

**SCHEDULE A: ROADWORKS**
**SECTION 1200**
**LIM 473/BROOKLYN-MAKOSHALA 24/25/057**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
<b>12.00</b>	<b><u>1200: GENERAL REQUIREMENTS AND PROVISIONS</u></b>				
B12.01	Provision for a Community Liaison Officer				
	(a) Provisional Sum for the payment of the Community Liaison Officer	Prov Sum	1	9000	
	(b) Handling costs and profit in respect of subitem B12.01(a)	%			
B12.02	Provision for cost of attending Steering Committee meetings				
	(a) Provisional Sum for the payment of travel cost incurred by Steering Committee members for attending Steering Committee meetings	Prov Sum	1	12000	
	(b) Handling costs and profit in respect of subitem B12.02(a)	%			
B12.03	Relocation and/or protection of services				
	(a) Allow a provisional sum for existing services to be relocated/or protected as ordered by the engineer	Prov Sum	1	100000	
	(d) Handling cost and profit in respect of sub-item B12.04(a)	%			
<b>B12.04</b>	Provision for the Engineer's Supervision and Quality Control				
	a) Allow a Provisional sum supervision for the Engineer and Engineer's Representative	Prov. Sum	1	750,000.00	
<b>B12.04</b>	Provision for Specialist Consultant for Survey				
	a) Allow a Provisional sum for Specialist Consultant Nominated by Makhuduthamaga LM	Prov. Sum	1.00	100000.00	
	b) Handling costs and profit in respect of sub-item B12.05(a)	%			
<b>B12.04</b>	Provision for Specialist Consultant for EIA				
	a) Allow a Provisional sum for Specialist Consultant Nominated by Makhuduthamaga LM	Prov. Sum	1.00	450000	
	b) Handling costs and profit in respect of sub-item B12.05(a)	%			
<b>B12.04</b>	Provision for Specialist Consultant for OHS				
	a) Allow a Provisional sum for Specialist Consultant Nominated by Makhuduthamaga LM	Prov. Sum	1.00	400000	
	b) Handling costs and profit in respect of sub-item B12.05(a)	%			
<b>B12.05</b>	Contract information board	No	2		
<b>TOTAL SECTION 1200 CARRIED TO SUMMARY</b>					

SCHEDULE A: ROADWORKS LIM 473/BROOKLYN-MAKOSHALA 24/25/057					SECTION 1300
ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
13.00	<b><u>1300: CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS</u></b>				
B13.01	The Contractor's general obligations:				
	(a) Fixed obligations	Lump Sum	1		
	(b) Value-related obligations	Lump Sum	1		
	(c) Time-related obligations	month	9		
	The combined total tendered for sub-items (a), (b) and (c) shall not exceed 15% of the tender sum.				
TOTAL SECTION 1300 CARRIED TO SUMMARY					

**SCHEDULE A: ROADWORKS**

**SECTION 1400**

**LIM 473/BROOKLYN-MAKOSHALA 24/25/057**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
<b>14.00</b>	<b><u>1400: HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL</u></b>				
<b>14.01</b>	<b>Office and laboratory accommodation:</b>				
	(a) Offices (Fully furnished)	m <sup>2</sup>	20		
	(e) Ablution units	no	2		
<b>14.02</b>	<b>Office furniture:</b>				
	(a) Chairs	No	10		
	(d) Desks, complete with drawers and locks	No	1		
<b>B14.03</b>	<b>Office and laboratory fittings, installations and equipment:</b>				
	(b) Prime-cost items and items paid for in a lump sum:				
	(ix) Provision of cellular telephones:				
	(1) Provision of cellular telephones	No.	1		
	<b>(2) Cost of calls and other charges</b>	<b>Prov. sum</b>	<b>1</b>		
	(3) Handling cost and profit in respect of subsubitem B14.03(b)(ix)(2) above	%			
	(c) Items measured by area:				
	(viii) Notice boards as per dwg. No.	m <sup>2</sup>	5		
	(ix) White board	m <sup>2</sup>	4		
<b>14.04</b>	<b>Car ports</b>				
	Car ports, 3.0m wide and 2,5m high, at offices	No.	2		
<b>B14.07</b>	<b>Rented, hotel and other accommodation</b>				
	(a) Provisional sum for providing rented housing, hotel or other accommodation as described in subsubclause 14.03 (c)(ii)	<b>Prov.Sum</b>	<b>1</b>		
	(b) Handling costs and profit in respect of subitem 14.07 (a)	%			
<b>14.08</b>	<b>Services:</b>				
	(a) Services at offices:				
	(i) Fixed costs	Lump Sum	1		
	(ii) Running costs	month	9		
<b>14.10</b>	<b>Provision of photostat facilities</b>	month	9		
<b>TOTAL SECTION 1400 CARRIED TO SUMMARY</b>					

