**REPUBLIC OF KENYA** 





## COUNTY GOVERNMENT OF NYANDARUA

### **DEPARTMENT OF TRANSPORT, ENERGY & PUBLIC WORKS**

# PROPOSED CONSTRUCTION AND COMPLETION OF A STANDARD CLASSROOM

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, <u>NYAHURURU.</u>

#### **ELEC/MECH ENGINEER**

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

#### **QUANTITY SURVEYOR,**

COUNTY QUANTITY SURVEYOR, DIR. OF PUBLIC WORKS, NYANDARUA COUNTY, P.O. BOX 82, <u>NYAHURURU.</u>

#### STRUCTURAL ENGINEER,

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

### **OCTOBER, 2024**

### FORM OF TENDER

	[Date)
Sir,	
In accordance with the Conditions of Contract, Sp Bills of Quantities for the execution of the above undersigned offer to construct, install and comple	named Works, we, the
any defects therein for the sum of Kshs figures] Kenya Shillings	
	[Amount in words]
We undertake, if our tender is accepted, to comme as is reasonably possible after the receipt of the Pr commence, and to complete the whole of the Wor Contract within We	roject Manager's notice to ks comprised in the
We agree to abide by this tender until <b>120 days fi</b> shall remain binding upon us and may be accepted said days	-
Unless and until a formal Agreement is prepared a together with your written acceptance thereof, sha Contract between us.	
We understand that you are not bound to accept the you may receive.	ne lowest or any tender
Dated this day of	20
Signaturein the capacity of	<u> </u>
Duly authorized to sign tenders for and on behalf	
of	[Address of the tenderer)
Witness; Name	
Address	
Signature	
Date	
	Sir,    In accordance with the Conditions of Contract, Sp    Bills of Quantities for the execution of the above undersigned offer to construct, install and complet any defects therein for the sum of Kshs.

