

BILL 6 - SEGMENT 6

1500 ACCOMMODATION OF TRAFFIC						
Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
6.1	1500	ACCOMMODATION OF TRAFFIC				
		Temporary traffic control facilities				
6.1.1	15.03	(a) Flagmen	man-day	200.0	500.00	100 000.00
Total Carried Forward To Summary						100 000.00

BILL 6 - SEGMENT 6

1700.CLEARING AND GRUBBING

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
6.2	1700	CLEARING AND GRUBBING				
6.2.1	17.01	Clearing and grubbing	ha	1.0	11,886.00	11,886.00
Total Carried Forward To Summary						11,886.00

BILL 6 - SEGMENT 6

3300 MASS EARTHWORKS

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
6.3	3300	MASS EARTHWORKS				
	633.04	Cut to spoil, for ALL haul. Material obtained from:				
6.3.1		(c) Hard excavation	m ³	1 992.0	55.00	109 560.00
	33.08	Widening of cuts (extra over items 33.01, 33.02 and 33.04)				
6.3.2		(a) In hard material	m ³	1 992.0	5.00	9 960.00
Total Carried Forward To Summary						119 520.00

BILL 6 - SEGMENT 6

6100 FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
6.4	6100	FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS				
6.4.1	6100	FOUNDATIONS FOR STRUCTURES				
	61.02	Excavation:				
		(a) Excavation - Soft Rock				
6.4.1.1		i) 0-2m	m³	851.0	50.00	42 550.00
6.4.1.2		(b) Extra over - Hard Rock	m³	211.0	180.00	37 980.00
6.4.1.3		(d) Extra over subitem 61.02(a) for excavation by hand	m³	744.0	500.00	372 000.00
	61.03	Access and drainage:				
6.4.1.4		(a) Access	L/sum	1.0	75 000.00	75 000.00
6.4.1.5		(b) Drainage where no access has been provided	L/sum	1.0	75 000.00	75 000.00
	61.04	Backfill to excavations utilising:				
6.4.1.6		(a) Material from the excavation	m³	196.0	78.00	15 288.00
6.4.1.7		(b) Imported material	m³	358.0	278.00	99 524.00
6.4.1.8	B61.05	Fill within a restricted area Extra Over	m³	485.0	31.00	15 035.00
	61.08	Foundation fill consisting of:				
6.4.1.9		(d) 75mm blinding (Class 15/19 MPa)	m²	11.0	1 840.00	20 240.00
Total Carried Forward To Summary						752 017.00

BILL 6 - SEGMENT 6

6200 FALSEWORK, FORMWORK AND CONCRETE FINISH

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
6.5	6200	FALSEWORK, FORMWORK AND CONCRETE FINISH				
	62.02	Vertical formwork to provide:				
		(a) Class F1 surface finish to:				
6.5.1		(i) Abutments and wing walls	m²	132.0	550.00	72 600.00
6.5.2		(ii) Foundations	m²	85.0	500.00	42 500.00
6.5.3		(iii) Cut-off Wall	m²	521.0	500.00	260 500.00
		(b) Class F2 surface finish to:				
6.5.4		(i) Abutments and wing walls	m²	132.0	575.00	75 900.00
6.5.5		(i) Piers	m²	80.0	575.00	46 000.00
	862.04	Inclined formwork to provide:				
		(b) Class F2 surface finish to:				
6.5.6		(i) Rounded finish to Piers	m²	11.0	600.00	6 600.00
Total Carried Forward To Summary						504 100.00

BILL 6 - SEGMENT 6

6300 STEEL REINFORCEMENT FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
6.6	6300	STEEL REINFORCEMENT FOR STRUCTURES				
	63.01	(a) Channel floor				
6.6.1		(i) Mesh Ref 395	kg	1 901.0	17.25	32 792.25
		(b) Abutments and wing walls				
6.6.2		(ii) High yield stress steel bars (Type C)	t	3.0	13 880.00	41 640.00
		(c) Cut-off Wall				
6.6.3		(i) Mild steel bars	t	0.6	13 880.00	8 328.00
6.6.4		(ii) High yield stress steel bars (Type C)	t	6.0	13 880.00	83 280.00
		(d) Foundations				
6.6.5		(i) Mild steel bars	t	0.5	13 880.00	6 940.00
6.6.6		(ii) High yield stress steel bars (Type C)	t	4.0	13 880.00	55 520.00
		(c) Piers				
6.6.7		(i) Mild steel bars	t	0.3	13 880.00	4 164.00
6.6.8		(ii) High yield stress steel bars (Type C)	t	3.0	13 880.00	41 640.00
		(d) Apron slab				
6.6.9		(i) Mesh Ref 395	kg	4 740.0	17.25	81 765.00
Total Carried Forward To Summary						356 069.25

BILL 6 - SEGMENT 6

6400 CONCRETE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
6.7	6400	CONCRETE FOR STRUCTURES				
	64.01	Cast in situ concrete:				
		(a) Class 25/19 MPa				
6.7.1		(i) Foundations	m ³	38.0	1 786.00	67 868.00
6.7.2		(ii) Apron slab and cut-off walls	m ³	381.0	1 786.00	644 746.00
		(b) Class 30/19 MPa				
6.7.3		(i) Abutments and retaining walls	m ³	33.0	1 850.00	61 050.00
6.7.4		(ii) Channel	m ³	72.0	1 850.00	133 200.00
6.7.5		(iii) Cut-off wall	m ³	4.0	1 850.00	7 400.00
6.7.6		(iv) Piers	m ³	22.0	1 850.00	40 700.00
Total Carried Forward To Summary						854 964.00

BILL 6 - SEGMENT 6

6600 NO-FINES CONCRETE, JOINTS, AND DRAINAGE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
6.8	6600	NO-FINES CONCRETE, JOINTS, AND DRAINAGE FOR STRUCTURES				
	66.01	Cast in situ no-fines concrete				
6.8.1		(a) No-fines blinding (15MPa/19mm)	m²	24.0	2 111.00	50 664.00
	66.06	Filled joints:				
6.8.2		a) Horizontal Dowel Joint "Type C" in channel floor and side slopes with 10mm jointex filler	m	7.5	363.00	2 722.50
6.8.3		b) Horizontal Expansion Joint "Type D" in channel with 10mm jointex filler	m	8.7	110.00	957.00
	66.07	Unfilled joints:				
6.8.4		(a) Horizontal Toggle Joint "Type A" in channel floor and side slopes	m	209.6	275.00	57 640.00
6.8.5		(b) Vertical Toggle Joint "Type A" in walls	m²	55.0	275.00	15 125.00
6.8.6		c) Inclined Dowel Joint "Type B" in channel	m	108.0	275.00	29 700.00
6.8.7		d) Galvanised dowels into existing structures	No	20.0	95.00	1 900.00
	66.19	Drainage pipes and weepholes:				
		(a) Weepholes:				
6.8.8		(i) 50mm dia. uPVC weepholes in side slopes	m	53.0	510.00	27 030.00
6.8.9		(ii) 50mm dia. uPVC pipes with stone filter wrapped in bidim	No	16.0	79.00	1 264.00
		(b) Non-return Weepholes:				
6.8.10		(i) 100mm dia. Ground water relief valve with stone filter wrapped in bidim	No	9.0	1 826.00	16 434.00
	66.21	Synthetic-fibre filter fabric				
6.8.11		(a) 300mm Filter fabric	m²	80.0	19.00	1 520.00
	66.27	Drainage strips				
6.8.12		(a) 200mm wide DN3 nelson drainage strips 2m c/c	m	41.0	50.00	2 050.00
6.8.13	66.28	Perforated drainage pipes-M65 Nelon drainage pipe or similar wrapped in Grade 2 geotextile (as specified in 2104 (a))	m	20.0	69.00	1 380.00
Total Carried Forward To Summary						208 386.50

BILL 6 - SEGMENT 6

		SUMMARY OF SECTIONS	
Section	Description		Amount R
6.1	1500 ACCOMMODATION OF TRAFFIC		100 000.00
6.2	1700 CLEARING AND GRUBBING		11 886.00
6.3	3300 MASS EARTHWORKS		119 520.00
6.4	6100 FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS		752 617.00
6.5	6200 FALSEWORK, FORMWORK AND		504 100.00
6.6	6300 STEEL REINFORCEMENT FOR		356 069.25
6.7	6400 CONCRETE FOR STRUCTURES		854 884.00
6.8	6600 NO-FINES CONCRETE, JOINTS, AND		209 385.50
Total Carried Forward To Summary Of Schedules			<u>3 007 542.75</u>

BILL 7 - DROP STRUCTURE A SV0421

5100 PITCHING, STONEWORK AND PROTECTION AGAINST EROSION

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
7.1	5100	PITCHING, STONEWORK AND PROTECTION AGAINST EROSION				
	B51.03	Stone masonry walls				
		(b) Cement-mortared stone walls				
7.1.1		(i) Sand stone cladding to RC walls inclusive of wall ties	m ²	52.8	1 575.00	83 160.00
Total Carried Forward To Summary						83 160.00

BILL 7 - DROP STRUCTURE A.SV0421

6100 FOUNDATIONS FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
7.2	6100	FOUNDATIONS FOR STRUCTURES				
	61.01	Additional foundation investigations				
7.2.1		(a) Additional foundation investigation	PC sum	1.0	50 000.00	50 000.00
7.2.2		(b) Contractor's overhead profits, etc. on the payment item (a) above	%	50 000.00	10.00	5 000.00
	61.02	Excavation:				
		(a) Excavating soft material situated within the following successive depth ranges:				
7.2.3		(1) 0 m up to 2 m	m³	2 113.0	45.00	95 085.00
7.2.4		(2) Exceeding 2 m and up to 4 m	m³	1 932.0	50.00	96 600.00
7.2.5		(3) Exceeding 4 m and up to 9 m	m³	3 910.0	65.00	254 150.00
7.2.6		(b) Extra over sub-item 61.02(a) for excavation in hard material irrespective of depth	m³	876.0	50.00	43 800.00
7.2.7	61.03	Access and drainage: (a) Access	L/sum	1.0	310 000.00	310 000.00
7.2.8		(b) Drainage where no access has been provided	L/sum	1.0	150 000.00	150 000.00
7.2.9	61.04	Backfill to excavations utilising: (a) Material from the excavation	m³	4 855.0	52.00	252 460.00
7.2.10	B61.05	Fill within a restricted area (extra over)	m³	4 073.0	31.00	126 263.00
	61.08	Foundation fill consisting of:				
7.2.11		(d) 75mm blinding (Class 15/19 MPa)	m²	82.0	1 766.00	109 430.00
7.2.12	B61.60	Establishment on the site for 300mm diaphragm wall	L Sum	1.0	2 750.00	2 750.00
	B61.61	Excavation for 300mm diaphragm wall				
7.2.13		1) 0 m up to 4 m	m³	34.7	720.00	24 984.00
	B61.62	Extra over item B61.61, irrespective of depth, through obstructions consisting of:				
7.2.14		(a) Hard rock	m³	6.9	720.00	4 968.00
	B61.63	Steel reinforcement in cast in situ diaphragm wall:				
7.2.15		(a) Mild steel bars	t	0.3	13 880.00	4 164.00
7.2.16		(b) High yield stress-steel bars of type C	t	3.5	13 880.00	48 580.00
	B61.64	Lateral support to excavations or to retain road fill				
Total Carried Forward						1 578 234.00

BILL 7 - DROP STRUCTURE A SV0421

0100 FOUNDATIONS FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
Brought Forward						1 578 234.00
7.2.17		(1) 0 to 5 m depth	L/sum	1.0	88 000.00	88 000.00
Total Carried Forward To Summary						1 666 234.00

BILL 7 - DROP STRUCTURE A SV0421

5200 FALSEWORK, FORMWORK AND CONCRETE FINISH						
Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
7.3	6200	FALSEWORK, FORMWORK AND CONCRETE FINISH				
	62.02	Vertical formwork to provide:				
		(a) Class F1 surface finish to:				
7.3.1		(i) Abutments and wing walls	m²	1 526.7	550.00	839 685.00
7.3.2		(ii) Foundations	m²	200.6	500.00	100 300.00
		(b) Class F2 surface finish to:				
7.3.3		(i) Abutments and wing walls	m²	1 526.7	550.00	839 685.00
7.3.4		(iv) Internal walls	m²	786.0	550.00	432 300.00
	B62.04	Inclined formwork to provide:				
7.3.5		(i) Curved channel soffit	m²	242.6	1 600.00	388 160.00
7.3.6	62.06	Formwork to form open joints	m²	24.9	600.00	14 940.00
		(a) Between face of channel panels				
Total Carried Forward To Summary						2 615 070.00

BILL 7 - DROP STRUCTURE A SV0421

6300 STEEL REINFORCEMENT FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
7.4	6300	STEEL REINFORCEMENT FOR STRUCTURES				
	63.01	Steel reinforcement for: Suspended Channel (a)				
7.4.1		(1) Mild steel bars	t	2.3	13 880.00	31 924.00
7.4.2		(2) High yield stress steel bars (Type C)	t	23.0	13 880.00	319 240.00
		(b) Abutments and wing walls				
7.4.3		(1) Mild steel bars	t	9.0	13 880.00	124 920.00
7.4.4		(2) High yield stress steel bars (Type C)	t	90.0	13 880.00	1 249 200.00
		(c) Piers				
7.4.5		(1) Mild steel bars	t	1.0	13 880.00	13 880.00
7.4.6		(2) High yield stress steel bars (Type C)	t	10.0	13 880.00	138 800.00
		(b) Foundations				
7.4.7		(1) Mild steel bars	t	4.0	13 880.00	55 520.00
7.4.8		(2) High yield stress steel bars (Type C)	t	39.0	13 880.00	541 320.00
Total Carried Forward To Summary						2 474 804.00

BILL 7 - DROP STRUCTURE A.SV0421

6400 CONCRETE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
7.5	6400	CONCRETE FOR STRUCTURES				
	864.01	Cast in situ concrete:				
		(b) Class 30/19 MPa Concrete.				
7.5.1		(i) Abutments and wing walls	m³	900.0	1 850.00	1 665 000.00
7.5.2		(ii) Curved Channel suspended slab	m³	192.0	1 850.00	355 200.00
7.5.3		(iii) Foundations	m³	486.0	1 850.00	899 100.00
7.5.4		(iv) Internal Walls	m³	98.3	1 850.00	181 855.00
Total Carried Forward To Summary						3 101 155.00

BILL 7 - DROP STRUCTURE A SV0421

ES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
7.6	6600	NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES				
	B66.06	Filled joints:				
7.6.1		(c) Horizontal Isolation Joint at surface beds with 10mm jointex filler	m	77.0	105.00	8 085.00
7.6.2		(e) Inclined joints in curved channel Joint Type "E"	m	54.0	715.00	38 810.00
7.6.3		(f) Inclined joints in curved channel Joint Type "F"	m	14.0	562.00	7 868.00
7.6.4		(g) Vertical joints in retaining walls Joint Type "G"	m	70.0	710.00	49 700.00
7.6.5		(h) Horizontal dowel joint type "h"	m	15.0	682.00	10 230.00
	B66.07	Unfilled joints:				
7.6.6		(b) Vertical Toggle Joint "Type A" in walls	m	120.0	262.00	31 440.00
7.6.7		(d) Saw-cut Joint in surface beds	m	35.0	27.00	945.00
	66.19	Drainage pipes and weepholes:				
		(a) Weep holes:				
7.6.8		(1) 50mm dia. uPVC weepholes at retaining walls (as shown on drawings)	m	161.0	510.00	82 110.00
	66.21	Synthetic-fibre filter fabric:				
7.6.9		(a) Kaymat U34 geotextile fabric to cover abutment and wing walls earth faces and around nylon drainage pipes	m²	1 080.0	20.00	21 600.00
	B66.28	Drainage strips:				
7.6.10		(a) 200mm wide DN3 nylon drainage strips 2.5m c/c	m	1 465.0	50.00	73 250.00
7.6.11	B66.29	Perforated drainage pipes - M65 Nylon drainage pipe or similar wrapped in Grade 2 geotextile (as specified in 2104 (a))	m	134.0	69.00	9 246.00
Total Carried Forward To Summary						333 084.00

BILL 7 - DROP STRUCTURE A SV0421

SUMMARY OF SECTIONS

Section	Description	Amount R
7.1	5100 PITCHING, STONWORK AND	83 160.00
7.2	6100 FOUNDATIONS FOR STRUCTURES	1 666 234.00
7.3	6200 FALSEWORK, FORMWORK AND	2 615 070.00
7.4	6300 STEEL REINFORCEMENT FOR	2 474 804.00
7.5	6400 CONCRETE FOR STRUCTURES	3 101 155.00
7.6	6600 NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR	333 084.00
Total Carried Forward To Summary Of Schedules		<u>10 273 507.00</u>

BILL 8 - DROP STRUCTURE B SV0879

5100 PITCHING, STONework AND PROTECTION AGAINST EROSION

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
8.1	5100	PITCHING, STONework AND PROTECTION AGAINST EROSION				
	B51.03	Stone masonry walls				
		(b) Cement-mortared stone walls				
8.1.1		(i) Sand stone cladding to RC walls inclusive of wall ties	m ²	52.8	1,575.00	83,160.00
Total Carried Forward To Summary.						83,160.00

