing lugs must be built into brickwork and frame filled up with cement mortar .				
2.E1.5.4.103	E1	46.005(c)		Frame built into half brick wall for 813 x 2032mm high door as detailed on drawing no.2I-C9-006&007	No	14		
2.E1.5.4.104	E1	46.005(c)		Frame built into one brick wall for 813 x 2032mm high door as detailed on drawing no.2I-C9-006&007	No	18		
2.E1.5.4.105	E1	46.005(c)		Frame built into one brick wall for 1600 x 2032mm high double door as detailed on drawing no 2I-C9-006&007	No	4		
	E1			Strongroom Door and Frame				
2.E1.5.4.106	E1	46.005(c) & 46.006(a)		Single strong room door with matching frame: overall thickness 120mm, outer plate 12mm with 7 lever security key lock, door projection 90 degrees. 760 x 1883 high (D10)	No	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	E1			INTERNAL & EXTERNAL PLASTER				
	E1			15mm thick cement plaster steel trowelled, on brickwork				
2.E1.5.4.107	E1	46.007(a)		On walls	m2	2 100		
	E1			TILING				
	E1			Approved glazed ceramic tiles fixed with approved waterproof adhesive to plaster and flush pointed with approved grout compound (plaster elsewhere). Colour of the tiles to be approved (PC sum of R300 per m² - Budgetary allowance per a m² for tiles)				
2.E1.5.4.108	E1	46.007(d)		On walls and splashbacks	m2	380		
2.E1.5.4.109	E1	46.007(d)		On narrow widths	m2	5		
2.E1.5.4.110	E1	46.007(d)		On floors	m2	350		
2.E1.5.4.111	E1	46.007(d)		Skirting	m2	560		
	E1			Dividing Strip				
2.E1.5.4.112	E1	46.011		30 x 3mm Brass flat dividing strip embedded in floor	m	45		
	E1			Genesis				
2.E1.5.4.113	E1	46.011		Brushed stainless steel tile edge trim (quarter round profile) by Kirk Marketing to top and side edges of wall tiling. Or equal approved	m	150		
	E1			FLOOR COVERINGS, WALL LININGS, SKIRTINGS, ETC.				
	E1			Carpet				
2.E1.5.4.114	E1	46.011		Commercial carpet tiles supplied and installed complete (PC sum of R400 per m ² - Budgetary allowance per a m ²)	m2	280		
	E1			Power skirting				
2.E1.5.4.115	E1	46.011		2 tier, three compartment power skirting 160 x 50mm with powder coated finish, fixed to walls	m	70		
	E1			PLUMBING AND DRAINAGE				
	E1			Water Reticulation and Drainage				
2.E1.5.4.116	E1	46.008(b)		Plumbing and drainage for the building complete as per drawing 21-C9-002	Sum	1		
	E1			Sanitary fittings				
	E1			All fittings butting up against wall or floor finishes are to be sealed with an approved silicone sealant to the Engineer's approval. Description of fittings shall be deemed to include the silicone sealant.				
2.E1.5.4.117	E1	46.008(c)		Ceramix Industries ASTRA TA01 closed-coupled washdown floor mounted WC complete with all fixations, mounting brackets and flushing mechanisms, stop cock, etc. Pan, White - TA0108A. Cistern, Front Flush White - CA0308A including resin seat Mirage Wirquin (2SM08001). Or equal approved	No	11		
2.E1.5.4.118	E1	46.008(c)		Suite L/L Protea Paraplegic Vaal WC complete with all fixtures, mounting brackets and flushing mechanisms, stop cocks, etc. Toilet Seat A1 White DPE FS28A (For Paraplegic Toilet Pan.) Or equal approved	No	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.E1.5.4.119	E1	46.008(c)		Ceramic Industries BEN UA01 white wall hung top entry urinal complete with all fixations, mounting brackets and bolts. Flushvalve: "Cobra" "Flushmaster Junior" ref:FJ6.000 3/4" CP, exposed type with integrated ballstop valve and wall plate and "FJT5.5" tailpipe and tube 215 mm long. Or equal approved	No	2		
2.E1.5.4.120	E1	46.008(c)		"Vaal Potteries" vitreous china 635 x 485 mm rounded "Lotus Basin" o.e.a. with three tap holes mounted on wall with 2 x 10mm anchor bolts (code. 8448Z0) Whb set with 31mm chromium plated whb outlet, with plug, chain, anchor and 32mm backnut complete including CP bottle trap, silico to be provided between basin & wall finish and one Cobra Watertech Gala single lever 15mm chrome single taphole basin mixer with classic handle, plug, chain and waste, flexible connection tubes and angle regulating valves (Code: GA-652). Or equal approved	No	9		
2.E1.5.4.121	E1	46.008(c)		"Franke/Citimetal" stainless steel single end bowl in-set sink Code DT 100E, size 1000 x 457mm including one Cobra Watertech Gala single lever 15mm chrome single taphole basin mixer with classic handle, plug, chain and waste, flexible connection tubes and angle regulating valves (Code: GA-652). Or equal approved	No	1		
2.E1.5.4.122	E1	46.008(c)		900 x 900 x 150 Plexicor Granada (raised surface) acrylic shower tray complete with waste and P-trap. Installation to be done strictly in accordance with manufacturer's specification and instructions. Or equal approved. Shower panel and door to be included in the rate	No	2		
2.E1.5.4.123	E1	46.008(c)		Cobra Code 3338B026/065 complete shower set, SANS 226, Type 2. Includes 2 x undertile stoptaps, flanges shower arm head and shower head. Or equal approved	No	2		
	E1			SERVICE FITTINGS				
	E1			KWIKOT ELECTRIC WATER HEATERS				
2.E1.5.4.124	E1	46.008(c)		Kwikot 100 litre Dual 600i round horizontal water heater with isolator switch fitted to electric cover plate, size 480 x 990mm (code ESG100), operating at 600kPa and fixed on roof (geyser placed in drip tray), including thermostat, element, 600 kPa safety valve, 20mm female draincock with compression inlet, Kwikot Mono pressure control valve and two 15mm vacuum breakers (for hot and cold water supply) and horizontal polyethylene geyser tray size 600 x 1940mm (code GSTP-1200). Electrical connection elsewhere specified. Or equal approved	No	3		
	E1			RAINWATER GOODS				
	E1			Aluminium gutters and rainwater pipes				
2.E1.5.4.125	E1	46.008(a)		150mm x 150mm square rainwater pipes (precoated colour to be confirmed by the engineer/architect)	m	110		
2.E1.5.4.126	E1	46.008(a)		Extra over rainwater pipe for bend	No	100		
2.E1.5.4.127	E1	46.008(a)		Extra over rainwater pipe for shoe	No	25		
	E1			Roof Drainage				
2.E1.5.4.128	E1	46.008(a)		150DN Saint Gobain cast iron 90 degrees side roof outlet, centre bolt	no	25		
2.E1.5.4.129	E1	46.008(a)		Aluminium pre-painted black 300 x 175mm x 300mm deep hopper fixed below outlet to match square rainwater pipe	No	25		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			ELECTRICAL				
	E1			Kitchen Appliances				
2.E1.5.4.130	E1	46.010		Defy Slimline 600 Stainless Steel Hob. Or equal approved.	No	1		
	E1			PAINTING				
	E1			PAINTWORK, ETC TO NEW WORK				
	E1			ON INTERNAL AND EXTERNAL FLOATED PLASTER SURFACES				
	E1			One coat primer and two coats premium quality highly washable and stain resistant acrylic emulsion paint for interior or exterior use. Colour to Engineer's/Architect's approval. Paint to a min of 10yr guarantee				
2.E1.5.4.131	E1	46.009(a)		Walls	m2	2100		
2.E1.5.4.132	E1	46.009(a)		Ceiling including cornices	m2	45		
	E1			MISCELLANEOUS TRADES, FIXTURES AND APPLIANCES				
2.E1.5.4.133	E1	46.011		Duct enclosure complete: 2000x2900mm high overall including 900x2100mm high door. Constructed of 38mm x 75mm timber composite panels (colour to be confirmed with the architect/engineer) fixed to aluminium subframe (subframe to be included), including hinges, external quality security gate locking mechanism (min 5 lever), etc	no	1		
	E1			PART E1.5.5: GUARDHOUSE 1				
	E1			EARTHWORKS				
	E1			REFER TO DRAWING 2I-C9-050				
	E1			EXCAVATIONS TO STOCKPILE				
2.E1.5.5.1	E1	9.010		Excavation by hand	m3	50		
2.E1.5.5.2	E1	9.009(b)		Rip and recompact 150mm insitu material to 93% Mod AASHTO	m2	70		
	E1			SOIL POISONING				
2.E1.5.5.3	E1	46.011		Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming (Supply of herbicide and ant poison shall be paid for in the provisional sums)	m2	85		
	E1			Backfilling				
2.E1.5.5.4	E1	15.014(a)		Selected backfilling from in-situ material compacted to 93% MOD AASHTO	m3	20		
	E1			SCHEDULED FORMWORK ITEMS				
	E1			Rough				
2.E1.5.5.5	E1	20.001		Sides of bases and surface beds	m2	18		
	E1			Smooth				
2.E1.5.5.6	E1	20.002		Vertical to slab upstands	m2	90		
2.E1.5.5.7	E1	20.002		Horizontal to slab soffits	m2	330		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			Narrow widths				
2.E1.5.5.8	E1	20.005		Up to 300mm wide to columns	m	200		
2.E1.5.5.9	E1	20.005		350mm to slab upstand	m	109		
	E1			SCHEDULED REINFORCEMENT ITEMS				
2.E1.5.5.10	E1	20.007		Steel bars (irrespective of grade or diameter)	t	20		
2.E1.5.5.11	E1	20.008		High tensile welded mesh	m2	23		
	E1			SCHEDULED CONCRETE ITEMS				
	E1			Blinding layer in 15MPa/19mm Concrete				
2.E1.5.5.12	E1	20.011		50mm blinding under bases	m2	15		
	E1			Strength concrete				
2.E1.5.5.13	E1	20.012		Grade 15MPa/19mm mass concrete	m3	5		
2.E1.5.5.14	E1	20.012		Grade 15MPa/19mm topping / screed	m3	25		
	E1			Grade 30MPa/19mm structural concrete				
2.E1.5.5.15	E1	20.012		Slabs, columns and beams	m3	105		
2.E1.5.5.16	E1	20.012		strip footings and aprons	m3	8		
	E1			Unformed surface finishes				
2.E1.5.5.17	E1	20.013(b)		Wood float to surface beds, aprons, slabs and screeds	m2	525		
	E1			Aggregate				
2.E1.5.5.18	E1	20.014		Nom 19mm ballast on roof	m3	11		
	E1			Joints				
2.E1.5.5.19	E1	20.016		Slip joint consisting of 2 layers 0.6mm thick galvanised plate on smooth mortar on 230mm walls	m	25		
2.E1.5.5.20	E1	20.016		Slip joint consisting of 2 layers 0.6mm thick galvanised plate on smooth mortar on 550mm walls	m	12.5		
2.E1.5.5.21	E1	20.016		Construction joints, including shutters	m	35		
2.E1.5.5.22	E1	20.016		Expansion joint including joint filler and sealant	m	60		
	E1			Manufacture (or supply) and erect precast elements				
	E1			Modcon precast concrete solutions finished smooth on exposed surfaces bedded and jointed in class II mortar and pointed on all exposed surfaces. Or equal approved				
2.E1.5.5.23	E1	20.017		Type 006, precast concrete coping, 250mm wide x 160mm high x 96mm to tapered edge.	m	50		
2.E1.5.5.24	E1	20.017		Type 015, precast concrete coping, 380mm wide x 100mm high x 75mm to tapered edge.	m	120		
	E1			Grouting				
2.E1.5.5.25	E1	20.018(a)		Under steel bases	m3	0.5		
	E1			Miscellaneous items				
2.E1.5.5.26	E1	20.020 c)		150 DN Cast iron domed 180 degrees roof full bore outlet (eared) cast-in	No	12		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			SCHEDULED STRUCTURAL STEEL ITEMS				
2.E1.5.5.27	E1	24.001		Supply, fabrication and corrosion protection of steel work, including fabrication drawings, delivery and erection on site. Members to be painted to specification	t	2.5		
	E1			SCHEDULED BUILDING WORKS				
	E1			Prestressed lintels (opening to be spanned stated)				
2.E1.5.5.28	E1	46.003(a)		1.2m span lintels (110mm x 75mm)	m	3		
2.E1.5.5.29	E1	46.003(a)		2m span lintels (110mm x 75mm)	m	2		
	E1			MASONRY				
	E1			Brickwork of NFX BRICKS (14 MPA NOMINAL COMPRESSIVE STRENGTH) IN CLASS I MORTAR				
2.E1.5.5.30	E1	46.004(a)		Half brick walls	m2	15		
2.E1.5.5.31	E1	46.004(a)		One brick walls	m2	70		
2.E1.5.5.32	E1	46.004(a)		Columns (230mm wide wall measured)	m2	35		
2.E1.5.5.33	E1	46.004(a)		550mm wide cavity walls (length of 550mm wide wall measured). Rate to include for wall ties	m2	45		
	E1			FACE BRICKWORK				
	E1			Face brickwork pointed with recessed horizontal and vertical joints. The cost for the supply and delivery of facebrick shall be paid for in Provisional Sums. All other costs related to the installation of the facebrick shall be included in this item (includes all other material). Samples of facebrick to be approved by the Engineer/Architect.				
2.E1.5.5.34	E1	46.004(g)		Extra over brickwork for face brickwork	m2	75		
	E1			Damp proofing				
2.E1.5.5.35	E1	46.004(c)		250 micron polythene sheeting under floor	m2	65		
2.E1.5.5.36	E1	46.004(c)		230mm wide polythene damp proofing in walls (including surface bed level, stone wall coping and around openings)	m	90		
	E1			MASONRY REINFORCING				
2.E1.5.5.37	E1	46.004(f)		Fabric reinforcement and building into joints of one brick walls	m	700		
	E1			STONE CLADDING				
2.E1.5.5.38	E1	46.004(g)		Stone cladding using stone from the excavations (blasting) within the Balancing Reservoir area	m2	35		
	E1			ROOF SHEETING AND SIDE CLADDING				
2.E1.5.5.39	E1	46.005(f)		Concealed fixed, Aluminium Composite Panels by TMS cladding & Louvre solutions or similar, fixed to brickwork via aluminium extruded panel clips, on 20mm extruded mullion hooks, with 20mm shadowline detail between cladding panels, supply and fixed to supplier specification and details	m2	90		
2.E1.5.5.40	E1	46.005(f)		Extra over item above for 550mm wide cladding to the top of the cavity wall	m2	10		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			Carpentry and joinery				
	E1			DOORS ETC				
	E1			REFER TO DRAWING NUMBER 2I-C9-050 (refer to schedules for opening and leaf sizes. Standard sizes to be used)				
2.E1.5.5.41	E1	46.005(e)		Single semi-solid timber door, with 100mm under-cut, with WC type locking mechanism complete as per drawing, size 900 x 2125 high	No	1		
2.E1.5.5.42	E1	46.005(e)		Single, solid, external, 1hr fire rated, framed, ledged, braced and battened timber door, with galvanized sheeting to external face and wrapped around corners of leaf, complete, including cylinder lock with a escutcheon plate locking mechanism, sundry items, striking plates, weather bars, handle set etc as per drawing, size 900 x 2125 high (D1)	No	2		
	E1			IRONMONGERY				
2.E1.5.5.43	E1	46.006(a)		Door Closer: Dorma TS83	No	2		
2.E1.5.5.44	E1	46.006(a)		Magnetic door lock (300kg)	no	2		
	E1			BATHROOM FITTINGS				
2.E1.5.5.45	E1	46.006(a)		"Franke STRX672 Stratos" automatic dispensing toilet roll holder. Or equal approved	No	1		
2.E1.5.5.46	E1	46.006(a)		"Franke STRX618 Stratos" o.e.a. soap dispenser. Or equal approved	No	1		
2.E1.5.5.47	E1	46.006(a)		"Franke STRX600 Stratos" paper towel dispenser. Or equal approved	No	1		
2.E1.5.5.48	E1	46.006(a)		"Franke STRX605 Stratos" o.e.a. waste bin. Or equal approved	No	1		
	E1			MIRRORS,ETC				
	E1			Silvered float glass copper backed mirrors with polished edges, holed for and fixed with round nose chromium plated mirror screws with rubber buffers to plugs in brickwork or concrete				
2.E1.5.5.49	E1	46.006(a)		600w x 750h mm vertically orientated bevelled all round 'GG' with four screws	No	1		
	E1			Steel windows, doors, etc				
2.E1.5.5.50	E1	46.006(b)		Approved extruded aluminium frames to manufacturer's details, with bullet resistant glazing (fixed) as detailed on window schedules. Refer to drawing 2I-C9-050 for Guardhouse Windows, size 1200 x 1600	No	2		
2.E1.5.5.51	E1	46.006(b)		Approved extruded aluminium frames to manufacturer's details, with bullet resistant glazing as detailed on window schedules with central opening. Refer to drawing 2I-C9-050 for Guardhouse Windows, size 1200 x 1600	No	1		
2.E1.5.5.52	E1	46.006(b)		Approved extruded aluminium frames to manufacturer's details, with obscure glazing as detailed on window schedules. Refer to drawing 2I-C9-050 for Guardhouse Windows, size 600 x 900mm	No	1		
	E1			PRESSED STEEL DOOR FRAMES				
	E1			1,6mm single rebated door frame SABS approved suitable for one brickwall to suite left or right hand door complete with standard butt hinges, brace jambs with timber when building in, fixing lugs must be built into brickwork and frame filled up with cement mortar .				
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.E1.5.5.53	E1	46.006(b)		Frame for door 900 x 2125 high as detailed on drawing no 2I-C9-050	No	3		
	E1			PLASTER, PAVING AND TILES				
2.E1.5.5.54	E1	46.007(a)		On walls	m2	90		
2.E1.5.5.55	E1	46.007(a)		On ceilings	m2	250		
	E1			TILING				
	E1			Approved glazed ceramic wall tiles fixed with approved waterproof adhesive to plaster and flush pointed with approved grout compound (plaster elsewhere). Colour of the tiles to be approved by the Engineer				
2.E1.5.5.56	E1	46.007 (b)ii		Skirting (100mm cut from floor tiles)	m	30		
2.E1.5.5.57	E1	46.007(d)		On walls and splash backs	m2	25		
2.E1.5.5.58	E1	46.007(d)		On floor	m2	20		
	E1			SUNDRIES				
	E1			GENESIS				
2.E1.5.5.59	E1	46.011		Brushed stainless steel tile edge trim (quarter round profile) by Kirk Marketing to top and side edges of wall tiling. Or equal approved	m	30		
	E1			PLUMBING AND DRAINAGE				
2.E1.5.5.60	E1	46.008(b)		Plumbing and drainage installed complete	Sum	1		
	E1			SANITARY PLUMBING				
2.E1.5.5.61	E1	46.008(c)		Sanitary plumbing installed complete	Sum	1		
	E1			SANITARY FITTINGS				
	E1			All fittings butting up against wall or floor finishes are to be sealed with an approved silicone sealant to the Engineer's approval. Description of fittings shall be deemed to include the silicone sealant.				
2.E1.5.5.62	E1	46.008(c)		Ceramix Industries ASTRA TA01 closed-coupled washdown floor mounted WC complete with all fixations, mounting brackets and flushing mechanisms. Pan, White - TA0108A. Cistern, Front Flush White - CA0308A including resin seat Mirage Wirquin (2SM08001). Or equal approved	No	1		
2.E1.5.5.63	E1	46.008(c)		"Vaal Potteries" vitreous china 635 x 485 mm rounded "Lotus Basin" o.e.a. with three tap holes mounted on wall with 2 x 10mm anchor bolts (code. 8448Z0) Whb set with 31mm chromium plated whb outlet, with plug, chain, anchor and 32mm backnut complete including CP bottle trap, silico to be provided between basin & wall finish and one Cobra Watertech Gala single lever 15mm chrome single taphole basin mixer with classic handle, plug, chain and waste, flexible connection tubes and angle regulating valves (Code: GA-652). Or equal approved	No	1		
2.E1.5.5.64	E1	46.008(c)		"Franke/Citimetal" stainless steel single end bowl in-set sink Code DT 100E, size 1000 x 457mm including one Cobra Watertech Gala single lever 15mm chrome single taphole basin mixer with classic handle, plug, chain and waste, flexible connection tubes and angle regulating valves (Code: GA-652). Or equal approved	No	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			RAINWATER GOODS				
	E1			uPVC gutters and rainwater pipes				
2.E1.5.5.65	E1	46.008(a)		150mm Diameter rainwater pipes	m	60		
2.E1.5.5.66	E1	46.008(a)		Extra over rainwater pipe for bend	No	12		
2.E1.5.5.67	E1	46.008(a)		Extra over rainwater pipe for shoe	No	12		
	E1			PAINTING				
	E1			PAINTWORK, ETC TO NEW WORK				
	E1			ON INTERNAL AND EXTERNAL FLOATED PLASTER SURFACES				
	E1			One coat primer and two coats premium quality highly washable and stain resistant acrylic emulsion paint for interior or exterior use. Colour to Engineer's approval. (paint with a minimum of 10 year guarantee to be used)				
2.E1.5.5.68	E1	46.009(a)		Walls	m2	110		
2.E1.5.5.69	E1	46.009(a)		On ceilings	m2	230		
	E1			Miscellaneous trades, fixtures and appliances				
2.E1.5.5.70	E1	46.011		Polyurethane waterproofing	m2	280		
2.E1.5.5.71	E1	46.011		100mm ISO Board high density 34-36kg/m3 rigid extruded polystyrene with tongue and groove joints, or equal approved	m2	60		
2.E1.5.5.72	E1	46.011		Waterpermeable fabric	m2	280		
2.E1.5.5.73	E1	46.011		Painted mild steel swing gate with Clearvu infill panels and heavy duty hinges. Complete with post, size 3 300mm wide X 2400 high	No	2		
2.E1.5.5.74	E1	46.011		Painted mild steel swing gate with Clearvu infill panels and heavy duty hinges. Complete with post, size 4 800mm wide X 2400 high	No	1		
2.E1.5.5.75	E1	46.011		3000mm wide heavy duty motorised combined spike and boom barrier, complete (Alltech Spiketech Grippa), or equal approved	no	2		
2.E1.5.5.76	E1	46.011		Full height heavy duty electromechanical turnstile with biometric access control (Alltech Rotatech FHD90), or equal approved	no	2		
2.E1.5.5.77	E1	46.011		Duct enclosure complete, including locking mechanism	no	1		
2.E1.5.5.78	E1	46.011		Magnetic door lock (300kg) connected to biometric system	no	2		
	E1			PART E1.5.6: GUARDHOUSE 2				
	E1			EARTHWORKS				
	E1			REFER TO DRAWING 2I-C9-050				
	E1			EXCAVATIONS TO STOCKPILE				
2.E1.5.6.1	E1	9.010		Excavation by hand	m3	50		
2.E1.5.6.2	E1	9.009(b)		Rip and recompact 150mm insitu material to 93% Mod AASHTO	m2	70		
	E1			SOIL POISONING				
2.E1.5.6.3	E1	46.011		Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming (Supply of herbicide and ant poison shall be paid for in the provisional sums)	m2	85		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			Backfilling				
2.E1.5.6.4	E1	15.014(a)		Selected backfilling from in-situ material compacted to 93% MOD AASHTO	m3	20		
	E1			SCHEDULED FORMWORK ITEMS				
	E1			Rough				
2.E1.5.6.5	E1	20.001		Sides of bases and surface beds	m2	18		
	E1			Smooth				
2.E1.5.6.6	E1	20.002		Vertical to slab upstands	m2	90		
2.E1.5.6.7	E1	20.002		Horizontal to slab soffits	m2	330		
	E1			Narrow widths				
2.E1.5.6.8	E1	20.005		Up to 300mm wide to columns	m	200		
2.E1.5.6.9	E1	20.005		350mm to slab upstand	m	109		
	E1			SCHEDULED REINFORCEMENT ITEMS				
2.E1.5.6.10	E1	20.007		Steel bars (irrespective of grade or diameter)	t	20		
2.E1.5.6.11	E1	20.008		High tensile welded mesh	m2	23		
	E1			SCHEDULED CONCRETE ITEMS				
	E1			Blinding layer in 15MPa/19mm Concrete				
2.E1.5.6.12	E1	20.011		50mm blinding under bases	m2	15		
	E1			Strength concrete				
2.E1.5.6.13	E1	20.012		Grade 15MPa/19mm mass concrete	m3	5		
2.E1.5.6.14	E1	20.012		Grade 15MPa/19mm topping / screed	m3	25		
	E1			Grade 30MPa/19mm structural concrete				
2.E1.5.6.15	E1	20.012		Slabs, columns and beams	m3	105		
2.E1.5.6.16	E1	20.012		strip footings and aprons	m3	8		
	E1			Unformed surface finishes				
2.E1.5.6.17	E1	20.013(b)		Wood float to surface beds, aprons, slabs and screeds	m2	525		
	E1			Aggregate				
2.E1.5.6.18	E1	20.014		Nom 19mm ballast on roof	m3	11		
	E1			Joints				
2.E1.5.6.19	E1	20.016		Slip joint consisting of 2 layers 0.6mm thick galvanised plate on smooth mortar on 230mm walls	m	25		
2.E1.5.6.20	E1	20.016		Slip joint consisting of 2 layers 0.6mm thick galvanised plate on smooth mortar on 550mm walls	m	12.5		
2.E1.5.6.21	E1	20.016		Construction joints, including shutters	m	35		
2.E1.5.6.22	E1	20.016		Expansion joint including joint filler and sealant	m	60		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			Manufacture (or supply) and erect precast elements				
	E1			Modcon precast concrete solutions finished smooth on exposed surfaces bedded and jointed in class II mortar and pointed on all exposed surfaces. Or equal approved				
2.E1.5.6.23	E1	20.017		Type 006, precast concrete coping, 250mm wide x 160mm high x 96mm to tapered edge.	m	50		
2.E1.5.6.24	E1	20.017		Type 015, precast concrete coping, 380mm wide x 100mm high x 75mm to tapered edge.	m	120		
	E1			Grouting				
2.E1.5.6.25	E1	20.018(a)		Under steel bases	m3	0.5		
	E1			Miscellaneous items				
2.E1.5.6.26	E1	20.020 c)		150 DN Cast iron domed 180 degrees roof full bore outlet (eared) cast-in	No	12		
	E1			SCHEDULED STRUCTURAL STEEL ITEMS				
2.E1.5.6.27	E1	24.001		Supply, fabrication and corrosion protection of steel work, including fabrication drawings, delivery and erection on site. Members to be painted to specification	t	2.5		
	E1			SCHEDULED BUILDING WORKS				
	E1			Prestressed lintels (opening to be spanned stated)				
2.E1.5.6.28	E1	46.003(a)		1.2m span lintels (110mm x 75mm)	m	3		
2.E1.5.6.29	E1	46.003(a)		2m span lintels (110mm x 75mm)	m	2		
	E1			MASONRY				
	E1			Brickwork of NFX BRICKS (14 MPA NOMINAL COMPRESSIVE STRENGTH) IN CLASS I MORTAR				
2.E1.5.6.30	E1	46.004(a)		Half brick walls	m2	15		
2.E1.5.6.31	E1	46.004(a)		One brick walls	m2	70		
2.E1.5.6.32	E1	46.004(a)		Columns (230mm wide wall measured)	m2	35		
2.E1.5.6.33	E1	46.004(a)		550mm wide cavity walls (length of 550mm wide wall measured). Rate to include for wall ties	m2	45		
	E1			FACE BRICKWORK				
	E1			Face brickwork pointed with recessed horizontal and vertical joints. The cost for the supply and delivery of facebrick shall be paid for in Provisional Sums. All other costs related to the installation of the facebrick shall be included in this item (includes all other material). Samples of facebrick to be approved by the Engineer/Architect.				
2.E1.5.6.34	E1	46.004(g)		Extra over brickwork for face brickwork	m2	75		
	E1			Damp proofing				
2.E1.5.6.35	E1	46.004(c)		250 micron polythene sheeting under floor	m2	65		
2.E1.5.6.36	E1	46.004(c)		230mm wide polythene damp proofing in walls (including surface bed level, stone wall coping and around openings)	m	90		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			MASONRY REINFORCING				
2.E1.5.6.37	E1	46.004(f)		Fabric reinforcement and building into joints of one brick walls	m	700		
	E1			STONE CLADDING				
2.E1.5.6.38	E1	46.004(g)		Stone cladding using stone from the excavations (blasting) within the Balancing Reservoir area	m2	35		
	E1			ROOF SHEETING AND SIDE CLADDING				
2.E1.5.6.39	E1	46.005(f)		Concealed fixed, Aluminium Composite Panels by TMS cladding & Louvre solutions or similar , fixed to brickwork via aluminium extruded panel clips, on 20mm extruded mullion hooks, with 20mm shadowline detail between cladding panels, supply and fixed to supplier specification and details	m2	90		
2.E1.5.6.40	E1	46.005(f)		Extra over item above for 550mm wide cladding to the top of the cavity wall	m2	10		
	E1			Carpentry and joinery				
	E1			DOORS ETC				
	E1			REFER TO DRAWING NUMBER 2I-C9-050 (refer to schedules for opening and leaf sizes. Standard sizes to be used)				
2.E1.5.6.41	E1	46.005(e)		Single semi-solid timber door, with 100mm under-cut, with WC type locking mechanism complete as per drawing, size 900 x 2125 high	No	1		
2.E1.5.6.42	E1	46.005(e)		Single, solid, external, 1hr fire rated, framed, ledged, braced and battened timber door, with galvanized sheeting to external face and wrapped around corners of leaf, complete, including cylinder lock with a escutcheon plate locking mechanism, sundry items, striking plates, weather bars, handle set etc as per drawing, size 900 x 2125 high (D1)	No	2		
	E1			IRONMONGERY				
2.E1.5.6.43	E1	46.006(a)		Door Closer: Dorma TS83	No	2		
2.E1.5.6.44	E1	46.006(a)		Magnetic door lock (300kg)	no	2		
	E1			BATHROOM FITTINGS				
2.E1.5.6.45	E1	46.006(a)		"Franke STRX672 Stratos" automatic dispensing toilet roll holder. Or equal approved	No	1		
2.E1.5.6.46	E1	46.006(a)		"Franke STRX618 Stratos" o.e.a. soap dispenser. Or equal approved	No	1		
2.E1.5.6.47	E1	46.006(a)		"Franke STRX600 Stratos" paper towel dispenser. Or equal approved	No	1		
2.E1.5.6.48	E1	46.006(a)		"Franke STRX605 Stratos" o.e.a. waste bin. Or equal approved	No	1		
	E1			MIRRORS,ETC				
	E1			Silvered float glass copper backed mirrors with polished edges, holed for and fixed with round nose chromium plated mirror screws with rubber buffers to plugs in brickwork or concrete				
2.E1.5.6.49	E1	46.006(a)		600w x 750h mm vertically orientated bevelled all round 'GG' with four screws	No	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			Steel windows, doors, etc				
2.E1.5.6.50	E1	46.006(b)		Approved extruded aluminium frames to manufacturer's details, with bullet resistant glazing (fixed) as detailed on window schedules. Refer to drawing 2I-C9-050 for Guardhouse Windows, size 1200 x 1600	No	2		
2.E1.5.6.51	E1	46.006(b)		Approved extruded aluminium frames to manufacturer's details, with bullet resistant glazing as detailed on window schedules with central opening. Refer to drawing 2I-C9-050 for Guardhouse Windows, size 1200 x 1600	No	1		
2.E1.5.6.52	E1	46.006(b)		Approved extruded aluminium frames to manufacturer's details, with obscure glazing as detailed on window schedules. Refer to drawing 2I-C9-050 for Guardhouse Windows, size 600 x 900mm	No	1		
	E1			PRESSED STEEL DOOR FRAMES				
	E1			1,6mm single rebated door frame SABS approved suitable for one brickwall to suite left or right hand door complete with standard butt hinges, brace jambs with timber when building in, fixing lugs must be built into brickwork and frame filled up with cement mortar .				
2.E1.5.6.53	E1	46.006(b)		Frame for door 900 x 2125 high as detailed on drawing no 2I-C9-050	No	3		
	E1			PLASTER, PAVING AND TILES				
2.E1.5.6.54	E1	46.007(a)		On walls	m2	90		
2.E1.5.6.55	E1	46.007(a)		On ceilings	m2	250		
	E1			TILING				
	E1			Approved glazed ceramic wall tiles fixed with approved waterproof adhesive to plaster and flush pointed with approved grout compound (plaster elsewhere). Colour of the tiles to be approved by the Engineer				
2.E1.5.6.56	E1	46.007(b)ii		Skirting (100mm cut from floor tiles)	m	30		
2.E1.5.6.57	E1	46.007(d)		On walls and splash backs	m2	25		
2.E1.5.6.58	E1	46.007(d)		On floor	m2	20		
	E1			SUNDRIES				
	E1			GENESIS				
2.E1.5.6.59	E1	46.011		Brushed stainless steel tile edge trim (quarter round profile) by Kirk Marketing to top and side edges of wall tiling. Or equal approved	m	30		
	E1			PLUMBING AND DRAINAGE				
2.E1.5.6.60	E1	46.008(b)		Plumbing and drainage installed complete	Sum	1		
	E1			SANITARY PLUMBING				
2.E1.5.6.61	E1	46.008(c)		Sanitary plumbing installed complete	Sum	1		
	E1			SANITARY FITTINGS				
	E1			All fittings butting up against wall or floor finishes are to be sealed with an approved silicone sealant to the Engineer's approval. Description of fittings shall be deemed to include the silicone sealant.				
