

BILL NO. 3

COWSHED

Item	Description	UNIT	QTY	RATE	AMOUNT
	<b>COW SHED</b> <b>SUBSTRUCTURES (provisional)</b> <b>Excavations and Earthworks</b>				
A	Excavate oversite average n.e 300mm deep to remove vegetable soil, load, wheel and cart away to spoil.	SM	254	50	12,700
B	Excavate for strip footing not exceeding 1.5M deep from reduced level.	CM	39	250	9,750
C	Ditto column bases not exceeding 1.5 M deep commencing from reduced level	CM	14	250	3,500
	Ditto to reduce level commencing stripped level; trim and prepare bottom surfaces to receive hardcore (m.s)	CM	98	250	24,500
D	Extra over normal excavation for excavating in all types of rock as described.	CM	50	1500	75,000
	<b>Disposal</b>				
E	Return, fill in and ram selected excavated material in layers	CM	15	900	13,500
F	Load surplus excavated materials and deposit away from site as directed by the Architect.	CM	136	200	27,200
	<b>Disposal of Water</b>				
G	Allow for keeping excavations free from all water including spring and running water by pumping, bailing or otherwise.	Item	1	10,000	10,000
	<b>Fillings</b>				
H	Over 300mm thick approved hardcore or other approved filling material well watered and compacted in 150mm thick layers.	CM	147	1,800	264,600
I	Stone or quarry dust 50mm thick layer of approved stone dust or murrum blinding to surfaces of hardcore.	SM	163	100	16,300
	<b>CARRIED TO COLLECTION FOR SUBSTRUCTURES</b>				372,050

	COW SHED <u>SUBSTRUCTURES CONTINUED</u>	UNIT	QTY	RATE	AMOUNT
A	<b>Anti-termite treatment</b> Anti-termite treatment as "Premise 200 sc" distributed by High Chemicals essentials or other equal and approved applied to surface of blinded hardcore and surrounding areas strictly in accordance with manufacturer's instructions (subject to a TEN YEAR GUARANTEE to the satisfaction of the Architect)	SM	233	175	40,775
	<b>Damp proof membranes</b>				
B	1000 gauge polythene or other equal and approved damp-proof membrane laid over blinded hardcore (measured nett-no allowance for laps) Insitu concrete works	SM	233	250	58,250
	<b>50mm thick concrete 1:4:8 (Class P/40mm) in blinding to:</b>				
C	Strip footing	SM	33	500	16,500
D	Ditto Columns bases	SM	56	500	28,000
	<b>Vibrated reinforced concrete 1:2: 4 (Class 25/20mm as described in:</b>				
E	Strip footing	CM	7	13,800	96,600
F	Column bases	CM	17	13,800	234,600
G	Columns & Stubb columns	CM	10	13,800	138,000
H	150 mm thick floor bed	SM	233	2,070	482,310
I	Ground beams	CM	14	13,800	193,200
	<b>Formwork to insitu concrete. Sawn formwork as described to:</b>				
J	Column bases	SM	47	350	16,450
K	Sides of strip footing	SM	22	350	7,700
L	Edge of floor bed 75-150mm high	LM	81	350	28,350
M	Sides of Ground beam	SM	55	350	19,250
	<b>CARRIED TO COLLECTION FOR SUBSTRUCTURES</b>				1,359,985

	COW SHED	UNIT	QTY	RATE	AMOUNT
	<b><u>SUBSTRUCTURES CONTINUED</u></b>				
	<b>Reinforcement (all Provisional) Supply and fix bar reinforcement including bending, hooking, tying, cutting and high tensile twisted bars to B.S. 4461</b>				
N	12mm diameter	KG	149	175	26,075
O	8mm diameter	KG	495	175	86,625
P	B.R.C Fabric mesh reinforcement to B.S 4483 Ref. No. A142 in floor bed (measured nett-no allowance for laps)	SM	233	240	55,920
	CARRIED TO COLLECTION FOR SUBSTRUCTURES				168,620

	COW SHED	UNIT	QTY	RATE	AMOUNT
	<b>Walling</b>				
A	200mm thick quarry dressed natural stone wall in foundations bedded and jointed in cement sand (1.4) mortar and reinforced with hoop iron every alternate course as described.	SM	166	1,300	215,800
	<b>Plinths</b>				
B	12mm thick cement sand 1:4 render to plinth of building	SM	41	350	14,350
C	Prepare and apply three coats of bituminous paint to rendered surfaces of plinth.	SM	41	350	14,350
	<b>CARRIED TO COLLECTION FOR SUBSTRUCTURES</b>				244,500

COLLECTION – COW SHED SUBSTRUCTURES	Amount Kshs
Brought forward from page 2	372,050
Brought forward from page 3	1,359,985
Brought forward from page 4	168,620
Brought forward from page 5	244,500
TOTAL FOR COW SHED SUBSTRUCTURES CARRIED TO SUMMARY	2,145,155

