

CONSTRUCTION OF ESIDUNGENI VEHICLE BRIDGE

SCHEDULE A: ROAD WORKS					SECTION B1200
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
1200	GENERAL REQUIREMENTS AND PROVISIONS				
B12.01	(i) Quality control tests ordered by the engineer	PC Sum		550000	550 000,00
	(ii) Percentage for charges and profit on Prime Cost Sum for quality control tests ordered by the engineer	%	550 000,00		
B12.02	(i) Employment of a community liaison officer for the duration of the contract @R9 500p/m	Prov Sum		114000	114 000,00
	(ii) Percentage for charges and profit on the Provisional Sum for the employment of a community liaison officer	%	114 000,00		
B12.03	(i) Provisional sum for materials for the lowering and relocation of existing services	Prov Sum		700000	700 000,00
	(ii) Percentage for charges and profit on the Provisional Sum for the lowering and relocation of existing services	%	700 000,00		
B12.04	(i) Provisional sum for the payment of royalties	Prov Sum		50000	50 000,00
	(ii) Percentage for charges and profit on the Provisional Sum for the payment of royalties	%	50 000,00		
B12.05	(i) Provisional sum for initial survey and putting up bench marks	Prov Sum		50000	50 000,00
	(ii) Percentage for charges and profit on the Provisional Sum for initial survey and putting up bench marks	%	50 000,00		
B12.06	(i) Provisional sum for training	Prov Sum		300000	300 000,00
	(ii) Percentage for charges and profit on the Provisional Sum for training	%	300 000,00		
B12.07	(i) Polyethylene sheeting for paving blocks(0,15mmthk)	m2	6504		
B12.08	(i) Provisional sum for civill student trainer @ R7500P/M	Prov Sum		90000	90 000,00
	(ii) Percentage for charges and profit on the Provisional Sum for training	%	90 000,00		
B12.09	(i) Provisional sum for Safety Rep @ R7500P/M	Prov Sum		90000	90 000,00
	(ii) Percentage for charges and profit on the Provisional Sum for training	%	90 000,00		
B12.10	(i) Provisional sum for 2 Sign Board	Prov Sum		30000	30 000,00
	(ii) Percentage for charges and profit on the Provisional Sign Board	%	30 000,00		
TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULE A: ROAD WORKS					SECTION B1300
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
B1300	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS				
13,01	The Contractor's general obligations				
	(a) Fixed obligations	L.sum	1		
	(b) Value Related Obligations	Sum	1		
	(c) Time-related obligations	month	10		
B13.01	(d) Health and Safety obligations including:	month	10		
	(i) COVID - 19 regulations				
	(ii) Fixed obligations for the preparation of risk assessments , safe work procedures, the project H & S file, the H & S plan and any other H & S matters that the contractor deems necessary.				
	(iii) Fixed obligations for completing and checking the project H & S file and handling it over to the Client on completion of the works.				
	(iv) Time related obligations for the updating and amending the risk assessments, the safe work procedures, the project H & S file and the H & S plan, and for full compliance with all H & S matters during the construction of the work under the contract.				
TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULE A: ROAD WORKS					SECTION 1400
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
1400	HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S				
14,01	Office and laboratory accommodation:				
	(a) Offices (interior floor space only)	m²	20		
	(e) Ablution units	m²	5		
B14.02	Office and laboratory furniture:				
	(a) Chairs	No	10		
	(d) Desks, complete with drawers and locks	No	1		
	(e) Drawing tables	No	1		
	(f) Conference tables	No	1		
	(xi) Air-conditioning units with 2,2 kW minimum capacity, mounted and with own power connection	No	1		
	(xvi) Refrigerators	No	1		
	(xvii) Bookcases	No	1		
	(b) Prime-cost items and items paid for in a lump sum :				
	(iii) The provision for telephone cost for the engineer, including the cost of calls in connection with contract administration and telephone rental	Prov Sum	1	20 000,00	20 000,00
	(iv) Handling costs and profit in respect of subsub-item B14.03(b)(iii) above	%	20 000,00		
14,04	Car ports:				
	Car ports, as specified, at offices and	No	1		
14,07	Rented, hotel and other accommodation:				
	(a) Provisional sum for providing rented housing, hotel or other accommodation as described in subsubclause 14.03(c)(ii)	Prov Sum	1	20 000,00	20 000,00
	(b) Handling costs and profit in respect of subitem 14.07(a)	%	20 000		
14,08	Services:				
	(a) Services at office and laboratories:				
	(i) Fixed costs	L.sum	1		
	(ii) Running costs	month	10		
	(c) Services for rented houses	month	10		
TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULE A: ROAD WORKS					SECTION B1500
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
1500	ACCOMMODATION OF TRAFFIC				
15,01	Accommodating traffic and maintaining temporary deviations (Including watering)				
	(a) On the following chainages				
	(i) 0-4000	km	1,08		
	(ii) Watering and blading of Gravel Deviation	km	1,6		
15,02	Earthwork for temporary deviation:				
	(a) Shaping of temporary deviations	km	1,08		
	(b) Cut and borrow to Fill	m³	3 360		
	(c) Cut to spoil	m³	945		
15/16,02	Overhaul on material hauled in excess of 1.0 km	m³-km	8 610		
15,03	Temporary traffic-control facilities:				
	(a) Flagmen	man-day	600		
	(b) Portable STOP and GO-RY signs (900 mm dia)	No	5		
	(e) Road signs, R- and TR-series, (1200mm dia)	No	10		
	(f) Road signs, TW-series, (1500 mm x 1500 mm)	No	10		
	(g) Road signs, TGS series (1200mm x 1200mm)	m²	20		
	(h) Delineators (TW401 and TW402) 800 mm x 250 mm overall size:				
	(i) Single	No	0		Rate only
	(ii) Mounted back to back	No	10		
	(j) Traffic cones, 750 mm high	No	10		
	(i) Provision of other traffic control measures	PC sum	1	10 000,00	10 000,00
	(ii) Handling costs and profits in respect of subitem B15.03(n)(i)	%	10 000,00		
15,10	Accommodation of traffic where the road is constructed in half widths	km	2,00		
B15.14	Amber flashing lights mounted on signs	No	10		
B15.15	Safety jackets	No	6		
1500	TOTAL CARRIED FORWARD TO SUMMARY				