SCHEDULE A: ROADWORKS LIM 473/BROOKLYN-MAKOSHALA 24/25/057					SECTION 1500
ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
15.00	<b>1500: ACCOMMODATION OF TRAFFIC</b>				
15.01	Accommodation of traffic and maintaining temporary deviations	km	3.4		
15.02	Earthworks for temporary deviation				
	(a) Shaping of temporary deviations	km	3.4		
15.03	<b>Temporary traffic-control facilities</b>				
	(a) Flagmen	man-day	400		
	(b) Portable STOP and GO-RY sign	No.	5		
	(e) Road signs, R - and TR-serie, 1200mm in dia	No.	10		
	(f) Road signs, TW-series, 1500mm sides	No.	15		
	(g) Road signs, STW-, DTG-, TGS- AND TG-series excluding delineators and barricades	m <sup>2</sup>	26		Rate Only
	(h) Delineators (800mm x 200mm)				
	(i) Single	No.	30		
	(ii) Mounted back to back	No.	40		
	(m) Two way communication devices	No.			Rate Only
15.04	<b>Relocation of traffic control facilities</b>	L/Sum	2		
15.05	<b>Gravelling and repair of temporary deviations and existing gravel shoulders used as temporary deviations:</b>				
	(a) Temporary deviations	m <sup>3</sup>	1500		
15.06	<b>Watering of temporary deviations</b>	kl	200		
15.07	<b>Blading by road grader of :</b>				
	(a) Temporary deviations	km-pass	1.5		
	(b) Existing roads used as temporary deviations	km-pass	1.5		
15.12	<b>Temporary Culverts:</b>				
	(a) Provision and laying of temporary prefabricated culverts complete ( 600 dia, Class 75 D interlocking, Class B bedding)	m	9		
	(b) Re-use of prefabricated culverts complete (600 dia, Class 100 D Interlocking, Class B bedding)	m	9		
<b>TOTAL SECTION 1500 CARRIED TO SUMMARY</b>					

SCHEDULE A: ROADWORKS LIM 473/BROOKLYN-MAKOSHALA 24/25/057					SECTION 1700
ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
17.00	<b><u>1700: CLEARING AND GRUBBING</u></b>				
17.01	(a) Clearing and grubbing				
	(i) Within the road reserve	ha	2		
	(ii) In borrow pits	ha	2		
17.02	<b>Removal and grubbing of large trees and tree</b>				
	(a) Girth exceeding 1 m up to and including 2 m	No	5		
	(b) Girth exceeding 2 m up to and including 3 m	No	5		
TOTAL SECTION 1700 CARRIED TO SUMMARY					

SCHEDULE A: ROADWORKS LIM 473/BROOKLYN-MAKOSHALA 24/25/057					SECTION 1800
ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
18.00	<b><u>1800: DAYWORKS</u></b>				
B18.01	<b>Labourers:</b>				
	(i) Unskilled	hr	400		
	(ii) Semi-skilled	hr	275		
	(iii) Skilled	hr	100		
B18.02	<b>Foreman</b>	hr	125		
B18.03	<b>Tipper trucks:</b>				
	(i) 3 - 5 ton	hr	252		
	(ii) 5,1 - 10 ton	hr	126		
B18.04	<b>Loader (0,5m³)</b>	hr	125		
B18.05	<b>Grader (CAT 140G or similar)</b>	hr	252		
B18.06	<b>LDV</b>	hr	400		
B18.07	<b>Compaction Rollers:</b>				
	(i) Vibrator roller	hr	252		
	(ii) Tamping roller	hr	84		
	(iii) Grid roller	hr	84		
B18.08	<b>Hand Controlled Compactors</b>				
	(i) Pedestrian roller (Bomag BW90 or similar)	hr	42		
	(ii) Vibratory plate	hr	42		
	(iii) Rammers	hr	42		
B18.09	<b>Water truck (min 10 000 ℓ )</b>	hr	252		
B18.10	<b>Dozer (D7 or similar)</b>	hr	60		
<b>TOTAL SECTION 1800 CARRIED TO SUMMARY</b>					