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.E1.5.6.62	E1	46.008(c)		Ceramix Industries ASTRA TA01 closed-coupled washdown floor mounted WC complete with all fixations, mounting brackets and flushing mechanisms. Pan, White - TA0108A. Cistern, Front Flush White - CA0308A including resin seat Mirage Wirquin (2SM08001). Or equal approved	No	1		
2.E1.5.6.63	E1	46.008(c)		"Vaal Potteries" vitreous china 635 x 485 mm rounded "Lotus Basin" o.e.a. with three tap holes mounted on wall with 2 x 10mm anchor bolts (code. 8448Z0) Whb set with 31mm chromium plated whb outlet, with plug, chain, anchor and 32mm backnut complete including CP bottle trap, silico to be provided between basin & wall finish and one Cobra Watertech Gala single lever 15mm chrome single taphole basin mixer with classic handle, plug, chain and waste, flexible connection tubes and angle regulating valves (Code: GA-652). Or equal approved	No	1		
2.E1.5.6.64	E1	46.008(c)		"Franke/Citimetal" stainless steel single end bowl in-set sink Code DT 100E, size 1000 x 457mm including one Cobra Watertech Gala single lever 15mm chrome single taphole basin mixer with classic handle, plug, chain and waste, flexible connection tubes and angle regulating valves (Code: GA-652). Or equal approved	No	1		
	E1			RAINWATER GOODS				
	E1			uPVC gutters and rainwater pipes				
2.E1.5.6.65	E1	46.008(a)		150mm Diameter rainwater pipes	m	60		
2.E1.5.6.66	E1	46.008(a)		Extra over rainwater pipe for bend	No	12		
2.E1.5.6.67	E1	46.008(a)		Extra over rainwater pipe for shoe	No	12		
	E1			PAINTING				
	E1			PAINTWORK, ETC TO NEW WORK				
	E1			ON INTERNAL AND EXTERNAL FLOATED PLASTER SURFACES				
	E1			One coat primer and two coats premium quality highly washable and stain resistant acrylic emulsion paint for interior or exterior use. Colour to Engineer's approval. (paint with a minimum of 10 year guarantee to be used)				
2.E1.5.6.68	E1	46.009(a)		Walls	m2	110		
2.E1.5.6.69	E1	46.009(a)		On ceilings	m2	230		
	E1			Miscellaneous trades, fixtures and appliances				
2.E1.5.6.70	E1	46.011		Polyurethane waterproofing	m2	280		
2.E1.5.6.71	E1	46.011		100mm ISO Board high density 34-36kg/m3 rigid extruded polystyrene with tongue and groove joints, or equal approved	m2	60		
2.E1.5.6.72	E1	46.011		Waterpermeable fabric	m2	280		
2.E1.5.6.73	E1	46.011		Painted mild steel swing gate with Clearvu infill panels and heavy duty hinges. Complete with post, size 3 300mm wide X 2400 high	No	2		
2.E1.5.6.74	E1	46.011		Painted mild steel swing gate with Clearvu infill panels and heavy duty hinges. Complete with post, size 4 800mm wide X 2400 high	No	1		
2.E1.5.6.75	E1	46.011		3000mm wide heavy duty motorised combined spike and boom barrier, complete (Alltech Spiketech Grippa), or equal approved	no	2		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.E1.5.6.76	E1	46.011		Full height heavy duty electromechanical turnstile with biometric access control (Alltech Rotatech FHD90), or equal approved	no	2		
2.E1.5.6.77	E1	46.011		Duct enclosure complete, including locking mechanism	no	1		
2.E1.5.6.78	E1	46.011		Magnetic door lock (300kg) connected to biometric system	no	2		
	E1			PART E1.5: Ancillary works (Carried forward to Summary of Bills)				

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
	E1			PART E1.6: Landscaping and Rehabilitation				
	E1			LANDSCAPING & REHABILITATION				
2.E1.6.1	E1	47.001		Shaping	m2	6 100		
2.E1.6.2	E1	47.007		Furnishing and applying fertilisers	kg	80		
2.E1.6.3	E1	47.011		Preparing topsoil for seeding	m2	6 100		
2.E1.6.4	E1	47.012		Hydro-seeding	ha	0.61		
	E1			Provision of seed				
2.E1.6.5	E1	47.010		Seed type - Anthephora pubescens	kg	0.61		
2.E1.6.6	E1	47.010		Seed type - Cenchrus ciliaris	kg	0.61		
2.E1.6.7	E1	47.010		Seed type - Chloris gayana	kg	6.1		
2.E1.6.8	E1	47.010		Seed type - Cynodon dactylon	kg	1.83		
2.E1.6.9	E1	47.010		Seed type - Digitaria eriantha	kg	7.32		
2.E1.6.10	E1	47.010		Seed type - Enneapogon chenchroides	kg	0.61		
2.E1.6.11	E1	47.010		Seed type - Eragrostis curvula	kg	1.22		
2.E1.6.12	E1	47.010		Seed type - Eragrostis lehmanniana	kg	0.31		
2.E1.6.13	E1	47.010		Seed type - Eragrostis tef	kg	1.83		
2.E1.6.14	E1	47.010		Seed type - Heteropogon contortus	kg	1.83		
2.E1.6.15	E1	47.010		Seed type - Panicum maximum	kg	2.14		
2.E1.6.16	E1	47.010		Seed type - Pogonarthria squarrosa	kg	0.61		
2.E1.6.17	E1	47.016		Provision of temporary erosion control measures	ha	0.61		
2.E1.6.18	E1	47.017		Maintenance of the Temporary Erosion Control Measures	sum	1		
2.E1.6.19	E1	47.018		Maintenance of Vegetation	sum	1		
	E1			PART E1.6: Landscaping and Rehabilitation (Carried forward to Summary of Bills)				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	E1			PART E1.7: Pipe Supply, Delivery and Installation				
2.E1.7.1	E1	32.001 &35.001		Pipes and pipe specials: Design and documentation (As required: For Employer Design)	Sum	1		
2.E1.7.2	E1	37.001		Corrosion protection: PQP and other documentation	Sum	1		
	E1			PIPES				
	E1			MANUFACTURE AND SUPPLY OF PIPES AND DELIVERY TO STORAGE ON SITE (EXCLUDING CORROSION PROTECTION)				
	E1			Grade X52; Ends prepared for site welding				
2.E1.7.3	E1	32.002		1420mm OD pipe, 12mm wall thickness	m	255		
	E1			EXTERNAL PIPE COATING (factory applied):				
	E1			Refer to Section 37: Painting and Corrosion Protection (Clause 37.10.12.4)				
	E1			Option No. 1: Polymer Modified Bitumen (System No 229A/236)				
2.E1.7.4	E1	37.002		1420mm OD pipes	m	255		
	E1			INTERNAL PIPE LINING (factory applied)				
	E1			Refer to Section 37: Painting and Corrosion Protection (Clause 37.10.12.4)				
	E1			Hot applied solvent free epoxy (System No 220)				
2.E1.7.5	E1	37.003		1420mm OD pipes	m	255		
	E1			PIPE SPECIALS				
	E1			MANUFACTURE AND SUPPLY OF PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	E1			BEND/JOINT TYPE NO. 1: HOT APPLIED SOLVENT FREE EPOXY (System No 220) AND POLYMER MODIFIED BITUMEN COATING (System No 229A)				
	E1			Grade X52; Ends prepared for site welding				
	E1			1420mm OD pipe, 12mm wall thickness				
2.E1.7.6	E1	32.003		Bend between 11.25 to and including 22.5 degrees	No	1		
2.E1.7.7	E1	32.003		Bend between 45 to and including 90 degrees	No	2		
	E1			LAY AND WELD STEEL PIPES				
	E1			Grade X52				
2.E1.7.8	E1	33.001		1420mm OD pipe, 12mm wall thickness	m	255		
	E1			INSTALLATION AND TESTING OF PIPE SPECIALS				
	E1			Grade X52				
	E1			1420mm OD pipe, 12mm wall thickness				
2.E1.7.9	E1	33.007		Bend between 11.25 to and including 22.5 degrees	No	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.E1.7.10	E1	33.007		Bend between 45 to and including 90 degrees	No	2		
	E1			SUPPLY AND INSTALL EXTERNAL COATING AND INTERNAL LINING OF PIPE JOINTS (field applied)				
	E1			BEND/JOINT TYPE NO. 1: HOT APPLIED SOLVENT FREE EPOXY (System No 220) AND POLYMER MODIFIED BITUMEN COATING (System No 276)				
2.E1.7.11	E1	37.004		1420mm OD pipe	No	22		
	E1			BEDDING REQUIREMENT SPECIFIC FOR POLYMER MODIFIED BITUMEN COATING				
2.E1.7.12	E1	15.013	X	Extra over 15.003(b), 15.003(d), 15.004(b), 15.004(d), 15.005(b), 15.005(d), 15.006(b) and 15.006(d) for crushing and screening of material	m3	1 355		
	E1			HYDROSTATIC TESTING				
2.E1.7.13	E1	33.008(a)		1420mm OD pipe, 12mm wall thickness	km	0.26		
	E1			PIPE LINING INTEGRITY TESTING				
2.E1.7.14	E1	33.009		1420mm OD as specified on drawing	m	255		
	E1			PIPE COATING INTEGRITY SURVEYS				
2.E1.7.15	E1	33.010		1420mm OD as specified on drawing	m	255		
	E1			MARKER POSTS				
2.E1.7.16	E1	33.012		As detailed on the drawing No 2A-C6-114	no	3		
	E1			BENCHMARK AND TRIANGULATION BEACONS				
2.E1.7.17	E1	33.013(a)		Survey	Sum	1		
2.E1.7.18	E1	33.013(b)		Benchmark and beacons	No	16		
	E1			PART E1.7: Pipe Supply, Delivery and Installation (Carried forward to Summary of Bills)				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	E1			PART E1.8: Pipeline Earthworks				
	E1			SITE CLEARANCE				
	E1			Clearing				
2.E1.8.1	E1	7.001(a)		Clearing	ha	1.5		
2.E1.8.2	E1	7.001(b)		Removal of boulders	m3	74		
2.E1.8.3	E1	7.002		Grubbing and removal of trees of girth up to and including 1m	ha	1.5		
2.E1.8.4	E1	7.003		Grubbing and removal of trees of girth over 1m	No	15		
	E1			Removal of topsoil				
2.E1.8.5	E1	7.004(a)		For pipelines, temporary stockpiling to windrows or stockpile alongside the pipeline and construction servitude	m3	1960		
	E1			Removal of fertile soil				
2.E1.8.6	E1	7.005(a)		For pipelines, temporary stockpile alongside the pipeline and construction servitude	m3	435		
2.E1.8.7	E1	7.007		Demolishing and disposal of structures and reinforced concrete	m3	20		
2.E1.8.8	E1	7.008		Moving Existing Rock Stockpile from Previous Project/Phase to Provide Working Space	m3	20		
2.E1.8.9	E1	7.009		Mulching	ha	1.5		
	E1			Overhaul				
2.E1.8.10	E1	7.006(a)		Between 1km up to and including 3km	m3	90		
2.E1.8.11	E1	7.006(b)		Between 3km up to and including 5km	m3	60		
2.E1.8.12	E1	7.006(c)		Between 5km up to and including 7km	m3	20		
	E1			DEALING WITH WATER				
				For all works included in PART E for Pipeline Earthworks				
2.E1.8.13	E1	8.001		Dealing with water	Sum	1		
2.E1.8.14	E1	8.002		Treatment of water	Sum	1		
2.E1.8.15	E1	8.003		Water monitoring	Sum	1		
2.E1.8.16	E1	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	E1			PIPE TRENCH EXCAVATIONS				
	E1			EXCAVATE IN ALL MATERIALS TO SPECIFIED LEVELS AND BATTERED SLOPES, INCLUDING TEMPORARY STOCKPILING AND LEVELLING ALONGSIDE EXCAVATIONS WITHIN THE CONFINES OF THE PIPE SERVITUDE				
	E1			Classified trench excavations:				
	E1			Within the freehaul distance				
2.E1.8.17	E1	9.012		Over 2m and up to 3m deep	m3	1150.00		
2.E1.8.18	E1	9.012		Over 3m and up to 4m deep	m3	150.00		
2.E1.8.19	E1	9.012		Over 4m and up to 5m deep	m3	230.00		
2.E1.8.20	E1	9.012		Over 5m and up to 6m deep	m3	695.00		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.E1.8.21	E1	9.012		Over 6m and up to 7m deep	m3	1740.00		
2.E1.8.22	E1	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	1045		
2.E1.8.23	E1	9.025		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (by non-explosive means)	m3	116		
2.E1.8.24	E1	9.020		Compaction of trench bottom	m2	965		
	E1			EXCAVATION ANCILLARIES				
2.E1.8.25	E1	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to designated spoil sites	m3	50		
2.E1.8.26	E1	9.015		Excavate by hand in soft material to expose existing services	m3	50		
2.E1.8.27	E1	9.021		Excavation by hand	m3	50		
	E1			OVERHAUL				
2.E1.8.28	E1	9.023(a)		Between 1km up to and including 3km	m3	153		
2.E1.8.29	E1	9.023(e)		Between 9km up to and including 11km	m3	1992		
	E1			PROVIDE AND USE OF SPECIALIST TEAM AND EQUIPMENT FOR THE DETECTION OF UNDERGROUND SERVICES				
2.E1.8.30	E1	9.017(a)		Provide the team and equipment	Sum	1		
2.E1.8.31	E1	9.017(b)		Use, operate and maintain equipment	day	2		
2.E1.8.32	E1	9.017(c)		Remove the team and equipment	Sum	1		
	E1			EXISTING SERVICES THAT INTERSECT OR ADJOIN A PIPE TRENCH				
2.E1.8.33	E1	9.018(a)		Services that intersect a pipe trench	No	1		
2.E1.8.34	E1	9.018(b)		Services that adjoin a trench	m	25		
2.E1.8.35	E1	9.022		Slurry trenches / curtain walls	m2	130		
2.E1.8.36	E1	9.024		Excavation of test pits	No	15		
	E1			BACKFILLING AND BEDDING				
	E1			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	E1			Provision of bed material				
2.E1.8.37	E1	15.003(c)		Material from the nearest borrow pit without screening	m3	40		
2.E1.8.38	E1	15.003(d)		Material from the nearest borrow pit with screening	m3	155		
	E1			Provision of bedding cradle material				
2.E1.8.39	E1	15.004(c)		Material from the nearest borrow pit without screening	m3	50		
2.E1.8.40	E1	15.004(d)		Material from the nearest borrow pit with screening	m3	185		
2.E1.8.41	E1	15.004(e)		Material from commercial sources	m3	25		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			Provision of soilcrete				
2.E1.8.42	E1	15.005(a)		Material without screening from trenches	m3	3		
2.E1.8.43	E1	15.005(b)		Material with screening from trenches	m3	5		
2.E1.8.44	E1	15.005(c)		Material from the nearest borrow pit without screening	m3	13		
2.E1.8.45	E1	15.005(d)		Material from the nearest borrow pit with screening	m3	6		
	E1			Provision of selected fill blanket				
2.E1.8.46	E1	15.006(a)		Material without screening from trenches	m3	3		
2.E1.8.47	E1	15.006(b)		Material with screening from trenches	m3	10		
2.E1.8.48	E1	15.006(c)		Material from the nearest borrow pit without screening	m3	170		
2.E1.8.49	E1	15.006(d)		Material from the nearest borrow pit with screening	m3	665		
2.E1.8.50	E1	15.006(e)		Material from commercial sources	m3	50		
	E1			Provision of main backfill material				
2.E1.8.51	E1	15.007(a)		Backfill material from trench excavation	m3	1485		
2.E1.8.52	E1	15.007(b)		Backfill material from the nearest borrow pit	m3	433		
	E1			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.E1.8.53	E1	15.001		Bed material	m3	195		
2.E1.8.54	E1	15.001		Bedding cradle	m3	260		
2.E1.8.55	E1	15.001		Selected fill blanket	m3	898		
2.E1.8.56	E1	15.001		Main backfill	m3	1875		
2.E1.8.57	E1	15.001		Fertile soil	m3	435		
2.E1.8.58	E1	47.005		Top soil	m3	1960		
2.E1.8.59	E1	15.002(a)		Soilcrete bed and bedding cradle	m3	11		
2.E1.8.60	E1	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	11		
2.E1.8.61	E1	15.002(b)		Cement stabilised soil collars (soilcrete)	m3	5		
	E1			PROVISION OF MATERIAL TO REPLACE UNSUITABLE MATERIAL FROM TRENCH BOTTOM OR TO PROVIDE SUPPORTING EARTHWORKS				
2.E1.8.62	E1	15.011(b)		From borrow pits	m3	50		
	E1			Placing of Material				
2.E1.8.63	E1	15.012		Placing of material to replace unsuitable material from trench bottom or to provide supporting earthworks	m3	50		
	E1			SUBSOIL DRAINAGE				
	E1			Crushed stone				
2.E1.8.64	E1	15.008(a)		Supply and place crushed stone for Layer no 1	m3	20		
2.E1.8.65	E1	15.008(c)		Supply and place well graded compacted dump rock for Layer no 2	m3	35		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			Geotextile				
2.E1.8.66	E1	15.008(b)		Supply and place geotextile for Layer no 1	m2	170		
2.E1.8.67	E1	15.008(d)		Supply and place geotextile for Layer no 2	m2	180		
	E1			ENCASING OF PIPES IN CONCRETE				
2.E1.8.68	E1	15.009(a)		Concrete strength grade 30/19	m3	15		
2.E1.8.69	E1	15.009(b)		Reinforcement	t	2		
	E1			OVERHAUL				
2.E1.8.70	E1	15.010(e)		Between 9km up to and including 11km	m3	1765		
	E1			PART E1.8: Pipeline Earthworks Total (Carried forward to Summary of Bills)				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	E1			PART E1.9: Valve installations, chambers and manifolds				
	E1			SINGLE AIR VALVE INSTALLATION				
	E1			REFER TO DRAWING 2A-C6-141 and 2A-C6-142				
	E1			EARTHWORKS				
	E1			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS, THRUST BLOCKS, ETC				
2.E1.9.1	E1	9.013		Excavate for valve chambers	m3	7		
	E1			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	E1			Provision of cement stabilised soil				
2.E1.9.2	E1	15.003(d)		Material from the nearest borrow pit with screening	m3	9		
2.E1.9.3	E1	15.003(e)		Cement for stabilisation of soil	m3	1		
	E1			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.E1.9.4	E1	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	9		
	E1			OVERHAUL				
2.E1.9.5	E1	15.010(a)		Between 1km up to and including 3km	m3	5		
2.E1.9.6	E1	15.010(b)		Between 3km up to and including 5km	m3	5		
	E1			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.E1.9.7	E1	15.014(a)		Structure backfilling compacted	m3	10		
2.E1.9.8	E1	15.014(a)		Embankment backfilling compacted	m3	19		
2.E1.9.9	E1	15.015		Finishing of slopes	m2	31		
	E1			OVERHAUL				
2.E1.9.10	E1	15.016(b)		Between 3km up to and including 5km	m3	12		
2.E1.9.11	E1	15.016(c)		Between 5km up to and including 7km	m3	12		
	E1			CONCRETE WORKS				
	E1			ROUGH FORMWORK				
	E1			Vertical surfaces				
2.E1.9.12	E1	20.001		Sides of floor slab	m2	5		
2.E1.9.13	E1	20.001		Sides of walls	m2	12		
	E1			SMOOTH FORMWORK				
	E1			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.E1.9.14	E1	20.002		Underside of slabs	m2	3		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			SMOOTH FORMWORK				
	E1			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.E1.9.15	E1	20.002		Walls	m2	30		
2.E1.9.16	E1	20.002		Side of Sump walls	m2	0.5		
2.E1.9.17	E1	20.005		Narrow widths - Up to 200mm high	m	8		
	E1			Box-out holes/Form voids (for sleeves only)				
	E1			a) Small, circular, of diameter up to and including 0.35 m				
2.E1.9.18	E1	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	2		
	E1			REINFORCEMENT				
2.E1.9.19	E1	20.007		Steel bars (irrespective of grade or diameter)	t	1.5		
	E1			CONCRETE				
	E1			CONCRETE 15 MPa/19mm in:				
2.E1.9.20	E1	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	11		
2.E1.9.21	E1	20.011(b)		Mass concrete filling where required by the engineer	m3	1		
2.E1.9.22	E1	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	5		
	E1			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.E1.9.23	E1	20.010		Foundations, bases, floor slabs and roof slabs	m3	4		
2.E1.9.24	E1	20.010		Walls	m3	6		
	E1			UNFORMED SURFACE FINISHES				
2.E1.9.25	E1	20.013(a)		Wood floated finish	m2	5		
2.E1.9.26	E1	20.013(b)		Steel floated finish	m2	10		
	E1			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	E1			PN10				
2.E1.9.27	E1	32.003		Item 1	No	1		
2.E1.9.28	E1	32.003		Item 2	No	1		
2.E1.9.29	E1	35.002		Item 3	No	1		
2.E1.9.30	E1	35.002		Item 4	No	1		
	E1			INSTALLATION OF VALVES AND SPECIALS				
	E1			PN10				
2.E1.9.31	E1	33.004		Item 1	No	1		
2.E1.9.32	E1	33.004		Item 2	No	1		
2.E1.9.33	E1	33.004		Item 3	No	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.E1.9.34	E1	33.004		Item 4	No	1		
	E1			ITEMS CAST OR BUILT INTO CONCRETE				
2.E1.9.35	E1	33.005		Steel pipe diameter 700mm	No	1		
	E1			SUPPLY AND ERECT PRECAST ELEMENTS				
	E1			Refer to Dwg 2A-C6-141 and 2A-C6-142				
2.E1.9.36	E1	20.017		Precast slab Type 1	No	2		
	E1			ANCILLARY WORKS				
2.E1.9.37	E1	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	1		
2.E1.9.38	E1	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	1		
2.E1.9.39	E1	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.E1.9.40	E1	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.E1.9.41	E1	20.021 c)		110mm diam uPVC pipe cast into concrete wall for the sump	No	1		
2.E1.9.42	E1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 700mm	No	1		
2.E1.9.43	E1	20.014		19mm aggregate/stone	m3	1		
2.E1.9.44	E1	20.021 c)		Vermin mesh to be applied to opening as per drawing Reg. No. 2A-C6-125	No	2		
	E1			SPECIFIC ITEMS OF WORK				
	E1			SEALING STRIPS, JOINT SEALANT, ETC				
2.E1.9.45	E1	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	6		
	E1			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	E1			Foundation trench excavation and backfilling				
2.E1.9.46	E1	21.001(b)		In all other classes of material	m3	1		
2.E1.9.47	E1	21.002		Surface preparation for bedding the gabions	m2	1		
2.E1.9.48	E1	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	6		
	E1			FLOW METER INSTALLATION				
	E1			REFER TO DRAWING 2A-C6-168 and 2A-C6-169				
	E1			EARTHWORKS				
	E1			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS, THRUST BLOCKS, ETC				
2.E1.9.49	E1	9.013		Excavate for valve chambers	m3	57		
2.E1.9.50	E1	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.E1.9.51	E1	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance.	m3	2		
2.E1.9.52	E1	9.020		Compaction of trench bottom (150mm thick)	m2	20		
	E1			OVERHAUL				
2.E1.9.53	E1	9.023(a)		Between 1km up to and including 3km	m3	1		
2.E1.9.54	E1	9.023(b)		Between 3km up to and including 5km	m3	1		
	E1			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	E1			Provision of bed material (G5)				
2.E1.9.55	E1	15.003(c)		Material from the nearest borrow pit without screening	m3	3		
	E1			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.E1.9.56	E1	15.001		Placing of bedding material	m3	3		
	E1			OVERHAUL				
2.E1.9.57	E1	15.010(c)		Between 5km up to and including 7km	m3	3		
	E1			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.E1.9.58	E1	15.014(a)		Structure backfilling compacted	m3	63		
2.E1.9.59	E1	15.014(b)		Rockfill processing and compaction	m3	2		
	E1			OVERHAUL				
2.E1.9.60	E1	15.016(b)		Between 3km up to and including 5km	m3	5		
2.E1.9.61	E1	15.016(c)		Between 5km up to and including 7km	m3	5		
	E1			CONCRETE WORKS				
	E1			ROUGH FORMWORK				
	E1			Vertical surfaces				
2.E1.9.62	E1	20.001		Sides of floor slab	m2	5		
2.E1.9.63	E1	20.001		Sides of walls	m2	29		
	E1			SMOOTH FORMWORK				
	E1			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.E1.9.64	E1	20.002		Underside of slabs	m2	6		
	E1			SMOOTH FORMWORK				
	E1			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.E1.9.65	E1	20.002		Walls	m2	78		
2.E1.9.66	E1	20.002		Side of Sump walls	m2	0.5		
2.E1.9.67	E1	20.002		Plinths	m2	4		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.E1.9.68	E1	20.005		Narrow widths - Up to 200mm high	m	18		
	E1			Box-out holes/Form voids (for sleeves only)				
	E1			a) Small, circular, of diameter up to and including 0.35 m				
2.E1.9.69	E1	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	8		
	E1			REINFORCEMENT				
2.E1.9.70	E1	20.007		Steel bars (irrespective of grade or diameter)	t	3.3		
	E1			CONCRETE				
	E1			CONCRETE 15 MPa/19mm in:				
2.E1.9.71	E1	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	17		
2.E1.9.72	E1	20.011(b)		Mass concrete filling where required by the engineer	m3	1		
2.E1.9.73	E1	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	10		
	E1			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.E1.9.74	E1	20.010		Foundations, bases, floor slabs and roof slabs	m3	7		
2.E1.9.75	E1	20.010		Plinths (Including grouting between the plinth and the pipes/specials where required)	m3	1		
2.E1.9.76	E1	20.010		Walls	m3	14		
	E1			UNFORMED SURFACE FINISHES				
2.E1.9.77	E1	20.013(a)		Wood floated finish	m2	10		
2.E1.9.78	E1	20.013(b)		Steel floated finish	m2	19		
	E1			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	E1			PN40				
2.E1.9.79	E1	32.003		Item 1	No	1		
2.E1.9.80	E1	32.003		Item 2	No	1		
2.E1.9.81	E1	36.8.2(c)		Item 3	No	1		
2.E1.9.82	E1	32.003		Item 4	No	1		
2.E1.9.83	E1	32.003		Item 5	No	1		
2.E1.9.84	E1	32.003		Item 6	No	1		
	E1			INSTALLATION OF VALVES AND SPECIALS				
	E1			PN40				
2.E1.9.85	E1	33.004		Item 1	No	1		
2.E1.9.86	E1	33.004		Item 2	No	1		
2.E1.9.87	E1	33.004		Item 3	No	1		
2.E1.9.88	E1	33.004		Item 4	No	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.E1.9.89	E1	33.004		Item 5	No	1		
2.E1.9.90	E1	33.004		Item 6	No	1		
	E1			ITEMS CAST OR BUILT INTO CONCRETE				
2.E1.9.91	E1	33.005		Steel pipe diameter 900mm up to 1500mm	No	2		
	E1			SUPPLY AND ERECT PRECAST ELEMENTS				
	E1			Refer to Dwg 2A-C6-168 and 2A-C6-169				
2.E1.9.92	E1	20.017		Precast slab Type 1	No	2		
	E1			ANCILLARY WORKS				
2.E1.9.93	E1	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	1		
2.E1.9.94	E1	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	1		
2.E1.9.95	E1	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.E1.9.96	E1	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.E1.9.97	E1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 1420mm	No	2		
2.E1.9.98	E1	20.021 c)		Vermine mesh to be applied to opening as per drawing Reg. No. 2A-C6-125	No	2		
2.E1.9.99	E1	20.021 c)		Sleeves to be grouted after the installation of cables to ensure no seepage 160mm diam x 0.3mm thick	No	6		
2.E1.9.100	E1	20.021 c)		Drilling for dowels and including grouting in of dowels, per one chamber complete, as per drawing 2A-C6-125. (Dowel material included in 20.007)	No	1		
2.E1.9.101	E1	20.021 c)		10mm Neoprene, as per drawing 2A-C6-125	m ²	1		
	E1			SPECIFIC ITEMS OF WORK				
	E1			SEALING STRIPS, JOINT SEALANT, ETC				
2.E1.9.102	E1	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	10		
	E1			NON-RETURN AND ISOLATING VALVE CHAMBER (along the High Lift Rising Main)				
	E1			REFER TO DRAWING 2A-C6-170 and 2A-C6-171				
	E1			EARTHWORKS				
	E1			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS, THRUST BLOCKS, ETC				
2.E1.9.103	E1	9.013		Excavate for valve chambers	m ³	144		
2.E1.9.104	E1	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m ³	12		
2.E1.9.105	E1	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance.	m ³	4		
2.E1.9.106	E1	9.020		Compaction of trench bottom (150mm thick)	m ²	46		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			OVERHAUL				
2.E1.9.107	E1	9.023(a)		Between 1km up to and including 3km	m3	15		
2.E1.9.108	E1	9.023(b)		Between 3km up to and including 5km	m3	15		
2.E1.9.109	E1	9.023(c)		Between 5km up to and including 7km	m3	15		
	E1			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	E1			Provision of bed material (G5)				
2.E1.9.110	E1	15.003(c)		Material from the nearest borrow pit without screening	m3	7		
	E1			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.E1.9.111	E1	15.001		Placing of bedding material	m3	7		
	E1			OVERHAUL				
2.E1.9.112	E1	15.010(c)		Between 5km up to and including 7km	m3	7		
	E1			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.E1.9.113	E1	15.014(a)		Structure backfilling compacted	m3	101		
2.E1.9.114	E1	15.014(b)		Rockfill processing and compaction	m3	4		
	E1			OVERHAUL				
2.E1.9.115	E1	15.016(b)		Between 3km up to and including 5km	m3	2		
2.E1.9.116	E1	15.016(c)		Between 5km up to and including 7km	m3	2		
	E1			CONCRETE WORKS				
	E1			ROUGH FORMWORK				
	E1			Vertical surfaces				
2.E1.9.117	E1	20.001		Sides of floor slab	m2	8		
2.E1.9.118	E1	20.001		Sides of walls	m2	48		
	E1			SMOOTH FORMWORK				
	E1			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.E1.9.119	E1	20.002		Underside of slabs	m2	10		
	E1			SMOOTH FORMWORK				
	E1			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.E1.9.120	E1	20.002		Walls	m2	133		
2.E1.9.121	E1	20.002		Side of Sump walls	m2	0.5		
2.E1.9.122	E1	20.002		Plinths	m2	6		
2.E1.9.123	E1	20.005		Narrow widths - Up to 200mm high	m	25		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			Box-out holes/Form voids (for sleeves only)				
	E1			a) Small, circular, of diameter up to and including 0.35 m				
2.E1.9.124	E1	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	6		
	E1			REINFORCEMENT				
2.E1.9.125	E1	20.007		Steel bars (irrespective of grade or diameter)	t	6.8		
	E1			CONCRETE				
	E1			CONCRETE 15 MPa/19mm in:				
2.E1.9.126	E1	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	42		
2.E1.9.127	E1	20.011(b)		Mass concrete filling where required by the engineer	m3	1		
2.E1.9.128	E1	46.007(b)i)		100mm thick granolithic screed laid to fall to direction of sump.	m2	28		
	E1			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.E1.9.129	E1	20.010		Foundations, bases, floor slabs and roof slabs	m3	16		
2.E1.9.130	E1	20.010		Plinths (Including grouting between the plinth and the pipes/specials where required)	m3	1		
2.E1.9.131	E1	20.010		Walls	m3	28		
	E1			UNFORMED SURFACE FINISHES				
2.E1.9.132	E1	20.013(a)		Wood floated finish	m2	28		
2.E1.9.133	E1	20.013(b)		Steel floated finish	m2	44		
	E1			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	E1			PN40				
2.E1.9.134	E1	32.003		Item 1	No	2		
2.E1.9.135	E1	32.003		Item 2	No	1		
2.E1.9.136	E1	32.003		Item 3	No	1		
2.E1.9.137	E1	35.002		Item 4	No	1		
2.E1.9.138	E1	32.003		Item 5	No	1		
2.E1.9.139	E1	35.002		Item 6	No	1		
2.E1.9.140	E1	32.003		Item 7	No	1		
2.E1.9.141	E1	32.003		Item 8	No	1		
2.E1.9.142	E1	35.002		Item 9	No	1		
2.E1.9.143	E1	35.002		Item 10	No	1		
2.E1.9.144	E1	32.003		Item 13	No	2		
2.E1.9.145	E1	35.002		Item 14	No	1		
2.E1.9.146	E1	32.003		Item 15	No	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.E1.9.147	E1	32.003		Item 16	No	1		
2.E1.9.148	E1	32.003		Item 17	No	1		
	E1			INSTALLATION OF VALVES AND SPECIALS				
	E1			PN40				
2.E1.9.149	E1	33.004		Item 1	No	2		
2.E1.9.150	E1	33.004		Item 2	No	1		
2.E1.9.151	E1	33.004		Item 3	No	1		
2.E1.9.152	E1	33.004		Item 4	No	1		
2.E1.9.153	E1	33.004		Item 5	No	1		
2.E1.9.154	E1	33.004		Item 6	No	1		
2.E1.9.155	E1	33.004		Item 7	No	1		
2.E1.9.156	E1	33.004		Item 8	No	1		
2.E1.9.157	E1	33.004		Item 9	No	1		
2.E1.9.158	E1	33.004		Item 10	No	1		
2.E1.9.159	E1	33.004		Item 13	No	2		
2.E1.9.160	E1	33.004		Item 14	No	1		
2.E1.9.161	E1	33.004		Item 15	No	1		
2.E1.9.162	E1	33.004		Item 16	No	1		
2.E1.9.163	E1	33.004		Item 17	No	1		
	E1			ITEMS CAST OR BUILT INTO CONCRETE				
2.E1.9.164	E1	33.005		Steel pipe diameter 900mm up to 1500mm	No	2		
	E1			SUPPLY AND ERECT PRECAST ELEMENTS				
	E1			Refer to Dwg 2A-C6-170 and 2A-C6-171				
2.E1.9.165	E1	20.017		Precast slab Type 1	No	9		
	E1			ANCILLARY WORKS				
2.E1.9.166	E1	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	1		
2.E1.9.167	E1	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	1		
2.E1.9.168	E1	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.E1.9.169	E1	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.E1.9.170	E1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 1200mm	No	2		
2.E1.9.171	E1	20.021 c)		Sleeves to be grouted after the installation of cables to ensure no seepage 160mm diam x 0.3mm thick	No	6		
2.E1.9.172	E1	20.021 c)		Portable aluminium steps complete, as per drawing 2A-C6-125	No	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.E1.9.173	E1	20.021 c)		Drilling for dowels and including grouting in of dowels, per one chamber complete, as per drawing 2A-C6-125. (Dowel material included in 20.007)	No	1		
2.E1.9.174	E1	20.021 c)		10mm Neoprene, as per drawing 2A-C6-125	m²	1		
	E1			SPECIFIC ITEMS OF WORK				
	E1			SEALING STRIPS, JOINT SEALANT, ETC				
2.E1.9.175	E1	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	46		
	E1			SINGLE SCOUR VALVE INSTALLATION (for 1400 to 1600mm diam pipeline)				
	E1			REFER TO DRAWING 2A-C6-148 and 2A-C6-149				
	E1			EARTHWORKS				
	E1			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS, THRUST BLOCKS, ETC				
2.E1.9.176	E1	9.013		Excavate for valve chambers	m3	103		
2.E1.9.177	E1	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	8		
2.E1.9.178	E1	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance.	m3	3		
2.E1.9.179	E1	9.020		Compaction of trench bottom (150mm thick)	m2	26		
	E1			OVERHAUL				
2.E1.9.180	E1	9.023(a)		Between 1km up to and including 3km	m3	11		
2.E1.9.181	E1	9.023(b)		Between 3km up to and including 5km	m3	11		
2.E1.9.182	E1	9.023(c)		Between 5km up to and including 7km	m3	11		
	E1			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	E1			Provision of bed material (G5)				
2.E1.9.183	E1	15.003(c)		Material from the nearest borrow pit without screening	m3	4		
	E1			Provision of cement stabilised soil				
2.E1.9.184	E1	15.003(d)		Material from the nearest borrow pit with screening	m3	15		
2.E1.9.185	E1	15.003(e)		Cement for stabilisation of soil	m3	1		
	E1			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.E1.9.186	E1	15.001		Placing of bedding material	m3	4		
2.E1.9.187	E1	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	15		
	E1			OVERHAUL				
2.E1.9.188	E1	15.010(b)		Between 3km up to and including 5km	m3	10		
2.E1.9.189	E1	15.010(c)		Between 5km up to and including 7km	m3	10		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	E1			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.E1.9.190	E1	15.014(a)		Structure backfilling compacted	m3	79		
2.E1.9.191	E1	15.014(a)		Embankment backfilling compacted	m3	22		
2.E1.9.192	E1	15.014(b)		Rockfill processing and compaction	m3	3		
2.E1.9.193	E1	15.015		Finishing of slopes	m2	36		
	E1			OVERHAUL				
2.E1.9.194	E1	15.016(b)		Between 3km up to and including 5km	m3	2		
2.E1.9.195	E1	15.016(c)		Between 5km up to and including 7km	m3	2		
	E1			CONCRETE WORKS				
	E1			ROUGH FORMWORK				
	E1			Vertical surfaces				
2.E1.9.196	E1	20.001		Sides of floor slab	m2	7		
2.E1.9.197	E1	20.001		Sides of walls	m2	42		
	E1			SMOOTH FORMWORK				
	E1			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.E1.9.198	E1	20.002		Underside of slabs	m2	9		
	E1			SMOOTH FORMWORK				
	E1			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.E1.9.199	E1	20.002		Walls	m2	135		
2.E1.9.200	E1	20.002		Side of Sump walls	m2	0.5		
2.E1.9.201	E1	20.002		Plinths	m2	4		
2.E1.9.202	E1	20.005		Narrow widths - Up to 250mm high (roof slabs)	m	25		
	E1			Box-out holes/Form voids (for sleeves only)				
	E1			a) Small, circular, of diameter up to and including 0.35 m				
2.E1.9.203	E1	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	6		
	E1			REINFORCEMENT				
2.E1.9.204	E1	20.007		Steel bars (irrespective of grade or diameter)	t	5		
	E1			CONCRETE				
	E1			CONCRETE 15 MPa/19mm in:				
2.E1.9.205	E1	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	22		
2.E1.9.206	E1	20.011(b)		Mass concrete filling where required by the engineer	m3	1		
2.E1.9.207	E1	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	13		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.E1.9.208	E1	20.010		Foundations, bases, floor slabs and roof slabs	m3	9		
2.E1.9.209	E1	20.010		Plinths (Including grouting between the plinth and the pipes/specials where required)	m3	1		
2.E1.9.210	E1	20.010		Walls	m3	23		
	E1			UNFORMED SURFACE FINISHES				
2.E1.9.211	E1	20.013(a)		Wood floated finish	m2	13		
2.E1.9.212	E1	20.013(b)		Steel floated finish	m2	26		
	E1			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	E1			PN40				
2.E1.9.213	E1	32.003		Item 1	No	1		
2.E1.9.214	E1	35.002		Item 2	No	2		
2.E1.9.215	E1	32.003		Item 3	No	1		
2.E1.9.216	E1	32.003		Item 4	No	1		
2.E1.9.217	E1	32.003		Item 5	No	1		
2.E1.9.218	E1	32.003		Item 6	No	1		
2.E1.9.219	E1	32.003		Item 7	No	1		
2.E1.9.220	E1	35.002		Item 8	No	1		
2.E1.9.221	E1	32.003		Item 9	No	1		
2.E1.9.222	E1	35.002		Item 10	No	1		
	E1			INSTALLATION OF VALVES AND SPECIALS				
	E1			PN40				
2.E1.9.223	E1	33.004		Item 1	No	1		
2.E1.9.224	E1	33.004		Item 2	No	2		
2.E1.9.225	E1	33.004		Item 3	No	1		
2.E1.9.226	E1	33.004		Item 4	No	1		
2.E1.9.227	E1	33.004		Item 5	No	1		
2.E1.9.228	E1	33.004		Item 6	No	1		
2.E1.9.229	E1	33.004		Item 7	No	1		
2.E1.9.230	E1	33.004		Item 8	No	1		
2.E1.9.231	E1	33.004		Item 9	No	1		
2.E1.9.232	E1	33.004		Item 10	No	1		
	E1			ITEMS CAST OR BUILT INTO CONCRETE				
2.E1.9.233	E1	33.005		Steel pipe diameter 900mm up to 1500mm	No	2		
2.E1.9.234	E1	33.005		Steel pipe diameter 300mm	No	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			SUPPLY AND ERECT PRECAST ELEMENTS				
	E1			Refer to Dwg 2A-C6-148 and 2A-C6-149				
2.E1.9.235	E1	20.017		Precast slab Type 1	No	1		
2.E1.9.236	E1	20.017		Precast slab Type 2	No	1		
	E1			ANCILLARY WORKS				
2.E1.9.237	E1	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	2		
2.E1.9.238	E1	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	2		
2.E1.9.239	E1	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.E1.9.240	E1	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.E1.9.241	E1	20.021 c)		Steel bars as per drawing Reg. No.2A-C6-125	No	1		
2.E1.9.242	E1	20.021 c)		160mm diam uPVC pipe cast into concrete wall for the sump	No	2		
2.E1.9.243	E1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 300mm	No	1		
2.E1.9.244	E1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 1420mm	No	2		
2.E1.9.245	E1	20.021 c)		Sleeves to be grouted after the installation of cables to ensure no seepage 160mm diam x 0.3mm thick	No	3		
2.E1.9.246	E1	20.021 c)		Drilling for dowels and including grouting in of dowels, per one chamber complete, as per drawing 2A-C6-125. (Dowel material included in 20.007)	No	1		
2.E1.9.247	E1	20.021 c)		10mm Neoprene, as per drawing 2A-C6-125	m ²	1		
	E1			SPECIFIC ITEMS OF WORK				
	E1			SEALING STRIPS, JOINT SEALANT, ETC				
2.E1.9.248	E1	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	9		
	E1			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	E1			Foundation trench excavation and backfilling				
2.E1.9.249	E1	21.001(b)		In all other classes of material	m3	29		
2.E1.9.250	E1	21.002		Surface preparation for bedding the gabions	m2	25		
2.E1.9.251	E1	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	24		
2.E1.9.252	E1	21.003(a)		Galvanised gabions cages (Refer to drawings for dimensions)	m3	4		
2.E1.9.253	E1	21.003(c)		Galvanised gabions mattresses (Refer to drawings for dimensions)	m3	3		
2.E1.9.254	E1	27.009		Rip-rap	m3	5		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			FIRE WATER INSTALLATION AT THE HIGH LIFT PUMP STATION				
	E1			REFER TO DRAWING 2E-C5-055 and 2E-C5-056				
	E1			EARTHWORKS				
	E1			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS, THRUST BLOCKS, ETC				
2.E1.9.255	E1	9.013		Excavate for valve chambers	m3	116		
2.E1.9.256	E1	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance.	m3	2		
2.E1.9.257	E1	9.020		Compaction of trench bottom (150mm thick)	m2	22		
	E1			OVERHAUL				
2.E1.9.258	E1	9.023(a)		Between 1km up to and including 3km	m3	16		
2.E1.9.259	E1	9.023(b)		Between 3km up to and including 5km	m3	16		
2.E1.9.260	E1	9.023(c)		Between 5km up to and including 7km	m3	16		
	E1			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	E1			Provision of bed material (G5)				
2.E1.9.261	E1	15.003(c)		Material from the nearest borrow pit without screening	m3	4		
	E1			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.E1.9.262	E1	15.001		Placing of bedding material	m3	4		
	E1			OVERHAUL				
2.E1.9.263	E1	15.010(b)		Between 3km up to and including 5km	m3	2		
2.E1.9.264	E1	15.010(c)		Between 5km up to and including 7km	m3	2		
	E1			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.E1.9.265	E1	15.014(a)		Structure backfilling compacted	m3	70		
2.E1.9.266	E1	15.014(b)		Rockfill processing and compaction	m3	3		
	E1			OVERHAUL				
2.E1.9.267	E1	15.016(b)		Between 3km up to and including 5km	m3	1		
2.E1.9.268	E1	15.016(c)		Between 5km up to and including 7km	m3	2		
	E1			CONCRETE WORKS				
	E1			ROUGH FORMWORK				
	E1			Vertical surfaces				
2.E1.9.269	E1	20.001		Sides of floor slab	m2	6		
2.E1.9.270	E1	20.001		Sides of walls	m2	25		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			SMOOTH FORMWORK				
	E1			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.E1.9.271	E1	20.002		Walls	m2	67		
2.E1.9.272	E1	20.002		Side of Sump walls	m2	0.5		
2.E1.9.273	E1	20.002		Plinths	m2	4		
	E1			Box-out holes/Form voids (for sleeves only)				
	E1			a) Small, circular, of diameter up to and including 0.35 m				
2.E1.9.274	E1	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	1		
	E1			REINFORCEMENT				
2.E1.9.275	E1	20.007		Steel bars (irrespective of grade or diameter)	t	3.2		
	E1			CONCRETE				
	E1			CONCRETE 15 MPa/19mm in:				
2.E1.9.276	E1	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	19		
2.E1.9.277	E1	20.011(b)		Mass concrete filling where required by the engineer	m3	1		
2.E1.9.278	E1	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	9		
	E1			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.E1.9.279	E1	20.010		Foundations, bases, floor slabs and roof slabs	m3	6		
2.E1.9.280	E1	20.010		Plinths (Including grouting between the plinth and the pipes/specials where required)	m3	1		
2.E1.9.281	E1	20.010		Walls	m3	14		
	E1			UNFORMED SURFACE FINISHES				
2.E1.9.282	E1	20.013(a)		Wood floated finish	m2	9		
2.E1.9.283	E1	20.013(b)		Steel floated finish	m2	14		
	E1			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	E1			PN40				
2.E1.9.284	E1	32.003		Item 1	No	1		
2.E1.9.285	E1	32.003		Item 2	No	1		
2.E1.9.286	E1	32.003		Item 3	No	1		
2.E1.9.287	E1	32.003		Item 4	No	2		
2.E1.9.288	E1	35.002		Item 5	No	2		
2.E1.9.289	E1	32.003		Item 6	No	2		
2.E1.9.290	E1	32.003		Item 7	No	1		
2.E1.9.291	E1	32.003		Item 8	No	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.E1.9.292	E1	32.003		Item 9	No	1		
2.E1.9.293	E1	35.002		Item 10	No	1		
2.E1.9.294	E1	32.003		Item 11	No	1		
2.E1.9.295	E1	32.003		Item 12	No	1		
2.E1.9.296	E1	32.003		Item 13	No	1		
2.E1.9.297	E1	32.003		Item 14	No	1		
2.E1.9.298	E1	35.002		Item 15	No	1		
2.E1.9.299	E1	32.003		Item 16	No	1		
	E1			INSTALLATION OF VALVES AND SPECIALS				
	E1			PN40				
2.E1.9.300	E1	33.004		Item 1	No	1		
2.E1.9.301	E1	33.004		Item 2	No	1		
2.E1.9.302	E1	33.004		Item 3	No	1		
2.E1.9.303	E1	33.004		Item 4	No	2		
2.E1.9.304	E1	33.004		Item 5	No	2		
2.E1.9.305	E1	33.004		Item 6	No	2		
2.E1.9.306	E1	33.004		Item 7	No	1		
2.E1.9.307	E1	33.004		Item 8	No	1		
2.E1.9.308	E1	33.004		Item 9	No	1		
2.E1.9.309	E1	33.004		Item 10	No	1		
2.E1.9.310	E1	33.004		Item 11	No	1		
2.E1.9.311	E1	33.004		Item 12	No	1		
2.E1.9.312	E1	33.004		Item 13	No	1		
2.E1.9.313	E1	33.004		Item 14	No	1		
2.E1.9.314	E1	33.004		Item 15	No	1		
2.E1.9.315	E1	33.004		Item 16	No	1		
	E1			ITEMS CAST OR BUILT INTO CONCRETE				
2.E1.9.316	E1	33.005		Steel pipe diameter 150mm	No	2		
	E1			SUPPLY AND ERECT PRECAST ELEMENTS				
	E1			Refer to Dwg 2E-C5-055 and 2E-C5-056				
2.E1.9.317	E1	20.017		Precast slab Type 1	No	1		
2.E1.9.318	E1	20.017		Precast slab Type 2	No	3		
2.E1.9.319	E1	20.017		Precast slab Type 3	No	1		
	E1			ANCILLARY WORKS				
2.E1.9.320	E1	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.E1.9.321	E1	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	1		
2.E1.9.322	E1	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.E1.9.323	E1	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.E1.9.324	E1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 150mm	No	3		
2.E1.9.325	E1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 50mm	No	1		
2.E1.9.326	E1	20.021 c)		Sleeves to be grouted after the installation of cables to ensure no seepage 160mm diam x 0.3mm thick	No	2		
2.E1.9.327	E1	20.021 c)		Portable aluminium steps complete, as per drawing 2A-C6-125	No	1		
2.E1.9.328	E1	20.021 c)		Drilling for dowels and including grouting in of dowels, per one chamber complete, as per drawing 2A-C6-125. (Dowel material included in 20.007)	No	1		
2.E1.9.329	E1	20.021 c)		10mm Neoprene, as per drawing 2A-C6-125	m ²	1		
	E1			SPECIFIC ITEMS OF WORK				
	E1			SEALING STRIPS, JOINT SEALANT, ETC				
2.E1.9.330	E1	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	10		
	E1			HIGH-LIFT PUMPING STATION MANIFOLD				
	E1			REFER TO DRAWING 2D-C4-001, 2D-C5-024, 2E-C3-006, 2E-C5-002 and 2E-C5-003				
	E1			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	E1			Suction Manifold				
