

SCHEDULE OF QUANTITIES

NB: TENDERERS MUST COMPLETE THE SCHEDULE OF QUANTITIES IN BLACK INK.

SCHEDULE A : BOROLELO INTERNAL ROAD AND STORMWATER UPGRADE

SECTION 1200

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1200	<u>GENERAL REQUIREMENTS AND PROVISIONS</u>				
B 12.01	Protection, removal, realignment and replacement of services				
	(a) Utility Services				
	(i) Relocation of services and payment to service owners	Prov.Sum	1	R 200 000,00	R 200 000,00
	(ii) Contractor's handling costs, profit and all other charges in respects of Subitems B12.01(i)	%	R 200 000,00		R -
C 12.01	Remuneration of the Project Liaison Officer and members of the Project Liaison Committee:				
	(a) Communit Liaison Officer (Allowance of R250 airtime per month and R250 Data per month included)	Prov.Sum	1	65 000,00	R 65 000,00
	(b) Project Steering Committee	Prov.Sum	1	60 000,00	R 60 000,00
	(c) Contractor's handling costs, profit and all other charges in respects of Subitems C12.01(a) and (b):				
	(i) Communit Liaison Officer	%	R 65 000,00		R -
	(ii) Project Steering Committee	%	R 60 000,00		R -
D 07.01	Training:				
	(a) Technical skills (Laying of Kerbing, OHS, Casting of Concrete)	Prov.Sum	1	R 200 000,00	R 200 000,00
	(c) Training venue	Prov.Sum	1	R 35 000,00	R 35 000,00
	(d) Contractor's handling costs, profit and all other charges in respect of Subitems				
	(i) Technical skills and Training Venue	%	R235 000,00		R -
	(e) Transport and accommodation of workers for training where it is not possible to undertake the training in close proximity to the site.	Prov.Sum	1	R 50 000,00	R 50 000,00
	other charges in respect of Subitem (e)	%	R 50 000,00		R -
E23.01	Contractor's initial obligations in respect of the Occupational Health and Safety Act and Construction Regulations	Lum Sum	1		R -
E23.03	Submission of the Health and Safety File	Lum Sum	1		R -
1200	TOTAL CARRIED TO SUMMARY				R -

SCHEDULE A : BOROLELO INTERNAL ROAD AND STORMWATER UPGRADE

SECTION 1300

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1300	<u>CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS</u>				
B13.01	The Contractor's general obligations:				
	(a) Contractual requirements	Sum	1		R -
	(b) Fixed obligations	Sum	1		R -
	(c) Time related obligations	Months	10		R -
	NB The combined total tendered for subitems (a), (b) and (c) shall not exceed 15% of the Tender Sum				
B13.06	Excavating material within the following depth ranges below ground level for the exposing of/ or searching for services: (a) 0m to 2m (i) Intermediate material	m ³	100		R -
	(b) Extra over item B13.06(a) for excavation by means of handtools such as picks, crowbars and pneumatic tools or mechanical breakers in the close vicinity of services or where no blasting or machine excavation is permitted. (i) Intermediate material	m ³	100		R -
1300	TOTAL CARRIED TO SUMMARY				

SCHEDULE A : BOROLELO INTERNAL ROAD AND STORMWATER UPGRADE

SECTION 1400

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1400	<u>HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL</u>				
14.01	Office and laboratory accommodation:				
	(a) Offices (interior floor space only)	m²	12		R -
14.02	Office and laboratory furniture:				
	(a) Chairs (Spec:)	No.	15		R -
	(b) Draughtsman's stools (Spec:)	No.	2		R -
	(c) Desks, complete with drawers and locks (Spec:)	No.	3		R -
	(d) Conference tables (3 Tables) (Spec:)	No.	3		R -
14.03	Office and laboratory fittings, installations and equipment:				
	(a) Items measured by number:				
	(i) 220/250 volt power points	No.	4		R -
	(ii) Double 80 watt fluorescent-light fittings complete with ballast and tubes	No.	4		R -
14.03 (a)(cont)	(iii) Fire extinguishers, 9,0 kg all purpose dry powder type, complete, mounted on wall with brackets	No.	4		R -
	(v) Steel filing cabinets with drawers	No.	2		R -
	(b) Prime-cost items and items paid for in a lump sum:				
	(i) The provision of telephone service, including the cost of calls in connection with contract administration and telephone rental	Prov.Sum	1	R 30 000,00	R 30 000,00
	(ii) Handling costs and profit in respect of subsubitem B14.03(b)(i) above	%	R 30 000,00		R -
14.04	Car-ports	No.	6		
14.05	Housing for labourers:				
	(a) Ablution unit, as specified, including latrines, wash basins and taps (2 Toilets)	Month	10		
14.06	Prefabricated houses (Storage)	No.	1		
14.07	Rented, hotel and other accommodation:				
	(a) Provisional Sum for providing rented housing, hotel or other accommodation (RE- Furnished with internet and airtime allowance)	Prov.Sum	1	R 100 000,00	R 100 000,00
	(b) Handling costs and profit in respect of subitem 14.07(a)	%	R 100 000,00		R -
14.08	Services:				
	(a) Services at offices and laboratories:				
	(i) Fixed costs	Lum Sum	1		R -
	(ii) Running costs	month	10		
1400	TOTAL CARRIED TO SUMMARY				R -