BILL 8 - DROP STRUCTURE B SV0879

6100 FOUNDATIONS FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
8.2	6100	FOUNDATIONS FOR STRUCTURES				
	61.01	Additional foundation investigations				
8.2.1		(a) Additional foundation investigation	PC sum	1.0	50 000.00	50 000.00
8.2.2		(b) Contractor's overhead profits, etc. on the payment item (a) above	%	60 000.00	10.00	5 000.00
	61.02	Excavation:				
		(a) Excavating soft material situated within the following successive depth ranges:				
8.2.3		(i) 0 m up to 2 m	m³	2 113.0	45.00	95 085.00
8.2.4		(ii) Exceeding 2 m and up to 4 m	m³	1 932.0	50.00	96 600.00
8.2.5		(iii) Exceeding 4 m and up to 9 m	m³	3 910.0	65.00	254 150.00
		(b) Extra over sub-item 61.02				
8.2.6		(a) for excavation in hard material irrespective of depth	m³	876.0	50.00	43 800.00
	61.03	Access and drainage:				
8.2.7		(a) Access	L sum	1.0	310 000.00	310 000.00
8.2.8		(b) Drainage where no access has been provided	L sum	1.0	150 000.00	150 000.00
		Backfill to excavations utilising:				
8.2.9	61.04	(a) Material from the excavation	m³	4 855.0	52.00	252 460.00
8.2.10	B61.05	Fill within a restricted area (extra over)	m³	4 073.0	31.00	126 263.00
	61.08	Foundation fill consisting of:				
8.2.11		(d) 75mm blinding (Class 15/19 MPa)	m²	62.0	1 765.00	109 430.00
8.2.12	B61.60	Establishment on the site for 300mm diaphragm wall	L Sum	1.0	2 750.00	2 750.00
	B61.61	Excavation for 300mm diaphragm wall				
8.2.13		(i) 0 m up to 4 m	m³	34.7	720.00	24 984.00
	B61.62	Extra over item B61.61, irrespective of the depth, to form augered and bored pile holes through identified obstructions consisting of:				
8.2.14		(b) Boulders (0.6m x 0.5 m x 0.5 m)	m³	6.9	720.00	4 968.00
	B61.63	Steel reinforcement in cast in situ diaphragm wall:				
8.2.15		(a) Mild steel bars	t	0.4	13 850.00	5 552.00
Total Carried Forward						1 531 042.00

BILL 8 - DROP STRUCTURE B SV0879

0100 FOUNDATIONS FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
Brought Forward						1 531 042.00
8.2.16		(b) High yield stress-steel bars of type C	t	3.5	13 680.00	48 580.00
	B61.64	Lateral support to excavations				
8.2.17		(i) 0 to 5 m depth	L/sum	1.0	88 000.00	88 000.00
Total Carried Forward To Summary						1 667 622.00

BILL 8 - DROP STRUCTURE B SV0579

6200 FALSEWORK, FORMWORK AND CONCRETE FINISH

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
8.3	6200	FALSEWORK, FORMWORK AND CONCRETE FINISH				
	62.02	Vertical formwork to provide:				
		(a) Class F1 surface finish to:				
8.3.1		(i) Abutments and wing walls	m²	1 526.7	550.00	839 685.00
8.3.2		(ii) Foundations	m²	200.6	500.00	100 300.00
		(b) Class F2 surface finish to:				
8.3.3		(i) Abutments and wing walls	m²	1 526.7	550.00	839 685.00
8.3.4		(iv) Internal walls	m²	786.0	550.00	432 300.00
	62.04	Inclined formwork to provide:				
8.3.5		(i) Curved channel soffit	m²	242.6	1 600.00	388 160.00
8.3.6	62.06	Formwork to form open joints (a)	m²	24.9	600.00	14 940.00
Total Carried Forward To Summary						2 615 070.00

BILL 8 - DROP STRUCTURE B SV0879

6300 STEEL REINFORCEMENT FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
8.4	6300	STEEL REINFORCEMENT FOR STRUCTURES				
	63.01	Steel reinforcement for: (a)Suspended Channel				
8.4.1		(i) Mild steel bars	t	2.3	13 880.00	31 924.00
8.4.2		(ii) High yield stress steel bars (Type C)	t	23.0	13 880.00	319 240.00
		(b) Abutments and wing walls				
8.4.3		(i) Mild steel bars	t	9.0	13 880.00	124 920.00
8.4.4		(ii) High yield stress steel bars (Type C)	t	90.0	13 880.00	1 249 200.00
		(c) Piers				
8.4.5		(i) Mild steel bars	t	1.0	13 880.00	13 880.00
8.4.6		(ii) High yield stress steel bars (Type C)	t	10.0	13 880.00	138 800.00
		(b) Foundations				
8.4.7		(i) Mild steel bars	t	4.0	13 880.00	55 520.00
8.4.8		(ii) High yield stress steel bars (Type C)	t	39.0	13 880.00	541 320.00
Total Carried Forward To Summary						2 474 804.00

BILL 8 - DROP STRUCTURE B SV0879

8400 CONCRETE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
8.5	8400	CONCRETE FOR STRUCTURES				
	864.01	Cast in situ concrete:				
		(b) Class 30/19 MPa Concrete				
8.5.1		(i) Abutments and wing walls	m³	900.0	1 850.00	1 665 000.00
8.5.2		(ii) Curved Channel Suspended Slab	m³	192.0	1 850.00	355 200.00
8.5.3		(iii) Foundations	m³	486.0	1 850.00	899 100.00
8.5.4		(iv) Internal Walls	m³	98.3	1 850.00	181 855.00
Total Carried Forward To Summary						3 101 155.00

BILL 8 - DROP STRUCTURE B SV0879

ES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
8.6	8600	NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES				
	866.06	Filled joints:				
8.6.1		(c) Horizontal Isolation Joint at surface beds with 10mm jointex filler	m	77.0	105.00	8 085.00
8.6.2		(e) Inclined joints in curved channel Joint Type "E"	m	54.0	715.00	38 610.00
8.6.3		(f) Inclined joints in curved channel Joint Type "F"	m	13.5	562.00	7 587.00
8.6.4		(g) Vertical joints in retaining walls Joint Type "G"	m	70.0	710.00	49 700.00
8.6.5		(h) Horizontal dowel joint type "H"	m	15.0	682.00	10 230.00
	866.07	Unfilled joints:				
8.6.6		(b) Vertical Toggle Joint "Type A" in walls	m	120.0	262.00	31 440.00
8.6.7		(d) Saw-cut Joint in surface beds	m	34.7	27.00	936.90
	66.19	Drainage pipes and weepholes:				
		(a) Weep holes:				
8.6.8		(i) 50mm dia. uPVC weepholes at retaining walls (as shown on drawings)	m	160.4	510.00	81 804.00
	66.21	Synthetic-fibre filter fabric				
8.6.9		(a) Kaymat U34 geotextile fabric to cover abutment and wing walls earth faces and around netlon drainage pipes	m²	1 080.1	20.00	21 602.00
	866.28	Drainage strips				
8.6.10		(a) 200mm wide DN3 netlon drainage strips 2.5m c/c	m	1 465.4	50.00	73 270.00
8.6.11	866.29	Perforated drainage pipes - M65 Netlon drainage pipe or similar wrapped in Grade 2 geotextile (as specified in 2104 (a))	m	133.7	69.00	9 225.30
Total Carried Forward To Summary						332 490.20

BILL 8 - DROP STRUCTURE B SV0879

SUMMARY OF SECTIONS

Section	Description	Amount R
8.1	5100 PITCHING, STONWORK AND	83 160.00
8.2	6100 FOUNDATIONS FOR STRUCTURES	1 667 622.00
8.3	6200 FALSEWORK, FORMWORK AND	2 615 070.00
8.4	6300 STEEL REINFORCEMENT FOR	2 474 804.00
8.5	6400 CONCRETE FOR STRUCTURES	3 101 155.00
8.6	6600 NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR	332 490.20
Total Carried Forward To Summary Of Schedules		<u>10 274 301.20</u>

BILL 10 - DROP STRUCTURE C.SV1420.

5100 PITCHING, STONEWORK AND PROTECTION AGAINST EROSION

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R.
9.1	5100	PITCHING, STONEWORK AND PROTECTION AGAINST EROSION				
	51.03	Stone masonry walls:				
		(b) Cement-mortared stone walls				
9.1.1		(i) Sand stone cladding to RC walls inclusive of wall ties	m ²	52.8	1 575.00	83 160.00
Total Carried Forward To Summary						83 160.00

BILL 10 - DROP STRUCTURE C SV1420

5100 FOUNDATIONS FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
9.2	6100	FOUNDATIONS FOR STRUCTURES				
	61.01	Additional foundation investigations				
9.2.1		(a) Additional foundation investigation	PC sum	1.0	50 000.00	50 000.00
9.2.2		(b) Contractor's overhead profits, etc. on the payment item (a) above	%	50 000.00	10.00	5 000.00
		Excavation:				
9.2.3	61.02	(a) Excavating soft material situated within the following successive depth ranges: (I) 0 m up to 2 m	m³	2 113.0	45.00	95 085.00
9.2.4		(II) Exceeding 2 m and up to 4 m	m³	1 932.0	50.00	96 600.00
9.2.5		(III) Exceeding 4 m and up to 9 m	m³	3 910.0	65.00	254 150.00
9.2.6		(b) Extra over sub-item 61.02(a) for excavation in hard material irrespective of depth	m³	876.0	50.00	43 800.00
		Access and drainage:				
9.2.7	61.03	(a) Access	L/sum	1.0	310 000.00	310 000.00
9.2.8		(b) Drainage where no access has been provided	L/sum	1.0	150 000.00	150 000.00
		Backfill to excavations utilising:				
9.2.9	61.04	(a) Material from the excavation	m³	4 855.0	52.00	252 460.00
9.2.10	B61.05	Fill within a restricted area (extra over)	m³	4 073.0	31.00	126 263.00
	61.08	Foundation fill consisting of:				
9.2.11		(d) 75mm blinding (Class 15/19 MPa)	m²	62.0	1 765.00	109 430.00
9.2.12	B61.60	Establishment on the site for 300mm diaphragm wall	L Sum	1.0	2 750.00	2 750.00
	B61.61	Excavation for 300mm diaphragm wall:				
9.2.13		(i) 0 m up to 4 m	m³	34.7	720.00	24 964.00
	B61.62	Extra over item B61.61, irrespective of the depth, through obstructions consisting of:				
9.2.14		(a) Hard rock	m³	6.9	720.00	4 968.00
	B61.63	Steel reinforcement in cast in situ diaphragm wall:				
9.2.15		(a) Mild steel bars	t	0.3	13 880.00	4 164.00
9.2.16		(b) High yield stress-steel bars of type C	t	3.5	13 880.00	48 580.00
	B61.64	Lateral support to excavations				
Total Carried Forward						1 578 234.00

BILL 10 - DROP STRUCTURE C SV1420

6100 FOUNDATIONS FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
Brought Forward:						1 578 234.00
9.2.17		(i) 0 to 5 m depth	L/sum	1.0	88 000.00	88 000.00
Total Carried Forward To Summary						1 666 234.00

BILL 10 - DROP STRUCTURE C SV1420

6200 FALSEWORK, FORMWORK AND CONCRETE FINISH

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
9.3	6200	FALSEWORK, FORMWORK AND CONCRETE FINISH				
	62.02	Vertical formwork to provide:				
		(a) Class F1 surface finish to:				
9.3.1		(i) Abutments and wing walls	m²	1 526.7	550.00	839 685.00
9.3.2		(ii) Foundations	m²	200.6	500.00	100 300.00
		(b) Class F2 surface finish to:				
9.3.3		(i) Abutments and wing walls	m²	1 526.7	550.00	839 685.00
9.3.4		(iv) Internal walls	m²	786.0	550.00	432 300.00
	B62.04	Inclined formwork to provide:				
9.3.5		(i) Curved channel soffit	m²	242.6	1 600.00	388 160.00
		Formwork to form open joints				
9.3.6	62.06	(a) Between face of channel panels	m²	24.9	600.00	14 940.00
Total Carried Forward To Summary						2 615 070.00

BILL 10 - DROP STRUCTURE C-SV1420

6300 STEEL REINFORCEMENT FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
9.4	6300	STEEL REINFORCEMENT FOR STRUCTURES				
	63.01	Steel reinforcement for: Suspended Channel (a)				
9.4.1		(i) Mild steel bars	t	2.3	13 880.00	31 924.00
9.4.2		(ii) High yield stress steel bars (Type C)	t	23.0	13 880.00	319 240.00
		(b) Abutments and wing walls				
9.4.3		(i) Mild steel bars	t	9.0	13 880.00	124 920.00
9.4.4		(ii) High yield stress steel bars (Type C)	t	90.0	13 880.00	1 249 200.00
		(c) Piers				
9.4.5		(i) Mild steel bars	t	1.0	13 880.00	13 880.00
9.4.6		(ii) High yield stress steel bars (Type C)	t	10.0	13 880.00	138 800.00
		(b) Foundations				
9.4.7		(i) Mild steel bars	t	4.0	13 880.00	55 520.00
9.4.8		(ii) High yield stress steel bars (Type C)	t	39.0	13 880.00	541 320.00
Total Carried Forward To Summary						2 474 804.00

BILL 10 - DROP STRUCTURE C.SV1420

6400 CONCRETE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
9.6	6400	CONCRETE FOR STRUCTURES				
	64.01	Cast in situ concrete:				
		(b) Class 30/19 MPa Concrete				
9.5.1		(i) Abutments and wing walls	m ²	899.6	1 850.00	1 664 260.00
9.5.2		(ii) Curved Channel	m ²	191.7	1 850.00	354 845.00
9.5.3		(iii) Foundations	m ³	486.0	1 850.00	899 100.00
9.5.4		(iv) Internal Walls	m ³	98.3	1 850.00	181 855.00
Total Carried Forward To Summary						3 099 860.00

BILL 10 - DROP STRUCTURE C SV1420

ES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
9.6	86600	NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES				
	866.06	Filled joints:				
9.6.1		(c) Horizontal Isolation Joint at surface beds with 10mm jointex filler	m	77.0	105.00	8 085.00
9.6.2		(e) Inclined joints in curved channel Joint Type "E"	m	54.0	715.00	38 610.00
9.6.3		(f) Inclined joints in curved channel Joint Type "F"	m	13.5	562.00	7 587.00
9.6.4		(g) Vertical joints in retaining walls Joint Type "G"	m	70.0	710.00	49 700.00
9.6.5		(h) Horizontal dowel joint type "H"	m	15.0	682.00	10 230.00
	866.07	Unfilled joints:				
9.6.6		(b) Vertical Toggle Joint "Type A" in walls	m	120.0	262.00	31 440.00
9.6.7		(d) Saw-cut Joint in surface beds	m	34.7	27.00	938.90
	866.08	Sealing joints with:				
9.6.8		(c) Horizontal Isolation Joint at surface beds with polyurethane joint sealant	m	77.0	106.00	8 085.00
	866.19	Drainage pipes and weepholes:				
		(b) Weep holes:				
9.6.9		(f) 50mm dia. uPVC weepholes at retaining walls (as shown on drawings)	m	160.4	510.00	81 804.00
	866.21	Synthetic-fibre filter fabric				
9.6.10		(a) Kaymat U34 geotextile fabric to cover abutment and wing walls earth faces and around netlon drainage pipes	m ²	1 080.1	20.00	21 602.00
	866.28	Drainage strips				
9.6.11		(a) 200mm wide DN3 netlon drainage strips 2.5m c/c	m	1 465.4	50.00	73 270.00
9.6.12	866.29	Perforated drainage pipes - M65 Netlon drainage pipe or similar wrapped in Grade 2 geotextile (as specified in 2104 (a))	m	133.7	69.00	9 226.30
Total Carried Forward To Summary						340 575.20

BILL 10 - DROP STRUCTURE C SV1420

SUMMARY OF SECTIONS

Section	Description	Amount R
9.1	5100 PITCHING, STONWORK AND	83 160.00
9.2	6100 FOUNDATIONS FOR STRUCTURES	1 866 234.00
9.3	6200 FALSEWORK, FORMWORK AND	2 615 070.00
9.4	6300 STEEL REINFORCEMENT FOR	2 474 804.00
9.5	6400 CONCRETE FOR STRUCTURES	3 099 860.00
9.6	6600 NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR	340 575.20
Total Carried Forward To Summary Of Schedules		<u>10 279 703.20</u>

BILL 10 - DROP STRUCTURE D SV2016

5100 PITCHING, STONEWORK AND PROTECTION AGAINST EROSION

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
10.1	5100	PITCHING, STONEWORK AND PROTECTION AGAINST EROSION				
	51.03	Stone masonry walls				
		(b) Cement-mortared stone walls				
10.1.1		(i) Sand stone cladding to RC walls inclusive of wall ties	m²	52.8	1 575.00	83 160.00
Total Carried Forward To Summary						83 160.00

BILL 10 - DROP STRUCTURE D SV2016

6100 FOUNDATIONS FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
10.2	6100	FOUNDATIONS FOR STRUCTURES				
	61.01	Additional foundation investigations				
10.2.1		(a) Additional foundation investigation	PC sum	1.0	50 000.00	50 000.00
10.2.2		(b) Contractor's overhead profits, etc. on the payment item (a) above	%	50 000.00	10.00	5 000.00
		Excavation:				
		(a) Excavating soft material situated within the following successive depth ranges:				
10.2.3	61.02	(i) 0 m up to 2 m	m³	2 113.0	45.00	95 085.00
10.2.4		(ii) Exceeding 2 m and up to 4 m	m³	1 932.0	50.00	96 600.00
10.2.5		(iii) Exceeding 4 m and up to 9 m	m³	3 910.0	65.00	254 150.00
10.2.6		(b) Extra over sub-item 61.02(a) for excavation in hard material irrespective of depth	m³	876.0	280.00	245 280.00
		Access and drainage:				
10.2.7	61.03	(a) Access	L/sum	1.0	310 000.00	310 000.00
10.2.8		(b) Drainage where no access has been provided	L/sum	1.0	150 000.00	150 000.00
		Backfill to excavations utilising:				
10.2.9	61.04	(a) Material from the excavation	m³	4 855.0	52.00	252 460.00
10.2.10	B61.05	Fill within a restricted area (extra over)	m³	4 073.0	31.00	126 263.00
	61.08	Foundation fill consisting of:				
10.2.11		(d) 75mm blinding (Class 15/19 MPa)	m²	62.0	1 765.00	109 430.00
10.2.12	B61.60	Establishment on the site for 300mm diaphragm wall	L/ Sum	1.0	2 750.00	2 750.00
	B61.61	Excavation for 300mm diaphragm wall				
10.2.13		(i) 0 m up to 4 m	m³	34.7	720.00	24 984.00
	B61.62	Extra over item B61.61. Irrespective of depth, through obstructions consisting of:				
10.2.14		(a) Hard rock	m³	6.9	720.00	4 968.00
	B61.63	Steel reinforcement in cast in situ piles:				
Total Carried Forward						1 726 970.00

