



COUNTY GOVERNMENT OF NYANDARUA

DEPARTMENT OF PUBLIC WORKS, ROADS, TRANSPORT, HOUSING & ENERGY

PROPOSED CONSTRUCTION AND COMPLETION OF PHARMACY AND LABORATORY UNITS AT MANUNGA HEALTH CENTRE

FOR

HEALTH SERVICES

BILL OF QUANTITIES

ARCHITECT,

COUNTY ARCHITECT, DIR. OF PUBLIC WORKS, NYANDARUA COUNTY, P.O. BOX 701 - 20303 OL KALOU

ELEC/MECH ENGINEER

COUNTY ELEC / MECH. ENGINEER, DIR. OF PUBLIC WORKS, NYANDARUA COUNTY, P.O. BOX 701 - 20303 OL KALOU

QUANTITY SURVEYOR,

COUNTY QUANTITY SURVEYOR, DIR. OF PUBLIC WORKS, NYANDARUA COUNTY, P.O. BOX 701 - 20303 OL KALOU

STRUCTURAL ENGINEER,

COUNTY ENGINEER - STRUCTURAL DIR. OF PUBLIC WORKS, NYANDARUA COUNTY, P.O. BOX 701 - 20303 OL KALOU

NOVEMBER, 2023

FORM OF TENDER

TO:		[Date)		
Dear Sir,				
1		tions of Contract, Specifications, Works, we, the undersigned offe		
	any defects therein for the sum	n of Kshs		[Amount in
	figures] Kenya Shillings			
2		accepted, to commence the Wor 's notice to commence, and to co Weeks		
3	We agree to abide by this tend and may be accepted at any tir	ler until <i>120 days from date of t</i> ne before end of the said days	<i>tender</i> , and it sha	ıll remain binding upon us
4		ement is prepared and executed citute a binding Contract betwee		her with your written
5	We understand that you are n	ot bound to accept the lowest or	any tender you m	ay receive.
	Dated this	day of	20	
	Signature	in the capacity	of	
	Duly authorized to sign tender	rs for and on behalf of		
				[Name of the Tenderer]
	of			[Address of the tenderer)
	Witness; Name			
	Address			
	Signature			
	Date			

BUILDER'S WORK

r.	UNGA HEALTH CENTRE	TT 1.	0.	ъ.	Amoun
Item	Description of Works	Unit	Qty	Rate	(Kshs
	ELEMENT NO. 01 - PRELIMINARIES The Contractor is to allow for all Preliminaries including site offices and stores, transport of workmen to and from site, transport of materials, supply, setting out, servicing, fueling of the plant and equipment, provision of plant operator, insurance for the works shall be the sole responsibility of the contractor and all other preliminaries incidental to these works				
A	Allow for all Preliminaries associated with the works	Item	1		
	Element 01				
	PRELIMINARIES CARRIED TO	SUMMA	ARY	KSHS	

	UNGA HEALIH CENTRE				Amoun
Item	Description of Works	Unit	Qty	Rate	(Kshs)
	ELEMENT NO. 02 - DEMOLATION AND ALTERATION Carefully demolish existing 7000x 3000mm and 2500 mm high corrugated building complete with Gulvanised sheet roofing complete with all accessories and fixing as neccessary, ironsheet walling including all necessary frames. Openings inluding steel casement windows doors and all including iron				
A	mongery and cart away debris as directed	Item	1		
	Element 02 DEMOLITION AND ALTERLATIONS CARRIED TO SUI	MADV		KSHS	