	E1			DN2000 PN16 plain ended Pipe Special Straight				
2.E1.9.331	E1	32.003		Item DM1.2 - L = 600 mm	No	1		
2.E1.9.332	E1	32.003		Item HLS1.2 - L = 6650 mm	No	3		
2.E1.9.333	E1	32.003		Item DM1.1 - L = 9000 mm	No	2		
2.E1.9.334	E1	32.003		Item HLS1.1- DN2000-1000 PN16 Unequal gusset tee	No	4		
2.E1.9.335	E1	32.003		Item HLS1.3 - DN2000-1600 PN16 Concentric reducer	No	1		
2.E1.9.336	E1	32.003		Item HLS1.4 - DN1600 PN16 Blind flange	No	1		
	E1			INSTALLATION OF VALVES AND SPECIALS				
	E1			Suction Manifold				
	E1			DN2000 PN16 plain ended Pipe Special Straight				
2.E1.9.337	E1	33.007		Item DM1.2 - L = 600 mm	No	1		
2.E1.9.338	E1	33.007		Item HLS1.2 - L = 6650 mm	No	3		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.E1.9.339	E1	33.007		Item DM1.1 - L = 9000 mm	No	2		
2.E1.9.340	E1	33.007		Item HLS1.1- DN2000-1000 PN16 Unequal gusset tee	No	4		
2.E1.9.341	E1	33.007		Item HLS1.3 - DN2000-1600 PN16 Concentric reducer	No	1		
2.E1.9.342	E1	33.007		Item HLS1.4 - DN1600 PN16 Blind flange	No	1		
	E1			ITEMS CAST OR BUILT INTO CONCRETE				
2.E1.9.343	E1	33.005		Steel pipe diameter 1000mm	No	4		
2.E1.9.344	E1	33.005		Steel pipe diameter 1400mm	No	1		
	E1			PIPE TESTING				
2.E1.9.345	E1	33.008		Hydrostatic Testing	Sum	1		
2.E1.9.346	E1	33.009		Pipe lining integrity testing	Sum	1		
2.E1.9.347	E1	33.010		Pipe coating integrity testing	Sum	1		
	E1			PART E1.9: Valve installations and chambers total <i>(Carried forward to Summary of Bills)</i>				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	E1			PART E1.10: Fibre Earthworks				
	E1			SITE CLEARANCE				
	E1			Removal of fertile soil				
2.E1.10.1	E1	7.005(a)		For pipelines, temporary stockpile alongside the pipeline and construction servitude	m3	50		
	E1			DEALING WITH WATER For all works included in PART E for Fibre Earthworks				
2.E1.10.2	E1	8.001		Dealing with water	Sum	1		
2.E1.10.3	E1	8.002		Treatment of water	Sum	1		
2.E1.10.4	E1	8.003		Water monitoring	Sum	1		
2.E1.10.5	E1	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	E1			PIPE TRENCH EXCAVATIONS				
	E1			EXCAVATE IN ALL MATERIALS TO SPECIFIED LEVELS AND BATTERED SLOPES, INCLUDING TEMPORARY STOCKPILING AND LEVELLING ALONGSIDE EXCAVATIONS WITHIN THE CONFINES OF THE PIPE SERVITUDE				
	E1			Classified trench excavations:				
	E1			Within the freehaul distance				
2.E1.10.6	E1	9.012		Up to 1m deep	m3	42		
2.E1.10.7	E1	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	2		
2.E1.10.8	E1	9.020		Compaction of trench bottom	m2	170		
	E1			EXCAVATION ANCILLARIES				
2.E1.10.9	E1	9.021		Excavation by hand	m3	15		
	E1			OVERHAUL				
2.E1.10.10	E1	9.023(a)		Between 1km up to and including 3km	m3	15		
	E1			EXISTING SERVICES THAT INTERSECT OR ADJOIN A PIPE TRENCH				
2.E1.10.11	E1	9.018(a)		Services that intersect a pipe trench	No	1		
	E1			BACKFILLING AND BEDDING				
	E1			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	E1			Provision of bed material				
2.E1.10.12	E1	15.003(a)		Material without screening from trenches	m3	5		
2.E1.10.13	E1	15.003(b)		Material with screening from trenches	m3	15		
2.E1.10.14	E1	15.003(c)		Material from the nearest borrow pit without screening	m3	1		
2.E1.10.15	E1	15.003(d)		Material from the nearest borrow pit with screening	m3	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	E1			Provision of selected fill blanket				
2.E1.10.16	E1	15.006(a)		Material without screening from trenches	m3	5		
2.E1.10.17	E1	15.006(b)		Material with screening from trenches	m3	20		
2.E1.10.18	E1	15.006(c)		Material from the nearest borrow pit without screening	m3	1		
2.E1.10.19	E1	15.006(d)		Material from the nearest borrow pit with screening	m3	1		
	E1			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.E1.10.20	E1	15.001		Bed material	m3	22		
2.E1.10.21	E1	15.001		Selected fill blanket	m3	27		
2.E1.10.22	E1	15.001		Fertile soil	m3	50		
	E1			OVERHAUL				
2.E1.10.23	E1	15.010(a)		Between 1km up to and including 3km	m3	10		
	E1			PART E1.10: Fibre Earthworks Total (Carried forward to Summary of Bills)				
				PART E: HIGH-LIFT PUMPING STATION (Carried forward to Summary of Bills)				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	F			PART F: HIGH LIFT RISING MAIN				
	F			PART F1: Preliminary and General (Secondary)				
	F			PRELIMINARY AND GENERAL (SECONDARY)				
	F	1.002		FIXED CHARGES - GENERAL OBLIGATIONS				
2.F.1.1	F		X	Head Office Contract Management and Overheads	Sum	1		
2.F.1.2	F		X	General Site Supervision and Overheads	Sum	1		
2.F.1.3	F		X	Method statements (1.10.1)	Sum	1		
2.F.1.4	F		X	Competency training (1.10.2.4)	Sum	1		
2.F.1.5	F		X	Returns and reporting (1.10.3)	Sum	1		
2.F.1.6	F		X	Management meetings (1.10.4)	Sum	1		
2.F.1.7	F		X	Integration management (1.10.5)	Sum	1		
2.F.1.8	F		X	Programming Requirements (1.9)	Sum	1		
2.F.1.9	F		X	Quality Management (1.10.2)	Sum	1		
2.F.1.10	F		X	Socio Economic Requirements (1.11)	Sum	1		
2.F.1.11	F		X	Occupational Health and Safety Requirements (1.12)	Sum	1		
2.F.1.12	F		X	Environmental Requirements (1.13)	Sum	1		
	F			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.F.1.13	F		X	.....	Sum	1		
2.F.1.14	F		X	.....	Sum	1		
2.F.1.15	F		X	.....	Sum	1		
2.F.1.16	F		X	.....	Sum	1		
	F	1.003 & 1.004		FIXED CHARGES - FACILITIES FOR THE CONTRACTOR (1.8)				
2.F.1.17	F		X	Transport of Staff and Labour (1.8.1.4)	Sum	1		
2.F.1.18	F		X	Construction Establishment Fencing (1.8.3.1)	Sum	1		
2.F.1.19	F		X	Lighting of Construction Establishment Areas (1.8.3.2)	Sum	1		
2.F.1.20	F		X	Electrical power and distribution (1.8.3.4)	Sum	1		
2.F.1.21	F		X	Standby power (1.8.3.4)	Sum	1		
2.F.1.22	F		X	Communications (1.8.3.7)	Sum	1		
	F			Office, Accommodation and Other Site facilities				
2.F.1.23	F		X	Accommodation for staff and workforce (1.8.3.8b)	Sum	1		
2.F.1.24	F		X	Offices (1.8.3.8c)	Sum	1		
2.F.1.25	F		X	Other establishment facilities (1.8.3.8d)	Sum	1		
2.F.1.26	F		X	Storage (1.8.3.8e)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			Other services				
2.F.1.27	F		X	Medical (1.8.3.12)	Sum	1		
2.F.1.28	F		X	Sanitation and Cleaning (1.8.3.13)	Sum	1		
2.F.1.29	F		X	Access control and security (1.8.3.14)	Sum	1		
	F			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.F.1.30	F		X	.....	Sum	1		
2.F.1.31	F		X	.....	Sum	1		
2.F.1.32	F		X	.....	Sum	1		
2.F.1.33	F		X	.....	Sum	1		
	F	1.004		FIXED CHARGES - SPECIFIC EQUIPMENT				
2.F.1.34	F		X	Equipment for construction and maintenance of the Contractor's work areas	Sum	1		
2.F.1.35	F		X	Minor equipment and small tools	Sum	1		
2.F.1.36	F		X	Equipment for dust and emissions control and monitoring in compliance with environmental requirement	Sum	1		
2.F.1.37	F		X	Construction services including electrical power, compressed air, water, communications, etc.	Sum	1		
2.F.1.38	F		X	Equipment for blasting and rock support	Sum	1		
2.F.1.39	F		X	Equipment for earthworks, trenching and backfilling	Sum	1		
2.F.1.40	F		X	Equipment for borrowing, processing of materials, transport of materials and spoiling of materials	Sum	1		
2.F.1.41	F		X	Equipment for crange, winches, lifting and pipe handling	Sum	1		
2.F.1.42	F		X	Equipment for welding, weld testing and coatings	Sum	1		
2.F.1.43	F		X	Equipment for site transporting, lifting, placing and fixing of structural steel work	Sum	1		
2.F.1.44	F		X	Equipment for site transporting, placing, fixing and finishing of concrete work, formwork and reinforcement	Sum	1		
2.F.1.45	F		X	Equipment for processing concrete (Batch plant)	Sum	1		
2.F.1.46	F		X	Equipment for dealing with water	Sum	1		
2.F.1.47	F		X	Equipment for Pipe Jacking and Grouting	Sum	1		
2.F.1.48	F	1.004(d)	X	Establishment and de-establishment for Pipe Jacking	Sum	1		
2.F.1.49	F	1.004(a)	X	Fixed related charges for relocation of pipe work front to different location as instructed by Engineer (Within 5km). Including provision for the loss of production	No	2		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.F.1.50	F		X	.....	Sum	1		
2.F.1.51	F		X	.....	Sum	1		
2.F.1.52	F		X	.....	Sum	1		
2.F.1.53	F		X	.....	Sum	1		
	F	1.006		TIME RELATED CHARGES - GENERAL OBLIGATIONS				
2.F.1.54	F		X	Head Office Contract Management and Overheads (Duration Weeks)	Sum	1		
2.F.1.55	F		X	General Site Supervision and Overheads (Duration Weeks)	Sum	1		
2.F.1.56	F		X	Method Statements (1.10.1) (Duration Weeks)	Sum	1		
2.F.1.57	F		X	Competency training (1.10.2.4) (Duration Weeks)	Sum	1		
2.F.1.58	F		X	Returns and reporting (1.10.3) (Duration Weeks)	Sum	1		
2.F.1.59	F		X	Management meetings (1.10.4) (Duration Weeks)	Sum	1		
2.F.1.60	F		X	Integration management (1.10.5) (Duration Weeks)	Sum	1		
2.F.1.61	F		X	Programming Requirements (1.9) (Duration Weeks)	Sum	1		
2.F.1.62	F		X	Quality Management (1.10.2) (Duration Weeks)	Sum	1		
2.F.1.63	F		X	Socio Economic Requirements (1.11) (Duration Weeks)	Sum	1		
2.F.1.64	F		X	Occupational Health and Safety (1.12) (Duration Weeks)	Sum	1		
2.F.1.65	F		X	Environmental Requirements (1.13) (Duration Weeks)	Sum	1		
2.F.1.66	F	1.006(d)	X	General charges for Pipe Jacking and Grouting (Duration days)	Sum	1		
2.F.1.67	F	1.006(a)	X	Time related charges for relocation of pipe work front to different location as instructed by Engineer (General Obligations) (Within 5km). Including provision for the loss of production	No	2		
	F			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.F.1.68	F		X	.....	Sum	1		
2.F.1.69	F		X	.....	Sum	1		
2.F.1.70	F		X	.....	Sum	1		
	F	1.007 & 1.008		TIME RELATED CHARGES - FACILITIES FOR THE CONTRACTOR (1.8)				
2.F.1.71	F		X	Transport of Staff and Labour (1.8.1.4) (Duration Weeks)	Sum	1		
2.F.1.72	F		X	Construction Establishment Fencing (1.8.3.1) (Duration Weeks)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.F.1.73	F		X	Lighting of Construction Establishment Areas (1.8.3.2) (Duration Weeks)	Sum	1		
2.F.1.74	F		X	Electrical power and distribution (1.8.3.4) (Duration Weeks)	Sum	1		
2.F.1.75	F		X	Standby power (1.8.3.4) (Duration Weeks)	Sum	1		
2.F.1.76	F		X	Communications (1.8.3.7) (Duration Weeks)	Sum	1		
	F			Office, Accommodation and Other Site facilities				
2.F.1.77	F		X	Accommodation for staff and workforce (1.8.3.8b)(Duration Weeks)	Sum	1		
2.F.1.78	F		X	Offices (1.8.3.8c) (Duration Weeks)	Sum	1		
2.F.1.79	F		X	Other establishment facilities (1.8.3.8d) (Duration Weeks)	Sum	1		
2.F.1.80	F		X	Storage (1.8.3.8e) (Duration Weeks)	Sum	1		
	F			Other services				
2.F.1.81	F		X	Medical (1.8.3.12) (Duration Weeks)	Sum	1		
2.F.1.82	F		X	Sanitation and Cleaning (1.8.3.13) (Duration Weeks)	Sum	1		
2.F.1.83	F		X	Access control and security (1.8.3.14) (Duration Weeks)	Sum	1		
2.F.1.84	F	1.007(d)	X	Facilities for for Pipe Jacking and Grouting (Duration days)	Sum	1		
2.F.1.85	F	1.007(a)	X	Time related charges for relocation of pipe work front to different location as instructed by Engineer (Facilities) (Within 5km). Including provision for the loss of production	No	2		
	F			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.F.1.86	F		X	.....	Sum	1		
2.F.1.87	F		X	.....	Sum	1		
2.F.1.88	F		X	.....	Sum	1		
2.F.1.89	F		X	.....	Sum	1		
	F	1.008		TIME RELATED CHARGES - SPECIFIC EQUIPMENT				
2.F.1.90	F		X	Equipment for construction and maintenance of the Contractor's work areas (Duration Weeks)	Sum	1		
2.F.1.91	F		X	Minor equipment and small tools (Duration Weeks)	Sum	1		
2.F.1.92	F		X	Equipment for dust and emissions control and monitoring in compliance with environmental requirement (Duration Weeks)	Sum	1		
2.F.1.93	F		X	Construction services including electrical power, compressed air, water, communications, etc. (Duration Weeks)	Sum	1		
2.F.1.94	F		X	Equipment for blasting and rock support (Duration Weeks)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.F.1.95	F		X	Equipment for earthworks, trenching and backfilling (Duration Weeks)	Sum	1		
2.F.1.96	F		X	Equipment for borrowing, processing of materials, transport of materials and spoiling of materials (Duration Weeks)	Sum	1		
2.F.1.97	F		X	Equipment for crange, winches, lifting and pipe handling (Duration Weeks)	Sum	1		
2.F.1.98	F		X	Equipment for welding, weld testing and coatings (Duration Weeks)	Sum	1		
2.F.1.99	F		X	Equipment for site transporting, lifting, placing and fixing of structural steel work (Duration Weeks)	Sum	1		
2.F.1.100	F		X	Equipment for site transporting, placing, fixing and finishing of concrete work, formwork and reinforcement (Duration Weeks)	Sum	1		
2.F.1.101	F		X	Equipment for processing concrete (Batch plant) (Duration Weeks)	Sum	1		
2.F.1.102	F		X	Equipment for dealing with water (Duration Weeks)	Sum	1		
2.F.1.103	F	1.008(d)	X	Equipment for Pipe Jacking and Grouting (Duration days)	Sum	1		
2.F.1.104	F	1.008(a)	X	Time related charges for relocation of pipe work front to different location as instructed by Engineer (Specific Equipment) (Within 5km). Including provision for the loss of production	No	2		
	F			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.F.1.105	F		X	.....	Sum	1		
2.F.1.106	F		X	.....	Sum	1		
2.F.1.107	F		X	.....	Sum	1		
2.F.1.108	F		X	.....	Sum	1		
	F			PART F1: Preliminary and General - Carried forward to Summary of Bills				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	F			PART F2: Permanent Access Track				
	F			Site Clearance				
2.F.2.1	F	7.001(a)		Clearing	ha	11		
	F			In situ treatment of foundations: (compacted to a minimum of 90% of modified AASHTO density, or else specified differently on the drawings)				
2.F.2.2	F	9.009(a)		Compaction of in-situ material	m2	10210		
2.F.2.3	F	9.009(b)		In situ treatment by ripping	m3	1535		
	F			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.F.2.4	F	15.014(b)		Rockfill processing and compaction	m3	160		
2.F.2.5	F	15.008(d)		Supply and place geotextile complete ("Rockgrid" or equal approved)	m2	320		
	F			Pavement layers constructed from gravel material				
2.F.2.6	F	25.001(c)		Gravel wearing course compacted to 95% of modified AASHTO density	m3	2045		
	F			Overhaul on material hauled in excess of 1.0 km				
2.F.2.7	F	25.018		a) Between 1km up to and including 3km	m3	740		
2.F.2.8	F	25.018		b) Between 3km up to and including 5km	m3	740		
2.F.2.9	F	25.018		c) Between 5km up to and including 7km	m3	740		
	F			STORMWATER				
	F			Bedding for Prefabricated Culverts				
2.F.2.10	F	27.003		b) Class B bedding	m3	135		
	F			Prefabricated Concrete Culverts				
2.F.2.11	F	27.004(a)		i) 450mm diameter socketed concrete pipe (Class D50), jointed with mortar	m	100		
	F			PART F2: Permanent Access Track - Carried forward to Summary of Bills				

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
	F			PART F3: Pipe supply, delivery, installation and testing				
	F			DETAILING AND DOCUMENTATION				
2.F.3.1	F	32.001		Pipes and pipe specials: Design and documentation (As required: For Employer Design)	Sum	1		
2.F.3.2	F	37.001		Corrosion protection: PQP and other documentation	Sum	1		
	F			PIPES				
	F			MANUFACTURE AND SUPPLY OF PIPES AND DELIVERY TO STORAGE ON SITE (EXCLUDING CORROSION PROTECTION)				
	F			Grade X52; Ends prepared for site welding				
2.F.3.3	F	32.002	X	1420mm OD pipe, 12mm wall thickness	m	4630		
2.F.3.4	F	32.002	X	1420mm OD pipe, 10mm wall thickness	m	24200		
	F			SPARE PIPES				
	F			Grade X52; Ends prepared for site welding				
2.F.3.5	F	32.002	X	1420mm OD pipe, 12mm wall thickness	m	39		
2.F.3.6	F	32.002	X	1420mm OD pipe, 10mm wall thickness	m	77		
	F			EXTERNAL PIPE COATING (factory applied):				
	F			Refer to Section 37: Painting and Corrosion Protection (Clause 37.10.12.4)				
	F			Option No. 1: Polymer Modified Bitumen (System No 229A/236)				
2.F.3.7	F	37.002	X	1420mm OD pipes	m	28830		
2.F.3.8	F	37.002	X	1420mm OD spare pipes	m	116		
	F			INTERNAL PIPE LINING (factory applied)				
	F			Refer to Section 37: Painting and Corrosion Protection (Clause 37.10.12.4)				
	F			Hot applied solvent free epoxy (System No 220)				
2.F.3.9	F	37.003	X	1420mm OD pipes	m	28830		
2.F.3.10	F	37.003	X	1420mm OD spare pipes	m	116		
	F			PIPE SPECIALS				
	F			MANUFACTURE AND SUPPLY OF PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	F			BEND/JOINT TYPE 1: HOT APPLIED SOLVENT FREE EPOXY (System No 220) AND POLYMER MODIFIED BITUMEN COATING (System No 229A)				
	F			Grade X52, Ends prepared for site welding				
	F			1420mm OD pipe, 12mm wall thickness				
2.F.3.11	F	32.003	X	Bend between 11.25 to and including 22.5 degrees	No	3		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.F.3.12	F	32.003	X	Bend between 45 to and including 90 degrees	No	2		
	F			1420mm OD pipe, 10mm wall thickness				
2.F.3.13	F	32.003	X	Bend between 22.5 to and including 45 degrees	No	4		
2.F.3.14	F	32.003	X	Bend between 45 to and including 90 degrees	No	6		
	F			LAY AND WELD STEEL PIPES				
	F			Grade X52				
2.F.3.15	F	33.001	X	1420mm OD pipe, 12mm wall thickness	m	4630		
2.F.3.16	F	33.001	X	1420mm OD pipe, 10mm wall thickness	m	24200		
	F			INSTALLATION AND TESTING OF PIPE SPECIALS				
	F			Grade X52				
	F			1420mm OD pipe, 12mm wall thickness				
2.F.3.17	F	33.007	X	Bend between 11.25 to and including 22.5 degrees	No	3		
2.F.3.18	F	33.007	X	Bend between 45 to and including 90 degrees	No	2		
	F			1420mm OD pipe, 10mm wall thickness				
2.F.3.19	F	33.007	X	Bend between 22.5 to and including 45 degrees	No	4		
2.F.3.20	F	33.007	X	Bend between 45 to and including 90 degrees	No	6		
	F			EXTRA OVER ITEM 33.001 FOR MITRE DEFLECTIONS UP TO 11.25 DEGREE TO FORM BENDS				
	F			Grade X52				
2.F.3.21	F	33.002	X	1420mm OD pipe, 12mm wall thickness	No	35		
2.F.3.22	F	33.002	X	1420mm OD pipe, 10mm wall thickness	No	26		
	F			SUPPLY AND INSTALL EXTERNAL COATING AND INTERNAL LINING OF PIPE JOINTS (field applied)				
	F			BEND/JOINT TYPE NO. 1: HOT APPLIED SOLVENT FREE EPOXY (System No 220) AND POLYMER MODIFIED BITUMEN COATING (System No 276)				
2.F.3.23	F	37.004	X	1420mm OD pipe	No	1808		
2.F.3.24	F	37.004	X	1000mm OD pipe	No	27		
	F			BEDDING REQUIREMENT SPECIFIC FOR POLYMER MODIFIED BITUMEN COATING				
2.F.3.25	F	15.013	X	Extra over 15.003(b), 15.003(d), 15.004(b), 15.004(d), 15.005(b), 15.005(d), 15.006(b) and 15.006(d) for crushing and screening of material	m3	100400		
	F			HYDROSTATIC TESTING				
2.F.3.26	F	33.008(a)		1420mm OD pipe, 12mm wall thickness	km	4.63		
2.F.3.27	F	33.008(a)		1420mm OD pipe, 10mm wall thickness	km	24.2		
	F			PIPE LINING INTEGRITY TESTING				
2.F.3.28	F	33.009		1420mm OD as specified on drawing	m	28830		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
			Reference				Brought Forward	
	F			PIPE COATING INTEGRITY SURVEYS				
2.F.3.29	F	33.010		1420mm OD as specified on drawing	m	28830		
	F			MARKER POSTS				
2.F.3.30	F	33.012		As detailed on the drawing No 2A-C6-114	no	225		
	F			BENCHMARK AND TRIANGULATION BEACONS				
2.F.3.31	F	33.013(a)		Survey	Sum	1		
2.F.3.32	F	33.013(b)		Benchmark and beacons	No	304		
	F			PART F3: Pipe supply, delivery, installation and testing Total <i>(Carried forward to Summary of Bills)</i>				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	F			PART F4: Pipeline Earthworks				
	F			SITE CLEARANCE				
	F			Clearing				
2.F.4.1	F	7.001(a)	X	Clearing	ha	117		
2.F.4.2	F	7.001(b)	X	Removal of boulders	m3	6 300		
2.F.4.3	F	7.002		Grubbing and removal of trees of girth up to and including 1m	ha	117		
2.F.4.4	F	7.003		Grubbing and removal of trees of girth over 1m	No	100		
	F			Removal of topsoil				
2.F.4.5	F	7.004(a)	X	For pipelines, temporary stockpiling to windrows or stockpile alongside the pipeline and construction servitude	m3	159 660		
	F			Removal of fertile soil				
2.F.4.6	F	7.005(a)	X	For pipelines, temporary stockpile alongside the pipeline and construction servitude	m3	34 200		
2.F.4.7	F	7.007		Demolishing and disposal of structures and reinforced concrete	m3	100		
2.F.4.8	F	7.008		Moving Existing Rock Stockpile from Previous Project/Phase to Provide Working Space	m3	50		
2.F.4.9	F	7.009		Mulching	ha	117		
	F			Overhaul				
2.F.4.10	F	7.006(a)	X	Between 1km up to and including 3km	m3	9150		
2.F.4.11	F	7.006(b)	X	Between 3km up to and including 5km	m3	7465		
2.F.4.12	F	7.006(c)	X	Between 5km up to and including 7km	m3	1650		
2.F.4.13	F	7.006(d)	X	Between 7km up to and including 9km	m3	550		
	F			DEALING WITH WATER				
				For all works included in PART F				
2.F.4.14	F	8.001		Dealing with water	Sum	1		
2.F.4.15	F	8.002		Treatment of water	Sum	1		
2.F.4.16	F	8.003		Water monitoring	Sum	1		
2.F.4.17	F	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	F			PIPE TRENCH EXCAVATIONS				
	F			EXCAVATE IN ALL MATERIALS TO SPECIFIED LEVELS AND BATTERED SLOPES, INCLUDING TEMPORARY STOCKPILING AND LEVELLING ALONGSIDE EXCAVATIONS WITHIN THE CONFINES OF THE PIPE SERVITUDE				
	F			Classified trench excavations:				
	F			Within the freehaul distance				
2.F.4.18	F	9.012	X	Over 2m and up to 3m deep	m3	154 500		
2.F.4.19	F	9.012	X	Over 3m and up to 4m deep	m3	17 500		
2.F.4.20	F	9.012	X	Over 4m and up to 5m deep	m3	2 980		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			Unclassified trench excavations:				
	F			Within the freehaul distance				
2.F.4.21	F	9.012		Over 1m and up to 2m deep	m3	100		
2.F.4.22	F	9.012		Over 2m and up to 3m deep	m3	500		
2.F.4.23	F	9.012		Over 3m and up to 4m deep	m3	150		
2.F.4.24	F	9.014	X	Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	32 800		
2.F.4.25	F	9.014	X	Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting), within 500m from Transnet and Eskom infrastructure (railways, conveyors, and high voltage power lines). (Eskom and/or Transnet requirements and approval processes to be met by Contractor)	m3	26 060		
2.F.4.26	F	9.025	X	Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (by non-explosive means), specific to rock breaking and removal within the prescribed limits of the Martial Eagle nest and the bat cave	m3	3 900		
2.F.4.27	F	9.025	X	Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (by non-explosive means)	m3	1 750		
2.F.4.28	F	9.020	X	Compaction of trench bottom	m2	75 500		
	F			EXCAVATION ANCILLARIES				
2.F.4.29	F	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to designated spoil sites	m3	2 300		
2.F.4.30	F	9.015		Excavate by hand in soft material to expose existing services	m3	265		
2.F.4.31	F	9.021		Excavation by hand	m3	300		
	F			OVERHAUL				
2.F.4.32	F	9.023(a)	X	Between 1km up to and including 3km	m3	43 635		
2.F.4.33	F	9.023(b)	X	Between 3km up to and including 5km	m3	34 300		
2.F.4.34	F	9.023(c)	X	Between 5km up to and including 7km	m3	22 835		
2.F.4.35	F	9.023(d)	X	Between 7km up to and including 9km	m3	15 160		
2.F.4.36	F	9.023(e)	X	Between 9km up to and including 11km	m3	17 250		
2.F.4.37	F	9.023(f)	X	Between 11km up to and including 13km	m3	1 500		
	F			PROVIDE AND USE OF SPECIALIST TEAM AND EQUIPMENT FOR THE DETECTION OF UNDERGROUND SERVICES				
2.F.4.38	F	9.017(a)		Provide the team and equipment	Sum	1		
2.F.4.39	F	9.017(b)		Use, operate and maintain equipment	day	44		
2.F.4.40	F	9.017(c)		Remove the team and equipment	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			EXISTING SERVICES THAT INTERSECT OR ADJOIN A PIPE TRENCH				
2.F.4.41	F	9.018(a)		Services that intersect a pipe trench	No	22		
2.F.4.42	F	9.018(b)		Services that adjoin a trench	m	1 157		
2.F.4.43	F	9.022		Slurry trenches / curtain walls	m2	660		
2.F.4.44	F	9.024		Excavation of test pits	No	1 160		
	F			BACKFILLING AND BEDDING				
	F			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	F			Provision of bed material				
2.F.4.45	F	15.003(a)	X	Material without screening from trenches	m3	85		
2.F.4.46	F	15.003(b)	X	Material with screening from trenches	m3	330		
2.F.4.47	F	15.003(c)	X	Material from the nearest borrow pit without screening	m3	2 940		
2.F.4.48	F	15.003(d)	X	Material from the nearest borrow pit with screening	m3	11 760		
	F			Provision of bedding cradle material				
2.F.4.49	F	15.004(a)	X	Material without screening from trenches	m3	7		
2.F.4.50	F	15.004(b)	X	Material with screening from trenches	m3	28		
2.F.4.51	F	15.004(c)	X	Material from the nearest borrow pit without screening	m3	3 560		
2.F.4.52	F	15.004(d)	X	Material from the nearest borrow pit with screening	m3	14 220		
2.F.4.53	F	15.004(e)	X	Material from commercial sources	m3	150		
	F			Provision of soilcrete				
2.F.4.54	F	15.005(a)		Material without screening from trenches	m3	40		
2.F.4.55	F	15.005(b)		Material with screening from trenches	m3	45		
2.F.4.56	F	15.005(c)		Material from the nearest borrow pit without screening	m3	155		
2.F.4.57	F	15.005(d)		Material from the nearest borrow pit with screening	m3	70		
2.F.4.58	F	15.005(e)		Material from commercial sources	m3	150		
	F			Provision of selected fill blanket				
2.F.4.59	F	15.006(a)	X	Material without screening from trenches	m3	350		
2.F.4.60	F	15.006(b)	X	Material with screening from trenches	m3	1 390		
2.F.4.61	F	15.006(c)	X	Material from the nearest borrow pit without screening	m3	12 870		
2.F.4.62	F	15.006(d)	X	Material from the nearest borrow pit with screening	m3	51 450		
2.F.4.63	F	15.006(e)	X	Material from commercial sources	m3	150		
	F			Provision of main backfill material				
2.F.4.64	F	15.007(a)	X	Backfill material from trench excavation	m3	23 250		
2.F.4.65	F	15.007(b)	X	Backfill material from the nearest borrow pit	m3	10 250		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.F.4.66	F	15.001	X	Bed material	m3	15 115		
2.F.4.67	F	15.001	X	Bedding cradle	m3	17 965		
2.F.4.68	F	15.001	X	Selected fill blanket	m3	66 210		
2.F.4.69	F	15.001	X	Main backfill	m3	29 800		
2.F.4.70	F	15.001	X	Fertile soil	m3	34 200		
2.F.4.71	F	47.005	X	Top soil	m3	159 660		
2.F.4.72	F	15.002(a)		Soilcrete bed and bedding cradle	m3	150		
2.F.4.73	F	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	260		
2.F.4.74	F	15.002(b)		Cement stabilised soil collars (soilcrete)	m3	50		
	F			PROVISION OF MATERIAL TO REPLACE UNSUITABLE MATERIAL FROM TRENCH BOTTOM OR TO PROVIDE SUPPORTING EARTHWORKS				
2.F.4.75	F	15.011(a)		From trench excavation	m3	770		
2.F.4.76	F	15.011(b)		From borrow pits	m3	770		
2.F.4.77	F	15.011(c)		From commercial sources	m3	770		
	F			Placing of Material				
2.F.4.78	F	15.012		Placing of material to replace unsuitable material from trench bottom or to provide supporting earthworks	m3	2 310		
	F			SUBSOIL DRAINAGE				
	F			Crushed stone				
2.F.4.79	F	15.008(a)		Supply and place crushed stone for Layer no 1	m3	40		
2.F.4.80	F	15.008(c)		Supply and place well graded compacted dump rock for Layer no 2	m3	65		
	F			Geotextile				
2.F.4.81	F	15.008(b)		Supply and place geotextile for Layer no 1	m2	340		
2.F.4.82	F	15.008(d)		Supply and place geotextile for Layer no 2	m2	360		
	F			ENCASING OF PIPES IN CONCRETE				
2.F.4.83	F	15.009(a)		Concrete strength grade 30/19	m3	30		
2.F.4.84	F	15.009(b)		Reinforcement	t	4		
	F			OVERHAUL				
2.F.4.85	F	15.010(a)	X	Between 1km up to and including 3km	m3	29560		
2.F.4.86	F	15.010(b)	X	Between 3km up to and including 5km	m3	33470		
2.F.4.87	F	15.010(c)	X	Between 5km up to and including 7km	m3	23510		
2.F.4.88	F	15.010(d)	X	Between 7km up to and including 9km	m3	7610		
2.F.4.89	F	15.010(e)	X	Between 9km up to and including 11km	m3	4990		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount	
							Brought Forward		
2.F.4.90	F	15.010(f)	X	Between 11km up to and including 13km	m3	3200			
		F	PART F4: Pipeline Earthworks Total - Carried forward to Summary of Bills						

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	F			PART F5: Valve installations and chambers				
	F			SINGLE AIR VALVE INSTALLATION				
	F			REFER TO DRAWING 2A-C6-141 and 2A-C6-142				
	F			EARTHWORKS				
	F			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS. THRUST BLOCKS. ETC				
2.F.5.1	F	9.013		Excavate for valve chambers	m3	370		
2.F.5.2	F	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	22		
	F			OVERHAUL				
2.F.5.3	F	9.023(a)		Between 1km up to and including 3km	m3	7		
2.F.5.4	F	9.023(b)		Between 3km up to and including 5km	m3	7		
2.F.5.5	F	9.023(c)		Between 5km up to and including 7km	m3	8		
	F			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	F			Provision of cement stabilised soil				
2.F.5.6	F	15.003(d)		Material from the nearest borrow pit with screening	m3	308		
2.F.5.7	F	15.003(e)		Cement for stabilisation of soil	m3	16		
	F			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.F.5.8	F	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	323		
	F			OVERHAUL				
2.F.5.9	F	15.010(b)		Between 3km up to and including 5km	m3	162		
2.F.5.10	F	15.010(c)		Between 5km up to and including 7km	m3	162		
	F			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.F.5.11	F	15.014(a)		Structure backfilling compacted	m3	550		
2.F.5.12	F	15.014(a)		Embankment backfilling compacted	m3	380		
2.F.5.13	F	15.015		Finishing of slopes	m2	730		
	F			OVERHAUL				
2.F.5.14	F	15.016(b)		Between 3km up to and including 5km	m3	292		
2.F.5.15	F	15.016(c)		Between 5km up to and including 7km	m3	292		
	F			CONCRETE WORKS				
	F			ROUGH FORMWORK				
	F			Vertical surfaces				
2.F.5.16	F	20.001		Sides of floor slab	m2	122		
2.F.5.17	F	20.001		Sides of walls	m2	432		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			SMOOTH FORMWORK				
	F			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.F.5.18	F	20.002		Underside of slabs	m2	86		
	F			SMOOTH FORMWORK				
	F			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.F.5.19	F	20.002		Walls	m2	1 134		
2.F.5.20	F	20.002		Side of Sump walls	m2	10		
2.F.5.21	F	20.005		Narrow widths - Up to 200mm high	m	298		
	F			Box-out holes/Form voids (for sleeves only)				
	F			a) Small, circular, of diameter up to and including 0.35 m				
2.F.5.22	F	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	76		
	F			REINFORCEMENT				
2.F.5.23	F	20.007		Steel bars (irrespective of grade or diameter)	t	48		
	F			CONCRETE				
	F			CONCRETE 15 MPa/19mm in:				
2.F.5.24	F	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	389		
2.F.5.25	F	20.011(b)		Mass concrete filling where required by the engineer	m3	19		
2.F.5.26	F	46.007(b)i)		100mm thick granolithic screed laid to fall to direction of sump.	m2	184		
	F			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.F.5.27	F	20.010	X	Foundations, bases, floor slabs and roof slabs	m3	124		
2.F.5.28	F	20.010	X	Walls	m3	196		
	F			UNFORMED SURFACE FINISHES				
2.F.5.29	F	20.013(a)		Wood floated finish	m2	184		
2.F.5.30	F	20.013(b)		Steel floated finish	m2	363		
2.F.5.31	F	33.004		Item 2	No	1		
2.F.5.32	F	33.004		Item 3	No	1		
2.F.5.33	F	33.004		Item 4	No	1		
	F			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	F			PN25				
2.F.5.34	F	32.003		Item 1	No	30		
2.F.5.35	F	32.003		Item 2	No	30		
2.F.5.36	F	35.002		Item 3	No	30		
2.F.5.37	F	35.002		Item 4	No	30		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			INSTALLATION OF VALVES AND SPECIALS				
	F			PN25				
2.F.5.38	F	33.004		Item 1	No	30		
2.F.5.39	F	33.004		Item 2	No	30		
2.F.5.40	F	33.004		Item 3	No	30		
2.F.5.41	F	33.004		Item 4	No	30		
	F			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	F			PN40				
2.F.5.42	F	32.003		Item 1	No	8		
2.F.5.43	F	32.003		Item 2	No	8		
2.F.5.44	F	35.002		Item 3	No	8		
2.F.5.45	F	35.002		Item 4	No	8		
	F			INSTALLATION OF VALVES AND SPECIALS				
	F			PN40				
2.F.5.46	F	33.004		Item 1	No	8		
2.F.5.47	F	33.004		Item 2	No	8		
2.F.5.48	F	33.004		Item 3	No	8		
2.F.5.49	F	33.004		Item 4	No	8		
	F			ITEMS CAST OR BUILT INTO CONCRETE				
2.F.5.50	F	33.005		Steel pipe diameter 700mm	No	38		
	F			SUPPLY AND ERECT PRECAST ELEMENTS				
	F			Refer to Dwg 2A-C6-141 and 2A-C6-142				
2.F.5.51	F	20.017		Precast slab Type 1	No	76		
	F			ANCILLARY WORKS				
2.F.5.52	F	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	38		
2.F.5.53	F	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	38		
2.F.5.54	F	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	38		
2.F.5.55	F	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	38		
2.F.5.56	F	20.021 c)		110mm diam uPVC pipe cast into concrete wall for the sump	No	38		
2.F.5.57	F	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 700mm	no	38		
2.F.5.58	F	20.014		19mm aggregate/stone	m3	23		
2.F.5.59	F	20.021 c)		Vermin mesh to be applied to opening as per drawing Reg. No. 2A-C6-125	no	76		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			SPECIFIC ITEMS OF WORK				
	F			SEALING STRIPS, JOINT SEALANT, ETC				
2.F.5.60	F	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	198		
	F			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	F			Foundation trench excavation and backfilling				
2.F.5.61	F	21.001(b)		In all other classes of material	m3	23		
2.F.5.62	F	21.002		Surface preparation for bedding the gabions	m2	23		
2.F.5.63	F	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	217		
	F			DOUBLE AIR VALVE INSTALLATION				
	F			REFER TO DRAWING 2A-C6-144 and 2A-C6-145				
	F			EARTHWORKS				
	F			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS. THRUST BLOCKS, ETC				
2.F.5.64	F	9.013		Excavate for valve chambers	m3	20		
2.F.5.65	F	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	1		
	F			OVERHAUL				
2.F.5.66	F	9.023(b)		Between 3km up to and including 5km	m3	1		
2.F.5.67	F	9.023(c)		Between 5km up to and including 7km	m3	1		
	F			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	F			Provision of cement stabilised soil				
2.F.5.68	F	15.003(d)		Material from the nearest borrow pit with screening	m3	17		
2.F.5.69	F	15.003(e)		Cement for stabilisation of soil	m3	0.9		
	F			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.F.5.70	F	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	17		
	F			OVERHAUL				
2.F.5.71	F	15.010(b)		Between 3km up to and including 5km	m3	8		
2.F.5.72	F	15.010(c)		Between 5km up to and including 7km	m3	9		
	F			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.F.5.73	F	15.014(a)		Structure backfilling compacted	m3	30		
2.F.5.74	F	15.014(a)		Embankment backfilling compacted	m3	8		
2.F.5.75	F	15.015		Finishing of slopes	m2	24		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	F			OVERHAUL				Brought Forward
2.F.5.76	F	15.016(b)		Between 3km up to and including 5km	m3	9		
2.F.5.77	F	15.016(c)		Between 5km up to and including 7km	m3	9		
	F			CONCRETE WORKS				
	F			ROUGH FORMWORK				
	F			Vertical surfaces				
2.F.5.78	F	20.001		Sides of floor slab	m2	7		
2.F.5.79	F	20.001		Sides of walls	m2	25		
	F			SMOOTH FORMWORK				
	F			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.F.5.80	F	20.002		Underside of slabs	m2	5		
	F			SMOOTH FORMWORK				
	F			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.F.5.81	F	20.002		Walls	m2	66		
2.F.5.82	F	20.002		Side of Sump walls	m2	0.5		
2.F.5.83	F	20.005		Narrow widths - Up to 200mm high	m	16		
	F			Box-out holes/Form voids (for sleeves only)				
	F			a) Small, circular, of diameter up to and including 0.35 m				
2.F.5.84	F	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	4		
	F			REINFORCEMENT				
2.F.5.85	F	20.007		Steel bars (irrespective of grade or diameter)	t	2.7		
	F			CONCRETE				
	F			CONCRETE 15 MPa/19mm in:				
2.F.5.86	F	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	21		
2.F.5.87	F	20.011(b)		Mass concrete filling where required by the engineer	m3	1		
2.F.5.88	F	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	10		
								Carried Forward

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.F.5.89	F	20.010		Foundations, bases, floor slabs and roof slabs	m3	7		
2.F.5.90	F	20.010		Walls	m3	12		
	F			UNFORMED SURFACE FINISHES				
2.F.5.91	F	20.013(a)		Wood floated finish	m2	10		
2.F.5.92	F	20.013(b)		Steel floated finish	m2	20		
	F			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	F			PN25				
2.F.5.93	F	32.003		Item 1	No	2		
2.F.5.94	F	32.003		Item 2	No	2		
2.F.5.95	F	35.002		Item 3	No	4		
2.F.5.96	F	35.002		Item 4	No	4		
	F			INSTALLATION OF VALVES AND SPECIALS				
	F			PN25				
2.F.5.97	F	33.004		Item 1	No	2		
2.F.5.98	F	33.004		Item 2	No	2		
2.F.5.99	F	33.004		Item 3	No	4		
2.F.5.100	F	33.004		Item 4	No	4		
	F			ITEMS CAST OR BUILT INTO CONCRETE				
2.F.5.101	F	33.005		Steel pipe diameter 700mm	No	2		
	F			SUPPLY AND ERECT PRECAST ELEMENTS				
	F			Refer to Dwg 2A-C6-144 and 2A-C6-145				
2.F.5.102	F	20.017		Precast slab Type 1	No	4		
	F			ANCILLARY WORKS				
2.F.5.103	F	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	2		
2.F.5.104	F	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	2		
2.F.5.105	F	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	2		
2.F.5.106	F	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	2		
2.F.5.107	F	20.021 c)		110mm diam uPVC pipe cast into concrete wall for the sump	No	2		
2.F.5.108	F	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 700mm	No	2		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.F.5.109	F	20.014		19mm aggregate/stone	m3	2		
2.F.5.110	F	20.021 c)		Vermin mesh to be applied to opening as per drawing Reg. No. 2A-C6-125	no	4		
	F			SPECIFIC ITEMS OF WORK				
	F			SEALING STRIPS, JOINT SEALANT, ETC				
2.F.5.111	F	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	11		
	F			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	F			Foundation trench excavation and backfilling				
2.F.5.112	F	21.001(b)		In all other classes of material	m3	2		
2.F.5.113	F	21.002		Surface preparation for bedding the gabions	m2	2		
2.F.5.114	F	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	12		
	F			DOUBLE SCOUR AND ISOLATING VALVE INSTALLATION (for 1400 to 1600mm diam pipeline)				
	F			REFER TO DRAWING 2A-C6-153, 2A-C6-154 & 2A-C6-155				
	F			EARTHWORKS				
	F			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS. THRUST BLOCKS. ETC				
2.F.5.115	F	9.013		Excavate for valve chambers	m3	231		
2.F.5.116	F	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	70		
2.F.5.117	F	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance.	m3	5		
2.F.5.118	F	9.020		Compaction of trench bottom (150mm thick)	m2	57		
	F			OVERHAUL				
2.F.5.119	F	9.023(a)		Between 1km up to and including 3km	m3	40		
2.F.5.120	F	9.023(b)		Between 3km up to and including 5km	m3	40		
2.F.5.121	F	9.023(c)		Between 5km up to and including 7km	m3	40		
	F			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	F			Provision of bed material (G5)				
2.F.5.122	F	15.003(c)		Material from the nearest borrow pit without screening	m3	9		
	F			Provision of cement stabilised soil				
2.F.5.123	F	15.003(d)		Material from the nearest borrow pit with screening	m3	20		
2.F.5.124	F	15.003(e)		Cement for stabilisation of soil	m3	1		
	F			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.F.5.125	F	15.001		Placing of bedding material	m3	9		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.F.5.126	F	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	21		
	F			OVERHAUL				
2.F.5.127	F	15.010(b)		Between 3km up to and including 5km	m3	15		
2.F.5.128	F	15.010(c)		Between 5km up to and including 7km	m3	15		
	F			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.F.5.129	F	15.014(a)		Structure backfilling compacted	m3	123		
2.F.5.130	F	15.014(a)		Embankment backfilling compacted	m3	28		
2.F.5.131	F	15.014(b)		Rockfill processing and compaction	m3	5		
2.F.5.132	F	15.015		Finishing of slopes	m2	47		
	F			OVERHAUL				
2.F.5.133	F	15.016(b)		Between 3km up to and including 5km	m3	3		
2.F.5.134	F	15.016(c)		Between 5km up to and including 7km	m3	3		
	F			CONCRETE WORKS				
	F			ROUGH FORMWORK				
	F			Vertical surfaces				
2.F.5.135	F	20.001		Sides of floor slab	m2	9		
2.F.5.136	F	20.001		Sides of walls	m2	66		
	F			SMOOTH FORMWORK				
	F			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.F.5.137	F	20.002		Underside of slabs	m2	14		
	F			SMOOTH FORMWORK				
	F			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.F.5.138	F	20.002		Walls	m2	240		
2.F.5.139	F	20.002		Side of Sump walls	m2	0.5		
2.F.5.140	F	20.002		Plinths	m2	4		
2.F.5.141	F	20.005		Narrow widths - Up to 250mm high (roof slabs)	m	69		
2.F.5.142	F	20.005		Box out 325mm wide x 150mm thick for precast concrete panel placement surface	m	2		
	F			Box-out holes/Form voids (for sleeves only)				
	F			a) Small, circular, of diameter up to and including 0.35 m				
2.F.5.143	F	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	2		
	F			REINFORCEMENT				
2.F.5.144	F	20.007		Steel bars (irrespective of grade or diameter)	t	10.5		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			CONCRETE				
	F			CONCRETE 15 MPa/19mm in:				
2.F.5.145	F	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	53		
2.F.5.146	F	20.011(b)		Mass concrete filling where required by the engineer	m3	1		
2.F.5.147	F	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	35		
	F			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.F.5.148	F	20.010		Foundations, bases, floor slabs and roof slabs	m3	22		
2.F.5.149	F	20.010		Plinths (Including grouting between the plinth and the pipes/specials where required)	m3	1		
2.F.5.150	F	20.010		Walls	m3	47		
	F			UNFORMED SURFACE FINISHES				
2.F.5.151	F	20.013(a)		Wood floated finish	m2	35		
2.F.5.152	F	20.013(b)		Steel floated finish	m2	57		
	F			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	F			PN25				
2.F.5.153	F	32.003		Item 1	No	2		
2.F.5.154	F	32.003		Item 2	No	1		
2.F.5.155	F	32.003		Item 3	No	1		
2.F.5.156	F	35.002		Item 4	No	1		
2.F.5.157	F	32.003		Item 5	No	1		
2.F.5.158	F	32.003		Item 6	No	2		
2.F.5.159	F	35.002		Item 6A	No	2		
2.F.5.160	F	32.003		Item 6B	No	2		
2.F.5.161	F	35.002		Item 6C	No	2		
2.F.5.162	F	32.003		Item 7	No	1		
2.F.5.163	F	35.002		Item 8	No	5		
2.F.5.164	F	32.003		Item 9	No	3		
2.F.5.165	F	32.003		Item 10	No	2		
2.F.5.166	F	32.003		Item 11	No	2		
2.F.5.167	F	32.003		Item 12	No	2		
2.F.5.168	F	32.003		Item 13	No	1		
	F			INSTALLATION OF VALVES AND SPECIALS				
	F			PN25				
2.F.5.169	F	33.004		Item 1	No	2		
2.F.5.170	F	33.004		Item 2	No	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.F.5.171	F	33.004		Item 3	No	1		
2.F.5.172	F	33.004		Item 4	No	1		
2.F.5.173	F	33.004		Item 5	No	1		
2.F.5.174	F	33.004		Item 6	No	2		
2.F.5.175	F	33.004		Item 6A	No	2		
2.F.5.176	F	33.004		Item 6B	No	2		
2.F.5.177	F	33.004		Item 6C	No	2		
2.F.5.178	F	33.004		Item 7	No	1		
2.F.5.179	F	33.004		Item 8	No	5		
2.F.5.180	F	33.004		Item 9	No	3		
2.F.5.181	F	33.004		Item 10	No	2		
2.F.5.182	F	33.004		Item 11	No	2		
