

REPUBLIC OF KENYA



COUNTY GOVERNMENT OF NYANDARUA

DEPARTMENT OF TRANSPORT, ENERGY & PUBLIC WORKS

PROPOSED CONSTRUCTION AND COMPLETION OF A LABORATORY AT
RIVERSIDE SECONDARY SCHOOL

FOR

N.G-C.D.F OLJORO-OROK CONSTITUENCY

Bills of Quantities

ARCHITECT,

COUNTY ARCHITECT,
DIR. OF PUBLIC WORKS,
NYANDARUA COUNTY,
P.O. BOX 82,
NYAHURURU.

QUANTITY SURVEYOR,

COUNTY QUANTITY SURVEYOR,
DIR. OF PUBLIC WORKS,
NYANDARUA COUNTY,
P.O. BOX 82,
NYAHURURU.

ELEC/MECH ENGINEER

COUNTY ELEC / MECH. ENGINEER,
DIR. OF PUBLIC WORKS,
NYANDARUA COUNTY,
P.O. BOX 82,
NYAHURURU.

STRUCTURAL ENGINEER,

COUNTY ENGINEER - STRUCTURAL
DIR. OF PUBLIC WORKS,
NYANDARUA COUNTY,
P.O. BOX 82,
NYAHURURU.

FORM OF TENDER

TO: _____ [Date] _____

Dear Sir,

- 1 In accordance with the Conditions of Contract, Specifications, Drawings and Bills of Quantities for the execution of the above named Works, we, the undersigned offer to construct, install and complete such Works and remedy any defects therein for the sum of Kshs. _____ [Amount in figures] Kenya Shillings _____
_____ [Amount in words]
- 2 We undertake, if our tender is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Project Manager's notice to commence, and to complete the whole of the Works comprised in the Contract within _____ Weeks
- 3 We agree to abide by this tender until **120 days from date of tender**, and it shall remain binding upon us and may be accepted at any time before end of the said days
- 4 Unless and until a formal Agreement is prepared and executed this tender together with your written acceptance thereof, shall constitute a binding Contract between us.
- 5 We understand that you are not bound to accept the lowest or any tender you may receive.

Dated this _____ day of _____ 20 _____

Signature _____ in the capacity of _____

Duly authorized to sign tenders for and on behalf of
_____ [Name of the Tenderer]
of _____ [Address of the tenderer]