PROPOSED CONSTRUCTION AND COMPLETION OF PHARMACY AND LABORATORY AT

	UNGA HEALTH CENTRE	TT 1.	0:	ъ.	(IZ 1)
Item	Description of Works	Unit	Qty	Rate	(Kshs)
	ELEMENT 03 SUBSTRUCTURE [ALL PROVISIONAL] Site Clearance				
A	Clear site of all grass, bushes, shrubs and all vegetation ; Cart away as directed by the Project Manager	SM	277		
	Oversite Excavation				
В	Excavate oversite to remove top soil average 200 mm deep and remove from site	СМ	277		
	Excavation including maintaining and supporting sides and keeping free from water, mud and fallen materials				
	Bulk excavations				
C	- not exceeding 1.50 metres deep	CM	97		
	For foundations commencing at reduced level				
D	- not exceeding 1.5 metres deep	CM	56		
	For column bases commencing at reduced level				
E	- not exceeding 1.5 metres deep	CM	25		
F	Extra over for excavating in soft/hard rock	CM	25		
	Disposal				
G	Backfilling to make up levels	СМ	30		
	Load and and heap all arising on site approximately (200 mm away) as directed by the Architect	СМ	178		
	Imported filling				
Н	Approved Hardcore filling to make up levels, hand packed not exceeding 300 mm thick in layers of 150mm maximum thickness	СМ	77		
I	50 mm thick murram blinding to surfaces of fill	SM	256		
-	Damp - proof membranes				
J	1000 Gauge polythene laid under surface beds	SM	272		
	Anti - termite treatment				
K	Chemical anti - termite treatment executed by an approved specialist under a ten - year guarantee to surfaces of hardcore, etc.	SM	272		
	Plain concrete 1:4:8				
L	- Blinding under foundations and columns, thickness 50 mm	SM	100		
	Element 03				
		Carried F		Kshs.	

	UNGA HEALIH CENTRE				Amount
Item	Description of Works	Unit	Qty	Rate	(Kshs)
	Brought Forward			Kshs.	
	Vibrated reinforced concrete class 25				
A	Foundations	CM	15		
В	Columns	CM	1		
С	Ground Beam	CM	9		
	Beds, thickness				
D	- 150 mm	SM	272		
	Reinforcement				
	High yield deformed steel bar reinforcement to B.S. 4461				
E	- 8mm Diameter bars	Kg	571		
F	- 12mm Diameter bars	Kg	800		
	Steel mesh fabric reinforcement to B.S. 4483				
	Layer of mesh fabric reinforcement laid in slab or bed (measured nett - no allowance made for laps)				
G	- Ref.A142 weighing 2.22 kgs per square metre	SM	272		
	Lined Fair Face Formwork				
Н	Sides of foundations, bases, etc.	SM	50		
I	Sides of Columns	SM	7		
	Edges of beds, etc.				
J	- 150 to 225 mm	LM	68		
	Natural Stone walling in cement mortar				
	Walling				
K	- 200 mm	SM	71		
	Cement and sand (1:5) rendering				
	Rendering to plinths finished with a steel trowel, thickness				
L	- 12 mm	SM	30		
	Prepare and apply two coats bituminous paint				
M	Rendered walls	SM	30		
	ELEMENT 03 SUBSTRUCTURE				
	Substructure (All Provisional) Carried	d to Sumi	nary	Kshs.	

IVIZIIV	UNGA HEALTH CENTRE	1	1		
Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	ELEMENT 04 FRAME SUPERSTRUCTURE				
	Vibrated reinforced concrete class 25				
A	Beams	CM	17		
В	Columns	SM	1.0		
	Columns	Sivi	1.0		
	Reinforcement (All Provisional)				
	High yield deformed steel bar reinforcement to B.S. 4461				
С	- 8mm Diameter bars	Kg	400		
D	- 12mm Diameter bars	Kg	510		
_	Lined Fair Face Formwork		_		
E	Sides of Columns	SM	7		
F	Sides and soffits of beams	SM	183		
	Steel Columns				
G	75 mm diameter x 3mm thick Circular Hollow Section (CHS); 2700mm long fixed with fish tail lugs to concrete floor slab.	NO	6		
	.,				
	On metal work				
	Prepare and apply one approved etching primer , one				
	undercoat and two coats of 'CROWN SOLO' or any other				
	equal and approved super gloss paint to: -				
	General surfaces of steel columns; not exceeding 100mm girth				
Н	external	LM	17		
	Element 04				
	Frame Superstructure Carr	ried to Sur	nmary	Kshs.	

MAIN	UNGA HEALTH CENTRE	-			
Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	ELEMENT 05 WALLING				
	External Walling				
	Machine cut stone walling in cement mortar (1:4) with neat raked horizontal joints				
	External walling reinforced with hoop iron at each and every alternate course, thickness				
A	- 200 mm	SM	103		
В	- 200 mm - Gable Walls	SM	37		
	Machine cut stone walling in cement mortar				
	Internal walling reinforced with hoop iron at each and every alternate course, thickness				
	Walling reinforced as described,				
С	- 200 mm	SM	60		
	Bituminous felt damp proof courses laid on and including leveling screed of cement mortar				
	In walling , width				
D	- 200 mm	LM	135		
	Element 05				
	Walling Carrie	d to Sum	mary	Kshs.	