SCHEDULE A: ROADWORKS LIM 473/BROOKLYN-MAKOSHALA 24/25/057						SECTION 2100
ITEM NO	LIC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
21.00		<b>2100: DRAINS</b>				
21.01		<b>Excavation for open drains</b>  (a) Excavating soft material situated within the following depth ranges below the surface level:				
	LIC	(i) 0 m up to 1,5 m	m <sup>3</sup>	1470		
		(b) Extra over sub item 21.01 (a) for excavation in hard material, irrespective of depth	m <sup>3</sup>	147		
21.02	LIC	<b>Clearing and shaping existing open drains</b>	m <sup>3</sup>	500		Rate Only
21.03		<b>Excavation for subsoil drainage systems</b>  (a) Excavating soft material situated within the following depth ranges below surface level:				
	LIC	(i) 0 m up to 1,5m	m <sup>3</sup>	1400		
		(b) Extra over subitem 21.03(a) for excavation in hard material irrespective of depth	m <sup>3</sup>	140		
21.04		<b>Impermeable backfilling to subsoil drainage systems</b>	m <sup>3</sup>	292		Rate Only
21.06		<b>Natural permeable material in subsoil drainage systems (crushed stone)</b>  (b) Crushed stone obtained from commercial sources				
		(ii) Coarse grade stone	m <sup>3</sup>	63		
21.07		<b>Natural permeable material in subsoil drainage systems (Sand)</b>  (b) Sand from commercial sources	m <sup>3</sup>	105		
21.08		<b>(b) Unplasticised PVC pipes and fittings, normal duty complete with couplings</b>  (1) Perforated				
		(i) 160mm dia.	m	75		
21.10		<b>Synthetic fibre filter fabric</b>  (i) "Kaymat U24 or approved equivalent	m <sup>2</sup>	628.4		
21.12		<b>Concrete outlet structures, manhole boxes, junction boxes and cleaning eyes for subsoil drainage systems:</b>  (a) Outlet structures	No	20		
TOTAL SECTION 2100 CARRIED TO SUMMARY						

SCHEDULE A: ROADWORKS LIM 473/BROOKLYN-MAKOSHALA 24/25/057					SECTION 2200	
ITEM	LIC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
22.00		<b>2200: PREFABRICATED CULVERTS</b>				
B22.01		<b>Excavation:</b>				
	LIC	(a) Excavating soft material situated within the following depth ranges below the surface level:				
		(i) 0m up to 1,5m	m <sup>3</sup>	90		
		(ii) Exceeding 1,5m up to 3,0m	m <sup>3</sup>	40		
		(iii) Exceeding 3,0m up to 4.5m	m <sup>3</sup>	.		Rate Only
		(iii) Exceeding 4,0m up to 6,0m	m <sup>3</sup>			Rate Only
		(b) Extra over subitem 22.01(a) for excavation hard material irrespective of depth	m <sup>3</sup>	18		
22.02	LIC	<b>Backfilling:</b>				
		(a) Using the excavated material	m <sup>3</sup>	130		
		(b) Using imported selected material	m <sup>3</sup>	26		
		(c) Extra over subitems 22.02(a) and 22.02(b) for soil cement backfilling (3% cement)	m <sup>3</sup>	8		
22.03		<b>Concrete pipe culverts:</b>				
		(b) On Class B bedding:				
		(iii) 450mm dia. (Class 100D)	m	500		Rate Only
		(iv) 600mm dia . ( Class 100D)	m	1500		
22.07	LIC	<b>Cast in situ concrete and formwork:</b>				
		(b) In floor slabs for portal or rectangular culverts including formwork, joints and Class U2 finish for:				
		(i) Class 25/19 concrete	m <sup>3</sup>			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 25/19 concrete	m <sup>3</sup>	50		
2200		<b>TOTAL CARRIED FORWARD</b>				



