

NQUTHU MUNICIPALITY

CONSTRUCTION OF PHILANI GRAVEL ROAD (WARD 14)

SECTION 1200

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1200	<u>GENERAL REQUIREMENTS AND PROVISIONS</u>				
12.01	Hand excavation in all type of material for exposing services.	m3	30,00		
	(a) Provisional sum for existing services to be relocated and/or protected during construction(on request by Enginner)	Prov Sum	1	255 000,00	R255 000,00
	(i) handling costs on item 12.02(a)	%	255 000,00		
	(b) Provide for identification, exposing and relocation of water services(on request by Enginner).	Prov Sum	1,00	50 000,00	R50 000,00
	(i) handling cost on item 12.02 (b)	%	50 000,00		
12.06	Provision for surveyor on request by Enginner	Prov Sum	1,00	50 000,00	R50 000,00
	handling cost on item 12.02 (c)	%			
	(a) Cost of Community participation, PLC and Community Wages, salaries and allowances	Prov Sum	1	30 000,0	R30 000,00
	(i) Handling costs and profit	%	30 000,00		
	(b) Provision of CLO	Prov Sm	1,00	27 000,00	R27 000,00
	(i) Handling costs and profit	%	27 000,00		
	(c) Provision of Training- Student to be appointed by the Client	Prov Sum	1,00	30 000,00	R30 000,00
	(i) Handling costs and profit	%	30 000,00		
	i) Contractors initial obligations in respect of the Occupational Health and Safety Act and Construction Regulation	Month	6		
	Project Name board as per drawing	No	1		
1200	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1300	<u>CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS</u>				
13,01	Contractor's general obligations:				
	(a) Fixed obligations	L.S	1		
	(b) Value related obligation	L.S	1		
	(c) Time-related obligations	Month	6		
1300	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1500	<u>ACCOMMODATION OF TRAFFIC</u>				
15.03	Temporary traffic control facilities				
	(a) Flagman	Mn-Day	240,0		
	(b) Portable STOP and GO-RY signs	No	2,0		
	(c) Road sign TR series (1200mm)	No	2		
	(d) Roads signs (R2,TW- series) 1500mm	No	2		
	Delineators (TW401/TW4020)(800mmx200mm)				
	(i) Single	No	60		
	Relocation of temporary facilities	L.S	1		
	Watering of temporary deviations	KL	700		
1500	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1600	<u>OVERHAUL</u>				
16,02	Overhaul on material hauled in excess of 1,0 km (ordinary overhaul)	m³km	191 100		
1600	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
PART D:					
1800	<u>DAYWORKS</u>				
B18.01	Personnel (during normal working hours)				
	(a) Unskilled labour	h	18		
	(b) Semi-Skilled labour	h	18		
	(c) Flagman	h	9		
	(d) Foreman	h	9		
	Plant				
	(a) Grader (cat 140g or Similar)	h	9		
	(b) Track excavator (cat 235 or similar)	h	9		
	(c) Vibratory roller	h	9		
	(d) Grid roller	h	9		
	(e) Tipper truck (10m3)	h	9		
	(f) Water Cart (10 000litres)	h	9		
	(g) Backhoe TLB (cat 428 or similar)	h	9		
D1800	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
2100	<u>DRAINS</u>				
21.01	Excavation for open channel drains:				
	(a) Excavating soft material situated within the following depth ranges below the surface level:				
	(i) 0m up to 1.5m	m ³	1 000		
	(ii) exceeding 1.5m and up to 3.0m	m ³	200		
	(b) Extra over subitem 21.01(a) and for excavation in hard in hard material, irrespective of depth	m ³	100		
21,03	Excavation for subsoil drainage systems:				
	(a) Excavating soft material situated within the following depth ranges below the surface level:				
	(i) 0 m up to 1,5 m	m ³	56		
21,04	Impermeable backfilling to subsoil drainage systems	m ³	45		
21,06	Natural permeable material in subsoil drainage systems (crushed stone):				
	(b) Crushed stone obtained from commercial sources (19mm Nominal Size)	m ³	47		
21,07	Natural permeable material in subsoil drainage systems (crushed stone):				
	(b) Sand from commercial sources (Coarse Grade Nom. 4.75mm)	m ³	50		
21,08	Pipes in subsoil drainage systems:				
	(b) Unplasticized PVC pipes and fittings, normal duty, complete with couplings (100 mm internal dia. slotted not perforated)	m	124		
21,10	Synthetic-fibre filter fabric (Grade 2)	m ²	85		
2100	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
2200	<u>PREFABRICATED CULVERTS</u>				
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	m³	246		
	(ii) Exceeding 1,5 m and up to 3,0 m	m³	148		
	(b) Extra over subitem 22.01(a) for excavation in intermediate material, irrespective of depth	m³	435		
22.02	Backfilling:				
	(a) Using the excavated material	m³	142		
	(b) Using imported selected material	m³	75		
	(c) using imported selected granular material	m³	79		
	(d) Extra over subitem (a) and (b) for backfilling using soil cement backfill cement, with 5% cement	m³	50		