tem	Description of Works	Unit	Qty	Rate	Amoun (Kshs
	ELEMENT 06 ROOFING & RAINWATER DISPOSAL				
	28 Gauge prepainted galvanised mini corrugated mild steel sheet				
	Roof sheeting laid with 94 mm side laps and 200 mm end laps fixed to timber purlins with and including roofing screws, washers and caps at centres				
A	~ 1200 mm	SM	287		
В	Raking cutting on sheeting	LM	61		
	Ridge sheeting , girth				
С	- 600 mm	LM	23		
	Sawn cypress (Grade 1) treated as described (provisional)				
	The following structural members in trusses including bolts , cleats , hoisting , etc.,.				
	Truss No. 1 (18 No.)				
	Rafters				
D	Rafters	LM	199		
	Kingpost				
E	100 x 50 mm	LM	36		
	Struts and ties				
F	- 100 x 50 mm	LM	350		
	Ceiling Joist				
G	- 150 x 50 mm	LM	178		
	Truss No. 2 (II No.)				
	Rafters				
Н	- 150 x 50 mm	LM	45		
	Ridge board				
	Ü				
Ι	- 150 x 50 mm	LM	46		
	Element 06				
	Roofing & Rainwater Disposal Carried I	Forward		Kshs.	

					Amount
Item	Description of Works	Unit	Qty	Rate	(Kshs)
	Brought	Forward		Kshs.	
	Purlins				
A	- 150 x 50 mm	LM	188		
	Wrought cypress treated as described				
	Fascia and bargeboard				
В	- 300 x 38 mm	LM	71		
	UPVC Pipes & Gutters				
	UPVC Pipes jointed with hemp gasket and cold caulking compound and fixed to walls with brackets @ 300mm c/c, size				
С	- 150 mm diameter	LM	12		
	Extra for offset in pipe , size				
D	- 100 x 100 mm	No.	4		
	Extra for shoe in pipe , diameter				
E	- 100 x 100 mm	No.	4		
	UPVC gutter half round, fixed to fascia board with brackets @ 300mm c/c, size				
F	- 100 mm diameter	LM	44		
	Extra for angle in gutter , size				
G	- 150 x 150 mm	No.	4		
	Knot, prime, stop and apply two undercoats and one gloss finishing coat paint to woodwork				
Н	- General wood surfaces	SM	260		
I	- 200 to 300 mm girth	LM	97		
	Element 06				
	Roofing & Rainwater Disposal Carried to Sum		1	Kshs.	

Item	Description of Works	Unit	Qty	Rate	Amoun (Kshs
	ELEMENT 07 EXTERNAL FINISHES				
	Cement and sand (1:4) rendering				
	Rendering to concrete surfaces finished with a wood float thickness				
A	- 15 mm	SM	62		
В	Ditto to reveals	SM	6		
	Prepare and apply three coats exterior quality 'permaplast' paint				
С	Rendered concrete surfaces externally	SM	62		
D	Rendered walls reveals	SM	6		
	Element 07				
	External Finishes Carried to Summar	у		Kshs.	

Item	Description of Works	Unit	Qty	Rate	Amoun (Kshs
	ELEMENT 08 INTERNAL FINISHES				
	Lime Plaster				
A	Plaster to walls	SM	405		
В	Plaster to sides and soffits of beams	SM	50		
	Terrazzo Finish Supply and fix only 600x600x10mm Terrazzo floor finish on prepared screed (m.s) with proprietary adhesive; jointed and pointed in matching coloured proprietary grouting: including pvc spacers and expansion joint as necessary: all to Architect's approval.				
С	600 x 600X10 mm Granito tiles in patterns as directed	SM	53		
D	100 mm Skirting tile cut out of tiles above	SM	23		
	Ceramic floor and wall tiles				
	Supply and and fix Ceramic non-slip floor Tiles including				
E	bedding in approved adhesive and pointing in tinted cement .	SM	170		
	Ditto Skirting				
F	- 100 mm high	LM	205		
G	Supply and and fix Wall Tiles including bedding in approved adhesive and pointing in tinted cement including conner.	SM	20		
	Cement and Sand [1:4] beds and backings				
	Beds to receive flooring, etc., finished with a steel trowel, thickness				
Н	32 mm thick	SM	10		
	Backing to tile dados, etc., thickness				
I	~ 12 mm	SM	20		
	Prepare and apply three coats plastic emulsion paint				
J	Plastered walls	SM	405		
K	Plastered sides & soffits of beams	SM	50		
L	Ceiling surfaces	SM	125		
	Calling Finish				
	Ceiling Finish Sawn Cypress				
M	75x50mm brandering at 600 centres both directions	LM	153		
	Ceiling Boards				
N	13mm thick plain chip-board ceiling boards nailed to timber brandering (m/s);nails punched and puttied	SM	125		
	Cornice				
0	75x25mm moulded cornice	LM	170		
	Element 08				
	Internal Finishes Carried to Summ	arv		Kshs.	

