

SCHEDULE OF RATES - 2006

THEORETICAL CONSUMPTION OF MATERIALS

Ref	ITEMS	UNIT	CONSUMPTION				REMARKS	
			GEL		SED			
3	<u>EARTH WORK IN HILL CUTTING WORKS</u>							
3.4	Hill cutting in rock using explosive	cum	0.286	kg	0.300	No		
3.7	Hill cutting in rock using explosive using compressor with jack hammer	cum	0.286	kg	0.200	No		
4	<u>FOUNDATION WORKS</u>							
4.2	Excavation in foundation trenches and in drains							
	b Soft Rock with blasting.	cum	0.225	kg	0.300	No		
	c Hard Rock requiring blasting.	cum	0.650	kg	0.700	No		
5	<u>SLIP CLEARANCE</u>							
5.4	Slip clearance including breaking of boulders using explosive	cum	0.338	kg	0.450	No		
Ref	ITEMS	UNIT	Cement bags	STONE cum			Sand cum	Recron gm
				Stone	40mm	20mm	12mm	
6	<u>FILLING WORKS</u>							
6.4	Stone filling in building works	cum		0.850				
6.5	Stone soling in buildings works	cum		0.950				
7	<u>Cement Mortar</u>							

7.1	Cement mortar 1:1	cum	20.600					0.713	
7.2	Cement mortar 1:2	cum	13.680					0.950	
7.3	Cement mortar 1:3	cum	10.200					1.070	
7.4	Cement mortar 1:4	cum	7.600					1.070	
7.5	Cement mortar 1:5	cum	6.200					1.070	
7.6	Cement mortar 1:6	cum	5.000					1.070	
8	CEMENT CONCRETE: (cast in situ)								
8.1	Cement Concrete								
a	1:1:2 (1cement, 1coarse sand, 2 graded stone aggregate of 20mm nominal size)	cum	12.200			0.675	0.225	0.450	
Ref	ITEMS	UNIT	Cement bags	STONE cum				Sand cum	Recron gm
				Stone	40mm	20mm	12mm		
b	1:1.5:3 (1cement, 1.5 coarse sand,3 graded stone aggregate of 20mm & down size)	cum	8.000			0.662	0.221	0.441	
c	1:2:4 mix. (1 cement, 2 coarse sand, 4 graded stone aggregate of 20mm & down size)	cum	6.400			0.705	0.235	0.470	
d	1:2:4 mix. (1 cement, 2 coarse sand, 4 graded stone aggregate of 40mm & down size)	cum	6.400		0.544	0.241	0.126	0.470	

	e	1:3:6 mix. (1 cement, 3 coarse sand, 6 stone aggregate of 20mm & down size)	cum	4.400			0.727	0.242	0.485	
	f	1:3:6 mix. (1 cement, 3 coarse sand, 6 stone aggregate of 40mm & down size)	cum	4.400		0.672	0.262		0.485	
	g	1:4:8 mix. (1 cement, 4 coarse sand, 8 stone aggregate of 40mm & down size)	cum	3.400		0.688	0.275		0.500	
	h	1:5:10 mix.(1cement, 5 coarse sand, 10 stone aggregate of 40mm & down size)	cum	2.600		0.662	0.258		0.475	
8.2	Cement Concrete with Recron 3S									
	a	1:1:2(1cement, 1coarse sand, 2 graded stone aggregate of 20mm nominal size)	cum	12.200			0.675	0.225	0.450	1525.00
	b	1:1.5:3 (1cement, 1.5 coarse sand,3 graded stone aggregate of 20mm & down size)	cum	8.000			0.662	0.221	0.441	1000.00