ITEM	LIC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		<b>AMOUNT BROUGHT FORWARD</b>				
		(d) Formwork of concrete under subitem 22.07(c)				
		(i) Vertical formwork for F1 surface finish	m <sup>2</sup>			Rate Only
		(ii) Vertical formwork for F2 surface finish	m <sup>2</sup>	50		
22.10		<b>Steel reinforcement:</b>				
		(b) Y 12:	t	1		
		(c) High tensile steel mesh:				
		(i) Ref. 245	kg			Rate Only
		(iii) Ref. 395	kg	380		
		(iii) Ref. 617	kg	205		
22.18		<b>Brickwork</b>				
		(b) 230mm thick	m <sup>2</sup>	60		Rate Only
22.12	LIC	<b>Removing existing concrete:</b>				
		(a) Plain concrete	m <sup>3</sup>	30		Rate Only
		(b) Reinforced concrete	m <sup>3</sup>			Rate Only
B22.14		<b>Removing and stacking existing prefabricated culverts (all sizes)</b> for re use as directed by the engineer	m	50		
2200		<b>TOTAL CARRIED FORWARD</b>				

**SCHEDULE A: ROADWORKS (SUB-CONTRACTORS)**
**SECTION 2300**
**LIM 473/BROOKLYN-MAKOSHALA 24/25/057**

ITEM	LIC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
23.00		<b><u>2300: CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES, AND CONCRETE LININGS FOR OPEN DRAINS</u></b>				
B23.01	LIC	<b>Concrete kerbing:</b> (a) Prefabricated mountable kerb, SABS 927 Fig 7 b) Prefabricated mountable kerb, SABS 927 Fig 8c	m m	4500		Rate Only
23.06	LIC	<b>Inlet, outlet, transition and similar structures: (including in-situ concrete chutes)</b> (a) Cast in situ concrete lining for Chute inlets Type "E": (Class 20/19 concrete): (b) Formwork (Class F1 surface finish) for Type "E" chutes & inlets : (i) To side with formwork on both internal and external faces (each face measured) (c) Class U2 surface finish to cast in situ concrete:	m <sup>3</sup> m <sup>2</sup> m <sup>2</sup>	40 30 300		
23.07	LIC	<b>Trimming of excavation for concrete-lined open drains:</b> (a) In soft material (b) In hard material	m <sup>2</sup> m <sup>2</sup>	4500 675		
23.08		<b>Concrete lining for open drains and drifts</b> (a) Cast in situ concrete lining (25/19) (i) Side drains (b) Class U2 surface finish to cast in situ concrete	m <sup>3</sup> m <sup>2</sup>	510 975		
23.09		<b>Formwork to cast in situ concrete lining for open drains (class F2 surface finish)</b> (c) To ends of slabs	m <sup>2</sup>	50		
2300		<b>TOTAL CARRIED FORWARD TO SUMMARY</b>				

<b>SCHEDULE A: ROADWORKS</b>	<b>SECTION 3100</b>
<b>LIM 473/BROOKLYN-MAKOSHALA 24/25/057</b>	

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
<b>3100</b>	<b><u>3100: BORROW MATERIALS</u></b>				
<b>B31.01</b>	<b>Excess overburden:</b>				
	(a) Depth up to and including 0,5m	m³	2000		
	(b) Depth exceeding 0,5m and up to 1,5m	m³	600		
<b>31.03</b>	<b>Finishing-off borrow areas in:</b>				
	(a) Hard material	ha	2.50		
	(c) Soft material	ha	1.00		
<b>31.04</b>	<b>Compensation to landowners:</b>				
	(a) Prime cost for compensation to landowners	PC Sum		<b>R 100,000.00</b>	
	(b) Handling cost and profit in respect of sub-item B31.04(a) above	%			
	<b>Fencing</b>				
<b>31/B55.10</b>	<b>Borrow-pit game proof fencing</b>				
	(a) Provisional sum for the erecting of 1.8m height, with provision of gate fencing around borrow pit.	Prov Sum		<b>R 100,000.00</b>	
	(b) Handling costs and profit in respect of subitem 31/B55.10(a)	%			
<b>TOTAL SECTION 3100 CARRIED TO SUMMARY</b>					