SCHEDULE A: ROAD WORKS					SECTION 1700
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
1700	CLEARING AND GRUBBING				
17,01	Clearing and grubbing	ha	2,50		
17,02	Removal and grubbing of large trees and tree stumps				
	(a) (a) Girth exceeding 1m up to and including 2m	no	4		
	(b) (b) Girth exceeding 2m up to and including 3m	no	2		
58,03	(f) Removal and stockpiling of topsoil	m3	1 138		
TOTAL CARRIED FORWARD TO SUMMARY					

PART A: SCHEDULE A: ROAD WORKS					SECTION B1800
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
1800	DAYWORKS				
18,01	Personnel				
	(a) Unskilled labour	h	20		
	(b) Semi-skilled labour	h	20		
	(c) Skilled labour	h	5		
	(d) Ganger	h	5		
	(e) Flagmen	h	20		
18,02	Equipment				
	(a) Front end loader, 2,0m³ bucket	h	5		
	(b) Backhoe loader, 0,75 m³ bucket	h	5		
	(c) Compressor & 2 jackhammers	h	5		
	(d) Grader, 14 000 kg / 100 kW	h	5		
	(e) Vibratory roller, 10 000 kg	h	5		
	(f) Pneumatic roller, 17 000 kg	h	5		
	(g) Pedestrian roller, double drum - 650 mm wide	h	10		
	(h) Tipper truck, 6 m³	h	5		
	(i) Water bowser, 10 000 l	h	5		
	(j) Excavator	h	5		
	(k) Bulldozer (Caterpillar D8 or similar)	h	5		
TOTAL CARRIED FORWARD TO SUMMARY					

PART A: SCHEDULE A: ROAD WORKS					SECTION 2100
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
2100	DRAINS				
21,01	Excavation for open drains (Type A,B and C trapezoidal drains):				
	(a) Excavating soft material situated within the following depth ranges below the surface level:				
	(i) 0 m up to 1,5 m	m ³	1 893		
	(b) Extra over subitem B21.01(a) for excavation in hard material, irrespective of depth	m ³	13		
21.15	Overhaul for material hauled in excess of 1,0 km free-haul (normal overhaul)	m ³ -km	3 811		
21,03	Excavation for subsoil drainage systems:				
	(a) Excavating soft material situated within the following depth ranges below the surface level:				
	(i) 0m up to 1,5m	m ³	135		
	(ii) Exceeding 1,5m and up to 3,0m	m ³	270		
	(b) Extra over subitem 21.03(a) for excavation in hard material irrespective of depth	m ³	50		
21,04	Natural permeable material in subsoil drainage				
21,06	(b) Crushed stone obtained from commercial source				
	(i) Fine Grade - 13,0mm	m ³	0		Rate Only
	(ii) Coarse-Grade - 19,0mm	m ³	45		
	Natural permeable material in subsoil drainage systems (sand):				
21,07	(b) Sand from commercial sources				
	(i) Medium grade < 2,00mm	m ³	0		Rate Only
	(ii) Fine grade < 0,25mm	m ³	45		
21,08	Pipes in subsoil drainage systems:				
	(b) Unplasticised PVC pipes and fittings, normal				
	(i) 110mm internal dia. slotted	m	250		
	Synthetic-fibre filter fabric:				
	(a) Grade 2	m ²	130		
21,10	Concrete Outlet Structures, manholes, junction boxes and cleaning eyes for s/s drainage				
	a) Outlet Structures	no	5		
21,13	Concrete caps for subsoil drain pipes	no	4		
21,17	Test flushing of piped subsoil drains	no	4		
21,20	Galvanized wire mesh at outlets	no	4		
TOTAL CARRIED FORWARD TO SUMMARY					