2.F.5.183	F	33.004		Item 12	No	2		
2.F.5.184	F	33.004		Item 13	No	1		
	F			ITEMS CAST OR BUILT INTO CONCRETE				
2.F.5.185	F	33.005		Steel pipe diameter 900mm up to 1500mm	No	2		
2.F.5.186	F	33.005		Steel pipe diameter 400mm	No	2		
	F			SUPPLY AND ERECT PRECAST ELEMENTS				
	F			Refer to Dwg 2A-C6-153, 2A-C6-154 & 2A-C6-155				
2.F.5.187	F	20.017		Precast slab Type 1	No	2		
2.F.5.188	F	20.017		Precast slab Type 2	No	8		
	F			ANCILLARY WORKS				
2.F.5.189	F	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	2		
2.F.5.190	F	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	2		
2.F.5.191	F	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.F.5.192	F	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.F.5.193	F	20.021 c)		Steel bars as per drawing Reg. No.2A-C6-125	No	1		
2.F.5.194	F	20.021 c)		160mm diam uPVC pipe cast into concrete wall for the sump	No	2		
2.F.5.195	F	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 400mm	no	2		
2.F.5.196	F	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 1200mm	no	2		
2.F.5.197	F	20.021 c)		Sleeves to be grouted after the installation of cables to ensure no seepage 160mm diam x 0.3mm thick	no	6		
2.F.5.198	F	20.021 c)		Portable aluminium steps complete, as per drawing 2A-C6-125	no	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.F.5.199	F	20.021 c)		Drilling for dowels and including grouting in of dowels, per one chamber complete, as per drawing 2A-C6-125. (Dowel material included in 20.007)	no	1		
2.F.5.200	F	20.021 c)		10mm Neoprene, as per drawing 2A-C6-125	m²	1		
	F			SPECIFIC ITEMS OF WORK				
	F			SEALING STRIPS, JOINT SEALANT, ETC				
2.F.5.201	F	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	62		
	F			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	F			Foundation trench excavation and backfilling				
2.F.5.202	F	21.001(b)		In all other classes of material	m3	40		
2.F.5.203	F	21.002		Surface preparation for bedding the gabions	m2	33		
2.F.5.204	F	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	32		
2.F.5.205	F	21.003(a)		Galvanised gabions cages (Refer to drawings for dimentions)	m3	4		
2.F.5.206	F	21.003(c)		Galvanised gabions mattresses (Refer to drawings for dimentions)	m3	5		
2.F.5.207	F	27.009		Rip-rap	m3	5		
	F			SINGLE SCOUR VALVE INSTALLATION (for 1400 to 1600mm diam pipeline)				
	F			REFER TO DRAWING 2A-C6-148 and 2A-C6-149				
	F			EARTHWORKS				
	F			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS. THRUST BLOCKS. ETC				
2.F.5.208	F	9.013		Excavate for valve chambers	m3	425		
2.F.5.209	F	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	180		
2.F.5.210	F	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance.	m3	10		
2.F.5.211	F	9.020		Compaction of trench bottom (150mm thick)	m2	102		
	F			OVERHAUL				
2.F.5.212	F	9.023(a)		Between 1km up to and including 3km	m3	60		
2.F.5.213	F	9.023(b)		Between 3km up to and including 5km	m3	60		
2.F.5.214	F	9.023(c)		Between 5km up to and including 7km	m3	60		
	F			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	F			Provision of bed material (G5)				
2.F.5.215	F	15.003(c)		Material from the nearest borrow pit without screening	m3	16		
	F			Provision of cement stabilised soil				
2.F.5.216	F	15.003(d)		Material from the nearest borrow pit with screening	m3	58		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.F.5.217	F	15.003(e)		Cement for stabilisation of soil	m3	3		
	F			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.F.5.218	F	15.001		Placing of bedding material	m3	16		
2.F.5.219	F	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	58		
	F			OVERHAUL				
2.F.5.220	F	15.010(a)		Between 1km up to and including 3km	m3	0		
2.F.5.221	F	15.010(b)		Between 3km up to and including 5km	m3	37		
2.F.5.222	F	15.010(c)		Between 5km up to and including 7km	m3	37		
2.F.5.223	F	15.010(d)		Between 7km up to and including 9km	m3	0		
2.F.5.224	F	15.010(e)		Between 9km up to and including 11km	m3	0		
2.F.5.225	F	15.010(f)		Between 11km up to and including 13km	m3	0		
	F			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.F.5.226	F	15.014(a)		Structure backfilling compacted	m3	330		
2.F.5.227	F	15.014(a)		Embankment backfilling compacted	m3	86		
2.F.5.228	F	15.014(b)		Rockfill processing and compaction	m3	10		
2.F.5.229	F	15.015		Finishing of slopes	m2	145		
	F			OVERHAUL				
2.F.5.230	F	15.016(b)		Between 3km up to and including 5km	m3	35		
2.F.5.231	F	15.016(c)		Between 5km up to and including 7km	m3	35		
	F			CONCRETE WORKS				
	F			ROUGH FORMWORK				
	F			Vertical surfaces				
2.F.5.232	F	20.001		Sides of floor slab	m2	25		
2.F.5.233	F	20.001		Sides of walls	m2	175		
	F			SMOOTH FORMWORK				
	F			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.F.5.234	F	20.002		Underside of slabs	m2	33		
	F			SMOOTH FORMWORK				
	F			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.F.5.235	F	20.002		Walls	m2	555		
2.F.5.236	F	20.002		Side of Sump walls	m2	2.0		
2.F.5.237	F	20.002		Plinths	m2	16		
2.F.5.238	F	20.005		Narrow widths - Up to 250mm high (roof slabs)	m	98		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			Box-out holes/Form voids (for sleeves only)				
	F			a) Small, circular, of diameter up to and including 0.35 m				
2.F.5.239	F	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	8		
	F			REINFORCEMENT				
2.F.5.240	F	20.007		Steel bars (irrespective of grade or diameter)	t	19.7		
	F			CONCRETE				
	F			CONCRETE 15 MPa/19mm in:				
2.F.5.241	F	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	88		
2.F.5.242	F	20.011(b)		Mass concrete filling where required by the engineer	m3	4		
2.F.5.243	F	46.007(b)i)		100mm thick granolithic screed laid to fall to direction of sump.	m2	52		
	F			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.F.5.244	F	20.010		Foundations, bases, floor slabs and roof slabs	m3	36		
2.F.5.245	F	20.010		Plinths (Including grouting between the plinth and the pipes/specials where required)	m3	4		
2.F.5.246	F	20.010		Walls	m3	92		
	F			UNFORMED SURFACE FINISHES				
2.F.5.247	F	20.013(a)		Wood floated finish	m2	52		
2.F.5.248	F	20.013(b)		Steel floated finish	m2	102		
	F			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	F			PN25				
2.F.5.249	F	32.003		Item 1	No	3		
2.F.5.250	F	35.002		Item 2	No	6		
2.F.5.251	F	32.003		Item 3	No	3		
2.F.5.252	F	32.003		Item 4	No	3		
2.F.5.253	F	32.003		Item 5	No	3		
2.F.5.254	F	32.003		Item 6	No	3		
2.F.5.255	F	32.003		Item 7	No	3		
2.F.5.256	F	35.002		Item 8	No	3		
2.F.5.257	F	32.003		Item 9	No	3		
2.F.5.258	F	35.002		Item 10	No	3		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			INSTALLATION OF VALVES AND SPECIALS				
	F			PN25				
2.F.5.259	F	33.004		Item 1	No	3		
2.F.5.260	F	33.004		Item 2	No	6		
2.F.5.261	F	33.004		Item 3	No	3		
2.F.5.262	F	33.004		Item 4	No	3		
2.F.5.263	F	33.004		Item 5	No	3		
2.F.5.264	F	33.004		Item 6	No	3		
2.F.5.265	F	33.004		Item 7	No	3		
2.F.5.266	F	33.004		Item 8	No	3		
2.F.5.267	F	33.004		Item 9	No	3		
2.F.5.268	F	33.004		Item 10	No	3		
	F			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	F			PN40				
2.F.5.269	F	32.003		Item 1	No	1		
2.F.5.270	F	35.002		Item 2	No	2		
2.F.5.271	F	32.003		Item 3	No	1		
2.F.5.272	F	32.003		Item 4	No	1		
2.F.5.273	F	32.003		Item 5	No	1		
2.F.5.274	F	32.003		Item 6	No	1		
2.F.5.275	F	32.003		Item 7	No	1		
2.F.5.276	F	35.002		Item 8	No	1		
2.F.5.277	F	32.003		Item 9	No	1		
2.F.5.278	F	35.002		Item 10	No	1		
	F			INSTALLATION OF VALVES AND SPECIALS				
	F			PN40				
2.F.5.279	F	33.004		Item 1	No	1		
2.F.5.280	F	33.004		Item 2	No	2		
2.F.5.281	F	33.004		Item 3	No	1		
2.F.5.282	F	33.004		Item 4	No	1		
2.F.5.283	F	33.004		Item 5	No	1		
2.F.5.284	F	33.004		Item 6	No	1		
2.F.5.285	F	33.004		Item 7	No	1		
2.F.5.286	F	33.004		Item 8	No	1		
2.F.5.287	F	33.004		Item 9	No	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.F.5.288	F	33.004		Item 10	No	1		
	F			ITEMS CAST OR BUILT INTO CONCRETE				
2.F.5.289	F	33.005		Steel pipe diameter 900mm up to 1500mm	No	8		
2.F.5.290	F	33.005		Steel pipe diameter 300mm	No	4		
	F			SUPPLY AND ERECT PRECAST ELEMENTS				
	F			Refer to Dwg 2A-C6-148 and 2A-C6-149				
2.F.5.291	F	20.017		Precast slab Type 1	No	4		
2.F.5.292	F	20.017		Precast slab Type 2	No	4		
	F			ANCILLARY WORKS				
2.F.5.293	F	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	8		
2.F.5.294	F	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	8		
2.F.5.295	F	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	4		
2.F.5.296	F	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	4		
2.F.5.297	F	20.021 c)		Steel bars as per drawing Reg. No.2A-C6-125	No	4		
2.F.5.298	F	20.021 c)		160mm diam uPVC pipe cast into concrete wall for the sump	No	8		
2.F.5.299	F	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 300mm	no	4		
2.F.5.300	F	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 1420mm	no	8		
2.F.5.301	F	20.021 c)		Sleeves to be grouted after the installation of cables to ensure no seepage 160mm diam x 0.3mm thick	no	8		
2.F.5.302	F	20.021 c)		Drilling for dowels and including grouting in of dowels, per one chamber complete, as per drawing 2A-C6-125. (Dowel material included in 20.007)	no	4		
2.F.5.303	F	20.021 c)		10mm Neoprene, as per drawing 2A-C6-125	m ²	4		
	F			SPECIFIC ITEMS OF WORK				
	F			SEALING STRIPS, JOINT SEALANT, ETC				
2.F.5.304	F	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	33		
	F			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	F			Foundation trench excavation and backfilling				
2.F.5.305	F	21.001(b)		In all other classes of material	m3	116		
2.F.5.306	F	21.002		Surface preparation for bedding the gabions	m2	97		
2.F.5.307	F	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	93		
2.F.5.308	F	21.003(a)		Galvanised gabions cages (Refer to drawings for dimentions)	m3	13		
2.F.5.309	F	21.003(c)		Galvanised gabions mattresses (Refer to drawings for dimentions)	m3	12		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.F.5.310	F	27.009		Rip-rap	m3	5		
	F			SCOUR VALVE, ISOLATING VALVE, AND AIR VALVE INSTALLATION (for 1400 to 1600mm diam pipeline)				
	F			REFER TO DRAWING 2A-C6-159, 2A-C6-160 and 2A-C6-161				
	F			EARTHWORKS				
	F			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS, THRUST BLOCKS, ETC				
2.F.5.311	F	9.013		Excavate for valve chambers	m3	412		
2.F.5.312	F	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	117		
2.F.5.313	F	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance.	m3	9		
2.F.5.314	F	9.020		Compaction of trench bottom (150mm thick)	m2	114		
	F			OVERHAUL				
2.F.5.315	F	9.023(a)		Between 1km up to and including 3km	m3	73		
2.F.5.316	F	9.023(b)		Between 3km up to and including 5km	m3	73		
2.F.5.317	F	9.023(c)		Between 5km up to and including 7km	m3	73		
	F			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	F			Provision of bed material (G5)				
2.F.5.318	F	15.003(c)		Material from the nearest borrow pit without screening	m3	17		
	F			Provision of cement stabilised soil				
2.F.5.319	F	15.003(d)		Material from the nearest borrow pit with screening	m3	40		
2.F.5.320	F	15.003(e)		Cement for stabilisation of soil	m3	2		
	F			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.F.5.321	F	15.001		Placing of bedding material	m3	17		
2.F.5.322	F	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	42		
	F			OVERHAUL				
2.F.5.323	F	15.010(b)		Between 3km up to and including 5km	m3	30		
2.F.5.324	F	15.010(c)		Between 5km up to and including 7km	m3	30		
	F			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.F.5.325	F	15.014(a)		Structure backfilling compacted	m3	218		
2.F.5.326	F	15.014(a)		Embankment backfilling compacted	m3	56		
2.F.5.327	F	15.014(b)		Rockfill processing and compaction	m3	9		
2.F.5.328	F	15.015		Finishing of slopes	m2	94		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			OVERHAUL				
2.F.5.329	F	15.016(b)		Between 3km up to and including 5km	m3	5		
2.F.5.330	F	15.016(c)		Between 5km up to and including 7km	m3	5		
	F			CONCRETE WORKS				
	F			ROUGH FORMWORK				
	F			Vertical surfaces				
2.F.5.331	F	20.001		Sides of floor slab	m2	18		
2.F.5.332	F	20.001		Sides of walls	m2	124		
	F			SMOOTH FORMWORK				
	F			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.F.5.333	F	20.002		Underside of slabs	m2	29		
	F			SMOOTH FORMWORK				
	F			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.F.5.334	F	20.002		Walls	m2	436		
2.F.5.335	F	20.002		Side of Sump walls	m2	1		
2.F.5.336	F	20.002		Plinths	m2	8		
2.F.5.337	F	20.005		Narrow widths - Up to 250mm high (roof slabs)	m	137		
2.F.5.338	F	20.005		Box out 325mm wide x 150mm thick for precast concrete panel placement surface	m	4		
	F			Box-out holes/Form voids (for sleeves only)				
	F			a) Small, circular, of diameter up to and including 0.35 m				
2.F.5.339	F	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	4		
	F			REINFORCEMENT				
2.F.5.340	F	20.007		Steel bars (irrespective of grade or diameter)	t	20		
	F			CONCRETE				
	F			CONCRETE 15 MPa/19mm in:				
2.F.5.341	F	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	105		
2.F.5.342	F	20.011(b)		Mass concrete filling where required by the engineer	m3	2		
2.F.5.343	F	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	69		
	F			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.F.5.344	F	20.010		Foundations, bases, floor slabs and roof slabs	m3	44		
2.F.5.345	F	20.010		Plinths (Including grouting between the plinth and the pipes/specials where required)	m3	2		
2.F.5.346	F	20.010		Walls	m3	86		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			UNFORMED SURFACE FINISHES				
2.F.5.347	F	20.013(a)		Wood floated finish	m2	69		
2.F.5.348	F	20.013(b)		Steel floated finish	m2	114		
	F			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	F			PN25				
2.F.5.349	F	32.003		Item 1	No	4		
2.F.5.350	F	32.003		Item 2	No	2		
2.F.5.351	F	32.003		Item 3	No	2		
2.F.5.352	F	35.002		Item 4	No	2		
2.F.5.353	F	32.003		Item 5	No	2		
2.F.5.354	F	32.003		Item 6	No	4		
2.F.5.355	F	35.002		Item 6A	No	2		
2.F.5.356	F	32.003		Item 6B	No	2		
2.F.5.357	F	35.002		Item 6C	No	2		
2.F.5.358	F	35.002		Item 6D	No	2		
2.F.5.359	F	35.002		Item 6E	No	2		
2.F.5.360	F	32.003		Item 7	No	2		
2.F.5.361	F	35.002		Item 8	No	6		
2.F.5.362	F	32.003		Item 9	No	4		
2.F.5.363	F	32.003		Item 10	No	2		
2.F.5.364	F	32.003		Item 11	No	2		
2.F.5.365	F	32.003		Item 12	No	2		
2.F.5.366	F	32.003		Item 13	No	2		
2.F.5.367	F	32.003		Item 14	No	2		
	F			INSTALLATION OF VALVES AND SPECIALS				
	F			PN25				
2.F.5.368	F	33.004		Item 1	No	4		
2.F.5.369	F	33.004		Item 2	No	2		
2.F.5.370	F	33.004		Item 3	No	2		
2.F.5.371	F	33.004		Item 4	No	2		
2.F.5.372	F	33.004		Item 5	No	2		
2.F.5.373	F	33.004		Item 6	No	4		
2.F.5.374	F	33.004		Item 6A	No	2		
2.F.5.375	F	33.004		Item 6B	No	2		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.F.5.376	F	33.004		Item 6C	No	2		
2.F.5.377	F	33.004		Item 6D	No	2		
2.F.5.378	F	33.004		Item 6E	No	2		
2.F.5.379	F	33.004		Item 7	No	2		
2.F.5.380	F	33.004		Item 8	No	6		
2.F.5.381	F	33.004		Item 9	No	4		
2.F.5.382	F	33.004		Item 10	No	2		
2.F.5.383	F	33.004		Item 11	No	2		
2.F.5.384	F	33.004		Item 12	No	2		
2.F.5.385	F	33.004		Item 13	No	2		
2.F.5.386	F	33.004		Item 14	No	2		
	F			ITEMS CAST OR BUILT INTO CONCRETE				
2.F.5.387	F	33.005		Steel pipe diameter 900mm up to 1500mm	No	4		
2.F.5.388	F	33.005		Steel pipe diameter 300mm	No	2		
	F			SUPPLY AND ERECT PRECAST ELEMENTS				
	F			Refer to Dwg 2A-C6-159, 2A-C6-160 and 2A-C6-161				
2.F.5.389	F	20.017		Precast slab Type 1	No	4		
2.F.5.390	F	20.017		Precast slab Type 2	No	16		
	F			ANCILLARY WORKS				
2.F.5.391	F	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	4		
2.F.5.392	F	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	4		
2.F.5.393	F	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	2		
2.F.5.394	F	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	2		
2.F.5.395	F	20.021 c)		Steel bars as per drawing Reg. No.2A-C6-125	No	2		
2.F.5.396	F	20.021 c)		160mm diam uPVC pipe cast into concrete wall for the sump	No	4		
2.F.5.397	F	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 300mm	no	4		
2.F.5.398	F	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 1200mm	no	4		
2.F.5.399	F	20.021 c)		Sleeves to be grouted after the installation of cables to ensure no seepage 160mm diam x 0.3mm thick	no	4		
2.F.5.400	F	20.021 c)		Portable aluminium steps complete, as per drawing 2A-C6-125	no	2		
2.F.5.401	F	20.021 c)		Drilling for dowels and including grouting in of dowels, per one chamber complete, as per drawing 2A-C6-125. (Dowel material included in 20.007)	no	2		
2.F.5.402	F	20.021 c)		10mm Neoprene, as per drawing 2A-C6-125	m ²	2		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			SPECIFIC ITEMS OF WORK				
	F			SEALING STRIPS, JOINT SEALANT, ETC				
2.F.5.403	F	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	122		
	F			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	F			Foundation trench excavation and backfilling				
2.F.5.404	F	21.001(b)		In all other classes of material	m3	80		
2.F.5.405	F	21.002		Surface preparation for bedding the gabions	m2	66		
2.F.5.406	F	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	64		
2.F.5.407	F	21.003(a)		Galvanised gabions cages (Refer to drawings for dimentions)	m3	8		
2.F.5.408	F	21.003(c)		Galvanised gabions mattresses (Refer to drawings for dimentions)	m3	10		
2.F.5.409	F	27.009		Rip-rap	m3	5		
	F			NON-RETURN AND ISOLATING VALVE CHAMBER (along the High Lift Rising Main)				
	F			REFER TO DRAWING 2A-C6-170 and 2A-C6-171				
	F			EARTHWORKS				
	F			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS. THRUST BLOCKS. ETC				
2.F.5.410	F	9.013		Excavate for valve chambers	m3	298		
2.F.5.411	F	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	95		
2.F.5.412	F	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance.	m3	8		
2.F.5.413	F	9.020		Compaction of trench bottom (150mm thick)	m2	92		
	F			OVERHAUL				
2.F.5.414	F	9.023(a)		Between 1km up to and including 3km	m3	34		
2.F.5.415	F	9.023(b)		Between 3km up to and including 5km	m3	34		
2.F.5.416	F	9.023(c)		Between 5km up to and including 7km	m3	34		
	F			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	F			Provision of bed material (G5)				
2.F.5.417	F	15.003(c)		Material from the nearest borrow pit without screening	m3	14		
	F			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.F.5.418	F	15.001		Placing of bedding material	m3	14		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			OVERHAUL				
2.F.5.419	F	15.010(b)		Between 3km up to and including 5km	m3	7		
2.F.5.420	F	15.010(c)		Between 5km up to and including 7km	m3	7		
	F			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.F.5.421	F	15.014(a)		Structure backfilling compacted	m3	199		
2.F.5.422	F	15.014(b)		Rockfill processing and compaction	m3	8		
	F			OVERHAUL				
2.F.5.423	F	15.016(b)		Between 3km up to and including 5km	m3	4		
2.F.5.424	F	15.016(c)		Between 5km up to and including 7km	m3	4		
	F			CONCRETE WORKS				
	F			ROUGH FORMWORK				
	F			Vertical surfaces				
2.F.5.425	F	20.001		Sides of floor slab	m2	16		
2.F.5.426	F	20.001		Sides of walls	m2	100		
	F			SMOOTH FORMWORK				
	F			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.F.5.427	F	20.002		Underside of slabs	m2	20		
	F			SMOOTH FORMWORK				
	F			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.F.5.428	F	20.002		Walls	m2	276		
2.F.5.429	F	20.002		Side of Sump walls	m2	0.5		
2.F.5.430	F	20.002		Plinths	m2	11		
2.F.5.431	F	20.005		Narrow widths - Up to 200mm high	m	50		
	F			Box-out holes/Form voids (for sleeves only)				
	F			a) Small, circular, of diameter up to and including 0.35 m				
2.F.5.432	F	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	4		
	F			REINFORCEMENT				
2.F.5.433	F	20.007		Steel bars (irrespective of grade or diameter)	t	13.8		
	F			CONCRETE				
	F			CONCRETE 15 MPa/19mm in:				
2.F.5.434	F	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	84		
2.F.5.435	F	20.011(b)		Mass concrete filling where required by the engineer	m3	2		
2.F.5.436	F	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	55		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.F.5.437	F	20.010		Foundations, bases, floor slabs and roof slabs	m3	32		
2.F.5.438	F	20.010		Plinths (Including grouting between the plinth and the pipes/specials where required)	m3	3		
2.F.5.439	F	20.010		Walls	m3	57		
	F			UNFORMED SURFACE FINISHES				
2.F.5.440	F	20.013(a)		Wood floated finish	m2	55		
2.F.5.441	F	20.013(b)		Steel floated finish	m2	88		
	F			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	F			PN25				
2.F.5.442	F	32.003		Item 1	No	4		
2.F.5.443	F	32.003		Item 2	No	2		
2.F.5.444	F	32.003		Item 3	No	2		
2.F.5.445	F	35.002		Item 4	No	2		
2.F.5.446	F	32.003		Item 5	No	2		
2.F.5.447	F	35.002		Item 6	No	2		
2.F.5.448	F	32.003		Item 7	No	2		
2.F.5.449	F	32.003		Item 8	No	2		
2.F.5.450	F	35.002		Item 9	No	2		
2.F.5.451	F	35.002		Item 10	No	2		
2.F.5.452	F	32.003		Item 13	No	4		
2.F.5.453	F	35.002		Item 14	No	2		
2.F.5.454	F	32.003		Item 15	No	2		
2.F.5.455	F	32.003		Item 16	No	2		
2.F.5.456	F	32.003		Item 17	No	2		
	F			INSTALLATION OF VALVES AND SPECIALS				
	F			PN25				
2.F.5.457	F	33.004		Item 1	No	4		
2.F.5.458	F	33.004		Item 2	No	2		
2.F.5.459	F	33.004		Item 3	No	2		
2.F.5.460	F	33.004		Item 4	No	2		
2.F.5.461	F	33.004		Item 5	No	2		
2.F.5.462	F	33.004		Item 6	No	2		
2.F.5.463	F	33.004		Item 7	No	2		
2.F.5.464	F	33.004		Item 8	No	2		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.F.5.465	F	33.004		Item 9	No	2		
2.F.5.466	F	33.004		Item 10	No	2		
2.F.5.467	F	33.004		Item 13	No	4		
2.F.5.468	F	33.004		Item 14	No	2		
2.F.5.469	F	33.004		Item 15	No	2		
2.F.5.470	F	33.004		Item 16	No	2		
2.F.5.471	F	33.004		Item 17	No	2		
	F			ITEMS CAST OR BUILT INTO CONCRETE				
2.F.5.472	F	33.005		Steel pipe diameter 900mm up to 1500mm	No	4		
	F			SUPPLY AND ERECT PRECAST ELEMENTS				
	F			Refer to Dwg 2A-C6-170 and 2A-C6-171				
2.F.5.473	F	20.017		Precast slab Type 1	No	18		
	F			ANCILLARY WORKS				
2.F.5.474	F	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	2		
2.F.5.475	F	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	2		
2.F.5.476	F	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	2		
2.F.5.477	F	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	2		
2.F.5.478	F	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 1200mm	No	4		
2.F.5.479	F	20.021 c)		Sleeves to be grouted after the installation of cables to ensure no seepage 160mm diam x 0.3mm thick	no	4		
2.F.5.480	F	20.021 c)		Portable aluminium steps complete, as per drawing 2A-C6-125	no	2		
2.F.5.481	F	20.021 c)		Drilling for dowels and including grouting in of dowels, per one chamber complete, as per drawing 2A-C6-125. (Dowel material included in 20.007)	no	2		
2.F.5.482	F	20.021 c)		10mm Neoprene, as per drawing 2A-C6-125	m ²	2		
	F			SPECIFIC ITEMS OF WORK				
	F			SEALING STRIPS, JOINT SEALANT, ETC				
2.F.5.483	F	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	92		
	F			ACCESS CHAMBER				
	F			REFER TO DRAWING 2A-C6-146 and 2A-C6-147				
	F			EARTHWORKS				
	F			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS. THRUST BLOCKS. ETC				
2.F.5.484	F	9.013		Excavate for valve chambers	m ³	13		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	F			Provision of cement stabilised soil				
2.F.5.485	F	15.003(d)		Material from the nearest borrow pit with screening	m3	9		
2.F.5.486	F	15.003(e)		Cement for stabilisation of soil	m3	0.5		
	F			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.F.5.487	F	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	9.5		
	F			OVERHAUL				
2.F.5.488	F	15.010(a)		Between 1km up to and including 3km	m3	5		
2.F.5.489	F	15.010(b)		Between 3km up to and including 5km	m3	5		
2.F.5.490	F	15.010(c)		Between 5km up to and including 7km	m3	5		
	F			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.F.5.491	F	15.014(a)		Structure backfilling compacted	m3	19		
2.F.5.492	F	15.014(a)		Embankment backfilling compacted	m3	1		
2.F.5.493	F	15.015		Finishing of slopes	m2	10		
	F			OVERHAUL				
2.F.5.494	F	15.016(b)		Between 3km up to and including 5km	m3	4		
2.F.5.495	F	15.016(c)		Between 5km up to and including 7km	m3	4		
	F			CONCRETE WORKS				
	F			ROUGH FORMWORK				
	F			Vertical surfaces				
2.F.5.496	F	20.001		Sides of floor slab	m2	4		
2.F.5.497	F	20.001		Sides of walls	m2	11		
	F			SMOOTH FORMWORK				
	F			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.F.5.498	F	20.002		Underside of slabs	m2	3		
	F			SMOOTH FORMWORK				
	F			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.F.5.499	F	20.002		Walls	m2	27		
2.F.5.500	F	20.002		Side of Sump walls	m2	0.5		
2.F.5.501	F	20.005		Narrow widths - Up to 200mm high	m	8		
	F			Box-out holes/Form voids (for sleeves only)				
	F			a) Small, circular, of diameter up to and including 0.35 m				
2.F.5.502	F	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	2		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			REINFORCEMENT				
2.F.5.503	F	20.007		Steel bars (irrespective of grade or diameter)	t	1.4		
	F			CONCRETE				
	F			CONCRETE 15 MPa/19mm in:				
2.F.5.504	F	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	11		
2.F.5.505	F	20.011(b)		Mass concrete filling where required by the engineer	m3	1		
2.F.5.506	F	46.007(b)i)		100mm thick granolithic screed laid to fall to direction of sump.	m2	5		
	F			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.F.5.507	F	20.010		Foundations, bases, floor slabs and roof slabs	m3	4		
2.F.5.508	F	20.010		Walls	m3	5		
	F			UNFORMED SURFACE FINISHES				
2.F.5.509	F	20.013(a)		Wood floated finish	m2	5		
2.F.5.510	F	20.013(b)		Steel floated finish	m2	10		
	F			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	F			PN25				
2.F.5.511	F	32.003		Item 1	No	1		
2.F.5.512	F	32.003		Item 2	No	1		
2.F.5.513	F	35.002		Item 3	No	1		
2.F.5.514	F	32.003		Item 4	No	1		
2.F.5.515	F	35.002		Item 5	No	1		
	F			INSTALLATION OF VALVES AND SPECIALS				
	F			PN25				
2.F.5.516	F	33.004		Item 1	No	1		
2.F.5.517	F	33.004		Item 2	No	1		
2.F.5.518	F	33.004		Item 3	No	1		
2.F.5.519	F	33.004		Item 4	No	1		
2.F.5.520	F	33.004		Item 5	No	1		
	F			ITEMS CAST OR BUILT INTO CONCRETE				
2.F.5.521	F	33.005		Steel pipe diameter 700mm	No	1		
	F			SUPPLY AND ERECT PRECAST ELEMENTS				
	F			Refer to Dwg 2A-C6-146 and 2A-C6-147				
2.F.5.522	F	20.017		Precast slab Type 1	No	2		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			ANCILLARY WORKS				
2.F.5.523	F	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	1		
2.F.5.524	F	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	1		
2.F.5.525	F	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.F.5.526	F	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.F.5.527	F	20.021 c)		160mm diam uPVC pipe cast into concrete wall for the sump	No	1		
2.F.5.528	F	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 700mm	No	1		
2.F.5.529	F	20.014		19mm aggregate/stone	m3	1		
2.F.5.530	F	20.021 c)		Vermin mesh to be applied to opening as per drawing Reg. No. 2A-C6-125	no	2		
	F			SPECIFIC ITEMS OF WORK				
	F			SEALING STRIPS, JOINT SEALANT, ETC				
2.F.5.531	F	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	6		
	F			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	F			Foundation trench excavation and backfilling				
2.F.5.532	F	21.001(b)		In all other classes of material	m3	1		
2.F.5.533	F	21.002		Surface preparation for bedding the gabions	m2	1		
2.F.5.534	F	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	6		
	F			FLOW METER INSTALLATION				
	F			REFER TO DRAWING 2A-C6-168 and 2A-C6-169				
	F			EARTHWORKS				
	F			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS. THRUST BLOCKS. ETC				
2.F.5.535	F	9.013		Excavate for valve chambers	m3	57		
2.F.5.536	F	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	14		
2.F.5.537	F	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance.	m3	2		
2.F.5.538	F	9.020		Compaction of trench bottom (150mm thick)	m2	20		
	F			OVERHAUL				
2.F.5.539	F	9.023(a)		Between 1km up to and including 3km	m3	7		
2.F.5.540	F	9.023(b)		Between 3km up to and including 5km	m3	7		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	F			Provision of bed material (G5)				
2.F.5.541	F	15.003(c)		Material from the nearest borrow pit without screening	m3	3		
	F			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.F.5.542	F	15.001		Placing of bedding material	m3	3		
	F			OVERHAUL				
2.F.5.543	F	15.010(c)		Between 5km up to and including 7km	m3	3		
	F			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.F.5.544	F	15.014(a)		Structure backfilling compacted	m3	61		
2.F.5.545	F	15.014(b)		Rockfill processing and compaction	m3	2		
	F			OVERHAUL				
2.F.5.546	F	15.016(b)		Between 3km up to and including 5km	m3	21		
	F			CONCRETE WORKS				
	F			ROUGH FORMWORK				
	F			Vertical surfaces				
2.F.5.547	F	20.001		Sides of floor slab	m2	5		
2.F.5.548	F	20.001		Sides of walls	m2	29		
	F			SMOOTH FORMWORK				
	F			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.F.5.549	F	20.002		Underside of slabs	m2	6		
	F			SMOOTH FORMWORK				
	F			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.F.5.550	F	20.002		Walls	m2	77		
2.F.5.551	F	20.002		Side of Sump walls	m2	0.5		
2.F.5.552	F	20.002		Plinths	m2	4		
2.F.5.553	F	20.005		Narrow widths - Up to 200mm high	m	18		
	F			Box-out holes/Form voids (for sleeves only)				
	F			a) Small, circular, of diameter up to and including 0.35 m				
2.F.5.554	F	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	8		
	F			REINFORCEMENT				
2.F.5.555	F	20.007		Steel bars (irrespective of grade or diameter)	t	3.2		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	F			CONCRETE				
	F			CONCRETE 15 MPa/19mm in:				
2.F.5.556	F	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	17		
2.F.5.557	F	20.011(b)		Mass concrete filling where required by the engineer	m3	1		
2.F.5.558	F	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	10		
	F			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.F.5.559	F	20.010		Foundations, bases, floor slabs and roof slabs	m3	6		
2.F.5.560	F	20.010		Plinths (Including grouting between the plinth and the pipes/specials where required)	m3	1		
2.F.5.561	F	20.010		Walls	m3	14		
	F			UNFORMED SURFACE FINISHES				
2.F.5.562	F	20.013(a)		Wood floated finish	m2	10		
2.F.5.563	F	20.013(b)		Steel floated finish	m2	19		
	F			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	F			PN25				
2.F.5.564	F	32.003		Item 1	No	1		
2.F.5.565	F	32.003		Item 2	No	1		
2.F.5.566	F	36.8.2(c)		Item 3	No	1		
2.F.5.567	F	32.003		Item 4	No	1		
2.F.5.568	F	32.003		Item 5	No	1		
2.F.5.569	F	32.003		Item 6	No	1		
	F			INSTALLATION OF VALVES AND SPECIALS				
	F			PN25				
2.F.5.570	F	33.004		Item 1	No	1		
2.F.5.571	F	33.004		Item 2	No	1		
2.F.5.572	F	33.004		Item 3	No	1		
2.F.5.573	F	33.004		Item 4	No	1		
2.F.5.574	F	33.004		Item 5	No	1		
2.F.5.575	F	33.004		Item 6	No	1		
	F			ITEMS CAST OR BUILT INTO CONCRETE				
2.F.5.576	F	33.005		Steel pipe diameter 900mm up to 1500mm	No	2		
	F			SUPPLY AND ERECT PRECAST ELEMENTS				
	F			Refer to Dwg 2A-C6-168 and 2A-C6-169				
2.F.5.577	F	20.017		Precast slab Type 1	No	2		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			ANCILLARY WORKS				
2.F.5.578	F	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	1		
2.F.5.579	F	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	1		
2.F.5.580	F	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.F.5.581	F	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.F.5.582	F	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 1420mm	no	2		
2.F.5.583	F	20.021 c)		Vermin mesh to be applied to opening as per drawing Reg. No. 2A-C6-125	no	2		
2.F.5.584	F	20.021 c)		Sleeves to be grouted after the installation of cables to ensure no seepage 160mm diam x 0.3mm thick	no	6		
2.F.5.585	F	20.021 c)		Drilling for dowels and including grouting in of dowels complete, as per drawing 2A-C6-125 (Dowel material included in 20.007)	sum	1		
2.F.5.586	F	20.021 c)		10mm Neoprene, as per drawing 2A-C6-125	m²	1		
	F			SPECIFIC ITEMS OF WORK				
	F			SEALING STRIPS, JOINT SEALANT, ETC				
2.F.5.587	F	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	10		
	F			FARMER OFF-TAKE				
	F			REFER TO DRAWING 2A-C6-190 and 2A-C6-191				
	F			EARTHWORKS				
	F			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS. THRUST BLOCKS. ETC				
2.F.5.588	F	9.013		Excavate for valve chambers	m3	106		
2.F.5.589	F	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	11		
	F			OVERHAUL				
2.F.5.590	F	9.023(a)		Between 1km up to and including 3km	m3	6		
2.F.5.591	F	9.023(b)		Between 3km up to and including 5km	m3	6		
	F			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	F			Provision of cement stabilised soil				
2.F.5.592	F	15.003(d)		Material from the nearest borrow pit with screening	m3	90		
2.F.5.593	F	15.003(e)		Cement for stabilisation of soil	m3	5		
	F			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.F.5.594	F	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	94		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			OVERHAUL				
2.F.5.595	F	15.010(b)		Between 3km up to and including 5km	m3	47		
2.F.5.596	F	15.010(c)		Between 5km up to and including 7km	m3	47		
	F			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.F.5.597	F	15.014(a)		Structure backfilling compacted	m3	158		
2.F.5.598	F	15.014(a)		Embankment backfilling compacted	m3	130		
2.F.5.599	F	15.015		Finishing of slopes	m2	221		
	F			OVERHAUL				
2.F.5.600	F	15.016(b)		Between 3km up to and including 5km	m3	95		
2.F.5.601	F	15.016(c)		Between 5km up to and including 7km	m3	95		
	F			CONCRETE WORKS				
	F			ROUGH FORMWORK				
	F			Vertical surfaces				
2.F.5.602	F	20.001		Sides of floor slab	m2	36		
2.F.5.603	F	20.001		Sides of walls	m2	140		
	F			SMOOTH FORMWORK				
	F			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.F.5.604	F	20.002		Underside of slabs	m2	25		
	F			SMOOTH FORMWORK				
	F			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.F.5.605	F	20.002		Walls	m2	368		
2.F.5.606	F	20.002		Side of Sump walls	m2	3		
2.F.5.607	F	20.005		Narrow widths - Up to 200mm high	m	87		
	F			Box-out holes/Form voids (for sleeves only)				
	F			a) Small, circular, of diameter up to and including 0.35 m				
2.F.5.608	F	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	22		
	F			REINFORCEMENT				
2.F.5.609	F	20.007		Steel bars (irrespective of grade or diameter)	t	16		
	F			CONCRETE				
	F			CONCRETE 15 MPa/19mm in:				
2.F.5.610	F	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	113		
2.F.5.611	F	20.011(b)		Mass concrete filling where required by the engineer	m3	6		
2.F.5.612	F	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	54		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.F.5.613	F	20.010		Foundations, bases, floor slabs and roof slabs	m3	36		
2.F.5.614	F	20.010		Walls	m3	64		
	F			UNFORMED SURFACE FINISHES				
2.F.5.615	F	20.013(a)		Wood floated finish	m2	54		
2.F.5.616	F	20.013(b)		Steel floated finish	m2	105		
	F			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	F			PN25				
2.F.5.617	F	32.003		Item 1	No	8		
2.F.5.618	F	32.003		Item 2	No	8		
2.F.5.619	F	35.002		Item 3	No	8		
2.F.5.620	F	32.003		Item 4	No	8		
2.F.5.621	F	35.002		Item 5	No	8		
2.F.5.622	F	32.003		Item 6	No	8		
	F			INSTALLATION OF VALVES AND SPECIALS				
	F			PN25				
2.F.5.623	F	33.004		Item 1	No	8		
2.F.5.624	F	33.004		Item 2	No	8		
2.F.5.625	F	33.004		Item 3	No	8		
2.F.5.626	F	33.004		Item 4	No	8		
2.F.5.627	F	33.004		Item 5	No	8		
2.F.5.628	F	33.004		Item 6	No	8		
	F			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	F			PN40				
2.F.5.629	F	32.003		Item 1	No	3		
2.F.5.630	F	32.003		Item 2	No	3		
2.F.5.631	F	35.002		Item 3	No	3		
2.F.5.632	F	32.003		Item 4	No	3		
2.F.5.633	F	35.002		Item 5	No	3		
2.F.5.634	F	32.003		Item 6	No	3		
	F			INSTALLATION OF VALVES AND SPECIALS				
	F			PN40				
2.F.5.635	F	33.004		Item 1	No	3		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.F.5.636	F	33.004		Item 2	No	3		
2.F.5.637	F	33.004		Item 3	No	3		
2.F.5.638	F	33.004		Item 4	No	3		
2.F.5.639	F	33.004		Item 5	No	3		
2.F.5.640	F	33.004		Item 6	No	3		
	F			ITEMS CAST OR BUILT INTO CONCRETE				
2.F.5.641	F	33.005		Steel pipe diameter 700mm	No	11		
	F			SUPPLY AND ERECT PRECAST ELEMENTS				
	F			Refer to Dwg 2A-C6-190 and 2A-C6-191				
2.F.5.642	F	20.017		Precast slab Type 1	No	22		
	F			ANCILLARY WORKS				
2.F.5.643	F	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	11		
2.F.5.644	F	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	11		
2.F.5.645	F	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	11		
2.F.5.646	F	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	11		
2.F.5.647	F	20.021 c)		160mm diam uPVC pipe cast into concrete wall for the sump	No	11		
2.F.5.648	F	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 700mm	No	11		
2.F.5.649	F	20.021 c)		Vermin mesh to be applied to opening as per drawing Reg. No. 2A-C6-125	no	22		
	F			SPECIFIC ITEMS OF WORK				
	F			SEALING STRIPS, JOINT SEALANT, ETC				
2.F.5.650	F	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	58		
	F			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	F			Foundation trench excavation and backfilling				
2.F.5.651	F	21.001(b)		In all other classes of material	m3	7		
2.F.5.652	F	21.002		Surface preparation for bedding the gabions	m2	7		
2.F.5.653	F	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	63		
	F			ISOLATING VALVE INSTALLATION (Break Pressure Reservoir)				
	F			REFER TO DRAWING 2G-C5-074 and 2G-C5-075				
	F			EARTHWORKS				
	F			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS. THRUST BLOCKS. ETC				
2.F.5.654	F	9.013		Excavate for valve chambers	m3	159		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.F.5.655	F	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	49		
2.F.5.656	F	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance.	m3	6		
2.F.5.657	F	9.020		Compaction of trench bottom (150mm thick)	m2	51		
	F			OVERHAUL				
2.F.5.658	F	9.023(a)		Between 1km up to and including 3km	m3	17		
2.F.5.659	F	9.023(b)		Between 3km up to and including 5km	m3	17		
2.F.5.660	F	9.023(c)		Between 5km up to and including 7km	m3	17		
	F			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	F			Provision of bed material (G5)				
2.F.5.661	F	15.003(c)		Material from the nearest borrow pit without screening	m3	8		
	F			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.F.5.662	F	15.001		Placing of bedding material	m3	8		
	F			OVERHAUL				
2.F.5.663	F	15.010(b)		Between 3km up to and including 5km	m3	4		
2.F.5.664	F	15.010(c)		Between 5km up to and including 7km	m3	4		
	F			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.F.5.665	F	15.014(a)		Structure backfilling compacted	m3	175		
2.F.5.666	F	15.014(b)		Rockfill processing and compaction	m3	6		
	F			OVERHAUL				
2.F.5.667	F	15.016(b)		Between 3km up to and including 5km	m3	37		
2.F.5.668	F	15.016(c)		Between 5km up to and including 7km	m3	37		
	F			CONCRETE WORKS				
	F			ROUGH FORMWORK				
	F			Vertical surfaces				
2.F.5.669	F	20.001		Sides of floor slab	m2	14		
2.F.5.670	F	20.001		Sides of walls	m2	74		
	F			SMOOTH FORMWORK				
	F			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.F.5.671	F	20.002		Underside of slabs	m2	10		
	F			SMOOTH FORMWORK				
	F			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.F.5.672	F	20.002		Walls	m2	198		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.F.5.673	F	20.002		Side of Sump walls	m2	1		
2.F.5.674	F	20.002		Plinths	m2	14		
2.F.5.675	F	20.005		Narrow widths - Up to 200mm high	m	30		
	F			Box-out holes/Form voids (for sleeves only)				
	F			a) Small, circular, of diameter up to and including 0.35 m				
2.F.5.676	F	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	6		
	F			REINFORCEMENT				
2.F.5.677	F	20.007		Steel bars (irrespective of grade or diameter)	t	8.5		
	F			CONCRETE				
	F			CONCRETE 15 MPa/19mm in:				
2.F.5.678	F	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	44		
2.F.5.679	F	20.011(b)		Mass concrete filling where required by the engineer	m3	2		
2.F.5.680	F	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	24		
	F			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.F.5.681	F	20.010		Foundations, bases, floor slabs and roof slabs	m3	17		
2.F.5.682	F	20.010		Plinths (Including grouting between the plinth and the pipes/specials where required)	m3	3		
2.F.5.683	F	20.010		Walls	m3	34		
	F			UNFORMED SURFACE FINISHES				
2.F.5.684	F	20.013(a)		Wood floated finish	m2	24		
2.F.5.685	F	20.013(b)		Steel floated finish	m2	42		
	F			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	F			PN25				
2.F.5.686	F	32.003		Item 1	No	3		
2.F.5.687	F	35.002		Item 2	No	3		
2.F.5.688	F	32.003		Item 3	No	3		
2.F.5.689	F	32.003		Item 4	No	3		
	F			INSTALLATION OF VALVES AND SPECIALS				
	F			PN25				
2.F.5.690	F	33.004		Item 1	No	3		
2.F.5.691	F	33.004		Item 2	No	3		
2.F.5.692	F	33.004		Item 3	No	3		
2.F.5.693	F	33.004		Item 4	No	3		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			ITEMS CAST OR BUILT INTO CONCRETE				
2.F.5.694	F	33.005		Steel pipe diameter 900mm up to 1500mm	No	6		
	F			SUPPLY AND ERECT PRECAST ELEMENTS				
	F			Refer to Dwg 2G-C5-074 and 2G-C5-075				
2.F.5.695	F	20.017		Precast slab Type 1	No	9		
	F			ANCILLARY WORKS				
2.F.5.696	F	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	3		
2.F.5.697	F	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	3		
2.F.5.698	F	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	3		
2.F.5.699	F	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	3		
2.F.5.700	F	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 1016mm	no	3		
2.F.5.701	F	20.021 c)		Sleeves to be grouted after the installation of cables to ensure no seepage 160mm diam x 0.3mm thick	no	6		
2.F.5.702	F	20.021 c)		Portable aluminium steps complete, as per drawing 2A-C6-125	no	3		
2.F.5.703	F	20.021 c)		Drilling for dowels and including grouting in of dowels, per one chamber complete, as per drawing 2A-C6-125. (Dowel material included in 20.007)	no	3		
2.F.5.704	F	20.021 c)		10mm Neoprene, as per drawing 2A-C6-125	m ²	3		
	F			SPECIFIC ITEMS OF WORK				
	F			SEALING STRIPS, JOINT SEALANT, ETC				
2.F.5.705	F	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	32		