**SCHEDULE A: ROADWORKS**  
**LIM 473/BROOKLYN-MAKOSHALA 24/25/057**

**SECTION 3300**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
<b>3300</b>	<b><u>3300: MASS EARTHWORKS</u></b>				
<b>33.01</b>	<b>Cut and borrow to fill, including 1.0 km free haul</b>				
	(a) Gravel material in compacted layer thicknesses of 200 mm and less:				
	(ii) Compacted to 93% of modified AASHTO density	m <sup>3</sup>	5610		
	( e ) Pioneer lyer	m <sup>3</sup>	1200		
<b>33.04</b>	<b>Cut and spoil, including free-haul up to 1.0km, material obtained from:</b>				
	(a) Soft excavation	m <sup>3</sup>	13090		
	(b) Intermediate excavation	m <sup>3</sup>	3927		
	(c) Hard excavation	m <sup>3</sup>	628		
	(d) Boulder Excavation class B	m <sup>3</sup>	500		
<b>33.09</b>	<b>Material bladed down to windrow</b>	m <sup>3</sup>			Rate Only
<b>33.10</b>	<b>Roadbed preparation and the compaction of material</b>				
	(a) Compaction to 93% of modified AASHTO density	m <sup>3</sup>	6120		
<b>33.11</b>	<b>Three roller passes</b>				
	(a) Vibratory roller	m <sup>2</sup>			Rate Only
	(b) Heavy grid roller	m <sup>2</sup>			Rate Only
<b>33.13</b>	<b>Finishing-off cut and fill slopes, median and interchange areas:</b>				
	(a) Cut slopes	m <sup>3</sup>	750		
	(b) Fill slopes	m <sup>3</sup>	750		
<b>33/16.00</b>	<b><u>1600: OVERHAUL</u></b>				
	<b>Overhaul on material hauled in excess of 10.0 km (ordinary overhaul)</b>	m <sup>3</sup> .km	7480		
	<b>TOTAL CARRIED FORWARD</b>				

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	AMOUNT BROUGHT FORWARD				
33/32.06	<u>3200: SELECTION, STOCKPILING AND BREAKING-DOWN THE MATERIAL FROM BORROW-PITS, CUTTING AND EXISTING PAVEMENT LAYERS AND PALCING. ETC.</u>				
	Stockpiling of material (Cut material for later use in laverworks)	m³	4000		Rate Only
	TOTAL SECTION 3300 CARRIED TO SUMMARY				

**SCHEDULE A: ROADWORKS**  
**LIM 473/BROOKLYN-MAKOSHALA 24/25/057**

**SECTION 3400**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3400	<b><u>3400: PAVEMENT LAYERS OF GRAVEL MATERIAL</u></b>				
34.01	<b>Pavement layers constructed from gravel taken from cut or borrow, including free-haul up to 1,0</b>				
	(a) Gravel selected layer compacted to:				
	(i) 150mm thick G7 material compacted to 93% modified AASHTO density	m³	15800		
	(b) Gravel <b>subbase</b> (chemically stabilized material to C3):				
	(i) 150mm thick G6 material compacted to 95% modified AASHTO density	m³	6800		
	(g) Gravel shoulder compacted to:				
	(ii) 150mm thick G7 material compacted to 93% modified AASHTO density	m³	2040		
B34.01	<b>Pavement layers constructed from gravel taken from commercial source, including free-haul up to 2.0 km:</b>				
	(b) Gravel <b>subbase</b> (chemically stabilized material to				
	(i) 150mm thick G6 material compacted to 95% modified AASHTO density	m³	10050		Rate Only
	(a) Gravel <b>base</b> (chemically stabilized material to C3) compacted to :	m³	8100		Rate Only
	(i) 150mm thick G2 material compacted to 87% bulk relative density	m³	7437		Rate Only
<b>TOTAL SECTION 3400 CARRIED TO SUMMARY</b>					

SCHEDULE A: ROADWORKS LIM 473/BROOKLYN-MAKOSHALA 24/25/057					SECTION 3500
ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3500	<b><u>3500: STABILIZATION</u></b>				
35.01	Chemical stabilisation extra-over unstabilized compacted layers:				
	(a) Base layer : 150mm thickness	m <sup>3</sup>	5440		
B35.02	Chemical stabilising agent:				
	(a) CEM II A/L 32.5 cement	t	330		
35.04	Provision and application of water for curing	kl	500		
35.05	Curing by covering with subsequent layer	m <sup>2</sup>			Rate Only
TOTAL SECTION 3500 CARRIED TO SUMMARY					