Witness; Name _____

Address _____

Signature _____

Date _____

BUILDER'S WORKS

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 1</u>				
	<u>SUBSTRUCTURES.</u>				
	<u>Site clearance</u>				
A	Clear the site off grass, shrubs and all vegetation; cart away as directed	210	sm	100	21,000.00
	<u>Oversite Excavation</u>				
B	Excavate oversite to remove top vegetable soil average 150mm deep and remove from site	210	sm	100	21,000.00
	<u>Excavation</u>				
C	Excavate oversite to reduce levels commencing from stripped level not exceeding 1.50 meters	74	cm	250	18,500.00
D	Excavate foundation trench commencing from stripped level not exceeding 1.50 meters	136	cm	250	34,000.00
E	Excavate pits for column/pier bases starting from ground level not exceeding 1.50 meters	4	cm	500	2,000.00
F	Extra over for excavating in rock; irrespective of depth or hardness	4	cm	1400	5,600.00
G	Return, fill-in and rum selected excavated materials around foundations	104	cm	300	31,200.00
H	Remove and cart away from site surplus excavated material as directed	30	cm	500	15,000.00
	<u>Diposal of water</u>				
K	Keeping all excavations free from all water including spring or running water		Item		2,500.00
	<u>Planking and strutting</u>				
I	Uphold the sides of all excavations		Item		2,500.00
	<i>Carried to collection</i>				153,300.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Filling</u>				
A	Hardcore filling in making up levels; handpacked, exceeding 300mm thick depositing and compacting in layers of 150mm maximum thickness.	64	cm	700	44,800.00
B	50mm thick murrum blinding to surfaces of fill	180	sm	150	27,000.00
	<u>Antitermite treatment</u>				
C	TERMIDOR' or other equal and approved insecticide with a ten-years guarantee to surfaces of fill and tops of foundations	180	sm	400	72,000.00
	<u>Concrete</u>				
D	50mm thick mass concrete class Q (1:3:6) to bottoms of foundations	124	sm	500	62,000.00
	<u>In situ concrete; reinforced; class 20 / (20mm); vibrated</u>				
E	Foundations in trenches irrespective of thickness	10	cm	11500	115,000.00
F	Column bases	2	cm	11500	23,000.00
G	150mm thick bed	180	sm	1500	270,000.00
	<u>Reinforcement</u>				
	<u>Bars; high yield steel; cold worked to B.S. 4461 including bends, hooks, tying wire and distance blocks</u>				
F	10mm bars	156	kg	200	31,200.00
G	8mm bars	116	kg	200	23,200.00
	<u>Fabric BS 4483</u>				
H	Reference A142 mesh 200 x 200mm, weighing 2.22kgs per square metre	360	sm	350	126,000.00
	<u>Sawn formwork to insitu concrete as described:-</u>				
I	To sides; vertical or battering of strip foundations.	34	sm	300	10,200.00
J	To sides of column bases	4	sm	300	1,200.00
K	Edges of ground floor slab; 75 to 150mm wide	56	lm	200	11,200.00
	<i>Carried to collection</i>				816,800.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Walling</u>				
A	200mm thick approved local natural stone; roughly squared to foundation walling; bedding and jointing in cement sand (1:3) mortar	96	sm	1180	113,280.00
B	200 x 400m stone piers in foundations	26	lm	500	13,000.00
	<u>Damp proofing</u>				
C	Polythene; 500 gauge, 150mm laps (no allowance made to laps), horizontal; 1 no. layer laid on murrum blinding	360	sm	150	54,000.00
D	200mm wide; B.S. 743 Type A bitumen hessian base 150 mm laps (no allowance made for laps); horizontal, 1 no. layer, bedded in cement sand (1:3) mortar	82	lm	100	8,200.00
	<u>In situ finishings</u>				
D	14mm thick 2 No. coatwork cement sand (1:3) render; wood floated to concrete or blockwork base to walls; external	30	sm	350	10,500.00
	<u>Prepare and apply three coats black bituminous paint on:-</u>				
E	Rendered plinths, externally.	30	sm	200	6,000.00
	<u>Paving slabs</u>				
F	600 x 600 x50 mm precast concrete class 20\20 paving slabs laid to falls on blinded hardcore surface and jointed in cement and sand (1:3) mortar	22	sm	480	10,560.00
	<i>Carried to collection</i>				215,540.00
	<u>COLLECTION</u>				
	From page PT 4				153,300.00
	From page PT 5				816,800.00
	From above				215,540.00
	<i>TOTAL FOR SUBSTRUCTURES CARRIED TO SUMMARY</i>				1,185,640.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 2</u>				
	<u>SUPERSTRUCTURES</u>				
	<u>RING BEAM</u>				
	<u>Insitu concrete; reinforced; class 25 / (20mm); vibrated</u>				
A	Beams	4	cm	13000	52,000.00
	<u>Reinforcement</u>				
	<u>Bars; high yield steel; cold worked to B.S. 4461 including bends, hooks, tying wire and distance blocks</u>				
B	12mm diameter bars	150	kg	200	30,000.00
C	8mm ditto	133	kg	200	26,600.00
	<u>Sawn formwork to insitu concrete as described:-</u>				
D	To sides and soffits of beams	46	sm	450	20,700.00
	<u>STRUCTURAL STEELWORK</u>				
	<u>Framed; bolted and welded site connections</u>				
E	50mm Diameter x 2.5 mm Circular hollow sections steel stanchions;weighing 3.64kg/m; one end fixed to concrete floors and the other end fixed to timber frame	10	NO	7000	70,000.00
TOTAL FOR SUPERSTRUCTURE CARRIED TO SUMMARY					199,300.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO.3</u>				
	<u>WALLING</u>				
	<u>PRECAST CONCRETE</u>				
	<u>Precast concrete grade 20/20mm aggregate including formwork, finishing fair on all exposed surfaces and hoisting and placing in position, bedding, jointing and pointing in cement and sand (1:4) mortar</u>				