	F			INLET MANIFOLDS <i>(Break Pressure Reservoir)</i>				
	F			REFER TO DRAWING 2G-C5-051 and 2G-C5-052				
	F			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	F			PN25				
2.F.5.706	F	32.003		Item 1	No	1		
2.F.5.707	F	32.003		Item 2	No	1		
2.F.5.708	F	32.003		Item 3	No	2		
2.F.5.709	F	32.003		Item 4	No	1		
2.F.5.710	F	32.003		Item 5	No	1		
	F			INSTALLATION OF VALVES AND SPECIALS				
	F			PN25				
2.F.5.711	F	32.007		Item 1	No	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.F.5.712	F	32.007		Item 2	No	1		
2.F.5.713	F	32.007		Item 3	No	2		
2.F.5.714	F	32.007		Item 4	No	1		
2.F.5.715	F	32.007		Item 5	No	1		
	F			REFER TO DRAWING 2G-C5-053 and 2G-C5-054				
	F			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	F			PN25				
2.F.5.716	F	32.003		Item 1	No	1		
2.F.5.717	F	32.003		Item 2	No	1		
2.F.5.718	F	32.003		Item 2A	No	1		
2.F.5.719	F	32.003		Item 3	No	2		
2.F.5.720	F	32.003		Item 4	No	1		
2.F.5.721	F	32.003		Item 5	No	1		
	F			INSTALLATION OF VALVES AND SPECIALS				
	F			PN25				
2.F.5.722	F	33.007		Item 1	No	1		
2.F.5.723	F	33.007		Item 2	No	1		
2.F.5.724	F	33.007		Item 2A	No	1		
2.F.5.725	F	33.007		Item 3	No	2		
2.F.5.726	F	33.007		Item 4	No	1		
2.F.5.727	F	33.007		Item 5	No	1		
	F			REFER TO DRAWING 2G-C5-055 and 2G-C5-056				
	F			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	F			PN25				
2.F.5.728	F	32.003		Item 1	No	1		
2.F.5.729	F	32.003		Item 2	No	1		
2.F.5.730	F	32.003		Item 2A	No	1		
2.F.5.731	F	32.003		Item 3	No	2		
2.F.5.732	F	32.003		Item 4	No	1		
2.F.5.733	F	32.003		Item 5	No	1		
	F			INSTALLATION OF VALVES AND SPECIALS				
	F			PN25				
2.F.5.734	F	33.007		Item 1	No	1		
2.F.5.735	F	33.007		Item 2	No	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.F.5.736	F	33.007		Item 2A	No	1		
2.F.5.737	F	33.007		Item 3	No	2		
2.F.5.738	F	33.007		Item 4	No	1		
2.F.5.739	F	33.007		Item 5	No	1		
	F			PART F5: Valve installations and chambers - Carried forward to Summary of Bills				

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
	F			PART F6: Crossings				
	F			PIPE JACKING				
	F			PIPE JACKING @ CH 2.126 km				
	F			REFER TO DRAWING NO 3F-C5-001 & 2A-C6-115				
	F			Design, supply and deliver pipes to be jacked				
2.F.6.1	F	10.001		Road D1649 crossing in 2000mm ND jacked concrete sleeve	m	42		
	F			Jacking of pipes				
2.F.6.2	F	10.002		Road D1649 crossing in 2000mm ND jacked concrete sleeve	m	42		
	F			Excavation for jacking (See Table 10/1 of section 10 of specification)				
2.F.6.3	F	10.003		Soft	m3	77		
2.F.6.4	F	10.003		Intermediate	m3	50		
2.F.6.5	F	10.003		Hard	m3	115		
2.F.6.6	F	10.004		Pit excavation (receiving and launching)	Sum	1		
2.F.6.7	F	10.005		Extra-over items 10.004 for excavation for jacking through unidentified obstructions	PS	1		398 380
2.F.6.8	F	10.006		Stabilisation of unstable areas and grouting	Sum	1		
2.F.6.9	F	10.007		Supply and install wheel/skid pipe supports and install service pipe	Sum	1		
2.F.6.10	F	10.008		Grouting of annulus	m3	66		
	F			OVERHAUL				
2.F.6.11	F	25.018(b)		Between 3km up to and including 5km	m3	121		
2.F.6.12	F	25.018(c)		Between 5km up to and including 7km	m3	121		
	F			MISCELLANEOUS				
2.F.6.13	F	20.021(c)		110mm diam HDPE PE100 SDR 11 sleeve pipe for optic fibre cables, fixed to concrete sleeve with hot dipped galvanised bracket	m	80		
	F			TEMPORARY TRAFFIC CONTROL FACILITIES				
	F			Temporary traffic-control facilities				
2.F.6.14	F	25.007(a)		Flagmen	sum	1		
2.F.6.15	F	25.007(b)		Road signs	sum	1		
2.F.6.16	F	25.007(c)		Flicker lights	sum	1		
2.F.6.17	F	25.007(d)		Delineators	sum	1		
2.F.6.18	F	25.007(e)		Barricading	sum	1		
2.F.6.19	F	25.007(f)		Two-way communication devices	sum	1		
2.F.6.20	F	25.007(g)		Personnel to manage and maintain temporary traffic-control facilities	sum	1		
2.F.6.21	F	25.007(h)		All other items not listed above	sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			ROAD CROSSINGS				
	F			ROAD CROSSINGS @ CH 2.092 km				
	F			REFER TO DRAWING NO 2F-C4-003				
	F			PATCHING OF EXISTING ROADS				
2.F.6.22	F	26.019(b)		Excavation in existing pavements for patching in: Sub base layers	m3	9		
2.F.6.23	F	26.020(g)		Backfilling of excavations for patching with: Selected backfill (G7 compacted to 95% of Modified AASHTO density)	m3	4		
2.F.6.24	F	26.020(h)		Backfilling of excavations for patching with: Gravel Wearing Course (As specified compacted to 95% of Modified AASHTO density)	m3	5		
	F			PROVISION OF SOILCRETE/CEMENT STABILISED SOIL				
	F			Provision of cement stabilised soil				
2.F.6.25	F	15.003(d)		Material from the nearest borrow pit with screening	m3	8		
2.F.6.26	F	15.003(e)		Cement for stabilisation of soil	m3	1		
	F			Placing of Bedding Material, Soilcrete, Fertile Soil and Main Backfill				
2.F.6.27	F	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	9		
	F			OVERHAUL				
2.F.6.28	F	25.018(b)		Between 3km up to and including 5km	m3	9		
2.F.6.29	F	25.018(c)		Between 5km up to and including 7km	m3	9		
	F			ACCOMMODATION OF TRAFFIC AND TEMPORARY DEVIATIONS				
	F			Accommodation of traffic and maintaining temporary deviations for:				
2.F.6.30	F	26.023(c)		Reinstatement of existing roads at crossings (full width deviation)	km	0.10		
	F			Relocating of traffic-control facilities for				
2.F.6.31	F	25.008(b)		Full width deviations where the pipe crosses the road	Sum	1		
2.F.6.32	F	25.017		Watering of temporary deviations	Sum	1		
2.F.6.33	F	26.025		Treatment of old roads and temporary deviations	km	0.10		
	F			TEMPORARY TRAFFIC CONTROL FACILITIES				
	F			Temporary traffic-control facilities				
2.F.6.34	F	25.007(a)		Flagmen	sum	1		
2.F.6.35	F	25.007(b)		Road signs	sum	1		
2.F.6.36	F	25.007(c)		Flicker lights	sum	1		
2.F.6.37	F	25.007(d)		Delineators	sum	1		
2.F.6.38	F	25.007(e)		Barricading	sum	1		
2.F.6.39	F	25.007(f)		Two-way communication devices	sum	1		
2.F.6.40	F	25.007(g)		Personnel to manage and maintain temporary traffic-control facilities	sum	1		
2.F.6.41	F	25.007(h)		All other items not listed above	sum	1		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	F			ROAD CROSSINGS				
	F			ROAD CROSSINGS @ CH 2.127 km				
	F			REFER TO DRAWING NO 2F-C4-003				
	F			PATCHING OF EXISTING ROADS				
2.F.6.42	F	26.018(a)		Sawing asphalt layers for patching: to an average depth not exceeding 50 mm	m	20		
2.F.6.43	F	26.019(a)		Excavation in existing pavements for patching in: Asphalt layers	m3	2		
2.F.6.44	F	26.019(b)		Excavation in existing pavements for patching in: Sub base layers	m3	4		
2.F.6.45	F	26.019(c)		Excavation in existing pavements for patching in: Base layers	m3	4		
2.F.6.46	F	26.020(a)		Backfilling of excavations for patching with: Continuously graded asphalt base (A-E2) - 150mm thick	t	10		
2.F.6.47	F	26.020(b)		Backfilling of excavations for patching with: Continuously graded asphalt surfacing (A-E2) - 45mm thick	t	3		
2.F.6.48	F	26.020(d)		Backfilling of excavations for patching with: Cement stabilized crushed stone (G1 stabilized with 2.5% cement)	m3	4		
2.F.6.49	F	26.020(e)		Backfilling of excavations for patching with: Cement stabilized selected layer (G5 stabilized with cement to form a C4, compacted to 95% of Modified AASHTO density)	m3	4		
2.F.6.50	F	26.021		Tack coat of 30% stable-grade emulsion	l	15		
	F			PROVISION OF SOILCRETE/CEMENT STABILISED SOIL				
	F			Provision of cement stabilised soil				
2.F.6.51	F	15.003(d)		Material from the nearest borrow pit with screening	m3	34		
2.F.6.52	F	15.003(e)		Cement for stabilisation of soil	m3	2		
	F			Placing of Bedding Material, Soilcrete, Fertile Soil and Main Backfill				
2.F.6.53	F	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	36		
	F			OVERHAUL				
2.F.6.54	F	25.018(b)		Between 3km up to and including 5km	m3	8		
2.F.6.55	F	25.018(c)		Between 5km up to and including 7km	m3	8		
	F			MATERIAL FROM COMMERCIAL SOURCES				
2.F.6.56	F	15.006(e)		G1 material from commercial sources	m3	4		
	F			FORMWORK				
	F			STRAIGHT ROUGH				
2.F.6.57	F	20.001		Vertical sides of concrete encasement	m2	41		
	F			REINFORCEMENT				
2.F.6.58	F	20.007		Steel bars (irrespective of grade or diameter)	t	2		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			CONCRETE				
	F			CONCRETE 15MPa/19mm in:				
2.F.6.59	F	20.011(a)		Blinding layer of 50mm minimum thickness	m2	21		
	F			STRENGTH CONCRETE, 30MPa/19mm in:				
2.F.6.60	F	20.012		Concrete encasement.	m3	25		
	F			UNFORMED SURFACE FINISHES				
2.F.6.61	F	20.013(a)		Wood floated finish	m2	21		
	F			ACCOMMODATION OF TRAFFIC AND TEMPORARY DEVIATIONS				
	F			Accommodation of traffic and maintaining temporary deviations for:				
2.F.6.62	F	26.023(c)		Reinstatement of existing roads at crossings (full width deviation)	km	0.10		
	F			Relocating of traffic-control facilities for				
2.F.6.63	F	25.008(b)		Full width deviations where the pipe crosses the road	Sum	1		
2.F.6.64	F	25.017		Watering of temporary deviations	Sum	1		
2.F.6.65	F	26.025		Treatment of old roads and temporary deviations	km	0.10		
	F			TEMPORARY TRAFFIC CONTROL FACILITIES				
	F			Temporary traffic-control facilities				
2.F.6.66	F	25.007(a)		Flagmen	sum	1		
2.F.6.67	F	25.007(b)		Road signs	sum	1		
2.F.6.68	F	25.007(c)		Flicker lights	sum	1		
2.F.6.69	F	25.007(d)		Delineators	sum	1		
2.F.6.70	F	25.007(e)		Barricading	sum	1		
2.F.6.71	F	25.007(f)		Two-way communication devices	sum	1		
2.F.6.72	F	25.007(g)		Personnel to manage and maintain temporary traffic-control facilities	sum	1		
2.F.6.73	F	25.007(h)		All other items not listed above	sum	1		
	F			ROAD CROSSINGS				
	F			ROAD CROSSINGS @ CH 3.689 km				
	F			REFER TO DRAWING NO 2F-C4-004				
	F			PATCHING OF EXISTING ROADS				
2.F.6.74	F	26.019(b)		Excavation in existing pavements for patching in: Sub base layers	m3	12		
2.F.6.75	F	26.020(g)		Backfilling of excavations for patching with: Selected backfill (G7 compacted to 95% of Modified AASHTO density)	m3	5		
2.F.6.76	F	26.020(h)		Backfilling of excavations for patching with: Gravel Wearing Course (As specified compacted to 95% of Modified AASHTO density)	m3	7		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			PROVISION OF SOILCRETE/CEMENT STABILISED SOIL				
	F			Provision of cement stabilised soil				
2.F.6.77	F	15.003(d)		Material from the nearest borrow pit with screening	m3	7		
2.F.6.78	F	15.003(e)		Cement for stabilisation of soil	m3	1		
	F			Placing of Bedding Material, Soilcrete, Fertile Soil and Main Backfill				
2.F.6.79	F	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	8		
	F			OVERHAUL				
2.F.6.80	F	25.018(b)		Between 3km up to and including 5km	m3	12		
2.F.6.81	F	25.018(c)		Between 5km up to and including 7km	m3	12		
2.F.6.82	F	25.018(d)		Between 7km up to and including 9km	m3	0		
	F			ACCOMMODATION OF TRAFFIC AND TEMPORARY DEVIATIONS				
	F			Accommodation of traffic and maintaining temporary deviations for:				
2.F.6.83	F	26.023(c)		Reinstatement of existing roads at crossings (full width deviation)	km	0.10		
	F			Relocating of traffic-control facilities for				
2.F.6.84	F	25.008(b)		Full width deviations where the pipe crosses the road	Sum	1		
2.F.6.85	F	25.017		Watering of temporary deviations	Sum	1		
2.F.6.86	F	26.025		Treatment of old roads and temporary deviations	km	0.10		
	F			TEMPORARY TRAFFIC CONTROL FACILITIES				
	F			Temporary traffic-control facilities				
2.F.6.87	F	25.007(a)		Flagmen	sum	1		
2.F.6.88	F	25.007(b)		Road signs	sum	1		
2.F.6.89	F	25.007(c)		Flicker lights	sum	1		
2.F.6.90	F	25.007(d)		Delineators	sum	1		
2.F.6.91	F	25.007(e)		Barricading	sum	1		
2.F.6.92	F	25.007(f)		Two-way communication devices	sum	1		
2.F.6.93	F	25.007(g)		Personnel to manage and maintain temporary traffic-control facilities	sum	1		
2.F.6.94	F	25.007(h)		All other items not listed above	sum	1		
	F			ROAD CROSSINGS				
	F			ROAD CROSSINGS @ CH 3.739 km				
	F			REFER TO DRAWING NO 2F-C4-004				
	F			PATCHING OF EXISTING ROADS				
2.F.6.95	F	26.019(b)		Excavation in existing pavements for patching in: Sub base layers	m3	12		
2.F.6.96	F	26.020(g)		Backfilling of excavations for patching with: Selected backfill (G7 compacted to 95% of Modified AASHTO density)	m3	5		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.F.6.97	F	26.020(h)		Backfilling of excavations for patching with: Gravel Wearing Course (As specified compacted to 95% of Modified AASHTO density)	m3	7		
	F			PROVISION OF SOILCRETE/CEMENT STABILISED SOIL				
	F			Provision of cement stabilised soil				
2.F.6.98	F	15.003(d)		Material from the nearest borrow pit with screening	m3	46		
2.F.6.99	F	15.003(e)		Cement for stabilisation of soil	m3	3		
	F			Placing of Bedding Material, Soilcrete, Fertile Soil and Main Backfill				
2.F.6.100	F	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	49		
	F			OVERHAUL				
2.F.6.101	F	25.018(b)		Between 3km up to and including 5km	m3	12		
2.F.6.102	F	25.018(c)		Between 5km up to and including 7km	m3	12		
2.F.6.103	F	25.018(d)		Between 7km up to and including 9km	m3	0		
	F			Accommodation of traffic and maintaining temporary deviations for:				
2.F.6.104	F	26.023(c)		Reinstatement of existing roads at crossings (full width deviation)	km	0.10		
	F			ACCOMMODATION OF TRAFFIC AND TEMPORARY DEVIATIONS				
	F			Relocating of traffic-control facilities for				
2.F.6.105	F	25.008(b)		Full width deviations where the pipe crosses the road	Sum	1		
2.F.6.106	F	25.017		Watering of temporary deviations	Sum	1		
2.F.6.107	F	26.025		Treatment of old roads and temporary deviations	km	0.10		
	F			TEMPORARY TRAFFIC CONTROL FACILITIES				
	F			Temporary traffic-control facilities				
2.F.6.108	F	25.007(a)		Flagmen	sum	1		
2.F.6.109	F	25.007(b)		Road signs	sum	1		
2.F.6.110	F	25.007(c)		Flicker lights	sum	1		
2.F.6.111	F	25.007(d)		Delineators	sum	1		
2.F.6.112	F	25.007(e)		Barricading	sum	1		
2.F.6.113	F	25.007(f)		Two-way communication devices	sum	1		
2.F.6.114	F	25.007(g)		Personnel to manage and maintain temporary traffic-control facilities	sum	1		
2.F.6.115	F	25.007(h)		All other items not listed above	sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			STREAM CROSSINGS				
	F			Refer to 2A-C6-110 and 2A-C6-117 to drawing				
	F			PIPE ENCASEMENT @ CH 2.40 km				
	F			FORMWORK				
	F			STRAIGHT ROUGH				
2.F.6.116	F	20.001		Vertical sides of concrete encasement	m2	77		
	F			REINFORCEMENT				
2.F.6.117	F	20.007		Steel bars (irrespective of grade or diameter)	t	3.5		
	F			CONCRETE				
	F			CONCRETE 15MPa/19mm in:				
2.F.6.118	F	20.011(a)		Blinding layer of 50mm minimum thickness	m2	41		
	F			STRENGTH CONCRETE, 30MPa/19mm in:				
2.F.6.119	F	20.012		Concrete encasement.	m3	46		
	F			UNFORMED SURFACE FINISHES				
2.F.6.120	F	20.013(a)		Wood floated finish	m2	41		
	F			CONSTRUCTION OF EROSION PROTECTION				
	F			Foundation trench excavation and backfilling				
2.F.6.121	F	21.001(b)		In all other classes of material	m3	211		
2.F.6.122	F	21.002		Surface preparation for bedding the gabions	m2	101		
2.F.6.123	F	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	237		
2.F.6.124	F	21.003(a)		Galvanised gabions cages (Refer to drawings for dimentions)	m3	20		
2.F.6.125	F	21.003(c)		Galvanised gabions mattresses (Refer to drawings for dimentions)	m3	25		
2.F.6.126	F	27.009		Rip-rap	m3	5		
	F			Crushed stone				
2.F.6.127	F	15.008 (a)		Supply and place crushed stone for Layer no 1	m3	16		
2.F.6.128	F	15.008 (c)		Supply and place well graded compacted dump rock for Layer no 2	m3	27		
	F			Geotextile				
2.F.6.129	F	15.008 (b)		Supply and place geotextile for Layer no 1	m2	117		
2.F.6.130	F	15.008 (d)		Supply and place geotextile for Layer no 2	m2	125		
	F			OVERHAUL				
2.F.6.131	F	25.018(b)		Between 3km up to and including 5km	m3	136		
2.F.6.132	F	25.018(c)		Between 5km up to and including 7km	m3	136		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			STREAM CROSSINGS				
	F			Refer to 2A-C6-110 and 2A-C6-117 to drawing				
	F			PIPE ENCASEMENT @ CH 2.90 km				
	F			FORMWORK				
	F			STRAIGHT ROUGH				
2.F.6.133	F	20.001		Vertical sides of concrete encasement	m2	77		
	F			REINFORCEMENT				
2.F.6.134	F	20.007		Steel bars (irrespective of grade or diameter)	t	3.5		
	F			CONCRETE				
	F			CONCRETE 15MPa/19mm in:				
2.F.6.135	F	20.011(a)		Blinding layer of 50mm minimum thickness	m2	41		
	F			STRENGTH CONCRETE, 30MPa/19mm in:				
2.F.6.136	F	20.012		Concrete encasement.	m3	46		
	F			UNFORMED SURFACE FINISHES				
2.F.6.137	F	20.013(a)		Wood floated finish	m2	41		
	F			CONSTRUCTION OF EROSION PROTECTION				
	F			Foundation trench excavation and backfilling				
2.F.6.138	F	21.001(b)		In all other classes of material	m3	317		
2.F.6.139	F	21.002		Surface preparation for bedding the gabions	m2	220		
2.F.6.140	F	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	273		
2.F.6.141	F	21.003(a)		Galvanised gabions cages (Refer to drawings for dimentions)	m3	120		
2.F.6.142	F	21.003(c)		Galvanised gabions mattresses (Refer to drawings for dimentions)	m3	30		
2.F.6.143	F	27.009		Rip-rap	m3	0		
	F			Crushed stone				
2.F.6.144	F	15.008 (a)		Supply and place crushed stone for Layer no 1	m3	16		
2.F.6.145	F	15.008 (c)		Supply and place well graded compacted dump rock for Layer no 2	m3	27		
	F			Geotextile				
2.F.6.146	F	15.008 (b)		Supply and place geotextile for Layer no 1	m2	117		
2.F.6.147	F	15.008 (d)		Supply and place geotextile for Layer no 2	m2	125		
	F			OVERHAUL				
2.F.6.148	F	25.018(b)		Between 3km up to and including 5km	m3	242		
2.F.6.149	F	25.018(c)		Between 5km up to and including 7km	m3	242		
	F			PART F6: Crossings total - Carried forward to Summary of Bills				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	F			PART F7: Landscaping and Rehabilitation				
	F			LANDSCAPING & REHABILITATION				
2.F.7.1	F	47.001		Shaping	m2	1 153 200		
2.F.7.2	F	47.002		Ripping	ha	116		
2.F.7.3	F	47.003		Trimming	m2	1 153 200		
2.F.7.4	F	47.004		Scarifying	ha	116		
2.F.7.5	F	47.007		Furnishing and applying fertilisers	kg	116 000		
2.F.7.6	F	47.011		Preparing topsoil for seeding	m2	1 153 200		
2.F.7.7	F	47.012		Hydro-seeding	ha	104		
2.F.7.8	F	47.013		Hand-seeding	ha	12		
2.F.7.9	F	47.015		Temporary re-vegetation	ha	12		
	F			Provision of seed				
2.F.7.10	F	47.010		Seed type - Anthephora pubescens	kg	116		
2.F.7.11	F	47.010		Seed type - Cenchrus ciliaris	kg	116		
2.F.7.12	F	47.010		Seed type - Chloris gayana	kg	1160		
2.F.7.13	F	47.010		Seed type - Cynodon dactylon	kg	346		
2.F.7.14	F	47.010		Seed type - Digitaria eriantha	kg	1384		
2.F.7.15	F	47.010		Seed type - Eriopogon chenchroides	kg	116		
2.F.7.16	F	47.010		Seed type - Eragrostis curvula	kg	231		
2.F.7.17	F	47.010		Seed type - Eragrostis lehmanniana	kg	58		
2.F.7.18	F	47.010		Seed type - Eragrostis tef	kg	346		
2.F.7.19	F	47.010		Seed type - Heteropogon contortus	kg	346		
2.F.7.20	F	47.010		Seed type - Panicum maximum	kg	404		
2.F.7.21	F	47.010		Seed type - Pogonarthria squarrosa	kg	116		
2.F.7.22	F	47.016		Provision of temporary erosion control measures	ha	116		
2.F.7.23	F	47.017		Maintenance of the Temporary Erosion Control Measures	sum	1		
2.F.7.24	F	47.018		Maintenance of Vegetation	sum	1		
	F			PART F7: Landscaping and Rehabilitation - Carried forward to Summary of Bills				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	F			PART F8: Fencing				
	F			FENCING (NON SECURITY TYPE - STOCKPROOF)				
2.F.8.1	F	6.001		Clearing the fence line, 1m wide strip	m	58350		
	F			Remove fencing and disposing of material				
2.F.8.2	F	6.004(a)		Seven strand stock proof fence (1,25m high)	m	47050		
2.F.8.3	F	6.004(b)		Sixteen strand game proof fencing (1.8m high)	m	2650		
2.F.8.4	F	6.004(c)		Twenty-one strand game proof fencing (2.4m high)	m	6615		
2.F.8.5	F	6.004(d)		Bonnox (or equal approved) (1.8 m high)	m	1330		
2.F.8.6	F	6.004(e)		Bonnox (or equal approved) (2.4 m high)	m	2650		
	F			Removal of gates				
2.F.8.7	F	6.007		All types of gates	No	74		
	F			Supply, erect and maintain during contract period new fencing material for new fences				
2.F.8.8	F	6.002(a)		Seven strand stock proof fence (1,25m high) as per drawing 2A-C6-101	m	47050		
2.F.8.9	F	6.002(b)		Sixteen strand game proof fencing (1.8m high) as per drawing 2A-C6-100	m	2650		
2.F.8.10	F	6.002(c)		Twenty-one strand game proof fencing (2.4m high) as per drawing 2A-C6-102	m	6615		
2.F.8.11	F	6.002(d)		Bonnox (or equal approved) (1.8 m high) as per drawing 2A-C6-118	m	1330		
2.F.8.12	F	6.002(e)		Bonnox (or equal approved) (2.4 m high) as per drawing 2A-C6-119	m	2650		
	F			Supply, erect and maintain gates during contract period				
2.F.8.13	F	6.005(a)		1.2m high gates for stock proof fences	No	22		
2.F.8.14	F	6.005(b)		1.8m high gates for game fences	No	11		
2.F.8.15	F	6.005(c)		2.4m high gates for game fences	No	26		
2.F.8.16	F	6.005(d)		1.8m high gates for bonnox fences	No	6		
2.F.8.17	F	6.005(e)		2.4m high gates for bonnex fences	No	11		
	F			Remove fencing installed under this contract and re-erect at another position				
2.F.8.18	F	6.003(a)		Seven strand stock proof fence (1,25m high) as per drawing 2A-C6-101	m	500		
2.F.8.19	F	6.003(b)		Sixteen strand game proof fencing (1.8m high) as per drawing 2A-C6-100	m	500		
2.F.8.20	F	6.003(c)		Twenty-one strand game proof fencing (2.4m high) as per drawing 2A-C6-102	m	500		
2.F.8.21	F	6.003(d)		Bonnox (or equal approved) (1.8 m high) as per drawing 2A-C6-118	m	500		
2.F.8.22	F	6.003(e)		Bonnox (or equal approved) (2.4 m high) as per drawing 2A-C6-119	m	500		
	F			Remove gates installed under this contract and re-erect at another position				
2.F.8.23	F	6.006(a)		1.2m high gates for stock proof fences	No	8		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.F.8.24	F	6.006(b)		1.8m high gates for game fences	No	2		
2.F.8.25	F	6.006(c)		2.4m high gates for game fences	No	4		
2.F.8.26	F	6.006(d)		1.8m high gates for bonnox fences	No	1		
2.F.8.27	F	6.006(e)		2.4m high gates for bonnex fences	No	2		
	F			Part F8: Fencing - Carried forward to Summary of Bills				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	F			PART F9: Borrow pits and Spoil Areas				
	F			BORROW PIT 25				
	F			OPENING OF BORROW AREAS				
2.F.9.1	F	14.001		Opening of borrow areas and access roads	Sum	1		
	F			Removal of agricultural material and overburden				
2.F.9.2	F	14.002		Removal and replacement of topsoil	m3	21 524		
2.F.9.3	F	14.003		Removal and replacement of fertile soil	m3	64 572		
2.F.9.4	F	14.004		Removal and replacement of overburden	m3	21 524		
	F			Handling of imported materials at the borrow and spoil areas prior to the commencement of finishing processes as per Clause 14.5.				
2.F.9.5	F	14.006		Spoiling of: Rock/boulders, material unsuitable for structural backfilling and surplus excavated material	m3	81 500		
	F			DEALING WITH WATER				
2.F.9.6	F	8.001		Dealing with water	Sum	1		
2.F.9.7	F	8.002		Treatment of water	Sum	1		
2.F.9.8	F	8.003		Water monitoring	Sum	1		
2.F.9.9	F	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	F			FENCING (NON SECURITY TYPE - STOCKPROOF)				
2.F.9.10	F	6.001		Clearing the fence line, 1m wide strip	m	1 958		
	F			Remove fencing and disposing of material				
2.F.9.11	F	6.004(c)		Twenty-one strand game proof fencing (2.4m high)	m	979		
2.F.9.12	F	6.004(e)		Bonnox (or equal approved) (2.4 m high)	m	979		
	F			Removal of gates				
2.F.9.13	F	6.007		All types of gates	No	2		
	F			Supply, erect and maintain during contract period new fencing material for new fences				
2.F.9.14	F	6.002(c)		Twenty-one strand game proof fencing (2.4m high) as per drawing 2A-C6-102	m	979		
2.F.9.15	F	6.002(e)		Bonnox (or equal approved) (2.4 m high) as per drawing 2A-C6-119	m	979		
	F			Supply, erect and maintain gates during contract period				
2.F.9.16	F	6.005(c)		2.4m high gates for game fences	No	1		
2.F.9.17	F	6.005(e)		2.4m high gates for bonnex fences	No	1		
	F			Remove fencing installed under this contract and re-erect at another position				
2.F.9.18	F	6.003(c)		Twenty-one strand game proof fencing (2.4m high) as per drawing 2A-C6-102	m	979		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.F.9.19	F	6.003(e)		Bonnox (or equal approved) (2.4 m high) as per drawing 2A-C6-119	m	979		
	F			Remove gates installed under this contract and re-erect at another position				
2.F.9.20	F	6.006(c)		2.4m high gates for game fences	No	1		
2.F.9.21	F	6.006(e)		2.4m high gates for bonnex fences	No	1		
	F			LANDSCAPING & REHABILITATION				
2.F.9.22	F	47.001		Shaping	m2	143 492		
2.F.9.23	F	47.002		Ripping	ha	15		
2.F.9.24	F	47.003		Trimming	m2	143 492		
2.F.9.25	F	47.004		Scarifying	ha	15		
2.F.9.26	F	47.007		Furnishing and applying fertilisers	kg	15 000		
2.F.9.27	F	47.011		Preparing topsoil for seeding	m2	143 492		
2.F.9.28	F	47.012		Hydro-seeding	ha	13.00		
2.F.9.29	F	47.013		Hand-seeding	ha	1.50		
2.F.9.30	F	47.015		Temporary re-vegetation	ha	1.50		
	F			Provision of seed				
2.F.9.31	F	47.010		Seed type - Anthephora pubescens	kg	15		
2.F.9.32	F	47.010		Seed type - Cenchrus ciliaris	kg	15		
2.F.9.33	F	47.010		Seed type - Chloris gayana	kg	150		
2.F.9.34	F	47.010		Seed type - Cynodon dactylon	kg	45		
2.F.9.35	F	47.010		Seed type - Digitaria eriantha	kg	180		
2.F.9.36	F	47.010		Seed type - Enneapogon chenchroides	kg	15		
2.F.9.37	F	47.010		Seed type - Eragrostis curvula	kg	30		
2.F.9.38	F	47.010		Seed type - Eragrostis lehmanniana	kg	8		
2.F.9.39	F	47.010		Seed type - Eragrostis tef	kg	45		
2.F.9.40	F	47.010		Seed type - Heteropogon contortus	kg	45		
2.F.9.41	F	47.010		Seed type - Panicum maximum	kg	53		
2.F.9.42	F	47.010		Seed type - Pogonarthria squarrosa	kg	15		
2.F.9.43	F	47.016		Provision of temporary erosion control measures	ha	15		
2.F.9.44	F	47.017		Maintenance of the Temporary Erosion Control Measures	sum	1		
2.F.9.45	F	47.018		Maintenance of Vegetation	sum	1		
	F			BORROW PIT 30				
	F			OPENING OF BORROW AREAS				
2.F.9.46	F	14.001		Opening of borrow areas and access roads	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			Removal of agricultural material and overburden				
2.F.9.47	F	14.002		Removal and replacement of topsoil	m3	12 614		
2.F.9.48	F	14.003		Removal and replacement of fertile soil	m3	37 842		
2.F.9.49	F	14.004		Removal and replacement of overburden	m3	12 614		
	F			Handling of imported materials at the borrow and spoil areas prior to the commencement of finishing processes as per Clause 14.5.				
2.F.9.50	F	14.006		Spoiling of: Rock/boulders, material unsuitable for structural backfilling and surplus excavated material	m3	65 950		
	F			DEALING WITH WATER				
2.F.9.51	F	8.001		Dealing with water	Sum	1		
2.F.9.52	F	8.002		Treatment of water	Sum	1		
2.F.9.53	F	8.003		Water monitoring	Sum	1		
2.F.9.54	F	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	F			FENCING (NON SECURITY TYPE - STOCKPROOF)				
2.F.9.55	F	6.001		Clearing the fence line, 1m wide strip	m	1 687		
	F			Remove fencing and disposing of material				
2.F.9.56	F	6.004(c)		Twenty-one strand game proof fencing (2.4m high)	m	844		
2.F.9.57	F	6.004(e)		Bonnox (or equal approved) (2.4 m high)	m	844		
	F			Removal of gates				
2.F.9.58	F	6.007		All types of gates	No	2		
	F			Supply, erect and maintain during contract period new fencing material for new fences				
2.F.9.59	F	6.002(c)		Twenty-one strand game proof fencing (2.4m high) as per drawing 2A-C6-102	m	844		
2.F.9.60	F	6.002(e)		Bonnox (or equal approved) (2.4 m high) as per drawing 2A-C6-119	m	844		
	F			Supply, erect and maintain gates during contract period				
2.F.9.61	F	6.005(c)		2.4m high gates for game fences	No	1		
2.F.9.62	F	6.005(e)		2.4m high gates for bonnex fences	No	1		
	F			Remove fencing installed under this contract and re-erect at another position				
2.F.9.63	F	6.003(c)		Twenty-one strand game proof fencing (2.4m high) as per drawing 2A-C6-102	m	844		
2.F.9.64	F	6.003(e)		Bonnox (or equal approved) (2.4 m high) as per drawing 2A-C6-119	m	844		
	F			Remove gates installed under this contract and re-erect at another position				
2.F.9.65	F	6.006(c)		2.4m high gates for game fences	No	1		
2.F.9.66	F	6.006(e)		2.4m high gates for bonnex fences	No	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			LANDSCAPING & REHABILITATION				
2.F.9.67	F	47.001		Shaping	m2	84 093		
2.F.9.68	F	47.002		Ripping	ha	9.0		
2.F.9.69	F	47.003		Trimming	m2	84 093		
2.F.9.70	F	47.004		Scarifying	ha	9.0		
2.F.9.71	F	47.007		Furnishing and applying fertilisers	kg	9 000		
2.F.9.72	F	47.011		Preparing topsoil for seeding	m2	84 093		
2.F.9.73	F	47.012		Hydro-seeding	ha	8.10		
2.F.9.74	F	47.013		Hand-seeding	ha	0.90		
2.F.9.75	F	47.015		Temporary re-vegetation	ha	0.90		
	F			Provision of seed				
2.F.9.76	F	47.010		Seed type - Anthephora pubescens	kg	9		
2.F.9.77	F	47.010		Seed type - Cenchrus ciliaris	kg	9		
2.F.9.78	F	47.010		Seed type - Chloris gayana	kg	90		
2.F.9.79	F	47.010		Seed type - Cynodon dactylon	kg	27		
2.F.9.80	F	47.010		Seed type - Digitaria eriantha	kg	108		
2.F.9.81	F	47.010		Seed type - Eneapogon chenchroides	kg	9		
2.F.9.82	F	47.010		Seed type - Eragrostis curvula	kg	18		
2.F.9.83	F	47.010		Seed type - Eragrostis lehmanniana	kg	5		
2.F.9.84	F	47.010		Seed type - Eragrostis tef	kg	27		
2.F.9.85	F	47.010		Seed type - Heteropogon contortus	kg	27		
2.F.9.86	F	47.010		Seed type - Panicum maximum	kg	32		
2.F.9.87	F	47.010		Seed type - Pogonarthria squarrosa	kg	9		
2.F.9.88	F	47.016		Provision of temporary erosion control measures	ha	9		
2.F.9.89	F	47.017		Maintenance of the Temporary Erosion Control Measures	sum	1		
2.F.9.90	F	47.018		Maintenance of Vegetation	sum	1		
	F			BORROW PIT 35				
	F			OPENING OF BORROW AREAS				
2.F.9.91	F	14.001		Opening of borrow areas and access roads	Sum	1		
	F			Removal of agricultural material and overburden				
2.F.9.92	F	14.002		Removal and replacement of topsoil	m3	6 412		
2.F.9.93	F	14.003		Removal and replacement of fertile soil	m3	19 236		
2.F.9.94	F	14.004		Removal and replacement of overburden	m3	6 412		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			Handling of imported materials at the borrow and spoil areas prior to the commencement of finishing processes as per Clause 14.5.				
2.F.9.95	F	14.006		Spoiling of: Rock/boulders, material unsuitable for structural backfilling and surplus excavated material	m3	33 400		
	F			DEALING WITH WATER				
2.F.9.96	F	8.001		Dealing with water	Sum	1		
2.F.9.97	F	8.002		Treatment of water	Sum	1		
2.F.9.98	F	8.003		Water monitoring	Sum	1		
2.F.9.99	F	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	F			FENCING (NON SECURITY TYPE - STOCKPROOF)				
2.F.9.100	F	6.001		Clearing the fence line, 1m wide strip	m	1 011		
	F			Remove fencing and disposing of material				
2.F.9.101	F	6.004(a)		Seven strand stock proof fence (1,25m high)	m	1 011		
	F			Removal of gates				
2.F.9.102	F	6.007		All types of gates	No	2		
	F			Supply, erect and maintain during contract period new fencing material for new fences				
2.F.9.103	F	6.002(a)		Seven strand stock proof fence (1,25m high) as per drawing 2A-C6-101	m	1 011		
	F			Supply, erect and maintain gates during contract period				
2.F.9.104	F	6.005(a)		1.2m high gates for stock proof fences	No	2		
	F			Remove fencing installed under this contract and re-erect at another position				
2.F.9.105	F	6.003(a)		Seven strand stock proof fence (1,25m high) as per drawing 2A-C6-101	m	1 011		
	F			Remove gates installed under this contract and re-erect at another position				
2.F.9.106	F	6.006(a)		1.2m high gates for stock proof fences	No	2		
	F			LANDSCAPING & REHABILITATION				
2.F.9.107	F	47.001		Shaping	m2	42 745		
2.F.9.108	F	47.002		Ripping	ha	5		
2.F.9.109	F	47.003		Trimming	m2	42 745		
2.F.9.110	F	47.004		Scarifying	ha	5		
2.F.9.111	F	47.007		Furnishing and applying fertilisers	kg	5 000		
2.F.9.112	F	47.011		Preparing topsoil for seeding	m2	42 745		
2.F.9.113	F	47.012		Hydro-seeding	ha	4.00		
2.F.9.114	F	47.013		Hand-seeding	ha	0.50		
2.F.9.115	F	47.015		Temporary re-vegetation	ha	0.50		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
	F			Provision of seed				
2.F.9.116	F	47.010		Seed type - Anthephora pubescens	kg	5		
2.F.9.117	F	47.010		Seed type - Cenchrus ciliaris	kg	5		
2.F.9.118	F	47.010		Seed type - Chloris gayana	kg	50		
2.F.9.119	F	47.010		Seed type - Cynodon dactylon	kg	15		
2.F.9.120	F	47.010		Seed type - Digitaria eriantha	kg	60		
2.F.9.121	F	47.010		Seed type - Eneapogon chenchroides	kg	5		
2.F.9.122	F	47.010		Seed type - Eragrostis curvula	kg	10		
2.F.9.123	F	47.010		Seed type - Eragrostis lehmanniana	kg	3		
2.F.9.124	F	47.010		Seed type - Eragrostis tef	kg	15		
2.F.9.125	F	47.010		Seed type - Heteropogon contortus	kg	15		
2.F.9.126	F	47.010		Seed type - Panicum maximum	kg	18		
2.F.9.127	F	47.010		Seed type - Pogonarthria squarrosa	kg	5		
2.F.9.128	F	47.016		Provision of temporary erosion control measures	ha	5		
2.F.9.129	F	47.017		Maintenance of the Temporary Erosion Control Measures	sum	1		
2.F.9.130	F	47.018		Maintenance of Vegetation	sum	1		
	F			SPOIL SITE B				
	F			OPENING OF SPOIL AREAS				
2.F.9.131	F	14.001		Opening of spoil areas and access roads	Sum	1		
	F			Removal of agricultural material and overburden				
2.F.9.132	F	14.002		Removal and replacement of topsoil	m3	3 600		
2.F.9.133	F	14.003		Removal and replacement of fertile soil	m3	10 810		
2.F.9.134	F	14.004		Removal and replacement of overburden	m3	3 600		
	F			Handling of imported materials at the borrow and spoil areas prior to the commencement of finishing processes as per Clause 14.5.				
2.F.9.135	F	14.006		Spoiling of: Rock/boulders, material unsuitable for structural backfilling and surplus excavated material	m3	8490		
	F			DEALING WITH WATER				
2.F.9.136	F	8.001		Dealing with water	Sum	1		
2.F.9.137	F	8.002		Treatment of water	Sum	1		
2.F.9.138	F	8.003		Water monitoring	Sum	1		
2.F.9.139	F	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	F			FENCING (NON SECURITY TYPE - STOCKPROOF)				
2.F.9.140	F	6.001		Clearing the fence line, 1m wide strip	m	536		
	F			Remove fencing and disposing of material				
2.F.9.141	F	6.004(a)		Seven strand stock proof fence (1,25m high)	m	536		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			Removal of gates				
2.F.9.142	F	6.007		All types of gates	No	2		
	F			Supply, erect and maintain during contract period new fencing material for new fences				
2.F.9.143	F	6.002(a)		Seven strand stock proof fence (1,25m high) as per drawing 2A-C6-101	m	536		
	F			Supply, erect and maintain gates during contract period				
2.F.9.144	F	6.005(a)		1.2m high gates for stock proof fences	No	2		
	F			Remove fencing installed under this contract and re-erect at another position				
2.F.9.145	F	6.003(a)		Seven strand stock proof fence (1,25m high) as per drawing 2A-C6-101	m	536		
	F			Remove gates installed under this contract and re-erect at another position				
2.F.9.146	F	6.006(a)		1.2m high gates for stock proof fences	No	2		
	F			LANDSCAPING & REHABILITATION				
2.F.9.147	F	47.001		Shaping	m2	24 000		
2.F.9.148	F	47.002		Ripping	ha	2.4		
2.F.9.149	F	47.003		Trimming	m2	24 000		
2.F.9.150	F	47.004		Scarifying	ha	2.4		
2.F.9.151	F	47.007		Furnishing and applying fertilisers	kg	2 400		
2.F.9.152	F	47.011		Preparing topsoil for seeding	m2	24 000		
2.F.9.153	F	47.012		Hydro-seeding	ha	2.10		
2.F.9.154	F	47.013		Hand-seeding	ha	0.30		
2.F.9.155	F	47.015		Temporary re-vegetation	ha	0.30		
	F			Provision of seed				
2.F.9.156	F	47.010		Seed type - Anthephora pubescens	kg	3		
2.F.9.157	F	47.010		Seed type - Cenchrus ciliaris	kg	3		
2.F.9.158	F	47.010		Seed type - Chloris gayana	kg	24		
2.F.9.159	F	47.010		Seed type - Cynodon dactylon	kg	8		
2.F.9.160	F	47.010		Seed type - Digitaria eriantha	kg	29		
2.F.9.161	F	47.010		Seed type - Eneapogon chenchroides	kg	3		
2.F.9.162	F	47.010		Seed type - Eragrostis curvula	kg	5		
2.F.9.163	F	47.010		Seed type - Eragrostis lehmanniana	kg	2		
2.F.9.164	F	47.010		Seed type - Eragrostis tef	kg	8		
2.F.9.165	F	47.010		Seed type - Heteropogon contortus	kg	8		
2.F.9.166	F	47.010		Seed type - Panicum maximum	kg	9		
2.F.9.167	F	47.010		Seed type - Pogonarthria squarrosa	kg	3		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.F.9.168	F	47.016		Provision of temporary erosion control measures	ha	3		
2.F.9.169	F	47.017		Maintenance of the Temporary Erosion Control Measures	sum	1		
2.F.9.170	F	47.018		Maintenance of Vegetation	sum	1		
	F			SPOIL SITE C				
	F			OPENING OF SPOIL AREAS				
2.F.9.171	F	14.001		Opening of spoil areas and access roads	Sum	1		
	F			Removal of agricultural material and overburden				
2.F.9.172	F	14.002		Removal and replacement of topsoil	m3	2 528		
2.F.9.173	F	14.003		Removal and replacement of fertile soil	m3	7 584		
2.F.9.174	F	14.004		Removal and replacement of overburden	m3	2 528		
	F			Handling of imported materials at the borrow and spoil areas prior to the commencement of finishing processes as per Clause 14.5.				
2.F.9.175	F	14.006		Spoiling of: Rock/boulders, material unsuitable for structural backfilling and surplus excavated material	m3	6820		
	F			DEALING WITH WATER				
2.F.9.176	F	8.001		Dealing with water	Sum	1		
2.F.9.177	F	8.002		Treatment of water	Sum	1		
2.F.9.178	F	8.003		Water monitoring	Sum	1		
2.F.9.179	F	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	F			FENCING (NON SECURITY TYPE - STOCKPROOF)				
2.F.9.180	F	6.001		Clearing the fence line, 1m wide strip	m	740		
	F			Remove fencing and disposing of material				
2.F.9.181	F	6.004(a)		Seven strand stock proof fence (1,25m high)	m	740		
	F			Removal of gates				
2.F.9.182	F	6.007		All types of gates	No	2		
	F			Supply, erect and maintain during contract period new fencing material for new fences				
2.F.9.183	F	6.002(a)		Seven strand stock proof fence (1,25m high) as per drawing 2A-C6-101	m	740		
	F			Supply, erect and maintain gates during contract period				
2.F.9.184	F	6.005(a)		1.2m high gates for stock proof fences	No	2		
	F			Remove fencing installed under this contract and re-erect at another position				
2.F.9.185	F	6.003(a)		Seven strand stock proof fence (1,25m high) as per drawing 2A-C6-101	m	740		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			Remove gates installed under this contract and re-erect at another position				
2.F.9.186	F	6.006(a)		1.2m high gates for stock proof fences	No	2		
	F			LANDSCAPING & REHABILITATION				
2.F.9.187	F	47.001		Shaping	m2	16 850		
2.F.9.188	F	47.002		Ripping	ha	1.69		
2.F.9.189	F	47.003		Trimming	m2	16 850		
2.F.9.190	F	47.004		Scarifying	ha	1.69		
2.F.9.191	F	47.007		Furnishing and applying fertilisers	kg	16 850		
2.F.9.192	F	47.011		Preparing topsoil for seeding	m2	16 850		
2.F.9.193	F	47.012		Hydro-seeding	ha	1.49		
2.F.9.194	F	47.013		Hand-seeding	ha	0.10		
2.F.9.195	F	47.015		Temporary re-vegetation	ha	0.10		
	F			Provision of seed				
2.F.9.196	F	47.010		Seed type - Anthephora pubescens	kg	3		
2.F.9.197	F	47.010		Seed type - Cenchrus ciliaris	kg	3		
2.F.9.198	F	47.010		Seed type - Chloris gayana	kg	24		
2.F.9.199	F	47.010		Seed type - Cynodon dactylon	kg	8		
2.F.9.200	F	47.010		Seed type - Digitaria eriantha	kg	29		
2.F.9.201	F	47.010		Seed type - Eneapogon chenchroides	kg	3		
2.F.9.202	F	47.010		Seed type - Eragrostis curvula	kg	5		
2.F.9.203	F	47.010		Seed type - Eragrostis lehmanniana	kg	2		
2.F.9.204	F	47.010		Seed type - Eragrostis tef	kg	8		
2.F.9.205	F	47.010		Seed type - Heteropogon contortus	kg	8		
2.F.9.206	F	47.010		Seed type - Panicum maximum	kg	9		
2.F.9.207	F	47.010		Seed type - Pogonarthria squarrosa	kg	3		
2.F.9.208	F	47.016		Provision of temporary erosion control measures	ha	3		
2.F.9.209	F	47.017		Maintenance of the Temporary Erosion Control Measures	sum	1		
2.F.9.210	F	47.018		Maintenance of Vegetation	sum	1		
	F			PART F9: Borrow pits and Spoil Areas - Carried forward to Summary of Bills				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	F			PART F10: Ancillary works				
	F			PART F10.1: INSTRUMENTATION HUT (At the Break Pressure Tank)				
	F			EARTHWORKS				
	F			REFER TO DRAWING 2G-C7-150				
2.F.10.1.1	F	9.010		Excavation by hand	m3	3		
2.F.10.1.2	F	9.009		Rip and recompact 150mm insitu material to 93% Mod AASHTO	m2	40		
	F			SOIL POISONING				
2.F.10.1.3	F	46.011		Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming (Supply of herbicide and ant poison shall be paid for in the provisional sums)	m2	40		
	F			FORMWORK				
	F			ROUGH FORMWORK				
	F			Narrow widths up to 300mm				
2.F.10.1.4	F	20.005		To apron and surfacebed	m	38		
	F			SMOOTH FORMWORK				
	F			Horizontal surfaces for visible surface including 20mm chamfers and drip grooves on a exposed corners to:				
2.F.10.1.5	F	20.002		Underside of slabs (Incl. Shelf)	m2	21		
	F			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.F.10.1.6	F	20.002		Upstand beams	m2	9		
2.F.10.1.7	F	20.002		Vertical sides of suspended slabs (incl. Shelf)	m2	4		
	F			REINFORCEMENT				
2.F.10.1.8	F	20.007		Steel bars (irrespective of grade or diameter)	t	1		
2.F.10.1.9	F	20.008		Mesh ref 395 high-tensile welded mesh	m2	2		
	F			CONCRETE				
	F			Strength concrete grade 30/19				
2.F.10.1.10	F	20.012		Surface bed, shelf, roof, ramp and apron	m3	12		
	F			Unformed surface finishes				
2.F.10.1.11	F	20.013(a)		Wood floated finish	m2	48		
2.F.10.1.12	F	20.013(b)		Steel floated finish (shelf & top of beams)	m2	5		
	F			AGGREGATE				
2.F.10.1.13	F	20.014		19mm stone balast	m3	0.8		
	F			JOINTS				
2.F.10.1.14	F	20.016		Construction joints, including shutters to apron	m	13		
2.F.10.1.15	F	20.016		75mm deep x 10mm wide expansion joint including shutter, 10mm soft board joint filler and sealant per detail C4 drawing 2A-C6-002	m	22		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
2.F.10.1.16	F	20.016		2 Layers 0.6mm thick galvanised plate, including smooth plaster to the tops of brick walls	m2	4		
	F			MASONRY				
	F			BRICKWORK OF NFX BRICKS (14 MPA NOMINAL COMPRESSIVE STRENGTH) IN CLASS I MORTAR				
2.F.10.1.17	F	46.004(a)		One brick walls for structure (220mm wide)	m2	45		
	F			FACE BRICKWORK				
	F			Face brickwork pointed with recessed horizontal and vertical joints. The cost for the supply and delivery of facebrick shall be paid for in Provisional Sums. All other costs related to the installation of the facebrick shall be included in this item (includes all other material). Samples of facebrick to be approved by the Engineer/Architect.				
