

Bill No. 1 GROUND WORKS

Item No.	Description	Unit	Qty
1.1	<u>GENERAL</u> (a) Rates shall include for: levelling, grading, trimming, compacting to faces of excavation, keep sides plumb, backfilling, consolidating, additional working space and disposing surplus soil.		
1.2	<u>EXCAVATION AND FILLING</u> (a) Excavation quantities are measured to the faces of concrete members. Rates shall include for all additional excavation required to place the formwork , back fill , dewatering and others (b) Rates shall include for: levelling, grading, trimming and compacting. (c) Ground need to be compacted to the density required by the consultant		
	1) Toilet & Shortage Building, Foundation Beam	m ³	3.79
	2) Boundary Wall, Tie Beam	m ³	34.62
	3) P, Planter-A, Foundation Beam	m ³	19.05
	4) Name Board Foundation Pad	m ³	1.43
	5) Sand Pit Boundary Wall	m ³	8.50
	6) Mural Wall Foundation	m ³	3.70
	7) Bench Foundation Pad	m ³	6.12
	8) Planter Box and Vine Trills Footing	m ³	1.82
1.3	<u>WATER PROOFING MEMBRANE</u> (a) Rates shall include for: dressing around and sealing to all penetrations, laps and turnups.		
	1) Polythene damp proof membrane (500gauge) laid under blinding layer	m ²	216.86
	2) Water proof membrane to sides of pads, beams and walls below floor level	m ²	372.76
Total of bill No.1 (Carried to summary of Bills)			

Bill No. 2**CONCRETE WORKS**

Item No.	Description	Unit	Qty
2.1	<p><u>GENERAL</u></p> <p><u>CONCRETE</u></p> <p>(a) Rates shall include for: placing in position; making good after removal of formwork and casting in all required items; additional concrete required to conform to structural and excavated tolerances.</p> <p>(b) Mix ratio for reinforced concrete shall be 1:2:3 and lean concrete shall be 1:2:6 by volume.</p> <p>(c) Quantity is measured to the edges of concrete foundation members. Rates shall be inclusive for any additional concrete required to place the formwork.</p> <p>(d) Desalinated water shall be used for all purposes, ground water shall not be used.</p> <p><u>FORM WORK</u></p> <p>(a) Exposed surface shall have fair finish while remaining may have rough finish.</p> <p>(b) Timber used for unexposed concrete surface shall sound dressed and seasoned good quality common timber while for exposed concrete surfaces dressed and matched boards uniformly thick and not more than 251mm wide.</p> <p>c) Plywood used for forms shall be of commercial standard, moisture resistance concrete form plywood not less than 6mm thick and at least 12mm thick.</p> <p>(d) Rates shall include for; all necessary boarding, supports, erecting, framing, temporary cambering cutting, perforations for reinforcing bars, bolts, straps, ties, hangers, pipes and removal of formwork.</p>		

	<p style="text-align: center;"><u>REINFORCEMENT WORK</u></p> <p>(a) Main reinforcement steel shall be high tensile steel hot rolled deformed bars complying with BS 1119 or BS 1172 Characteristic strength not less than 160N/mm².</p> <p>(b) Stirrups shall be hot rolled mild steel round bars complying with BS 1119, Characteristic strength not less than 250N/mm²</p> <p>(c) Rates shall include for; distribution steel, cleaning, fabrication, placing, the provision for all necessary temporary fixings, and supports including chairs and tie wire , laps and wastage.</p>		
Subtotal of bill No.2 (Carried to Collection Page)			

Bill No. 2 CONCRETE WORKS

Item No.	Description	Unit	Qty
2.2	<u>LEAN CONCRETE</u>		
2.2.1	<u>50mm thick lean concrete below Foundation</u>		
1)	Toilet & Shortage Building, Foundation Beam	m ²	6.32
2)	Boundary Wall, Tie Beam	m ²	57.70
3)	P, Planter-A, Foundation Beam	m ²	31.76
4)	Name Board Foundation Pad	m ²	2.38
5)	Sand Pit Boundary Wall	m ²	13.08
6)	Mural Wall Foundation	m ²	6.17
7)	Bench Foundation Pad	m ²	30.26
8)	Planter Box and Vine Trills Footing	m ²	2.80
2.2.2	<u>150mm thick lean concrete below Curbs</u>		
1)	Curb B	m ²	156.22
2)	Curb C	m ²	7.05
2.3	<u>REINFORCED CONCRETE</u>		
2.3.1	<u>Toilet & Shortage Building</u>		
2.3.1.1	<u>Foundation Beams</u>		
1)	FB1, 200mm x 400mm	m ³	2.53
2.3.1.2	<u>Columns</u>		
1)	C1, 200mm x 200mm	m ³	0.76

