



REPUBLIC OF KENYA

DIRECTORATE OF PUBLIC WORKS

PROPOSED CONSTRUCTION OF 4NO CLASSROOM AT KMTC – ISIOLO

TENDER DOCUMENT

W.P.ITEM NO.....

**ISSUED BY:
COUNTY WORKS OFFICER,
DEPARTMENT OF PUBLIC WORKS
P.O BOX 38,
ISIOLO**

**KENYA MEDICAL TRAINING
COLLEGE
P.O BOX 844
ISIOLO**

JANUARY 2018

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KSH
	<p><u>PROPOSED CLASSROOM OF 4NO CLASSROOM AT KMTC ISIOLO ELEMENT NO.1</u></p> <p><u>SUBSTRUCTURES</u> <u>(ALL PROVISIONAL MEASURED)</u> <u>The following works have been measured up to and including ground floor slab)</u></p> <p><u>Earth works & excavating</u></p>				
A	Clear the site of all bushes, shrubs, small trees and hedges including grubbing up their roots and dispose as directed	SM	351		
B	Excavate to remove clay soil average 2000mm deep and deposit as directed	CM	702		
C	Extra over excavation for all class of rocks.	CM	5		
D	Approved hardcore Thick filling well handpacked,rammed, watered and compacted in layers of 150mmmm thick.	CM	702		
E	50mm fine materials for blinding (murrum/quarry dust) to surface of hardcore well and leveled.	SM	301		
F	Return, fill and ram selected excavated materials around foundation.	CM	100		
G	Load and cart away excavated soil from site as directed.	CM	602		
H	“Termido” or other equal and approved insecticide solution treatment to manufacture instructions on blinded surfaces and bottoms of foundations.	CM	312		
J	1000 Gauge polythene D.P.M under lay sheeting to bottom of slab with end and side laps of 150mm.	SM	312		
K	Allow for keeping excavations free from all waters by draining, pumping or otherwise.		ITEM		
L	Allow for maintaining and upholding sides of excavations as necessary clearing away any debris; rubbish e.t.c		ITEM		
	TO TAL CARRIED TO COLLECTION				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KSH
	<u>SUBSTRUCTURES (Continued)</u>				
	<u>Plain concrete (1:4:8)in:-</u>				
A	50mm Thick blinding to foundation and column bases	SM	74		
	<u>Vibrated Reinforced Concrete(1:2:4)</u>				
B	Ground beams	CM	7		
C	Foundation strip footing and columns bases.	CM	16		
D	Columns	CM	2		
E	100mm Thick ground floor slab	SM	165		
	<u>Sawn formwork to :-</u>				
F	Edges of floor slab 75-150high	LM	55		
G	Sides of column bases and foundation	SM	53		
H	Sides of column and ground beams	SM	101		
	<u>Steel reinforcements:</u>				
	<u>Supply and including all necessary tying wires and spacer blocks.</u>				
I	8mm High tensile square twisted steel bars	KG	362		
J	10mm Ditto	KG	540		
K	12mm Ditto	KG	640		
L	Steel fabric reinforcement mesh No. A142	SM	165		
	<u>Foundation walling</u>				
	<u>Natural stone walling in cement-sand (1:3) mortar including reinforcing with 20x3mm thick hoop-iron in every alternate course.</u>				
M	225 mm Thick walling	SM	215		
	TO CARRIED TO COLLECTION				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KSH
	<u>SUBSTRUCTURES (Continued)</u>				
	<u>Plinths</u>				
A	12mm thick cement-sand (1:3) render to plinths.	SM	38		
B	Prepare and apply three coats of Bitumastic paints to rendered plinths externally.	SM	38		
	<u>Paving slabs around building</u>				
C	600x600mm thick grey pre-cast concrete (1:2:4) paving slabs with cement and sand Mortar (1:3) joints including 50mm bed of sand.	SM	45		
	TOTAL CARRIED TO COLLECTION BELOW				
	<u>COLLECTION</u>				
	FROM PAGE SH/1				
	FROM PAGE SH/2				
	FROM ABOVE				
	TOTAL FOR ELEMENT NO.1 SUBSTRUCTURES CARRIED TO SUMMARY PAGE				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KSH
	<u>SUPERSTRUCTURE</u>				
	<u>ELEMENT NO.2</u>				
	<u>REINFORCED CONCRETE SUPERSTRUCTURE</u>				
	<u>Vibrated Reinforced Concrete (1:2:4):-</u>				
A	Beams	CM	8		
B	Columns	CM	5		
	<u>Sawn formwork to:-</u>				
C	Sides and Soffits of Beams and Lintols.	KG	89		