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SECTION 1500

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1500	ACCOMMODATION OF TRAFFIC				
15.01	Accommodating traffic and maintaining temporary deviations	km	1,62		
15.02	Earthworks for temporary deviations:				
	(a) Shaping of temporary deviations	km	3,24		
	(b) Cut and borrow to fill	m³	519,75		
	(c) Cut to spoil	m³	3811,50		
B15.03	Temporary traffic-control facilities:				
	(a) Flagmen	man-day	200,00		
	(b) Portable STOP and GO-RY signs	No.	4,00		
	(c) Amber flicker lights	No.	4,00		
	(d) Road signs, R- and TR-series, (size indicated)	No.	10,00		
	(e) Road signs, TW-series, (size indicated)	No.	10,00		
	(f) Road signs, STW-, DTG-, TGS- and TG-series (excluding delineators and barricades)	m²	6,00		
	(g) Delineators (DTG50J), sides:				
	(i) Single	No.	60,00		
	(ii) Mounted back to back	No.	100,00		
	(h) Movable barricade/road sign combination* Traffic cones	No.	20,00		
	(i) Two-way communication devices	No.	2,00		
15.05	Gravelling and repair of temporary deviations and existing gravel shoulders used as temporary deviations:				
	(a) Temporary deviations	m³	200,00		
15.06	Watering of temporary deviations	kl	110,00		
15.07	Blading by road grader of:				
	(a) Temporary deviations	km-pass	2,00		
15.08	Repairs, alterations and/or additions to existing roads used as temporary deviations	P.Sum	1,00		
15.10	Accommodation of traffic where the road is constructed in half-widths	km	1,62		
1500	TOTAL CARRIED TO SUMMARY				

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SECTION 1600

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1600	<u>OVERHAUL (Commercial Sourced Material) (Supply and deliver to Site)</u>				
16.01	Commercial materials identified by the Contractor from commercial, private or other non-commercial suppliers (Type G5 material for selected, subbase and base layer)	m³	6 634		R -
16.02	Sampling and material testing by a commercial laboratory for the stabilisation designs and Construction				
	(a) Cost of sampling and material testing	Prov.Sum	1	R150 000,00	R 150 000,00
	(b) Handling cost and profit in respect of item (16.02 (a))	%	R150 000,00		
1600	TOTAL CARRIED TO SUMMARY				R -

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SECTION 1700

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1700	<u>CLEARING AND GRUBBING</u>				
17,01	Clearing and grubbing	ha	1,62		
17,02	Removal and grubbing of large trees and tree stumps:				
	(a) Girth exceeding 1 m up to and including 2 m	number	2		
1700	TOTAL CARRIED TO SUMMARY				R -

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SECTION 1800

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1800	<u>DAYWORKS</u>				
B18.01	Unskilled labour				
	(a) Normal working hours	hr	1		Rate Only
	(b) Overtime	hr	1		Rate Only
	(c) Sundays and public holidays	hr	1		Rate Only
B18.02	Semi skilled labour				
	(a) Normal working hours	hr	1		Rate Only
	(b) Overtime	hr	1		Rate Only
	(c) Sundays and public holidays	hr	1		Rate Only
B18.03	Skilled labour				
	(a) Normal working hours	hr	1		Rate Only
	(b) Overtime	hr	1		Rate Only
	(c) Sundays and public holidays	hr	1		Rate Only
B18.04	Foreman				
	(a) Normal working hours	hr	1		Rate Only
	(b) Overtime	hr	1		Rate Only
	(c) Sundays and public holidays	hr	1		Rate Only
B18.05	Hire of construction equipment	hr	1		Rate Only
1800	TOTAL CARRIED TO SUMMARY				Rate Only

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SECTION 2100

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
2100	<u>DRAINS</u>				
21.01	Excavation for open 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	2 430,00		
	(b) Extra over subitem 21.01(a) for excavation in hard material, irrespective of depth	m ³	243,00		
2100	TOTAL CARRIED TO SUMMARY				