BILL 10 - DROP STRUCTURE D.SV2016

6100 FOUNDATIONS FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
Brought Forward						1 726 970.00
10.2.15		(a) Mild steel bars	t	0.3	13 880.00	4 164.00
10.2.16		(b) High yield stress-steel bars of type C	t	3.5	13 880.00	48 580.00
	B61,64	Lateral support to excavations or to retain road fill				
10.2.17		(i) 0 to 5 m depth	L/sum	1.0	88 000.00	88 000.00
Total Carried Forward To Summary						1 867 714.00

BILL 10 - DROP STRUCTURE D SV2016

6200 FALSEWORK, FORMWORK AND CONCRETE FINISH

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
10.3	6200	FALSEWORK, FORMWORK AND CONCRETE FINISH				
	62.02	Vertical formwork to provide:				
		(a) Class F1 surface finish to:				
10.3.1		(i) Abutments and wing walls	m²	1 526.7	550.00	839 685.00
10.3.2		(ii) Foundations	m²	200.6	500.00	100 300.00
		(b) Class F2 surface finish to:				
10.3.3		(i) Abutments and wing walls	m²	1 526.7	550.00	839 685.00
10.3.4		(iv) Internal walls	m²	786.0	550.00	432 300.00
	62.04	Inclined formwork to provide:				
10.3.5		(i) Curved channel soffit	m²	242.6	1 600.00	388 160.00
10.3.8	62.06	Formwork to form open joints (Between face of channel panels)	m²	24.9	600.00	14 940.00
Total Carried Forward To Summary						2 615 070.00

BILL 10- DROP STRUCTURE D SV2016

6300 STEEL REINFORCEMENT FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
10.4	6300	STEEL REINFORCEMENT FOR STRUCTURES				
	63.01	Steel reinforcement for:				
		(a) Suspended Channel				
10.4.1		(i) Mild steel bars	l	2.3	13 880.00	31 924.00
10.4.2		(ii) High yield stress steel bars (Type C)	l	23.0	13 880.00	319 240.00
		(b) Abutments and wing walls				
10.4.3		(i) Mild steel bars	l	9.0	13 880.00	124 920.00
10.4.4		(ii) High yield stress steel bars (Type C)	l	90.0	13 880.00	1 249 200.00
		(c) Piers				
10.4.5		(i) Mild steel bars	l	1.0	13 880.00	13 880.00
10.4.6		(ii) High yield stress steel bars (Type C)	l	10.0	13 880.00	138 800.00
		(d) Foundations:				
10.4.7		(i) Mild steel bars	l	4.0	13 880.00	55 520.00
10.4.8		(ii) High yield stress steel bars (Type C)	l	39.0	13 880.00	541 320.00
Total Carried Forward To Summary						2 474 804.00

BILL 10 - DROP STRUCTURE D SV2016

6400 CONCRETE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
10.5	6400	CONCRETE FOR STRUCTURES				
	64.01	Cast in situ concrete:				
		(b) Class 30/19 MPa Concrete				
10.5.1		(i) Abutments and wing walls	m ³	900.0	1 850.00	1 665 000.00
10.5.2		(ii) Curved Channel Suspended slab	m ³	191.7	1 850.00	354 645.00
10.5.3		(iii) Foundations	m ³	486.0	1 850.00	899 100.00
10.5.4		(iv) Internal Walls	m ³	98.3	1 850.00	181 855.00
Total Carried Forward To Summary						3 100 600.00

BILL 10 - DROP STRUCTURE D-SV2016

ES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
10.6	6600	NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES				
	666.06	Filled joints:				
10.6.1		(c) Horizontal Isolation Joint at surface beds with 10mm jointex filler	m	77.0	105.00	8 065.00
10.6.2		(e) inclined joints in curved channel Joint Type "E"	m	64.0	715.00	38 610.00
10.6.3		(f) inclined joints in curved channel Joint Type "F"	m	13.5	562.00	7 587.00
10.6.4		(g) Vertical joints in retaining walls Joint Type "G"	m	70.0	710.00	49 700.00
10.6.5		(h) Horizontal dowel joint Type "H"	m	15.0	682.00	10 230.00
	666.07	Unfilled joints:				
10.6.6		(b) Vertical Toggle Joint "Type A" in walls	m	120.0	262.00	31 440.00
10.6.7		(d) Saw-cut Joint in surface beds	m	34.7	27.00	936.90
	66.19	Drainage pipes and weepholes:				
		(a) Weep holes:				
10.6.8		(i) 50mm dia. uPVC weepholes at retaining walls (as shown on drawings)	m	160.4	510.00	81 804.00
	66.21	Synthetic-fibre filter fabric				
10.6.9		(a) Kaymat U34 geotextile fabric to cover abutment and wing walls earth faces and around neilon drainage pipes	m²	1 080.1	20.00	21 602.00
	666.28	Drainage strips				
10.6.10		(a) 200mm wide DN3 neilon drainage strips 2.5m c/c	m	1 465.4	50.00	73 270.00
10.6.11	666.29	Perforated drainage pipes - M55 Neilon drainage pipe or similar wrapped in Grade 2 geotextile (as specified in 2104 (a))	m	133.7	69.00	9 225.30
Total Carried Forward To Summary						332 480.20

BILL 10 - DROP STRUCTURE D SV2016

SUMMARY OF SECTIONS

Section	Description	Amount R
10.1	5100 PITCHING, STONWORK AND	83 160.00
10.2	6100 FOUNDATIONS FOR STRUCTURES	1 887 714.00
10.3	6200 FALSEWORK, FORMWORK AND	2 615 070.00
10.4	6300 STEEL REINFORCEMENT FOR	2 474 804.00
10.5	6400 CONCRETE FOR STRUCTURES	3 100 600.00
10.6	6600 NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR	332 490.20
Total Carried Forward To Summary Of Schedules		<u>10 473 838.20</u>

BILL 11 - PEDESTRIAN BRIDGE AT DROP STRUCTURE B

4700 SURFACING OF BRIDGE DECKS

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
11.1	4700	SURFACING OF BRIDGE DECKS				
	847.01	Surfacing on bridge deck				
11.1.1		(ii) 25 mm thickness premix (Inclusive of prime coat)	t	6.8	1 765.00	12 002.00
Total Carried Forward To Summary						12 002.00

BILL 11 - PEDESTRIAN BRIDGE AT DROP STRUCTURE B

6200 FALSEWORK, FORMWORK AND CONCRETE FINISH

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
11.2	6200	FALSEWORK, FORMWORK AND CONCRETE FINISH				
	62.02	Vertical formwork to provide:				
		(a) Class F1 surface finish to:				
11.2.1		(i) Bridge Beam internal faces	m²	100.0	550.00	55 000.00
		(b) Class F2 surface finish to:				
11.2.2		(ii) Deck sides	m²	13.0	575.00	7 475.00
	62.03	Horizontal formwork to provide:				
		(b) Class F2 surface finish to:				
11.2.3		(i) Bridge Beam soffit	m²	44.0	3 452.00	151 888.00
	662.04	Inclined formwork to provide:				
		(a) Class F1 surface finish to:				
11.2.4		(i) Bridge Beam internal haunches	m²	18.0	575.00	10 350.00
		(b) Class F2 surface finish to:				
11.2.5		(i) Deck soffit	m²	60.0	3 452.00	207 120.00
11.2.6		(ii) Bridge Beam side walls	m²	88.0	600.00	52 800.00
	662.05	Permanent formwork:				
11.2.7		(a) 30mm precast planks to form void	m²	28.0	600.00	16 800.00
	62.06	Formwork to form open joints				
11.2.8		(a) Between face beam and curtain wall	m²	8.9	600.00	5 340.00
Total Carried Forward To Summary						506 773.00

BILL 11 - PEDESTRIAN BRIDGE AT DROP STRUCTURE B

6300 STEEL REINFORCEMENT FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
11.3	6300	STEEL REINFORCEMENT FOR STRUCTURES				
	63.01	Steel reinforcement for:				
		(a) Bridge Beam and deck				
11.3.1		(i) Mild steel bars	t	1.0	13 880.00	13 880.00
11.3.2		(ii) High yield stress steel bars (type C)	t	10.3	13 880.00	142 964.00
Total Carried Forward To Summary						156 844.00

BILL 11 - PEDESTRIAN BRIDGE AT DROP STRUCTURE B

6400 CONCRETE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
11.4	6400	CONCRETE FOR STRUCTURES				
	B64.01	Cast in situ concrete:				
		(d) Class 60MPa/13mm				
11.4.1		(II) Bridge Beam and Deck	m³	57.0	2 176.00	124 032.00
	B64.07	Curing of concrete				
11.4.2		(i) Exposed concrete faces	m²	297.0	35.00	10 395.00
11.4.3	B64.08	Hot weather concreting	L Sum	1.0	8 000.00	8 000.00
Total Carried Forward To Summary						142 427.00

BILL 11 - PEDESTRIAN BRIDGE AT DROP STRUCTURE B

6500 PRESTRESSING

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
11.5	6500	PRESTRESSING				
	655.01	Prestressing tendons:				
11.5.1		(a) Longitudinal tendons	MN-m	636.0	210.00	133 560.00
	65.02	Anchorage and couplers:				
11.5.2		(a) Anchorage	MN	15.9	3 100.00	49 290.00
11.5.3		(c) Couplers	MN	15.9	1 680.00	26 712.00
Total Carried Forward To Summary						209 562.00

BILL 11 - PEDESTRIAN BRIDGE AT DROP STRUCTURE B

S CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
11.6	6600	NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES				
	866.05	Expansion joints:				
11.6.1		(a) Claw joint or similar approved in deck over abutments and piers (40mm movement capacity)	m	6.0	15 150.00	90 900.00
	66.11	Bearings				
11.6.2		(a) Elastomeric bearing (250 x 200 x 41mm)	No	4.0	3 850.00	15 400.00
Total Carried Forward To Summary						106 300.00

BILL 11 - PEDESTRIAN BRIDGE AT DROP STRUCTURE B

5700 STRUCTURAL STEELWORK

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
11.7	6700	STRUCTURAL STEELWORK				
	67.01	Structural steel:				
11.7.1		(a) Balustrades as per drawing 4974-0088-DGA-S100	m	88.0	2 100.00	184 800.00
11.7.2		(b) 1m high tubular handrails and stanchions with knee rail as per drawing 4974-0088-DGA-S100	m	140.0	1 000.00	140 000.00
Total Carried Forward To Summary						324 800.00

BILL 11 - PEDESTRIAN BRIDGE AT DROP STRUCTURE B

8100 TESTING OF MATERIALS AND WORKMANSHIP

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
11.8	8100	TESTING OF MATERIALS AND WORKMANSHIP				
11.8.1	B81.01	Special tests on elastomeric bearings (150% vertical load and 150% shear distortion) as described in subclause 6604(d)	No	4.0	185.00	740.00
Total Carried Forward To Summary						740.00

BILL 11 - PEDESTRIAN BRIDGE AT DROP STRUCTURE B

SUMMARY OF SECTIONS

Section	Description	Amount R
11.1	4700 SURFACING OF BRIDGE DECKS	12 002.00
11.2	6200 FALSEWORK, FORMWORK AND	506 773.00
11.3	6300 STEEL REINFORCEMENT FOR	158 844.00
11.4	6400 CONCRETE FOR STRUCTURES	142 427.00
11.5	6500 PRESTRESSING	209 562.00
11.6	6600 NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR	106 300.00
11.7	6700 STRUCTURAL STEELWORK	324 800.00
11.8	8100 TESTING OF MATERIALS AND	740.00
Total Carried Forward To Summary Of Schedules		<u>1 459 448.00</u>

BILL 12 - VEHICLE BRIDGE AT DROP STRUCTURE C

4700 SURFACING OF BRIDGE DECKS

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
12.1	4700	SURFACING OF BRIDGE DECKS				
	B47.01	Surfacing on bridge deck				
12.1.1		(i) 40 mm thickness premix (Inclusive of prime coat)	t	11.1	1 765.00	19 591.50
Total Carried Forward To Summary						19 591.50

BILL 12 - VEHICLE BRIDGE AT DROP STRUCTURE C

6200 FALSEWORK, FORMWORK AND CONCRETE FINISH

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
12.2	6200	FALSEWORK, FORMWORK AND CONCRETE FINISH				
	62.02	Vertical formwork to provide:				
		(a) Class F1 surface finish to:				
12.2.1		(i) Bridge Beam internal face	m²	200.0	550.00	110 000.00
		(b) Class F2 surface finish to:				
12.2.2		(ii) Deck sides	m²	15.0	575.00	8 625.00
	62.03	Horizontal formwork to provide:				
		(b) Class F2 surface finish to:				
12.2.3		(i) Bridge Beam soffit	m²	91.0	3 452.00	314 132.00
	B62.04	Inclined formwork to provide:				
		(a) Class F1 surface finish to:				
12.2.4		(i) Bridge Beam internal haunches	m²	36.0	575.00	20 700.00
		(b) Class F2 surface finish to:				
12.2.5		(i) Deck soffit	m²	60.0	3 452.00	207 120.00
12.2.6		(ii) Bridge Beam side walls	m²	88.0	600.00	52 800.00
	B62.05	Permanent formwork:				
12.2.7		(a) 30mm precast planks to form void	m²	56.0	600.00	33 600.00
Total Carried Forward To Summary						746 977.00

BILL 12 - VEHICLE BRIDGE AT DROP STRUCTURE C

6300 STEEL REINFORCEMENT FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
12.3	6300	STEEL REINFORCEMENT FOR STRUCTURES				
	63.01	Steel reinforcement for:				
		(a) Bridge Beam and deck				
12.3.1		(i) Mild steel bars	t	1.9	13 680.00	26 372.00
12.3.2		(ii) High yield stress steel bars (type C)	t	19.2	13 880.00	266 496.00
Total Carried Forward To Summary						292 868.00

BILL 12 - VEHICLE BRIDGE AT DROP STRUCTURE C

6400 CONCRETE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
12.4	8400	CONCRETE FOR STRUCTURES				
	B64.01	Cast in situ concrete:				
		(c) Class 80MPa/13mm concrete				
12.4.1		(ii) Bridge Beam (Class W30/19 MPa)	m³	106.6	2 176.00	231 961.60
	B64.07	Curing of concrete				
12.4.2		(i) Exposed concrete faces	m²	404.0	35.00	14 140.00
12.4.3	B64.08	Hot weather concreting	L Sum	1.0	8 000.00	8 000.00
Total Carried Forward To Summary						254 101.60

BILL 12 - VEHICLE BRIDGE AT DROP STRUCTURE C

6500 PRESTRESSING

Item	Payment	Item Description	Unit	Quantity	Rate	Amount
12.5	6500	PRESTRESSING				
	65.01	Prestressing tendons:				
12.5.1		(a) Longitudinal tendons	MN-m	1 210.0	210.00	254 100.00
	65.02	Anchorage and couplers:				
12.5.2		(a) Anchorage	MN	30.0	3 100.00	93 000.00
12.5.3		(c) Coupler	MN	30.0	1 680.00	50 400.00
Total Carried Forward To Summary						397 500.00

BILL 12 - VEHICLE BRIDGE AT DROP STRUCTURE C
S CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
12.6	6600.	NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES				
	866.05	Expansion joints:				
12.6.1		(a) Claw joint or similar approved in deck over abutments and piers (40mm movement capacity)	m	8.0	15 870.00	126 960.00
	66.11	Bearings				
12.6.2		(a) Elastomeric bearing (250 x 200 x 41mm)	No	4.0	3 850.00	15 400.00
Total Carried Forward To Summary						142 360.00

BILL 12 - VEHICLE BRIDGE AT DROP STRUCTURE C

6700 STRUCTURAL STEELWORK

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
12.7	6700	STRUCTURAL STEELWORK				
	67.01	Structural steel:				
12.7.1		(a) Balustrades as per drawing 4974-0142-DGA-S100	m	88.0	2 100.00	184 800.00
12.7.2		(b) 1m high tubular handrails and stanchions with knee rail as per drawing 4974-0088-DGA-S100	m	140.0	1 000.00	140 000.00
Total Carried Forward To Summary						324 800.00

BILL 12 - VEHICLE BRIDGE AT DROP STRUCTURE C

8100 TESTING OF MATERIALS AND WORKMANSHIP

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
12.8	8100	TESTING OF MATERIALS AND WORKMANSHIP				
12.8.1	881.01	Special tests on elastomeric bearings (150% vertical load and 150% shear distortion) as described in subclause 6604(d)	No	4.0	185.00	740.00
Total Carried Forward To Summary						740.00

BILL 12 - VEHICLE BRIDGE AT DROP STRUCTURE C

SUMMARY OF SECTIONS

Section	Description	Amount R
12.1	4700 SURFACING OF BRIDGE DECKS.	19 591.50
12.2	6200 FALSEWORK, FORMWORK AND	746 977.00
12.3	6300 STEEL REINFORCEMENT FOR	292 868.00
12.4	6400 CONCRETE FOR STRUCTURES	254 101.60
12.5	6500 PRESTRESSING	397 500.00
12.6	6600 NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR	142 360.00
12.7	6700 STRUCTURAL STEELWORK	324 800.00
12.8	8100 TESTING OF MATERIALS AND	740.00
Total Carried Forward To Summary Of Schedules		<u>2 178 938.10</u>