D	Sides of Columns	KG	78		
	<u>Steel reinforcements:</u>				
	<u>Supply and fix including all necessary tying wires and spacer blocks.</u>				
E	8mm High tensile square twisted bars	KG	442		
F	12mm Ditto	KG	730		
	TOTAL FOR ELEMENT NO.2 REINFORCED CONCRETE SUPERSTRUCTURE TOTAL CARRIED TO SUMMARY.....				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KSH
	<u>ELEMENT NO.3</u> <u>WALLING</u>				
	<u>Natural building stones or concrete blocks in cement-sand (1:4) mortar and reinforced at every alternate course with 25mmx3mm thick hoop-iron.</u>				
A	150mm thick walling	SM	191		
B	Extra over walling for smooth face dressing and horizontal and vertical keying in cement sand mortar .	SM	158		
	<u>Bitumastic pamp proof course felt cement(1:4) mortar bed</u>				
C	150mm wide	LM	77		
	<u>Permanent ventilation</u>				
E	Leave make hole size 225x225mm through walling for vents.	NO	18		
F	225x225x12mm Thick precast concrete (1:2:4) vent block lined with Mosquito gauze internally including moulding around in cement- sand (1:3) Mortar.	PAIR	18		
G	20mm thick MDF sliding wall boarding including framing and ironmongery to enable vertical movement	SM	30		
	TOTAL FOR ELEMENT NO.3 WALLING CARRIED TO SUMMARY PAGE.....				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KSHS
	<u>ELEMENT NO. 4</u> <u>ROOFING AND RAINWATER DISPOSAL</u>				
	<u>Wall-plate in first grade sawn celcured cypress.</u>				
A	100x50mm wall-plate on beam with 12mm cement /sand (1:3) mortar bed and hoop iron straps (m/s)	LM	76		
B	Make mortice in concrete beam for anchoring hoop iron straps	NO	45		
C	20x2mm thick hoop iron strapping's 800mm long once folded, cast into beams and other end run over and lapped over timber with adequate nailing.	NO	45		
	<u>Covering</u>				
D	30gauge prepainted roofing sheets on 75x50mm timber purlins (m/s) with adequate end and side laps.	SM	388		
E	Ditto matching ridge and valley	LM	26		
	<u>TRUSSES</u> <u>The folwling double pitched sawn cypress celecured graded timber</u>				
G	150x50mm tie beam	LM	190		
H	150 x50mm rafters	LM	222		
J	100X50mm struts or ties	LM	210		
K	75x50mm purlins	LM	370		
	<u>Wrot 1st grade cypress in:-</u>				
L	250x25mm fascia / verge boards with one beveled edge and fixed to ends of rafters and purlins	LM	83		
	TOTAL CARRIED TO COLLECTION PAGE				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KSHS
	<u>ROOFING (continued)</u> <u>1st grade sawn cypress timber in:-</u>				
A	75x50mm branding set at 600mm centres between tie beams	LM	325		
B	50 x 50mm ditto	LM	300		
	<u>Rain water good in 26 gauge galvanized iron sheets rolled to required shape and hoisting to position box gutter size 150x300mm high.</u>				
C	150x100mm deep box gutters fixed to fascia with wrought metal brackets set at 1000mm centres.	LM	51		
D	Extra over ditto stopped end with 100mm diameter nozzle outlet.	NO	6		
E	Ditto only 100mm diameter nozzle outlet.	NO	6		
F	100mm diameter downpipe fixed at walling with holder butts at 1000mm centres one end built into walling including around in mortar.	LM	24		
G	Extra over ditto for swanneck.	NO	6		
H	Ditto but shoe 500mm long	NO	6		
	<u>Decoration and painting.</u>				
	<u>knot, prime, stop destain, prepare and apply one undercoat and two finishing gloss oil paint to:-</u>				
	<u>Prepare and apply three coats gloss oil paint to:-</u>				
I	General surface of metal gutters.	SM	36		
J	Surface of timber 200-300mm girth.	LM	83		
	TOTAL CARRIED TO COLLECTION PAGE				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KSHS
	<p data-bbox="289 338 557 369">ROOFING (continued)</p> <p data-bbox="532 485 748 579" style="text-align: center;">COLLECTION FROM PAGE SH/6 FROM PAGE SH/7</p>				
	<p data-bbox="289 1839 889 1902">TOTAL FOR ELEMENT NO. 3 ROOFING SUMMARY PAGE</p>			KSHS	