	c	1:2:4 mix.(1 cement, 2 coarse sand, 4 graded stone aggregate of 20mm & down size)	cum	6.400			0.705	0.235	0.470	800.00
Ref		<u>ITEMS</u>	<u>UNIT</u>	Cement bags	STONE cum				Sand cum	Recron gm
	d	1:2:4 mix.(1 cement, 2 coarse sand, 4 graded stone aggregate of 40mm & down size)	cum	6.400		0.544	0.241	0.126	0.470	800.00
	e	1:3:6 mix.(1 cement, 3 coarse sand, 6 stone aggregate of 20mm & down size)	cum	4.400			0.727	0.242	0.485	550.00
	f	1:3:6 mix.(1 cement, 3 coarse sand, 6 stone aggregate of 40mm & down size)	cum	4.400		0.672	0.262		0.485	550.00
	g	1:4:8 mix. (1 cement, 4 coarse sand, 8 stone aggregate of 40mm & down size)	cum	3.400		0.688	0.275		0.500	212.50
	h	1:5:10 mix.(1cement, 5 coarse sand, 10 stone aggregate of 40mm & down size)	cum	2.600		0.662	0.258		0.475	162.50
8.3		Damp Proof Coarse 40 mm thick with cement concrete 1:2:4	sqm	0.256				0.038	0.019	

8.4	Damp Proof Course 40 mm thick in cement concrete 1:2:4 with Recron 3S	sqm	0.256				0.038	0.019	16.00	
9	<u>REINFORCED CEMENT CONCRETE CAST IN SITU</u>									
9.1	Reinforced Cement Concrete									
a	1:1:2 (1 cement: 1 coarse sand : 2 graded stone aggregate 20mm and down nominal gauge size)	cum	12.200			0.675	0.225	0.450		
b	1:1.5:3 Mix (1cement, 1.5 coarse sand 3 graded stone aggregate 20mm and down nominal gauge)	cum	8.000			0.662	0.221	0.450		
c	1:2:4 (1cement,2coarse sand, 4 graded stone aggregate of 20mm nominal size).	cum	6.400			0.705	0.235	0.470		
<u>Ref</u>	<u>ITEMS</u>	<u>UNIT</u>	Cement bags	STONE cum				Sand cum	Recron gm	
				Stone	40mm	20mm	12mm			
9.2	Reinforced Cement Concrete with Recron 3S									
a	1:1:2 (1 cement: 1 coarse sand : 2 graded stone aggregate 20mm and down nominal gauge size)	cum	12.200			0.675	0.225	0.450	1525.00	

	b	1:1.5:3 Mix (1cement, 1.5 coarse sand 3 graded stone aggregate 20mm and down nominal gauge)	cum	8.000			0.662	0.221	0.450	1000.00
	c	1:2:4 (1cement,2coarse sand, 4 graded stone aggregate of 20mm nominal size).	cum	6.400			0.705	0.235	0.470	800.00
10	<u>CEMENT PLASTER WORKS:</u>									
10.1	12mm thick Cement Plaster									
	a	1:3 Mix	sqm	0.147					0.015	
	b	1:4 mix.	sqm	0.109					0.015	
	c	1:5 Mix	sqm	0.089					0.015	
	d	1:6 Mix.	sqm	0.072					0.015	
10.2	15mm thick Cement Plaster									
	a	1:3 Mix	sqm	0.175					0.018	
	b	1:4 mix.	sqm	0.131					0.018	
	c	1:5 Mix	sqm	0.107					0.018	
	d	1:6 Mix.	sqm	0.086					0.018	
10.3	20mm thick Cement Plaster									

	a	1:3 Mix	sqm	0.228					0.024	
	b	1:4 mix.	sqm	0.170					0.024	
	c	1:5 Mix	sqm	0.139					0.024	
	d	1:6 Mix.	sqm	0.112					0.024	
Ref	ITEMS		UNIT	Cement bags	STONE cum				Sand cum	Recron gm
					Stone	40mm	20mm	12mm		
10.4	12mm thick Cement Plaster with Recorn 3S									
	a	1:3 Mix	sqm	0.147					0.015	14.69
	b	1:4 mix.	sqm	0.109					0.015	10.94
	c	1:5 Mix	sqm	0.089					0.015	9.00
	d	1:6 Mix.	sqm	0.072					0.015	7.20
10.5	15mm thick Cement Plaster with Recorn 3S									
	a	1:3 Mix	sqm	0.175					0.018	17.54
	b	1:4 mix.	sqm	0.131					0.018	13.07
	c	1:5 Mix	sqm	0.107					0.018	10.66
	d	1:6 Mix.	sqm	0.086					0.018	8.60
10.6	20mm thick Cement Plaster with Recorn 3S									