A	Window cill; 225 x 50mm extreme height, once sunk weathered and throated; reinforced as necessary for handling	24	lm	350	8,400.00
	<u>NATURAL STONE WALLING</u>				
B	200 mm thick approved local; chisel dressed both sides; bedding, jointing and pointing in cement sand (1:3)	168	sm	1300	218,400.00
C	Ditto; in gable walls	18	sm	1300	23,400.00
D	200mm eaves filling; 200mm high including dressing between rafters	36	lm	450	16,200.00
	<u>Labour and material</u>				
F	Raking cutting to 200mm thick natural stone wall	18	lm	500	9,000.00
G	Extra over horizontal and vertical pointing in 10mm thick rod in cement and sand nmortar (1:3) mortar; and one coat of bituminous paint	130	sm	450	58,500.00
	TOTAL FOR WALLING CARRIED TO SUMMARY				333,900.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO.4</u>				
	<u>ROOFING</u>				
	<u>Galvanized corrugated IT5 Sheet roofing; 28 gauge;Pre-painted</u>				
A	Roof covering not exceeding 45 ⁰ from horizontal;fixing to timber structure (m/s) with roofing nails and neoprene washers.	252	sm	700	176,400.00
	<u>Accessories; fixing as necessary</u>				
B	150mm Diameter half round ridge cap	20	lm	350	7,000.00
	<u>CARPENTRY</u>				
	<u>The following in 6No. sawn celcured cypress timber trusses, nailed connections; hoisting 3m above ground and spanning 9.90m</u>				
D	150 x 50mm rafters	86	lm	320	27,520.00
E	150 x 50mm kingpost	204	lm	320	65,280.00
F	100 x 50mm struts and ties	116	lm	230	26,680.00
G	150 x 25mm splice plate	40	lm	230	9,200.00
H	100 x 50mm wall plate rag-bolted at 1200mm centres with 12mm diameter bolts (ms)	56	1m	230	12,880.00
I	200 x 40mm ridge board	20	1m	330	6,600.00
J	75 x 50mm purlins	174	1m	130	22,620.00
	<u>Wrot cypress, prime grade</u>				
K	200 x 25mm thick fascia /barge board	72	lm	260	18,720.00
	<u>Painting and Decorations</u>				
	<u>On Woodwork</u>				
	<u>Knot prime and stop; prepare and apply one undercoat and two coats of 'CROWN SOLO' or other equal and approved super gloss oil paint to:-</u>				
L	Fascias; 200 to 300mm girth; external	72	lm	60	4,320.00
TOTAL FOR ROOFING CARRIED TO SUMMARY					377,220.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 5</u> <u>OPENINGS</u>				
	<u>Doors and Gates</u> <u>Purpose made mild steel casement doors in small panes; with and including 20 x 50mm burglar proof flats welded to door; all welding ground smooth</u>				
A	Double door; overall size 1500 x 2400mm high, with two openable leaves size 900 x 2100 and 600 x 2100mm high; 3 pairs 150mm long purpose made hinges and all necessary iron mongery	2	No.	5000	10,000.00
	<u>PURPOSE MADE UNITS</u> <u>Supply, assemble and fix the following purpose-made mild steel casement windows in small panes of 300 x 200mm standard metal section from approved manufacturer complete with frames, transomes, mullions and approved ironmongery; all welding ground smooth</u>				
B	Window, overall size 1750 x 1700mm high	8	No	3000	24,000.00
C	Window; overall size 1750 x 900mm high	6	No.	3000	18,000.00
	<u>Glazing</u>				
D	4mm thick clear glass panes; fixing with rubber	26	sm	200	5,200.00
	<u>Iron mongery</u> <u>Supply and fix the following to UNION catalogue or other equal and approved</u> <i>To metal surfaces or the like welding or fixing with rivets</i>				
E	200mm diameter steel purpose-made D handles	2	No	300	600.00
G	4 lever steel door lock to steel metal	2	No	580	1,160.00
H	Rubber door stop complete with 38mm rawl bolt	4	No	100	400.00
	<u>Prepare and apply one coat etching primer, one undercoat and two coats gloss oil paint to Crown Solo or other equal and approved to: -</u>				
I	General surfaces of metal casement doors and windows; over 300mm girth internal	56	sm	150	8,400.00
	TOTAL FOR OPENINGS CARRIED TO SUMMARY				67,760.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO.6</u>				
	<u>FINISHES</u>				
	<u>WALL FINISHES</u>				
	<u>Render; cement and sand (1:3)</u>				
A	18mm thick one coat backings; wood floated to concrete or blockwork base; beams and wall; external	48	sm	400	19,200.00
	<u>Plaster; 12mm thick 2 No. coatwork, 9mm first coat of cement sand (1:6); 3mm second coat of cement and lime putty (1:10); steel trowelled to concrete or blockwork base generally to: -</u>				
B	Walls; internal	382	sm	200	76,400.00
	<u>FLOOR FINISHES</u>				
	<u>Screed; cement and sand (1:3) coloured</u>				
C	40mm thick red oxide screed to concrete or blockwork base generally to floors level; internal	180	sm	320	57,600.00
D	100mm wide skirting; rounded junction with wall finish and coved junction with floor finish	80	lm	40	3,200.00
	<u>Painting and Decorations</u>				
	<u>Prepare surfaces and apply one undercoat and three coats of first quality emulsion paint to the following surfaces:-</u>				
E	To walls internally	382	sm	200	76,400.00
F	To beams and walls; externally	96	sm	200	19,200.00
	TOTAL FOR FINISHES CARRIED TO SUMMARY				252,000.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
<u>SUMMARY PAGE</u>					K.SHS.
1	SUBSTRUCTURES (ALL PROVISIONAL)		PT / 6		1,185,640.00
2	FRAME		PT / 7		199,300.00
3	WALLING		PT / 8		333,900.00
4	ROOFING.		PT / 9		377,220.00
5	OPENINGS		PT / 10		67,760.00
6	FINISHES		PT / 11		252,000.00
TOTAL FOR BUILDER'S WORKS					2,415,820.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
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PC & PROVISIONAL SUMS