	COW SHED <u>CONCRETE SUPERSTRUCTURE</u>	UNIT	QTY	RATE	AMOUNT
	<b>Vibrated reinforced concrete 1:2:4 (class 20/25mm) as described in:</b>				
A	Columns	CM	2	13,800	27,600
B	Beams	CM	14	13,800	193,200
C	Ring beam	CM	10	13,800	138,000
	<b>Formwork to insitu concrete Sawn formwork as described to:</b>				
D	Sides of columns	SM	16	350	5,600
E	Sides of soffits of beams	SM	266	350	93,100
	<b>Reinforcement (provisional)</b>				
	<b>Supply and fix bar reinforcement including bending, hooking, tying, cutting and high tensile twisted bars to B.S.4461</b>				
F	12mm diameter	KG	96	175	16,800
G	8mm diameter	KG	30	175	5,250
	CARRIED TO COLLECTION FOR SUPERSTRUCTURE				479,550

Item	Description	UNIT	QTY	RATE	AMOUNT
	<b>COW SHED</b> <b>ROOFING AND ROOF FINISHES (Provisional)</b> <b>Roofing and Rainwater Disposal</b> <b>Steel Roofing and Rainwater Disposal</b>				
	<b>Roof Covering</b>				
A	IT5 iron sheets Gauge 30 from Mabati Rolling Mills or other equal approved source. Laid and fixed on steel roof structure (m.s) with and including approved fasteners and hardware of quality grade 8.8 to B.S 4360 (m.s)	SM	250	1,800	450,000
B	Ditto for raking cutting to roofing sheets	LM	69	250	17,250
	<b>Steel Roof Structure</b>				
	<b>Roof structure in structural steel works in accordance with BS5950 of quality grade 43A to BS4360 with an including all fasteners and 8.8 hardware of quality grade to BS4360 and including labour for hoisting 8175mm above the ground level primed with one coat of grey oxide</b>				
C	50 x 50 x 4mm x 6.28kg/m; Trusses, external members	KG	1476	175	258,300
D	50 x 50 x 4mm x 6.28kg/m; Trusses, internal members	KG	1142	175	199,850
	<b>Independent members in:</b>				
E	75 x 50 x 4mm x 7.35Kg/m wall plate	KG	447	175	78,225
F	125 x 50 x 2mm x 3.5325Kg/m Z- Purlins	KG	960	175	168,000
G	Ditto Gutter purlins	KG	129	175	22,575
H	Provision for gusset plates, brackets, cleats and any other bolted connections (5 % of the total weight allowed)	Item	1	50,000	50,000
	<b>Mild steel plated gutter</b>				
J	200mm x 100mm deep x 2mm thick boxed gutters welded to gutter purlins (m.s) and welded to fascia plate	LM	37	750	27,750
K	Extra over for stop ends 200mm x 100mm deep	NO	2	1,050	2,100
	<b>CARRIED TO COLLECTION FOR ROOFING AND</b>				1,274,050

	ROOF FINISHES				
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Item	Description	UNIT	QTY	RATE	AMOUNT
	<b>Downpipes</b>				
A	100mm diameter mild steel down pipes held onto walls with approved steel holder bats	LM	11	750	8,250
B	Extra over for swan neck bends, 600mm long average	NO	2	1,050	2,100
C	Ditto for shoes, 200mm long average	NO	2	1,050	2,100
	<b>2mm thick mild steel plate as described in:</b>				
D	Ex 200 x 2mm thick Fascia welded to steel rafters, (m.s)	LM	64	700	44,800
	<b>Painting and decorating</b> <b>Prepare the fascia surfaces and apply three coats gloss oil paint from approved sources to:</b>				
E	Surface of fascia 200-300mm girth	SM	38	350	13,300
	CARRIED TO COLLECTION FOR ROOFING AND ROOF FINISHES				57,250

COLLECTION – COW SHED ROOFING AND ROOF FINISHES	Amount Kshs
Brought forward from page 8	
Brought forward from page 9	57,250
<b>TOTAL FOR COW SHED ROOFING AND ROOF FINISHES CARRIED TO SUMMARY</b>	<b>1,331,300</b>