2.3.1.3 Beams			
1)	B1, 200mm x 350mm	m ³	1.09
2)	B2, 200mm x 350mm	m ³	0.56
2.3.1.4 Floor Slab			
1)	100mm thk Ground Floor Slab	m ³	2.27
2.3.1.5 RC Wall			
1)	150mm thk 1200mm high Parapet Wall	m ³	0.60
2.3.2 Boundary Wall			
2.3.2.1 Foundation Beams			
1)	FB2, 225mm x 225mm	m ³	10.45
2)	FB2, 225mm x 225mm	m ³	2.53
2.3.2.2 Main Columns			
1)	C1, 200mm x 200mm	m ³	3.46
2)	C1, 200mm x 200mm	m ³	0.74
2.3.2.3 Stiffer Columns			
1)	SC1, 150mm x 100mm	m ³	0.29
2)	SC1, 150mm x 100mm	m ³	0.09
2.3.2.4 Capping Beams			
1)	CB1, 100mm x 75mm	m ³	1.55
2)	CB1, 100mm x 75mm	m ³	0.38
Subtotal of bill No.2 (Carried to Collection Page)			

Bill No. 2 CONCRETE WORKS

Item No.	Description	Unit	Qty
2.3	<u>REINFORCED CONCRETE CONT'D</u>		
2.3.3	<u>P, Planter-A</u>		
2.3.3.1	<u>Strip Foundation</u>		
1)	SF1, 400mm x 225mm	m ³	5.72
2.3.3.2	<u>Wall</u>		
1)	100mm thk 800mm High Wall	m ³	7.21

2.3.4 <u>Name Board</u>			
2.3.4.1 <u>Strip Foundation</u>			
1)	SF2, 750mm x 200mm	m ³	0.42
2.3.4.2 <u>Wall</u>			
1)	150mm thk 1400mm High Wall	m ³	1.16
2.3.5 <u>Sand Pit Area Boundary Wall</u>			
2.3.5.1 <u>Strip Foundation</u>			
1)	SF3, 400mm x 200mm	m ³	2.09
2.3.5.2 <u>Wall</u>			
1)	100mm thk 350mm High Wall	m ³	2.09
2.3.6 <u>Mural Wall</u>			
2.3.6.1 <u>Strip Foundation</u>			
1)	SF2, 750mm x 200mm	m ³	1.09
2.3.6.2 <u>Wall</u>			
1)	150mm thk 1800mm High Wall	m ³	2.39
2.3.7 <u>Other Concrete Works</u>			
2.3.7.1 <u>Benches</u>			
1)	P, A1, 2200mm x 425mm	m ³	6.46
2)	P, C1, 1150mm x 450mm	m ³	11.19
3)	P, C2, 1700mm x 500mm	m ³	5.94
2.3.7.2 <u>Planter Box and Vine Trills Footing</u>			
1)	F1, 5000mm x 700mm	m ³	2.80
2)	100mm thk 800mm High Wall	m ³	2.30
2.3.7.3 <u>Curbs</u>			
1)	CR B, 100mm x 300mm	m ³	26.78
2)	CR C, 100mm x 200mm	m ³	0.81
2.4	<u>FORM WORK</u>		
2.4.1 <u>Toilet & Shortage Building</u>			
2.4.1.1 <u>Foundation Beams</u>			
1)	FB1, 200mm x 400mm	m ²	25.29
2.4.1.2 <u>Columns</u>			
1)	C1, 200mm x 200mm	m ²	15.12
2.4.1.3 <u>Beams</u>			
1)	B1, 200mm x 350mm	m ²	13.97

2)	B2, 200mm x 350mm	m ²	7.18
Subtotal of bill No.2 (Carried to Collection Page)			

