

REPUBLIC OF KENYA



MINISTRY OF LANDS, PUBLIC WORKS, HOUSING & URBAN
DEVELOPMENT

State Department for Public Works

CONSTRUCTION OF 3 No. CLASSROOMS, COMPUTER ROOM
AND LIBRARY
AT
IKOMERO SECONDARY SCHOOL

REVISED COST ESTIMATES

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Y WORKS OFFICER
ox 14,
- KAKAMEGA

FUNDED BY:

NG - CDF, KHWISERO CONSTITUENCY
P. O. Box 124,
50135 - KHWISERO

COUNTY WORKS OFFICER
State Department for Public Works
P. O. Box 14-50100,
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DECEMBER, 2022

CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	GROUND FLOOR				
	ELEMENT NO. 01				
	Substructure works				
	Site clearance (All Provisional)				
	Clear site of all bushes, shrubs and small trees of girth not exceeding 600mm diameter measured 1 metre from ground level and dispose all the arising materials.	558	SM	90	50,220.00
	Roll wheel and deposit on site and later spread as directed by the project manager	558	CM	100	55,800.00
	Excavate from stripped level to reduce level depth not exceeding 1500mm	168	CM	150	25,200.00
	Excavation to column bases				
	Excavate for square columns bases depth not exceeding 1.5 metres and dispose off the excavated material as directed	214	CM	250	53,500.00
	Excavation to foundation trenches				
	Extra over excavation for excavation in rock irrespective of class and dispose the arising materials away from site at distance not less than 100 metres	77	CM	450	34,650.00
	Excavate for foundation strip from stripped, of depth not exceeding 1.5m and dispose off as directed by the P.M	149	CM	250	37,250.00
	Form work to column bases				
	Soft sawn celcured timber form work to column bases, girth exceeding 200mm but not exceeding 300mm	105	SM	300	31,500.00
	Total carried to collection				288,120.00

CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Form work to foundation strip</u>				
	Softwood sawn celcured timber formwork of girt exceeding 150mm but not exceeding 255mm	74	SM	300	22,200.00
	<u>Reinforcement to column bases</u>				
	12mm high tensile steel bars including tying wires, spacer blocks and hooks to BS 4461	490	kg	160	78,400.00
	<u>Reinforcement to foundation strip</u>				
	10mm diameter, ditto	246	kg	160	39,360.00
	8mm diameter, ditto	120	kg	160	19,200.00
	<u>Concrete works</u>				
	<u>mass concrete class 10 - 15mm (1:3:6) aggregate in :-</u>				
	50mm thick blinding under strip foundation	60	SM	300	18,000.00
	Ditto in column bases	32	SM	300	9,600.00
	<u>Class 20/20mm aggregate, mix (1:2:4) Vibrated concrete</u>				
	<u>inc:-</u>				
	Column bases	14	CM	13,000	182,000.00
	Foundation strip	22	CM	13,000	286,000.00
	<u>Formwork to stub column</u>				
	Softwood sawn celcured timber formwork to column	78	SM	300	23,400.00
	<u>Reinforcement to stub column</u>				
	16mm diameter high tensile square steel bars to BS 4461 including tying wires, hooks and spacer blocks all in position.	435	kg	160	69,600.00
	Ditto but 8mm bars	174	kg	160	27,840.00
	<u>Class 20/20mm aggregate, mix (1:2:4) Vibrated concrete</u>				
	<u>inc:-</u>				
	Stub Columns	6	CM	13,000	78,000.00
	Total carried to collection				853,600.00

CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

DESCRIPTION	QTY	UNIT	RATE	AMOUNT
<u>Foundation walling</u> 75mm thick hand dressed approved natural stone walling reinforced with 20mm thick hoop iron at every second course finished with (1:3) cement sand mortar	222	SM	1500	333,000.00
<u>Backfilling</u> 150mm thick approved hardcore filling consolidated in 150mm layers and well compacted.	400	SM	350	140,000.00
<u>Blind</u> 150mm thick approved hardcore filling consolidated two layers and well compacted.	400	SM	250	100,000.00
Apply and apply "Gladiator TC"(organophosphates waterproofing) coverage 8SM per litre as "HIGH CHEM LTD" water equal and approved.	400	SM	150	60,000.00
150 Gauge Damp Proof membrane with lap allowance of 200mm	400	SM	150	60,000.00
Steel fabric reinforcement with 150mm laps allowance (allowance for laps) reference A 142 to BS 1483.	400	SM	350	140,000.00
<u>Formwork to edges of slab</u> Sawn timber formwork to edges of ground floor slab, not exceeding 75mm but not exceeding 150mm	62	LM	150	9,300.00
Total carried to collection				842,300.00

CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Class 20/20mm aggregate, mix (1:2:4) Vibrated concrete</u>				
	100mm thick Class 20/20mm reinforced vibrated concrete to ground floor slab	400	SM	1900	760,000.00
	<u>Plinth treatment</u>				
	100mm thick render (400 mm girth) of cement to sand (1:4) successive bituminous paint (M.s)	38	SM	250	9,500.00
	Prepare and apply one undercoat and two finishing coats of thick bituminous paint	38	SM	350	13,300.00
	<u>Planking and strutting</u>				
	Allow for planking and strutting to sides of excavations		ITEM		10,000.00
	<u>Removal of water</u>				
	Allow for keeping of the excavation free from mud and all water including spring and running water by pumping, seeping or any other approved means		ITEM		10,000.00
	<u>Removal</u>				
	Load surplus excavated material and cart away from site distance not less than 500 metres	130	CM	200	26,000.00
	<u>Fillings</u>				
	Return fill in and ram selected excavated materials around foundation	262	CM	150	39,300.00
	<u>Forming slabs</u>				
	100x100x50mm thick precast concrete slabs on including 100mm sand bed and 100mm thick compacted hardcore sub-base to full jointing and pointing in cement sand mortar (1:3) and compaction.	74	SM	1100	81,400.00
	Total carried to collection				949,500.00

CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

DESCRIPTION	QTY	UNIT	RATE	AMOUNT
<u>COLLECTION</u>				
Brought forward from page CH/1				288,120.00
Brought forward from page CH/2				853,600.00
Brought forward from page CH/3				842,300.00
Brought forward from page CH/4				949,500.00
Total for Element No. 01 Substructure Carried to Summary page				2,933,520.00

CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 02				
	<u>SUPERSTRUCTURE FRAME</u>				
	<u>COLUMNS</u>				
	<u>Reinforced (Provisional)</u>				
	16mm high tensile reinforcing steel bars including spacers, hooks and tying wire all to position to BS 4461	874	KG	160	139,840.00
	16mm diameter ditto	328	KG	160	52,480.00
	<u>Formwork to:-</u>				
	Softwood sawn timber formwork to columns	153	SM	300	45,900.00
	Vibrated reinforced concrete (1:2:4) / 20-20mm aggregate in columns	11	CM	13,000	143,000.00
	<u>Main and intermediate beams</u>				
	<u>Reinforcement (All Provisional)</u>				
	16mm high tensile reinforcing steel bars including spacers, hooks and tying wires to position	1720	KG	160	275,200.00
	16mm diameter bar	700	KG	160	112,000.00
	<u>Main intermediate Beams</u>				
	<u>Concrete works</u>				
	Class 20/20mm aggregate, mix (1:2:4) Vibrated and reinforced concrete beams	24	CM	13,000	312,000.00
	<u>Formwork to:-</u>				
	Softwood cypress sawn celcured timber formwork to sides and soffit of ring beam	300	SM	300	90,000.00
	<u>Walling</u>				
	<u>200mm Thick Walling</u>				
	200mm thick medium dressed one side natural stone walling reinforced with 20mm hoop iron at every second course laid with (1:4) cement sand mortar	304	SM	1700	516,800.00
	<u>Water proofing</u>				
	200mm wide bituminous felt damp proof course bedded in (1:3) cement sand mortar	140	LM	100	14,000.00
	TOTAL CARRIED TO COLLECTION PAGE				1,701,220.00

CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Suspended Floor Slab</u>				
	<u>Reinforcement (Provisional)</u>				
	10mm high tensile square reinforcement steel bars, including tying wires and spacer blocks all to position	4,938	KG	160	790,080.00
	<u>Formwork to edges of slab</u>				
	Softwood sawn formwork to edges of floor slab exceeding 75mm but exceeding 150mm	105	LM	150	15,750.00
	Sawn softwood formwork to soffits of suspended floor slab	400	SM	300	120,000.00
	<u>Concrete Works</u>				
	<u>Vibrated reinforced concrete class 20-20mm aggregate (1:2:4) in:-</u>				
	150mm thick suspended slab	400	SM	1900	760,000.00
	TOTAL COLLECTION				1,685,830.00
	<u>COLLECTION</u>				
	Brought forward from page CH/6				1,701,220.00
	Brought forward from above				1,685,830.00
	Total for Element No. 02 Superstructure Frame Carried to Summary				3,387,050.00

CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

DESCRIPTION	QTY	UNIT	RATE	AMOUNT
ELEMENT NO. 03				
DOORS				
<u>Primed steel casement standard door complete with hinges ,stars, fasteners, permanent mesh with mosquito gauze and sheet hood assembled and fixed to opening including cutting and setting lugs to concrete or blockwork surround and setting frame in cement and sand mortar (1:3) comprising 40x25x3mm stiles,bottom and top rail and the intermediate rails, all primed with red oxide to:-</u>				
2400mm x 2400 high door complete with 50 x 2400 fixed mesh frame with 'UNION" 1- lever steel door lock, 3 x 2400mm lockable tower bolts.	2	NO	12,000	24,000.00
Painting and Decoration				
Prime and apply one undercoat and two finishing coats of high quality gloss oil paint both internal and external surface of doors	10	SM	350	3,500.00
Interior Doors				
24mm thick solidcore mahogany veneered both sides flush door overall size 1200 x 2400mm high	1	No	11000	11,000.00
24mm thick solidcore mahogany veneered both sides flush door overall size 900 x 2400mm high	6	No	6000	36,000.00
<u>Door following in wrot mahogany or other equal and primed hardwood</u>				
24mm thick hardwood with one labour plugged and screwed	42	LM	850	35,700.00
24mm moulded Architrave plugged and screwed to the wall	42	LM	250	10,500.00
24mm diameter Quadrant	42	LM	250	10,500.00
24mm glass beading	6	LM	100	600.00
24mm thick clear glass not exceeding 050m2 glazing including	2	SM	1200	2,400.00
Element No.03 Doors				
Summary				134,200.00

PROPOSED CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Iron Mongery</u>				
	<u>Supply and fix the following iron - mongery as "Union" or any other equal and approved manufacturer with matching screws and all the other accessories</u>				
	100mm long brass butt hinges	18	PRS	200	3,600.00
	3-lever, 75mm rebated mortice lock complete with 3 - keys and set of chromium plate handles of " UNION " or other equal and approved	9	NO	2700	24,300.00
	30mm diameter rubber doorstop with rawlbolt fixed to concrete floor or wall	2	NO	150	300.00
	100mm brass tower bolts	9	NO	100	900.00
	<u>Painting and Decoration</u>				
	Prime back of frame exc.100mm but not exc.200mm girth.	42	LM	150	6,300.00
	Prepare and apply one undercoat and two finishing coats of best quality clear varnish to doors	26	SM	350	9,100.00
	Frame Ditto but girth 100-200mm	42	LM	150	6,300.00
	Glass beading ditto girth not exceeding 100mm	6	LM	150	900.00
	250 x 25 thick mild steel fixing cramps one end split and angled and build into natural stone walling and other end drilled and screwed to frame	28	NO	250	7,000.00
	TOTAL COLLECTION				58,700.00
	<u>COLLECTION</u>				
	Brought forward from page CH/08				134,200.00
	Brought forward from above				58,700.00
	Total for Element No.03 Doors Carried to Summary				192,900.00

CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

DESCRIPTION	UNIT	RATE	AMOUNT	
ELEMENT NO. 04				
WINDOWS				
<u>Galvanized steel casement windows (supply and fix</u> <u>following windows casement frames</u> <u>complete with hinges ,stars, fasteners, permanent</u> <u>net with mosquito gauze and sheet good assembled and</u> <u>ready opening including cutting and pinning lugs to</u> <u>concrete or blockwork surround and bedding frame in</u> <u>cement and sand mortar (1:3) glazingto:-</u> 1500x1200mm frame all welded joints ground smooth and painted with red oxide coat with two side hanglights; one fixed bottom light and two fixed light	15	NO	10,000	150,000.00
Window size 1500 x 900mm precast vent blocks fixed to concrete	2	SM	7,000	14,000.00
<u>Burglar proofing</u> <u>supply and fix openings galvanized mild steel grill framed</u> <u>40x25x3 mm thick R.H.S including pinning lugs to</u> <u>concrete or blockwork and bedding frame in cement sand</u> <u>mortar to:-</u> 1500x1500mm with 40x25x3mm burglar proofing in varied curved patterns, curves	15	NO	1200	18,000.00
1500x900mm with 40x25x3mm burglar proofing in varied curved patterns, curves	2	NO	800	1,600.00
<u>Glazing</u> 1500x1200mm thick clear glass fixed to metal frame (M.S) with putty sealant exceeding 0.50m2 but not exceeding 1.0m2.	38	SM	1200	45,600.00
<u>Window Cill</u> 150mm thick x 250mm wide precast concrete (1:2:4) waterproofed throated and grooved and bedded on 200mm thick concrete including heavy duty weld mesh and building in concrete blockwork	14	LM	250	3,500.00
<u>Painting and Decoration</u> Prime and apply one undercoat and two finishing coats of high quality gloss oil paint both internal and external surface of windows	38	SM	350	13,300.00
Total for Element No. 04 Windows Carried to Summary				246,000.00

THE CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

DESCRIPTION	QTY	UNIT	RATE	AMOUNT
Element No. 05				
Finishes				
100mm thick cement sand screed (1:3) mortar Finish on mass concrete floor slab.	400	SM	250	100,000.00
100mm thick screed skirting	190	LM	350	66,500.00
100mm thick cement lime sand (1:1:6) plaster trowelled smooth to receive paint(m.s), internal walls	510	SM	250	127,500.00
100mm render to key in external walls	182	SM	250	45,500.00
Plaster columns and beams	152	SM	250	38,000.00
Painting and decoration				
Prime and apply one undercoat and two finishing coats of eggshell silk matt plastic emulsion paint to internal walls	510	SM	350	178,500.00
Prime and apply one undercoat and two finishing coats of eggshell silk matt plastic emulsion paint to internal walls	182	SM	350	63,700.00
Plaster of suspended floor slab				
100mm thick plaster trowelled smooth to receive paint(m.s)	400	SM	250	100,000.00
Prime and apply one undercoat and two finishing coats of eggshell silk matt plastic emulsion paint	400	SM	350	140,000.00
Element No. 06 Finishes Carried to Summary				859,700.00

CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

DESCRIPTION	QTY	UNIT	RATE	AMOUNT
<u>Summary page for Ground Floor</u>				
Structure brought forward from page CH/5				2,933,520.00
Structure Frame brought forward from page CH/07				3,387,050.00
Doors brought forward from page CH/09				192,900.00
Windows brought forward from page CH/10				246,000.00
Floors brought forward from page CH/ 11				859,700.00
Total for Ground Floor Works Carried to Main Summary				7,619,170.00

CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

DESCRIPTION	QTY	UNIT	RATE	AMOUNT
FIRST FLOOR				
Element-01				
STRUCTURE FRAME				
Columns				
Measurements (Provisional)				
High tensile reinforcing steel bars including spacers, and tying wires all to positions to BS 4461 (52No.) columns	910	KG	160	145,600.00
10mm diameter ditto, stirrups	370	KG	160	59,200.00
Formwork to:-				
Redwood sawn timber formwork to square/ rectangular/round columns	153	SM	300	45,900.00
Concrete works				
Cast reinforced concrete (1:2:4) class 20/20mm aggregate cemented to columns	11	CM	13,000	143,000.00
Measurements (All Provisional)				
High tensile reinforcing steel bars including spacers, and tying wires to position .	1720	KG	160	275,200.00
10mm diameter bar	700	KG	160	112,000.00
Beams and intermediate beams				
Concrete works				
Cast 20/20mm aggregate, mix (1:2:4) Vibrated and cemented concrete beams	24	CM	13,000	312,000.00
Formwork				
Redwood cypress sawn celcured timber formwork to sides of ring beam	300	SM	300	90,000.00
Thick Walling				
100mm thick medium dressed natural stone concrete walling cemented with 20mm hoop iron at every two second course with (1:4) cement sand mortar (External wall)	364	SM	1700	618,800.00
Roofing				
100mm wide bituminous felt damp proof course bedded in cement sand mortar	140	LM	100	14,000.00
Element No.01 Superstructure /Frame				1,815,700.00
Summary				

CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

DESCRIPTION	QTY	UNIT	RATE	AMOUNT
ELEMENT NO. 02				
DOORS				
<u>Galvanized steel casement Doors standard door</u> <u>complete with hinges ,stars, fasteners, permanent</u> <u>lock with mosquito gauze and sheet hood</u> <u>assembled and fixed to opening including cutting and</u> <u>embedding into concrete or blockwork surround and</u> <u>installing frame in cement and sand mortar (1:3)</u> <u>comprising 40x25x3mm stiles,bottom and top rail and</u> <u>two intermediate rails, all primed with red oxide to:-</u> 500mm x 2400 high door complete with 50 x 2400 fixed hardware with ' UNION" 1- lever steel door lock, 3 x 20mm lockable tower bolts.	3	NO	12000	36,000.00
Painting and Decoration				
Prime and apply one undercoat and two finishing coats of high quality clear polyethene varnish to doors internal & externally	18	SM	350	6,300.00
Total for Element No.02 Doors				
Carried to Summary				42,300.00

CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL.

DESCRIPTION	QTY	UNIT	RATE	AMOUNT
ELEMENT NO. 03				
<u>Supply and fix purpose made steel casement windows (supply and fix the following windows using heavy duty steel frames with hinges ,stars, fasteners, permanent fasteners including cutting and pinning lugs to concrete or blockwork surround and bedding frame in cement and sand)</u> Size 1500mm frame all welded joints ground smooth and painted with red oxide coat with two side hanglights; one sliding light and two fixed light	9	NO	10,000	90,000.00
<u>Supply and fix size 1500 X 900mm precast vent blocks fixed to concrete</u>	6	SM	7000	42,000.00
<u>Burglar proofing</u>				
<u>Supply and fix openings galvanized mild steel grill framed with 3mm thick R.H.S including pinning lugs to concrete or blockwork and bedding frame in cement sand mortar to:-</u>				
Size 1200mm with 45x25x3mm burglar proofing in varied patterns, curves	9	NO	1200	10,800.00
Size 900mm with 45x25x3mm burglar proofing in varied patterns, curves	6	NO	800	4,800.00
<u>Supply and fix clear glass fixed to metal frame (M.S) with putty</u> Area exceeding 0.50m2 but not exceeding 1.0m2.	38	SM	1200	45,600.00
<u>Supply and fix</u> Size 250mm x 250mm wide precast concrete(1:2:4) weathered and grooved and bedded on 200mm thick walls including all necessary reinforcement and building in concrete	36	LM	250	9,000.00
<u>Painting and Decoration</u> Supply and apply one undercoat and two finishing coats of quality gloss oil paint both internal and external surface	38	SM	350	13,300.00
For Element No. 03 Windows Carried to Summary				215,500.00

CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

DESCRIPTION	QTY	UNIT	RATE	AMOUNT
Element No. 05				
Finishes				
100mm thick cement sand screed (1:3) mortar Finish on mass concrete floor slab.	400	SM	250	100,000.00
75mm thick screed skirting	190	LM	350	66,500.00
15mm thick cement lime sand (1:1:6) plaster trowelled smooth to receive paint(m.s), internal walls	510	SM	250	127,500.00
100mm but render to key in external walls	182	SM	250	45,500.00
100mm on columns and beams	158	SM	250	39,500.00
Painting and decoration				
Prime and apply one undercoat and two finishing coats of first grade silk matt plastic emulsion paint to internal walls	510	SM	350	178,500.00
Painting and decoration				
Prime and apply one undercoat and two finishing coats of first grade silk matt plastic emulsion paint to columns and beams	158	SM	350	55,300.00
Ceiling Board				
100mm thick chipboard ceiling panel 'V' jointed edges at all joints both ways (ms)	400	SM	1200	480,000.00
100mm x 50mm cypress softwood cornice moulded and plugged	190	LM	100	19,000.00
100mm x 50mm access trap door with 50x50mm timber to edges.	4	NO	800	3,200.00
Painting and Decorating				
Prime and apply one undercoat and two finishing coats of first grade plastic emulsion paint to ceiling surface	400	SM	350	140,000.00
100mm but cornice	190	LM	150	28,500.00
Prime and fix the following unwrot cypress timber				
100mm x 50mm brandering	445	LM	120	53,400.00
100mm x 50mm brandering	890	LM	100	89,000.00
Total for Element No. 04 Finishes Carried to Summary				1,425,900.00