22.03	Concrete pipe culverts on Class C bedding:				
	(a) 450mm dia Class 100D	m	14		
	(b) 600mm dia Class 100D	m	103		
	(d) 1200 mm dia Class 75D	m	14		
B22.18	Manholes, catchpits, precast return walls, inlets and outlets structures complete				
	(a) 450 mm dia Class 75D	no	10		Rate Only
	(b) 600 mm dia Class 75D	m	60		Rate Only
	(d) 1200 mm dia Class 75D	n	12		Rate Only
2200	TOTAL CARRIED FORWARD				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3100	<u>BORROW MATERIAL</u>				
	Excess overburden	m³	280,00		
	Finishing off Borrow Area in:				
	B3: Quarry Rehabilitation	PC Sum	1	150 000	150 000,00
	c) Soft material	ha	0,9		
3100	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3300	<u>MASS EARTHWORKS</u>				
33,01	Cut and borrow to fill,including free -haul up to 1.0km				
	(a) Gravel material in compacted layer thicknesses of 200mm and less:				
	(i) Compacted to 93% of modified AASHTO density	m³	4 250		
	E.O item 33,01 for excavating and breaking down material in:				
	(a) intermediate excavation	m³	425		
33,04	Cut to spoil, including free-haul up to 1,0 km. Material obtained from:				
	(a) Soft Excavation	m³	439		
33,10	Roadbed preparation and the compaction of material:				
	(a) Compaction to 93% of modified AASHTO density	m³	3 170		
33/32.06	Stockpiling of material	m³	500		
	Provision for Blasting on request by Enginner	Prov Sum	1	150 000,00	150 000,00
3300	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3400	<u>PAVEMENT LAYERS OF GRAVEL MATERIAL</u>				
34,01	Pavement layers constructed from gravel taken from approved borrow pit (cut or borrow)				
	(a) Gravel base layer compacted to:				
	(i) 95% of modified AASHTO density (G5 material, 200mm thick)	m³	44580		
	(b) Gravel wearing course compacted to:				
	(i) 95% of modified AASHTO density (G6 material, 150mm thick)	m³	33546		
3400	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5400	<u>PITCHING, STONWORK AND PROTECTION AGAINST EROSION</u>				
55,01	Stone pitching: (b) Grouted stone pitching on a concrete bed, 100mm thick	m ²	110,00		Rate Only
5100	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5200	<u>FENCING</u>				
52.01	Dumprock compacted with 3 roller-pass (200mm)	m³	385,50		
55,02	Supply and Erect new fencing material:				
	(a) Fencing formed of 100x50x2,5 dia. Galvanised fencing 1,8 m high and fixed to each straining wire with 8- gauge binding wire at 500mm centre	m	500		Rate Only
5200	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5600	<u>ROAD SIGNS</u>				
56.01	Road sign boards complete with supports with Class 1 retro-reflective background. Symbols and lettering in semi matt black. Borders in Class 1 retro- reflective material, where the signboard is constructed from : (c) Pre-painted galvanised steel plate (chromadek or approved equivalent 1,6mm thick) or approved equivalent Area not exceeding 2m² Area exceeding 2m² but not 10m² e) CHROMADEK 1,4mm thick regulatory warning and information signs 1) Octagonal	m² m²	4 2		Rate Only Rate Only
56.03	iii) 914mm 2) Triangular	No No	4 4		Rate Only Rate Only
56.05	i) 914mm Round ii) 914mm Danger plates i) 600mm x 200mm Road sign supports (overhead road sign structures excluded): (b) Treated timber poles (100-150mm) Excavation and backfilling for road sign support	No No No m m³	4 5 36 49 9		Rate Only Rate Only Rate Only Rate Only Rate Only
5600	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5900	<u>FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS</u>				
59.01	Finishing the road and road reserve:				
	(b) Single-carriageway road	km	3,50		
5900	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
8100	<u>TESTING MATERIALS AND WORKMANSHIP</u>				
81.02	Other special tests required by the Engineer:				
	(a) Cost of testing	Prov sum	1	100 000	R100 000,00
	(b) Charge on prime cost	%	100000	0,10	R10 000,00
8100	TOTAL CARRIED TO SUMMARY				110 000,00

SUMMARY OF SCHEDULE OF QUANTITIES		
Section	Description	Amount
1200	GENERAL REQUIREMENTS AND PROVISIONS	R
1300	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS	R
1500	ACCOMMODATION OF TRAFFIC	R
1600	OVERHAUL	R
1700	CLEARING AND GRUBBING	R
1800	DAYWORKS	R
2100	DRAINS	R
2200	PREFABRICATED CULVERTS	R
3100	BORROW MATERIALS	R
3300	MASS EARTHWORKS	R
3400	PAVEMENT LAYERS OF GRAVEL MATERIAL	R
5100	PITCHING, STONWORK AND PROTECTION AGAINST EROSION	R
5200	FENCING	R
5600	ROAD SIGNS	R
5900	FINISHING THE ROAD AND ROAD RESERVE	R
8100	TESTING MATERIAL AND WORKMANSHIP	R 110 000,00
A1	Provisional Sum For (SMME's)	R 490 000,00
Sub Total A		
Add 10% contingencies OF Sub-total A		
Sub Total B		
Add 15% VAT		
ESTIMATED PROJECT COST		