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KSHS
	<p><u>ELEMENT NO. 5</u> <u>DOORS</u></p> <p><u>METAL DOORS</u></p> <p><u>The following purpose Aluminium doors complete with hanging locking accessories fabricated in accordance with the architectural designs and once primed with red oxide before delivery to the site cutting and pinning fixing lugs to walls and plastering reveals in cement (1:3) mortar with all main frames in 50x40mm RHS tubing.</u></p>				
A	Double leaf door size 1200x2700mm high overall comprising 50x25x3mm thick framing, 50x25mm RHS vertical infill flush welded and jointed to full width of door.	NO	2		
B	Ditto Single leaf door size 900x2700mm.	NO	1		
	<p><u>TIMBER DOORS</u></p> <p><u>The following in framing and finishes wrot hardwood in:-</u></p>				
C	100x50mm rebated and moulded framing	LM	7		
D	45x20mm architrave	LM	7		
E	30mm quadrant beading	LM	7		
	<p><u>Flush doors</u></p>				
F	50 mm Thick semi-solid core flush door size 820x2080 lipped all round with hardwood lipping	NO	1		
	<p><u>IRONMONGERY</u> <u>Supply and fix only the following ironmongeries to manufactures instructions with matching screws.</u></p>				
G	100mm pressed brass hinges	Prs	1 ¹ / ₂		
	TOTAL CARRIED TO COLLECTION PAGE				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KSHS
A	Two lever mortice lock as "union" or other equal approved with set of handles furniture	NO	1		
B	Steel door lock as 'Union' or other equal approved with set of handle furniture	NO	3		
C	100mm steel tower bolt	NO	4		
D	Rubber door stop with raw bolt screwed & plugged	NO	4		
	<u>Prepare and apply one undercoat and two finishing coats gloss oil painting to:-</u>				
E	Metal surfaces externally	SM	18		
F	Ditto Internally	SM	18		
	<u>Knot, prime, stop and apply one undercoat and two finishing coats gloss all paint to:-</u>				
H	Wood surfaces internally	SM	4		
I	Ditto 100 – 200mm girth	LM	7		
J	Ditto 0 – 100mm girth	LM	7		
	TOTAL CARRIED TO COLLECTION BELOW				
	<u>COLLECTION</u>				
	FROM SH/9				
	FROM ABOVE				
	TOTAL FOR ELEMENT NO.5 DOORS CARRIED TO SUMMARY PAGE				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KSHS
	<u>ELEMENT NO. 6</u>				
	<u>WINDOWS</u>				
	<u>The following purpose made burglar proofed Aluminum metal window casements in standard section framing in medium panes all complete with necessary fasteners and stays to all openable parts and 75mm permanent vent hood filled with coffee-tray and mosquito gauze to full width all as per Architects designs including cutting stone and pinning fixing lugs and beddings and pointing ground reveals in Cement(1:3) mortar</u>				
A	Windows size 3400x1500mm high with 2 equal 900mm high side-hung openable satchets, one 3 equal sized paned top-hung openable satch.	NO	9		
B	Ditto 3300x1500mm ditto	NO	2		
C	Ditto 2000x1500mm high with 2 equal height section lower section fixed, upper operable top-hung.	NO	1		
D	1500x1500mm ditto	NO	2		
	<u>GLAZING</u>				
	<u>4mm thick class in medium panes including cutting and glazing to metal with lead putty</u>				
E	Clear sheet 0.10-0.50SM	SM	51		
	<u>Insitu concrete (1:2:4) as described including formwork in:</u>				
F	Windows cill size (average) 65mm thick x 250mm wide weathered and throated	LM	43		
	<u>Pelment Boxes.</u>				
G	Wrot hardwood pelmet box comprising 150x25mm top fascia and ends fixed on 50x25mm sawn bearer plugged to wall	LM	43		
H	Brass 1-section curtain track complete with hocks and rollers	LM	43		
	<u>Prepare and apply one undercoat and two coats glass oil finishing paint to:-</u>				
I	Glazed metal surfaces externally	SM	51		
J	Ditto internally	SM	51		
K	Timber 200-300mm girth	LM	43		
	TOTAL FOR ELEMENT NO.6 WINDOWS CARRIED TO SUMMARY PAGE.....				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KSHS
	<u>ELEMENT NO. 7</u> <u>FINISHINGS</u> <u>External Walls</u>				
A	12mm Thick cement-sand (1:4) render to beams and columns	SM	45		
B	15mm Thick ditto to wall surfaces	SM	37		
C	Three coats of 1 st grade plastic emulsion paint as per “crown berger” or other equal and approved to plastered/rendered surfaces.	SM	82		
	<u>Internal walls</u>				
D	15mm thick terrazzo sand (1:4) plaster finished smooth for painting	SM	203		
	<u>Floors</u>				
E	30mm Thick Terrazzo	SM	290		
F	150 x 20mm matching skirting with coved junction at floor and rounded edges at top	LM	114		
	<u>Ceiling</u>				
G	12mm Thick chipboard ceiling boards nailed symmetrically onto timber brandering (m/s) with clout nails and v-jointed.	SM	288		
H	100x25mm wrot cypress mould cornice with mitre jointing at corners	LM	151		
I	Extra-over chipboard ceiling for trap door size 600x600mm comprising loose 12mm board set on 50x25mm framing.	NO	2		
	<u>PAINTING and DECORATIONS</u> <u>Prepare AND APPLY THREE COATS”SILKY Vinly as Crown</u> <u>berger” Plastic Emulsion Painting to-:</u>				
J	Plastered walls surfaces.	SM	203		
K	Ditto celotex ceiling boards and cornices	SM	288		
	ELEMENTS NO.7 FINISHES TOTAL CARRIED TO SUMMARY PAGE.....				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>SUMMARY</u>				
1	ELEMENT NO.1 SUBSTRUCTURES B/F FROM SH/3				
2	ELEMENT NO.2 R.C SUPERSTRUCTURE B/F FROM SH/4				
3	ELEMENT NO.3 WALLING B/F FROM SH/5.....				
4	ELEMENT NO. 4 ROOFING B/F FROM SH/8.....				
5	ELEMENT NO.5 DOORS B/F FROM SH/10.....				
6	ELEMENT NO.6 WINDOWS B/F FROM SH/11.....				
7	ELEMENT NO.7 FINISHING B/F FROM SH/12.....				
8	SUB TOTAL				
					X2
	TOTAL ELEMENT SUMMARY FOR 4NO CLASSROOMS CARRIED TO GRAND SUMMARY.....				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KSHS.
	<u>ELEMENT NO.8:ELECTRICAL</u> <u>Electrical Works</u>				
A	Supply and install complete the following light fittings including bulbs and tubes, testing and commissioning. All lights to be Thorn or its approved equivalent (a) 1200mm, 1x36w fluorescent battern as thoru or approved equivalent (b) 1500mm, 1x58W bare fluorescent battern with angle reflector. (c) 1200mm, 1x36W bare fluorescent battern-verandah light (d) Bulkhead fitting 1000W with energy saving Bulb 14W	NO	14		
B	Supply, install and connect complete 1.5sq.mm2 colour coded SC cables to lighting points drawn in concealed /surface PVC conduits complete with draw boxes and other necessary accessories	NO	21		
C	Supply, install and connect –lighting switches as mem or approved equivalent associated concealed conduits. Switches as mem or approved equivalent a) 1gang 1 way b) 2gang 2 way c) 3 gang 2 way d) 1gang intermediate	NO NO NO NO	4 2 0 0		
D	Supply install and connect 2.5sq.mm colour coded Sc cables to socket power points drawn in concealed/surface PVC conduits, complete with draw boxes, switch boxes and other necessary accessories.	NO	15		
E	Allow for 16g loop in Box complete with 60/80A cutout with neutral link as indonisian or its approved equivalent.	NO	1		