Item	Description	UNIT	QTY	RATE	AMOUNT
	<b>COW SHED</b> <b>STRUCTURAL STEELWORK</b>				
	<b>Structural steel works in accordance with BS5950 of quality grade 43A to BS4360 with an including all fasteners and 8.8 hardware of quality grade to BS4360 and including labour for hoisting 8175mm above the ground level primed with one coat of grey oxide and two final coats of gunmetal</b>				
A	76mm CHS x 7.09kg/m; column	KG	936	195	182,520
B	50 x 25 x 3mm x3.5235Kg/m; runners	KG	857	175	149,975
C	75 x 50 x 4mm x 7.35Kg/m; beams	KG	174	175	30,450
	<b>Expanded metal</b>				
D	8''x 4''x 1.5 mm thick expanded metal to the walls to B.S 4483 (measured nett - no allowance for laps); Including painting with approved paints; all to client's approval	SM	73	1,800	131,400
	<b>Iron sheet wall cover</b>				
E	IT5 iron sheets Gauge 30 from Mabati Rolling Mills or other equal approved source. Laid and fixed on steel roof structure (m.s) with and including approved fasteners and hardware of quality grade 8.8 to B.S 4360 (m.s)	SM	73	1,800	131,400
F	<b>To walls:</b> Masonry: approved local natural quarry stone; squared; machine dressed, bedding, jointing and pointing in cement sand mortar (1:3)	SM	130	1,500	195,000
G	<b>Floor cover:</b> Supply and fix 1.5mm chequered on the floor deck plate according to the specifications with approved fasteners	SM	224	1,800	403,200
H	200 mm thick walling in machine cut stone from an approved source, bedded and jointed in cement sand (1:4) mortar including reinforcing with hoop iron every alternate course as described (Feeding Troughs)	SM	47	1,500	70,500
	<b>TOTAL FOR STRUCTURAL STEELWORK CARRIED TO SUMMARY</b>				1,163,045

Item	Description	UNIT	QTY	RATE	AMOUNT
	COW SHED <b><u>DOORS AND FINISHES</u></b>				
	<b>Steel grilled doors</b>				
	Supply and fix mild steel grilled metal door fabricated from 62mm x 62mm x 6mm thick mild steel angle T sections in braces and framing all round. Supply and fix mild steel grilled metal door handles, lock rings, 400mm long heavy duty bolts, wall fixing brackets and bottom guides including shop priming with red oxide primer and all necessary welding and grinding welds smooth, fitting and hanging in position all in accordance with Architectural details				
A	Overall size 900mm wide x 2400mm high	No.	1	17,000	17,000
B	<b>Painting to metal surfaces over 300mm internally and externally</b>  Prepare and apply two undercoats and one finishing coat gloss oil paint to metal	SM	13	350	4,550
	<b>TOTAL FOR DOORS AND FINISHES CARRIED TO SUMMARY</b>				21,550

Item	Description	UNIT	QTY	RATE	AMOUNT
	<b>COW SHED</b> <b><u>WALL FINISHES</u></b>				
	<b>Painting and decorating</b>				
	<b>Approved exterior quality paint; to crown paints or equal and approved to wood floated rendered surfaces</b>				
A	Surfaces of walls; vertical; external	SM	73	350	25,550
	<b>Prepare, prime and apply two undercoats and one gloss finishing coat oil paint to metal</b>				
B	Over 300 mm; internally and externally, wire mesh & Ms. Plate	SM	406	350	142,100
	<b>TOTAL FOR WALL FINISHES CARRIED TO SUMMARY</b>				167,650

	<b><u>FLOOR FINISHES</u></b>				
C	Supply and fix medium density cabro 80mm thick. Class 20/20 finished in dry mortar (1:3)	SM	224	2,500	560,000
	<b>TOTAL FOR FLOOR FINISHES CARRIED TO SUMMARY</b>				560,000

	<b><u>ELECTRICAL &amp; MECHANICAL WORKS (PROVISIONAL)</u></b>				
A	Electrical Works (Provisional)	Item	1		500,000
	<b>TOTAL FOR ELECTRICAL WORKS (PROVISIONAL) CARRIED TO SUMMARY</b>				500,000
B	Mechanical Works (Provisional)	Item	1		700,000
	<b>TOTAL MECHANICAL WORKS (PROVISIONAL) CARRIED TO SUMMARY</b>				700,000

COLLECTION – COW SHED	Amount Kshs
SUBSTRUCTURES (provisional) total from page 6	2,145,155
CONCRETE SUPERSTRUCTURE total from page 7	479,550
ROOFING AND ROOF FINISHES total from page 9	1,331,300
STRUCTURAL STEELWORKS total from page 10	1,163,045
DOORS AND DOOR FINISHES total from page 11	21,550
EXTERNAL WALL FINISHES total from page 12	167,650
FLOOR FINISHES total from page 12	560,000
ELECTRICAL WORKS (provisional) from page 12	500,000
MECHANICAL WORKS (provisional) from page 12	500,000
SUB TOTAL 1 FOR COW SHED	6,868,250
SUB TOTAL 2 ADD 10% CONTINGENCY	686,825
VAT 16%	0
TOTAL COW SHED TO BE CARRIED FORWARD TO GRAND SUMMARY	7,555,075