BILL 14 - PEDESTRIAN BRIDGE AT DROP STRUCTURE D-SV2016

4700 SURFACING OF BRIDGE DECKS

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
13.1	4700	SURFACING OF BRIDGE DECKS				
	B47.01	Surfacing on bridge deck				
13.1.1		(1) 25 mm thickness premix (inclusive of prime coat)	t	6.8	1 765.00	12 002.00
Total Carried Forward To Summary						12 002.00

BILL 14 - PEDESTRIAN BRIDGE AT DROP STRUCTURE D SV2016

6200 FALSEWORK, FORMWORK AND CONCRETE FINISH

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
13.2	6200	FALSEWORK, FORMWORK AND CONCRETE FINISH				
	62.02	Vertical formwork to provide:				
	B62.04	(a) Class F1 surface finish to:				
13.2.1		(i) Bridge Beam internal faces	m ²	100.0	550.00	55 000.00
		(b) Class F2 surface finish to:				
13.2.2		(ii) Deck sides	m ²	13.0	500.00	6 500.00
	62.03	Horizontal formwork to provide:				
		(b) Class F2 surface finish to:				
13.2.3		(i) Bridge Beam soffit	m ²	44.1	3 452.00	152 233.20
		Inclined formwork to provide:				
	B62.04	(a) Class F1 surface finish to:				
13.2.4		(i) Bridge Beam internal haunches	m ²	18.0	500.00	9 000.00
		(b) Class F2 surface finish to:				
13.2.5		(i) Deck soffit	m ²	60.0	3 452.00	207 120.00
13.2.6		(ii) Bridge Beam side walls	m ²	86.0	600.00	52 800.00
	B62.05	Permanent formwork:				
13.2.7		(a) 30mm precast planks to form void	m ²	28.0	600.00	16 800.00
	62.06	Formwork to form open joints				
13.2.8		(a) Between face beam and curtain wall	m ²	8.9	600.00	5 340.00
Total Carried Forward To Summary						504 793.20

BILL 14 - PEDESTRIAN BRIDGE AT DROP STRUCTURE D SV2016

6300 STEEL REINFORCEMENT FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
13.3	6300	STEEL REINFORCEMENT FOR STRUCTURES				
	63.01	Steel reinforcement for:				
		(a) Bridge Beam and deck				
13.3.1		(i) Mild steel bars	t	1.0	13 880.00	13 880.00
13.3.2		(ii) High yield stress steel bars (type C)	t	10.3	13 880.00	142 964.00
Total Carried Forward To Summary						156 844.00

BILL 14 - PEDESTRIAN BRIDGE AT DROP STRUCTURE D SV2018

6400 CONCRETE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
13.4	6400	CONCRETE FOR STRUCTURES				
	B64.01	Cast in situ concrete:				
		(c) Class 60MPa/13mm concrete				
13.4.1		(ii) Bridge Beam and Deck	m³	57.0	2 176.00	124 032.00
	B64.07	Curing of concrete				
13.4.2		(i) Exposed concrete faces	m²	297.0	35.00	10 395.00
13.4.3	B64.08	Hot weather concreting	L Sum	1.0	8 000.00	8 000.00
Total Carried Forward To Summary						142 427.00

BILL 14 - PEDESTRIAN BRIDGE AT DROP STRUCTURE D SV2016

6500 PRESTRESSING

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
13.5	6500	PRESTRESSING				
	65.01	Prestressing tendons:				
13.5.1		(a) Longitudinal tendons	MN-m	636.0	210.00	133 560.00
	65.02	Anchorage and couplers:				
13.5.2		(a) Anchorage	MN	15.9	3 100.00	49 290.00
13.5.3		(c) Coupler	MN	15.9	1 680.00	26 712.00
Total Carried Forward To Summary						209 562.00

BILL 14 - PEDESTRIAN BRIDGE AT DROP STRUCTURE D SV2016

S CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
13.6	6600	NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES				
	B66.05	Expansion joints:				
13.6.1		(a) Claw joint or similar approved in deck over abutments and piers (40mm movement capacity)	m	6.0	15 150.00	90 900.00
	B66.11	Bearings				
13.6.2		(a) Elastomeric bearing (250 x 200 x 41mm)	No	4.0	3 850.00	15 400.00
Total Carried Forward To Summary						106 300.00

BILL 14 - PEDESTRIAN BRIDGE AT DROP STRUCTURE D SV2016

6700 STRUCTURAL STEELWORK

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
13.7	6700	STRUCTURAL STEELWORK				
	67.01	Structural steel:				
13.7.1		(a) Balustrades as per drawing 4974-0202-DGA-S100	m	88.0	2 100.00	184 800.00
13.7.2		(b) 1m high tubular handrails and stanchions with knee rail as per drawing 4974-0088-DGA-S100	m	140.0	1 000.00	140 000.00
Total Carried Forward To Summary						324 800.00

BILL 14 - PEDESTRIAN BRIDGE AT DROP STRUCTURE D SV2016

TESTING OF MATERIALS AND WORKMANSHIP

Item	Payment	Item Description	Unit	Quantity	Rate	Amount-R
13.8	8100	TESTING OF MATERIALS AND WORKMANSHIP				
13.8.1	B81.01	Special tests on elastomeric bearings (150% vertical load and 150% shear distortion) as described in subclause 6604(d)	No	4.0	185.00	740.00
Total Carried Forward To Summary						740.00

BILL 14 - PEDESTRIAN BRIDGE AT DROP STRUCTURE D SV2016

SUMMARY OF SECTIONS

Section	Description	Amount R
13.1	4700 SURFACING OF BRIDGE DECKS	12 002.00
13.2	6200 FALSEWORK, FORMWORK AND	504 793.20
13.3	6300 STEEL REINFORCEMENT FOR	156 844.00
13.4	6400 CONCRETE FOR STRUCTURES	142 427.00
13.5	6500 PRESTRESSING	209 562.00
13.6	6600 NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR	106 300.00
13.7	6700 STRUCTURAL STEELWORK	324 800.00
13.8	TESTING OF MATERIALS AND WORKMANSHIP	740.00
Total Carried Forward To Summary Of Schedules		<u>1 457 468.20</u>

BILL 14 - BRIDGE SV A1182 - 12M CLIPPER CRESCENT BRIDGE

4700 SURFACING OF BRIDGE DECKS

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
14.1	4700	SURFACING OF BRIDGE DECKS				
	847.01	Surfacing on bridge deck				
14.1.1		(i) Timber decking inclusive of installation	m²	25.2	1 250.00	31 500.00
Total Carried Forward To Summary						31 500.00

BILL 14 - BRIDGE SV A1182 - 12M CLIPPER CRESCENT BRIDGE

5200 GABIONS

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
14.2	5200	GABIONS				
	52.03	Gabions:				
14.2.1		(i) 1mx1mx1m, mesh size 80 mm x 100 mm nominal diameter of mesh size 2,2 mm, and 1 m diaphragm	m ³	24.0	1 740.00	41 760.00
Total Carried Forward To Summary						41 760.00

BILL 14 - BRIDGE SV A1182 - 12M CLIPPER CRESCENT BRIDGE

6100 FOUNDATIONS FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
14.3	6100	FOUNDATIONS FOR STRUCTURES				
	61.01	Additional foundation investigations				
14.3.1		(a) Additional foundation investigation	PC sum	1.0	20 000.00	20 000.00
14.3.2		(b) Contractor's overhead profits, etc. on the payment item (a) above	%	20 000.00	10.00	2 000.00
14.3.3	61.02	Excavation:				
		(a) Excavating soft material situated within the following successive depth ranges:				
14.3.4		(i) 0 m up to 2 m	m ³	25.0	105.00	2 625.00
14.3.5		(b) Extra over sub-item 61.02(a) for excavation in hard material irrespective of depth	m ³	3.0	50.00	150.00
	61.04	Backfill to excavations utilising:				
14.3.6		(b) Imported Material (G7 free draining)	m ³	15.0	280.00	4 200.00
14.3.7		(c) Soil cement	m ³	0.0	992.00	0.00
14.3.8	B61.05	Fill within a restricted area (extra over)	m ³	15.0	31.00	465.00
	61.08	Foundation fill consisting of:				
14.3.9		(d) 75mm blinding (Class 15/19 MPa)	m ³	1.3	1 765.00	2 294.50
Total Carried Forward To Summary						31 734.50

BILL 14 - BRIDGE SV A1182 - 12M CLIPPER CRESCENT BRIDGE

6200 FALSEWORK, FORMWORK AND CONCRETE FINISH

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
14.4	6200	FALSEWORK, FORMWORK AND CONCRETE FINISH				
	62.02	Vertical formwork to provide:				
		(a) Class F1 surface finish to:				
14.4.1		(i) Abutments and wing walls	m²	24.0	550.00	13 200.00
14.4.2		(ii) Foundations	m²	8.1	500.00	4 050.00
		(b) Class F2 surface finish to:				
14.4.3		(i) Abutments and wing walls	m²	24.0	575.00	13 800.00
Total Carried Forward To Summary						31 050.00

BILL 14 - BRIDGE SV A1182 - 12M CLIPPER CRESCENT BRIDGE

6300 STEEL REINFORCEMENT FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
14.5	6300	STEEL REINFORCEMENT FOR STRUCTURES				
	63.01	Steel reinforcement for:				
		(a) Abutments and wing walls				
14.5.1		(i) Mild steel bars	t	0.1	13 880.00	1 388.00
14.5.2		(ii) High yield stress steel bars (type C)	t	0.8	13 880.00	11 104.00
		(b) Foundations				
14.5.3		(i) Mild steel bars	t	0.1	13 880.00	1 388.00
14.5.4		(ii) High yield stress steel bars (type C)	t	0.5	13 880.00	6 940.00
Total Carried Forward To Summary						20 820.00

BILL 14 - BRIDGE SV A1182 - 12M CLIPPER CRESCENT BRIDGE

6400 CONCRETE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
14.6	6400	CONCRETE FOR STRUCTURES				
	664.01	Cast in situ concrete:				
		(a) Class 30MPa/19mm Concrete:				
14.6.1		(i) Abutments and wing walls	m ²	8.0	1 850.00	14 800.00
14.6.2		(ii) Foundations	m ³	6.0	1 850.00	11 100.00
Total Carried Forward To Summary						25 900.00

BILL 14 - BRIDGE SV A1182 - 12M CLIPPER CRESCENT BRIDGE

S CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
14.7	6600	NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES				
	66.11	Bearings				
14.7.1		(a) Elastomeric bearing (200 x 150 x 22mm)	No	4.0	1 650.00	6 600.00
	66.19	Drainage pipes and weepholes:				
		(a) Weepholes:				
14.7.2		(i) 50mm dia. uPVC Scupper pipes	m	2.4	510.00	1 224.00
	66.21	Synthetic-fibre filter fabric:				
14.7.3		(a) Koymat U34 geotextile fabric to cover abutment and wing walls earth faces and around netlon drainage pipes	m²	24.0	19.00	456.00
Total Carried Forward To Summary						8 280.00

BILL 14 - BRIDGE SV A1182 - 12M CLIPPER CRESCENT BRIDGE

6700 STRUCTURAL STEELWORK

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
14.8	6700	STRUCTURAL STEELWORK				
	B67.01	Structural steel:				
14.8.1		(a) Through Truss and Deck Frame	t	1.6	33 100.00	52 960.00
	B67.03	Corrosion protection:				
		(a) Sprayed on metal				
14.8.2		(i) Duplex epoxy and polyurethane paint system	m²	31.9	280.00	8 932.00
		(b) Hot-dip galvanising				
14.8.3		(i) Through Truss and Deck Frame	t	1.6	11 550.00	18 480.00
Total Carried Forward To Summary						80 372.00

BILL 14 - BRIDGE SV A1182 - 12M CLIPPER CRESCENT BRIDGE

SUMMARY OF SECTIONS

Section	Description	Amount R
14.1	4700 SURFACING OF BRIDGE DECKS	31 500.00
14.2	5200 GABIONS	41 760.00
14.3	6100 FOUNDATIONS FOR STRUCTURES	31 734.50
14.4	6200 FALSEWORK, FORMWORK AND	31 050.00
14.5	6300 STEEL REINFORCEMENT FOR	20 820.00
14.6	6400 CONCRETE FOR STRUCTURES	25 900.00
14.7	6600 NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR	8 290.00
14.8	6700 STRUCTURAL STEELWORK	80 372.00
Total Carried Forward To Summary Of Schedules		<u>271 418.50</u>

BILL 15 - BRIDGE SV A1580 - 15m GARDEN CRESCENT BRIDGE

4700 SURFACING OF BRIDGE DECKS

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
15.1	4700	SURFACING OF BRIDGE DECKS				
	B47.01	Surfacing on bridge deck				
15.1.1		(i) Timber decking inclusive of installation	m²	31.9	1 250.00	39 875.00
Total Carried Forward To Summary						39 875.00

BILL 15 - BRIDGE SV A1580 - 15m GARDEN CRESCENT BRIDGE

5200 GABIONS

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
15.2	5200	GABIONS				
	52.03	Gabions: (a) Galvanized gabion boxes				
15.2.1		(i) 1mx1mx1m, mesh size 80 mm x 100 mm nominal diameter of mesh size 2.2 mm, and 1 m diaphragm	m ³	24.0	1 740.00	41 760.00
Total Carried Forward To Summary						41 760.00

BILL 15 - BRIDGE SV A1580 - 15m GARDEN CRESCENT BRIDGE

6100 FOUNDATIONS FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
15.3	6100	FOUNDATIONS FOR STRUCTURES				
	61.01	Additional foundation investigations				
15.3.1		(a) Additional foundation investigation	PC sum	1.0	20 000.00	20 000.00
15.3.2		(b) Contractor's overhead profits, etc. on the payment item (a) above	%	20 000.00	10.00	2 000.00
	61.02	Excavation:				
		(a) Excavating soft material situated within the following successive depth ranges:				
15.3.3		(1) 0 m up to 2 m	m³	25.2	110.00	2 772.00
15.3.4		(b) Extra over sub-item 61.02(a) for excavation in hard material irrespective of depth	m³	2.5	50.00	125.00
	61.04	Backfill to excavations utilising:				
15.3.5		(b) Imported Material (G7 free draining)	m³	15.0	280.00	4 200.00
15.3.6	61.05	Fill within a restricted area (extra over)	m³	15.0	31.00	465.00
	61.08	Foundation fill consisting of:				
15.3.7		(d) 75mm blinding (Class 15/19 MPa)	m²	1.3	1 765.00	2 294.50
Total Carried Forward To Summary						31 856.50

BILL 15 - BRIDGE SV A1580 - 15m GARDEN CRESCENT BRIDGE

6200 FALSEWORK, FORMWORK AND CONCRETE FINISH

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
15.4	6200	FALSEWORK, FORMWORK AND CONCRETE FINISH				
	62.02	Vertical formwork to provide:				
		(a) Class F1 surface finish to:				
15.4.1		(i) Abutments and wing walls	m ²	24.0	550.00	13 200.00
15.4.2		(ii) Foundations	m ²	8.1	500.00	4 050.00
		(b) Class F2 surface finish to:				
15.4.3		(i) Abutments and wing walls	m ²	24.0	575.00	13 800.00
Total Carried Forward To Summary						31 050.00

BILL 15 - BRIDGE SV A1580 - 15m GARDEN CRESCENT BRIDGE

6300 STEEL REINFORCEMENT FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
15.5	6300	STEEL REINFORCEMENT FOR STRUCTURES				
	63.01	Steel reinforcement for:				
		(a) Abutments and wing walls				
15.5.1		(1) Mild steel bars	t	0.1	13 880.00	1 388.00
15.5.2		(2) High yield stress steel bars (type C)	t	0.8	13 880.00	11 104.00
		(b) Foundations				
15.5.3		(1) Mild steel bars	t	0.0	13 880.00	Rate Only
15.5.4		(2) High yield stress steel bars (Type C)	t	0.5	13 880.00	6 940.00
Total Carried Forward To Summary						19 432.00

BILL 15 - BRIDGE SV A1580 - 15m GARDEN CRESCENT BRIDGE

6400 CONCRETE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
15.6	6400	CONCRETE FOR STRUCTURES				
	B64.01	Cast in situ concrete:				
		(a) Class 30MPa/19mm Concrete				
15.6.1		(i) Abutments and wing walls	m ²	8.0	1 850.00	14 800.00
15.6.2		(i) Foundations	m ³	6.0	1 850.00	11 100.00
	B64.07	Curing of concrete:				
15.6.3		(i) Exposed concrete faces	m ²	24.0	16.00	384.00
Total Carried Forward To Summary						26 284.00

BILL 15 - BRIDGE SV A1580 - 15m GARDEN CRESCENT BRIDGE
 S CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
15.7	6600	NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES				
	66.11	Bearings				
15.7.1		(a) Elastomeric bearing (200 x 150 x 22mm)	No	4.0	1 650.00	6 600.00
	66.19	Drainage pipes and weepholes:				
		(a) Weepholes:				
15.7.2		(i) 50mm dia. uPVC Scupper pipes	m	2.4	510.00	1 224.00
	66.21	Synthetic-fibre filter fabric				
15.7.3		(a) Kaymat U34 geotextile fabric to cover abutment and wing walls earth faces and around nylon drainage pipes	m²	24.0	20.00	480.00
Total Carried Forward To Summary						8 304.00

BILL 15 - BRIDGE SV A1580 - 15m GARDEN CRESCENT BRIDGE

6700 STRUCTURAL STEELWORK

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
15.8	6700	STRUCTURAL STEELWORK				
	B67.01	Structural steel:				
15.8.1		(a) Through Truss and Deck Frame	t	2.0	33 100.00	66 200.00
	B67.03	Corrosion protection:				
		(a) Sprayed on metal				
15.8.2		(i) Duplex epoxy and polyurethane paint system	m²	29.4	280.00	8 232.00
		(b) Hot-dip galvanising				
15.8.3		(i) Through Truss and Deck Frame	t	2.0	11 550.00	23 100.00
Total Carried Forward To Summary						97 532.00