	a	1:3 Mix	sqm	0.228					0.024	22.85
	b	1:4 mix.	sqm	0.170					0.024	17.02
	c	1:5 Mix	sqm	0.139					0.024	13.89
	d	1:6 Mix.	sqm	0.112					0.024	11.20
10.8		Cement plaster in 1:3 mix cement mortar with a floating coat of neat cement								
	a	12 mm thick	sqm	0.455					0.002	
	b	15 mm thick	sqm	0.458					0.002	
	c	20 mm thick	sqm	0.463					0.002	
10.90		POINTING ON BRICKS / STONE WORKS								
	a	Pointing on bricks works with 1:3 mix cement mortar (1 cement, 3 fine sand) (Raised or cut pointing)	sqm	0.469					0.049	
Ref		ITEMS	UNIT	Cement bags	STONE cum				Sand cum	Recron gm
					Stone	40mm	20mm	12mm		

	b	Pointing on stone works with 1:3 mix cement mortar (1 cement, 3 fine sand) (raised or cut pointing)	sqm	0.459					0.048	
10.10		LIME PUNNING								
	a	Lime punning with lime mortar 1:1 (1 lime putty , 1 fine sand) with a coat of 3 mm thickness all complete:	sqm	unslaked lime (Kg)	=	1.353	white cement (kg)	=	0.50	
	b	Lime punning with lime mortar 1:1 (1 lime putty , 1 fine sand) with a coat of 3 mm thickness all complete with Recron 3S	sqm	unslaked lime (Kg)	=	1.353	white cement (kg)	=	0.50	2.71
11		<u>BUILDING PARTITION WORKS</u>								
11.1		Brick Work in half brick thick with 1:4 cement mortar	sqm	0.213					0.030	
11.2		Brick Work in one brick thick with 1:5 cement mortar	cum	1.550					0.270	
11.3		Brick Masonry in one and half brick thick wall with 1:6 cement mortar	cum	1.350					0.290	
11.4		Ekra walling with 20mm thickness. cement plaster 1:3mix	sqm	0.456					0.048	
11.5		Hollow Blocks in 1:4 c.m.	sqm	0.748			0.061		0.078	

11.6	Solid Block in 1:4 c.m.	sqm	0.787			0.095	0.032	0.093	
11.7	Brick Work in half brick thick in 1:4 cement mortar with Recron 3S	sqm	0.213					0.030	21.28
11.8	Brick Work in one brick thick in 1:5 cement mortar with Recron 3S	cum	1.550					0.270	155.00
11.9	Brick Masonry in one and half brick thick in 1:6 cement mortarwith Recron 3S	cum	1.350					0.290	135.00
11.10	Ekra Walling in 20mm thick CP in 1:3mix with Recron 3S	sqm	0.456					0.048	17.54
Ref	<u>ITEMS</u>	<u>UNIT</u>	Cement bags	STONE cum				Sand cum	Recron gm
				Stone	40mm	20mm	12mm		
11.11	Hollow Blocks in 1:4 c.m with Recron 3S	sqm	0.748			0.061		0.078	45.90
11.12	Solid Block in 1:4 c.m with Recron 3S	sqm	0.787			0.095	0.032	0.093	21.28
12	<u>FLOORING WORKS</u>								
12.1	18mm thick 30 cm height cement plaster skirting with cement mortar 1:3 finished with a floating coat of neat cement	sqm	0.281					0.025	
12.2	21mm thick 30 cm height cement plaster skirting with cement mortar 1:3 finished with a floating coat of neat cement	sqm	0.315					0.029	