PART A: SCHEDULE A: ROAD WORKS					SECTION 2200
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
2200	PREFABRICATED CULVERTS				
22,01	Excavation: (a) Excavating soft material situated within the following depth ranges below the surface level: (i) 0 m up to 1.5 m (ii) Exceeding 1,5 m and up to 3,0 m (b) Extra over subitem 22.01(a) for excavation in hard material, irrespective of depth	m ³ m ³ m ³	270 1210,56 370		
22,02	Backfilling: (a) Using the excavated material (b) Using imported selected material (c) Extra over subitems 22.02(a) and (b) for soil cement backfilling containing 3% cement	m ³ m ³ m ³	112 280 98		
22,03	Concrete pipe culverts: (b) On class B bedding: (i) 450 mm dia. Type 100D (ii) 525 mm dia. Type 100D (iii) 600 mm dia. Type 100D (iv) 750 mm dia. Type 100D (v) 900 mm dia. Type 100D (v) 1050 mm dia. Type 100D	m m m m m m	0 0 0 78,00 0 0		Rate only Rate only Rate only Rate only
22,05	Portal and rectangular culverts: (b) Without prefabricated floor slabs: (i) 1200 mm x 600 mm Type 100D (i) 1500 mm x 1500 mm Type 100D (i) 1800 mm x 1800 mm Type 100D (ii) 3000 mm x 3000 mm Type 100D	m m m m	0 0 0 0		Rate only Rate only Rate only Rate only
22,07	Cast in situ concrete and formwork: (a) In class A bedding, screeds and the encasing for pipes, including formwork (i) Class 25/19 (ii) Class 15/19	 m ³ m ³	 0 0		 Rate only Rate only
2200	TOTAL CARRIED FORWARD				

PART A: SCHEDULE A: ROAD WORKS

SECTION 2200

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMT (R)
2200	BROUGHT FORWARD				
22,07	(b) In floor slabs for portal or rectangular culverts, including formwork and class U2 surface finish				
	(i) Class 30/19	m ³	0		Rate only
	(c) In inlet and outlet structures, skewed ends, catchpits, manholes, thrust and anchor blocks, excluding formwork but including class U2 surface finish				
	(i) Class 30/19	m ³	30		
	(d) Formwork of concrete under subitem 22.07(c) above				
	(i) Vertical formwork for F1 surface finish	m ²	95		
	(ii) Vertical formwork for F2 surface finish	m ²	85		
	(iii) Horizontal formwork for F2 surface finish	m ²	95		
22,10	Steel reinforcement:				
	(a) Mild steel bars	t	3,0		
	(b) High-tensile steel bars	t	5,0		
	(c) Welded steel fabric ref 500	kg	2 050		
22,11	Dowels for joining old and new concrete	kg	0		Rate only
22,12	Removing existing concrete:				
	(a) Plain concrete	m ³	30		
	(b) Reinforced concrete	m ³	20		
22,14	Removing and stacking exis. prefab culverts	m	0		Rate only
22,18	Brickworks				
	(b) 230 mm Thick	m ²	1500		
22,19	Plaster	m ²	3000		
22,25	Overhaul on demolished material and rubble carted to spoil for haul in excess of a free-haul distance of 1.0 km	m ³ -km	2 160		
22,30	Compaction of bedding				
	(a) to 90 % MOD AASHTO	m ³	150		
TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULE A: ROAD WORKS					SECTION 2300
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
2300	CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES, AND CONCRETE LININGS FOR OPEN DRAINS				
23,01	Concrete kerbing:				
	(a) Precast kerbing to SABS 927				
	(i) Figure 7 kerb	m	200		
	(ii) Figure 8 kerb	m	2560		
	(ii) Fig 12 kerb	m	0		Rate only
23,02	Kerbing and channeling				
	(a) Edge beams (Cast in-situ 30/19 Mpa)	m ³	20		
	(b) Concrete channels, cast in-situ concrete class 30/19 Mpa	m ³	20		
23,03	Cast insitu V-Drain (Drift) (30mpa)	m ³	324		
23,04	Cast insitu V-Drain (Stone Pitching)	m ³	150		
23,06	"Inlets, outlets, transitions and" similar structures (measured by components)				
	a Concrete class 25/19				
	1 In transitions an outlet structures	m ³	28		
	2 Side inlets and Manholes (as per drawing)	no.	8		
	3 Speed bumps	no	6		
	4 Energy breaker blocks	no	60		
23,07	Trimming of excavations for concrete lined open drains				
	a In soft material	m ²	800		
	b In hard material	m ²	750		
TOTAL CARRIED FORWARD					

