

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
1700	<u>CLEARING AND GRUBBING</u>				
17,01	Clearing and grubbing	ha	2,5		
17,02	Removal and grubbing of large trees and tree stumps	No	5		
1700	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	m ³	246		
	(ii) Exceeding 1,5 m and up to 3,0 m	m ³	148		
	(b) Extra over subitem 22.01(a) for excavation in intermediate material, irrespective of depth	m ³	435		
22.02	Backfilling:				
	(a) Using the excavated material	m ³	142		
	(b) Using imported selected material	m ³	75		
	(c) using imported selected granular material	m ³	79		
	(d) Extra over subitem (a) and (b) for backfilling using soil cement backfill cement, with 5% cement	m ³	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	m ³	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	MASS EARTHWORKS				
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	m ³	4 250		
	E.O item 33,01 for excavating and breaking down material in:				
	(a) intermediate excavation	m ³	425		
33,04	Cut to spoil, including free-haul up to 1,0 km. Material obtained from:				
	(a) Soft Excavation	m ³	439		
33,10	Roadbed preparation and the compaction of material:				
	(a) Compaction to 93% of modified AASHTO density	m ³	3 170		
33/32.06	Stockpiling of material	m ³	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)	m ³	44580		
	(b) Gravel wearing course compacted to:				
	(i) 95% of modified AASHTO density (G6 material, 150mm thick)	m ³	33546		
3400	TOTAL CARRIED TO SUMMARY				

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5400	<u>PITCHING, STONEMWORK 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	FENCING				
52.01	Dumprock compacted with 3 roller-pass (200mm)	m ³	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 2m ²	m ²	4		Rate Only
	Area exceeding 2m ² but not 10m ²	m ²	2		Rate Only
	e) CHROMADEK 1,4mm thick regulatory warning and information signs				
	1) Octagonal				
56.03	iii) 914mm	No	4		Rate Only
	2) Triangular	No	4		Rate Only
56.05	i) 914mm	No	4		Rate Only
	Round				
	ii) 914mm	No	5		Rate Only
	Danger plates				
	i) 600mm x 200mm	No	36		Rate Only
	Road sign supports (overhead road sign structures excluded):				
	(b) Treated timber poles (100-150mm)	m	49		Rate Only
	Excavation and backfilling for road sign support	m ³	9		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	TESTING MATERIALS AND WORKMANSHIP				
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, STONEMWORK 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		