<b>SCHEDULE A: ROADWORKS</b>	<b>SECTION 3600</b>
<b>LIM 473/BROOKLYN-MAKOSHALA 24/25/057</b>	

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
36.01	<b>CRUSHED-STONE-BASE</b>  <b>Crushed stone base including overhaul from commercial source</b>  (a)Construction from type G1 material obtained <b>from Commercial source</b> compacted to 88% of apparent relative density  (i) 150mm layer thickness	m <sup>3</sup>			Rate Only
<b>TOTAL SECTION 3600 CARRIED TO SUMMARY</b>					



SCHEDULE A: ROADWORKS LIM 473/BROOKLYN-MAKOSHALA 24/25/057					SECTION 4100
ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
4100	<b><u>4100: PRIME COAT</u></b>				
41.01	<b>Prime coat:</b>				
	(c) MC-30 cut-back bitumen (0.8l/m2)	ℓ	16320		
	(d) MC-70 cut-back bitumen (0.8l/m2)	ℓ			Rate Only
41.02	<b>Aggregate for blinding</b>	m <sup>2</sup>			Rate Only
41.03	<b>Extra over item 41.01 for applying the prime coat in areas accessible only to hand held equipment</b>	ℓ			Rate Only
TOTAL SECTION 4100 CARRIED TO SUMMARY					

SCHEDULE A: ROADWORKS LIM 473/BROOKLYN-MAKOSHALA 24/25/057					SECTION 4200
ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
4200	<u>4200: ASPHALT BASE AND SURFACING</u>				
42.02	Asphalt surfacing				
	(a) Continuously graded hot-mix asphalt using:				
	(i) 60/70 pen, 30 mm thick medium grade	m <sup>2</sup>	25,800		
42.03	Rolled-in chipping, 13.2 mm nominal size at 4kg/m2 nominal application rate	t	103		
42.04	Tack coat of 30% stable-grade emulsion	ℓ	5,000		
B42.08	100mm cores in asphalt paving	No	20		
B45.21	Aggregate variations	m <sup>2</sup>			Rate Only
TOTAL SECTION 4200 CARRIED TO SUMMARY					

SCHEDULE A: ROADWORKS LIM 473/BROOKLYN-MAKOSHALA 24/25/057						SECTION 5100
ITEM NO	LIC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
51.00		<u>5100: PITCHING, STONEMWORK, ETC.</u>				
51.01	LIC	Stone pitching:				
		(b) Grouted stone pitching	m <sup>2</sup>	100		
51.03	LIC	Stone masonry walls:				
		(b) Cement-mortared stone walls	m <sup>3</sup>			Rate Only
51.04	LIC	Concrete edge beams:				
		(a) Class 25/19 cast in-situ concrete	m <sup>3</sup>	20		
TOTAL SECTION 4200 CARRIED TO SUMMARY						

SCHEDULE A: ROADWORKS						SECTION 5200
LIM 473/BROOKLYN-MAKOSHALA 24/25/057						
ITEM	LIC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
52.00		<b>SECTION 5200</b>				
		<b>5200: GABIONS</b>				
52.01		Foundation trench excavation and backfilling:				
		( a) In Solid rock (Material which requires blasting)	m <sup>3</sup>			Rate Only
		(b) In all other classes of material	m <sup>3</sup>	200		
52.02		<b>Surface preparation for bedding the gabions</b>	m <sup>2</sup>	120		
52.03		Gabions:				
		(a) Galvanized gabion boxes:				
		Mesh size: 80mm x 100mm, wire diameter: 2.7mm, diaphragm spacing: 1,0m				
		(i) 2m x 1m x 1m	m <sup>3</sup>	400		
		(c) Galvanized gabion mattresses:				
		Mesh size: 80mm x 100mm, wire diameter: 2.5mm, diaphragm spacing: 1,0m:				
		(ii) 6.0m x 2.0m x 0.3m deep	m <sup>3</sup>	80		
52.04		Filter Fabric:				
		(a) Kaymat A5 or approved equivalent	m <sup>2</sup>	1920		
TOTAL CARRIED FORWARD TO SUMMARY FOR SECTION 5200						

