REPUBLIC OF KENYA



STATE DEPARTMENT OF PUBLIC WORKS

Telegrams: "MINIWORKS", Embu

Telefax: 31775

When replying please quote

County Works Office

Embu County

P.O. Box 29-60100

PROPOSED COMPLETION OF DINING HALL AT GIKUURI SECONDARY SCHOOL

IN

RUNYENJES CONSTITUENCY

BILL OF QUANTITIES



			MULTIPURPO			
		DAY SE	CONDARY SO	CHOOL	Dagas40	
Bill of Qua	FLOOR FINISHS AND WALL				Page:18	
Bill no. 18	FINISH	Units	Quantity	Unit Bid De	Project: Amount KSh	
Item No.	Description	Units	Quantity	Offic bld Na	Amount Ron	
A	provide 32mm thick floor screed.	SM	495	360	178,200	0.00
В	provide and lay non sliperly floor tiles (ditto)	SM	495	1400	693,000	0.00
С	PAVING SLAB					
D	provide 200mm thick hardcore	СМ	10	1000	10,000	0.00
E	provide 100m thick mass concrete C15(1:3:6) finished in normal screed	СМ	5	9600	48,000	0.00
	WALL FINISH-PAINTING					
F	Plastered walls rendered concr		650			
G	To window and door render no	M ²	45	260	11,700	0.00
					4 400 000	000
	Totals carried to summary				1,109,900	1.00

DI	STRICT	WOR	KS OFFICER DISTRICT
P	. O. Bo	x 428,	RUNYENJES.
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ription de D-8 for the and slab area to the at 20mm spacing or to center de 100mm 15/20 concrete for erving bench de 150mm grey dressed machine one to as support e topslab de and lay white alles at the top and	Units	Quantity 26.42	Unit Bid R	Page:19 Project: Amount K3 3698.8 19200
de D-8 for the and slab area to the at 20mm spacing or to center de 100mm 15/20 concrete for erving bench de 150mm grey dressed machine one to as support e topslab	KG	26.42	140 9600	3698.8 19200
de D-8 for the and slab area to the at 20mm spacing or to center de 100mm 15/20 concrete for erving bench de 150mm grey dressed machine one to as support e topslab	KG	26.42	140 9600	3698.8 19200
15/20 concrete for erving bench de 150mm grey dressed machine one to as support e topslab de and lay white				
dressed machine one to as support e topslab	SM	13	1200	15600
of the support and	SM	30	1300	39000
ly and fix wash basins with pillar nd other ections to waste age	NO.	6	3500	21000
y and fix waste age (4inches)with all ssary connections	LM	50	200	10000
ly and fix kitchen	NO.	1	6000	6000
	basins with pillar and other sections to waste age y and fix waste age (4inches)with all ssary connections	ly and fix wash basins with pillar and other ections to waste age NO. ly and fix waste age (4inches)with all ssary connections LIM	ly and fix wash basins with pillar and other ections to waste age NO. 6 ly and fix waste age (4inches)with all ssary connections LM 50 ly and fix kitchen	ly and fix wash basins with pillar and other ections to waste age NO. 6 3500 ly and fix waste age (4inches)with all ssary connections LM 50 200 ly and fix kitchen

DISTRICT	WOR	KS OFFICER
		ing the
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	COMPLETION OF A MU	
	GIKUURI DAY SECO	NDARY SCHOOL
Bill of Quantities		Page: 20
	Summary	Project:
Item No.20	Description	Amount (KShs)
	FLOOR AND WALL	
	FINISH(TILING, PAVING	1
BILL17	SLAB AND PAINTING)	1,109,900.0
	PROVISION OF	
	HANDWASHING POINT,	
	BLUMPING WORKS AND	
BILL18	BENCHES	114,498.8
	Sub Total 1	1,224,398.8
	Add 5% FOR PMC	61,219.8
	Aud 5/61 OKT MO	01,210.
	Sub Total 2	1,285,618.7
	ADD3% INCOME TAX	38,568.8
	SUBTOTAL	1,324,187.3
	VAT @ 16 %	211,869.9
	Total	1,536,057.2
	CARRIED TO SUMMARY	1,536,057.2