12.3	40 mm thick 1:2:4 c.c. flooring with floating coat of neat cement	sqm	0.340			0.027	0.009	0.018	
12.4	40 mm thick 1:2:4 c.c. flooring with floating coat of neat cement with Recron 3S	sqm	0.340			0.027	0.009	0.018	42.50
12.5	40 mm thick 1:2:4 c.c. flooring with floating coat of neat cement with Ironite	sqm	0.340	Ironite (kg)	0.340	0.027	0.009	0.018	
12.6	40 mm thick 1:2:4 c.c. flooring with floating coat of neat cement (without glass strip)	sqm	0.340			0.027	0.009	0.018	
12.8	18mm thick red oxide plaster skirting with under layer of 12mm thick cement plaster in 1:3 mix	sqm	0.260					0.023	
12.9	21 mm thick red oxide plaster skirting with under layer of 15mm thick cement plaster in 1:3 mix	sqm	0.289					0.026	
12.10	40 mm thick Red oxide flooring with under layer 30mm thick 1:2:4 c.c. and top layer of 10mm thick plaster of red oxide	sqm	0.438				0.028	0.027	
Def	ITEMS	UNIT	Cement	STONE cum			Sand	Recron	

<u>NO</u>	<u>ITEMS</u>	<u>UNIT</u>	<u>bags</u>	<u>Stone</u>	<u>40mm</u>	<u>20mm</u>	<u>12mm</u>	<u>cum</u>	<u>gm</u>
12.11	40mm thick marble chips flooring in light shade pigment with white cement	sqm	0.258				0.032	0.016	
12.12	40mm thick mosaic flooring medium shade pigment with ordinary cement 50% and white cement 50%	sqm	0.259				0.032	0.016	
12.14	18mm thick 30 cm high marble chips skirting (light shade)	sqm	0.259					0.019	
12.15	21mm thick 30 cm high marble chips skirting (light shade)	sqm	0.206					0.022	
12.18	Marble Stone slabs flooring over 20mm(average)thick 1:4 CM	sqm	0.270					0.024	
12.19	Marble Stone slabs flooring over 20mm(average)thick 1:4 CM	sqm	0.270					0.024	
12.20	Granite Marble Stone slabs flooring over 20mm(average)thick 1:4 CM	sqm	0.270					0.024	

12.23	Marble Stone in Risers of steps, skirting and pads, walls, pillars etc laid on 10mm thick base c.m.in 1:3 CM	sqm	0.224					0.013	
12.24	Marble Stone in Risers of steps, skirting and pads, walls, pillars etc laid on 10mm thick base c.m.in 1:3 CM	sqm	0.224					0.013	
12.25	Granite stone in Risers of steps, skirting and pads, walls, pillars etc laid on 10mm thick base c.m. 1:3	sqm	0.224					0.013	
12.26	Kota stone slab flooring over 20mm thick 1:4 c.m base	sqm	0.298					0.024	
<u>Ref</u>	<u>ITEMS</u>	<u>UNIT</u>	Cement bags	STONE cum				Sand cum	Recron gm
				Stone	40mm	20mm	12mm		
12.27	Kota stone slabs in Risers of steps, skirting dado and walls laid on 12mm thick base of c.m. 1:3	sqm	0.237					0.015	
12.28	White or colored glazed vitrified tiles in flooring, treads of steps landing etc laid on a bed of 15mm, cm 1:3 mix	sqm	0.122					0.013	

12.29	White or colored glazed vitrified tiles in flooring, treads of steps landing etc laid on a bed of 15mm, cm 1:3 mix	sqm	0.122					0.013	
12.30	White or colored glazed vitrified tiles in flooring, treads of steps landing etc laid on a bed of 15mm, cm 1:3 mix	sqm	0.122					0.013	
12.31	White or colored glazed tiles in skirting, risers of steps and Dados on 12mm thick cement plaster in 1:3 mix	sqm	0.102					0.011	
12.32	Chequers tiles in flooring over 12mm thick cement plaster	sqm	0.294					0.024	
12.33	White or colored or ceramic glazed tiles in skirting, risers of steps and Dados on 12mm thick cement plaster of 1:3 mix	sqm	0.213					0.015	
12.36	Colored glazed tiles with flush pointing with white cement slurry.	sqm	0.122					0.013	
12.37	White or colored glazed tiles anti skid laid on bed of 15mm thick, cm of 1:3 mix	sqm	0.122					0.013	