BILL 15 - BRIDGE SV A1580 - 15m GARDEN CRESCENT BRIDGE

SUMMARY OF SECTIONS

Section	Description	Amount R
15.1	4700 SURFACING OF BRIDGE DECKS	39 875.00
15.2	5200 GABIONS	41 760.00
15.3	6100 FOUNDATIONS FOR STRUCTURES	31 850.50
15.4	6200 FALSEWORK, FORMWORK AND	31 050.00
15.5	6300 STEEL REINFORCEMENT FOR	19 432.00
15.6	6400 CONCRETE FOR STRUCTURES	26 284.00
15.7	6500 NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR	8 304.00
15.8	6700 STRUCTURAL STEELWORK	97 532.00
Total Carried Forward To Summary Of Schedules		<u>296 093.50</u>

BILL 16 - BRIDGE SV A1811 - 14m BAY CRESCENT BRIDGE

4700 SURFACING OF BRIDGE DECKS

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
16.1	4700	SURFACING OF BRIDGE DECKS				
18.1.1	B47.01	(1) Timber decking inclusive of installation	m²	29.8	1 250.00	37 250.00
Total Carried Forward To Summary						37 250.00

BILL 16 - BRIDGE SV A1811 - 14m BAY CRESCENT BRIDGE

5200 GABIONS

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
16.2	5200	GABIONS				
	52.03	Gabions:				
		(a) Galvanized gabion boxes				
16.2.1		(i) 1m x 1m x 1m, mesh size 80 mm x 100 mm nominal diameter of mesh size 2.2 mm, and 1 m diaphragm spacing	m ³	24.0	1 740.00	41 760.00
Total Carried Forward To Summary						41 760.00

BILL 16 - BRIDGE SV A1811 - 14m BAY CRESCENT BRIDGE

6100 FOUNDATIONS FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
16.3	6100	FOUNDATIONS FOR STRUCTURES				
	61.01	Additional foundation investigations				
16.3.1		(a) Additional foundation investigation	PC sum	1.0	20 000.00	20 000.00
16.3.2		(b) Contractor's overhead profits, etc. on the payment item (a) above	%	20 000.00	10.00	2 000.00
	61.02	Excavation:				
		(a) Excavating soft material situated within the following successive depth ranges:				
16.3.3		(1) 0 m up to 2 m	m ³	25.2	105.00	2 646.00
16.3.4		(b) Extra over sub-item 61.02(a) for excavation in hard material irrespective of depth	m ³	2.5	50.00	125.00
	61.04	Backfill to excavations utilising:				
16.3.5		(b) Imported material	m ³	15.0	280.00	4 200.00
16.3.6	661.05	Fill within a restricted area (extra over item 33.01)	m ³	15.0	31.00	465.00
	61.08	Foundation fill consisting of:				
16.3.7		(d) Mass concrete Class 15/19	m ³	1.3	1 765.00	2 294.50
Total Carried Forward To Summary						31 730.50

BILL 16 - BRIDGE SV A1811 - 14m BAY CRESCENT BRIDGE

6200 FALSEWORK, FORMWORK AND CONCRETE FINISH

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
16.4	6200	FALSEWORK, FORMWORK AND CONCRETE FINISH				
	62.02	Vertical formwork to provide:				
		(a) Class F1 surface finish to:				
16.4.1		(i) Abutments and wing walls	m ²	24.0	550.00	13 200.00
16.4.2		(ii) Foundations	m ²	8.1	500.00	4 050.00
		(b) Class F2 surface finish to:				
16.4.3		(i) Abutments and wing walls	m ²	24.0	575.00	13 800.00
Total Carried Forward To Summary						31 050.00

BILL 16 - BRIDGE SV A1811 - 14m BAY CRESCENT BRIDGE

6300 STEEL REINFORCEMENT FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
16.5	6300	STEEL REINFORCEMENT FOR STRUCTURES				
	63.01	Steel reinforcement for:				
		(a) Abutments and wing walls				
16.5.1		(1) Mild steel bars	t	0.1	13 880.00	1 388.00
16.5.2		(2) High yield stress steel bars (type C)	t	0.8	13 880.00	11 104.00
		(b) Foundations				
16.5.3		(1) Mild steel bars	t	0.1	13 880.00	1 388.00
16.5.4		(2) High yield stress steel bars (Type C)	t	0.5	13 880.00	6 940.00
Total Carried Forward To Summary						20 820.00

BILL 16 - BRIDGE SV A1811 - 14m BAY CRESCENT BRIDGE

6400 CONCRETE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
16.6	8400	CONCRETE FOR STRUCTURES				
	864.01	Cast in situ concrete:				
		(a) Class 30MPa/19mm Concrete				
16.6.1		(i) Abutments and wing walls	m³	7.6	1 850.00	14 060.00
16.6.2		(ii) Foundations	m³	5.9	1 850.00	10 915.00
Total Carried Forward To Summary						24 975.00

BILL 16 - BRIDGE SV A1811 - 14m BAY CRESCENT BRIDGE

S CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
16.7	6600	NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES				
	66.11	Bearings				
16.7.1		(a) Elastomeric bearing (200 x 150 x 22mm)	No	4.0	1 650.00	6 600.00
	66.19	Drainage pipes and weepholes:				
		(a) Weepholes:				
16.7.2		(i) 50mm dia. uPVC Scupper pipes	m	2.4	510.00	1 224.00
	66.21	Synthetic-fibre filter fabric				
16.7.3		(a) Kaymat U34 geotextile fabric to cover abutment and wing walls earth faces and around nation drainage pipes	m²	24.0	20.00	480.00
Total Carried Forward To Summary						8 304.00

BILL 16 - BRIDGE SV A1811 - 14m BAY CRESCENT BRIDGE

6700 STRUCTURAL STEELWORK

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
16.8	6700	STRUCTURAL STEELWORK				
	B67.01	Structural steel:				
16.8.1		(a) Through Truss and Deck Frame	t	1.7	33 100.00	56 270.00
	B67.03	Corrosion protection:				
		(a) Sprayed on metal				
16.8.2		(i) Duplex epoxy and polyurethane paint system	m²	25.0	280.00	7 000.00
		(b) Hot-dip galvanising				
16.8.3		(i) Through Truss and Deck Frame	t	1.7	11 550.00	19 635.00
Total Carried Forward To Summary						82 905.00

BILL 16 - BRIDGE SV A1811 - 14m BAY CRESCENT BRIDGE

SUMMARY OF SECTIONS

Section	Description	Amount R
16.1	4700 SURFACING OF BRIDGE DECKS	37 250.00
16.2	5200 GABIONS	41 760.00
16.3	6100 FOUNDATIONS FOR STRUCTURES	31 730.50
16.4	6200 FALSEWORK, FORMWORK AND	31 050.00
16.5	6300 STEEL REINFORCEMENT FOR	20 820.00
16.6	6400 CONCRETE FOR STRUCTURES	24 975.00
16.7	6500 NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR	8 304.00
16.8	6700 STRUCTURAL STEELWORK	82 905.00
Total Carried Forward To Summary Of Schedules		<u>278 794.50</u>

BILL 17 - GOLF COURSE FOOTBRIDGE SV3220

4700 SURFACING OF BRIDGE DECKS

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
17.1.	4700	SURFACING OF BRIDGE DECKS				
	B47.01	Surfacing on bridge deck				
17.1.1		(I) Timber decking inclusive of installation	m²	46.2	1 250.00	57 750.00
Total Carried Forward To Summary						57 750.00

BILL 17 - GOLF COURSE FOOTBRIDGE SV3220

6100 FOUNDATIONS FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
17.2	6100	FOUNDATIONS FOR STRUCTURES				
	61.01	Additional foundation investigations				
17.2.1		(a) Additional foundation investigation	PC sum	1.0	20 000.00	20 000.00
17.2.2		(b) Contractor's overhead profits, etc. on the payment item (a) above	%	20 000.00	10.00	2 000.00
17.2.3	61.02	Excavation: (a) Excavating soft material situated within the following successive depth ranges: (1) 0 m up to 2 m	m³	95.0	105.00	9 975.00
17.2.4		(b) Extra over sub-item 61.02(a) for excavation in hard material irrespective of depth	m³	10.0	50.00	500.00
17.2.5	61.04	Backfill to excavations utilising:	m³	48.0	78.00	3 744.00
17.2.6		(a) Material from the excavation	m³	48.0	280.00	13 440.00
17.2.7	61.05	Fill within a restricted area (extra over)	m³	51.0	31.00	1 581.00
	61.08	Foundation fill consisting of:				
17.2.8		(d) 75mm blinding (Class 15/19 MPa)	m²	4.0	1 765.00	7 060.00
	61.51	Lateral support to excavations or to retain road fill				
17.2.9		(i) 0 to 5 m depth	L/sum	1.0	75 000.00	75 000.00
Total Carried Forward To Summary						133 300.00

BILL 17 - GOLF COURSE FOOTBRIDGE SV3220

6200 FALSEWORK, FORMWORK AND CONCRETE FINISH

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
17.3	6200	FALSEWORK, FORMWORK AND CONCRETE FINISH				
17.3.1	6200	FALSEWORK, FORMWORK AND CONCRETE FINISH				
	62.02	Vertical formwork to provide:				
		(a) Class F1 surface finish to:				
17.3.1.1		(i) Abutments and wing walls	m²	86.0	550.00	47 300.00
17.3.1.2		(ii) Foundations.	m²	17.2	500.00	8 600.00
		(b) Class F2 surface finish to:				
17.3.1.3		(i) Abutments and wing walls	m²	86.0	575.00	49 450.00
Total Carried Forward To Summary						105 350.00

BILL 17 - GOLF COURSE FOOTBRIDGE SV3220

6300 STEEL REINFORCEMENT FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
17.4	6300	STEEL REINFORCEMENT FOR STRUCTURES				
	63.01	Steel reinforcement for:				
		(b) Abutments and wing walls				
17.4.1		(1) Mild steel bars	t	0.3	13 880.00	4 164.00
17.4.2		(2) High yield stress steel bars (type C)	t	3.4	13 880.00	47 192.00
		(b) Foundations				
17.4.3		(1) Mild steel bars	t	0.2	13 880.00	2 776.00
17.4.4		(2) High yield stress steel bars (Type C)	t	1.9	13 880.00	26 372.00
Total Carried Forward To Summary						80 504.00

BILL 17 - GOLF COURSE FOOTBRIDGE SV3220

6400 CONCRETE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
17.5	6400	CONCRETE FOR STRUCTURES				
	64.01	Cast in situ concrete:				
		(a) Class 30MPa/19mm Concrete				
17.5.1		(i) Abutments and wing walls	m ²	34.4	1 850.00	63 640.00
17.5.2		(i) Foundations	m ²	24.1	1 850.00	44 585.00
Total Carried Forward To Summary						108 225.00

BILL 17 - GOLF COURSE FOOTBRIDGE SV3220

S CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
17.6	6600	NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES				
	66.11	Bearings				
17.6.1		(a) Elastomeric bearing (200 x 150 x 22mm)	No	4.0	1 500.00	6 000.00
	66.19	Drainage pipes and weepholes:				
		(a) Weepholes:				
17.6.2		(i) 50mm dia. uPVC Scupper pipes	m	1.6	510.00	816.00
	66.21	Synthetic-fibre filter fabric				
17.6.3		(a) Kaymat U34 geotextile fabric to cover abutment and wing walls earth faces and around netton drainage pipes	m²	86.0	20.00	1 720.00
Total Carried Forward To Summary						8 536.00

BILL 17 - GOLF COURSE FOOTBRIDGE SV3220

6700 STRUCTURAL STEELWORK

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
17.7	6700	STRUCTURAL STEELWORK				
	B67.01	Structural steel:				
17.7.1		(a) Through Truss and Deck Frame	t	4.5	33 100.00	148 850.00
	B67.03	Corrosion protection:				
		(a) Sprayed on metal				
17.7.2		(i) Duplex epoxy and polyurethane paint system	m²	99.3	280.00	27 804.00
		(b) Hot-dip galvanising				
17.7.3		(i) Through Truss and Deck Frame	t	4.5	11 650.00	51 975.00
Total Carried Forward To Summary						228 729.00

BILL 17 - GOLF COURSE FOOTBRIDGE SV3220

SUMMARY OF SECTIONS

Section	Description	Amount R
17.1	4700 SURFACING OF BRIDGE DECKS	57 750.00
17.2	6100 FOUNDATIONS FOR STRUCTURES	133 300.00
17.3	6200 FALSEWORK, FORMWORK AND	106 350.00
17.4	6300 STEEL REINFORCEMENT FOR	80 504.00
17.5	6400 CONCRETE FOR STRUCTURES	108 225.00
17.6	6800 NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR	8 536.00
17.7	6700 STRUCTURAL STEELWORK	228 729.00
Total Carried Forward To Summary Of Schedules		<u>722 394.00</u>

BILL 18 - NMT FOOTBRIDGE SV3390

4700 SURFACING OF BRIDGE DECKS

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
18.1	4700	SURFACING OF BRIDGE DECKS				
	B47.01	Surfacing on bridge deck				
18.1.1		(1) Timber decking inclusive of installation	m²	46.2	1 250.00	57 750.00
Total Carried Forward To Summary						57 750.00

BILL 18 - NMT FOOTBRIDGE SV3390

6100 FOUNDATIONS FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
18.2	6100	FOUNDATIONS FOR STRUCTURES				
	61.01	Additional foundation investigations				
18.2.1		(a) Additional foundation investigation	PC sum	1.0	20 000.00	20 000.00
18.2.2		(b) Contractor's overhead profits, etc. on the payment item (a) above	%	20 000.00	10.00	2 000.00
	61.02	Excavation:				
		(a) Excavating soft material situated within the following successive depth ranges:				
18.2.3		(1) 0 m up to 2 m	m³	95.0	105.00	9 975.00
18.2.4		(b) Extra over sub-item 61.02(a) for excavation in hard material (respective of depth)	m³	9.5	280.00	2 660.00
	61.04	Backfill to excavations utilising:				
18.2.5		(a) Material from the excavation	m³	48.0	78.00	3 744.00
18.2.6		(b) Imported material	m³	48.0	280.00	13 440.00
18.2.7	B61.05	Fill within a restricted area (extra over)	m³	51.0	31.00	1 581.00
	61.08	Foundation fill consisting of:				
18.2.8		(d) 75mm blinding (Class 15/19 MPa)	m³	4.0	1 765.00	7 060.00
	B61.51	Lateral support to excavations or to retain road fill				
18.2.9		(f) 0 to 5 m depth	L/sum	1.0	75 000.00	75 000.00
Total Carried Forward To Summary						135 460.00

BILL 18 - NMT FOOTBRIDGE SV3390

6200 FALSEWORK, FORMWORK AND CONCRETE FINISH

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
18.3	6200	FALSEWORK, FORMWORK AND CONCRETE FINISH				
	62.02	Vertical formwork to provide:				
		(a) Class F1 surface finish to:				
18.3.1		(i) Abutments and wing walls	m²	86.0	550.00	47 300.00
18.3.2		(ii) Foundations	m²	17.2	500.00	8 600.00
		(b) Class F2 surface finish to:				
18.3.3		(i) Abutments and wing walls	m²	86.0	575.00	49 450.00
Total Carried Forward To Summary						105 350.00

BILL 18 - NMT FOOTBRIDGE SV3390.