# **BUILDER'S WORKS**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 1				
	<u>SUBSTRUCTURES.</u>				
	Site clearance				
А	Clear the site off grass, shrubs and all vegetation; cart away as directed	105	sm	100	10,500.00
	Oversite Excavation				
В	Excavate oversite to remove top vegetable soil average 150mm deep and remove from site	105	sm	100	10,500.00
	Excavation				
С	Excavate oversite to reduce levels commencing from stripped level not exceeding 1.50 meters	37	cm	250	9,250.00
D	Excavate foundation trench commencing from stripped level not exceeding 1.50 meters	68	cm	250	17,000.00
Е	Excavate pits for column/pier bases starting from ground level not exceeding 1.50 meters	2	cm	500	1,000.00
F	Extra over for excavating in rock; irrespective of depth or hardness	2	cm	1400	2,800.00
G	Return, fill-in and rum selected excavated materials around foundations	52	cm	300	15,600.00
Н	Remove and cart away from site surplus excavated material as directed	15	cm	500	7,500.00
	Diposal of water				
К	Keeping all excavations free from all water including spring or running water		Item		5,000.00
	Planking and strutting				
Ι	Uphold the sides of all excavations		Item		5,000.00
	Carried to collection	I		l	84,150.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Filling				
А	Hardcore filling in making up levels; handpacked, exceeding 300mm thick depositing and compacting in layers of 150mm maximum thickness.	32	cm	700	22,400.00
В	50mm thick murram blinding to surfaces of fill	90	sm	150	13,500.00
	Antitermite treatment				
C	TERMIDOR' or other equal and approved insecticide with a ten-years guarantee to surfaces of fill and tops of foundations	90	sm	400	36,000.00
	<u>Concrete</u>				
D	50mm thick mass concrete class Q (1:3:6) to bottoms of foundations	62	sm	500	31,000.00
	Insitu concrete; reinforced; class 20 / (20mm); vibrated				
E	Foundations in trenches irrespective of thickness	5	cm	13000	65,000.00
F	Column bases	1	cm	13000	13,000.00
G	150mm thick bed	90	sm	2250	202,500.00
	Reinforcement Bars; high yield steel; cold worked to B.S. 4461 including bends, hooks, tying wire and distance blocks				
F	10mm bars	78	kg	200	15,600.00
G	8mm bars	58	kg	200	11,600.00
	Fabric BS 4483				
Н	Reference A142 mesh 200 x 200mm, weighing 2.22kgs per square metre	90	sm	350	31,500.00
	Sawn formwork to insitu concrete as described:-				
I	To sides; vertical or battering of strip foundations.	17	sm	300	5,100.00
J	To sides of column bases	2	sm	300	600.00
K	Edges of ground floor slab; 75 to 150mm wide	28	lm	200	5,600.00
	Carried to collection				453,400.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Walling				
А	200mm thick approved local natural stone; roughly squared to foundation walling; bedding and jointing in cement sand (1:3) mortar	48	sm	1180	56,640.00
В	200 x 400m stone piers in foundations	13	lm	500	6,500.00
	Damp proofing				
С	Polythene; 500 gauge, 150mm laps (no allowance made to laps), horizontal; 1 no. layer laid on murram blinding	90	sm	150	13,500.00
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	41	lm	100	4,100.00
	Insitu finishings				
D	14mm thick 2 No. coatwork cement sand (1:3) render; wood floated to concrete or blockwork base to walls; external	15	sm	350	5,250.00
	Prepare and apply three coats black bituminous paint on:-				
E	Rendered plinths, externally.	15	sm	200	3,000.00
	Paving slabs				
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	11	sm	480	5,280.00
	Carried to collection				04 270 00
					94,270.00
	COLLECTION				
	From page PT 4				84,150.00
	From page PT 5				453,400.00
	From above				94,270.00
	TOTAL FOR SUBSTRUCTURES CARRIED TO	SUM	MARY		631,820.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 2				
	<u>SUPERSTRUCTURES</u>				
	<u>RING BEAM</u>				
	Insitu concrete; reinforced; class 25 / (20mm); vibrated				
Α	Beams	3	cm	13000	39,000.00
	Reinforcement				
	Bars; high yield steel; cold worked to B.S. 4461 including bends, hooks, tying wire and distance blocks				
В	12mm diameter bars	112	kg	200	22,400.00
C	8mm ditto	81	kg	200	16,200.00
	Sawn formwork to insitu concrete as described:-				
D	To sides and soffits of beams	23	sm	450	10,350.00
	STRUCTURAL STEELWORK				
	Framed; bolted and welded site connections				
Е	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	5	NO	7000	35,000.00
	TOTAL FOR SUPERSTRUCTURE CARRIED T			v	122,950.00
	I OTAL FOR SULERSTRUCTURE CARRIED I	0 501			122,730.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO.3				
	WALLING				
	DRECAST CONCRETE				
	<u>PRECAST CONCRETE</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				
	Window cill; 225 x 50mm extreme height, once sunk				
Α	weathered and throated; reinforced as necessary for	12	lm	350	4,200.00
	handling				
	NATURAL STONE WALLING				
	NATURAL STONE WALLING				
D	200 mm thick approved local; chisel dressed both sides;	0.4		1100	02 400 00
В	bedding, jointing and pointing in cement sand (1:3)	84	sm	1100	92,400.00
G		0		1200	11 700 00
C	Ditto; in gable walls	9	sm	1300	11,700.00
	200mm eaves filling; 200mm high including dressing	10	1	450	9 100 00
D	between rafters	18	lm	450	8,100.00
	Labour and material				
F	Raking cutting to 200mm thick natural stone wall	9	lm	500	4,500.00
	Extra over horizontal and vertical pointing in 10mm thick				
G	rod in cement and sand nmortar (1:3) mortar; and one coat	65	sm	450	29,250.00
0	of bituminous paint	05	5111	150	29,250.00
	TOTAL FOR WALLING CARRIED TO SU	MMA	KY		150,150.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO.4				
	ROOFING				
	Galvanized corrugated IT5 Sheet roofing; 28 gauge;Pre-				
	painted				
	Roof covering not exceeding $45^{\circ}$ from horizontal; fixing to	126	~ ~ ~	700	88 200 00
A	timber structure (m/s) with roofing nails and neoprene washers.	126	sm	700	88,200.00
	wusheis.				
	Accessories; fixing as necessary				
D	150mm Dismester helf reput di des son	10	1	350	2 500 00
В	150mm Diameter half round ridge cap	10	lm	550	3,500.00
	CARPENTRY				
	The following in 6No. sawn celcured cypress timber				
	trusses, nailed connections; hoisting 3m above ground and				
	spanning 9.90m				
D	150 x 50mm rafters	43	lm	320	13,760.00
-		100			
E	150 x 50mm kingpost	102	lm	320	32,640.00
F	100 x 50mm struts and ties	58	lm	230	13,340.00
G	150 x 25mm splice plate	20	lm	230	4,600.00
	100 x 50mm wall plate rag-bolted at 1200mm centres with				
Н	12mm diameter bolts (ms)	28	1m	230	6,440.00
Ι	200 x 40mm ridge board	10	1m	330	3,300.00
J	75 x 50mm purlins	87	1m	130	11,310.00
		07	1111	150	11,510.00
	Wrot cypress, prime grade				
K	200 x 25mm thick fascia /barge board	36	lm	260	9,360.00
K	200 x 25min the rase a /barge board	50	1111	200	9,300.00
	Painting and Decorations				
	<u>On Woodwork</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:-				
L	Fascias; 200 to 300mm girth; external	36	lm	60	2,160.00
	r usenus, 200 to 500mini girui, externar	50	1111	00	2,100.00
					100 (10 00
	TOTAL FOR ROOFING CARRIED TO SU	WIMA	KY		188,610.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	ELEMENT NO. 5 OPENINGSDoors and Gates Purpose made mild steel casement doors in small panes; with and including 20 x 50mm burglar proof flats welded to door; all welding ground smoothDouble 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 mongeryPURPOSE MADE UNITSSupply, assemble and fix the following purpose-made mild	1	No.	5000	5,000.00
	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				
В	Window, overall size 1750 x 1700mm high	4	No	3000	12,000.00
C	Window; overall size 1750 x 900mm high	3	No.	3000	9,000.00
D	Glazing 4mm thick clear glass panes; fixing with rubber	13	sm	200	2,600.00
	<u>Iron mongery</u> <u>Supply and fix the following to UNION catalogue or other</u> <u>equal and approved</u> <i>To metal surfaces or the like weldingor fixing with rivets</i>				
Е	200mm diameter steel purpose-made D handles	1	No	300	300.00
G	4 lever steel door lock to steel metal	1	No	580	580.00
Н	Rubber door stop complete with 38mm rawl bolt	2	No	100	200.00
	Prepare and apply one coat etching primer, one undercoat and two coats gloss oil paint to Crown Solo or other equal and approved to: -				
Ι	General surfaces of metal casement doors and windows; over 300mm girth internal	28	sm	150	4,200.00
	TOTAL FOR OPENINGS CARRIED TO SU	J <b>MMA</b>	RY		33,880.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO.6				
	<u>FINISHES</u>				
	WALL FINISHES				
	Render; cement and sand (1:3)				
A	18mm thick one coat backings; wood floated to concrete or blockwork base; beams and wall; external	24	sm	400	9,600.00
	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 toconcrete or blockwork base generally to: -				
В	Walls; internal	191	sm	200	38,200.00
	<u>FLOOR FINISHES</u>				
	Screed; cement and sand (1:3) coloured				
C	40mm thick red oxide screed to concrete or blockwork base generally to floors level; internal	90	sm	320	28,800.00
D	100mm wide skirting; rounded junction with wall finish and coved junction with floor finish	40	lm	40	1,600.00
	Painting and Decorations				
	<u>Prepare surfaces and apply one undercoat and three coats</u> of first quality emulsion paint to the following surfaces:-				
Е	To walls internally	191	sm	200	38,200.00
F	To beams and walls; externally	24	sm	200	4,800.00
	TOTAL FOR FINISHES CARRIED TO SU	MMA	RY	l	121,200.00