Item	Description of Works	Unit	Qty	Rate	Amoun (Kshs
	ELEMENT 09- JOINERY AND FITTINGS(ALL PROVISIONAL)				
	WORKTOP CONCRETE WORKS Solid concrete blockwalling in cement sand (1:4) mortar				
A	100mm thick support wall	SM	4		
В	Reinforced concrete (1:2:4)class 20/20 in:- 100mm thick suspended slab	SM	17		
С	Reinforcements B.R.C Mesh A65 in slab	SM	17		
D	Sawn formwork to:- soffittes of suspended slab	SM	17		
E	Edge of slab 75-150mm high.	LM	35		
F	Base cabinets: Mass concrete (1:3:6) as described in:- sand (1:4) screed	СМ	2		
G	Sawn formwork to:- Edge of slab 75-150mm high	LM	35		
Н	Extra over ditto for 25x25mm planted stop to formrebate.	LM	35		
I	50 x 25mm bearer	LM	116		
J	45 x 45mm rebated frame	LM	114		
K	Ditto but twice rebated	LM	20		
	25mm thick laminated MDF boards as described in:-				
L	Shelves hardwood lipped all round	SM	34		
M	Divisions ditto	SM	26		
N	Doors hardwood lipped all round	SM	34		
0	<u>Ironmongery</u> Stainless steel hydraulic malpa hinges	PRS	84		
P	75mm chromium plated barrel bolt	NO	56		
Q	"Ideal" or any other equal and approved ball catch	NO	56		
R	100mm chromium 'D' handles	NO	56		
S	50mm union cupboard lock.	NO	56		
	Insitu Finishings 15 mm cement sand (1:4) Backing to receive tiles on the worktops				
T	Worktops	SM	17		
	"Saj" Ceramic tiles, Non - slip, approved adhesive, fixed on prepared screed according to Manufacturer's instructions				
U	Size 330 x 330 x 8 mm thick Element 09	SM	17		
	Joinery and Fittings Carried to Summar	·v	1	Kshs	

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
reem	ELEMENT 10 WINDOWS	Ome	Qu	Tunce	(Rono)
	Windows cill				
	Precast Concrete to approval				
Α	150 x 25 mm cill, bedded and jointed in cement and sand 1:1				
В	and pointed in tinted cement Prepare and apply three coats gloss paint	LM SM	12 14		
ь	Frepare and apply timee coats gloss paint	SIVI	14		
	Steel Casement Windows				
	Purpose made casement windows with permanent ventilating units, manufactured from 20 x 20 x 3 mm 'Z' and 'T' mild steel sections including and complete with heavy duty brass stays and fasteners fixed to masonry jambs and concrete head				
С	Window, overall size 600x1500	No	1		
	Triple Window				
D	- 1500 x 1500 mm	No	5		
E	- 2000 x 1500 mm	No	3		
F	- 1000 x 1500 mm	No	3		
	Vertical multi- sash window				
G	- 600 x 600 mm	No	2		
Н	- 1000 x 1500 mm	No	1		
Ι	- 1000 x 1500 mm	No	1		
	Triple Window				
J	- 2000 x 1500 mm	No	1		
	Clear/Obscure sheet glass				
	4 mm Glass and glazing to metal with putty in panes				
Н	- 0.50 to 1.00 square metres	SM	26		
	Prepare, prime and apply two undercoats and one gloss finishing coat oil paint to metal				
I	Windows (both sides measured overall)	SM	52		
	Element 10				
	Windows Carried to Summa	rv		Kshs.	