6300 STEEL REINFORCEMENT FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
18.4	6300	STEEL REINFORCEMENT FOR STRUCTURES:				
	63.01	Steel reinforcement for:				
		(a) Abutments and wing walls				
18.4.1		(i) Mild steel bars	t	0.3	13 880.00	4 164.00
18.4.2		(ii) High yield stress steel bars (type C)	t	3.4	13 880.00	47 192.00
		(b) Foundations				
18.4.3		(i) Mild steel bars	t	0.2	13 880.00	2 776.00
18.4.4		(ii) High yield stress steel bars (Type C)	t	1.9	13 880.00	26 372.00
Total Carried Forward To Summary						80 504.00

BILL 18 - NMT FOOTBRIDGE SV3390

6400 CONCRETE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
18.5	6400	CONCRETE FOR STRUCTURES				
	64.01	Cast in situ concrete:				
		(a) Durability concrete (Class W)				
18.5.1		(i) Abutments and wing walls (Class 30/19 MPa)	m ³	34.4	2 180.00	74 992.00
		(b) Normal concrete				
18.5.2		(i) Foundations (Class 30 MPa/19)	m ³	24.1	1 850.00	44 585.00
Total Carried Forward To Summary						119 577.00

BILL 18 - NMT FOOTBRIDGE SV3390

S CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
18.8	6600	NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES				
	66.11	Bearings				
18.6.1		(a) Elastomeric bearing (200 x 150 x 22mm)	No	4.0	1 575.00	6 300.00
	66.19	Drainage pipes and weepholes:				
		(a) Weepholes:				
18.6.2		(i) 50mm dia. uPVC Scupper pipes	m	1.6	510.00	816.00
	66.21	Synthetic-fibre filter fabric				
18.6.3		(a) Kaymat U34 geotextile fabric to cover abutment and wing walls earth faces and around Nelson drainage pipes	m²	85.0	20.00	1 720.00
Total Carried Forward To Summary						8 836.00

BILL 18 - NMT FOOTBRIDGE SV3390

6700 STRUCTURAL STEELWORK

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
18.7	6700	STRUCTURAL STEELWORK				
	B87.01	Structural steel:				
18.7.1		(a) Through Truss and Deck Frame	t	4.5	33 100.00	148 950.00
	B67.03	Corrosion protection:				
		(a) Sprayed on metal				
18.7.2		(i) Duplex epoxy and polyurethane paint system	m²	99.3	280.00	27 804.00
		(b) Hot-dip galvanising				
18.7.3		(i) Through Truss and Deck Frame	t	4.5	11 550.00	51 975.00
Total Carried Forward To Summary						228 729.00

BILL 18 - NMT FOOTBRIDGE SV3390

SUMMARY OF SECTIONS

Section	Description	Amount R
18.1	4700 SURFACING OF BRIDGE DECKS	57 750.00
18.2	6100 FOUNDATIONS FOR STRUCTURES	135 460.00
18.3	6200 FALSEWORK, FORMWORK AND	105 350.00
18.4	6300 STEEL REINFORCEMENT FOR	80 504.00
18.5	6400 CONCRETE FOR STRUCTURES	119 577.00
18.6	6600 NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR	8 836.00
18.7	6700 STRUCTURAL STEELWORK	228 729.00
Total Carried Forward To Summary Of Schedules		<u>736 208.00</u>

BILL 19 - AUXILIARY SPILLWAY B SV0825

8100 FOUNDATIONS FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
19.1	6100	FOUNDATIONS FOR STRUCTURES				
	61.02	Excavation:				
		(a) Excavating soft material situated within the following successive depth ranges:				
19.1.1		(1) 0 m up to 2 m	m³	348.4	105.00	36 582.00
	61.04	Backfill to excavations utilising:				
19.1.2		(a) Material from the excavation	m³	252.0	78.00	19 656.00
19.1.3	661.05	Fill within a restricted area (extra over)	m³	252.0	31.00	7 812.00
Total Carried Forward To Summary						64 050.00

BILL 19 - AUXILIARY SPILLWAY B SV0825

6200 FALSEWORK, FORMWORK AND CONCRETE FINISH

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R.
19.2	6200	FALSEWORK, FORMWORK AND CONCRETE FINISH				
	62.02	Vertical formwork.				
		(a) Class F1 surface finish to:				
19.2.1		(i) Retaining Wall	m²	101.0	550.00	55 550.00
19.2.2		(ii) Foundations	m²	179.0	500.00	89 500.00
		(b) Class F2 surface finish to:				
19.2.3		(i) Retaining Wall	m²	186.0	575.00	106 950.00
	862.04	Inclined formwork				
19.2.4		(i) Chamfered inlet	m²	22.5	600.00	13 500.00
Total Carried Forward To Summary						265 500.00

BILL 19 - AUXILIARY SPILLWAY B SV0825

6300 STEEL REINFORCEMENT FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
19.3	6300	STEEL REINFORCEMENT FOR STRUCTURES				
	63.01	Steel reinforcement for:				
		(a) Ground slab				
19.3.1		(i) Mild steel bars	t	0.5	13 880.00	6 940.00
19.3.2		(ii) High yield stress steel bars (type C)	t	5.0	13 880.00	69 400.00
		(b) Walls				
19.3.3		(i) Mild steel bars	t	0.5	13 880.00	6 940.00
19.3.4		(ii) High yield stress steel bars (type C)	t	5.0	13 880.00	69 400.00
		(c) Foundations				
19.3.5		(i) Mild steel bars	t	0.4	13 880.00	5 552.00
19.3.6		(ii) High yield stress steel bars (type C)	t	0.4	13 880.00	5 552.00
Total Carried Forward To Summary						163 784.00

BILL 19 - AUXILIARY SPILLWAY B SV0825

6400 CONCRETE FOR STRUCTURES						
Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
19.4	6400	CONCRETE FOR STRUCTURES				
	B64.01	Cast in situ concrete:				
		(a) Class 25MPa/19				
19.4.1		(i) Ground slab	m ²	56.0	1 786.00	100 016.00
19.4.2		(ii) Walls	m ³	57.0	1 786.00	101 802.00
19.4.3		(iii) Foundations	m ³	7.0	1 786.00	12 502.00
Total Carried Forward To Summary						214 320.00

BILL 19 - AUXILIARY SPILLWAY B SV0825

S CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
19.5	6600	NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES				
	866.06	Filled joints:				
19.5.1		h) Horizontal Expansion Joint "Type B" in surface bed with 10mm jointex filler	m²	0.9	682.00	613.80
19.5.2		j) Vertical Expansion Joint "Type B" in walls with 10mm jointex filler	m²	0.6	682.00	409.20
	866.07	Unfilled joints:				
19.5.3		(a) Horizontal Toggle Joint "Type A" in surface beds	m²	9.8	262.00	2 567.60
19.5.4		(b) Vertical Toggle Joint "Type A" in walls	m²	4.7	262.00	1 231.40
Total Carried Forward To Summary						4 822.00

BILL 19 - AUXILIARY SPILLWAY B SV0825

SUMMARY OF SECTIONS

Section	Description	Amount R
19.1	6100 FOUNDATIONS FOR STRUCTURES	64 050.00
19.2	6200 FALSEWORK, FORMWORK AND	265 500.00
19.3	6300 STEEL REINFORCEMENT FOR	163 784.00
19.4	6400 CONCRETE FOR STRUCTURES	214 320.00
19.5	NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION,	4 822.00
Total Carried Forward To Summary Of Schedules		<u>712 476.00</u>

BILL 20 - AUXILIARY SPILLWAY C SV1350

6100 FOUNDATIONS FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
20.1	6100	FOUNDATIONS FOR STRUCTURES				
	61.02	Excavation;				
		(a) Excavating soft material situated within the following successive depth ranges:				
20.1.1		(i) 0 m up to 2 m	m ²	348.5	105.00	36 592.50
	61.04	Backfill to excavations utilising:				
20.1.2		(a) Material from the excavation	m ³	252.0	78.00	19 656.00
20.1.3	B61.05	Fill within a restricted area (extra over)	m ³	252.0	31.00	7 812.00
Total Carried Forward To Summary						64 060.50

BILL 20 - AUXILIARY SPILLWAY C SV1350

6200 FALSEWORK, FORMWORK AND CONCRETE FINISH

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
20.2	6200	FALSEWORK, FORMWORK AND CONCRETE FINISH				
	62.02	Vertical formwork				
		(a) Class F1 surface finish to:				
20.2.1		(i) Retaining Wall	m²	101.0	550.00	55 550.00
20.2.2		(ii) Foundations	m²	179.0	500.00	89 500.00
		(b) Class F2 surface finish to:				
20.2.3		(i) Retaining Wall	m²	186.0	575.00	106 950.00
	662.04	Inclined formwork				
20.2.4		(i) Chamfered Inlet	m²	22.5	600.00	13 500.00
Total Carried Forward To Summary						265 500.00

BILL 20 - AUXILIARY SPILLWAY C SV1350

6300 STEEL REINFORCEMENT FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
20.3	6300	STEEL REINFORCEMENT FOR STRUCTURES				
	63.01	Steel reinforcement for:				
		(a) Ground slab				
20.3.1		(i) Mild steel bars	t	0.5	13 880.00	6 940.00
20.3.2		(ii) High yield stress steel bars (type C)	t	4.6	13 880.00	62 460.00
		(B) Walls				
20.3.3		(i) Mild steel bars	t	0.5	13 880.00	6 940.00
20.3.4		(ii) High yield stress steel bars (type C)	t	4.6	13 880.00	63 848.00
		(c) Foundations				
20.3.5		(i) Mild steel bars	t	0.1	13 880.00	1 388.00
20.3.6		(ii) High yield stress steel bars (type C)	t	0.4	13 880.00	5 552.00
Total Carried Forward To Summary						147 128.00

BILL 20 - AUXILIARY SPILLWAY C SV1350

6400 CONCRETE FOR STRUCTURES						
Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
20.4	6400	CONCRETE FOR STRUCTURES				
	604.01	Cast in situ concrete:				
		(a) Class 25MPa/19				
20.4.1		(i) Ground slab	m ²	56.0	1 786.00	100 016.00
20.4.2		(ii) Walls	m ²	57.0	1 786.00	101 802.00
20.4.3		(iii) Foundations	m ³	7.0	1 786.00	12 502.00
Total Carried Forward To Summary						214 320.00

BILL 20 - AUXILIARY SPILLWAY C.SV1350

S CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
20.5	6600	NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES				
	666.06	Filled joints:				
20.5.1		h) Horizontal Expansion Joint "Type B" in surface bed with 10mm jointex filler	m²	0.9	650.00	585.00
20.5.2		j) Vertical Expansion Joint "Type B" in walls with 10mm jointex filler	m²	0.6	650.00	390.00
	666.07	Unfilled joints:				
20.5.3		(a) Horizontal Toggle Joint "Type A" in surface beds	m²	8.8	262.00	2 567.60
20.5.4		(b) Vertical Toggle Joint "Type A" in walls	m²	4.7	262.00	1 231.40
Total Carried Forward To Summary						4 774.00

BILL 20 - AUXILIARY SPILLWAY C SV1350

		SUMMARY OF SECTIONS	
Section	Description		Amount R
20.1	6100 FOUNDATIONS FOR STRUCTURES		64 060.50
20.2	6200 FALSEWORK, FORMWORK AND		265 500.00
20.3	6300 STEEL REINFORCEMENT FOR		147 128.00
20.4	6400 CONCRETE FOR STRUCTURES		214 320.00
20.5	6600 NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR		4 774.00
Total Carried Forward To Summary Of Schedules			<u>695 782.50</u>

BILL 21 - AUXILIARY SPILLWAY D SV1950

6100 FOUNDATIONS FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
21.1	6100	FOUNDATIONS FOR STRUCTURES				
	61.02	Excavation;				
		(a) Excavating soft material situated within the following successive depth ranges:				
21.1.1		(i) 0 m up to 2 m	m³	348,0	105,00	36 540,00
	61.04	Backfill to excavations utilising;				
21.1.2		(a) Material from the excavation	m³	252,0	78,00	19 656,00
21.1.3	661.05	Fill within a restricted area (extra over)	m³	252,0	31,00	7 812,00
Total Carried Forward To Summary						64 008,00

BILL 21 - AUXILIARY SPILLWAY D SV1950.

6200 FALSEWORK, FORMWORK AND CONCRETE FINISH

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
21.2	6200	FALSEWORK, FORMWORK AND CONCRETE FINISH				
	62.02	Vertical formwork				
		(a) Class F1 surface finish to:				
21.2.1		(i) Retaining Wall	m²	101.0	550.00	55 550.00
21.2.2		(ii) Foundations	m²	179.0	500.00	89 500.00
		(b) Class F2 surface finish to:				
21.2.3		(i) Retaining Wall	m²	166.0	575.00	106 850.00
	662.04	Inclined formwork				
21.2.4		(i) Chamfered inlet	m²	22.5	600.00	13 500.00
Total Carried Forward To Summary						285 500.00

BILL 21 - AUXILIARY SPILLWAY D SV1950

6300 STEEL REINFORCEMENT FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
21.3	6300	STEEL REINFORCEMENT FOR STRUCTURES				
	63.01	Steel reinforcement for:				
		(a) Ground slab				
21.3.1		(i) Mild steel bars	t	0.5	13 880.00	6 940.00
21.3.2		(ii) High yield stress steel bars (type C)	t	4.5	13 880.00	62 460.00
		(b) Walls				
21.3.3		(i) Mild steel bars	t	0.5	13 880.00	6 940.00
21.3.4		(ii) High yield stress steel bars (type C)	t	4.6	13 880.00	63 848.00
		(c) Foundations				
21.3.5		(i) Mild steel bars	t	0.1	13 880.00	1 388.00
21.3.6		(ii) High yield stress steel bars (type C)	t	0.4	13 880.00	5 552.00
Total Carried Forward To Summary						147 128.00

BILL 21 - AUXILIARY SPILLWAY D SV1950

6400 CONCRETE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
21.4	6400	CONCRETE FOR STRUCTURES				
	B64.01	Cast in situ concrete:				
		(a) Class 25MPa/19				
21.4.1		(i) Ground slab	m³	56.0	1 786.00	100 016.00
21.4.2		(ii) Walls	m³	57.0	1 786.00	101 802.00
21.4.3		(iii) Foundations	m³	7.0	1 786.00	12 502.00
Total Carried Forward To Summary						214 320.00

BILL 21 - AUXILIARY SPILLWAY D-SV1950

S CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
21.5	6600	NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES				
	B66.06	Filled joints:				
21.5.1		h) Horizontal Expansion Joint "Type B" in surface bed with 10mm jointex filler	m²	0.9	685.00	616.50
21.5.2		j) Vertical Expansion Joint "Type B" in walls with 10mm jointex filler	m²	0.6	685.00	411.00
	B66.07	Unfilled joints:				
21.5.3		(a) Horizontal Toggle Joint "Type A" in surface beds	m²	9.8	262.00	2 567.60
21.5.4		(b) Vertical Toggle Joint "Type A" in walls	m²	4.7	262.00	1 231.40
Total Carried Forward To Summary						4 826.50

BILL 21 - AUXILIARY SPILLWAY D SV1950

SUMMARY OF SECTIONS

Section	Description	Amount R
21.1	6100 FOUNDATIONS FOR STRUCTURES	64 008.00
21.2	6200 FALSEWORK, FORMWORK AND	285 500.00
21.3	6300 STEEL REINFORCEMENT FOR	147 128.00
21.4	6400 CONCRETE FOR STRUCTURES	214 320.00
21.5	6600 NO-FINES CONCRETE, JOINTS, BEARINGS, BOLT GROUPS FOR	4 826.50
Total Carried Forward To Summary Of Schedules		<u>695 782.50</u>

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION A: PRELIMINARY AND GENERAL

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
22.1		SECTION A: PRELIMINARY AND GENERAL				
22.1.1		FIXED CHARGE ITEMS				
	PSA 8.3.5	Contractor's obligation with respect to Health and Safety				
22.1.1.1		a) Preparation of Project Specific Health and Safety Plan	Sum	1.0	7 500.00	7 500.00
22.1.1.2		b) Carrying out a Hazard Identification and Risk Assessment	Sum	1.0	7 500.00	7 500.00
22.1.1.3		c) Preparation and maintenance of H&S File	Sum	1.0	15 000.00	15 000.00
22.1.1.4		d) Preparation of Method Statements and Safe Work Procedures	Sum	1.0	25 000.00	25 000.00
22.1.1.5		e) Emergency Preparedness and Response plan	Sum	1.0	5 000.00	5 000.00
22.1.1.6		f) Occupational health provisions	Sum	1.0	60 000.00	60 000.00
22.1.1.7		g) Inoculation of Contractor's personnel for working on Wastewater Treatment Works	Sum	1.0	40 000.00	40 000.00
22.1.1.8		h) Provision of Personal Protective Equipment and clothing	Sum	1.0	20 000.00	20 000.00
22.1.1.9		i) Provision of Occupational Health and Safety equipment	Sum	1.0	15 000.00	15 000.00
22.1.1.10		j) Ensuring public health and safety	Sum	1.0	25 000.00	25 000.00
22.1.1.11		k) Occupational health and safety signage, pictograms and notices	Sum	1.0	10 000.00	10 000.00
22.1.1.12		l) All other fixed costs associated with complying with the requirements	Sum	1.0	0.00	0.00
	PSA 8.3.6	Compliance with Environmental Management Specifications				
22.1.1.13		a) Fixed costs with respect to Environmental Management	Sum	1.0	7 500.00	7 500.00
22.1.1.14		b) Environmental awareness training	Sum	1.0	25 000.00	25 000.00
22.1.1.15	PSA 8.3.7	Producing and Submitting the Quality Control Programme	Sum	1.0	25 000.00	25 000.00
	PSA 8.4.2.2	Facilities for the contractor				
22.1.1.16		a) Dealing with water	Sum	1.0	125 000.00	125 000.00
Total Carried Forward						412 500.00

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION A: PRELIMINARY AND GENERAL

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
Brought Forward						412 500.00
22.1.1.17		b) Search for, record and protect all survey benchmarks	Sum	1.0	7 500.00	7 500.00
22.1.1.18		c) Maintain continuity of flow through works	Sum	1.0	150 000.00	150 000.00
22.1.1.19		d) Provide access for authorised personnel	Sum	1.0	25 000.00	25 000.00
22.1.1.20		e) Nightwatch and security	Sum	1.0	175 000.00	175 000.00
	PSA 8.4.6	Compliance with respect to Health and Safety				
22.1.1.21		a) Provision of Construction Manager and alternate	Sum	1.0	200 000.00	200 000.00
22.1.1.22		b) Provision of Assistant Construction Manager(s)	Sum	1.0	175 000.00	175 000.00
22.1.1.23		c) Provision of Health and Safety Officer	Sum	1.0	175 000.00	175 000.00
22.1.1.24		d) Provision of Construction supervisors and assistant construction supervisors	Sum	1.0	7 500.00	7 500.00
22.1.1.25		e) Maintenance of H&S file	Sum	1.0	15 000.00	15 000.00
22.1.1.26		f) Implementation and Management of the Health and Safety Plan	Sum	1.0	80 000.00	80 000.00
22.1.1.27		g) Enforcing of Hazard Identification and Risk Assessment	Sum	1.0	50 000.00	50 000.00
22.1.1.28		h) Implementation of Method Statements and Safe Work Procedures	Sum	1.0	15 000.00	15 000.00
22.1.1.29		i) Ensuring sub-contractors' compliance with statutory requirements, including monitoring and auditing of sub-contractors	Sum	1.0	25 000.00	25 000.00
22.1.1.30		j) Occupational health and safety training, promotion and awareness	Sum	1.0	25 000.00	25 000.00
22.1.1.31		k) Ensuring public health and safety	Sum	1.0	5 000.00	5 000.00
22.1.1.32		l) All other time related costs associated with complying with the requirements of the OHS Act, Construction Regulations 2014, all other relevant regulations in terms of the OHS act and the Health and Safety Specifications, for the duration of the Contract.	Sum	1.0	0.00	0.00
Total Carried Forward						1 542 500.00

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION A: PRELIMINARY AND GENERAL