2.F.10.1.18	F	46.004(h)		Extra over brickwork for face brickwork	m2	90		
	F			MASONRY REINFORCING				
2.F.10.1.19	F	46.004(f)		Fabric reinforcement and building into joints of one brick walls	m	200		
2.F.10.1.20	F	46.004(f)		Masonry reinforcing (3 no R8 bars) on 230mm wall	m	4		
	F			METALWORK				
	F			Supply and fabrication of steel				
2.F.10.1.21	F	24.001		1000mm x 1000mm 3CR12 louvre per drawing 86490 complete including shop details, supply and installation	No	1		
2.F.10.1.22	F	46.005(c)		Doors: double transformer door (2400mm x 1800mm) with insect proofing and louvres, locking mechanism, supplied, installed and painted. All as per dwg. 2G-C7-150	No	1		
	F			MISCELLANEOUS TRADES, FIXTURES AND APPLIANCES				
2.F.10.1.23	F	46.011		Epoxy sealant to shelf	m2	1.8		
2.F.10.1.24	F	46.011		110 ribbed HDPE sleeves supplied and installed per supplier's specification, including draw wire (ducting from draw box to interior of instrumentation hut)	m	15		
2.F.10.1.25	F	46.011		Polyurethane waterproofing	m2	23		
2.F.10.1.26	F	46.011		100mm thick Isoboard	m2	15		
2.F.10.1.27	F	46.011		Waterpermeable fabric	m2	23		
2.F.10.1.28	F	46.011		80 ND uPVC drainage pipes cast into upstand beams (Weep holes)	m	3		
2.F.10.1.29	F	46.012		Draw box per detail C10 drawing 2A-C6-003, complete	no	1		
	F			FIRE				
2.F.10.1.30	F	46.011		Supply, delivery and installation of SABS Approved 5kg CO2 fire extinguisher complete with wall bracket and wooden backing board	No	2		
2.F.10.1.31	F	46.011		Supply and installation of SABS Approved 190mm x 380mm single sided, wall mounted photo luminescent safety signs	no	2		
	F			PART F10: Ancillary works - Carried forward to Summary of Bills				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	F			PART F11: Fibre Earthworks				
	F			SITE CLEARANCE				
	F			Removal of fertile soil				
2.F.11.1	F	7.005(a)		For pipelines, temporary stockpile alongside the pipeline and construction servitude	m3	4100		
	F			DEALING WITH WATER				
2.F.11.2	F	8.001		Dealing with water	Sum	1		
2.F.11.3	F	8.002		Treatment of water	Sum	1		
2.F.11.4	F	8.003		Water monitoring	Sum	1		
2.F.11.5	F	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	F			PIPE TRENCH EXCAVATIONS				
	F			EXCAVATE IN ALL MATERIALS TO SPECIFIED LEVELS AND BATTERED SLOPES, INCLUDING TEMPORARY STOCKPILING AND LEVELLING ALONGSIDE EXCAVATIONS WITHIN THE CONFINES OF THE PIPE SERVITUDE				
	F			Classified trench excavations:				
	F			Within the freehaul distance				
2.F.11.6	F	9.012		Up to 1m deep	m3	3 435		
2.F.11.7	F	9.012		Over 1m and up to 2m deep	m3	150		
2.F.11.8	F	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	70		
2.F.11.9	F	9.020		Compaction of trench bottom	m2	13 125		
	F			EXCAVATION ANCILLARIES				
2.F.11.10	F	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to designated spoil sites	m3	22		
2.F.11.11	F	9.015		Excavate by hand in soft material to expose existing services	m3	45		
2.F.11.12	F	9.021		Excavation by hand	m3	15		
	F			OVERHAUL				
2.F.11.13	F	9.023(a)		Between 1km up to and including 3km	m3	150		
2.F.11.14	F	9.023(b)		Between 3km up to and including 5km	m3	80		
2.F.11.15	F	9.023(c)		Between 5km up to and including 7km	m3	55		
2.F.11.16	F	9.023(d)		Between 7km up to and including 9km	m3	64		
2.F.11.17	F	9.023(e)		Between 9km up to and including 11km	m3	5		
	F			EXISTING SERVICES THAT INTERSECT OR ADJOIN A PIPE TRENCH				
2.F.11.18	F	9.018(a)		Services that intersect a pipe trench	No	22		
2.F.11.19	F	9.018(b)		Services that adjoin a trench	m	1 160		
2.F.11.20	F	9.022		Slurry trenches / curtain walls	m2	90		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			BACKFILLING AND BEDDING				
	F			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	F			Provision of bed material				
2.F.11.21	F	15.003(a)		Material without screening from trenches	m3	230		
2.F.11.22	F	15.003(b)		Material with screening from trenches	m3	900		
2.F.11.23	F	15.003(c)		Material from the nearest borrow pit without screening	m3	40		
2.F.11.24	F	15.003(d)		Material from the nearest borrow pit with screening	m3	155		
	F			Provision of selected fill blanket				
2.F.11.25	F	15.006(a)		Material without screening from trenches	m3	345		
2.F.11.26	F	15.006(b)		Material with screening from trenches	m3	1 375		
2.F.11.27	F	15.006(c)		Material from the nearest borrow pit without screening	m3	40		
2.F.11.28	F	15.006(d)		Material from the nearest borrow pit with screening	m3	160		
2.F.11.29	F	15.006(e)		Material from commercial sources	m3	50		
	F			Provision of main backfill material				
2.F.11.30	F	15.007(a)		Backfill material from trench excavation	m3	145		
2.F.11.31	F	15.007(b)		Backfill material from the nearest borrow pit	m3	465		
	F			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.F.11.32	F	15.001		Bed material	m3	1 325		
2.F.11.33	F	15.001		Selected fill blanket	m3	1 970		
2.F.11.34	F	15.001		Main backfill	m3	165		
2.F.11.35	F	15.001		Fertile soil	m3	4505		
	F			PROVISION OF MATERIAL TO REPLACE UNSUITABLE MATERIAL FROM TRENCH BOTTOM OR TO PROVIDE SUPPORTING EARTHWORKS				
2.F.11.36	F	15.011(b)		From borrow pits	m3	22		
	F			Placing of Material				
2.F.11.37	F	15.012		Placing of material to replace unsuitable material from trench bottom or to provide supporting earthworks	m3	22		
	F			SUBSOIL DRAINAGE				
	F			Crushed stone				
2.F.11.38	F	15.008(a)		Supply and place crushed stone for Layer no 1	m3	7		
2.F.11.39	F	15.008(c)		Supply and place well graded compacted dump rock for Layer no 2	m3	12		
	F			Geotextile				
2.F.11.40	F	15.008(b)		Supply and place geotextile for Layer no 1	m2	125		
2.F.11.41	F	15.008(d)		Supply and place geotextile for Layer no 2	m2	145		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	F			ENCASING OF PIPES IN CONCRETE				
2.F.11.42	F	15.009(a)		Concrete strength grade 30/19	m3	10		
2.F.11.43	F	15.009(b)		Reinforcement	t	2		
	F			OVERHAUL				
2.F.11.44	F	15.010(a)		Between 1km up to and including 3km	m3	215		
2.F.11.45	F	15.010(b)		Between 3km up to and including 5km	m3	275		
2.F.11.46	F	15.010(c)		Between 5km up to and including 7km	m3	205		
2.F.11.47	F	15.010(d)		Between 7km up to and including 9km	m3	55		
2.F.11.48	F	15.010(e)		Between 9km up to and including 11km	m3	80		
	F			PART F11: Fibre Earthworks Total - Carried forward to Summary of Bills				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	G			PART G: BREAK PRESSURE RESERVOIR				
	G			PART G1: Preliminary and General (Secondary)				
	G			PRELIMINARY AND GENERAL (SECONDARY)				
	G	1.002		FIXED CHARGES - GENERAL OBLIGATIONS				
2.G.1.1	G		X	Head Office Contract Management and Overheads	Sum	1		
2.G.1.2	G		X	General Site Supervision and Overheads	Sum	1		
2.G.1.3	G		X	Method statements (1.10.1)	Sum	1		
2.G.1.4	G		X	Competency training (1.10.2.4)	Sum	1		
2.G.1.5	G		X	Returns and reporting (1.10.3)	Sum	1		
2.G.1.6	G		X	Management meetings (1.10.4)	Sum	1		
2.G.1.7	G		X	Integration management (1.10.5)	Sum	1		
2.G.1.8	G		X	Programming Requirements (1.9)	Sum	1		
2.G.1.9	G		X	Quality Management (1.10.2)	Sum	1		
2.G.1.10	G		X	Socio Economic Requirements (1.11)	Sum	1		
2.G.1.11	G		X	Occupational Health and Safety Requirements (1.12)	Sum	1		
2.G.1.12	G		X	Environmental Requirements (1.13)	Sum	1		
	G			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.G.1.13	G		X	.....	Sum	1		
2.G.1.14	G		X	.....	Sum	1		
2.G.1.15	G		X	.....	Sum	1		
2.G.1.16	G		X	.....	Sum	1		
	G	1.003 & 1.004		FIXED CHARGES - FACILITIES FOR THE CONTRACTOR (1.8)				
2.G.1.17	G		X	Transport of Staff and Labour (1.8.1.4)	Sum	1		
2.G.1.18	G		X	Construction Establishment Fencing (1.8.3.1)	Sum	1		
2.G.1.19	G		X	Lighting of Construction Establishment Areas (1.8.3.2)	Sum	1		
2.G.1.20	G		X	Electrical power and distribution (1.8.3.4)	Sum	1		
2.G.1.21	G		X	Standby power (1.8.3.4)	Sum	1		
2.G.1.22	G		X	Communications (1.8.3.7)	Sum	1		
	G			Office, Accommodation and Other Site facilities				
2.G.1.23	G		X	Accommodation for staff and workforce (1.8.3.8b)	Sum	1		
2.G.1.24	G		X	Offices (1.8.3.8c)	Sum	1		
2.G.1.25	G		X	Other establishment facilities (1.8.3.8d)	Sum	1		
2.G.1.26	G		X	Storage (1.8.3.8e)	Sum	1		
	G			Other services				
2.G.1.27	G		X	Medical (1.8.3.12)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.G.1.28	G		X	Sanitation and Cleaning (1.8.3.13)	Sum	1		
2.G.1.29	G		X	Access control and security (1.8.3.14)	Sum	1		
	G			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.G.1.30	G		X	.....	Sum	1		
2.G.1.31	G		X	.....	Sum	1		
2.G.1.32	G		X	.....	Sum	1		
2.G.1.33	G		X	.....	Sum	1		
	G	1.004		FIXED CHARGES - SPECIFIC EQUIPMENT				
2.G.1.34	G		X	Equipment for construction and maintenance of the Contractor's work areas	Sum	1		
2.G.1.35	G		X	Minor equipment and small tools	Sum	1		
2.G.1.36	G		X	Equipment for dust and emissions control and monitoring in compliance with environmental requirement	Sum	1		
2.G.1.37	G		X	Construction services including electrical power, compressed air, water, communications, etc.	Sum	1		
2.G.1.38	G		X	Equipment for blasting and rock support	Sum	1		
2.G.1.39	G		X	Equipment for earthworks, trenching and backfilling	Sum	1		
2.G.1.40	G		X	Equipment for borrowing, processing of materials, transport of materials and spoiling of materials	Sum	1		
2.G.1.41	G		X	Equipment for crange, winches, lifting and pipe handling	Sum	1		
2.G.1.42	G		X	Equipment for welding, weld testing and coatings	Sum	1		
2.G.1.43	G		X	Equipment for site transporting, lifting, placing and fixing of structural steel work	Sum	1		
2.G.1.44	G		X	Equipment for site transporting, placing, fixing and finishing of concrete work, formwork and reinforcement	Sum	1		
2.G.1.45	G		X	Equipment for processing concrete (Batch plant)	Sum	1		
2.G.1.46	G		X	Equipment for dealing with water	Sum	1		
	G			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.G.1.47	G		X	.....	Sum	1		
2.G.1.48	G		X	.....	Sum	1		
2.G.1.49	G		X	.....	Sum	1		
2.G.1.50	G		X	.....	Sum	1		
	G	1.006		TIME RELATED CHARGES - GENERAL OBLIGATIONS				
2.G.1.51	G		X	Head Office Contract Management and Overheads (Duration Weeks)	Sum	1		
2.G.1.52	G		X	General Site Supervision and Overheads (Duration Weeks)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.G.1.53	G		X	Method Statements (1.10.1) (Duration Weeks)	Sum	1		
2.G.1.54	G		X	Competency training (1.10.2.4) (Duration Weeks)	Sum	1		
2.G.1.55	G		X	Returns and reporting (1.10.3) (Duration Weeks)	Sum	1		
2.G.1.56	G		X	Management meetings (1.10.4) (Duration Weeks)	Sum	1		
2.G.1.57	G		X	Integration management (1.10.5) (Duration Weeks)	Sum	1		
2.G.1.58	G		X	Programming Requirements (1.9) (Duration Weeks)	Sum	1		
2.G.1.59	G		X	Quality Management (1.10.2) (Duration Weeks)	Sum	1		
2.G.1.60	G		X	Socio Economic Requirements (1.11) (Duration Weeks)	Sum	1		
2.G.1.61	G		X	Occupational Health and Safety (1.12) (Duration Weeks)	Sum	1		
2.G.1.62	G		X	Environmental Requirements (1.13) (Duration Weeks)	Sum	1		
	G			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.G.1.63	G		X	.....	Sum	1		
2.G.1.64	G		X	.....	Sum	1		
2.G.1.65	G		X	.....	Sum	1		
	G	1.007 & 1.008		TIME RELATED CHARGES - FACILITIES FOR THE CONTRACTOR (1.8)				
2.G.1.66	G		X	Transport of Staff and Labour (1.8.1.4) (Duration Weeks)	Sum	1		
2.G.1.67	G		X	Construction Establishment Fencing (1.8.3.1) (Duration Weeks)	Sum	1		
2.G.1.68	G		X	Lighting of Construction Establishment Areas (1.8.3.2) (Duration Weeks)	Sum	1		
2.G.1.69	G		X	Electrical power and distribution (1.8.3.4) (Duration Weeks)	Sum	1		
2.G.1.70	G		X	Standby power (1.8.3.4) (Duration Weeks)	Sum	1		
2.G.1.71	G		X	Communications (1.8.3.7) (Duration Weeks)	Sum	1		
	G			Office, Accommodation and Other Site facilities				
2.G.1.72	G		X	Accommodation for staff and workforce (1.8.3.8b)(Duration Weeks)	Sum	1		
2.G.1.73	G		X	Offices (1.8.3.8c) (Duration Weeks)	Sum	1		
2.G.1.74	G		X	Other establishment facilities (1.8.3.8d) (Duration Weeks)	Sum	1		
2.G.1.75	G		X	Storage (1.8.3.8e) (Duration Weeks)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	G			Other services				
2.G.1.76	G		X	Medical (1.8.3.12) (Duration Weeks)	Sum	1		
2.G.1.77	G		X	Sanitation and Cleaning (1.8.3.13) (Duration Weeks)	Sum	1		
2.G.1.78	G		X	Access control and security (1.8.3.14) (Duration Weeks)	Sum	1		
	G			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.G.1.79	G		X	.....	Sum	1		
2.G.1.80	G		X	.....	Sum	1		
2.G.1.81	G		X	.....	Sum	1		
2.G.1.82	G		X	.....	Sum	1		
	G	1.008		TIME RELATED CHARGES - SPECIFIC EQUIPMENT				
2.G.1.83	G		X	Equipment for construction and maintenance of the Contractor's work areas (Duration Weeks)	Sum	1		
2.G.1.84	G		X	Minor equipment and small tools (Duration Weeks)	Sum	1		
2.G.1.85	G		X	Equipment for dust and emissions control and monitoring in compliance with environmental requirement (Duration Weeks)	Sum	1		
2.G.1.86	G		X	Construction services including electrical power, compressed air, water, communications, etc. (Duration Weeks)	Sum	1		
2.G.1.87	G		X	Equipment for blasting and rock support (Duration Weeks)	Sum	1		
2.G.1.88	G		X	Equipment for earthworks, trenching and backfilling (Duration Weeks)	Sum	1		
2.G.1.89	G		X	Equipment for borrowing, processing of materials, transport of materials and spoiling of materials (Duration Weeks)	Sum	1		
2.G.1.90	G		X	Equipment for crange, winches, lifting and pipe handling (Duration Weeks)	Sum	1		
2.G.1.91	G		X	Equipment for welding, weld testing and coatings (Duration Weeks)	Sum	1		
2.G.1.92	G		X	Equipment for site transporting, lifting, placing and fixing of structural steel work (Duration Weeks)	Sum	1		
2.G.1.93	G		X	Equipment for site transporting, placing, fixing and finishing of concrete work, formwork and reinforcement (Duration Weeks)	Sum	1		
2.G.1.94	G		X	Equipment for processing concrete (Batch plant) (Duration Weeks)	Sum	1		
2.G.1.95	G		X	Equipment for dealing with water (Duration Weeks)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
			Reference				Brought Forward	
	G			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.G.1.96	G		X	.....	Sum	1		
2.G.1.97	G		X	.....	Sum	1		
2.G.1.98	G		X	.....	Sum	1		
2.G.1.99	G		X	.....	Sum	1		
	G			PART G1: Preliminary and General - Carried forward to Summary of Bills				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	G			PART G2: Earthworks				
	G			SITE CLEARANCE				
2.G.2.1	G	16.001		Clear and strip site	m2	110 000		
	G			Remove and grub large trees (complete with stumps) or stumps only, as scheduled, of girth				
2.G.2.2	G	16.002(a)		Over 1 m and up to and including 2 m	No	32		
2.G.2.3	G	16.002(b)		Over 2 m and up to and including 3 m	No	5		
2.G.2.4	G	16.002(c)		Over 3 m and up to and including 4 m	No	1		
	G			Removal of surface rocks				
2.G.2.5	G	16.003		Extra-over 16.001 for removal of rocks	m3	40		
	G			Remove topsoil				
2.G.2.6	G	16.007		Remove topsoil to nominal depth 150 mm	m3	16 500		
	G			In-situ treatment of foundations				
2.G.2.7	G	9.009(b)		In-situ treatment by ripping	m3	8 820		
	G			EXCAVATION				
	G			Material unsuitable for embankment				
2.G.2.8	G	16.008(a)		i) To spoil at designated spoil site	m3	41 445		
	G			Material suitable for embankment from essential excavations for				
2.G.2.9	G	16.008(b)		(5) Cut to fill from excavation of reservoir basin	m3	37 450		
	G			Extra-over items (b) (1)-(5) for excavation in:				
2.G.2.10	G	16.008(c)		(2) Hard rock material	m3	41 445		
	G			Forming embankment				
	G			REFER TO DRAWING 2A-C6-008 & 2A-C6-010 for embankment compaction densities				
2.G.2.11	G	16.010(a)		i) Selected semi-pervious material: Imported material from borrow pits	m3	12 840		
2.G.2.12	G	16.010(a)		ii) Selected semi-pervious material: In-situ embankment excavated material	m3	1 200		
2.G.2.13	G	16.010(b)		i) Unselected pervious material: Imported material from borrow pits (homogeneous)	m3	25 635		
2.G.2.14	G	16.010(b)		ii) Unselected pervious material: In-situ embankment excavated material (homogeneous)	m3	30 625		
2.G.2.15	G	16.010(d)		Topsoil from stockpile to downstream slope	m3	1 400		
2.G.2.16	G	16.010(g)		Gravel capping	m3	850		
	G			Prepare surface areas to be lined				
2.G.2.17	G	16.014		Embankment floor	m2	19 170		
2.G.2.18	G	16.015		Embankment slopes	m2	33 075		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	G			OVERHAUL				
2.G.2.19	G	16.013(a)		Between 1km up to and including 3km	m3	33 715		
2.G.2.20	G	16.013(b)		Between 3km up to and including 5km	m3	35 800		
2.G.2.21	G	16.013(c)		Between 5km up to and including 7km	m3	16 860		
2.G.2.22	G	16.013(d)		Between 7km up to and including 9km	m3	43 830		
	G			DEALING WITH WATER For all works included in PART G				
2.G.2.23	G	8.001		Dealing with water	Sum	1		
2.G.2.24	G	8.002		Treatment of water	Sum	1		
2.G.2.25	G	8.003		Water monitoring	Sum	1		
2.G.2.26	G	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	G			PART G2: Earthworks - Carried forward to Summary of Bills				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	G			PART G3: Structures				
	G			INLET, OVERFLOW, ACCESS BRIDGES AND STAIRS AND DISCHARGE STRUCTURES				
	G			REFER TO DRAWING 2G-C5-101, 2G-C7-100 to 106, 2G-C7-120, 2G-C7-130, 2G-C7-140 and 2G-C7-141				
	G			EARTHWORKS				
	G			Excavation in all materials to spoil				
2.G.3.1	G	9.001		Excavate for structures	m3	1 270		
	G			Excavation in all materials to a provisional stockpile within the free haul distance				
2.G.3.2	G	9.003		Excavate for structures	m3	1 105		
2.G.3.3	G	9.010		Excavation by hand	m3	54		
	G			OVERHAUL				
2.G.3.4	G	9.011g)		Overhaul distances further than 13km	m3.km	43 370		
	G			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.G.3.5	G	15.014(a)		Structure backfilling compacted to compacted to 93% MOD AASHTO	m3	1 123		
	G			CONCRETE WORKS				
	G			ROUGH FORMWORK				
	G			Vertical surfaces				
2.G.3.6	G	20.001		Sides of floor slab and column bases	m2	159		
2.G.3.7	G	20.001		Sides of walls	m2	550		
	G			SMOOTH FORMWORK				
	G			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.G.3.8	G	20.002		Walls	m2	1 185		
2.G.3.9	G	20.002		Pipe supports	m2	5		
2.G.3.10	G	20.002		To stair treads	m2	49		
2.G.3.11	G	20.002		To columns	m2	32		
2.G.3.12	G	20.002		To liner tie beams	m2	91		
	G			Sloping surfaces including chamfers				
2.G.3.13	G	20.002		Smooth, inclined including 20mm chamfer, to liner tie beams	m2	135		
	G			Horizontal surfaces including chamfers				
2.G.3.14	G	20.002		Slabs	m2	120		
2.G.3.15	G	20.005		Narrow Widths (exceeding 0 and not exceeding 300mm high)	m	75		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	G			REINFORCEMENT				
2.G.3.16	G	20.007(a)		Steel bars irrespective of grade and diameter	t	149		
	G			CONCRETE				
	G			Prescribed mix concrete				
2.G.3.17	G	20.010		Grade 35MPa/19mm in water retaining structures, access bridges, access stairs, tie beams, etc.	m3	717		
	G			Blinding layer in 15MPa/19mm in:				
2.G.3.18	G	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	556		
	G			Strength Concrete				
2.G.3.19	G	20.012		Grade 30MPa/19mm in downstream stair bases	m3	7		
	G			UNFORMED SURFACE FINISHES				
2.G.3.20	G	20.013(a)		Wood floated finish	m2	666		
2.G.3.21	G	20.013(b)		Steel floated finish to top of walls and beams	m2	391		
2.G.3.22	G	20.013(d)		Broomed	m2	275		
	G			JOINTS				
2.G.3.23	G	20.016		10mm wide x 1200mm deep with joint filler and sealant at inlet and overflow	m	50		
2.G.3.24	G	20.016		10mm wide x 250mm deep with joint filler and sealant at inlet per detail C3.2 / C3.3 drg 2A-C6-002	m	145		
2.G.3.25	G	20.016		10mm wide x 1100mm deep with joint filler and sealant at overflow	m	40		
2.G.3.26	G	20.016		Construction joint to liner tie beam consisting of Y12 dowel (L = 350mm) epoxied 150mm into existing concrete. Dowel spacing 500mm c/c (concrete and formwork measured elsewhere)	m	301		
	G			MANUFACTURE (OR SUPPLY) AND ERECT PRECAST ELEMENTS				
2.G.3.27	G	20.17(b)		Precast baffles per drawing 2G-C7-101	No	480		
	G			MISCELLANEOUS ITEMS				
2.G.3.28	G	20.021(a)		Polythene sheeting under concrete	m2	340		
	G			STRUCTURAL STEEL				
	G			Supply and fabrication of steelwork				
2.G.3.29	G	24.001(a) & 24.011		Access bridges and stairs	t	32		
2.G.3.30	G	24.002		Delivery to site	t	32		
2.G.3.31	G	24.003		Erection on site	t	32		
	G			Flooring and frames, complete and installed				
2.G.3.32	G	24.009 (a) 24.011		Galvanised open grid floors complete with galvanised embedment angle frame per detail C13.2 Drawing 2A-C6-004 where applicable	m2	270		
2.G.3.33	G	24.009 (a) 24.011		Prefabricated grid treads 250mm wide x 1100mm long	no	132		
							Carried Forward	

Item no.	Part	Payment Reference	Breakdown Reference	Description	Unit	Quantity	Rate	Amount
							Brought Forward	
				ANCILLARY WORKS				
				Mild steel stanchions, ball type welded construction, 1050mm high, stanchion OD 42.9mm, 2.5mm wall thickness. Mentis Sales Inter-Link Handrail System or similar approved.				
2.G.3.34	G	24.007(b)		Side mounted. Type MT90, including fixing detail	m	276		
2.G.3.35	G	24.007(c)		iii) Bends, end closures and accessories	No	48		
				Manhole covers and lids, complete and installed				
2.G.3.36	G	24.010		Manhole covers and lids per drawing 137079/01 ME to collection chambers	No	4		
				ITEMS CAST OR BUILT INTO CONCRETE				
2.G.3.37	G	33.005		Steel pipe diameter 1200mm	No	6		
				DRAINAGE STRUCTURE (Culverts)				
				REFER TO DRAWING 2G-C5-015				
				EARTHWORKS				
				Excavation in all materials to spoil				
2.G.3.38	G	9.001		Excavate for drainage structure and collection boxes	m3	2 000		
				Excavation in all materials to stockpile				
2.G.3.39	G	9.003		Excavate for drainage structure and collection boxes	m3	1 900		
2.G.3.40	G	9.007		Extra-Over items 9.001 to 9.005 for: Hard Excavation for unclassified material (by non-explosive means)	m3	400		
				OVERHAUL				
2.G.3.41	G	9.011 g)		Overhaul of excavated material to spoil site at Balancing reservoir	m3.km	58 000		
				CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.G.3.42	G	15.014(a)		Structure backfilling compacted to compacted to 93% MOD AASHTO	m3	1 900		
				FOUNDATION PREPARATION				
2.G.3.43	G	9.009 a)		Compaction of insitu material under drainage structure to 93% MOD AASHTO	m2	1450		
				CONCRETE WORKS				
				ROUGH FORMWORK				
				Vertical surfaces				
2.G.3.44	G	20.001		Sides of floor slab	m2	160		
2.G.3.45	G	20.001		Sides of mass concrete	m2	1 400		
				SMOOTH FORMWORK				
				Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.G.3.46	G	20.002		Chambers and wing walls	m2	400		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	G			Horizontal surfaces including chamfers				
2.G.3.47	G	20.002		Slabs	m2	65		
2.G.3.48	G	20.005		Narrow Widths (exceeding 0 and not exceeding 300mm high)	m	60		
	G			Box-out holes / Form voids				
	G			Large other than circular				
2.G.3.49	G	20.006(d)		2.0m wide x 0.3m deep	No	3		
2.G.3.50	G	20.006(d)		4.0m wide x 0.8m deep	No	3		
	G			REINFORCEMENT				
2.G.3.51	G	20.007(a)		Steel bars irrespective of grade and diameter	t	55		
	G			CONCRETE				
	G			Blinding layer in 15MPa/19mm F30 concrete:				
2.G.3.52	G	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	380		
	G			Strength concrete grade 15MPa/19mm in:				
2.G.3.53	G	20.012		Culvert structure mass concrete	m2	300		
	G			Strength concrete grade 30MPa/19mm:				
2.G.3.54	G	20.012		Collection chambers	m3	120		
2.G.3.55	G	20.012		Culvert structure and wing walls	m3	180		
	G			UNFORMED SURFACE FINISHES				
	G			Steel floated finish				
2.G.3.56	G	20.013(b)		Collection chambers	m2	165		
2.G.3.57	G	20.013(b)		Culvert structure	m2	680		
	G			JOINTS				
2.G.3.58	G	20.016		Key joint at culvert channel floor	m	210		
2.G.3.59	G	20.016		10mm wide x 200mm deep with joint filler and sealant collection boxes per C3.2 / C3.3 drg 2A-C6-002	m	80		
2.G.3.60	G	20.016		30mm deep x 150mm wide slot in base slab for culvert installation including 1:6 packing mortar	m	600		
	G			HD BOLTS AND MISCELLANEOUS METAL WORK				
2.G.3.61	G	20.19		Galvanised R20 steel bars, supplied and installed	m	80		
	G			STRUCTURAL STEEL				
	G			Flooring and frames, complete and installed				
2.G.3.62	G	24.009 (a)		Galvanised open grid floors complete with galvanised embedment angle frame per detail C13.2 Drawing 2A-C6-004	m2	8		
	G			Manhole covers and lids, complete and installed				
2.G.3.63	G	24.010		Manhole covers and lids per drawing 137079/01 ME to collection chambers	No	4		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	G			STORMWATER DRAINAGE				
	G			Prefabricated concrete culverts				
2.G.3.64	G	27.004 b)		2400 x 2100mm precast portal culverts	m	270		
2.G.3.65	G	46.011		Synthetic-fibre filter blanket wrapped around 19mm stone encasing with 300mm side and 300mm end laps, including stitching	m2	1050		
2.G.3.66	G	27.002(c)		19mm Crushed stone encasing to drainage pipe	m3	90		
	G			Perforated Flexible Drainage Pipes				
2.G.3.67	G	27.004		160 ND ribbed slotted HDPE with smooth bore (Drainex or similar) laid in stone encasing (encasing elsewhere)	m	600		
	G			PATCHING OF EXISTING ROADS				
2.G.3.68	G	26.018(a)		Sawing asphalt layers for patching: to an average depth not exceeding 50 mm	m	15		
2.G.3.69	G	26.019(a)		Excavation in existing pavements for patching in: Asphalt layers	m3	1		
2.G.3.70	G	26.019(b)		Excavation in existing pavements for patching in: Sub base layers	m3	25		
2.G.3.71	G	26.019(c)		Excavation in existing pavements for patching in: Base layers	m3	22		
2.G.3.72	G	26.020(a)		Backfilling of excavations for patching with: Continuously graded asphalt surfacing (A-E2) - 45mm thick	t	2.3		
2.G.3.73	G	26.020(d)		Backfilling of excavations for patching with: Cement stabilized crushed stone (G1 stabilized with 2.5% cement)	m3	25		
2.G.3.74	G	26.020(f)		Backfilling of excavations for patching with: Selected backfill (G7 compacted to 93% of Modified AASHTO density)	m3	22		
2.G.3.75	G	26.021		Tack coat of 30% stable-grade emulsion	l	5		
	G			Overhaul				
2.G.3.76	G	25.018(d)		Between 7km up to and including 9km	m3	72		
	G			Material from Commercial Sources				
2.G.3.77	G	15.006(e)		G1 material from commercial sources	m3	25		
	G			ACCOMMODATION OF TRAFFIC AND TEMPORARY DEVIATIONS				
	G			Accommodation of traffic and maintaining temporary deviations for:				
2.G.3.78	G	26.023(c)		Reinstatement of existing roads at crossings (full width deviation)	km	0.15		
	G			TEMPORARY TRAFFIC CONTROL FACILITIES				
	G			Temporary traffic-control facilities				
2.G.3.79	G	25.007(a)		Flagmen	sum	1		
2.G.3.80	G	25.007(b)		Road signs	sum	1		
2.G.3.81	G	25.007(c)		Flicker lights	sum	1		
2.G.3.82	G	25.007(d)		Delineators	sum	1		
2.G.3.83	G	25.007(e)		Barricading	sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.G.3.84	G	25.007(f)		Two-way communication devices	sum	1		
2.G.3.85	G	25.007(g)		Personnel to manage and maintain temporary traffic-control facilities	sum	1		
2.G.3.86	G	25.007(h)		All other items not listed above	sum	1		
	G			PART G3: Structures - Carried forward to Summary of Bills				

Item no.	Part	Payment Reference	Breakdown	Description	Unit	Quantity	Rate	Amount
	G			PART G4: Lining				
	G			Reservoir membranes and liners				
2.G.4.1	G	17.001		Inspection, acceptance and maintenance of surface area	m2	49 420		
2.G.4.2	G	17.002		Access to lining area	sum	1		
	G			Geo-cells, Membranes and liners				
2.G.4.3	G	17.005		2mm HDPE liner (Slopes) 2A-C6-010	m2	31 165		
2.G.4.4	G	17.005		1.5mm HDPE liner (Floor) 2A-C6-010	m2	18 255		
2.G.4.5	G	17.006		150mm geocellular confinement layer filled with 5Mpa soilcrete 2A-C6-010	m2	50 825		
	G			Anchoring to concrete structure:				
2.G.4.6	G	17.007		a) Inlet structure	m	50		
2.G.4.7	G	17.007		b) Outlet structure	m	40		
2.G.4.8	G	17.007		c) Overflow structure	m	50		
2.G.4.9	G	17.008		Anchor trench for HDPE liner	m	1 685		
2.G.4.10		17.008		Anchor trench for Geocell confinement layer - 0.75m wide	m	945		
2.G.4.11		17.008		Anchor trench for Geocell confinement layer - 1m wide	m	380		
2.G.4.12		17.008		10mm diam edge pegs for Geocell confinement layer as per drawing 2A-C6-010	no	5 680		
	G			Safety Items				
2.G.4.13	G	17.009		Safety ropes and buoys as per dwg 2A-C6-004	No.	10		
2.G.4.14	G	17.010		Warning signs as per dwg 2A-C6-004	No.	10		
2.G.4.15	G	25.021		Guard rails complete as per 2A-C6-007, including fixing to concrete base, the concrete base, etc.	m	2 575		
	G			PART G4: Lining - Carried forward to Summary of Bills				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	G			PART G5: Landscaping and Rehabilitation				
	G			LANDSCAPING & REHABILITATION				
2.G.5.1	G	47.001		Shaping	m2	75200		
2.G.5.2	G	47.007		Furnishing and applying fertilisers	kg	2350		
2.G.5.3	G	47.011		Preparing topsoil for seeding	m2	75200		
2.G.5.4	G	47.012		Hydro-seeding	ha	7.52		
	G			Provision of seed				
2.G.5.5	G	47.010		Seed type - Anthephora pubescens	kg	7.52		
2.G.5.6	G	47.010		Seed type - Cenchrus ciliaris	kg	7.52		
2.G.5.7	G	47.010		Seed type - Chloris gayana	kg	75.2		
2.G.5.8	G	47.010		Seed type - Cynodon dactylon	kg	22.56		
2.G.5.9	G	47.010		Seed type - Digitaria eriantha	kg	90.24		
2.G.5.10	G	47.010		Seed type - Eriopogon chenchroides	kg	7.52		
2.G.5.11	G	47.010		Seed type - Eragrostis curvula	kg	15.04		
2.G.5.12	G	47.010		Seed type - Eragrostis lehmanniana	kg	3.76		
2.G.5.13	G	47.010		Seed type - Eragrostis tef	kg	22.56		
2.G.5.14	G	47.010		Seed type - Heteropogon contortus	kg	22.56		
2.G.5.15	G	47.010		Seed type - Panicum maximum	kg	26.32		
2.G.5.16	G	47.010		Seed type - Pogonarthria squarrosa	kg	7.52		
2.G.5.17	G	47.016		Provision of temporary erosion control measures	ha	7.52		
2.G.5.18	G	47.017		Maintenance of the Temporary Erosion Control Measures	sum	1		
2.G.5.19	G	47.018		Maintenance of Vegetation	sum	1		
	G			PART G5: Landscaping and Rehabilitation - Carried forward to Summary of Bills				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	G			PART G6: Ancillary Works				
	G			PART G6.1: FENCING				
	G			FENCING (NON SECURITY TYPE - STOCKPROOF)				
2.G.6.1.1	G	6.001		Clearing the fence line, 1m wide strip	m	1 320		
	G			Remove fencing and disposing of material				
2.G.6.1.2	G	6.004(a)		Seven strand stock proof fence (1,25m high)	m	1 320		
	G			Removal of gates				
2.G.6.1.3	G	6.007		All types of gates	No	2		
	G			Supply, erect and maintain during contract period new fencing material for new fences				
2.G.6.1.4	G	6.002(a)		Seven strand stock proof fence (1,25m high) as per drawing 2A-C6-101	m	1 320		
	G			Supply, erect and maintain gates during contract period				
2.G.6.1.5	G	6.005(a)		1.2m high gates for stock proof fences	No	2		
	G			SECURITY FENCING				
	G			SITE CLEARANCE				
	G			CLEARING THE FENCE LINE, 1M WIDE STRIP				
2.G.6.1.6	G	6.001		Outer Security fencing	m	1 320		
	G			SECURITY FENCING				
	G			SUPPLY AND ERECT NEW FENCING MATERIAL FOR NEW FENCES.				
2.G.6.1.7	G	6.002(g)		Outer Security fencing as per drawing 167 766/13, 167 768/13 and 167 769/13	m	1 320		
	G			SUPPLY AND ERECT PERMANENT GATES				
2.G.6.1.8	G	6.005(e)		Outer Security gate as per drawing 167 767/13, 167 768/13 and 167 769/13	No.	2		
	G			PART G6.2: INTERNAL ROADS				
	G			EARTHWORKS				
	G			Bulk Excavation				
2.G.6.2.1	G	9.001		Excavation in all materials to spoil	m3	3 390		
2.G.6.2.2	G	9.006		Extra-Over items 9.001 to 9.005 for: Hard Excavation (blasting)	m3	340		
	G			In situ treatment of foundations: (compacted to a minimum of 90% of modified AASHTO density, or else specified differently on the drawings)				
2.G.6.2.3	G	9.009(a)		Compaction of in-situ material	m2	3 600		
2.G.6.2.4	G	9.009(b)		In situ treatment by ripping	m3	720		
2.G.6.2.5	G	9.009(c)		In situ treatment by rock blasting	m3	50		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	G			Pavement layers constructed from gravel material				
2.G.6.2.6	G	25.001(a)		Selected layer compacted to 93% of modified AASHTO density in 150mm thick layers (G7)	m3	1 335		
2.G.6.2.7	G	25.001(b)		Subbase layer compacted to 97% of modified AASHTO density in 150mm thick layers (G5)	m3	1 335		
2.G.6.2.8	G	25.001(c)		Gravel wearing course compacted to 95% of modified AASHTO density	m3	720		
	G			Overhaul on material hauled in excess of 1.0 km				
2.G.6.2.9	G	25.018		a) Between 1km up to and including 3km	m3	1 370		
2.G.6.2.10	G	25.018		b) Between 3km up to and including 5km	m3	4 450		
2.G.6.2.11	G	25.018		c) Between 5km up to and including 7km	m3	1 030		
	G			STORMWATER				
	G			Bedding for Prefabricated Culverts				
2.G.6.2.12	G	27.003		b) Class B bedding	m3	12		
	G			Prefabricated Concrete Culverts				
2.G.6.2.13	G	27.004(a)		i) 450mm diameter socketed concrete pipe (Class D50), jointed with mortar	m	10		
	G			PART G6.3: STORMWATER				
	G			SUBSOIL DRAINAGE				
	G			Pipe Trench Excavations				
	G			Excavate in all materials to specified levels and battered slopes, including temporary stockpiling and levelling alongside excavations within the confines of the pipe servitude				
	G			Unclassified trench excavations:				
	G			Within the freehaul distance				
2.G.6.3.1	G	9.012		Up to 1m deep	m3	500		
2.G.6.3.2	G	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	50		
	G			Overhaul				
2.G.6.3.3	G	9.023(b)		Between 3km up to and including 5km	m3	250		
2.G.6.3.4	G	9.023(c)		Between 5km up to and including 7km	m3	250		
2.G.6.3.5	G	46.011		Synthetic-fibre filter blanket wrapped around 19mm stone encasing with 300mm side and 300mm end laps, including stitching	m2	1440		
2.G.6.3.6	G	27.002(a)		Natural permeable sand - plaster sand	m3	420		
2.G.6.3.7	G	27.002(c)		19mm Crushed stone	m3	60		
	G			Perforated Flexible Drainage Pipes				
2.G.6.3.8	G	27.004		75mm Pipes laid in stone encasing (encasing elsewhere)	m	1200		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	G			uPVC Drainage Pipes				
2.G.6.3.9	G	27.004		110mm Pipes encased in plaster sand as per drawing 2A-C6-012 (plaster sand measured separately).	m	1400		
	G			CATCHMENT DRAINS				
	G			EARTHWORKS				
	G			Excavation in all materials to spoil				
2.G.6.3.10	G	9.001		Excavate for lined catchment drains	m3	500		
2.G.6.3.11	G	9.007		Extra-Over items 9.001 to 9.005 for: Hard Excavation for unclassified material (by non-explosive means)	m3	50		
	G			Overhaul				
2.G.6.3.12	G	9.011(c)		Between 5km up to and including 7km	m3	500		
	G			Catchwater drains				
2.G.6.3.13	G	27.001(e)		"Armoflex" lined drains complete as per drawing 2A-C6-011	m2	470		
	G			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	G			Foundation trench excavation and backfilling				
2.G.6.3.14	G	21.001(b)		In all other classes of material	m3	2		
2.G.6.3.15	G	21.002		Surface preparation for bedding the gabions	m2	2		
2.G.6.3.16	G	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	10		
2.G.6.3.17	G	21.003(a)		Galvanised gabions cages (Refer to drawings for dimensions)	m3	2		
	G			PART G6.4: INSTRUMENTATION HUT				
	G			EARTHWORKS				
	G			REFER TO DRAWING 2G-C7-150				
2.G.6.4.1	G	9.010		Excavation by hand	m3	3		
2.G.6.4.2	G	9.009		Rip and recompact 150mm insitu material to 93% Mod AASHTO	m2	40		
	G			SOIL POISONING				
2.G.6.4.3	G	46.011		Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming (Supply of herbicide and ant poison shall be paid for in the provisional sums)	m2	40		
	G			FORMWORK				
	G			ROUGH FORMWORK				
	G			Narrow widths up to 300mm				
2.G.6.4.4	G	20.005		To apron and surfacebed	m	38		
	G			SMOOTH FORMWORK				
	G			Horizontal surfaces for visible surface including 20mm chamfers and drip grooves on a exposed corners to:				
2.G.6.4.5	G	20.002		Underside of slabs (Incl. Shelf)	m2	21		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	G			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.G.6.4.6	G	20.002		Upstand beams	m2	9		
2.G.6.4.7	G	20.002		Vertical sides of suspended slabs (incl. Shelf)	m2	4		
	G			REINFORCEMENT				
2.G.6.4.8	G	20.007		Steel bars (irrespective of grade or diameter)	t	1		
2.G.6.4.9	G	20.008		Mesh ref 395 high-tensile welded mesh	m2	2		
	G			CONCRETE				
	G			Strength concrete grade 30/19				
2.G.6.4.10	G	20.012		Surface bed, shelf, roof, ramp and apron	m3	12		
	G			Unformed surface finishes				
2.G.6.4.11	G	20.013(a)		Wood floated finish	m2	48		
2.G.6.4.12	G	20.013(b)		Steel floated finish (shelf & top of beams)	m2	5		
	G			AGGREGATE				
2.G.6.4.13	G	20.014		19mm stone balast	m3	0.8		
	G			JOINTS				
2.G.6.4.14	G	20.016		Construction joints, including shutters to apron	m	13		
2.G.6.4.15	G	20.016		75mm deep x 10mm wide expansion joint including shutter, 10mm soft board joint filler and sealant per detail C4 drawing 2A-C6-002	m	22		
2.G.6.4.16	G	20.016		2 Layers 0.6mm thick galvanised plate, including smooth plaster to the tops of brick walls	m2	4		
	G			MASONRY				
	G			BRICKWORK OF NFX BRICKS (14 MPA NOMINAL COMPRESSIVE STRENGTH) IN CLASS I MORTAR				
2.G.6.4.17	G	46.004(a)		One brick walls for structure	m2	45		
	G			FACE BRICKWORK				
	G			Face brickwork pointed with recessed horizontal and vertical joints. The cost for the supply and delivery of facebrick shall be paid for in Provisional Sums. All other costs related to the installation of the facebrick shall be included in this item (includes all other material). Samples of facebrick to be approved by the Engineer/Architect.				