DISTRICT WORKS OFFICER EMBU EAST DISTRICT
P. O. Box 428, RUNYENJES.
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REPUBLIC OF KENYA



STATE DEPARTMENT OF PUBLIC WORKS

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P.O. Box 29-60100

PROPOSED COMPLETION OF DINING HALL AT GIKUURI SECONDARY SCHOOL

IN

RUNYENJES CONSTITUENCY

BILL OF QUANTITIES

DISTRICT WORKS OFFICER
EMBU EAST DISTRICT
P. O. BOX 428, RUNYENJES.

Bill of Qua	antities	AND SERVICE OF THE PARTY OF THE			Page: 1
Bill No.1	SITE CLEARANCE		MAY STATE OF THE		Project:
Item No.	Description	Units	Quantity	Unit Bid Rate(Ksh)	Amount KSh
A	Clear site including removal of all bushes shrubs, and removal of stumps to prepare for excavation	SM	700	80	56,000.00
	Total Carried Forward to Summary:				56,000.00

DISTRICT I	NOR	KS OFFICER DISTRICT
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P. O. Box	428,	RUNYENJES.
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Bill of Qua	intities	OT USE	25 6 3 8 6 9		Page: 2
Bill No.2	EXCAVATION AND FILLING FOR STRU	CTURES		Unit Bid	Project:
tem No.	Description	Units	Quantity	Rate(Ksh)	Amount KSh
	excavate 300mm top soil and dispose to s	SM	660	150	99000
Α	Excavate for strip footing bases in soft material	M³	150	500	75,000.00
В	Ditto but in hard material	M ³	10	1,000	10,000.00
С	Allow for keeping excavations free from water by baling or pumping as required including provision of drains e.t.c, as necessary	item	1	25,000.00	25,000.00
D	Allow for maintaining and supporting sides of excavations and keeping from fallen material as necessary	item	1	20,000.00	20,000.00
	Disposal				-
E	Backfilling around foundations	M ₃	50	600.00	30,000.00
F	Load and cart away surplus excavated material	M³	100	650.00	65,000.00
	Imported Filling				
G	Imported approved fill material to make up levels well waterd and compacted in layers of 300mm deep.	M³	27	1,450.00	39,150.00
	Natural stones				
Н	200mm natural foundation stone	m ²	260	1,600.00	416,000.00
	Anti-termite Treatment				
	Plain Concrete Class 15(1:4:8)				
ı	100 mm Thick blinding for strip footing	M³	12	10,500.00	126,000.00
	Vibrated reinforced concrete class 15/15 with minimum cube crushing strength of 15N/mm² at 28 days	The second secon	1		
J	150 mm thick for strip footing	M³	20	13,850.00	277,000.00
	Total Carried Forward to Summary:				1,083,150.00

DISTRICT V	NORKS OFFICER
1	2 - 4-4
P. O. Box	428, RUNYENJES.
SIGN	

	CONSTRUCTION OF				
	GIKUURI DAY S	SECON	NDARY SCH	IOOL	
Bill of Qua					Page: 3
Bill No.3	Demolition & alterations				Project:
Item No.	Description	Units	Quantity	Unit Bid Rate(Ksh)	Amount KSh
Bill No.3	WALLING				Project:3
Item No.	Description	Units	Quantity	nit Bid Rate(Ks	Amount KSh
	Grey machine dressed stone walling of the required minimum compressive strength of 10 N/mm2 bedded in cement sand (1:3) mortar reinforced with and including gauge 12 soft wire gauge hoop iron at every alternate course				
A	150 mm thick walling	m2	310	1,700.00	510,000.00
	Total Carried Forward to Summary:				510,000.00