IVIZALIV	UNGA HEALTH CENTRE				Amount
Item	Description of Works	Unit	Qty	Rate	(Kshs)
	ELEMENT II DOORS				
	Flush doors to B.S. 459 [Part 2]				
	50 mm Solid core flush doors faced both sides with 6 mm plywood zen veneered for polishing , moulded and hardwood lipped all round, size				
A	- 900 x 2700 mm	No.	10		
	Doors, frames and finishings in wrought cypress				
	Glazing beads with two labours				
В	- 25 x 23 mm	LM	30		
	Beads with two labours				
С	- 25 x 25 mm	LM	75		
	Architraves with two labours				
D	- 50 x 38 mm	LM	65		
	Transome with three labours				
Е	- 100 x 50 mm	LM	30		
	Frame with three labours				
F	- 200 x 50 mm	LM	65		
	Steel Casement French doors				
	Supply, assemble and fix the following purpose-made standard 32mm 'Z' section steel doors to comply to B.S. 990, obtained from an approved manufacturer, primed with red oxide primer before delivery to site complete with hinges, handles, catches and building in lugs as detailed on drawings with all necessary frames & ironmongery.				
G	- 1500 x 2700 mm - Double Leaf	No	1		
Н	- 900 x 2700 mm	No	3		
	Element 11				
	Doors Carried Forward			Kshs.	

	UNGA HEALTH CENTRE				Amount
Item	Description of Works	Unit	Qty	Rate	(Kshs)
	Providet Farry			Kshs	
	Brought Forward Ironmongery - supply and fix the following or other equal			KSIIS.	
	and approved with matching screws				
	Pairs brass butt hinges				
A	- 100 mm	No	15		
	Three lever stainless steel cylinder deadlock complete with handle				
В	- "Union 7203 SSS"	No	10		
С	Oval Satin anodised aluminium door stop [Ref: Union DS- 01AS]	No	10		
	Clear sheet glass				
	4 mm Glass and glazing to wood with beads [measured separately] in panes				
D	- 0.50 to 1.00 square metres	SM	13		
	Prepare and apply one coat wood preservative to woodwork before fixing				
	Frames , skirtings , etc.				
E	- not exceeding 100 mm	LM	110		
F	- 100 to 200 mm girth	LM	63		
G	- 200 to 300 mm girth	LM	63		
	Prepare and spray stain three coats polyurethane varnish to woodwork				
	Surfaces				
Н	- not exceeding 100 mm	LM	110		
I	- 100 to 200 mm girth	LM	63		
I	- 200 to 300 mm girth	LM	63		
,					
	Element 11				
		to Sumn	narv	Kshs.	

	SUMMARY OF SECTION		
	Element Number and Name	Page	
01	Preliminaries	RU/1	
02	Demolition and Alteration	RU/2	
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06	Roof Structure & Covering	RU/8	
07	External Finishes	RU/9	
08	Joinery and fittings	RU/10	
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10	Windows	RU/12	
11	Doors	RU/13	
	TOTAL FOR PHARMACY AND LABORATORY UNITS CARRIED TO SUMMARY	KSHS	

PROVISIONAL SUMS

	DD OVICIONAL CLIMS			
	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			
A	Allow a prime cost sum of Kshs Four Hundred and Eighty Thousand (Kshs. 480,000.00)Only for Mechanical Services.	ITEM		
В	Allow a prime cost sum of Kshs Three Hundred and Eighty Thousand (Kshs. 380,000.00)Only for Electrical Installation.	ITEM		
С	Allow a provisional sum of Kshs Sixty Thousand (Kshs. 60,000.00)Only for Supervisory expenses	ITEM		
D	Allow a provisional sum of Kenya shillings One hundred and Fifty thousand (Kshs. 150,000.00) Only for Contingencies to be expended in whole or part only at the discretion of the Project Manager			
	TOTAL FOR PROVISIONAL SUMS CARRIED TO SUM	MARY	KSHS	

GRAND SUMMARY

ITEM	DESCRIPTION	Page No.	FOR OFFICIAL USE ONLY	FOR TENDERER USE ONLY				
			KSHS.	KSHS.				
A	Pharmacy and Laboratory units - Builder's Works	RU/13						
В	P.C & Provisional Sums	PS/1						
	SUB-TOTAL ADD 2% PROJECT MANAGEMENT PAYABLE TO COUNTY REVENUE ACCOUNT							
	TOTAL CARRIED TO FORM OF TI INCLUSIVE OF 16% V.A.T.	ENDER						
Amount	in words. Kenya shillings							
	's Signature and stamp							
	2							
Date								
Witness Signature								
Address								
•••••		••••••						