PROPOSED CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

DESCRIPTION	QTY	UNIT	RATE	AMOUNT
<u>Summary page for First Floor</u>				
Superstructure Frame brought forward from page CH/12				1,815,700.00
Doors brought forward from page CH/14				42,300.00
Windows brought forward from page CH/15				215,500.00
Finishes brought forward from page CH/ 16				1,425,900.00
Total for First Floor Works Carried to Main Summary				3,499,400.00

PROPOSED CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
ELEMENT NO. 06					
ROOFS CONSTRUCTION					
<u>Roof trusses</u>					
<u>The following in hardwood timber roof trusses of various sizes assembled and fixed according to the engineer's detailed specification</u>					
<u>Sawn calculated first grade cypress in :-</u>					
	150 x50mm rafters	352	LM	300	105,600.00
	Ditto tie beam	316	LM	300	94,800.00
	Ditto struts & ties	280	LM	300	84,000.00
	75x50 purlins	542	LM	150	81,300.00
<u>Sawn calculated second grade cypress in :-</u>					
	100x50mm. Wall plate bolt to beams	82	LM	250	20,500.00
<u>Mild steel</u>					
	12mm diameter rag bolt 150mm long built into prepared mortice in concrete(m.s)	28	NO	150	4,200.00
	150x50x6mm Angle cleat.	28	NO	100	2,800.00
<u>Nails</u>					
	Drill hole in 150mm thick softwood for 12 diameter bolt	28	NO	100	2,800.00
	Cut mortice 225mm deep in reinforced concrete beam for and including embedding 12mm diameter bolt with concrete (1:2:4) and make good.	28	NO	150	4,200.00
<u>Roof Covering</u>					
	28 gauge prepainted galvanized IT5 box profile corrugated sheets laid and secured on 75x50 timber purlins using 'J' bolts and washers.	542	SM	1300	704,600.00
<u>Roofing work in connection with interanal foul drainage.</u>					
	Ridge cap	38	LM	400	15,200.00
Total carried to collection					1,120,000.00

PROPOSED CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>Rainwater Goods</u>				
	<u>Fabricate and assemble in gauge 18 prepainted steel sheet</u>				
	250 x 225mm box gutter	75	LM	850	63,750.00
	75mm diameter down pipe clipped onto concrete wall with and including holder bats at 900mm centres	36	LM	550	19,800.00
	Extra over box gutter for making hole size 75mm	6	NO	350	2,100.00
	Extra over box gutter for stripped end	6	NO	350	2,100.00
	Extra over down pipe for shoe	6	NO	350	2,100.00
	<u>Prepare and apply one approved, primer, one undercoat and two coats of 'CROWN SOLO' or other equal and</u>				
	General surfaces of gutters, over 300mm girth external	75	LM	150	11,250.00
	Small pipes, externally	36	LM	150	5,400.00
	<u>Wrot cypress</u>				
	250x25mm fascia board	114	LM	200	22,800.00
	<u>Painting and Decorating</u>				
	<u>Prepare, knot, prime, stop, and apply undercoat two finishing</u>				
	Surface 200-300mm girth	114	LM	150	17,100.00
	Total Carried to Collection				129,300.00
	<u>COLLECTION</u>				
	Brought forward from page CH/18				1,120,000.00
	Brought down from above				129,300.00
	Total for Element No.06 Roof construction Carried to Summary				1,249,300.00

PROPOSED CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
ELEMENT NO.06 STAIRS					
<u>Vibrated reinforced concrete class (1:1:4) 20mm aggregate as described in:-</u>					
	Stairs	1	CM	13,000	13,000.00
	200mm thick stair landing	4	SM	1900	7,600.00
	Stair beam	2	CM	13,000	26,000.00
<u>Sawn formwork as described to:-</u>					
	Stoping soffits of stairs	7	SM	300	2,100.00
	Horizontal soffit of stair landing	6	SM	300	1,800.00
	Sides of stair beam	4	SM	300	1,200.00
	Edge of sloping stair girth 300mm	12	LM	100	1,200.00
	Edge of stair landing girth 75mm -150mm	6	LM	100	600.00
	Edge of riser 75mm -150mm	24	LM	100	2,400.00
<u>Reinforcement (All Provisional)</u>					
<u>The following in high tensile reinforcement square twisted bar to B.S 4461 as described including cutting to lengths, bending, twisting and fixing, including all necessary tying and spacer blocks.</u>					
	12 diameter bar	175	KG	160	28,000.00
	10mm diameter bar	221	KG	160	35,360.00
<u>Stair finishes</u>					
<u>20mm thick cement sand (1:3) screed to:-</u>					
	Stair	6	SM	250	1,500.00
	Landing	4	SM	250	1,000.00
	Sides of stair width 300mm	15	LM	100	1,500.00
Total Carried to Collection					123,260.00