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
Brought Forward						1 542 500.00
22.1.1.33	PSA 8.4.7	Time related costs with respect to environmental management	Sum	1.0	175 000.00	175 000.00
22.1.1.34	PSA 8.4.8	Compliance with the Quality Control Programme	Sum	1.0	25 000.00	25 000.00
22.1.2		TEMPORARY WORKS				
	PSA 8.8.2	Dealing with Traffic (or accommodation of traffic)				
22.1.2.1		Traffic Accommodation	Sum	1.0	15 000.00	15 000.00
22.1.3		PROVISION FOR POSSIBLE LOAD SHEDDING				
	PSA 8.9	Costs in the event of power cut (provisional)				
22.1.3.1		a) During working hours	hours	4.0	25 000.00	100 000.00
22.1.3.2		b) During non-working hours	hours	4.0	25 000.00	100 000.00
22.1.4	PA 8.1	MAINTAINING FLOW THROUGH THE WWTW				
22.1.4.1		a) Dealing with Flow from Chlorine Contact Tank to the Canal	Sum	1.0	75 000.00	75 000.00
22.1.4.2		b) Diverting Flow for Modifications to Chamber from Chlorine Contact Tank	Sum	1.0	68 000.00	68 000.00
Total Carried Forward To Summary						2 100 500.00

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION C: SITE CLEARANCE

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
22.2	SANS 1200 C	SECTION C: SITE CLEARANCE				
22.2.1.		CLEAR SITE				
	8.2.1	Clear and grub				
22.2.1.1		a) Pipeline	m ²	120.0	9.00	1 080.00
22.2.1.2		b) Maturation Ponds	m ²	1 900.0	1.50	2 850.00
	8.2.2	Remove and grub large trees of girth:				
22.2.1.3		a) Less than 1.0m	No	1.0	565.00	565.00
22.2.1.4	PSC 8.2.2	b) over 1 m and up to and including 2 m	No	6.0	685.00	4 110.00
22.2.1.5	8.2.5	Existing fenceline to be taken down, reinstated, in new position and dispose of surplus fence	m	163.0	355.00	57 865.00
	PSC 8.2.7	Dismantle and Relocate Pipelines, Electricity Transmission Lines, Cables etc				
22.2.1.6		a) Cables	No	5.0	2 625.00	13 125.00
22.2.1.7		b) 63mm diameter HDPE water pipe (From Clarifier to Existing Chamber D)	m	20.0	60.00	1 200.00
	PSC 8.2.8	Demolish and remove structures / buildings / materials / etc.				
22.2.1.8		b) Demolish Sludge drying beds (12mx 14m each)	No	10.0	11 140.00	111 400.00
22.2.1.9		c) Existing pipeline (from the drying beds)	m	100.0	58.00	5 800.00
22.2.1.10		d) Demolish existing chamber or pipeline located under Pond 2 (Provisional)	Sum	1.0	3 625.00	3 625.00
22.2.1.11		e) Vibracrete Wall in the existing pond	m	40.0	70.00	2 800.00
22.2.1.12		f) 630mm diameter pipe (From Chamber D to the Existing Pond)	m	19.0	148.00	2 812.00
22.2.1.13		g) Existing Chamber J to make way for the New Canal	No	1.0	4 346.00	4 346.00
22.2.1.14		h) Existing 625mm diameter SW pipe to make way for New Canal	m	65.0	148.00	9 620.00
22.2.1.15		i) Vibracrete Wall on the Golf Course boundary to make way for New Canal	m	55.0	70.00	3 850.00
Total Carried Forward						225 048.00

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION C: SITE CLEARANCE

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
Brought Forward						225 048.00
22.2.1.16	PSC 8.2.11	Dealing with Hazardous Material				
		1) 150mm diameter sludge feed pipe to the Sludge drying beds pipe	Sum	1.0	12 500.00	12 500.00
22.2.1.17	PSC 8.2.12	Break out concrete or brickwork and make good				
		1) Existing chamber to make way for new pipework	m³	1.0	1 500.00	1 500.00
22.2.1.18	PSC 8.2.16	Saw cut through existing surfaces				
		a) Concrete (50mm to 200mm)	m	8.0	75.00	600.00
22.2.1.19	PSC 8.2.17	Removal of existing kerbs				
		a) Channelling	m	5.0	50.00	250.00
22.2.1.20	PSC 8.2.18	General Waste removal				
		a) Metal	t	0.1	10 000.00	1 000.00
22.2.1.21		b) Building Rubble	t	0.1	10 000.00	1 000.00
22.2.1.22		c) Other	t	0.1	7 500.00	750.00
22.2.1.23	PSC 8.2.19	Survey of Sludge Volume (Area 1800 m²)				
		a) Establishment of plant and survey control	Sum	1.0	15 750.00	15 750.00
22.2.1.24		b) Survey of submerged sludge in Maturation Pond	Sum	1.0	31 500.00	31 500.00
22.2.1.25		c) Survey of empty Maturation Pond	Sum	1.0	21 000.00	21 000.00
22.2.1.26	PSC 8.2.21	Drawdown surface water level in maturation ponds at the WWTW	Sum	1.0	10 500.00	10 500.00
22.2.1.27	PSC 8.2.22	Cleaning out of Sludge from Maturation Pond				
		a) Remove sludge from Maturation Pond	m³	3 100.0	306.00	948 600.00
Total Carried Forward To Summary						1 269 998.00

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION D: EARTHWORKS

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
22.3	SANS 1200 D	SECTION D: EARTHWORKS				
22.3.1	PSD 8.3.2	BULK EXCAVATION				
		a) Excavate in all materials and use for embankment or backfill or dispose, as ordered				
22.3.1.1		1) Stockpile and maintain	m³	94.0	50.00	4 700.00
22.3.1.2		2) Spoil to designated dump site (within freehaul distance) and spread	m³	2 350.0	35.00	84 900.00
22.3.1.3		3) Cut to fill	m³	242.4	68.00	16 483.20
		b) Extra-over payment item 8.3.2 for:				
22.3.1.4		i) Hard rock excavation	m³	700.0	180.00	126 000.00
22.3.1.5		ii) Boulder Excavation	m³	700.0	120.00	84 000.00
22.3.2		RESTRICTED EXCAVATION				
	PSD 8.3.3	a) Excavate for restricted foundations, footings and pipe trenches and use for backfill or embankment or dispose as ordered for				
22.3.2.1		(i) Stockpile and maintain	m³	55.0	75.00	4 125.00
22.3.2.2		(ii) Spoil to designated dump site (within freehaul distance) and spread	m³	45.0	50.00	2 250.00
22.3.2.3		(iii) Cut to fill	m³	10.0	109.00	1 090.00
	8.3.3 b)	(b) Extra-Over for payment item PSD 8.3.3 for:				
22.3.2.4		(i) Hard Rock Excavation (Provisional)	m³	10.0	280.00	2 800.00
22.3.2.5		ii) Boulders excavation	m³	10.0	120.00	1 200.00
22.3.2.6		b) Final shaping, trimming and compacting of embankment sides	m²	825.0	15.00	12 375.00
22.3.2.7		c) Extra over item PSD 8.3.3 for importation of approved sand fill from commercial sources	m³	200	245.00	49 000.00
22.3.2.8		d) Extra over PSD 8.3.3 for 5% cement stabilised sand	m³	50.0	195.00	9 750.00
22.3.2.9		e) Extra over item PSD 8.3.3 for restricted backfilling against structures from stockpile	m³	110.0	31.00	3 410.00
Total Carried Forward						402 143.20

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION D: EARTHWORKS

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
Brought Forward						402 143.20
	8.3.7	Shoring to protect existing structures				
22.3.2.10		(a) Shoring for construction of extensions to Existing chamber D	m²	10.0	2 500.00	25 000.00
22.3.3		EXISTING SERVICES				
22.3.3.1	8.3.8.1	(a) Establish service detection crew	Sum	1.0	2 500.00	2 500.00
22.3.3.2		(b) The use or hire of specialist equipment for detection	hours	20.0	500.00	10 000.00
	8.3.8.1	(c) Excavate by hand in soft material to expose services				
22.3.3.3		(i) 1 No. existing 630mm diameter Gravity pipeline from Clarifiers to Existing Chamber D	m³	10.0	500.00	5 000.00
22.3.3.4		(ii) Existing pipelines <300mm diameter	m³	5.0	500.00	2 500.00
22.3.3.5		(iii) 1 No. existing 630mm diameter Gravity pipeline from Existing Chamber D to Existing Pond	m³	10.0	500.00	5 000.00
22.3.3.6		(iv) Cables	m²	15.0	500.00	7 500.00
	8.3.8.2	Dealing with services that are at risk because of the construction of earthworks				
		(c) Temporary protection of services				
22.3.3.7		(i) Existing pipelines, <300mm diameter	No	5.0	7 500.00	37 500.00
22.3.3.8		(ii) Existing 630mm diameter pipeline	No	6.0	15 000.00	90 000.00
22.3.3.9		2) Cables	No	10.0	15 000.00	150 000.00
	8.3.10	Topsolling				
22.3.3.10		150 mm top soil from stockpile	m²	400.0	10.00	4 000.00
22.3.3.11		Hydroseeding	m²	400.0	7.60	3 040.00
	PSD 8.3.15	Final Grading				
22.3.3.12		(a) Machine grading	m²	500.0	9.00	4 500.00
		(b) Hand Trimming				
Total Carried Forward						748 683.20

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION D: EARTHWORKS

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
Brought Forward						748 683.20
22.3.3.13		(i) Flat areas with slopes less than 1:4	m ²	30.0	10.00	300.00
22.3.3.14		(ii) Areas with slopes steeper than or equal to 1:4	m ²	1 200.0	16.00	19 200.00
22.3.3.15	PAJ 8.1	(a) 1000mm high HDPE mole barrier (2mm thick sheet) as per Drawing No.XXXX.	m	111.0	152.00	16 872.00
Total Carried Forward To Summary						785 055.20

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION DB: EARTHWORKS (PIPE TRENCHES)

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
22.4	SANS 1200 DB	SECTION DB: EARTHWORKS (PIPE TRENCHES)				
22.4.1		EXCAVATION				
	8.3.2 (a)	Excavate in all materials for trenches, dewater, backfill, compact, and dispose of surplus or unsuitable material for: (a) Pipes over 110mm and up to 315mm external diameter (or groups of pipe with trench widthless than 1000mm) for depths:				
22.4.1.1		(i) Exceeding 0.0m up to 1.0m	m		80.00	Rate Only
22.4.1.2		(ii) Exceeding 1.0m up to 2.0m	m	19.0	100.00	1 900.00
22.4.1.3		(iii) Exceeding 2.0m up to 3.0m	m		170.00	Rate Only
		(a) Pipes over 315mm and up to 1000mm external diameter (or groups of pipe with trench widthless than 1600mm) for depths:				
22.4.1.4		(i) Exceeding 0.0m up to 1.0m	m		95.00	Rate Only
22.4.1.5		(ii) Exceeding 1.0m up to 2.0m	m	144.0	120.00	17 280.00
22.4.1.6		(iii) Exceeding 2.0m up to 3.0m	m	15.0	190.00	2 850.00
	PSDB 8.3.2 (b)	Extra-over Payment Items 8.3.2 for: (Provisional).				
22.4.1.7		(a) Hard rock excavation.	m³	76.0	280.00	21 280.00
22.4.1.8	PSDB 8.3.2 (c)	Excavate and dispose of unsuitable material from the trench bottom (provisional)	m³	55.0	0.00	Included
22.4.2		EXCAVATION ANCILLARIES				
	8.3.3.1	Make up deficiency in backfill material (Provisional).				
22.4.2.1		(a) By importation from commercial sources	m³	55.0	245.00	13 475.00
	PSDB 8.3.5	Existing services that intersect or Adjoin a pipe trench				
		(a) Services that adjoin a pipe trench.				
22.4.2.2		(i) Existing 0- 300mm diameter pipeline	m	10.0	50.00	500.00
Total Carried Forward						57 285.00

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION DB: EARTHWORKS (PIPE TRENCHES)

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
Brought Forward						57 285.00
22.4.2. 3		(f) Existing 300-1000mm diameter pipeline	m	10.0	50.00	500.00
22.4.3		FINISHING				
	PSDB 8.3.6.1	Reinstate surface complete with all courses				
22.4.3. 1		a) Precast concrete channels	m	10.0	392.00	3 920.00
22.4.3. 2		b) Precast kerbing	m	4.0	201.00	804.00
22.4.3. 3		c) Class 30MPa/19mm Reinforced concrete slab thickness of 150mm	m²	8.0	2 225.00	17 800.00
Total Carried Forward To Summary						80 309.00

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION G : CONCRETE WORKS

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
22.5	SANS 1200 GA	SECTION G : CONCRETE WORKS				
		MODIFICATION OF EXISTING CHAMBER D (See Dwg. 4974-0315-DRG-C410 TO 4974-0315-DRG-C411)				
22.5.1	8.2	FORMWORK				
		Rates for smooth formwork shall include corner chamfers up to 15 x 15mm as specified				
	8.2.1	Rough - Plane				
22.5.1.1		(a) Vertical (0 to 300mm high)	m	7.0	300.00	2 100.00
22.5.1.2		(b) Vertical (0.3 to 4.0m high)	m²	15.0	575.00	8 625.00
	8.2.2	Smooth - Plane				
22.5.1.3	8.2.5	(b) Vertical (0 to 300mm high)	m		300.00	Rate Only
22.5.1.4	8.2.2	(c) Vertical (0.3 to 4.0m high)	m²	20.0	600.00	12 000.00
	8.2.6	Box out holes				
22.5.1.5		i) 600 mm diameter pipe (with puddle flange)	No	2.0	5 000.00	10 000.00
22.5.1.6		ii) 630mm diameter pipe (including swailable waterstop)	No	1.0	5 300.00	5 300.00
		Reinforcement				
	8.3.1	Steel Bars				
		(a) High tensile steel				
22.5.1.7		(i) 8mm up to 16mm diameter	l	0.4	13 680.00	5 552.00
22.5.1.8		(ii) 20mm up to 32mm (Provisional)	l	0.2	13 680.00	2 776.00
		Concrete				
	8.4.3	a) 10MPa/19mm concrete to:				
22.5.1.9		(i) Blinding layer (horizontal)	m²	0.5	1 785.00	897.50
	8.4.3	b) 15MPa/19mm concrete to:				
22.5.1.10		(i) mole barrier capping	m³	3.3	2 595.00	8 563.50
Total Carried Forward						55 814.00

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION G : CONCRETE WORKS

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
Brought Forward						55 814.00
	8.4.3	(c) 30 MPa / 19mm concrete to:				
22.5.1.11		(i) Walls	m ²	6.5	1 850.00	12 025.00
22.5.1.12		(ii) Base	m ²	1.5	1 850.00	2 775.00
22.5.1.13	8.4.3	(d) 15 MPa structural screed to chamber floor	m ³	0.5	2 370.00	1 185.00
	8.4.4	Unformed surface finishes				
22.5.1.14		(a) Wood float finish to floor slab	m ²	5	22.00	110.00
22.5.1.15		(b) Steel float finish to tops of walls	m ²	2	33.00	66.00
22.5.2	8.5	JOINTS				
22.5.2.1		a) Base of wall construction joint Type A complete as shown on drawing 4974-0315-DRD-C410	m	7.0	330.00	2 310.00
22.5.2.2		b) Base of wall construction joint Type B complete as shown on drawing 4974-0315-DRD-C410	m	3.0	715.00	2 145.00
22.5.2.3		c) Base of wall construction joint Type C complete as shown on drawing 4974-0315-DRD-C410	m	6.0	1 430.00	11 440.00
22.5.3	8.7	GROUTING				
		Castling in of pipes into new concrete wall (pipes and fittings measured elsewhere)				
22.5.3.1	PSG 8.7 (c)	i) New 800 mm diameter pipe (with puddle flange)	No	2.0	8 250.00	16 500.00
22.5.3.2		ii) Existing 830 mm diameter pipe (including swollable waterstop)	No	1.0	8 900.00	8 900.00
		Grouting				
22.5.3.3	PSG 8.10	Extra-over Item 8.4.1 for the addition of Xypex Admix C500NF or equally approved admix	kg	38.0	60.00	2 280.00
22.5.3.4	PSG 8.11	Construction joints for concrete containing Xypex Admix C500NF or equally approved admix	m	11.0	110.00	1 210.00
22.5.4		NEW CHAMBER (A, B, C, E, F, H) (See Dwg. 4974-0315-DRG-C410 TO 4974-0315-DRG-C413)				
Total Carried Forward						118 780.00

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION G : CONCRETE WORKS

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
Brought Forward						116 760.00
22.5.5	8.2	FORMWORK				
		Rates for smooth formwork shall include corner chamfers up to 15 x 15mm as specified.				
	8.2.1	Rough - Plane				
22.5.5.1		(a) Vertical (0 to 300mm high)	m	65	300.00	19 500.00
22.5.5.2		(b) Vertical (0.3 to 4.0m high)	m²	135	575.00	77 625.00
	8.2.2	Smooth - Plane				
22.5.5.3		(b) Vertical (0 to 300mm high)	m		300.00	Rate Only
22.5.5.4		(c) Vertical (0.3 to 4.0m high)	m²	170	600.00	102 000.00
	8.2.5	Box out holes				
		a) Box out holes and pockets for:				
22.5.5.5		(i) 600 mm diameter pipe (with puddle flange)	No	12.0	5 000.00	60 000.00
22.5.5.6		(ii) 630mm diameter pipe (including swellable waterstop)	No	6.0	5 300.00	31 800.00
		Reinforcement				
	8.3.1	Steel Bars				
		(a) High tensile steel				
22.5.5.7		(i) 8mm up to 16mm diameter	t	4.0	13 880.00	55 520.00
22.5.5.8		(ii) 20mm up to 32mm (Provisional)	t	0.1	13 880.00	1 388.00
		Concrete				
	8.4.3	a) 10MPa/19mm concrete to:				
22.5.5.9		(i) Blinding layer (horizontal)	m²	2.0	1 840.00	3 680.00
	8.4.3	(b) 30 MPa /19mm concrete to:				
22.5.5.10		(i) Walls	m²	35.0	1 850.00	64 750.00
22.5.5.11		(ii) Base	m²	9.0	1 850.00	16 650.00
Total Carried Forward						549 673.00