2.G.6.4.18	G	46.004(h)		Extra over brickwork for face brickwork	m2	90		
	G			MASONRY REINFORCING				
2.G.6.4.19	G	46.004(f)		Fabric reinforcement and building into joints of one brick walls	m	200		
2.G.6.4.20	G	46.004(f)		Masonry reinforcing (3 no R8 bars) on 230mm wall	m	4		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	G			METALWORK				
	G			Supply and fabrication of steel				
2.G.6.4.21	G	24.001		1000mm x 1000mm 3CR12 louvre per drawing 86490 complete including shop details, supply and installation	No	1		
2.G.6.4.22	G	46.005(c)		Doors: double transformer door (2400mm x 1800mm) with insect proofing and louvres, locking mechanism, supplied, installed and painted. All as per dwg. 2G-C7-150	No	1		
	G			MISCELLANEOUS TRADES, FIXTURES AND APPLIANCES				
2.G.6.4.23	G	46.011		Epoxy sealant to shelf	m2	1.8		
2.G.6.4.24	G	46.011		110 ribbed HDPE sleeves supplied and installed per supplier's specification, including draw wire (ducting from draw box to interior of instrumentation hut)	m	15		
2.G.6.4.25	G	46.011		Polyurethane waterproofing	m2	23		
2.G.6.4.26	G	46.011		100mm thick Isoboard	m2	15		
2.G.6.4.27	G	46.011		Waterpermeable fabric	m2	23		
2.G.6.4.28	G	46.011		80 ND uPVC drainage pipes cast into upstand beams (Weep holes)	m	3		
2.G.6.4.29	G	46.012		Draw box per detail C10 drawing 2A-C6-003, complete	no	1		
	G			FIRE				
2.G.6.4.30	G	46.011		Supply, delivery and installation of SABS Approved 5kg CO2 fire extinguisher complete with wall bracket and wooden backing board	No	2		
2.G.6.4.31	G	46.011		Supply and installation of SABS Approved 190mm x 380mm single sided, wall mounted photo luminescent safety signs	no	2		
	G			PART G6: Ancillary Works - Carried forward to Summary of Bills				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	H			PART H: GRAVITY MAINS				
	H1			PART H1: BPR TO OFF TAKE C - CH0 TO CH82				
	H1			PART H1.1: Preliminary and General (Secondary)				
	H1			PRELIMINARY AND GENERAL (SECONDARY)				
	H1	1.002		FIXED CHARGES - GENERAL OBLIGATIONS				
2.H1.1.1	H1		X	Head Office Contract Management and Overheads	Sum	1		
2.H1.1.2	H1		X	General Site Supervision and Overheads	Sum	1		
2.H1.1.3	H1		X	Method statements (1.10.1)	Sum	1		
2.H1.1.4	H1		X	Competency training (1.10.2.4)	Sum	1		
2.H1.1.5	H1		X	Returns and reporting (1.10.3)	Sum	1		
2.H1.1.6	H1		X	Management meetings (1.10.4)	Sum	1		
2.H1.1.7	H1		X	Integration management (1.10.5)	Sum	1		
2.H1.1.8	H1		X	Programming Requirements (1.9)	Sum	1		
2.H1.1.9	H1		X	Quality Management (1.10.2)	Sum	1		
2.H1.1.10	H1		X	Socio Economic Requirements (1.11)	Sum	1		
2.H1.1.11	H1		X	Occupational Health and Safety Requirements (1.12)	Sum	1		
2.H1.1.12	H1		X	Environmental Requirements (1.13)	Sum	1		
	H1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.H1.1.13	H1		X	.....	Sum	1		
2.H1.1.14	H1		X	.....	Sum	1		
2.H1.1.15	H1		X	.....	Sum	1		
2.H1.1.16	H1		X	.....	Sum	1		
	H1	1.003 & 1.004		FIXED CHARGES - FACILITIES FOR THE CONTRACTOR (1.8)				
2.H1.1.17	H1		X	Transport of Staff and Labour (1.8.1.4)	Sum	1		
2.H1.1.18	H1		X	Construction Establishment Fencing (1.8.3.1)	Sum	1		
2.H1.1.19	H1		X	Lighting of Construction Establishment Areas (1.8.3.2)	Sum	1		
2.H1.1.20	H1		X	Electrical power and distribution (1.8.3.4)	Sum	1		
2.H1.1.21	H1		X	Standby power (1.8.3.4)	Sum	1		
2.H1.1.22	H1		X	Communications (1.8.3.7)	Sum	1		
	H1			Office, Accommodation and Other Site facilities				
2.H1.1.23	H1		X	Accommodation for staff and workforce (1.8.3.8b)	Sum	1		
2.H1.1.24	H1		X	Offices (1.8.3.8c)	Sum	1		
2.H1.1.25	H1		X	Other establishment facilities (1.8.3.8d)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.H1.1.26	H1		X	Storage (1.8.3.8e)	Sum	1		
	H1			Other services				
2.H1.1.27	H1		X	Medical (1.8.3.12)	Sum	1		
2.H1.1.28	H1		X	Sanitation and Cleaning (1.8.3.13)	Sum	1		
2.H1.1.29	H1		X	Access control and security (1.8.3.14)	Sum	1		
	H1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.H1.1.30	H1		X	.....	Sum	1		
2.H1.1.31	H1		X	.....	Sum	1		
2.H1.1.32	H1		X	.....	Sum	1		
2.H1.1.33	H1		X	.....	Sum	1		
	H1	1.004		FIXED CHARGES - SPECIFIC EQUIPMENT				
2.H1.1.34	H1		X	Equipment for construction and maintenance of the Contractor's work areas	Sum	1		
2.H1.1.35	H1		X	Minor equipment and small tools	Sum	1		
2.H1.1.36	H1		X	Equipment for dust and emissions control and monitoring in compliance with environmental requirement	Sum	1		
2.H1.1.37	H1		X	Construction services including electrical power, compressed air, water, communications, etc.	Sum	1		
2.H1.1.38	H1		X	Equipment for blasting and rock support	Sum	1		
2.H1.1.39	H1		X	Equipment for earthworks, trenching and backfilling	Sum	1		
2.H1.1.40	H1		X	Equipment for borrowing, processing of materials, transport of materials and spoiling of materials	Sum	1		
2.H1.1.41	H1		X	Equipment for crange, winches, lifting and pipe handling	Sum	1		
2.H1.1.42	H1		X	Equipment for welding, weld testing and coatings	Sum	1		
2.H1.1.43	H1		X	Equipment for site transporting, lifting, placing and fixing of structural steel work	Sum	1		
2.H1.1.44	H1		X	Equipment for site transporting, placing, fixing and finishing of concrete work, formwork and reinforcement	Sum	1		
2.H1.1.45	H1		X	Equipment for processing concrete (Batch plant)	Sum	1		
2.H1.1.46	H1		X	Equipment for dealing with water	Sum	1		
2.H1.1.47	H1		X	Equipment for pipe jacking and grouting	Sum	1		
2.H1.1.48	H1	1.004(d)	X	Establishment and de-establishment for Pipe Jacking	Sum	1		
2.H1.1.49	H1	1.004(a)	X	Fixed related charges for relocation of pipe work front to different location as instructed by Engineer (Within 5km). Including provision for the loss of production	No	3		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	H1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.H1.1.50	H1		X	.....	Sum	1		
2.H1.1.51	H1		X	.....	Sum	1		
2.H1.1.52	H1		X	.....	Sum	1		
2.H1.1.53	H1		X	.....	Sum	1		
	H1	1.006		TIME RELATED CHARGES - GENERAL OBLIGATIONS				
2.H1.1.54	H1		X	Head Office Contract Management and Overheads (Duration Weeks)	Sum	1		
2.H1.1.55	H1		X	General Site Supervision and Overheads (Duration Weeks)	Sum	1		
2.H1.1.56	H1		X	Method Statements (1.10.1) (Duration Weeks)	Sum	1		
2.H1.1.57	H1		X	Competency training (1.10.2.4) (Duration Weeks)	Sum	1		
2.H1.1.58	H1		X	Returns and reporting (1.10.3) (Duration Weeks)	Sum	1		
2.H1.1.59	H1		X	Management meetings (1.10.4) (Duration Weeks)	Sum	1		
2.H1.1.60	H1		X	Integration management (1.10.5) (Duration Weeks)	Sum	1		
2.H1.1.61	H1		X	Programming Requirements (1.9) (Duration Weeks)	Sum	1		
2.H1.1.62	H1		X	Quality Management (1.10.2) (Duration Weeks)	Sum	1		
2.H1.1.63	H1		X	Socio Economic Requirements (1.11) (Duration Weeks)	Sum	1		
2.H1.1.64	H1		X	Occupational Health and Safety (1.12) (Duration Weeks)	Sum	1		
2.H1.1.65	H1		X	Environmental Requirements (1.13) (Duration Weeks)	Sum	1		
2.H1.1.66	H1	1.006(d)	X	General charges for Pipe Jacking and Grouting (Duration days)	Sum	1		
2.H1.1.67	H1	1.006(a)	X	Time related charges for relocation of pipe work front to different location as instructed by Engineer (General Obligations) (Within 5km). Including provision for the loss of production	No	3		
	H1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.H1.1.68	H1		X	.....	Sum	1		
2.H1.1.69	H1		X	.....	Sum	1		
2.H1.1.70	H1		X	.....	Sum	1		
	H1	1.007 & 1.008		TIME RELATED CHARGES - FACILITIES FOR THE CONTRACTOR (1.8)				
2.H1.1.71	H1		X	Transport of Staff and Labour (1.8.1.4) (Duration Weeks)	Sum	1		
2.H1.1.72	H1		X	Construction Establishment Fencing (1.8.3.1) (Duration Weeks)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.H1.1.73	H1		X	Lighting of Construction Establishment Areas (1.8.3.2) (Duration Weeks)	Sum	1		
2.H1.1.74	H1		X	Electrical power and distribution (1.8.3.4) (Duration Weeks)	Sum	1		
2.H1.1.75	H1		X	Standby power (1.8.3.4) (Duration Weeks)	Sum	1		
2.H1.1.76	H1		X	Communications (1.8.3.7) (Duration Weeks)	Sum	1		
	H1			Office, Accommodation and Other Site facilities				
2.H1.1.77	H1		X	Accommodation for staff and workforce (1.8.3.8b)(Duration Weeks)	Sum	1		
2.H1.1.78	H1		X	Offices (1.8.3.8c) (Duration Weeks)	Sum	1		
2.H1.1.79	H1		X	Other establishment facilities (1.8.3.8d) (Duration Weeks)	Sum	1		
2.H1.1.80	H1		X	Storage (1.8.3.8e) (Duration Weeks)	Sum	1		
	H1			Other services				
2.H1.1.81	H1		X	Medical (1.8.3.12) (Duration Weeks)	Sum	1		
2.H1.1.82	H1		X	Sanitation and Cleaning (1.8.3.13) (Duration Weeks)	Sum	1		
2.H1.1.83	H1		X	Access control and security (1.8.3.14) (Duration Weeks)	Sum	1		
2.H1.1.84	H1	1.007(d)	X	Facilities for for Pipe Jacking and Grouting (Duration Days)	Sum	1		
2.H1.1.85	H1	1.007(a)	X	Time related charges for relocation of pipe work front to different location as instructed by Engineer (Facilities) (Within 5km). Including provision for the loss of production	No	3		
	H1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.H1.1.86	H1		X	.....	Sum	1		
2.H1.1.87	H1		X	.....	Sum	1		
2.H1.1.88	H1		X	.....	Sum	1		
2.H1.1.89	H1		X	.....	Sum	1		
	H1	1.008		TIME RELATED CHARGES - SPECIFIC EQUIPMENT				
2.H1.1.90	H1		X	Equipment for construction and maintenance of the Contractor's work areas (Duration Weeks)	Sum	1		
2.H1.1.91	H1		X	Minor equipment and small tools (Duration Weeks)	Sum	1		
2.H1.1.92	H1		X	Equipment for dust and emissions control and monitoring in compliance with environmental requirement (Duration Weeks)	Sum	1		
2.H1.1.93	H1		X	Construction services including electrical power, compressed air, water, communications, etc. (Duration Weeks)	Sum	1		
2.H1.1.94	H1		X	Equipment for blasting and rock support (Duration Weeks)	Sum	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.H1.1.95	H1		X	Equipment for earthworks, trenching and backfilling (Duration Weeks)	Sum	1		
2.H1.1.96	H1		X	Equipment for borrowing, processing of materials, transport of materials and spoiling of materials (Duration Weeks)	Sum	1		
2.H1.1.97	H1		X	Equipment for crange, winches, lifting and pipe handling (Duration Weeks)	Sum	1		
2.H1.1.98	H1		X	Equipment for welding, weld testing and coatings (Duration Weeks)	Sum	1		
2.H1.1.99	H1		X	Equipment for site transporting, lifting, placing and fixing of structural steel work (Duration Weeks)	Sum	1		
2.H1.1.100	H1		X	Equipment for site transporting, placing, fixing and finishing of concrete work, formwork and reinforcement (Duration Weeks)	Sum	1		
2.H1.1.101	H1		X	Equipment for processing concrete (Batch plant) (Duration Weeks)	Sum	1		
2.H1.1.102	H1		X	Equipment for dealing with water (Duration Weeks)	Sum	1		
2.H1.1.103	H1	1.008(d)	X	Equipment for Pipe Jacking and Grouting (Duration days)	Sum	1		
2.H1.1.104	H1	1.008(a)	X	Time related charges for relocation of pipe work front to different location as instructed by Engineer (Specific Equipment) (Within 5km). Including provision for the loss of production	No	3		
	H1			Any other charges not included elsewhere. Contractor to indicate below against sums as unit prices in the amount column ("Nil" to be entered if not required)				
2.H1.1.105	H1		X	.....	Sum	1		
2.H1.1.106	H1		X	.....	Sum	1		
2.H1.1.107	H1		X	.....	Sum	1		
2.H1.1.108	H1		X	.....	Sum	1		
	H1			PART H1.1: Preliminary and General - Carried forward to Summary of Bills				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	H1			PART H1.2: Permanent Access Track				
	H1			Site Clearance				
2.H1.2.1	H1	7.001(a)		Clearing	ha	29		
	H1			In situ treatment of foundations: (compacted to a minimum of 90% of modified AASHTO density, or else specified differently on the drawings)				
2.H1.2.2	H1	9.009(a)		Compaction of in-situ material	m2	28 725		
2.H1.2.3	H1	9.009(b)		In situ treatment by ripping	m3	4 310		
	H1			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.H1.2.4	H1	15.014(b)		Rockfill processing and compaction	m3	800		
2.H1.2.5	H1	15.008(d)		Supply and place geotextile complete ("Rockgrid" or equal approved)	m2	1 600		
	H1			Pavement layers constructed from gravel material				
2.H1.2.6	H1	25.001(c)		Gravel wearing course compacted to 95% of modified AASHTO density	m3	5 745		
	H1			Overhaul on material hauled in excess of 1.0 km				
2.H1.2.7	H1	25.018		a) Between 1km up to and including 3km	m3	2 405		
2.H1.2.8	H1	25.018		b) Between 3km up to and including 5km	m3	2 405		
2.H1.2.9	H1	25.018		c) Between 5km up to and including 7km	m3	2 405		
	H1			STORMWATER				
	H1			Bedding for Prefabricated Culverts				
2.H1.2.10	H1	27.003		b) Class B bedding	m3	670		
	H1			Prefabricated Concrete Culverts				
2.H1.2.11	H1	27.004(a)		i) 450mm diameter socketed concrete pipe (Class D50), jointed with mortar	m	500		
	H1			PART H1.2: Permanent Access Track - Carried forward to Summary of Bills				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
	H1			PART H1.3: Pipe supply, delivery, installation and testing				
	H1			DETAILING AND DOCUMENTATION				
2.H1.3.1	H1	32.001		Pipes and pipe specials: Design and documentation (As required: For Employer Design)	Sum	1		
2.H1.3.2	H1	37.001		Corrosion protection: PQP and other documentation	Sum	1		
	H1			PIPES				
	H1			MANUFACTURE AND SUPPLY OF PIPES AND DELIVERY TO STORAGE ON SITE (EXCLUDING CORROSION PROTECTION)				
	H1			Grade X52; Ends prepared for site welding				
2.H1.3.3	H1	32.002	X	1620mm OD pipe, 11mm wall thickness	m	32980		
2.H1.3.4	H1	32.002	X	1520mm OD pipe, 10mm wall thickness	m	30500		
2.H1.3.5	H1	32.002	X	1420mm OD pipe, 10mm wall thickness	m	18575		
	H1			SPARE PIPES				
	H1			Grade X52; Ends prepared for site welding				
2.H1.3.6	H1	32.002	X	1620mm OD pipe, 11mm wall thickness	m	77		
2.H1.3.7	H1	32.002	X	1520mm OD pipe, 10mm wall thickness	m	77		
2.H1.3.8	H1	32.002	X	1420mm OD pipe, 10mm wall thickness	m	39		
	H1			EXTERNAL PIPE COATING (factory applied):				
	H1			Refer to Section 37: Painting and Corrosion Protection (Clause 37.10.12.4)				
	H1			Option No. 1: Polymer Modified Bitumen (System No 229A/236)				
2.H1.3.9	H1	37.002	X	1620mm OD pipes	m	32980		
2.H1.3.10	H1	37.002	X	1620mm OD spare pipes	m	77		
2.H1.3.11	H1	37.002	X	1520mm OD pipes	m	30500		
2.H1.3.12	H1	37.002	X	1520mm OD spare pipes	m	77		
2.H1.3.13	H1	37.002	X	1420mm OD pipes	m	18575		
2.H1.3.14	H1	37.002	X	1420mm OD spare pipes	m	39		
	H1			INTERNAL PIPE LINING (factory applied)				
	H1			Refer to Section 37: Painting and Corrosion Protection (Clause 37.10.12.4)				
	H1			Hot applied solvent free epoxy (System No 220)				
2.H1.3.15	H1	37.003	X	1620mm OD pipes	m	32980		
2.H1.3.16	H1	37.003	X	1620mm OD spare pipes	m	77		
2.H1.3.17	H1	37.003	X	1520mm OD pipes	m	30500		
2.H1.3.18	H1	37.003	X	1520mm OD spare pipes	m	77		
2.H1.3.19	H1	37.003	X	1420mm OD pipes	m	18575		
2.H1.3.20	H1	37.003	X	1420mm OD spare pipes	m	39		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	H1			PIPE SPECIALS				
	H1			MANUFACTURE AND SUPPLY OF PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	H1			BEND/JOINT TYPE NO. 1: HOT APPLIED SOLVENT FREE EPOXY (System No 220) AND POLYMER MODIFIED BITUMEN COATING (System No 229A)				
	H1			Grade X52, Ends prepared for site welding				
	H1			1620mm OD pipe, 11mm wall thickness				
2.H1.3.21	H1	32.003	X	Bend between 22.5 to and including 45 degrees	No	6		
2.H1.3.22	H1	32.003	X	Bend between 45 to and including 90 degrees	No	9		
	H1			1520mm OD pipe, 10mm wall thickness				
2.H1.3.23	H1	32.003	X	Bend between 11.25 to and including 22.5 degrees	No	5		
2.H1.3.24	H1	32.003	X	Bend between 22.5 to and including 45 degrees	No	6		
2.H1.3.25	H1	32.003	X	Bend between 45 to and including 90 degrees	No	2		
	H1			1420mm OD pipe, 10mm wall thickness				
2.H1.3.26	H1	32.003	X	Bend between 22.5 to and including 45 degrees	No	1		
2.H1.3.27	H1	32.003	X	Bend between 45 to and including 90 degrees	No	2		
	H1			LAY AND WELD STEEL PIPES				
	H1			Grade X52				
2.H1.3.28	H1	33.001	X	1620mm OD pipe, 11mm wall thickness	m	32980		
2.H1.3.29	H1	33.001	X	1520mm OD pipe, 10mm wall thickness	m	30500		
2.H1.3.30	H1	33.001	X	1420mm OD pipe, 10mm wall thickness	m	18575		
	H1			INSTALLATION AND TESTING OF PIPE SPECIALS				
	H1			Grade X52				
	H1			1620mm OD pipe, 11mm wall thickness				
2.H1.3.31	H1	33.007	X	Bend between 22.5 to and including 45 degrees	No	6		
2.H1.3.32	H1	33.007	X	Bend between 45 to and including 90 degrees	No	9		
	H1			1520mm OD pipe, 10mm wall thickness				
2.H1.3.33	H1	33.007	X	Bend between 11.25 to and including 22.5 degrees	No	5		
2.H1.3.34	H1	33.007	X	Bend between 22.5 to and including 45 degrees	No	6		
2.H1.3.35	H1	33.007	X	Bend between 45 to and including 90 degrees	No	2		
	H1			1420mm OD pipe, 10mm wall thickness				
2.H1.3.36	H1	33.007	X	Bend between 22.5 to and including 45 degrees	No	1		
2.H1.3.37	H1	33.007	X	Bend between 45 to and including 90 degrees	No	2		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	H1			EXTRA OVER ITEM 33.001 FOR MITRE DEFLECTIONS UP TO 11.25 DEGREE TO FORM BENDS				
	H1			Grade X52				
2.H1.3.38	H1	33.002	X	1620mm OD pipe, 11mm wall thickness	No	92		
2.H1.3.39	H1	33.002	X	1520mm OD pipe, 10mm wall thickness	No	114		
2.H1.3.40	H1	33.002	X	1420mm OD pipe, 10mm wall thickness	No	50		
	H1			SUPPLY AND INSTALL EXTERNAL COATING AND INTERNAL LINING OF PIPE JOINTS (field applied)				
	H1			BEND/JOINT TYPE NO. 1: HOT APPLIED SOLVENT FREE EPOXY (System No 220) AND POLYMER MODIFIED BITUMEN COATING (System No 276)				
2.H1.3.41	H1	37.004	X	1620mm OD pipe	No	1926		
2.H1.3.42	H1	37.004	X	1520mm OD pipe	No	1808		
2.H1.3.43	H1	37.004	X	1420mm OD pipe	No	1073		
	H1			BEDDING REQUIREMENT SPECIFIC FOR POLYMER MODIFIED BITUMEN COATING				
2.H1.3.44	H1	15.013	X	Extra over 15.003(b), 15.003(d), 15.004(b), 15.004(d), 15.005(b), 15.005(d), 15.006(b) and 15.006(d) for crushing and screening of material	m3	302775		
	H1			HYDROSTATIC TESTING				
2.H1.3.45	H1	33.008(a)		1620mm OD pipe, 11mm wall thickness	km	32.98		
2.H1.3.46	H1	33.008(a)		1520mm OD pipe, 10mm wall thickness	km	30.50		
2.H1.3.47	H1	33.008(a)		1420mm OD pipe, 10mm wall thickness	km	18.58		
	H1			PIPE LINING INTEGRITY TESTING				
2.H1.3.48	H1	33.009		1620mm OD as specified on drawing	m	32980		
2.H1.3.49	H1	33.009		1520mm OD as specified on drawing	m	30500		
2.H1.3.50	H1	33.009		1420mm OD as specified on drawing	m	18575		
	H1			PIPE COATING INTEGRITY SURVEYS				
2.H1.3.51	H1	33.010		1620mm OD as specified on drawing	m	32980		
2.H1.3.52	H1	33.010		1520mm OD as specified on drawing	m	30500		
2.H1.3.53	H1	33.010		1420mm OD as specified on drawing	m	18575		
	H1			MARKER POSTS				
2.H1.3.54	H1	33.012		As detailed on the drawing No 2A-C6-114	no	729		
	H1			BENCHMARK AND TRIANGULATION BEACONS				
2.H1.3.55	H1	33.013(a)		Survey	Sum	1		
2.H1.3.56	H1	33.013(b)		Benchmark and beacons	No	862		
	H1			PART H1.3: Pipe Supply, Delivery and Installation - Carried forward to Summary of Bills				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	H1			PART H1.4: Pipeline Earthworks				
	H1			SITE CLEARANCE				
	H1			Clearing				
2.H1.4.1	H1	7.001(a)		Clearing	ha	330		
2.H1.4.2	H1	7.001(b)		Removal of boulders	m3	16 415		
2.H1.4.3	H1	7.002		Grubbing and removal of trees of girth up to and including 1m	ha	330		
2.H1.4.4	H1	7.003		Grubbing and removal of trees of girth over 1m	No	985		
	H1			Removal of topsoil				
2.H1.4.5	H1	7.004(a)		For pipelines, temporary stockpiling to windrows or stockpile alongside the pipeline and construction servitude	m3	435 615		
	H1			Removal of fertile soil				
2.H1.4.6	H1	7.005(a)		For pipelines, temporary stockpile alongside the pipeline and construction servitude	m3	100 470		
2.H1.4.7	H1	7.007		Demolishing and disposal of structures and reinforced concrete	m3	100		
2.H1.4.8	H1	7.008		Moving Existing Rock Stockpile from Previous Project/Phase to Provide Working Space	m3	50		
2.H1.4.9	H1	7.009		Mulching	ha	330		
	H1			Overhaul				
2.H1.4.10	H1	7.006(a)		Between 1km up to and including 3km	m3	13 813		
2.H1.4.11	H1	7.006(b)		Between 3km up to and including 5km	m3	8 790		
2.H1.4.12	H1	7.006(c)		Between 5km up to and including 7km	m3	2 512		
	H1			DEALING WITH WATER				
	H1			For all works included in PART H1				
2.H1.4.13	H1	8.001		Dealing with water	Sum	1		
2.H1.4.14	H1	8.002		Treatment of water	Sum	1		
2.H1.4.15	H1	8.003		Water monitoring	Sum	1		
2.H1.4.16	H1	8.004		Sampling equipment and reagents for the Engineer	Sum	1		
	H1			PIPE TRENCH EXCAVATIONS				
	H1			EXCAVATE IN ALL MATERIALS TO SPECIFIED LEVELS AND BATTERED SLOPES, INCLUDING TEMPORARY STOCKPILING AND LEVELLING ALONGSIDE EXCAVATIONS WITHIN THE CONFINES OF THE PIPE SERVITUDE				
	H1			Classified trench excavations:				
	H1			Within the freehaul distance				
2.H1.4.17	H1	9.012		Over 2m and up to 3m deep	m3	337 760		
2.H1.4.18	H1	9.012		Over 3m and up to 4m deep	m3	217 570		
2.H1.4.19	H1	9.012		Over 4m and up to 5m deep	m3	7 260		
2.H1.4.20	H1	9.012		Over 5m and up to 6m deep	m3	800		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.H1.4.21	H1	9.012		Over 6m and up to 7m deep	m3	795		
2.H1.4.22	H1	9.012		Over 7m and up to 8m deep	m3	220		
2.H1.4.23	H1	9.012		Over 8m and up to 9m deep	m3	110		
2.H1.4.24	H1	9.012		Over 9m and up to 10m deep	m3	75		
	H1			Unclassified trench excavations:				
	H1			Within the freehaul distance				
2.H1.4.25	H1	9.012		Over 1m and up to 2m deep	m3	198		
2.H1.4.26	H1	9.012		Over 2m and up to 3m deep	m3	857		
2.H1.4.27	H1	9.012		Over 3m and up to 4m deep	m3	965		
2.H1.4.28	H1	9.012		Over 4m and up to 5m deep	m3	574		
2.H1.4.29	H1	9.012		Over 5m and up to 6m deep	m3	50		
2.H1.4.30	H1	9.012		Over 6m and up to 7m deep	m3	792		
2.H1.4.31	H1	9.012		Over 7m and up to 8m deep	m3	220		
2.H1.4.32	H1	9.012		Over 8m and up to 9m deep	m3	71		
2.H1.4.33	H1	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	13 908		
2.H1.4.34	H1	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting), within 500m from Transnet and Eskom infrastructure (railways, conveyors, and high voltage power lines). (Eskom and/or Transnet requirements and approval processes to be met by Contractor)	m3	128 625		
2.H1.4.35	H1	9.025		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (by non-explosive means)	m3	732		
	H1	9.020		Compaction of trench bottom	m2	223 270		
2.H1.4.36	H1			EXCAVATION ANCILLARIES				
2.H1.4.37	H1	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to designated spoil sites	m3	255		
2.H1.4.38	H1	9.015		Excavate by hand in soft material to expose existing services	m3	1 260		
2.H1.4.39	H1	9.021		Excavation by hand	m3	300		
	H1			OVERHAUL				
2.H1.4.40	H1	9.023(a)		Between 1km up to and including 3km	m3	126 950		
2.H1.4.41	H1	9.023(b)		Between 3km up to and including 5km	m3	123 170		
2.H1.4.42	H1	9.023(c)		Between 5km up to and including 7km	m3	70 015		
2.H1.4.43	H1	9.023(d)		Between 7km up to and including 9km	m3	28 310		
2.H1.4.44	H1	9.023(e)		Between 9km up to and including 11km	m3	16 120		
2.H1.4.45	H1	9.023(f)		Between 11km up to and including 13km	m3	3 465		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	H1			PROVIDE AND USE OF SPECIALIST TEAM AND EQUIPMENT FOR THE DETECTION OF UNDERGROUND SERVICES				
2.H1.4.46	H1	9.017(a)		Provide the team and equipment	Sum	1		
2.H1.4.47	H1	9.017(b)		Use, operate and maintain equipment	day	50		
2.H1.4.48	H1	9.017(c)		Remove the team and equipment	Sum	1		
	H1			EXISTING SERVICES THAT INTERSECT OR ADJOIN A PIPE TRENCH				
2.H1.4.49	H1	9.018(a)		Services that intersect a pipe trench	No	25		
2.H1.4.50	H1	9.018(b)		Services that adjoin a trench	m	5 100		
2.H1.4.51	H1	9.022		Slurry trenches / curtain walls	m2	1 700		
2.H1.4.52	H1	9.024		Excavation of test pits	No	3 285		
	H1			BACKFILLING AND BEDDING				
	H1			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	H1			Provision of bed material				
2.H1.4.53	H1	15.003(a)		Material without screening from trenches	m3	3 380		
2.H1.4.54	H1	15.003(b)		Material with screening from trenches	m3	13 520		
2.H1.4.55	H1	15.003(c)		Material from the nearest borrow pit without screening	m3	5 560		
2.H1.4.56	H1	15.003(d)		Material from the nearest borrow pit with screening	m3	22 210		
	H1			Provision of bedding cradle material				
2.H1.4.57	H1	15.004(a)		Material without screening from trenches	m3	1 215		
2.H1.4.58	H1	15.004(b)		Material with screening from trenches	m3	4 855		
2.H1.4.59	H1	15.004(c)		Material from the nearest borrow pit without screening	m3	10 000		
2.H1.4.60	H1	15.004(d)		Material from the nearest borrow pit with screening	m3	39 975		
2.H1.4.61	H1	15.004(e)		Material from commercial sources	m3	150		
	H1			Provision of soilcrete				
2.H1.4.62	H1	15.005(a)		Material without screening from trenches	m3	40		
2.H1.4.63	H1	15.005(b)		Material with screening from trenches	m3	45		
2.H1.4.64	H1	15.005(c)		Material from the nearest borrow pit without screening	m3	160		
2.H1.4.65	H1	15.005(d)		Material from the nearest borrow pit with screening	m3	70		
2.H1.4.66	H1	15.005(e)		Material from commercial sources	m3	50		
	H1			Provision of selected fill blanket				
2.H1.4.67	H1	15.006(a)		Material without screening from trenches	m3	5 570		
2.H1.4.68	H1	15.006(b)		Material with screening from trenches	m3	22 280		
2.H1.4.69	H1	15.006(c)		Material from the nearest borrow pit without screening	m3	34 800		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.H1.4.70	H1	15.006(d)		Material from the nearest borrow pit with screening	m3	139 120		
2.H1.4.71	H1	15.006(e)		Material from commercial sources	m3	150		
	H1			Provision of main backfill material				
2.H1.4.72	H1	15.007(a)		Backfill material from trench excavation	m3	94 800		
2.H1.4.73	H1	15.007(b)		Backfill material from the nearest borrow pit	m3	24 380		
	H1			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.H1.4.74	H1	15.001		Bed material	m3	44 670		
2.H1.4.75	H1	15.001		Bedding cradle	m3	56 195		
2.H1.4.76	H1	15.001		Selected fill blanket	m3	201 920		
2.H1.4.77	H1	15.001		Main backfill	m3	109 016		
2.H1.4.78	H1	15.001		Fertile soil	m3	100 470		
2.H1.4.79	H1	47.005		Top soil	m3	435 620		
2.H1.4.80	H1	15.002(a)		Soilcrete bed and bedding cradle	m3	100		
2.H1.4.81	H1	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	165		
2.H1.4.82	H1	15.002(b)		Cement stabilised soil collars (soilcrete)	m3	100		
	H1			PROVISION OF MATERIAL TO REPLACE UNSUITABLE MATERIAL FROM TRENCH BOTTOM OR TO PROVIDE SUPPORTING EARTHWORKS				
2.H1.4.83	H1	15.011(a)		From trench excavation	m3	130		
2.H1.4.84	H1	15.011(b)		From borrow pits	m3	95		
2.H1.4.85	H1	15.011(c)		From commercial sources	m3	100		
	H1			Placing of Material				
2.H1.4.86	H1	15.012		Placing of material to replace unsuitable material from trench bottom or to provide supporting earthworks	m3	325		
	H1			SUBSOIL DRAINAGE				
	H1			Crushed stone				
2.H1.4.87	H1	15.008(a)		Supply and place crushed stone for Layer no 1	m3	365		
2.H1.4.88	H1	15.008(c)		Supply and place well graded compacted dump rock for Layer no 2	m3	608		
	H1			Geotextile				
2.H1.4.89	H1	15.008(b)		Supply and place geotextile for Layer no 1	m2	3 150		
2.H1.4.90	H1	15.008(d)		Supply and place geotextile for Layer no 2	m2	3 330		
	H1			ENCASING OF PIPES IN CONCRETE				
2.H1.4.91	H1	15.009(a)		Concrete strength grade 30/19	m3	30		
2.H1.4.92	H1	15.009(b)		Reinforcement	t	4		
	H1			OVERHAUL				
2.H1.4.93	H1	15.010(a)		Between 1km up to and including 3km	m3	87 665		
2.H1.4.94	H1	15.010(b)		Between 3km up to and including 5km	m3	87 485		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.H1.4.95	H1	15.010(c)		Between 5km up to and including 7km	m3	49 435		
2.H1.4.96	H1	15.010(d)		Between 7km up to and including 9km	m3	17 855		
2.H1.4.97	H1	15.010(e)		Between 9km up to and including 11km	m3	11 380		
2.H1.4.98	H1	15.010(f)		Between 11km up to and including 13km	m3	7 035		
	H1			PART H1.4: Pipeline Earthworks - Carried forward to Summary of Bills				

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
	H1			PART H1.5: Valve installations and chambers				
	H1			SINGLE AIR VALVE INSTALLATION				
	H1			REFER TO DRAWING 2A-C6-141 and 2A-C6-142				
	H1			EARTHWORKS				
	H1			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS, THRUST BLOCKS, ETC				
2.H1.5.1	H1	9.013		Excavate for valve chambers	m3	867		
2.H1.5.2	H1	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	11		
	H1			OVERHAUL				
2.H1.5.3	H1	9.023(a)		Between 1km up to and including 3km	m3	4		
2.H1.5.4	H1	9.023(b)		Between 3km up to and including 5km	m3	4		
2.H1.5.5	H1	9.023(c)		Between 5km up to and including 7km	m3	4		
	H1			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	H1			Provision of cement stabilised soil				
2.H1.5.6	H1	15.003(d)		Material from the nearest borrow pit with screening	m3	941		
2.H1.5.7	H1	15.003(e)		Cement for stabilisation of soil	m3	47		
	H1			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.H1.5.8	H1	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	988		
	H1			OVERHAUL				
2.H1.5.9	H1	15.010(b)		Between 3km up to and including 5km	m3	494		
2.H1.5.10	H1	15.010(c)		Between 5km up to and including 7km	m3	494		
	H1			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.H1.5.11	H1	15.014(a)		Structure backfilling compacted	m3	1 364		
2.H1.5.12	H1	15.014(a)		Embankment backfilling compacted	m3	1 762		
2.H1.5.13	H1	15.015		Finishing of slopes	m2	3 077		
	H1			OVERHAUL				
2.H1.5.14	H1	15.016(b)		Between 3km up to and including 5km	m3	1135		
2.H1.5.15	H1	15.016(c)		Between 5km up to and including 7km	m3	1135		
	H1			CONCRETE WORKS				
	H1			ROUGH FORMWORK				
	H1			Vertical surfaces				
2.H1.5.16	H1	20.001		Sides of floor slab	m2	368		
2.H1.5.17	H1	20.001		Sides of walls	m2	1 305		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	H1			SMOOTH FORMWORK				
	H1			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.H1.5.18	H1	20.002		Underside of slabs	m2	259		
	H1			SMOOTH FORMWORK				
	H1			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.H1.5.19	H1	20.002		Walls	m2	3 430		
2.H1.5.20	H1	20.002		Side of Sump walls	m2	28.0		
2.H1.5.21	H1	20.005		Narrow widths - Up to 200mm high	m	902		
	H1			Box-out holes/Form voids (for sleeves only)				
	H1			a) Small, circular, of diameter up to and including 0.35 m				
2.H1.5.22	H1	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	230		
	H1			REINFORCEMENT				
2.H1.5.23	H1	20.007		Steel bars (irrespective of grade or diameter)	t	145		
	H1			CONCRETE				
	H1			CONCRETE 15 MPa/19mm in:				
2.H1.5.24	H1	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	1 177		
2.H1.5.25	H1	20.011(b)		Mass concrete filling where required by the engineer	m3	115		
2.H1.5.26	H1	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	556		
	H1			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.H1.5.27	H1	20.010		Foundations, bases, floor slabs and roof slabs	m3	374		
2.H1.5.28	H1	20.010		Walls	m3	592		
	H1			UNFORMED SURFACE FINISHES				
2.H1.5.29	H1	20.013(a)		Wood floated finish	m2	556		
2.H1.5.30	H1	20.013(b)		Steel floated finish	m2	1 096		
	H1			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	H1			PN16				
2.H1.5.31	H1	32.003		Item 1 - for 1600mm ND pipe	No	24		
2.H1.5.32	H1	32.003		Item 1 - for 1400mm ND pipe	No	1		
2.H1.5.33	H1	32.003		Item 2	No	25		
2.H1.5.34	H1	35.002		Item 3	No	25		
2.H1.5.35	H1	35.002		Item 4	No	25		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	H1			INSTALLATION OF VALVES AND SPECIALS				
	H1			PN16				
2.H1.5.36	H1	33.004		Item 1 - for 1600mm ND pipe	No	24		
2.H1.5.37	H1	33.004		Item 1 - for 1400mm ND pipe	No	1		
2.H1.5.38	H1	33.004		Item 2	No	25		
2.H1.5.39	H1	33.004		Item 3	No	25		
2.H1.5.40	H1	33.004		Item 4	No	25		
	H1			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	H1			PN25				
2.H1.5.41	H1	32.003		Item 1 - for 1600mm ND pipe	No	23		
2.H1.5.42	H1	32.003		Item 1 - for 1500mm ND pipe	No	41		
2.H1.5.43	H1	32.003		Item 1 - for 1400mm ND pipe	No	26		
2.H1.5.44	H1	32.003		Item 2	No	90		
2.H1.5.45	H1	35.002		Item 3	No	90		
2.H1.5.46	H1	35.002		Item 4	No	90		
	H1			INSTALLATION OF VALVES AND SPECIALS				
	H1			PN25				
2.H1.5.47	H1	33.004		Item 1 - for 1600mm ND pipe	No	23		
2.H1.5.48	H1	33.004		Item 1 - for 1500mm ND pipe	No	41		
2.H1.5.49	H1	33.004		Item 1 - for 1400mm ND pipe	No	26		
2.H1.5.50	H1	33.004		Item 2	No	90		
2.H1.5.51	H1	33.004		Item 3	No	90		
2.H1.5.52	H1	33.004		Item 4	No	90		
	H1			ITEMS CAST OR BUILT INTO CONCRETE				
2.H1.5.53	H1	33.005		Steel pipe diameter 700mm	No	115		
	H1			SUPPLY AND ERECT PRECAST ELEMENTS				
	H1			Refer to Dwg 2A-C6-141 and 2A-C6-142				
2.H1.5.54	H1	20.017		Precast slab Type 1	No	230		
	H1			ANCILLARY WORKS				
2.H1.5.55	H1	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	115		
2.H1.5.56	H1	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	115		
2.H1.5.57	H1	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	115		
2.H1.5.58	H1	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	115		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.H1.5.59	H1	20.021 c)		110mm diam uPVC pipe cast into concrete wall for the sump	No	115		
2.H1.5.60	H1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes ND700mm	no	115		
2.H1.5.61	H1	20.014		19mm aggregate/stone	m3	69		
2.H1.5.62	H1	20.021 c)		Vermin mesh to be applied to opening as per drawing Reg. No. 2A-C6-125	no	230		
	H1			SPECIFIC ITEMS OF WORK				
	H1			SEALING STRIPS, JOINT SEALANT, ETC				
2.H1.5.63	H1	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	598		
	H1			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	H1			Foundation trench excavation and backfilling				
2.H1.5.64	H1	21.001(b)		In all other classes of material	m3	69		
2.H1.5.65	H1	21.002		Surface preparation for bedding the gabions	m2	69		
2.H1.5.66	H1	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	656		
	H1			ACCESS CHAMBER 1				
	H1			REFER TO DRAWING 2A-C6-146 and 2A-C6-147				
	H1			EARTHWORKS				
	H1			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS, THRUST BLOCKS, ETC				
2.H1.5.67	H1	9.013		Excavate for valve chambers	m3	8		
2.H1.5.68	H1	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	4		
	H1			OVERHAUL				
2.H1.5.69	H1	9.023(b)		Between 3km up to and including 5km	m3	2		
2.H1.5.70	H1	9.023(c)		Between 5km up to and including 7km	m3	2		
	H1			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	H1			Provision of bed material (G5)				
2.H1.5.71	H1	15.003(c)		Material from the nearest borrow pit without screening	m3	0		
	H1			Provision of cement stabilised soil				
2.H1.5.72	H1	15.003(d)		Material from the nearest borrow pit with screening	m3	9		
2.H1.5.73	H1	15.003(e)		Cement for stabilisation of soil	m3	0.5		
	H1			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.H1.5.74	H1	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	9.5		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	H1			OVERHAUL				
2.H1.5.75	H1	15.010(b)		Between 3km up to and including 5km	m3	5		
2.H1.5.76	H1	15.010(c)		Between 5km up to and including 7km	m3	5		
	H1			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.H1.5.77	H1	15.014(a)		Structure backfilling compacted	m3	13		
2.H1.5.78	H1	15.014(a)		Embankment backfilling compacted	m3	8		
2.H1.5.79	H1	15.015		Finishing of slopes	m2	17		
	H1			OVERHAUL				
2.H1.5.80	H1	15.016(b)		Between 3km up to and including 5km	m3	9		
2.H1.5.81	H1	15.016(c)		Between 5km up to and including 7km	m3	9		
	H1			CONCRETE WORKS				
	H1			ROUGH FORMWORK				
	H1			Vertical surfaces				
2.H1.5.82	H1	20.001		Sides of floor slab	m2	4		
2.H1.5.83	H1	20.001		Sides of walls	m2	11		
	H1			SMOOTH FORMWORK				
	H1			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.H1.5.84	H1	20.002		Underside of slabs	m2	3		
	H1			SMOOTH FORMWORK				
	H1			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.H1.5.85	H1	20.002		Walls	m2	27		
2.H1.5.86	H1	20.002		Side of Sump walls	m2	0.5		
2.H1.5.87	H1	20.005		Narrow widths - Up to 200mm high	m	8		
	H1			Box-out holes/Form voids (for sleeves only)				
	H1			a) Small, circular, of diameter up to and including 0.35 m				
2.H1.5.88	H1	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	2		
	H1			REINFORCEMENT				
2.H1.5.89	H1	20.007		Steel bars (irrespective of grade or diameter)	t	1.35		
	H1			CONCRETE				
	H1			CONCRETE 15 MPa/19mm in:				
2.H1.5.90	H1	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	11		
2.H1.5.91	H1	20.011(b)		Mass concrete filling where required by the engineer	m3	1		
2.H1.5.92	H1	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	5		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	H1			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.H1.5.93	H1	20.010		Foundations, bases, floor slabs and roof slabs	m3	4		
2.H1.5.94	H1	20.010		Walls	m3	5		
	H1			UNFORMED SURFACE FINISHES				
2.H1.5.95	H1	20.013(a)		Wood floated finish	m2	5		
2.H1.5.96	H1	20.013(b)		Steel floated finish	m2	10		
	H1			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	H1			PN25				
2.H1.5.97	H1	32.003		Item 1	No	1		
2.H1.5.98	H1	32.003		Item 2	No	1		
2.H1.5.99	H1	35.002		Item 3	No	1		
2.H1.5.100	H1	32.003		Item 4	No	1		
2.H1.5.101	H1	35.002		Item 5	No	1		
	H1			INSTALLATION OF VALVES AND SPECIALS				
	H1			PN25				
2.H1.5.102	H1	33.004		Item 1	No	1		
2.H1.5.103	H1	33.004		Item 2	No	1		
2.H1.5.104	H1	33.004		Item 3	No	1		
2.H1.5.105	H1	33.004		Item 4	No	1		
2.H1.5.106	H1	33.004		Item 5	No	1		
	H1			ITEMS CAST OR BUILT INTO CONCRETE				
2.H1.5.107	H1	33.005		Steel pipe diameter 700mm	No	1		
	H1			SUPPLY AND ERECT PRECAST ELEMENTS				
	H1			Refer to Dwg 2A-C6-146 and 2A-C6-147				
2.H1.5.108	H1	20.017		Precast slab Type 1	No	2		
	H1			ANCILLARY WORKS				
2.H1.5.109	H1	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	1		
2.H1.5.110	H1	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	1		
2.H1.5.111	H1	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.H1.5.112	H1	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.H1.5.113	H1	20.021 c)		160mm diam uPVC pipe cast into concrete wall for the sump	No	1		
2.H1.5.114	H1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 700mm	No	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.H1.5.115	H1	20.014		19mm aggregate/stone	m3	1		
2.H1.5.116	H1	20.021 c)		Vermin mesh to be applied to opening as per drawing Reg. No. 2A-C6-125	no	2		
	H1			SPECIFIC ITEMS OF WORK				
	H1			SEALING STRIPS, JOINT SEALANT, ETC				
2.H1.5.117	H1	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	6		
	H1			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	H1			Foundation trench excavation and backfilling				
2.H1.5.118	H1	21.001(b)		In all other classes of material	m3	1		
2.H1.5.119	H1	21.002		Surface preparation for bedding the gabions	m2	1		
2.H1.5.120	H1	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	6		
	H1			ACCESS CHAMBER 2				
	H1			REFER TO DRAWING 2A-C6-146 and 2A-C6-147				
	H1			EARTHWORKS				
	H1			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS. THRUST BLOCKS. ETC				
2.H1.5.121	H1	9.013		Excavate for valve chambers	m3	90		
2.H1.5.122	H1	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	42		
	H1			OVERHAUL				
2.H1.5.123	H1	9.023(a)		Between 1km up to and including 3km	m3	14		
2.H1.5.124	H1	9.023(b)		Between 3km up to and including 5km	m3	14		
2.H1.5.125	H1	9.023(c)		Between 5km up to and including 7km	m3	14		
	H1			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	H1			Provision of cement stabilised soil				
2.H1.5.126	H1	15.003(d)		Material from the nearest borrow pit with screening	m3	13		
2.H1.5.127	H1	15.003(e)		Cement for stabilisation of soil	m3	1		
	H1			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.H1.5.128	H1	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	14		
	H1			OVERHAUL				
2.H1.5.129	H1	15.010(b)		Between 3km up to and including 5km	m3	7		
2.H1.5.130	H1	15.010(c)		Between 5km up to and including 7km	m3	7		
	H1			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.H1.5.131	H1	15.014(a)		Structure backfilling compacted	m3	114		
2.H1.5.132	H1	15.015		Finishing of slopes	m2	11		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	H1			OVERHAUL				
2.H1.5.133	H1	15.016(b)		Between 3km up to and including 5km	m3	33		
2.H1.5.134	H1	15.016(c)		Between 5km up to and including 7km	m3	33		
	H1			CONCRETE WORKS				
	H1			ROUGH FORMWORK				
	H1			Vertical surfaces				
2.H1.5.135	H1	20.001		Sides of floor slab	m2	12		
2.H1.5.136	H1	20.001		Sides of walls	m2	57		
	H1			SMOOTH FORMWORK				
	H1			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.H1.5.137	H1	20.002		Underside of slabs	m2	3		
	H1			SMOOTH FORMWORK				
	H1			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.H1.5.138	H1	20.002		Walls	m2	134		
2.H1.5.139	H1	20.002		Side of Sump walls	m2	0.5		
2.H1.5.140	H1	20.005		Narrow widths - Up to 200mm high	m	10		
	H1			Box-out holes/Form voids (for sleeves only)				
	H1			a) Small, circular, of diameter up to and including 0.35 m				
2.H1.5.141	H1	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	2		
	H1			REINFORCEMENT				
2.H1.5.142	H1	20.007		Steel bars (irrespective of grade or diameter)	t	9.3		
	H1			CONCRETE				
	H1			CONCRETE 15 MPa/19mm in:				
2.H1.5.143	H1	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	18		
2.H1.5.144	H1	20.011(b)		Mass concrete filling where required by the engineer	m3	1		
2.H1.5.145	H1	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	5		
	H1			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.H1.5.146	H1	20.010		Foundations, bases, floor slabs and roof slabs	m3	14		
2.H1.5.147	H1	20.010		Walls	m3	48		
	H1			UNFORMED SURFACE FINISHES				
2.H1.5.148	H1	20.013(a)		Wood floated finish	m2	5		
2.H1.5.149	H1	20.013(b)		Steel floated finish	m2	12		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	H1			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	H1			PN25				
2.H1.5.150	H1	32.003		Item 1	No	1		
2.H1.5.151	H1	32.003		Item 2	No	1		
2.H1.5.152	H1	35.002		Item 3	No	1		
2.H1.5.153	H1	32.003		Item 4	No	1		
2.H1.5.154	H1	35.002		Item 5	No	1		
	H1			INSTALLATION OF VALVES AND SPECIALS				
	H1			PN25				
2.H1.5.155	H1	33.004		Item 1	No	1		
2.H1.5.156	H1	33.004		Item 2	No	1		
2.H1.5.157	H1	33.004		Item 3	No	1		
2.H1.5.158	H1	33.004		Item 4	No	1		
2.H1.5.159	H1	33.004		Item 5	No	1		
	H1			ITEMS CAST OR BUILT INTO CONCRETE				
2.H1.5.160	H1	33.005		Steel pipe diameter 700mm	No	1		
	H1			SUPPLY AND ERECT PRECAST ELEMENTS				
	H1			Refer to Dwg 2A-C6-146 and 2A-C6-147				
2.H1.5.161	H1	20.017		Precast slab Type 1	No	2		
	H1			ANCILLARY WORKS				
2.H1.5.162	H1	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126 (8 to 9m deep)	No	1		
2.H1.5.163	H1	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	1		
2.H1.5.164	H1	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.H1.5.165	H1	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	1		
2.H1.5.166	H1	20.021 c)		160mm diam uPVC pipe cast into concrete wall for the sump	No	1		
2.H1.5.167	H1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 700mm	No	1		
2.H1.5.168	H1	20.014		19mm aggregate/stone	m3	1		
2.H1.5.169	H1	20.021 c)		Vermin mesh to be applied to opening as per drawing Reg. No. 2A-C6-125	no	2		
	H1			SPECIFIC ITEMS OF WORK				
	H1			SEALING STRIPS, JOINT SEALANT, ETC				
2.H1.5.170	H1	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	7		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	H1			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	H1			Foundation trench excavation and backfilling				
2.H1.5.171	H1	21.001(b)		In all other classes of material	m3	1		
2.H1.5.172	H1	21.002		Surface preparation for bedding the gabions	m2	1		