12.38	40 mm thick 1:2:4 CC flooring with Red oxide and Recorn 3S	sqm	0.438				0.028	0.027	30.05
Ref	ITEMS	UNIT	Cement bags	STONE cum				Sand cum	Bond stone
				Stone	40mm	20mm	12mm		
13	<u>MASONRY WORKS</u>								
13.1	Plum concrete in 1:2:4 c.c.	cum	3.200	0.500		0.353	0.118	0.235	
13.2	Plum concrete in 1:4:8 c.c.	cum	1.700	0.500	0.344	0.138		0.250	
13.3	Hand Packed wall	cum		0.850					
13.4	Random Rubble Stone Masonry wall	cum	0.241	0.930	0.049	0.020		0.035	7
13.5	G.I. wire (gauge 08 B.W.G)	sqm	GI wire	=	2.500				
13.6	Random Rubble Stone Masonry in 1:3:6 c.c.	cum	1.693	0.923	0.271	0.106		0.196	7
13.7	Random Rubble Stone Masonry in 1:4:8 c.c.	cum	1.363	0.840	0.276	0.110		0.200	7
13.8	Coarse Rubble Stone Masonry wall in 1:3:6c.c.	cum	1.561	0.840	0.250	0.098		0.181	7
13.9	Coarse Rubble Stone Masonry in 1:4:8 c.c.	cum	1.261	0.840	0.255	0.102		0.185	7
13.10	Chisel Dressed Stone Masonry wall in 1:5 Cement Mortar	cum	1.736	0.820				0.300	

13.11	Parapet of standard size in 1:2:4										
	a 45cm height, 30 cm top and 45 cm bottom	Rm	0.711	0.084		0.059	0.020	0.064			
	b 60cm height, 45 cm top and 60cm bottom	Rm	1.260	0.158		0.111	0.037	0.109			
14	<u>DRAINAGE</u>										
14.1	V' shaped drain with cement pointing in 1:4 cement mortar	Rm	0.045	0.169				0.005			
14.2	Box Drain of 30 cm (ht) x 45 cm (width) with 1:2:4 Plum concrete	Rm	1.156	0.230		0.163	0.054	0.109	guard stone 5 no		
14.3	Box Drain of 60 cm (ht) x 45 cm (width) with 1:2:4 Plum concrete (20mm & down)	Rm	1.664	0.309		0.219	0.073	0.146	guard stone 5 no		
<u>Ref</u>	<u>ITEMS</u>	<u>UNIT</u>	Cement bags	STONE cum				Sand cum	Bond stone		
				Stone	40mm	20mm	12mm				
14.4	U shaped drain of 23cm (ht) x 23 cm (width) with 1:2:4 Plum concrete (20mm & down)	Rm	0.672	0.115		0.082	0.027	0.065			

14.5	Hume pipe semicircular drain 23 cm internal dimension 1:2:4 Cement concrete (20mm & down)	Rm	0.702	0.048		0.022	0.007	0.015	guard stone 5 no
14.6	V' shaped drain with cement concrete base in 1:2:4 mix	Rm	0.646	0.135		0.073	0.024	0.048	
Ref	<u>ITEMS</u>	<u>UNIT</u>	Bitumin (kg)	STONE cum				Sand cum	Fire wood (pile)
				Stone/ Metal	90-45 mm	Binding Mat	12 mm & Dn		
H	<u>ROAD WORKS</u>								
26.1	15 cm (6") wide and 23 cm (9") deep hammer dressed stone edging	Rm		0.038					
26.2	Hand packed stone soling								
a	Manual means.	cum	}	0.950					
b	3 wheeled 8-10 ton roller.	cum							