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION G : CONCRETE WORKS

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R.
Brought Forward						549 673.00
22.5.5.12	8.4.3	(c) 15 MPa structural screed to chamber floor	m ³	2.0	2 370.00	4 740.00
	8.4.4	Unformed surface finishes				
22.5.5.13		(a) Wood float finish to floor slab	m ²	20	22.00	440.00
22.5.5.14		(b) Steel float finish to tops of walls	m ²	16	33.00	528.00
22.5.6	8.5	JOINTS				
22.5.6.1		a) Base of wall construction joint Type A (Detail 2) complete as shown on drawing (See Dwg. 4974-0315-DRG-C410)	m	48.0	330.00	15 840.00
22.5.7	8.7	GROUTING				
		Casting in of pipes into new concrete wall (pipes and fittings measured elsewhere)				
22.5.7.1	PSG 8.7 (c)	i) 800 mm diameter pipe (with puddle flange)	No	12.0	8 250.00	99 000.00
22.5.7.2		ii) 630mm diameter pipe (including swelable waterstop)	No	6.0	8 900.00	53 400.00
		Grouting				
22.5.7.3	PSG 8.10	Extra-over item 8.4.1 for the addition of Xypex Admix C500NF or equally approved admix	kg	230.0	60.00	13 800.00
22.5.7.4	PSG 8.11	Construction joints for concrete containing Xypex Admix C500NF or equally approved admix	m	60.0	110.00	6 600.00
22.5.8		CONCRETE LINING TO MATURATION POND (See Dwg. 4974-0315-DRG-C403 and 4974-0315-DRG-C411)				
	8.2	Formwork				
		Rates for smooth formwork shall include corner chamfers up to 15 x 15mm as specified				
	8.2.1	Rough - Plane				
22.5.8.1		a) Vertical (0 to 500mm high)	m	255.0	250.00	63 750.00
22.5.8.2		b) Vertical (500 to 2000mm high)	m ²	315.0	600.00	189 000.00
		Smooth - Plane				
Total Carried Forward						986 771.00

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION G : CONCRETE WORKS

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
Brought Forward						998 771.00
22.5.8.3		a) Vertical (0 to 500mm high)	m		300.00	Rate Only
22.5.8.4		b) Vertical (500 to 2000mm high)	m²	165.0	600.00	99 000.00
	8.2.6	Box out holes				
		a) Box out holes and pockets for:				
22.5.8.5		1) 600mm diameter GRP pipe	No	8.0	7 500.00	60 000.00
	8.3	Reinforcement				
		Steel Bars				
		(a) High tensile steel				
22.5.8.6		(i) 8mm up to 16mm diameter	t	3.5	13 880.00	48 580.00
22.5.8.7		(ii) 20mm up to 32mm (Provisional)	t	0.2	13 880.00	2 776.00
	8.3.2	High Tensile Welded Mesh				
22.5.8.8		a) Mesh Ref 245	m²	3 800.0	45.00	171 000.00
	8.4.1	Concrete				
		a) 10MPa/19mm non fines concrete to:				
22.5.8.9		1) Blinding layer (horizontal)	m²	75.0	1 765.00	132 375.00
		b) 20 MPa /19mm concrete to:				
22.5.8.10		1) Pond base	m²	171.0	1 750.00	299 250.00
22.5.8.11		2) Pond embankments	m²	166.0	1 785.00	294 525.00
22.5.8.12		3) Outlet Headwall Base	m²	8.2	1 715.00	14 063.00
22.5.8.13		4) Retaining Wall	m²	65.0	1 715.00	111 475.00
22.5.8.14		5) Retaining Wall Base	m²	75.0	1 715.00	128 625.00
		b) 25 MPa /19mm concrete to:				
22.5.8.15		3) Outlet Headwall Wall	m²	15.7	1 785.00	28 024.50
Total Carried Forward						2 386 464.50

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION G : CONCRETE WORKS

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
Brought Forward						2 386 464.50
22.5.8.16	8.4.3	(c) 15 MPa structural screed to pond floor	m ²	90.0	2 370.00	213 300.00
	8.4.4	Unformed surface finishes				
22.5.8.17		a) Broom brush finish to concrete panels	m ²	1 880.0	28.00	52 640.00
	8.5	Joints				
22.5.8.18		a) Construction Joints complete Detailed '1' on DWG 4974-0315-DRD-C414	m	470.0	360.00	169 200.00
22.5.8.19		b) Saw cut joints as detailed on DWG 4974-0315-DRD-C414	m	150.0	440.00	66 000.00
	8.7	Grouting				
		Build in pipework (pipes and fittings measured elsewhere)				
22.5.8.20	PSG 8.7 (c)	1) 600 mm diameter Concrete pipe	No	7.0	8 250.00	57 750.00
22.5.8.21	PSG 8.10	Extra-over item 8.4.1 for the addition of Xypex Admix C500NF or equally approved admix	kg	1 960.0	60.00	117 600.00
22.5.8.22	PSG 8.11	Construction joints for concrete containing Xypex Admix C500NF or equally approved admix	m	470.0	110.00	51 700.00
		Sundries				
22.5.8.23	PSLB 8.2.6	Type 2 Geotextile layer	m ²	850.0	21.00	17 850.00
Total Carried Forward To Summary						3 132 604.50

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION H: STRUCTURAL STEELWORK

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
22.6	SANS 1200 H	SECTION H: STRUCTURAL STEELWORK				
22.6.1	8.3.1.2	SUPPLY AND FABRICATION, INCLUDING HOT DIP GALVANISING OF STEELWORK COMPLETE WITH ALL THE NECESSARY CLEATS, BRACKETS, BOLTS, CHEMICAL ANCHOR, PLATES, ETC., AS FOLLOWS:				
		a) Using HDG Steel:				
22.6.1.1		(i) PFC 120 x 55 support the GRP moulded walking grating (at approximately 1.9m long channel with plate anchored to the new concrete wall and channel bolted to the channel)	t	1.0	87 872.00	87 872.00
	PSH 8.3.7	Stainless steel Penstock specials				
		(a) Supply and install penstock and frames into new or existing concrete extensions to chamber (incl. locking bolt)				
22.6.1.2		(i) 910mm wide x 2910mm high (Reinforced) 600mm dia pipe	No	15.0	58 055.00	840 825.00
22.6.1.3		(i) 940mm wide x 2910mm high (Reinforced)- 630mm dia pipe	No	5.0	58 055.00	280 275.00
	PSH 8.3.16	Fencing (Provisional)				
22.6.1.4		(i) Flatwrap barb wire	m	115.0	100.00	11 500.00
22.6.1.5		(ii) Hot-dip galvanised mesh (100mm x 50mmx Core wire diameter 3.5mm) Fencing of nominal height 2200mm	m	115.0	205.00	23 575.00
22.6.1.6		(iii) Concrete plinth	m	115.0	363.00	41 745.00
	PAF 8.1.2	Supply and Install Gates Complete				
22.6.1.7		(i) Pedestrian gate nominal height of 2100mm	No	1.0	8 140.00	8 140.00
	PSHA 8.3.9.1	38mm thick GRP moulded walking grating (green)				
22.6.1.8		1. GRP walkway gratings approx. 2400 x 1950 m to top of the New Chambers (A, B, D, E, G)	No	5.0	7 300.00	36 500.00
22.6.1.9		2. GRP walkway gratings approx. 3.7 x 1.9 m to top of the Chamber D	No	1.0	10 975.00	10 975.00
22.6.1.10		2. GRP walkway gratings approx. 3.7 x 2.4 m to top of the Chamber F	No	1.0	13 850.00	13 850.00
Total Carried Forward						1 335 257.00

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION H: STRUCTURAL STEELWORK

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
Brought Forward						1 335 257.00
22.6.1.11	PSHA 8.3.9.2	Hot Dip Galvanised Mild Steel angle (a) 45x45x5mm HDG angles with fishtails	m	35.0	408.00	14 280.00
22.6.1.12	PSHA 8.3.9.3	Handrailing 316 stainless steel Galvanised mild steel and painted hand rails assembly complete for: Along Concrete lined Maturation pond	m	250.0	1 000.00	250 000.00
22.6.1.13		1) Horizontal	No	4.0	175.00	700.00
22.6.1.14		Existing Chamber D 2) Shaped ends	m	6.5	1 000.00	6 500.00
22.6.1.15		1) Horizontal	No	1.0	175.00	175.00
22.6.1.16		New Chamber A 2) Shaped ends	m	8.0	1 000.00	8 000.00
22.6.1.17		1) Horizontal	No	2.0	175.00	350.00
Total Carried Forward To Summary						1 615 262.00

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION L: MEDIUM-PRESSURE PIPELINES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
22.7	SANS 1200 L	SECTION L: MEDIUM-PRESSURE PIPELINES				
22.7.1	PSL 8.2.1	SUPPLY, LAY, BED AND TEST HDPE CLASS 12 PIPES:				
22.7.1.1		(a) 63mm diameter,	m	19.0	118.00	2 242.00
22.7.2		SUPPLY, LAY, BED AND TEST GRP PN6 (SN 5000) PIPES:				
22.7.2.1		(a) 600mm diameter.	m	154.0	2 740.00	421 960.00
22.7.3	8.2.2	SPECIALS AND FITTINGS				
		Extra over 8.2.1 for supplying, laying, bedding and testing of specials complete with couplings:				
		GRP PN6 (SN 5000) to suit pipework				
22.7.3.1		a) 600mm x 45 degree bend	No	1.0	15 500.00	15 500.00
		FC fittings Class 12 to suit pipework				
22.7.3.2		a) 150mm End cap for sludge feed pipeline to drying beds	No	20.0	330.00	6 600.00
		Supply, lay, bed, joint and test specials (complete with couplings)				
		(a) GRP fittings to suit Class PN6 (SN5000) pipe				
22.7.3.3		(f) 600mm dia. straight pipe with puddle flange	No	13.0	26 075.00	338 975.00
22.7.4	8.2.3	VALVES				
		Extra over 8.2.1 for the supplying, fixing and bedding of:				
		a) Valves, resilient seat gate type, including including couplings and flanges for connect into Stainless steel pipe				
22.7.4.1		(j) 63 mm dia flanged	No	1.0	2 765.00	2 765.00
		Thrust block including formwork				
22.7.4.2		(a) Concrete class 20MPa / 19mm	m ³	6.0	2 740.00	16 440.00
	PSL 8.2.4	Flexible joints at structures				
Total Carried Forward						804 482.00

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION L: MEDIUM-PRESSURE PIPELINES

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
Brought Forward						804 482.00
22.7.4.3	PSL 8.2.16	(a) 600 mm diameter Connect to existing pipelines	No	13.0	7 285.00	94 705.00
22.7.4.4		(l) Connection to existing 800mm diameter GRP pipeline at New chamber	No	2.0	15 275.00	30 550.00
22.7.4.5	PSL 8.2.17	Extra over item PSL 8.2.16 for dealing with existing flow	Sum	1.0	19 635.00	19 635.00
Total Carried Forward To Summary						949 372.00

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION LB : BEDDING (PIPES)

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
22.8	SANS 1200 LB	SECTION LB : BEDDING (PIPES)				
	8.2.1	Provision of bedding from trench excavation				
22.8.1		(a) Selected granular material	m³	47.0	44.00	2 068.00
22.8.2		(b) Selected fill material	m³	32.0	44.00	1 408.00
	8.2.2.3	Provision of bedding by importation from commercial sources				
22.8.3		(a) Selected granular material	m³	184.0	245.00	45 080.00
22.8.4		(b) Selected fill material	m³	123.0	245.00	30 135.00
	PSLB 8.2.6	Provision of Bedding in waterlogged conditions				
22.8.5		(a) Single size 19mm stone	m³	5.0	588.00	2 940.00
22.8.6		(b) Bidim A4 or equal approved geotextile	m²	5.0	20.00	100.00
Total Carried Forward To Summary						81 731.00

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION ME: SUBBASE

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
22.9	SABS 1200 ME	SECTION ME: SUBBASE				
	8.3.3	Construct G5 quality subbase with material from commercial sources, compacted to 95% of mod. AASHTO density:				
22.9.1		a) 150mm to sidewalks	m ³	162.0	415.00	67 230.00
22.9.2		b) Base of the New Concrete Ponds	m ³	130.0	435.00	56 550.00
22.9.3	8.3.6	Stabilising agent; cement grade CEM II 32.5N for pavement layers	t	6.0	1 820.00	10 920.00
Total Carried Forward To Summary						134 700.00

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION MJ: SEGMENTED PAVING

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
22.10		SECTION MJ: SEGMENTED PAVING				
	PSMJ 8.2.2	Construction of paving complete				
22.10.1		a) 80mm interlocking paving blocks (TYPE S-A, CLASS 35) on 25mm sand, on paved walkways	m²	1 063.0	156.00	165 828.00
	8.2.3	Cutting units to fit edge restraints				
22.10.2		a) Straight edge cut	m	162.0	12.00	1 944.00
22.10.1	MK 8.2.1	PRECAST CONCRETE KERBING				
		a) Type E3				
22.10.1 .1		i) Straights	m	162.0	188.00	30 456.00
Total Carried Forward To Summary						198 228.00

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

SECTION MK: KERBING AND CHANNELING

Item	Payment	Item Description	Unit	Quantity	Rate	Amount R
22.11		SECTION MK: KERBING AND CHANNELING				
22.11.1		CONCRETE KERBS AND CHANNELS				
22.11.2	8.2.1	PRECAST CONCRETE KERBING				
		a) Type BK2				
22.11.2.1		i) Straights	m	15.0	212.00	3 180.00
22.11.2.2		ii) 1m to 4m radius	m	15.0	485.00	7 275.00
22.11.2.3		iii) 4m to 20m radius	m		345.00	Rate Only
22.11.2.4		iv) Exceeding 20m radius	m		225.00	Rate Only
		Channel				
22.11.2.5		a) Type C1 double channel	m	20.0	425.00	8 500.00
Total Carried Forward To Summary						18 955.00

BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW

		SUMMARY OF SECTIONS	
Section	Description		Amount R
22.1	SECTION A: PRELIMINARY AND GENERAL		2 100 500.00
22.2	SECTION C: SITE CLEARANCE		1 269 990.00
22.3	SECTION D: EARTHWORKS		785 055.20
22.4	SECTION D0: EARTHWORKS (PIPE		80 309.00
22.5	SECTION G: CONCRETE WORKS		3 132 504.50
22.6	SECTION H: STRUCTURAL STEELWORK		1 615 262.00
22.7	SECTION L: MEDIUM-PRESSURE PIPELINES		949 372.00
22.8	SECTION LB: BEDDING (PIPES)		51 731.00
22.9	SECTION ME: SUBBASE		134 700.00
22.10	SECTION MJ: SEGMENTED PAVING		108 228.00
22.11	SECTION MK: KERBING AND CHANNELING		18 955.00
Total Carried Forward To Summary Of Schedules			<u>10 366 614.70</u>

SUMMARY OF SCHEDULES

Schedule	Description	Amount (Rand)
1	BILL 1 - GENERAL	59 818 417 - 05
2	BILL 2 - SEGMENT 1	3 249 325 - 60
3	BILL 3 - SEGMENT 2	90 632 866 - 67
4	BILL 4 - SEGMENT 3	39 013 995 - 88
5	BILL 5 - SEGMENT 4	8 919 202 - 90
6	BILL 6 - SEGMENT 6	3 007 502 - 75
7	BILL 7 - DROP STRUCTURE A SV0421	10 273 507 - 00
8	BILL 8 - DROP STRUCTURE B SV0879	10 274 701 - 20
9	BILL 9 - DROP STRUCTURE C SV1420	10 279 703 - 20
10	BILL 10 - DROP STRUCTURE D SV2016	10 473 835 - 20
11	BILL 11 - PEDESTRIAN BRIDGE AT DROP STRUCTURE B	1 459 448 - 00
12	BILL 12 - VEHICLE BRIDGE AT DROP STRUCTURE C	2 178 938 - 10
13	BILL 13 - PEDESTRIAN BRIDGE AT DROP STRUCTURE D SV2016	1 457 408 - 20
14	BILL 14 - BRIDGE SV A1182 - 12M CLIPPER CRESCENT BRIDGE	2 71 416 - 50
15	BILL 15 - BRIDGE SV A1580 - 15m GARDEN CRESCENT BRIDGE	296 093 - 50
16	BILL 16 - BRIDGE SV A1811 - 14m BAY CRESCENT BRIDGE	278 794 - 50
17	BILL 17 - GOLF COURSE FOOTBRIDGE SV3220	722 394 - 00
18	BILL 18 - NMT FOOTBRIDGE SV3390	736 206 - 00
19	BILL 19 - AUXILIARY SPILLWAY B SV0825	712 476 - 00
20	BILL 20 - AUXILIARY SPILLWAY C SV1350	695 782 - 50
21	BILL 21 - AUXILIARY SPILLWAY D SV1950	695 782 - 50
22	BILL 22 - ALTERATIONS TO PONDS AT GORDON'S BAY WWTW	10 706 614 - 70
SUB-TOTAL		265 814 114 - 95
CONTINGENCIES		
Allow the sum of 10% (ten percent) of the above Sub-total for Contingencies to be spent as the Employer's Agent may direct and to be deducted in whole or in part if not required.		26 581 411 - 50
TOTAL INCLUDING CONTINGENCIES		292 395 526 - 45
VALUE ADDED TAX		
ADD: VAT at the rate of 15%		43 859 328 - 77
Carried to part C1.1 Form of Offer and Acceptance		336 254 855 - 42

Contract
Part C2: Pricing Data
Contract No. 256Q/2019/20

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C2.2
Bills of Materials
Summary