Bill of Qua	antities				Page: 4
Bill No.4	CONCRETE	SEE SEE SEE		CHIEF CAR	Project:
Item No.	Description	Units	Quantity	Unit Bid Rate(Ksh)	Amount KSh
	FORMWORK			411	
A	Provide formwork for the ringbeam and sides of gloor slab	SM	230	600.00	138,000.00
	High yield square twisted steel bar reinforcement to B.S. 4461				
В	provide assorted reinforcement bar for the ringbeam Vibrated reinforced concrete class 15/15	KG	1400	200.00	280,000.00
	with minimum cube crushing strength of 15N/mm² at 28 days				
С	Ring beam class 15/20	M³	14	13,800.00	193,200.00
	Total Carried Forward to Summary:				611,200.00



neral: Office ninistration and rheads/Preliminar scription	Units			Page: 5
ninistration and rheads/Preliminar				
scription	Unite			Project:
	Onics	Quantity	Unit Bid Rate(Ksh)	Amount KSh
licity Sign Boards	KS	1	15000	15000
w a prime cost n for the BOQ and N preparation	PC SUM	ITEM	31000	31000
w prime cost for endance upon the county works cer and his staff as ected by the gineer in cordance with use 137 of the endard specification	PC SUM	10000		10000
ra-over Item Above Contractor's rhead and profit o D and E(5%)				2050
	of for the BOQ and N preparation we prime cost for indance upon the county works her and his staff as cited by the inneer in fordance with itse 137 of the indard specification ra-over Item Above Contractor's intend and profit	w prime cost for indance upon the county works ser and his staff as cited by the ineer in ordance with ise 137 of the indard specification PC SUM PC SUM	for the BOQ and N preparation PC SUM ITEM w prime cost for Indance upon the County works Ber and his staff as Cotted by the Indance with Item PC SUM ITEM PC SUM ITEM ITEM	for the BOQ and IN preparation PC SUM ITEM 31000 w prime cost for indance upon the county works the rand his staff as cited by the inneer in ordance with itse 137 of the indard specification PC SUM 10000 ra-over Item Above Contractor's rhead and profit in D and E(5%) all Carried Forward

DIST	RICT WORKS OFFICER
P. 0). Box 428, RUNYENJES.
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		UURI DAT	SECONDA	RYSCHOOL	D 0
Bill of Qua	ntities				Page: 6
Bill No.6	SITE CLEARANCE		<u> </u>		Project:
tem No.	Description	Units	Quantity	Unit Bid Rate(Ks	Amount KSh
	Clear site including removal of all debris, bushes and shrubs as necessary for preparation of		0.1	600000	en 000 00
Α	execution of works.	На	0.1	600000	60,000.00
					- 100
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_					
	Total Carried Forward	to Summo			60,000.00



		V OFFICE LID	PURPOSE I	IALL		
	GIKUURI DA	Y SECOND	ARY SCHOOL)L	Page: 7	
Bill of Quant	ities		 		Project:	
Bill No.7	Demolition & alteration	Units	Ougatitu	Unit Bid Rate(Amount KS	
Item No.	Description	Units	Quantity	Ullit Blu Katel	Alliount No	
A	Carefully hack out existing wall to allow for consruction of R.C columns and the minibeams above main ringbeam, load, cart away debris and make good all works disturbed	item	1	250,000.00	250,000.00	
					111100	