SCHEDULE A: ROAD WORKS
SECTION 2300

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
2300	BROUGHT FORWARD				
23.08	Concrete lining for open drains				
	b Class U2 surface finish to cast insitu concrete for all types open drains	m ²	1762,6		
23.09	Formwork to cast insitu concrete lining for open drains				
	b To sides with formwork on both internal and external faces (each face measured)	m	1420		
	c To ends of slabs	m	450		
23.10	Sealed joints in concrete linings of				
	a "Flexcell, 10mm x 100mm deep"	m	150		
23.12	Steel Reinforcement				
	(a) Mild steel bars	t			Rate only
	(b) High-tensile steel bars	t			Rate only
	(c) Welded steel fabric ref 193	kg	4 000		
23.13	Polyethylene sheeting for concrete-lined open drains (0.15 mm thk)	m ²	1762,6		
23.14	Cutting bituminous surfacing and pavement layers for concrete kerbing & channelling	m	1 800		
23.19	Selected fill under concrete-lined drains	m ³	1 100		
B23.20	Curing of open channel concrete	m ²	2 200		
TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULE A: ROAD WORKS					SECTION 3100
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
3100	BORROW MATERIALS				
31,01	Excess overburden	m ³	5 400		
31,03	Finishing-off borrow areas in:				
	(a) Hard material	ha	1,5		
	(b) Intermediate material	ha	1,5		
	(c) Soft material	ha	1,5		
TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULE A: ROAD WORKS					SECTION 3300
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
3300	MASS EARTHWORKS				
B33.01	Cut and borrow to fill including 0,5km Free-haul				
	(a) Material in compacted layer thicknesses of 200 mm and less:				
	(ii) Compacted to 93% of modified AASHTO density	m ³	10 368		
	(b) Hard Excavation for rockfill	m ³	1 512		
	(c) Rock fill (as specified in subclause 3209(c))	m ³	600		
B33/32,06	Cut to Stockpiling including 0,5km Free-haul for later use	m ³	5 400		
33,04	Cut to spoil, including free-haul up to 0.5km, material obtained from:				
	(a) Soft excavation	m ³	5 400		
	(b) Intermediate excavation	m ³	0		Rate only
	(c) Hard Excavation	m ³	95		
33,07	Removal of unsuitable material (including free-haul of 1.0km):				
	(a) In layer thicknesses of 200mm and less:				
	(i) Stable material	m ³	2 160		
33,10	Roadbed preparation and the compaction of material:				
	(a) Compaction to 90% of modified AASHTO density	m ³	2 640		
33,11	Three-roller-passes compaction:				
	(a) Vibratory rollers	m ²			Rate Only
	(c) Grid rollers	m ²			Rate Only
	(d) Tamping rollers	m ²			Rate Only
33,13	Finishing-off cut and fill slopes, medians and interchange areas:				
	(a) Cut slopes	m ²	350		
	(b) Fill slopes	m ²	250		
33,12	In situ treatment of roadbed:				
	(a) In situ treatment by ripping	m ²			Rate Only
	(b) in situ treatment by blasting	m ²	750		
33/16.02	Overhaul on material hauled in excess of 0.5 km	m ³ -km	10 000		
33/16.02	Overhaul on material hauled in excess of 1.0 km	m ³ -km	422 625		
TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULE A: ROAD WORKS					SECTION 3400
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
3400	PAVEMENT LAYERS OF GRAVEL MATERIAL				
	(a) Gravel selected layer compacted to:				
	(i) 93% of modified AASHTO density (150mm G6) Lowerselected	m³	1 782		
	(ii) 93% of modified AASHTO density (150mm G6) Lowerselected (From Commercial Sources)	m³	1 782		
	(iii) 96% of modified AASHTO density (150mm G6) Upperselected	m³	1 683		
	(iv) 96% of modified AASHTO density (150mm G6) Upperselected (From Commercial Sources)	m³	1 683		
	Gravel base (chemically stabilized G5 material) compacted to:				
	(i) 98% of modified AASHTO density (150mm G5)	m³	1 584		
	(ii) 98% of modified AASHTO density (150mm G1) (From a Commercial Sources)	m³	1 584		
	(g) Gravel Shoulders compacted to				
	(i) 98% of modified AASHTO density (150mm G5)	m³	792		
B34.14	Extra over Sub Item B34.01 for:				
	(a) Placing and compacting of material in restricted areas	m³	175		
34/16,02	Overhaul on material hauled in excess of 1.0 km	m³-km	165 978		
TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULE A: ROAD WORKS					SECTION 3500
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
3500	STABILIZATION				
35,01	Chemical stabilization extra over unstabilized compacted layers:				
	(a) Subbase:				
	(i) 150mm thickness (C3)	m ³	1 728		
35,02	Chemical stabilising agent:				
	(g) Cement (CEM II 32.5N)	t	180		
35,04	Provision and application of water for curing	kl	4 000		
35,05	Curing by covering with the subsequent layer	m ²	30 000		
TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULE A : ANCILLARY ROADWORKS					Section 5100
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
5100	<u>PITCHING, STONEWORKS AND PROTECTION AGAINST EROSION</u>				
51,01	Stone pitching				
	(c) Grouted stone pitching on a concrete bed 100mm	m³	250		
51,05	Concrete edge beam				
	(a) 20Mpa, 150mmx75mm	m³	100		
51,06	Provision of approved herbicides and ant poison				
	(b) Provision of material	Prov Sum		15000	15 000,00
	Percentage for charges and profit on the Provisional Sum	%	15 000,00		
51,07	Foundation trenches	m³	10		
5200	TOTAL CARRIED TO SUMMARY				