2.H1.5.173	H1	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	6		
	H1			SINGLE SCOUR VALVE INSTALLATION (for 1400 to 1600mm diam pipeline)				
	H1			REFER TO DRAWING 2A-C6-148 and 2A-C6-149				
	H1			EARTHWORKS				
	H1			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS, THRUST BLOCKS, ETC				
2.H1.5.174	H1	9.013		Excavate for valve chambers	m3	1 294		
2.H1.5.175	H1	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	510		
2.H1.5.176	H1	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance.	m3	26		
2.H1.5.177	H1	9.020		Compaction of trench bottom (150mm thick)	m2	276		
	H1			OVERHAUL				
2.H1.5.178	H1	9.023(a)		Between 1km up to and including 3km	m3	170		
2.H1.5.179	H1	9.023(b)		Between 3km up to and including 5km	m3	170		
2.H1.5.180	H1	9.023(c)		Between 5km up to and including 7km	m3	170		
	H1			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	H1			Provision of bed material (G5)				
2.H1.5.181	H1	15.003(c)		Material from the nearest borrow pit without screening	m3	42		
	H1			Provision of cement stabilised soil				
2.H1.5.182	H1	15.003(d)		Material from the nearest borrow pit with screening	m3	160		
2.H1.5.183	H1	15.003(e)		Cement for stabilisation of soil	m3	8		
	H1			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.H1.5.184	H1	15.001		Placing of bedding material	m3	42		
2.H1.5.185	H1	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	160		
	H1			OVERHAUL				
2.H1.5.186	H1	15.010(a)		Between 1km up to and including 3km	m3	0		
2.H1.5.187	H1	15.010(b)		Between 3km up to and including 5km	m3	101		
2.H1.5.188	H1	15.010(c)		Between 5km up to and including 7km	m3	101		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	H1			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.H1.5.189	H1	15.014(a)		Structure backfilling compacted	m3	1 025		
2.H1.5.190	H1	15.014(a)		Embankment backfilling compacted	m3	235		
2.H1.5.191	H1	15.014(b)		Rockfill processing and compaction	m3	26		
2.H1.5.192	H1	15.015		Finishing of slopes	m2	393		
	H1			OVERHAUL				
2.H1.5.193	H1	15.016(b)		Between 3km up to and including 5km	m3	92		
2.H1.5.194	H1	15.016(c)		Between 5km up to and including 7km	m3	92		
	H1			CONCRETE WORKS				
	H1			ROUGH FORMWORK				
	H1			Vertical surfaces				
2.H1.5.195	H1	20.001		Sides of floor slab	m2	67		
2.H1.5.196	H1	20.001		Sides of walls	m2	526		
	H1			SMOOTH FORMWORK				
	H1			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.H1.5.197	H1	20.002		Underside of slabs	m2	91		
	H1			SMOOTH FORMWORK				
	H1			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.H1.5.198	H1	20.002		Walls	m2	1 688		
2.H1.5.199	H1	20.002		Side of Sump walls	m2	6		
2.H1.5.200	H1	20.002		Plinths	m2	44		
2.H1.5.201	H1	20.005		Narrow widths - Up to 250mm high (roof slabs)	m	267		
	H1			Box-out holes/Form voids (for sleeves only)				
	H1			a) Small, circular, of diameter up to and including 0.35 m				
2.H1.5.202	H1	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	22		
	H1			REINFORCEMENT				
2.H1.5.203	H1	20.007		Steel bars (irrespective of grade or diameter)	t	58.5		
	H1			CONCRETE				
	H1			CONCRETE 15 MPa/19mm in:				
2.H1.5.204	H1	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	242		
2.H1.5.205	H1	20.011(b)		Mass concrete filling where required by the engineer	m3	11		
2.H1.5.206	H1	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	142		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	H1			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.H1.5.207	H1	20.010		Foundations, bases, floor slabs and roof slabs	m3	98		
2.H1.5.208	H1	20.010		Plinths (Including grouting between the plinth and the pipes/specials where required)	m3	11		
2.H1.5.209	H1	20.010		Walls	m3	281		
	H1			UNFORMED SURFACE FINISHES				
2.H1.5.210	H1	20.013(a)		Wood floated finish	m2	142		
2.H1.5.211	H1	20.013(b)		Steel floated finish	m2	279		
	H1			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	H1			PN25				
2.H1.5.212	H1	32.003		Item 1 - for 1600mm ND pipe	No	3		
2.H1.5.213	H1	32.003		Item 1 - for 1500mm ND pipe	No	3		
2.H1.5.214	H1	32.003		Item 1 - for 1400mm ND pipe	No	5		
2.H1.5.215	H1	35.002		Item 2	No	22		
2.H1.5.216	H1	32.003		Item 3	No	11		
2.H1.5.217	H1	32.003		Item 4	No	11		
2.H1.5.218	H1	32.003		Item 5	No	11		
2.H1.5.219	H1	32.003		Item 6	No	11		
2.H1.5.220	H1	32.003		Item 7	No	11		
2.H1.5.221	H1	35.002		Item 8	No	11		
2.H1.5.222	H1	32.003		Item 9	No	11		
2.H1.5.223	H1	35.002		Item 10	No	11		
	H1			INSTALLATION OF VALVES AND SPECIALS				
	H1			PN25				
2.H1.5.224	H1	33.004		Item 1 - for 1600mm ND pipe	No	3		
2.H1.5.225	H1	33.004		Item 1 - for 1500mm ND pipe	No	3		
2.H1.5.226	H1	33.004		Item 1 - for 1400mm ND pipe	No	5		
2.H1.5.227	H1	33.004		Item 2	No	22		
2.H1.5.228	H1	33.004		Item 3	No	11		
2.H1.5.229	H1	33.004		Item 4	No	11		
2.H1.5.230	H1	33.004		Item 5	No	11		
2.H1.5.231	H1	33.004		Item 6	No	11		
2.H1.5.232	H1	33.004		Item 7	No	11		
2.H1.5.233	H1	33.004		Item 8	No	11		
2.H1.5.234	H1	33.004		Item 9	No	11		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.H1.5.235	H1	33.004		Item 10	No	11		
	H1			ITEMS CAST OR BUILT INTO CONCRETE				
2.H1.5.236	H1	33.005		Steel pipe diameter 900mm up to 1500mm	No	22		
2.H1.5.237	H1	33.005		Steel pipe diameter 300mm	No	11		
	H1			SUPPLY AND ERECT PRECAST ELEMENTS				
	H1			Refer to Dwg 2A-C6-148 and 2A-C6-149				
2.H1.5.238	H1	20.017		Precast slab Type 1	No	11		
2.H1.5.239	H1	20.017		Precast slab Type 2	No	11		
	H1			ANCILLARY WORKS				
2.H1.5.240	H1	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	22		
2.H1.5.241	H1	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	22		
2.H1.5.242	H1	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	11		
2.H1.5.243	H1	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	11		
2.H1.5.244	H1	20.021 c)		Steel bars as per drawing Reg. No.2A-C6-125	No	11		
2.H1.5.245	H1	20.021 c)		160mm diam uPVC pipe cast into concrete wall for the sump	No	22		
2.H1.5.246	H1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 300mm	No	11		
2.H1.5.247	H1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 1420mm	No	10		
2.H1.5.248	H1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 1520mm	No	6		
2.H1.5.249	H1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 1620mm	No	6		
2.H1.5.250	H1	20.021 c)		Sleeves to be grouted after the installation of cables to ensure no seepage 160mm diam x 0.3mm thick	no	22		
2.H1.5.251	H1	20.021 c)		Drilling for dowels and including grouting in of dowels, per one chamber complete, as per drawing 2A-C6-125. (Dowel material included in 20.007)	no	11		
2.H1.5.252	H1	20.021 c)		10mm Neoprene, as per drawing 2A-C6-125	m²	11		
	H1			SPECIFIC ITEMS OF WORK				
	H1			SEALING STRIPS, JOINT SEALANT, ETC				
2.H1.5.253	H1	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	90		
	H1			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	H1			Foundation trench excavation and backfilling				
2.H1.5.254	H1	21.001(b)		In all other classes of material	m3	319		
2.H1.5.255	H1	21.002		Surface preparation for bedding the gabions	m2	266		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.H1.5.256	H1	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	255		
2.H1.5.257	H1	21.003(a)		Galvanised gabions cages <i>(Refer to drawings for dimentions)</i>	m3	35		
2.H1.5.258	H1	21.003(c)		Galvanised gabions mattresses <i>(Refer to drawings for dimentions)</i>	m3	32		
2.H1.5.259	H1	27.009		Rip-rap	m3	30		
	H1			DOUBLE SCOUR AND ISOLATING VALVE INSTALLATION <i>(for 1400 to 1600mm diam pipeline)</i>				
	H1			REFER TO DRAWING 2A-C6-153, 2A-C6-154 & 2A-C6-155				
	H1			EARTHWORKS				
	H1			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS. THRUST BLOCKS. ETC				
2.H1.5.260	H1	9.013		Excavate for valve chambers	m3	2 636		
2.H1.5.261	H1	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	1 143		
2.H1.5.262	H1	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance.	m3	50		
2.H1.5.263	H1	9.020		Compaction of trench bottom (150mm thick)	m2	623		
	H1			OVERHAUL				
2.H1.5.264	H1	9.023(a)		Between 1km up to and including 3km	m3	442		
2.H1.5.265	H1	9.023(b)		Between 3km up to and including 5km	m3	442		
2.H1.5.266	H1	9.023(c)		Between 5km up to and including 7km	m3	442		
	H1			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	H1			Provision of bed material (G5)				
2.H1.5.267	H1	15.003(c)		Material from the nearest borrow pit without screening	m3	94		
	H1			Provision of cement stabilised soil				
2.H1.5.268	H1	15.003(d)		Material from the nearest borrow pit with screening	m3	217		
2.H1.5.269	H1	15.003(e)		Cement for stabilisation of soil	m3	11		
	H1			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.H1.5.270	H1	15.001		Placing of bedding material	m3	94		
2.H1.5.271	H1	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	228		
	H1			OVERHAUL				
2.H1.5.272	H1	15.010(b)		Between 3km up to and including 5km	m3	161		
2.H1.5.273	H1	15.010(c)		Between 5km up to and including 7km	m3	161		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	H1			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.H1.5.274	H1	15.014(a)		Structure backfilling compacted	m3	1 439		
2.H1.5.275	H1	15.014(a)		Embankment backfilling compacted	m3	306		
2.H1.5.276	H1	15.014(b)		Rockfill processing and compaction	m3	50		
2.H1.5.277	H1	15.015		Finishing of slopes	m2	513		
	H1			OVERHAUL				
2.H1.5.278	H1	15.016(b)		Between 3km up to and including 5km	m3	25		
2.H1.5.279	H1	15.016(c)		Between 5km up to and including 7km	m3	25		
	H1			CONCRETE WORKS				
	H1			ROUGH FORMWORK				
	H1			Vertical surfaces				
2.H1.5.280	H1	20.001		Sides of floor slab	m2	97		
2.H1.5.281	H1	20.001		Sides of walls	m2	786		
	H1			SMOOTH FORMWORK				
	H1			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.H1.5.282	H1	20.002		Underside of slabs	m2	155		
	H1			SMOOTH FORMWORK				
	H1			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.H1.5.283	H1	20.002		Walls	m2	2 766		
2.H1.5.284	H1	20.002		Side of Sump walls	m2	6		
2.H1.5.285	H1	20.002		Plinths	m2	44		
2.H1.5.286	H1	20.005		Narrow widths - Up to 250mm high (roof slabs)	m	749		
2.H1.5.287	H1	20.005		Box out 325mm wide x 150mm thick for precast concrete panel placement surface	m	22		
	H1			Box-out holes/Form voids (for sleeves only)				
	H1			a) Small, circular, of diameter up to and including 0.35 m				
2.H1.5.288	H1	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	22		
	H1			REINFORCEMENT				
2.H1.5.289	H1	20.007		Steel bars (irrespective of grade or diameter)	t	118.4		
	H1			CONCRETE				
	H1			CONCRETE 15 MPa/19mm in:				
2.H1.5.290	H1	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	573		
2.H1.5.291	H1	20.011(b)		Mass concrete filling where required by the engineer	m3	11		
2.H1.5.292	H1	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	380		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	H1			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.H1.5.293	H1	20.010		Foundations, bases, floor slabs and roof slabs	m3	238		
2.H1.5.294	H1	20.010		Plinths (Including grouting between the plinth and the pipes/specials where required)	m3	11		
2.H1.5.295	H1	20.010		Walls	m3	540		
	H1			UNFORMED SURFACE FINISHES				
2.H1.5.296	H1	20.013(a)		Wood floated finish	m2	380		
2.H1.5.297	H1	20.013(b)		Steel floated finish	m2	627		
	H1			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	H1			PN16				
2.H1.5.298	H1	32.003		Item 1 - for 1600mm ND pipe	No	4		
2.H1.5.299	H1	32.003		Item 2	No	2		
2.H1.5.300	H1	32.003		Item 3	No	2		
2.H1.5.301	H1	35.002		Item 4	No	2		
2.H1.5.302	H1	32.003		Item 5	No	2		
2.H1.5.303	H1	32.003		Item 6	No	4		
2.H1.5.304	H1	35.002		Item 6A	No	4		
2.H1.5.305	H1	32.003		Item 6B	No	4		
2.H1.5.306	H1	35.002		Item 6C	No	4		
2.H1.5.307	H1	32.003		Item 7	No	2		
2.H1.5.308	H1	35.002		Item 8	No	10		
2.H1.5.309	H1	32.003		Item 9	No	6		
2.H1.5.310	H1	32.003		Item 10	No	4		
2.H1.5.311	H1	32.003		Item 11	No	4		
2.H1.5.312	H1	32.003		Item 12	No	4		
2.H1.5.313	H1	32.003		Item 13	No	2		
	H1			INSTALLATION OF VALVES AND SPECIALS				
	H1			PN16				
2.H1.5.314	H1	33.004		Item 1 - for 1600mm ND pipe	No	4		
2.H1.5.315	H1	33.004		Item 2	No	2		
2.H1.5.316	H1	33.004		Item 3	No	2		
2.H1.5.317	H1	33.004		Item 4	No	2		
2.H1.5.318	H1	33.004		Item 5	No	2		
2.H1.5.319	H1	33.004		Item 6	No	4		
2.H1.5.320	H1	33.004		Item 6A	No	4		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.H1.5.321	H1	33.004		Item 6B	No	4		
2.H1.5.322	H1	33.004		Item 6C	No	4		
2.H1.5.323	H1	33.004		Item 7	No	2		
2.H1.5.324	H1	33.004		Item 8	No	10		
2.H1.5.325	H1	33.004		Item 9	No	6		
2.H1.5.326	H1	33.004		Item 10	No	4		
2.H1.5.327	H1	33.004		Item 11	No	4		
2.H1.5.328	H1	33.004		Item 12	No	4		
2.H1.5.329	H1	33.004		Item 13	No	2		
	H1			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	H1			PN25				
2.H1.5.330	H1	32.003		Item 1 - for 1600mm ND pipe	No	6		
2.H1.5.331	H1	32.003		Item 1 - for 1500mm ND pipe	No	10		
2.H1.5.332	H1	32.003		Item 1 - for 1400mm ND pipe	No	2		
2.H1.5.333	H1	32.003		Item 2	No	9		
2.H1.5.334	H1	32.003		Item 3	No	9		
2.H1.5.335	H1	35.002		Item 4	No	9		
2.H1.5.336	H1	32.003		Item 5	No	9		
2.H1.5.337	H1	32.003		Item 6	No	18		
2.H1.5.338	H1	35.002		Item 6A	No	18		
2.H1.5.339	H1	32.003		Item 6B	No	18		
2.H1.5.340	H1	35.002		Item 6C	No	18		
2.H1.5.341	H1	32.003		Item 7	No	9		
2.H1.5.342	H1	35.002		Item 8	No	45		
2.H1.5.343	H1	32.003		Item 9	No	27		
2.H1.5.344	H1	32.003		Item 10	No	18		
2.H1.5.345	H1	32.003		Item 11	No	18		
2.H1.5.346	H1	32.003		Item 12	No	18		
2.H1.5.347	H1	32.003		Item 13	No	9		
	H1			INSTALLATION OF VALVES AND SPECIALS				
	H1			PN25				
2.H1.5.348	H1	33.004		Item 1 - for 1600mm ND pipe	No	6		
2.H1.5.349	H1	33.004		Item 1 - for 1500mm ND pipe	No	10		
2.H1.5.350	H1	33.004		Item 1 - for 1400mm ND pipe	No	2		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.H1.5.351	H1	33.004		Item 2	No	9		
2.H1.5.352	H1	33.004		Item 3	No	9		
2.H1.5.353	H1	33.004		Item 4	No	9		
2.H1.5.354	H1	33.004		Item 5	No	9		
2.H1.5.355	H1	33.004		Item 6	No	18		
2.H1.5.356	H1	33.004		Item 6A	No	18		
2.H1.5.357	H1	33.004		Item 6B	No	18		
2.H1.5.358	H1	33.004		Item 6C	No	18		
2.H1.5.359	H1	33.004		Item 7	No	9		
2.H1.5.360	H1	33.004		Item 8	No	45		
2.H1.5.361	H1	33.004		Item 9	No	27		
2.H1.5.362	H1	33.004		Item 10	No	18		
2.H1.5.363	H1	33.004		Item 11	No	18		
2.H1.5.364	H1	33.004		Item 12	No	18		
2.H1.5.365	H1	33.004		Item 13	No	9		
	H1			ITEMS CAST OR BUILT INTO CONCRETE				
2.H1.5.366	H1	33.005		Steel pipe diameter 900mm up to 1500mm	No	22		
2.H1.5.367	H1	33.005		Steel pipe diameter 400mm	No	22		
	H1			SUPPLY AND ERECT PRECAST ELEMENTS				
	H1			Refer to Dwg 2A-C6-153, 2A-C6-154 & 2A-C6-155				
2.H1.5.368	H1	20.017		Precast slab Type 1	No	22		
2.H1.5.369	H1	20.017		Precast slab Type 2	No	88		
	H1			ANCILLARY WORKS				
2.H1.5.370	H1	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	22		
2.H1.5.371	H1	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	22		
2.H1.5.372	H1	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	11		
2.H1.5.373	H1	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	11		
2.H1.5.374	H1	20.021 c)		Steel bars as per drawing Reg. No.2A-C6-125	No	11		
2.H1.5.375	H1	20.021 c)		160mm diam uPVC pipe cast into concrete wall for the sump	No	22		
2.H1.5.376	H1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 400mm	No	22		
2.H1.5.377	H1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 1620mm	No	10		
2.H1.5.378	H1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 1520mm	No	10		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.H1.5.379	H1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 1420mm	No	2		
2.H1.5.380	H1	20.021 c)		Sleeves to be grouted after the installation of cables to ensure no seepage 160mm diam x 0.3mm thick	no	22		
2.H1.5.381	H1	20.021 c)		Portable aluminium steps complete, as per drawing 2A-C6-125	no	11		
2.H1.5.382	H1	20.021 c)		Drilling for dowels and including grouting in of dowels, per one chamber complete, as per drawing 2A-C6-125. (Dowel material included in 20.007)	no	11		
2.H1.5.383	H1	20.021 c)		10mm Neoprene, as per drawing 2A-C6-125	m²	11		
	H1			SPECIFIC ITEMS OF WORK				
	H1			SEALING STRIPS, JOINT SEALANT, ETC				
2.H1.5.384	H1	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	669		
	H1			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	H1			Foundation trench excavation and backfilling				
2.H1.5.385	H1	21.001(b)		In all other classes of material	m3	433		
2.H1.5.386	H1	21.002		Surface preparation for bedding the gabions	m2	361		
2.H1.5.387	H1	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	350		
2.H1.5.388	H1	21.003(a)		Galvanised gabions cages (Refer to drawings for dimentions)	m3	43		
2.H1.5.389	H1	21.003(c)		Galvanised gabions mattresses (Refer to drawings for dimentions)	m3	51		
2.H1.5.390	H1	27.009		Rip-rap	m3	30		
	H1			SCOUR VALVE, ISOLATING VALVE, AND AIR VALVE INSTALLATION (for 1400 to 1600mm diam pipeline)				
	H1			REFER TO DRAWING 2A-C6-159, 2A-C6-160 and 2A-C6-161				
	H1			EARTHWORKS				
	H1			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS. THRUST BLOCKS. ETC				
2.H1.5.391	H1	9.013		Excavate for valve chambers	m3	627		
2.H1.5.392	H1	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	198		
2.H1.5.393	H1	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance.	m3	14		
2.H1.5.394	H1	9.020		Compaction of trench bottom (150mm thick)	m2	170		
	H1			OVERHAUL				
2.H1.5.395	H1	9.023(a)		Between 1km up to and including 3km	m3	108		
2.H1.5.396	H1	9.023(b)		Between 3km up to and including 5km	m3	108		
2.H1.5.397	H1	9.023(c)		Between 5km up to and including 7km	m3	108		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	H1			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	H1			Provision of bed material (G5)				
2.H1.5.398	H1	15.003(c)		Material from the nearest borrow pit without screening	m3	26		
	H1			Provision of cement stabilised soil				
2.H1.5.399	H1	15.003(d)		Material from the nearest borrow pit with screening	m3	60		
2.H1.5.400	H1	15.003(e)		Cement for stabilisation of soil	m3	3		
	H1			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.H1.5.401	H1	15.001		Placing of bedding material	m3	26		
2.H1.5.402	H1	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	62		
	H1			OVERHAUL				
2.H1.5.403	H1	15.010(b)		Between 3km up to and including 5km	m3	44		
2.H1.5.404	H1	15.010(c)		Between 5km up to and including 7km	m3	44		
	H1			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.H1.5.405	H1	15.014(a)		Structure backfilling compacted	m3	339		
2.H1.5.406	H1	15.014(a)		Embankment backfilling compacted	m3	84		
2.H1.5.407	H1	15.014(b)		Rockfill processing and compaction	m3	14		
2.H1.5.408	H1	15.015		Finishing of slopes	m2	140		
	H1			OVERHAUL				
2.H1.5.409	H1	15.016(b)		Between 3km up to and including 5km	m3	7		
2.H1.5.410	H1	15.016(c)		Between 5km up to and including 7km	m3	7		
	H1			CONCRETE WORKS				
	H1			ROUGH FORMWORK				
	H1			Vertical surfaces				
2.H1.5.411	H1	20.001		Sides of floor slab	m2	27		
2.H1.5.412	H1	20.001		Sides of walls	m2	191		
	H1			SMOOTH FORMWORK				
	H1			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.H1.5.413	H1	20.002		Underside of slabs	m2	43		
	H1			SMOOTH FORMWORK				
	H1			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.H1.5.414	H1	20.002		Walls	m2	673		
2.H1.5.415	H1	20.002		Side of Sump walls	m2	2		
2.H1.5.416	H1	20.002		Plinths	m2	12		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.H1.5.417	H1	20.005		Narrow widths - Up to 250mm high (roof slabs)	m	205		
2.H1.5.418	H1	20.005		Box out 325mm wide x 150mm thick for precast concrete panel placement surface	m	6		
	H1			Box-out holes/Form voids (for sleeves only)				
	H1			a) Small, circular, of diameter up to and including 0.35 m				
2.H1.5.419	H1	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	6		
	H1			REINFORCEMENT				
2.H1.5.420	H1	20.007		Steel bars (irrespective of grade or diameter)	t	30		
	H1			CONCRETE				
	H1			CONCRETE 15 MPa/19mm in:				
2.H1.5.421	H1	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	157		
2.H1.5.422	H1	20.011(b)		Mass concrete filling where required by the engineer	m3	3		
2.H1.5.423	H1	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	104		
	H1			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.H1.5.424	H1	20.010		Foundations, bases, floor slabs and roof slabs	m3	65		
2.H1.5.425	H1	20.010		Plinths (Including grouting between the plinth and the pipes/specials where required)	m3	3		
2.H1.5.426	H1	20.010		Walls	m3	132		
	H1			UNFORMED SURFACE FINISHES				
2.H1.5.427	H1	20.013(a)		Wood floated finish	m2	104		
2.H1.5.428	H1	20.013(b)		Steel floated finish	m2	171		
	H1			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	H1			PN16				
2.H1.5.429	H1	32.003		Item 1	No	4		
2.H1.5.430	H1	32.003		Item 2	No	2		
2.H1.5.431	H1	32.003		Item 3	No	2		
2.H1.5.432	H1	35.002		Item 4	No	2		
2.H1.5.433	H1	32.003		Item 5	No	2		
2.H1.5.434	H1	32.003		Item 6	No	4		
2.H1.5.435	H1	35.002		Item 6A	No	2		
2.H1.5.436	H1	32.003		Item 6B	No	2		
2.H1.5.437	H1	35.002		Item 6C	No	2		
2.H1.5.438	H1	35.002		Item 6D	No	2		
2.H1.5.439	H1	35.002		Item 6E	No	2		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.H1.5.440	H1	32.003		Item 7	No	2		
2.H1.5.441	H1	35.002		Item 8	No	6		
2.H1.5.442	H1	32.003		Item 9	No	4		
2.H1.5.443	H1	32.003		Item 10	No	2		
2.H1.5.444	H1	32.003		Item 11	No	2		
2.H1.5.445	H1	32.003		Item 12	No	2		
2.H1.5.446	H1	32.003		Item 13	No	2		
2.H1.5.447	H1	32.003		Item 14	No	2		
	H1			INSTALLATION OF VALVES AND SPECIALS				
	H1			PN16				
2.H1.5.448	H1	33.004		Item 1	No	4		
2.H1.5.449	H1	33.004		Item 2	No	2		
2.H1.5.450	H1	33.004		Item 3	No	2		
2.H1.5.451	H1	33.004		Item 4	No	2		
2.H1.5.452	H1	33.004		Item 5	No	2		
2.H1.5.453	H1	33.004		Item 6	No	4		
2.H1.5.454	H1	33.004		Item 6A	No	2		
2.H1.5.455	H1	33.004		Item 6B	No	2		
2.H1.5.456	H1	33.004		Item 6C	No	2		
2.H1.5.457	H1	33.004		Item 6D	No	2		
2.H1.5.458	H1	33.004		Item 6E	No	2		
2.H1.5.459	H1	33.004		Item 7	No	2		
2.H1.5.460	H1	33.004		Item 8	No	6		
2.H1.5.461	H1	33.004		Item 9	No	4		
2.H1.5.462	H1	33.004		Item 10	No	2		
2.H1.5.463	H1	33.004		Item 11	No	2		
2.H1.5.464	H1	33.004		Item 12	No	2		
2.H1.5.465	H1	33.004		Item 13	No	2		
2.H1.5.466	H1	33.004		Item 14	No	2		
	H1			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	H1			PN25				
2.H1.5.467	H1	32.003		Item 1	No	2		
2.H1.5.468	H1	32.003		Item 2	No	1		
2.H1.5.469	H1	32.003		Item 3	No	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.H1.5.470	H1	35.002		Item 4	No	1		
2.H1.5.471	H1	32.003		Item 5	No	1		
2.H1.5.472	H1	32.003		Item 6	No	2		
2.H1.5.473	H1	35.002		Item 6A	No	1		
2.H1.5.474	H1	32.003		Item 6B	No	1		
2.H1.5.475	H1	35.002		Item 6C	No	1		
2.H1.5.476	H1	35.002		Item 6D	No	1		
2.H1.5.477	H1	35.002		Item 6E	No	1		
2.H1.5.478	H1	32.003		Item 7	No	1		
2.H1.5.479	H1	35.002		Item 8	No	3		
2.H1.5.480	H1	32.003		Item 9	No	2		
2.H1.5.481	H1	32.003		Item 10	No	1		
2.H1.5.482	H1	32.003		Item 11	No	1		
2.H1.5.483	H1	32.003		Item 12	No	1		
2.H1.5.484	H1	32.003		Item 13	No	1		
2.H1.5.485	H1	32.003		Item 14	No	1		
	H1			INSTALLATION OF VALVES AND SPECIALS				
	H1			PN25				
2.H1.5.486	H1	33.004		Item 1	No	2		
2.H1.5.487	H1	33.004		Item 2	No	1		
2.H1.5.488	H1	33.004		Item 3	No	1		
2.H1.5.489	H1	33.004		Item 4	No	1		
2.H1.5.490	H1	33.004		Item 5	No	1		
2.H1.5.491	H1	33.004		Item 6	No	2		
2.H1.5.492	H1	33.004		Item 6A	No	1		
2.H1.5.493	H1	33.004		Item 6B	No	1		
2.H1.5.494	H1	33.004		Item 6C	No	1		
2.H1.5.495	H1	33.004		Item 6D	No	1		
2.H1.5.496	H1	33.004		Item 6E	No	1		
2.H1.5.497	H1	33.004		Item 7	No	1		
2.H1.5.498	H1	33.004		Item 8	No	3		
2.H1.5.499	H1	33.004		Item 9	No	2		
2.H1.5.500	H1	33.004		Item 10	No	1		
2.H1.5.501	H1	33.004		Item 11	No	1		
2.H1.5.502	H1	33.004		Item 12	No	1		
2.H1.5.503	H1	33.004		Item 13	No	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.H1.5.504	H1	33.004		Item 14	No	1		
	H1			ITEMS CAST OR BUILT INTO CONCRETE				
2.H1.5.505	H1	33.005		Steel pipe diameter 900mm up to 1500mm	No	6		
2.H1.5.506	H1	33.005		Steel pipe diameter 300mm	No	3		
	H1			SUPPLY AND ERECT PRECAST ELEMENTS				
	H1			Refer to Dwg 2A-C6-159, 2A-C6-160 and 2A-C6-161				
2.H1.5.507	H1	20.017		Precast slab Type 1	No	6		
2.H1.5.508	H1	20.017		Precast slab Type 2	No	24		
	H1			ANCILLARY WORKS				
2.H1.5.509	H1	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	6		
2.H1.5.510	H1	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	6		
2.H1.5.511	H1	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	3		
2.H1.5.512	H1	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	3		
2.H1.5.513	H1	20.021 c)		Steel bars as per drawing Reg. No.2A-C6-125	No	3		
2.H1.5.514	H1	20.021 c)		160mm diam uPVC pipe cast into concrete wall for the sump	No	6		
2.H1.5.515	H1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 300mm	No	6		
2.H1.5.516	H1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 1200mm	No	6		
2.H1.5.517	H1	20.021 c)		Sleeves to be grouted after the installation of cables to ensure no seepage 160mm diam x 0.3mm thick	no	6		
2.H1.5.518	H1	20.021 c)		Portable aluminium steps complete, as per drawing 2A-C6-125	no	3		
2.H1.5.519	H1	20.021 c)		Drilling for dowels and including grouting in of dowels, per one chamber complete, as per drawing 2A-C6-125. (Dowel material included in 20.007)	no	3		
2.H1.5.520	H1	20.021 c)		10mm Neoprene, as per drawing 2A-C6-125	m²	3		
	H1			SPECIFIC ITEMS OF WORK				
	H1			SEALING STRIPS, JOINT SEALANT, ETC				
2.H1.5.521	H1	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	183		
	H1			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	H1			Foundation trench excavation and backfilling				
2.H1.5.522	H1	21.001(b)		In all other classes of material	m3	119		
2.H1.5.523	H1	21.002		Surface preparation for bedding the gabions	m2	99		
2.H1.5.524	H1	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	96		
2.H1.5.525	H1	21.003(a)		Galvanised gabions cages (Refer to drawings for dimentions)	m3	12		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.H1.5.526	H1	21.003(c)		Galvanised gabions mattresses <i>(Refer to drawings for dimensions)</i>	m3	14		
2.H1.5.527	H1	27.009		Rip-rap	m3	10		
	H1			FLOW METER INSTALLATION				
	H1			REFER TO DRAWING 2A-C6-168 and 2A-C6-169				
	H1			EARTHWORKS				
	H1			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS. THRUST BLOCKS. ETC				
2.H1.5.528	H1	9.013		Excavate for valve chambers	m3	152		
2.H1.5.529	H1	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	68		
2.H1.5.530	H1	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance.	m3	6		
2.H1.5.531	H1	9.020		Compaction of trench bottom (150mm thick)	m2	58		
	H1			OVERHAUL				
2.H1.5.532	H1	9.023(a)		Between 1km up to and including 3km	m3	23		
2.H1.5.533	H1	9.023(b)		Between 3km up to and including 5km	m3	23		
2.H1.5.534	H1	9.023(c)		Between 5km up to and including 7km	m3	23		
	H1			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	H1			Provision of bed material (G5)				
2.H1.5.535	H1	15.003(c)		Material from the nearest borrow pit without screening	m3	9		
	H1			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.H1.5.536	H1	15.001		Placing of bedding material	m3	9		
	H1			OVERHAUL				
2.H1.5.537	H1	15.010(c)		Between 5km up to and including 7km	m3	9		
	H1			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.H1.5.538	H1	15.014(a)		Structure backfilling compacted	m3	175		
2.H1.5.539	H1	15.014(b)		Rockfill processing and compaction	m3	6		
	H1			OVERHAUL				
2.H1.5.540	H1	15.016(b)		Between 3km up to and including 5km	m3	50		
2.H1.5.541	H1	15.016(c)		Between 5km up to and including 7km	m3	50		
	H1			CONCRETE WORKS				
	H1			ROUGH FORMWORK				
	H1			Vertical surfaces				
2.H1.5.542	H1	20.001		Sides of floor slab	m2	13		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.H1.5.543	H1	20.001		Sides of walls	m2	83		
	H1			SMOOTH FORMWORK				
	H1			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.H1.5.544	H1	20.002		Underside of slabs	m2	16		
	H1			SMOOTH FORMWORK				
	H1			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.H1.5.545	H1	20.002		Walls	m2	230		
2.H1.5.546	H1	20.002		Side of Sump walls	m2	1		
2.H1.5.547	H1	20.002		Plinths	m2	10		
2.H1.5.548	H1	20.005		Narrow widths - Up to 200mm high	m	54		
	H1			Box-out holes/Form voids (for sleeves only)				
	H1			a) Small, circular, of diameter up to and including 0.35 m				
2.H1.5.549	H1	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	24		
	H1			REINFORCEMENT				
2.H1.5.550	H1	20.007		Steel bars (irrespective of grade or diameter)	t	9.3		
	H1			CONCRETE				
	H1			CONCRETE 15 MPa/19mm in:				
2.H1.5.551	H1	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	51		
2.H1.5.552	H1	20.011(b)		Mass concrete filling where required by the engineer	m3	3		
2.H1.5.553	H1	46.007(b)i)		100mm thick granolithic screed laid to fall to direction of sump.	m2	29		
	H1			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.H1.5.554	H1	20.010		Foundations, bases, floor slabs and roof slabs	m3	19		
2.H1.5.555	H1	20.010		Plinths (Including grouting between the plinth and the pipes/specials where required)	m3	3		
2.H1.5.556	H1	20.010		Walls	m3	40		
	H1			UNFORMED SURFACE FINISHES				
2.H1.5.557	H1	20.013(a)		Wood floated finish	m2	29		
2.H1.5.558	H1	20.013(b)		Steel floated finish	m2	55		
	H1			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	H1			PN16				
2.H1.5.559	H1	32.003		Item 1	No	1		
2.H1.5.560	H1	32.003		Item 2	No	1		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.H1.5.561	H1	36.8.2(c)		Item 3	No	1		
2.H1.5.562	H1	32.003		Item 4	No	1		
2.H1.5.563	H1	32.003		Item 5	No	1		
2.H1.5.564	H1	32.003		Item 6	No	1		
	H1			INSTALLATION OF VALVES AND SPECIALS				
	H1			PN16				
2.H1.5.565	H1	33.004		Item 1	No	1		
2.H1.5.566	H1	33.004		Item 2	No	1		
2.H1.5.567	H1	33.004		Item 3	No	1		
2.H1.5.568	H1	33.004		Item 4	No	1		
2.H1.5.569	H1	33.004		Item 5	No	1		
2.H1.5.570	H1	33.004		Item 6	No	1		
	H1			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	H1			PN25				
2.H1.5.571	H1	32.003		Item 1	No	2		
2.H1.5.572	H1	32.003		Item 2	No	2		
2.H1.5.573	H1	36.8.2(c)		Item 3	No	2		
2.H1.5.574	H1	32.003		Item 4	No	2		
2.H1.5.575	H1	32.003		Item 5	No	2		
2.H1.5.576	H1	32.003		Item 6	No	2		
	H1			INSTALLATION OF VALVES AND SPECIALS				
	H1			PN25				
2.H1.5.577	H1	33.004		Item 1	No	2		
2.H1.5.578	H1	33.004		Item 2	No	2		
2.H1.5.579	H1	33.004		Item 3	No	2		
2.H1.5.580	H1	33.004		Item 4	No	2		
2.H1.5.581	H1	33.004		Item 5	No	2		
2.H1.5.582	H1	33.004		Item 6	No	2		
	H1			ITEMS CAST OR BUILT INTO CONCRETE				
2.H1.5.583	H1	33.005		Steel pipe diameter 900mm up to 1500mm	No	6		
	H1			SUPPLY AND ERECT PRECAST ELEMENTS				
	H1			Refer to Dwg 2A-C6-168 and 2A-C6-169				
2.H1.5.584	H1	20.017		Precast slab Type 1	No	6		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	H1			ANCILLARY WORKS				
2.H1.5.585	H1	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	3		
2.H1.5.586	H1	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	3		
2.H1.5.587	H1	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	3		
2.H1.5.588	H1	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	3		
2.H1.5.589	H1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 1620mm	no	2		
2.H1.5.590	H1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 1620mm	no	4		
2.H1.5.591	H1	20.021 c)		Vermin mesh to be applied to opening as per drawing Reg. No. 2A-C6-125	no	6		
2.H1.5.592	H1	20.021 c)		Sleeves to be grouted after the installation of cables to ensure no seepage 160mm diam x 0.3mm thick	no	18		
2.H1.5.593	H1	20.021 c)		Drilling for dowels and including grouting in of dowels, per one chamber complete, as per drawing 2A-C6-125. (Dowel material included in 20.007)	no	3		
2.H1.5.594	H1	20.021 c)		10mm Neoprene, as per drawing 2A-C6-125	m ²	3		
	H1			SPECIFIC ITEMS OF WORK				
	H1			SEALING STRIPS, JOINT SEALANT, ETC				
2.H1.5.595	H1	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	30		
	H1			FARMER OFF-TAKE				
	H1			REFER TO DRAWING 2A-C6-190 and 2A-C6-191				
	H1			EARTHWORKS				
	H1			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS. THRUST BLOCKS. ETC				
2.H1.5.596	H1	9.013		Excavate for valve chambers	m3	286		
	H1			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	H1			Provision of cement stabilised soil				
2.H1.5.597	H1	15.003(d)		Material from the nearest borrow pit with screening	m3	278		
2.H1.5.598	H1	15.003(e)		Cement for stabilisation of soil	m3	14		
	H1			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.H1.5.599	H1	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	292		
	H1			OVERHAUL				
2.H1.5.600	H1	15.010(a)		Between 1km up to and including 3km	m3	98		
2.H1.5.601	H1	15.010(b)		Between 3km up to and including 5km	m3	98		
2.H1.5.602	H1	15.010(c)		Between 5km up to and including 7km	m3	98		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	H1			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.H1.5.603	H1	15.014(a)		Structure backfilling compacted	m3	446		
2.H1.5.604	H1	15.014(a)		Embankment backfilling compacted	m3	400		
2.H1.5.605	H1	15.015		Finishing of slopes	m2	726		
	H1			OVERHAUL				
2.H1.5.606	H1	15.016(b)		Between 3km up to and including 5km	m3	270		
2.H1.5.607	H1	15.016(c)		Between 5km up to and including 7km	m3	270		
	H1			CONCRETE WORKS				
	H1			ROUGH FORMWORK				
	H1			Vertical surfaces				
2.H1.5.608	H1	20.001		Sides of floor slab	m2	109		
2.H1.5.609	H1	20.001		Sides of walls	m2	432		
	H1			SMOOTH FORMWORK				
	H1			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.H1.5.610	H1	20.002		Underside of slabs	m2	77		
	H1			SMOOTH FORMWORK				
	H1			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.H1.5.611	H1	20.002		Walls	m2	1 135		
2.H1.5.612	H1	20.002		Side of Sump walls	m2	9		
2.H1.5.613	H1	20.005		Narrow widths - Up to 200mm high	m	267		
	H1			Box-out holes/Form voids (for sleeves only)				
	H1			a) Small, circular, of diameter up to and including 0.35 m				
2.H1.5.614	H1	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	68		
	H1			REINFORCEMENT				
2.H1.5.615	H1	20.007		Steel bars (irrespective of grade or diameter)	t	46.1		
	H1			CONCRETE				
	H1			CONCRETE 15 MPa/19mm in:				
2.H1.5.616	H1	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	348		
2.H1.5.617	H1	20.011(b)		Mass concrete filling where required by the engineer	m3	17		
2.H1.5.618	H1	46.007(b)i		100mm thick granolithic screed laid to fall to direction of sump.	m2	165		
	H1			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.H1.5.619	H1	20.010		Foundations, bases, floor slabs and roof slabs	m3	111		
2.H1.5.620	H1	20.010		Walls	m3	196		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	H1			UNFORMED SURFACE FINISHES				
2.H1.5.621	H1	20.013(a)		Wood floated finish	m2	165		
2.H1.5.622	H1	20.013(b)		Steel floated finish	m2	324		
	H1			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	H1			PN16				
2.H1.5.623	H1	32.003		Item 1	No	7		
2.H1.5.624	H1	32.003		Item 2	No	7		
2.H1.5.625	H1	35.002		Item 3	No	7		
2.H1.5.626	H1	32.003		Item 4	No	7		
2.H1.5.627	H1	35.002		Item 5	No	7		
2.H1.5.628	H1	32.003		Item 6	No	7		
	H1			INSTALLATION OF VALVES AND SPECIALS				
	H1			PN16				
2.H1.5.629	H1	33.004		Item 1	No	7		
2.H1.5.630	H1	33.004		Item 2	No	7		
2.H1.5.631	H1	33.004		Item 3	No	7		
2.H1.5.632	H1	33.004		Item 4	No	7		
2.H1.5.633	H1	33.004		Item 5	No	7		
2.H1.5.634	H1	33.004		Item 6	No	7		
	H1			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	H1			PN25				
2.H1.5.635	H1	32.003		Item 1 - for 1600mm ND pipe	No	9		
2.H1.5.636	H1	32.003		Item 1 - for 1500mm ND pipe	No	16		
2.H1.5.637	H1	32.003		Item 1 - for 1400mm ND pipe	No	9		
2.H1.5.638	H1	32.003		Item 2	No	34		
2.H1.5.639	H1	35.002		Item 3	No	34		
2.H1.5.640	H1	32.003		Item 4	No	34		
2.H1.5.641	H1	35.002		Item 5	No	34		
2.H1.5.642	H1	32.003		Item 6	No	34		
	H1			INSTALLATION OF VALVES AND SPECIALS				
	H1			PN25				
2.H1.5.643	H1	33.004		Item 1 - for 1600mm ND pipe	No	9		
2.H1.5.644	H1	33.004		Item 1 - for 1500mm ND pipe	No	16		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.H1.5.645	H1	33.004		Item 1 - for 1400mm ND pipe	No	9		
2.H1.5.646	H1	33.004		Item 2	No	34		
2.H1.5.647	H1	33.004		Item 3	No	34		
2.H1.5.648	H1	33.004		Item 4	No	34		
2.H1.5.649	H1	33.004		Item 5	No	34		
2.H1.5.650	H1	33.004		Item 6	No	34		
	H1			ITEMS CAST OR BUILT INTO CONCRETE				
2.H1.5.651	H1	33.005		Steel pipe diameter 700mm	No	34		
	H1			SUPPLY AND ERECT PRECAST ELEMENTS				
	H1			Refer to Dwg 2A-C6-190 and 2A-C6-191				
2.H1.5.652	H1	20.017		Precast slab Type 1	No	68		
	H1			ANCILLARY WORKS				
2.H1.5.653	H1	24.008		Ladders, complete and installed as per drawing Reg. No.2A-C6-126	No	34		
2.H1.5.654	H1	24.010		Manhole cover and lids, complete and installed as per drawing Reg. No.2A-C6-120/121/122	No	34		
2.H1.5.655	H1	20.021 c)		Roof slab inlet ventilator as per drawing Reg. No.2A-C6-123/124	No	34		
2.H1.5.656	H1	20.021 c)		Roof slab outlet ventilator as per drawing Reg. No.2A-C6-123/124	No	34		
2.H1.5.657	H1	20.021 c)		160mm diam uPVC pipe cast into concrete wall for the sump	No	34		
2.H1.5.658	H1	20.021 c)		Waterproof between pipe and concrete wall complete, as per drawing Reg. No. 2A-C6-125 ("Pipe/Wall Interface Detail") for pipe sizes 700mm	No	34		
2.H1.5.659	H1	20.021 c)		Vermin mesh to be applied to opening as per drawing Reg. No. 2A-C6-125	no	68		
	H1			SPECIFIC ITEMS OF WORK				
	H1			SEALING STRIPS, JOINT SEALANT, ETC				
2.H1.5.660	H1	33.014		15mm Joint sealing not exceeding 300mm high as per drawing Reg. No.2A-C6-125	m	177		
	H1			CONSTRUCTION OF STONE DRAIN AND EROSION PROTECTION				
	H1			Foundation trench excavation and backfilling				
2.H1.5.661	H1	21.001(b)		In all other classes of material	m3	21		
2.H1.5.662	H1	21.002		Surface preparation for bedding the gabions	m2	21		
2.H1.5.663	H1	21.005		Geotextile fabric (type and grade indicated on the Drawings)	m2	194		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	H1			SCOUR VALVE AND ISOLATING VALVE INSTALLATION <i>(Break Pressure Reservoir)</i>				
	H1			REFER TO DRAWING 2G-C5-071 and 2G-C5-072				
	H1			EARTHWORKS				
	H1			ADDITIONAL EXCAVATION IN ALL MATERIALS BEYOND THE TRENCH PAYMENT LINE FOR VALVE CHAMBERS. THRUST BLOCKS. ETC				
2.H1.5.664	H1	9.013		Excavate for valve chambers	m3	405		
2.H1.5.665	H1	9.014		Extra-Over items 9.012, 9.013, 9.016 and 9.021 for: Hard Excavation for classified and unclassified material (blasting)	m3	211		
2.H1.5.666	H1	9.016		Excavation and disposal of unsuitable/surplus material from trench bottom to temporary stockpile within free haul distance.	m3	10		
2.H1.5.667	H1	9.020		Compaction of trench bottom (150mm thick)	m2	112		
	H1			OVERHAUL				
2.H1.5.668	H1	9.023(a)		Between 1km up to and including 3km	m3	71		
2.H1.5.669	H1	9.023(b)		Between 3km up to and including 5km	m3	71		
2.H1.5.670	H1	9.023(c)		Between 5km up to and including 7km	m3	71		
	H1			PROVISION OF MATERIAL FOR BED, BEDDING CRADLE, SELECTED FILL BLANKET AND MAIN BACKFILL				
	H1			Provision of bed material (G5)				
2.H1.5.671	H1	15.003(c)		Material from the nearest borrow pit without screening	m3	17		
	H1			Provision of cement stabilised soil				
2.H1.5.672	H1	15.003(d)		Material from the nearest borrow pit with screening	m3	52		
2.H1.5.673	H1	15.003(e)		Cement for stabilisation of soil	m3	3		
	H1			PLACING OF BEDDING MATERIAL, SOILCRETE, FERTILE SOIL AND MAIN BACKFILL				
2.H1.5.674	H1	15.001		Placing of bedding material	m3	17		
2.H1.5.675	H1	15.002(b)		Cement stabilised soil bed and bedding cradle	m3	55		
	H1			OVERHAUL				
2.H1.5.676	H1	15.010(b)		Between 3km up to and including 5km	m3	36		
2.H1.5.677	H1	15.010(c)		Between 5km up to and including 7km	m3	36		
	H1			CONSTRUCTION OF EMBANKMENT AND STRUCTURE BACKFILL				
2.H1.5.678	H1	15.014(a)		Structure backfilling compacted	m3	284		
2.H1.5.679	H1	15.014(a)		Embankment backfilling compacted	m3	68		
2.H1.5.680	H1	15.014(b)		Rockfill processing and compaction	m3	9		
2.H1.5.681	H1	15.015		Finishing of slopes	m2	113		
	H1			OVERHAUL				
2.H1.5.682	H1	15.016(b)		Between 3km up to and including 5km	m3	32		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
2.H1.5.683	H1	15.016(c)		Between 5km up to and including 7km	m3	32		
	H1			CONCRETE WORKS				
	H1			ROUGH FORMWORK				
	H1			Vertical surfaces				
2.H1.5.684	H1	20.001		Sides of floor slab	m2	29		
2.H1.5.685	H1	20.001		Sides of walls	m2	170		
	H1			SMOOTH FORMWORK				
	H1			Horizontal surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.H1.5.686	H1	20.002		Underside of slabs	m2	26		
	H1			SMOOTH FORMWORK				
	H1			Vertical surfaces for visible surface including 20mm chamfers on a exposed corners to:				
2.H1.5.687	H1	20.002		Walls	m2	568		
2.H1.5.688	H1	20.002		Side of Sump walls	m2	2		
2.H1.5.689	H1	20.002		Plinths	m2	12		
2.H1.5.690	H1	20.005		Narrow widths - Up to 250mm high (roof slabs)	m	110		
	H1			Box-out holes/Form voids (for sleeves only)				
	H1			a) Small, circular, of diameter up to and including 0.35 m				
2.H1.5.691	H1	20.006 (a)		Over 0m deep and up to and including 0.5m deep	No.	6		
	H1			REINFORCEMENT				
2.H1.5.692	H1	20.007		Steel bars (irrespective of grade or diameter)	t	27.9		
	H1			CONCRETE				
	H1			CONCRETE 15 MPa/19mm in:				
2.H1.5.693	H1	20.011(a)		Blinding layer of 50mm minimum thickness including levelling and floating.	m2	100		
2.H1.5.694	H1	20.011(b)		Mass concrete filling where required by the engineer	m3	3		
2.H1.5.695	H1	46.007(b)i)		100mm thick granolithic screed laid to fall to direction of sump.	m2	53		
	H1			PRESCRIBED MIX CONCRETE, 35MPa/19mm (water retaining)				
2.H1.5.696	H1	20.010		Foundations, bases, floor slabs and roof slabs	m3	51		
2.H1.5.697	H1	20.010		Plinths (Including grouting between the plinth and the pipes/specials where required)	m3	3		
2.H1.5.698	H1	20.010		Walls	m3	132		
	H1			UNFORMED SURFACE FINISHES				
2.H1.5.699	H1	20.013(a)		Wood floated finish	m2	53		
2.H1.5.700	H1	20.013(b)		Steel floated finish	m2	101		
							Carried Forward	

Item no.	Part	Payment	Breakdown	Description	Unit	Quantity	Rate	Amount
		Reference						
							Brought Forward	
	H1			MANUFACTURE AND SUPPLY OF PIPES, PIPE ANCILLARIES AND SPECIALS AND DELIVERY TO STORAGE ON SITE (INCLUDING CORROSION PROTECTION)				
	H1			PN16				
2.H1.5.701	H1	32.003		Item 1	No	3		
2.H1.5.702	H1	35.002		Item 2	No	6		
2.H1.5.703	H1	32.003		Item 3	No	3		
2.H1.5.704	H1	32.003		Item 4	No	3		
2.H1.5.705	H1	32.003		Item 5	No	3		
2.H1.5.706	H1	32.003		Item 6	No	3		
2.H1.5.707	H1	32.003		Item 7	No	3		
2.H1.5.708	H1	35.002		Item 8	No	3		
2.H1.5.709	H1	32.003		Item 9	No	3		
2.H1.5.710	H1	35.002		Item 10	No	3		
2.H1.5.711	H1	35.002		Item 11	No	3		
2.H1.5.712	H1	32.003		Item 12	No	3		
2.H1.5.713	H1	32.003		Item 13	No	3		
	H1			INSTALLATION OF VALVES AND SPECIALS				
	H1			PN16				
2.H1.5.714	H1	33.004		Item 1	No	3		
2.H1.5.715	H1	33.004		Item 2	No	6		
2.H1.5.716	H1	33.004		Item 3	No	3		
2.H1.5.717	H1	33.004		Item 4	No	3		
2.H1.5.718	H1	33.004		Item 5	No	3		
2.H1.5.719	H1	33.004		Item 6	No	3		
2.H1.5.720	H1	33.004		Item 7	No	3		
2.H1.5.721	H1	33.004		Item 8	No	3		
2.H1.5.722	H1	33.004		Item 9	No	3		
2.H1.5.723	H1	33.004		Item 10	No	3		
2.H1.5.724	H1	33.004		Item 11	No	3		
2.H1.5.725	H1	33.004		Item 12	No	3		
2.H1.5.726	H1	33.004		Item 13	No	3		
	H1			ITEMS CAST OR BUILT INTO CONCRETE				
2.H1.5.727	H1	33.005		Steel pipe diameter 900mm up to 1500mm	No	6		
2.H1.5.728	H1	33.005		Steel pipe diameter 200mm	No	3		
							Carried Forward	