	COMPLETION O			ALL	
D:II (0		ECONDA	RY SCHOOL		Dogge 9
Bill of Qua	EXCAVATION AND FILLING				Page: 8
Dill No 0	1				Project:
Bill No.8	FOR STRUCTURES	Units	Quantity	Unit Rid Rate	Project: Amount KSh
Item No.	Description	Units	Quantity	OIIIL DIG KAL	Alloult Koll
	Excavate for strip footing in soft				
Α	material	M ³	45	250.00	11,250.00
В	Ditto but in hard material	M³	3	500.00	1,500.00
	Allow for keeping excavations				
	free from water by baling or				
	pumping as required including				
i.	provision of drains e.t.c, as				
C	necessary	item	1	3,500.00	3,500.00
	Allow for maintaining and				
	supporting sides of excavations	i			
	and keeping from fallen material		No.		
D	as necessary	item	1	3,500.00	3,500.00
	Disposal				
E	Backfilling around foundations	M ³	41	100.00	4,100.00
	Load and cart away surplus				
F	excavated material	M ³	1 7	200.00	1,400.00
·	Imported Filling	1			
	Imported approved fill material				
	to make up levels well waterd		k	-	
G	and compacted in layers	M ³	27	1,100.00	29,700.00
	Natural stones	***			
	200mm natural foundation stone				V-20-0000000
	for retaining waill for paving				
н	slab.	m2	93	1,300.00	120,900.00
	0,00				
	200 mm Thick approved				
	hardcore filling to make up				
	levels well compacted in layers(
ı	in the hall and paving slab)	M ³	110	1,100.00	121,000.00
·	Damp-proof membrane	1770			
	Single layer of 1000 gauge		 		· · · · · · · · · · · · · · · · · · ·
	polythene sheeting laid on				
	blinded hardcore with 150 mm				
J	side laps to receive concrete	m2	495	100.00	49,500.00
	Anti-termite Treatment				
	Chemical anti-termite treatment				
	executed by an approved				
	specialist under a ten-year				
K	guarantee to surfaces of	m2	495	80.00	39,600.00
	Plain Concrete Class 15(1:4:8)				
	100 mm Thick blinding under				
L	column bases	M ³	3	9,600.00	28,800.00
Reserve					
	Total Carried Forward to Sumr	narv:			414,750.00
	1				- OT MORKS

DISTRICT WORKS OFFICER
EMBU EAST DISTRICT

P. O. Box 428, RUNYENJES. ción

	COMPLETION OF A				
Bill of	GINDONI DAT S	ECONDA	T SCHOOL	r	T. Marine
Quantities					Page: 9
Bill No.9	CONCRETE				Project:
				Unit Bid	Amount
Item No.	Description	Units	Quantity	Rate(Ksh)	KSh
	Description Vibrated reinforced concrete class 15/15 with minimum cube crushing strength of 15N/mm² at 28 days				
	125 mm thick ground floor				
Α	slab	M³	69	9600	662400
В	Column bases class 15/20	M³	5	9600	48000
С	Sub-columns and columns class 15/20	M³	20	9600	192000
D	Ring beam class 15/20	M³	5	9600	48000
	Total Carried Forward to Summary:	,			950400



Bill of Quar	ntities				Page: 10
Bill No.10	REINFORCEMENT (All Provisional)				Project:
tem No.	Description	Units	Quantity	Unit Bid Rate(Ksh)	Amount KSh
	Reinforcement (All Provisional) High yield square twisted steel bar reinforcement to B.S. 4461				
Α	D12 for column base , sub column and columns D10 for the ringbeam	KG	900	140	126,000.00
В	after 2course above main ring beam	KG	300	140	42,000.00
С	D-8 for all ringbars/shear members Steel mesh fabric reinforcement to BS 4483	KG	600	140	84,000.00
D	Layer of fabric mesh reinforcement laid in bed with 150 mm side and end laps (measured nett- no allowance given for laps) ref. A98	SM	495	200.00	99,000.00
	Total Carried Forward to Summary:				351,000.00

DISTRICT WORK	KS OFFICER DISTRICT
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P. O. Box 428,	RUNYENJES.
SIGN	

Bill of Qua	DAY SECONDARY SCHOOL antities			A PERMIT	Page: 11
Bill No.11	FORMWORK:	ALC: LANG			Project:
Item No.	Description	Units	Quantity	Unit Bid Rate(Ksh)	Amount KSh
	Formwork to:				
Α	Sides of column	m ²	195	400.00	78,000.00
В	Sides of ground slab : Edges 75-150 mm high	m ²	16	100.00	1,600.00
С	Sides of ring beam	m ²	54	400.00	21,600.00
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	Total Carried Forward to Summary:				101,200.0

DISTRICT WORKS OFFICER EMBU EAST DISTRICT
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P. O. Box 428, RUNYENJES.
SIGN