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KSHS.
G	Allow for earthling for the above loop in box as per the requirement of the technical specification	SUM	1		
H	Supply and install 10.0mm 2 3 coreS.W.A underground cable form the nearest power terminal	M	50		
I	Supply, install, connect 3x10sq mm PVC insulated SC copper cables from the consumer outlet loop in box	NO	1		
J	Supply, install complete 100AMP ways SP/N MCB consumer Unit from normal power supply complete with intergral isolator and MCBs as specified as mem or approved equivalent.	NO	1		
K	Supply, install and connect 13Amp twin socket outlets for normal power as mem or as approved equivalent.	NO	15		
	B.C.F previous page.				
	B.C.F from above				
L	Subtotal for 2 no classes				
					X2
M	For 4 No classes				
	Carried to collection				

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT KSHS.
	<u>PC AND PROVISION SUMS</u>				
A	Allow provision sum of Kshs 600,000 contingencies				600,000
B	Allow a sum of Ksh 300,000 project management				300,000
	TOTAL P.C & PROVISIONAL SUMS CARRIED TO GRAND SUMMARY				

PROPOSED CONSTRUCTION OF 4NO CLASSROOM AT ISIOLO KMTC

GRAND SUMMARY

ITEM	DESCRIPTION	FOR TENDERERS USE ONLY (KSHS)	OFFICIAL USE ONLY (KSHS)
1.	PARTICULAR PRELIMINARIES		
2.	GENERAL PRELIMINARIES		
3.	4NO CLASSROOMS		
4.	ELECTRICAL INSTALLATION		
5	PC AND PROVISIONAL SUM		
6	SUBTOTAL (A)		
7.	ADD 16% V.A.T SUB TOTAL		
8.	GRAND TOTAL CARRIED TO FORM OF TENDER		

Amount in Words.....

Tenders signature and stump.....Date.....

Name.....

Name of witness.....

Signature.....

Address