SCHEDULE A : ROAD WORKS					Section 5200
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<u>GABIONS</u>				
52,01	Foundation trench excavation and backfilling				
	(a) In solid rock	m ³	48		
	(b) In all other classes of material	m ³	48		
52,02	Surface preparation for bedding the gabions	m ²	360		
52,03	Gabions				
	(b) Galvanised gabion boxes 1m x 1m x 2m 0.5m x 0.5m x 2m	m ³	70		
	(b) Galvanised gabion boxes 1.0m x 1.0m x 2m	m ³	70		
	(d) Galvanised gabion mattresses 0.3m x 1m x 3m	m ³	900		
B33.20	Fill constructed with material obtained from commercial sources or sources provided by the Contractor, including all haul:				
	(e) Rock fill (1 m x 1 m x 13m)	m ³	405		
	(f) Synthetic-fibre filter fabric: (a) Grade 2	m ²	300		
5200	TOTAL CARRIED TO SUMMARY				

SCHEDULE A : ANCILLARY ROADWORKS					Section 5400
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
5400	<u>GUARDRAILS</u>				
54,01	Guardrails on timber				
	(c) Galvanised	m	550		
54,03	Extar over items 54,01	m	80		
54,04	End treatments				
	(a) End wings	no	4		
	(b) Bull noses	no	4		
54,06	Reflective plates	no	5		
5200	TOTAL CARRIED TO SUMMARY				

SCHEDULE A: ROAD WORKS					SECTION 5600
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
5600	ROAD SIGNS				
56,01	Road sign boards with painted or coloured semi-matt background. Symbols, lettering and borders in semi-matt black or in Class 1 retro-reflective material, where the sign board is constructed from:				
	(a) Aluminium sheet (2,0 mm thick):				
	(i) Area not exceeding 2 m ²	m ²	30		
	(ii) Area exceeding 2 m ² but not 10 m ²	m ²	28		
56,02	Extra over item B56.01 for using:				
	(a) Background of retro-reflective material:				
	(i) Class I	m ²	26		
	(b) Lettering, symbols, numbers, arrows, emblems and borders of retro-reflective material:				
	(i) Class II	m ²	20		
56,03	Road sign supports (over-head road sign structures excluded):				
	(a) Steel tubing	t	1		
	(b) Timber (100-150mm dia treated in accordance to SABS673)	m	80		
56,05	Excavation and backfilling for road sign supports (not applicable to kilometre posts)	m ³	15		
56,06	Extra over item 56.05 for cement-treated soil backfill	m ³	15		
5600	TOTAL CARRIED FORWARD				