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO.6</u>				
	<u>PROVISIONAL SUMS</u>				
	<u>The following provisional sums are to be measured on completion and priced in accordance with the rates contained in these bills of quantities or prorata thereto or deducted in whole if not required</u>				
A	Allow a provisional sum of Kshs Thirty Thousand Only for Project Supervision expenses		ITEM		30,000.00
B	Allow a provisional sum of Kshs Twenty Thousand Only for Project Management Committee expenses		ITEM		20,000.00
C	Allow a provisional sum of Kshs Five Thousand Only for labelling		ITEM		5,000.00
D	Allow a provisional sum of Kenya shillings Thirty Thousand Only for Contingencies		ITEM		30,000.00
TOTAL FOR PROVISIONAL SUMS CARRIED TO SUMMARY					85,000.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
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GRAND SUMMARY PAGE

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
<u>GRAND SUMMARY PAGE</u>					K.SHS.
1	BUILDERS WORKS			PT /12	2,415,820.00
2	P.C AND PROVISIONAL SUMS			PT / 14	85,000.00
	<i>Sub total</i>				2,500,820.00
	TOTAL CARRIED TO FORM OF TENDER				2,500,820.00

Amount of tender in words: Kenya Shillings:.....

.....

.....

Tenderer's signature and stamp:.....

Address:.....

Date:.....

Witness: Name and signature.....

Address:.....

Date:.....