ITEM		UNIT RATE	AMOUNT
	SUMMARY PAGE		K.SHS.
1	SUBSTRUCTURES (ALL PROVISIONAL)	PT / 6	631,820.00
2	FRAME	PT / 7	122,950.00
3	WALLING	PT / 8	150,150.00
4	ROOFING.	PT / 9	188,610.00
5	OPENINGS	PT / 10	33,880.00
6	FINISHES	PT / 11	121,200.00
	TOTAL FOR BUILDER'S WORKS		1,248,610.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT

# **PC & PROVISIONAL SUMS**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO.6				
	PROVISIONAL SUMS				
	<u>The following provisional sums are to be measured on</u> <u>completion and priced in accordance with the rates</u> <u>contained in these bills of quantities or prorata thereto or</u> <u>deducted in whole if not required</u>				
А	Allow a provisional sum of Kshs Thirty Thousand Only for Project Supervision expenses		ITEM		15,000.00
В	Allow a provisional sum of Kshs Twenty Thousand Only for Project Management Committee expenses		ITEM		12,000.00
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		20,000.00
	TOTAL FOR PROVISIONAL SUMS CARRIED	ГО SU	MMA	RY	52,000.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT

# **GRAND SUMMARY PAGE**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	GRAND SUMMARY PAGE				K.SHS.
1	BUILDERS WORKS		РТ	/12	1,248,610.00
2	P.C AND PROVISIONAL SUMS		PT	/ 14	52,000.00
	Sub total				1,300,610.00
	TOTAL CARRIED TO FORM OF TEN	1,300,610.00			

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

Tenderer's signature and stamp:.... Address:... Date:... Witness: Name and signature.... Address:...