PROPOSED CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>40mm thick granite to:-</u>				
	Stair tread 300mm wide	60	LM	250	15,000.00
	Stair riser 150mm high	64	LM	250	16,000.00
	Landing	4	SM	1,400	5,600.00
	Sides of stair overall width 300mm	15	LM	250	3,750.00
	<u>Cement lime (1:1:6) sand plaster as described to:-</u>				
	12mm thick in two coats to sloping soffites of stairs	6	SM	250	1,500.00
	12mm thick in two coats of horizontal soffites of landing	4	SM	250	1,000.00
	Prepare and apply one undercoat and two finishing coats of vinyl matt emulsion paint on plastered surface	22	SM	350	7,700.00
	<u>Balustrating</u>				
	75mm x 25mm x 3mm rectangular hollow section (RHS) steel bottom rails welded and fixed in position	24	LM	400	9,600.00
	75mm x 25mm x 3mm ditto middle rail ditto	24	LM	400	9,600.00
	75mm x 25mm x 3mm rectangular hollow section (RHS) baluster 1200mm long twice counter sunk, one end fanged and built into concrete bed (m.s)	72	NO	200	14,400.00
	<u>Sundries</u>				
	Weld baluster to metal rail	72	NO	250	18,000.00
	Extra over baluster for fanged end	48	NO	250	12,000.00
	Make hole in reinforced concrete for fanged end and make good in cement sand mortar	48	NO	250	12,000.00
	Total Carried to Collection				126,150.00

PROPOSED CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Supply and weld on steel hand rail 4.00mm steel flat width 100mm	24	LM	400	9,600.00
	Supply and fix onto steel top rail 1125mm wrot mahogany or other equal and approved HARDWOOD handrail with three labour	24	LM	200	4,800.00
	<u>Prepare and apply three coats of prime grade gloss paint to:</u>				
	Metal surface girth 100 -200mm (top rail, middle rail and bottom rail)	48	LM	220	10,560.00
	Metal surface girth not exceeding 100mm	144	LM	200	28,800.00
	Prepare and apply three coats of clear varnish on general surface of wood girth 200 - 300mm	24	LM	150	3,600.00
	Total Carried to Collection				57,360.00
	<u>COLLECTION</u>				
	Brought forward from page CH/20				123,260.00
	Brought forward from page CH/21				126,150.00
	Brought down from above				57,360.00
	Total for Element No. 07 Stairs Carried to Summary				306,770.00

PROPOSED CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

DESCRIPTION	QTY	UNIT	RATE	AMOUNT
ELEMENT 08				
<u>Vibrated reinforced concrete (1:2:4)20mm</u>				
<u>aggregete as described in:-</u>				
150mm thick ramp slab	34	SM	1500	51,000.00
200mm thick ramp landing	5	SM	1900	9,500.00
Ramp beam	4	CM	13,000	52,000.00
<u>Sawn formwork tas described to:-</u>				
slope soffit of ramp	34	SM	250	8,500.00
horizontalsoffit of ramp landing	5	SM	250	1,250.00
sides of ramp beam	28	SM	250	7,000.00
Edges of slopping ramp girth 75-150mm	18	LM	100	-1,800.00
Edges of ramp landing 75-150mm	4	LM	100	400.00
<u>Reinforcement (all provisional)</u>				
<u>The following in high tensile reinforcement square twisted</u>				
<u>bar to B.S 4461 as described inculding cutting to lenghs</u>				
<u>,bending all ,twisting and fixing ,inculding all necessary</u>				
<u>tying and spacing blocks</u>				
20mm diameter bar	120	KG	160	19,200.00
16mm Ditto	110	KG	160	17,600.00
12mm Ditto	546	KG	160	87,360.00
10mm Ditto	196	KG	160	31,360.00
8mm Ditto	20	KG	160	3,200.00
<u>Ramp finishes</u>				
20mm thick cemet sand (1:3)screeed to.				
Ramp	34	SM	250	8,500.00
Ramp landing	5	SM	250	1,250.00
sides of ramp width 200mm	4	LM	100	400.00
TOTAL CARRIED TO COLLECTION				300,320.00