26.5	<p>Water bound macadam sub -base with stone aggregate, screenings and binding material, including screening, sorting and spreading of materials, watering, ramming to required template, carriage to be given extra. Thickness of compacted base to be 100 mm of Grading I classification using stone metals of 90 mm - 45 mm size and stone screenings of Type A (20mm down) and specified quality of binding materials @ 0.09 cum per sqm.</p>							
a	3 wheeled 8-10 ton roller.	cum	}	1.245	0.285	0.900		
b	tandem wheel vibratory road roller of 11.5-42 ton capacity	cum						
c	single wheel vibratory hand roller of 1-3 ton capacity.	cum						
d	Manual means	cum						
Ref	ITEMS	UNIT	Bitumin (kg)	STONE cum			Sand cum	Fire wood (pile)
				Stone/ Metal	90-45 mm	Binding Mat	20mm & Dn	
26.6	<p>Water bound macadam base course with stone aggregate, screenings and binding material, including screening, sorting and spreading of materials, watering, ramming to required template, carriage to be given extra. Thickness of compacted base to be 75 mm of Grading II classification using stone metals of 63 mm - 45 mm size and stone screenings of Type A (20 mm down) and specified quality of binding materials @ 0.09 cum per sqm</p>							
a	3 wheeled 8-10 ton roller.	cum	}					

b	tandem wheel vibratory road roller of 11.5-42 ton capacity	cum	}	1.245	0.180	0.900				
c	single wheel vibratory hand roller of 1-3 ton capacity.	cum								
d	Manual means	cum								
26.7	<p>Water bound macadam surface - course with stone aggregate, screenings and binding material, including screening, sorting and spreading of materials, watering, ramming to required template, carriage to be given extra. Thickness of compacted base to be 75 mm of Grading III classification using stone metals of 53 mm - 22.4 mm size and stone screenings of Type B (10 mm down) and specified quality of binding materials @ 0.013 cum per sqm.</p>									
a	3 wheeled 8-10 ton roller.	cum	}		1.245	0.130	0.210			
b	tandem wheel vibratory road roller of 11.5-42 ton capacity	cum								
c	single wheel vibratory hand roller of 1-3 ton capacity.	cum								
d	Manual means	cum								
Ref	ITEMS	UNIT	Bitumin (kg)	STONE cum				Sand cum	Fire wood (pile)	
				Stone/ Metal	90-45 mm	Binding Mat	12mm & Dn			
26.13	20 mm thick premixed carpetting using firewood on new surfaces with 0.27 cum(per 10 sqm)									
a	3 wheeled 8-10 ton roller.	sqm	}							

b	Tandem wheel vibratory road roller of 11.5-42 ton capacity	sqm	3.583				0.028	0.0093	0.012
c	Manual means	sqm							
Ref	ITEMS	UNIT	Bitumin (kg)	STONE cum				Sand cum	Fire wood (pile)
				Stone/ Metal	90-45 mm	Binding Mat	12mm & Dn		
26.14	20 mm thick premixed carpetting using bitumen boiler and asphalt mixer on new surfaces with .27 cum per 10 sqm of 10								
a	3 wheeled 8-10 ton roller.	sqm	3.583				0.028	0.0093	
b	tandem wheel vibratory road roller of 11.5-42 ton capacity	sqm							
26.15	20 mm thick premixed carpetting using firewood on old surfaces with 0.27 cum per 10 sqm								
a	3 wheeled 8-10 ton roller.	sqm	3.345				0.028	0.0093	0.012
b	single wheel vibratory hand roller of 1-3 ton capacity.	sqm							
c	Manual means	sqm							
26.16	20 mm thick premixed carpetting using bitumen boiler and asphalt mixer on old surfaces with .27 cum per 10 sqm								

26.17	a	Seal Coat using bitumen boiler and asphalt mixer with 0.091cum per 10 sqm	sqm	2.048					0.0093	
26.17	b	Seal Coat using firewood with 0.091cum per 10 sqm	sqm	2.048					0.0093	0.0013
26.18		25 mm compacted thickness of Semi Dense Bituminous Concrete wearing coat	sqm	3.025	cement = 1.00 Kg			0.035	0.0004	anti stripping = 0.030 kg
26.19		50 mm compacted thickness of premixed Bituminous Macadam base course	sqm	3.851	cement = 2.060 kg			0.072	0.001	anti stripping = 0.0385 kg