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SECTION 2300

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
2300	<u>CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES, AND CONCRETE LININGS FOR OPEN DRAINS</u>				
23.01	Concrete kerbing:				
	(a) Prefabricated mountable kerb, SABS 927 fig 8c.	m	1 782,00		
	(d) 200 mm x 300 mm cast in situ class 25/19 concrete edge beam	m³	116,64		
23.07	Trimming of excavations for concrete-lined open drains:				
	(a) In soft material	m²	200,00		
	(b) In hard material	m²	450,00		
23.08	Concrete for open v-drains:				
	(a) Cast in situ class 30/19 concrete lining in drains	m³	874,80		
23.09	Formwork to cast in situ concrete lining for open drains (class F2 surface finish):				
	(b) To sides with formwork on both internal and external faces (each face measured)	m²	712,80		
	(c) To ends of slabs	m²	44,00		
23.12	Steel reinforcement:				
	(a) Welded steel fabric / Mesh Wire ref. 196	m²	3 564,00		R -
2300	Carried forward to Summary				

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SECTION 3300

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3300	<u>MASS EARTHWORKS</u>				
33.01	Cut and borrow to fill, including free-haul up to 1,0 km:				
	(a) Material in compacted layer thicknesses of 150 mm and less:				
	(ii) Compacted to 93% of modified AASHTO density	m ³	1 871,10		
33.03	Extra over item 33.01 for excavating and breaking down material in:				
	(a) Intermediate excavation	m ³	467,78		
	(b) Hard excavation	m ³	374,22		
	(c) Boulder excavation class A	m ³	280,67		
	(d) Boulder excavation class B	m ³	187,11		
33.04	Cut to spoil, including free-haul up to 5,0 km. Material obtained from:				
	(a) Soft excavation	m ³	600,00		
	(b) Intermediate excavation	m ³	600,00		
	(c) Hard excavation	m ³	1 344,00		
	(d) Boulder excavation class A	m ³	672,00		
	(e) Boulder excavation class B	m ³	336,00		
33.07	Removal of unsuitable material (including free-haul of 5,0 km):				
	(a) In layer thicknesses of 200 mm and less:				
	(i) Unstable material	m ³	2 240,00		
33.09	Material bladed to windrow	m ³	350,00		
33.10	Roadbed preparation and the compaction of material:				
	(a) Compaction to 90% of modified AASHTO density	m ³	1 680,00		
33.11	Three-roller-passes compaction:				
	(a) Vibratory roller	m ²			Rate Only
	(b) Oscillatory roller	m ²			Rate Only
	(c) Grid roller	m ²			Rate Only
	(d) Tamping roller	m ²			Rate Only
3300	Carried forward to Summary				R -

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SECTION 3400

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3400	<u>PAVEMENT LAYERS OF GRAVEL MATERIAL</u>				
34.01	Pavement layers constructed from gravel taken from Commercial source				
	(a) Gravel roadbed / Selected compacted to:				
	(i) 93% of modified AASHTO density for a compacted layer thickness of 150 mm	m ³	1 871,10		
	(b) Gravel subbase (chemically stabilized material) compacted to:				
	(i) 97% of modified AASHTO density for a compacted layer thickness of 150 mm	m ³	1 871,10		
	Material from commercial source for Subbase layer				
	(c) Gravel base (chemically stabilized material) compacted to:				
	(i) 98% of modified AASHTO density for a compacted layer thickness of 150 mm	m ³	1 871,10		
	Material from commercial source for base layer				
	(d) Gravel shoulders compacted to:				
	(i) 93% of modified AASHTO density for a compacted layer thickness of 150mm	m ³	2 138,40		
34.03	Pavement layers constructed from gravel obtained from existing pavement layers:				
	(a) Gravel selected layer compacted to 93% of modified AASHTO density, using:				
	(i) Non-cemented material for a compacted layer thickness of 150 mm	m ³			Rate Only
	(b) Gravel subbase (unstabilized gravel) compacted to 97% of modified AASHTO density, using:				
	(i) Non-cemented material for a compacted layer thickness of 150 mm	m ³			Rate Only
	(c) Gravel base (stabilized gravel) compacted to 98% of modified AASHTO density (unstabilized gravel), using:				
	(i) Cemented material for a compacted layer thickness of 150 mm	m ³			Rate Only
3400	Carried forward				