Bill of Qua	ntities		A STONE S		Page: 12
Bill No.12	WALLING			and more control	Project:
Item No.	Description	Units	Quantity	Unit Bid Rate(Ksh)	Amount KSh
	Grey machine dressed stone walling of the required minimum compressive strength of 10 N/mm2 bedded in cement sand (1:3) mortar reinforced with and including gauge 12 soft wire gauge hoop iron at every alternate course				-
Α	150 mm thick walling Plinth Finishes	m²	300	1,200.00	360,000.00
В	15mm Thick cement sand rendering (1:3) to plinth walls minimum 600 mm depth.	m²	90	320.00	28,800.00
С	Prepare and apply three coats of black bituminous paint or other approved to rendered plinths externally	m²	90	260.00	23,400.00
D	Provide running keying to the external wall with paint	m²	145	260.00	37,700.00
	Eaves Filling				
E	Labour and materials for eaves filling on 200 mm thick walls	m ²	85	200.00	17,000.00
F	Cuvered cutting to 200 mm thick walls	LM	75	250.00	18,750.00
					-
		-			
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	Total Carried Forward to Summary:			Į.	485,650.00

DISTRICT WORKS OFFICER EMBU EAST DISTRICT
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P. O. Box 428, RUNYENJES.
SIGN

	COMPLETION OF					
	GIKUURI DAY	SECON	DARY SC	HOOL		
Bill of Qu	antities					
Bill No.13	windows and doors				page:13	
Item No.	Description	Units	Quantity	Unit Bid Rate(Ksh)	Amount KSh	
Α	provide and install complete 1500mm×2900mm steel double door with casement	NO.	3	15,000.00	45,000.00	
В	provide and install complete 1200mm×2900mm steel double door with casement	NO.	1	14,000.00	14,000.00	
C	provide and install complete 900mm×2900mm steel double door with casement	NO.	5	1,300.00	6,500.00	
D	provide and install complete 1500mm×2400mm steel double door with casement	NO.	2	14,000.00	28,000.00	
E	provide and install complete 900mm×2400mm steel double door with casement	NO.	4	14,000.00	56,000.00	
F	provide and install complete 1500mm ×1800mm steel window with two side hang lights:one fixed bottom light and one fixed light complete with glazing	NO.	25	11,000.00	275,000.00	
G	provide and install complete 900mm ×1300mm steel window with two side hang lights:one fixed bottom light and one fixed light complete with glazing	NO.	7	11,000.00	77,000.00	
н	provide and install complete 1500mm ×1300mm steel window with two side hang lights:one fixed bottom light and one fixed light complete with glazing	NO.	1	11,000.00	11,000.00	
ı	provide and install 1700mm ×900mm lockable steel serving window	NO.	2	1,500.00	3,000.00	
J	provide and install 500mm square steel casement ventillators with glazing	NO.	53	2,000.00	106,000.00	
	Total Carried Forward to Summary:				621,500.00	

DISTRICT WOR	DISTRICT
	y areas
P. O. Box 428,	RUNYENJES.
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Bill of Quar	ntities	200 E	S. Halles		Page: 14
Bill No.14	ROOF CONSTRUCTION				Project:
Item No.	Description	Units	Quantit	Unit Bid Rate(Ksh)	Amount KSh
Α	IRON SHEETS 30 GAUGE BOX PROFILE PRE- PAINTED	M²	650		520,000.00
В	Ridge cap	LM	50	350.00	17,500.00
С	75mm self tapping screws	PKTS	15	1,200.00	18,000.00
10-10-10-10-10-10-10-10-10-10-10-10-10-1	STEEL WORK				
	provide primed;				
D	75 x 50 x 3mm RHS for MAIN RAFTERS	LM	400	550.00	220,000.00
E	50x50x3mm RHS	LM	330	500.00	165,000.00
F	50x50x3mm RHS (purlins) at a spacing of 1.8m c/c	LM	400	450.00	180,000.00
G	200 x 150 Steel gutter	LM	95	900.00	85,500.00
i	provide 200mm wide fabricated steel fascia board	LM	60	1,200.00	72,000.00
	note: cost of welding ,primer and hoisting the trusse are inclusive in the rates.				
	Total Carried Forward to Summary:				1,278,000.00