Bill No. 2 CONCRETE WORKS

Item No.	Description	Unit	Qty
2.4	<u>FORM WORK CONT'D</u>		
2.4.1.4	<u>Floor Slab</u>		
1)	100mm thk Ground Floor Slab	m ²	4.34
2.4.1.5	<u>RC Wall</u>		
1)	150mm thk 1200mm high Parapet Wall	m ²	7.93
2.4.2	<u>Boundary Wall</u>		
2.4.2.1	<u>Foundation Beams</u>		
1)	FB2, 225mm x 225mm	m ²	92.90
2)	FB2, 225mm x 225mm	m ²	22.50
2.4.2.2	<u>Main Columns</u>		
1)	C1, 200mm x 200mm	m ²	69.22
2)	C1, 200mm x 200mm	m ²	14.83
2.4.2.3	<u>Stiffer Columns</u>		
1)	SC1, 150mm x 100mm	m ²	9.53
2)	SC1, 150mm x 100mm	m ²	3.09
2.4.2.4	<u>Capping Beams</u>		
1)	CB1, 100mm x 75mm	m ²	30.97
2)	CB1, 100mm x 75mm	m ²	7.50
2.4.3	<u>P, Planter-A</u>		
2.4.3.1	<u>Strip Foundation</u>		
1)	SF1, 400mm x 225mm	m ²	28.58
2.4.3.2	<u>Wall</u>		
1)	100mm thk 800mm High Wall	m ²	144.18
2.4.4	<u>Name Board</u>		
2.4.4.1	<u>Strip Foundation</u>		
1)	SF2, 750mm x 200mm	m ²	1.12

2.4.4.2	<u>Wall</u>		
1)	150mm thk 1400mm High Wall	m ²	15.41
2.4.5	<u>Sand Pit Area Boundary Wall</u>		
2.4.5.1	<u>Strip Foundation</u>		
1)	SF3, 400mm x 200mm	m ²	10.47
2.4.5.2	<u>Wall</u>		
1)	100mm thk 350mm High Wall	m ²	41.87
2.4.6	<u>Mural Wall</u>		
2.4.6.1	<u>Strip Foundation</u>		
1)	SF2, 750mm x 200mm	m ²	2.90
2.4.6.2	<u>Wall</u>		
1)	150mm thk 1800mm High Wall	m ²	31.93
Subtotal of bill No.2 (Carried to Collection Page)			

Bill No. 2 CONCRETE WORKS

Item No.	Description	Unit	Qty
2.4	<u>FORM WORK CONT'D</u>		
2.4.7	<u>Other Concrete Works</u>		
2.4.7.1	<u>Benches</u>		
1)	P, A1, 2200mm x 425mm	m ²	70.03
2)	P, C1, 1150mm x 450mm	m ²	124.13
3)	P, C2, 1700mm x 500mm	m ²	61.50
2.4.7.2	<u>Planter Box and Vine Trills Footing</u>		
1)	F1, 5000mm x 700mm	m ²	11.52
2)	100mm thk 800mm High Wall	m ²	31.10
2.4.7.3	<u>Curbs</u>		
1)	CR B, 100mm x 300mm	m ²	535.60
2)	CR C, 100mm x 200mm	m ²	16.12
2.5	<u>REINFORCEMENT</u>		
2.5.1	<u>Toilet & Shortage Building</u>		

2.5.1.1 <u>Foundation Beams</u>			
1)	FB1, 200mm x 400mm		
	12mm dia, Steel deformed bars 6m	kg	178.00
	6mm dia, Steel deformed bars 6m	kg	74.00
2.5.1.2 <u>Columns</u>			
1)	C1, 200mm x 200mm		
	12mm dia, Steel deformed bars 6m	kg	93.00
	6mm dia, Steel deformed bars 6m	kg	13.00
2.5.1.3 <u>Beams</u>			
1)	B1, 200mm x 350mm		
	12mm dia, Steel deformed bars 6m	kg	74.00
	12mm dia, Steel deformed bars 6m	kg	35.00
2)	B2, 200mm x 350mm		
	12mm dia, Steel deformed bars 6m	kg	28.00
	12mm dia, Steel deformed bars 6m	kg	9.00
2.5.1.4 <u>Floor Slab</u>			
1)	100mm thk Ground Floor Slab		
	10mm dia, Steel deformed bars 6m	kg	182.00
2.5.1.5 <u>RC Wall</u>			
1)	150mm thk 1200mm high Parapet Wall		
	10mm dia, Steel deformed bars 6m	kg	65.00
2.5.2 <u>Boundary Wall</u>			
2.5.2.1 <u>Foundation Beams</u>			
1)	FB2, 225mm x 225mm		
	10mm dia, Steel deformed bars 6m	kg	559.00
	6mm dia, Steel deformed bars 6m	kg	152.00
2)	FB2, 225mm x 225mm		
	10mm dia, Steel deformed bars 6m	kg	135.00
	6mm dia, Steel deformed bars 6m	kg	37.00
Subtotal of bill No.2 (Carried to Collection Page)			