PART A: SCHEDULE A: ROAD WORKS

SECTION 5600

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
5600	BROUGHT FORWARD				
56,07	Extra over item 56.05 for rock excavation	m ³	10		
56,08	Dismantling, storing and re-erecting road signs with a surface area of:				
	(a) Up to 2 m ²	No	10		
	(b) Exceeding 2 m ² but not 10 m ²	No	4		
56,09	Dismantling and storing road signs with a surface area of:				
	(a) Up to 2 m ²	No	6		
	(b) Exceeding 2 m ² but not 10 m ²	No			Rate Only
56,1	Danger plates at culverts/structures (800mm x 200mm)	No	24		
TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULE A: ROAD WORKS					SECTION 5700
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
5700	ROAD MARKINGS				
57,02	Retro-reflective road-marking paint:				
	(a) White lines (broken or unbroken)				
	(i) 100 mm wide	km	1,377		
	(ii) 200 mm wide	km	0,75		
	(iii) 300 mm wide	km	0,3		
	(b) Yellow lines (broken or unbroken)				
	(i) 150 mm wide	km	2,754		
	(c) Red lines (broken or unbroken)				
	(i) 100 mm wide	km	0		Rate Only
	(d) White lettering and symbols	m²	15		
	(e) Yellow lettering and symbols	m²	5		
57,04	Variations in rate of application:				
	(a) White paint	litre			Rate Only
	(b) Yellow paint	litre			Rate Only
	(c) Red paint	litre			Rate Only
	(d) Retro-reflective beads	kg			Rate Only
57,06	Setting out and premarking the lines (excluding traffic island markings, lettering and symbols)	km	4,881		
57,05	Road Studs				
	(a) Supply	no	200		
	(b) Install road studs	no	200		
57,07	Re-establishing the painting unit during and at the end of the maintenance period	no	3		
TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULE A: ROAD WORKS					SECTION 5900
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
5900	FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS				
59,01	Finishing the road and road reserve:				
	(a) Single carriageway road	km	1,086		
	(b) Dual carriageway road	km	0		
TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULE A: STRUCTURAL				SECTION 6100	
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
6100	FOUNDATIONS FOR STRUCTURES				
61,01	Additional foundation investigations	PC sum	1	120 000,00	120 000,00
	Percentage for charges and profit on the Provisional Sum for item 61,01	%	120 000,00		
61,02	Excavation				
	(a) Excavation soft material situated with the following successive depth ranges				
	(i) 0 m up to 2 m	m³	600,00		
	(ii) Exceeding 2 m and up to 4 m	m³	550,00		
	(iii) Exceeding 4 m and up to 6 m	m³	200,00		
	(v) Exceeding 6 m and up to 8 m	m³	100,00		
	(b) Extra over subitem 61,02(a) for excavation in hard material irrespective of depth	m³	600		
	(c) Extra over subitem 61,02(a) for additional excavation required by the engineer after the excavation has been completed	m³	600		
	(d) Extra over subitem 61,02(a) for excavation by hand.	m³	40		
61,03	Access and drainage				
	(a) Access	PC sum	1	300 000,00	300 000,00
	(b) Drainage where no access has been provided	PC sum	1	150 000,00	150 000,00
	Percentage for charges and profit on the Provisional Sum for item 61,03(a) and (b)	%	450 000,00		
61,04	Backfill to excavations utilising:				
	(a) Material from the excavation	m³	600		
	(b) Imported Material	m³	900		
	(c) Soil cement	m³	25		
61,05	Fill within restricted area (extra over item 33,01)	m³	508		
61,06	Overhaul in excess of 1,0km on excavated material and on material imported for backfill, foundation fill and fill for caissons	m³-km	5640		
61,07	Overbreak in excavation in hard material	m²	189		
61,08	Foundation fill consisting of:				
	(a) Rock fill	m³	189		
	(b) Crushed -stone fill	m³	189		
	(c) Compacted granular	m³	189		
TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULE A: STRUCTURAL				SECTION 6100	
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
	BROUGHT FORWARD				
	(d) Mass concrete (class 15/19)	m³	189		
	(e) Concrete screed (75mm class 15/19)	m³	189		
61,09	Establishment on the site for the drilling of holes (type of drilling indicated)	PC sum	1	50 000,00	50 000,00
	Percentage for charges and profit on the Provisional Sum for item 61,09	%	50 000,00		
61,10	Moving to and setting up the equipment at each hole to be drilled	No	2 500		
61,11	Drilling of holes (38mm diameter percussion drilling)	m	48		
61,12	Grouting	Kg	10		
61,13	Dowl bars (High tensile 25mm diameter 2,3m Length)	Kg	270		
61,14	Foundation lining	m²	56,7		
TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULE A: STRUCTURAL					SECTION 6200
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
6200	FALSEWORK, FORMWORK AND CONCRETE FINISH				
62,02	Vertical formwork to provide				
	(a) Class F1 surface finish to:				
	(i) Abutment and Pier bases	m ²	330		
	(ii) Apron slabs	m ²	80		
	(iii) Deck: Edges and Stop Ends	m ²	280		
	(b) Class F2 surface finish to:				
	(i) Abutments and Wing Walls	m ²	850		
	(ii) Piers	m ²	550		
	(iii) Exposed external surfaces of deck sides				
	(iv) Parapets and end blocks	m ²	750		
	(v) Sidewalks	m ²	40		
62,03	Horizontal formwork to provide				
	(b) Class F2 surface finish to:				
	(i) Deck soffit (including sloping featured edges)	m ²	802		
62,04	Inclined formwork to provide				
	(a) Class F1 surface finish to:				
	(i) Abutment walls and wingwalls	m ²	600		
	(b) Class F2 surface finish to:				
	(i) Pier Cap soffit	m ²	10		
62,06	Formwork to from open joints				
	(i) Between vertical and horizontal surfaces at the deck ends and the abutments.	m ²	310		
TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULE A: STRUCTURAL					SECTION 6300
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
6300	STEEL REINFORCEMENT FOR STRUCTURES				
63,01	Steel reinforcement for:				
	(a) Pier Bases				
	(i) Mild-steel bars	ton	5		
	(ii) High-yield-stress-steel bars	ton	35		
	(iii) Welded steel fabric	Kg	0		Rate Only
	(b) Pier Walls and Pier Caps				
	(i) Mild-steel bars	ton	5		
	(ii) High-yield-stress-steel bars	ton	40		
	(iii) Welded steel fabric	Kg	0		Rate Only
	(c) Abutment Bases				
	(i) Mild-steel bars	ton	5		
	(ii) High-yield-stress-steel bars	ton	35		
	(iii) Welded steel fabric	Kg	0		Rate Only
	(d) Abutment Wall and Winwalls				
	(i) Mild-steel bars	ton	5		
	(ii) High-yield-stress-steel bars	ton	50		
	(iii) Welded steel fabric	Kg	0		Rate Only
	(e) Deck Slab and Diaphragms				
	(i) Mild-steel bars	ton	5		
	(ii) High-yield-stress-steel bars	ton	65		
	(iii) Welded steel fabric	Kg	0		Rate Only
	(f) Parapets and End blocks				
	(i) Mild-steel bars	ton	5		
	(ii) High-yield-stress-steel bars	ton	15		
	(iii) Welded steel fabric	Kg	0		Rate Only
	(g) Apron				
	(i) Mild-steel bars	ton	5		
	(ii) High-yield-stress-steel bars	ton	15		
	(iii) Welded steel fabric	Kg	0		Rate Only
TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULE A: STRUCTURAL					SECTION 6400
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
6400	CONCRETE FOR STRUCTURES				
64,01	Cast in situ concrete				
	(a) (i) 30/19Mpa Diaphragms	m ³	20		
	(ii) 30/19Mpa Parapets	m ³	48		
	(iii) 30/26Mpa Foundations Concrete	m ³	150		
	(iv) 30/19Mpa Abutments Concrete (Right Bases)	m ³	100		
	(v) 30/19Mpa Abutments Concrete (Right Wall)	m ³	150		
	(vi) 30/19Mpa Abutments Concrete (Left Bases)	m ³	70		
	(vii) 30/19Mpa Abutments Concrete (left Walls)	m ³	200		
	(viii) 30/19Mpa Piers Concrete (Bases)	m ³	150		
	(ix) 30/19Mpa Piers Concrete (Walls)	m ³	120		
	(x) 30/19Mpa Piers Concrete (Caps)	m ³	100		
	(xi) 40/19Mpa Deck Concrete	m ³	600		
	(xii) 30/19Mpa Approach Slab/Apron Slab	m ³	50		
64,06	Demolishing existing concrete				
	(a) Plain concrete				
	(i) 30Mpa concrete	m ³	150		
	(a) Reinforced concrete				
	(i) 30Mpa concrete	m ³	500		
64/16.02	Overhaul on material hauled in excess of 1.0 km (ordinary overhaul)	m ³ km	24000		
TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULE A: STRUCTURAL					SECTION 6600
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
6600	NO-FINES CONCRETE, JOINES, BEARINGS, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGEFOR STRUCTURES				
66,01	Cast in situ no-concrete (30Mpa)	m³	150		
66,03	Proprietary expansion joints				
	Prime cost sum allowed for purchasing and taking delivery of expansion joints	PC sum	1	100 000,00	100 000,00
	(a)				
	Percentage for charges and profit on the Provisional Sum for item 66,03(a)	%	100 000,00		
	(b)				
66,04	Installation of pro-prietary expansion joints				
	(a) Expansion Joints 10mm Thick	m	126		
66,05	Expansion joints				
	(a) Expansion Joints 10mm Thick	m	126		
66,06	Filled joints				
	(a) Expansion Joints 10mm Thick	m	126		
66,07	Unfilled joints				
	(a) Expansion Joints 10mm Thick	m²	50		
66,08	Sealing Joints				
	(a) Expansion Joints 10mm Thick	m²	50		
66,09	Proprietary bearings				
	Prime cost sum allowed for purchasing and taking delivery of expansion joints	PC sum	1	120 000,00	120 000,00
	(a)				
	Percentage for charges and profit on the Provisional Sum for item 66,03(a)	%	120 000,00		
	(b)				
66,10	Installing the Proprietary bearings				
	(a) Laminated Elestomeric Bearing				
	(i) Multidirectional	no	12		
66,12	Concrete hinges				
	(a) Hings	m	80		
TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULE A: STRUCTURAL					SECTION 6600
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
	BROUGHT FORWARD				
66,13	Bearing strips	m ²	150		
66,14	Dowels/guides	no	50		
61,15	Concrete parapets	m	200		
61,16	Steel rails	m	200,00		
61,17	End blocks	No	50		
66,18	Number for structures				
	(a) Number plates	no	10		
	(b) Painted number	no	10		
	(c) Number formed	no	10		
66,19	Drainage pipes and weep holes				
	(a) Drainage pipes				
	(i) M65 Netlon Drrainage Pipe behind abutments as detailed	m	75		
	(b) Weep hole				
	(i) UPVC 75 diameter pipes	m	90		
	(c) Drainage strips				
	(i) 325 mm wide DN1 Netlon drainage strips covered with Kaymat U34	m	50		
66,21	Synthetic-fibre filter fabric	m ²	150		
66,22	Concrete channelling	m	200		
66,23	Crushed stone in drainage strips	m ²	50		
66,24	Nose ending at Balustrades	no	4		
66,25	Crushed transition blocks	no	50		
66,26	Supplying and installing bolt groups complete for electrification brackets				
	(a) Single-bolt groups	no	100		
	(b) Double-bolt groups	no	100		
B66,27	Supplying and installing bridge deck walkway	m	60		
TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULE A: SIDE WALK**Section 7300**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<u>CONCRETE BLOCK PAVING FOR ROADS</u>				
73,01	Concrete block paving: (b) (Type: Pavtile Plaza Block) Segmented block paving to road areas (80 mm Interlocking type)	m²	6 600		
73,02	Cast in situ concrete edge and intermediate beams	m³	50		
73,03	Provision of approved herbicide and ant poison	m³	130		
	(a) Provision for ant Poison	Prov Sum		10000	10 000
	(b) Perentage for charges and profit	%	10 000,00		
7300	TOTAL CARRIED TO SUMMARY				