DISTRICT WORKS OFFICER EMBU BAST DISTRICT
P. O. Box 428, RUNYENJES.
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Bill of Quantities					Page: 15
Bill no. 15 FINISHES					Project:
Item No.	Description	Units	Quantity	Unit Bid Rate(Ksh)	Amount KSh
	floor finish	I	1		
Α	provide 32mm thick floor screed.	M²	495	360.00	178,200.00
В	provide and lay non sliperly floor tiles (ditto) walling	M²	495	1,400.00	693,000.00
 	Cement sand (1:4) rendering				
С	15 mm Rendering to concrete beams, columns and walls	M²	650	320.00	208,000.00
D	Ditto to window and door reveals not exceeding 100 mm girth	M²	45	320.00	14,400.00
	Prepare surface and apply one undercoat of matt vinyl emulsion and two finishing coats of silk vinyl emulsion to:				-
Ē	Plastered walls rendered concrete beams and columns	M²	650	260.00	169,000.00
F	To window and door render not exceeding 100 mm girth	M²	45	260.00	11,700.00
	Total Carried Forward to Summary:				1,274,300.00



Bill of Quantities					Page: 16
Bill no. 16	PROVISIONAL SUM				Project:
tem No.	Description	Units	Quantity	Unit Bid Rate(Ksh)	Amount KSh
Α	Supply and install meter box	NO.	1	5,500.00	5,500.00
В	supply and install earthrod	NO.	1	600.00	600.00
С	Supply and install earth cable 6mm sq.	LM	8	450.00	3,600.00
D	provide 6mm sq.red black,green cable for main supplyfrom the meter boxto consumer unit	LM	30	250.00	7,500.00
E	provide kmpg/100A dp mcb dp for meterbox	NO.	1	1,800.00	1,800.00
F	Provide 100A cct breaker mcb dp for mains	NO.	1	1,500.00	1,500.00
G	provide consumer unit/distributor board	NO.	1	4,000.00	4,000.00
Н	provide 30/60A mcbsp for socket and other heating elements	NO.	1	850.00	850.00
1	provide 10A mcb for lighting	NO.	2	1,000.00	2,000.00
J	provide 2.5mm socket cables	LM	150	250.00	37,500.00
K	provide 1.5mm lighting cables	LM	250	250.00	62,500.00
L	provide double socket plates	NO.	16	100.00	1,600.00
М	provide double socket outlets	NO.	16	500.00	8,000.00
N	provide lighting switches plates	NO.	20	100.00	2,000.00
0	provide and fix switches	NO.	20	150.00	3,000.00
Q	provide double flourescent tubes 4fts	NO.	22		57,200.00
R	Provide circular boxes	NO.	40	100.00	4,000.00
S	Provide security lighting cct and cover	NO.	6	300.00	1,800.00
Т	provide 20mm pvc pipe conduits	LM	400	50.00	20,000.00
	Total Carried Forward to				224,950.00
	Summary:				ORKS OFFICE

DISTRICT WORKS OFFICER

P. O. Box 428, RUNYENJES.

SIGN

tem No.17 [1 s 2 e	Summary Description	Project:
1 5	Description	
2 6		Amount (KShs)
2007CB, 92	site clearance	56,000.00
3 v	excavation for foundation and substructures	1,083,150.00
	walling	510,000.00
4 f	formwork, rinbeam reinforcement and concrete	611,200.00
	general preliminaries and overheads	58,050.00
	removal of debris, bushes and stumps	60,000.00
7 (demolitions and alterations	250,000.00
8 6	excavations,and filling for structures	414,750.00
	subbase,subcolumn, column concrete	950,400.00
10 r	reinforcement for columns	351,000.00
11 f	formwork for columns and ringbeam	101,200.00
12 \$	supestructure	485,650.00
	windows and doors	621,500.00
14 r	roof construction	1,278,000.00
And the second s	finishes	1,274,300.00
16 €	electrical works	224,950.00
17 €	extra for working benches and drainage works	114,498.80
	Sub Total 1	8,444,648.80
	Add 5% FOR PMC	422,232.44
	Sub Total 2	8,866,881.24
1	ADD3% INCOME TAX	266,006.44
	SUBTOTAL	9,132,887.68
1	VAT @ 16 %	1,461,262.03
	Total	10,594,149.7
	Carried to page on the form of Tender	10,594,149.71