PROPOSED CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

DESCRIPTION	QTY	UNIT	RATE	AMOUNT
<u>15mm thick terrazzo chips to</u> Ramp	34	SM	1500	51,000.00
Ramp landing	5	SM	1500	7,500.00
sides of ramp overall width 200mm	4	LM	250	1,000.00
<u>cement lime sand (1:1:6) plaster as described to;</u> 12mm thick in two coats to sloping soffites of ramp	34	SM	250	8,500.00
12mm thick in two coats to horizontal soffites of ramp	5	SM	250	1,250.00
prepare and apply one undercoat and two finishing coats of vinyl matt emulsion paint on plastered surface	38	SM	250	9,500.00
<u>Balusterting</u> 75mm x25mm x 3mm rectangular hollow section (RHS) steel bottom rail welded and fixed in position	40	LM	350	14,000.00
75mm x 25mm x 3mm ditto to middle rail	20	LM	350	7,000.00
25mm x 25mm x 3mm rectangular hollow section (RHS) balusters 1200mm long twice counter sunk ,one end fanged and built into concrete bed (MS)	104	NO	200	20,800.00
<u>sundries</u> weld balusters to metal rail	305	NO	200	61,000.00
Extra over baluster for fanged end	104	NO	200	20,800.00
Make hole in reinforced for fanged end and make good in cement sand mortar	104	NO	200	20,800.00
TOTAL CARRIED TO COLLECTION				223,150.00

PROPOSED CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

DESCRIPTION	QTY	UNIT	RATE	AMOUNT
Supply and weld on steel hand rail 4mm steel flat width 100mm	30	LM	400	12,000.00
Supply and fix onto steel top rail 1125 x50 mm wrot mahongany or other equal and approved HARDWOOD HANDRAIL with three labours	30	LM	200	6,000.00
<u>prepare and and apply three coats of prime grade gloss paint to:</u>				0.00
metal surface girth 100-200mm (top rail ,middlle rail and bottom rail	92	LM	120	11,040.00
Metal surface girth not exceeding 100mm	172	LM	120	20,640.00
prepare and apply three coats of clear varnish on general surface of wood girth 200-300mm	30	LM	120	3,600.00
<u>Total carried to collection</u>				53,280.00
<u>COLLECTION</u>				
Brought forward from page CH/23				300,320.00
Brought forward from page CH/24				223,150.00
Brought forward from above				53,280.00
Total for ELEMENT NO 08 Ramp carried to collection main sammary				576,750.00

CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

DESCRIPTION	QTY	UNIT	RATE	AMOUNT
MAIN SUMMARY				
GROUND FLOOR WORKS FROM PAGE CH/12				7,619,170.00
FIRST FLOOR WORKS FROM PAGE CH/17				3,499,400.00
ROOF WORKS FROM PAGE CH/19				1,249,300.00
STAIR CASE WORKS FROM PAGE CH/22				306,770.00
RAMP WORKS FROM PAGE CH/25				576,750.00
TOTAL FOR BUILDER'S WORKS CARRIED TO GRAND SUMMARY				13,251,390.00

PROPOSED CONSTRUCTION OF 3 No. CLASSROOMS, A COMPUTER ROOM LIBRARY AT IKOMERO SECONDARY SCHOOL

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>PRIME COST AND PROVISIONAL SUMS</u>				
A	Allow prime cost Sum of Kenya Shillings Two Hundred Thousand (Kshs. 200,000.00) only for Electrical Installation and upgrading of main switch to be executed by a nominated Sub-Contractor		Sum		200,000.00
B	Allow for profit for Main Contractor on item "A" above		4%		8,000.00
C	Allow for attendance for Main Contractor on item "A" above		Sum		8,000.00
D	Allow for a prime cost sum of Kenya shillings Two Hundred Thousand,(Kshs.200,000.00) only for Project Management Team		Sum		200,000.00
E	Allow a provisional sum of Kenya shillings One Hundred Thousand (Ksh. 100,000.00) only for contigencies to be spent at the discretion of the pm.		Sum		100,000.00
F	CDF team administration costs (Kshs 675,000.00)		Sum		675,000.00
TOTAL FOR PRIME COST AND PROVISIONAL SUMS CARRIED TO GRAND SUMMARY					1,191,000.00