SCHEDULE A: ROAD WORKS					SECTION 8100
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT (R)
8100	TESTING MATERIALS AND WORKMANSHIP				
81,02	Other special tests requested by the engineer	Prov Sum	1	100 000,00	100 000,00
	(ii) Percentage for charges and profit on Prime Cost Sum for quality control tests ordered by the engineer	%	100 000,00		
TOTAL CARRIED FORWARD TO SUMMARY					

CONSTRUCTION OF ESIDUNGENI VEHICLE BRIDGE

SUMMARY OF SECTIONS
Contract No: 213/2020 XXXIX

SECTION	DESCRIPTION	AMOUNT (R)
SCHEDULE A: ROAD WORKS		
1200	GENERAL REQUIREMENTS AND PROVISIONS	
1300	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS	
1400	HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL	
1500	ACCOMMODATION OF TRAFFIC	
1700	CLEARING AND GRUBBING	
B1800	DAYWORKS	
2100	DRAINS	
2200	PREFABRICATED CULVERTS	
2300	CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES, AND CONCRETE LININGS FOR OPEN DRAINS	
3100	BORROW MATERIAL	
3300	MASS EARTHWORKS	
3400	PAVEMENT LAYERS OF GRAVEL MATERIAL	
3500	STABILIZATION	
5100	PITCHING, STONWORK AND PROTECTION AGAINST EROSION	
5200	GABIONS	
5400	GUARDRAILS	
5600	ROAD SIGNS	
5700	ROAD MARKINGS	
5900	FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS	
6100	FOUNDATIONS FOR STRUCTURE	
6200	FALSEWORK, FORMWORK AND CONCRETE FINISH	
6300	STEEL REINFORCEMENT FOR STRUCTURE	
6400	CONCRETE FOR STRUCTURE	
6600	NO-FINES CONCRETE, JOINTS, BEARING, BOLT GROUPS FOR ELECTRIFICATION, PARAPETS AND DRAINAGE FOR STRUCTURES	
7300	CONCRETE BLOCK PAVING	
8100	TESTING MATERIALS AND WORKMANSHIP	
	TOTAL SCHEDULE A: ROAD WORKS	
	TOTAL CARRIED FORWARD TO CALCULATION OF TENDER SUM	
	10% contingencies	
	TOTAL 1	
	10% CPA	
	TOTAL 2	
	15% VAT	
	GRAND TOTAL	