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SECTION 3500

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3500	<u>STABILIZATION</u>				
35.01	Chemical stabilization extra over unstabilized compacted layers:				
	(a) Gravel Subbase (150mm Thick)	m³	1 764,18		
	(a) Gravel base (150mm thick)	m³	1 663,20		
35.02	Chemical stabilizing agent:				
	(a) Ordinary Portland cement	t	280,00		
35.04	Provision and application of water for curing	kl	40 000,00		
3500	TOTAL CARRIED TO SUMMARY				

SCHEDULE A : BOROLELO INTERNAL ROAD AND STORMWATER UPGRADE

SECTION 5600

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
56.01	Road sign boards with painted or coloured semi-matt background. Symbols, lettering and borders in semi-matt black or Class I retro-reflective material, where the sign board is constructed from: (a) Aluminium sheet (2,0 mm thick): (i) Area not exceeding 2 m² (ii) Area exceeding 2 m² but not 10 m² (e) Aluminium sheet regulatory warning and information signs (1) Octagonal (i) 1220mm (2) Triangular (ii) 1524 mm (3) Round (iii) 1220 mm	m² m² No No No	0,00 0,00 8,00 20,00 8,00		Rate Only Rate Only
56.02	Extra over item 56.01 for using: (a) Background of retro-reflective material: (i) Class I (b) Lettering, symbols, numbers, arrows, emblems and borders of retro-reflective material: (i) Class II Road sign supports (overhead road sign structures excluded): (a) Steel tubing (76mm dia x 2mm thick) (b) Timber (i) 100 mm diameter	m² m² t No	30,00 30,00 3,00 0,00		Rate Only
5600	TOTAL CARRIED TO SUMMARY				

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SECTION 5700

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
5700	ROAD MARKINGS				
57.01	Road-marking paint:				
	(a) White lines (broken or unbroken):				
	(i) 100 mm wide	km	2,00		
	(b) White lettering and symbols	m²	150,00		
	(c) Yellow lines (Solid, broken or unbroken):				
	(i) 100 mm wide	km	4,00		
57.04	Variations in rate of application:				
	(a) White paint	Litre			Rate Only
57.06	Setting out and premarking the lines (excluding traffic-island markings, lettering and symbols)	km	4,86		
57.07	Re-establishing the painting unit at the end of the maintenance period	Lum.Sum	1,00		R -
5700	TOTAL CARRIED TO SUMMARY				

SCHEDULE A : BOROLELO INTERNAL ROAD AND STORMWATER UPGRADE

SECTION 5900

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
5900	<u>FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS</u>				
59.01	Finishing the road and road reserve: (a) Single-carriageway road	km	1,78		
59.02	Treatment of old roads and temporary deviations	km	0,98		
5900	TOTAL CARRIED TO SUMMARY				

SCHEDULE A : BOROLELO INTERNAL ROAD AND STORMWATER UPGRADE

SECTION 8100

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
7300	<u>CONCRETE BLOCK PAVING FOR ROADS</u>				
73,01	Concrete block paving (rate to include procuring, delivering, preparation / levelling of river sand and packing of paving blocks into position 80mm interlocking paving blocks	m ²	13860,00		
7300	TOTAL CARRIED TO SUMMARY				R 0,00

SCHEDULE A : BOROLELO INTERNAL ROAD AND STORMWATER UPGRADE

SECTION 8100

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
8100	<u>TESTING MATERIALS AND WORKMANSHIP</u>				
81.02	Other special tests requested by the Engineer:				
	(a) Cost of testing	Prov. Sum	1	R350 000,00	R 350 000,00
	(b) Charge on Prime Cost Sum	%	R350 000,00		R -
8100	TOTAL CARRIED TO SUMMARY				R -

BOROLELO INTERNAL ROAD AND STORMWATER UPGRADE

FINAL SUMMARY

SECTION	DESCRIPTION	AMOUNT
1200	GENERAL REQUIREMENTS AND PROVISIONS	R -
1300	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS	
1400	HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL	R -
1500	ACCOMMODATION OF TRAFFIC	
1600	OVERHAUL	R -
1700	CLEARING AND GRUBBING	R -
1800	DAYWORK	Rate Only
2100	DRAINS	
2300	CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES, AND CONCRETE LININGS FOR OPEN DRAINS	
3300	MASS EARTHWORKS	R -
3400	PAVEMENT LAYERS OF GRAVEL MATERIAL	
3500	STABILIZATION	
5600	ROAD SIGNS	
5700	ROAD MARKINGS	
5900	FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS	
7300	CONCRETE BLOCK PAVING FOR ROADS	R -
8100	TESTING MATERIALS AND WORKMANSHIP	R -
SUBTOTAL 1		R -
ADD 10% CONTIGENCIES		R -
SUBTOTAL 2		R -
ADD 15 % VAT		R -
TOTAL		R -