<b>SCHEDULE A: ROADWORKS</b>	<b>SECTION 5200</b>
<b>LIM 473/BROOKLYN-MAKOSHALA 24/25/057</b>	

Item No.	LIC	Description	Unit	QTY	Rate	Amount
5400		<b>GUARDRAILS</b>				
54.01		<b>Guardrails on timber posts:</b>				
		(a) Galvanized	m	150		
		<b>Extra over item 54.01 for horizontally curved guard-rails factory bend to a radius of less than 45m</b>	m			Rate Only
54.04		<b>End treatments:</b>				
		(b) Bull nose	No	8		
54.06		Reflective plates (Large reflectors)	No	160.00		
<b>TOTAL SECTION 5400 CARRIED FORWARD TO SUMMARY</b>						

<b>SCHEDULE A: ROADWORKS</b>	<b>SECTION 5600</b>
<b>LIM 473/BROOKLYN-MAKOSHALA 24/25/057</b>	

**SECTION 5600**

ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
56.00	<b><u>5600: ROAD SIGNS</u></b>				
B56.01	Road sign boards with painted or coloured semi-matt background. Symbols, lettering, and borders in diamond grade retro-reflective material, where the sign board is constructed from:  (c) Prepainted galvanised steel plate (chromadek or approved equivalent):  (i) Area not exceeding 2m²  (ii) Area exceeding 2m² but not 10m²  (e) Aluminium sheet regulatory warning and information signs  (i) Area not exceeding 2m²	m²                      	50                      		
56.02	<b>Extra over item 56.01 for using:</b>  (a) Background of retro-reflective material:  (iii) Class III  (b) Lettering, symbols, numbers, arrows, emblems and borders of retro- reflective material:  (ii) Class III	m²                      	100                      		
56.03	<b>Road sign supports (overhead road sign structures excluded):</b>  (b) Steel tubing	t	0.5		
56.05	<b>Excavation and backfilling for road sign supports (not applicable to kilometre posts)</b>	m³	10		
56.06	<b>Extra over item 56.05 for cement-treated soil</b>	m³	10		
56.07	<b>Extra over item 56.05 for rock excavation</b>	m³	10		
B56.10	<b>Danger Plates</b>  (a) Type W401/W402 back-to-back at culverts	No	20		
<b>TOTAL SECTION 5600 CARRIED TO SUMMARY</b>					

SCHEDULE A: ROADWORKS LIM 473/BROOKLYN-MAKOSHALA 24/25/057					SECTION 5700
ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
57.00	<b>5700: ROAD MARKINGS</b>				
57.02	<b>Retro-reflective road-marking paint:</b>				
	(a) White lines (broken or unbroken)				
	(i) 100 mm wide	km	3.4		
	(ii) 300 mm wide	km	1.0		
	(b) Yellow lines (broken or unbroken)				
	(ii) 150 mm wide	km	13		Rate only
	(d) White lettering and symbols	m²	136		
	(e) Yellow lettering and symbols	m²	99.0		Rate Only
57.04	<b>Variations in rate of application:</b>				
	(a) White paint	ℓ			Rate Only
	(b) Yellow paint	ℓ			Rate Only
B57.06	<b>Setting out and pre-marking the lines (excluding traffic island markings, lettering and symbols)</b>	km	9.0		
TOTAL SECTION 5700 CARRIED TO SUMMARY					

SCHEDULE A: ROADWORKS LIM 473/BROOKLYN-MAKOSHALA 24/25/057					SECTION 5900
ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
59.00	<u>5900: FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS</u>				
59.01	Finishing the road and road reserve:  (b) Single carriageway road	km	3.4		
TOTAL SECTION 5900 CARRIED TO SUMMARY					



SCHEDULE A: ROADWORKS (SUB-CONTRACTORS)  
LIM 473/BROOKLYN-MAKOSHALA 24/25/057

SECTION 7300

ITEM NO	LIC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
7300		<u>7300CONCRETE BLOCK PAVING FOR ROADS</u>				
73.02	LIC	Bedding Sand	m3	100		
73.01		<u>CONCRETE BLOCK PAVING</u>				
	LIC	80 mm Thick Concrete Interlocking Blocks Class 30	m²	600		
73.02	LIC	S-A to SABS 1058, Grey, in Herringbone Pattern				
	LIC	Cast in situ concrete edge and intermediate Beams	m3	15		
		Class 25/19 concrete				
73.03	LIC	Provision of Approved herbicidi and Ant Poisoning	m²			Rate Only
TOTAL SECTION 5900 CARRIED TO SUMMARY						