Bill No. 2 **CONCRETE WORKS**

Item No.	Description	Unit	Qty
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2.5 REINFORCEMENT CONT'D**2.5.2.2 Main Columns**

1)	C1, 200mm x 200mm		
	10mm dia, Steel deformed bars 6m	kg	296.00
	6mm dia, Steel deformed bars 6m	kg	60.00
2)	C1, 200mm x 200mm		
	10mm dia, Steel deformed bars 6m	kg	63.00
	6mm dia, Steel deformed bars 6m	kg	13.00

2.5.2.3 Stiffer Columns

1)	SC1, 150mm x 100mm		
	10mm dia, Steel deformed bars 6m	kg	34.00
	6mm dia, Steel deformed bars 6m	kg	3.00
2)	SC1, 150mm x 100mm		
	10mm dia, Steel deformed bars 6m	kg	10.00
	6mm dia, Steel deformed bars 6m	kg	1.00

2.5.2.4 Capping Beams

1)	CB1, 100mm x 75mm		
	10mm dia, Steel deformed bars 6m	kg	280.00
	6mm dia, Steel deformed bars 6m	kg	33.00
2)	CB1, 100mm x 75mm		
	10mm dia, Steel deformed bars 6m	kg	68.00
	6mm dia, Steel deformed bars 6m	kg	8.00

2.5.3 P, Planter-A**2.5.3.1 Strip Foundation**

1)	SF1, 400mm x 225mm		
	10mm dia, Steel deformed bars 6m	kg	435.00

2.5.3.2 Wall

1)	100mm thk 800mm High Wall		
	10mm dia, Steel deformed bars 6m	kg	371.00

2.5.4 Name Board**2.5.4.1 Strip Foundation**

1)	SF2, 750mm x 200mm		
	10mm dia, Steel deformed bars 6m	kg	19.00

2.5.4.2 Wall

1)	150mm thk 1400mm High Wall		
	10mm dia, Steel deformed bars 6m	kg	116.00

2.5.5	<u>Sand Pit Area Boundary Wall</u>		
2.5.5.1	<u>Strip Foundation</u>		
1)	SF3, 400mm x 200mm 10mm dia, Steel deformed bars 6m	kg	157.00
2.5.5.2	<u>Wall</u>		
1)	100mm thk 350mm High Wall 10mm dia, Steel deformed bars 6m	kg	118.00
Subtotal of bill No.2 (Carried to Collection Page)			

Bill No. 2 CONCRETE WORKS

Item No.	Description	Unit	Qty
2.5	<u>REINFORCEMENT CONT'D</u>		
2.5.6	<u>Mural Wall</u>		
2.5.6.1	<u>Strip Foundation</u>		
1)	SF2, 750mm x 200mm 10mm dia, Steel deformed bars 6m	kg	48.00
2.5.6.2	<u>Wall</u>		
1)	150mm thk 1800mm High Wall 10mm dia, Steel deformed bars 6m	kg	294.00
2.5.7	<u>Other Concrete Works</u>		
2.5.7.1	<u>Benches</u>		
1)	P, A1, 2200mm x 425mm 12mm dia, Steel deformed bars 6m	kg	798.00
	6mm dia, Steel deformed bars 6m	kg	22.00
2)	P, C1, 1150mm x 450mm 12mm dia, Steel deformed bars 6m	kg	1,268.00
	6mm dia, Steel deformed bars 6m	kg	52.00
3)	P, C2, 1700mm x 500mm 12mm dia, Steel deformed bars 6m	kg	654.00
	6mm dia, Steel deformed bars 6m	kg	21.00
2.5.7.2	<u>Planter Box and Vine Trills Footing</u>		
1)	F1, 5000mm x 700mm 12mm dia, Steel deformed bars 6m	kg	97.00

	6mm dia, Steel deformed bars 6m	kg	14.00
2)	100mm thk 800mm High Wall		
	10mm dia, Steel deformed bars 6m	kg	95.00
Subtotal of bill No.2 (Carried to Collection Page)			

Bill No. 2 CONCRETE WORKS

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