SCHEDULE A: ROADWORKS LIM 473/BROOKLYN-MAKOSHALA 24/25/057					SECTION 8100
ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
81.00	<b><u>8100: TESTING MATERIALS AND WORKMANSHIP</u></b>				
B81.02	Other special tests requested by the engineer				
	(a) Other special tests requested by the engineer	Prov Sum		R 100,000.00	
	(b) Handling cost and profit in respect of sub-item B81.02(a)	%			
TOTAL SECTION 8100 CARRIED TO SUMMARY					

SCHEDULE B: OHS ACT OBLIGATIONS LIM 473/BROOKLYN-MAKOSHALA 24/25/057					SCHEDULE B
ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	<b><u>SCHEDULE B: OCCUPATIONAL HEALTH AND SAFETY ACT OBLIGATIONS</u></b>				
B1.1	Contractor's initial obligations in respect of the Occupational Health and Safety Act and Construction Regulations	Lump Sum	1		
B1.3	Submission of the Health and Safety File	Lump Sum	1		
TOTAL SCHEDULE B CARRIED TO SUMMARY					

SCHEDULE D: PROVISION OF STRUCTURED TRAINING LIM 473/BROOKLYN-MAKOSHALA 24/25/057					SCHEDULE D
ITEM NO	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
D2.1	<b><u>SCHEDULE D: STRUCTURED TRAINING</u></b>				
	<b>Provision for accredited training</b>				
	(a) Generic Skills	Prov Sum	1	R 300,000.00	
	(b) Entrepreneurial Skills	Prov Sum	1	R 100,000.00	
	(c) Transport and venue of workers for training where it is not possible to undertake the training in close proximity to the site	Prov Sum	1	R 30,000.00	
	(c) Handling cost and profit in respect of sub-item C2.1(a) and (b) above	%			
TOTAL SCHEDULE D CARRIED TO SUMMARY					

**C2.3 SUMMARY OF BILL OF QUANTITIES****SCHEDULE A : ROADWORKS**

<b>SECTION</b>	<b>DESCRIPTION</b>	<b>AMOUNT</b>
1200	General requirements and provisions	R .....
1300	Contractor's establishment on site and general obligations	R .....
1400	Houses, offices and laboratories for the Engineer's personnel	R .....
1500	Accommodation of traffic	R .....
1700	Clearing and grubbing	R .....
1800	Dayworks	R .....
2100	Drain	R .....
2200	Prefabricated Culvert Structure	R .....
2300	Concrete Kerbing, Concrete Channeling, Open Chutes	R .....
3100	Borrow materials	R .....
3300	Mass earthworks	R .....
3400	Pavement layers of gravel materials	R .....
3500	Stabilization	R .....
3600	Crushed Stone Base	R .....
4100	Prime coat	R .....
4200	Asphalt Base and Surfacing	R .....
5200	Gabions	R .....
5100	Pitching, stonework, etc.	R .....
5400	Guardrails	R .....
5600	Road Signs	R .....
5700	Road markings	R .....
5900	Finishing the road and road reserve and treating old roads	R .....
7300	Concrete block paving	R .....
8100	Testing materials and workmanship	R .....
	<b>TOTAL SCHEDULE A</b>	<b>R .....</b>

<b>SCHEDULE B : OHS ACT OBLIGATIONS</b>		
	Occupational Health and Safety Act Obligations	R
<b>TOTAL SCHEDULE B</b>		<b>R</b>
<b>SCHEDULE D : PROVISION OF STRUCTURED TRAINING</b>		
	Structured Training	R
<b>TOTAL SCHEDULE D</b>		<b>R</b>

## **C2.4 CALCULATION OF TENDER SUM**

TOTAL SCHEDULE A : ROADWORKS	R
TOTAL SCHEDULE B: OHS ACT OBLIGATIONS	R
TOTAL SCHEDULE D: PROVISION FOR STRUCTURED TRAINING	R
<b>TENDER (CONTRACT) SUM</b>	<b>R</b>
ADD 5% FOR CONTINGENCIES (This amount is under the sole control of the employer)	R
SUBTOTAL	<b>R</b>
ADD : 15% VAT	R
<b>TENDER (CONTRACT) PRICE CARRIED TO FORM OF ACCEPTANCE (Page C.3)</b>	<b>R</b>

**Note :** Tender sum is the value of the offered total of the prices exclusive of VAT, contingencies, CPA and special materials but including contractual variations.