

**THE PROPOSED CONSTRUCTION OF 5 NO. CLASSROOMS
RAMP AND STAIRS AT KIHUMBUINI PRIMARY SCHOOL**

BY

WESTLANDS NG-CDF

BILLS OF QUANTITIES

PREPARED BY

HOUSING AND URBAN RENEWAL SUB-SECTOR

NAIROBI CITY COUNTY

P.O.BOX 30075

NAIROBI

May-24

PROPOSED 5NO. CLASSROOMS AT

KIHUMBUNI PRIMARY SCHOOL

Item	Description	Unit	Qty	Rate	Amount
ELEMENT NO.1 SUBSTRUCTURES					
(All provisional)					
Excavations and Earthworks					
<i>No allowance is made in excavations for working space. The contractor to include in his rates.</i>					
A	Clear site of all grass and small plants not exceeding 300mm girth and cart away or burn arisings.	SM	460		
B	Excavate oversite average 150mm deep to remove vegetable soil, load, wheel and deposit 100 meters away and later spread and level onn site where directed	SM	460		
C	Excavation of foundation trenches 600 wide commencing from reduced level and cart away from site as directed; not exceeding 1.5m deep.	CM	124		
D	Excavate for column bases starting from striped levelbut not exceeding 1.5m dp from ground level.	CM	148		
E	Load, wheel and cart away from site surplus excavated material and deposit in approved dumping area.	CM	130		
F	Return fill and well ram selected excavated material around foundations.	CM	142		
Fillings					
G	50mm fine material for blinding (murrum/quarry dust) to surface of hardcore well rolled and levelled	SM	470		
H	300mm thick approved hardcore filling spread, lvelled, well rammed amd consolidated in 150mm thick layers to receive concrete surface bed	SM	132		
I	Anti-termite treatment as "Premise 200sc" distributed by high chemicals essentials or other equal and approved applied to surface of blinded hardcore and surrounding areas strictly in accordance with manufacturer's instructions (subject to a TEN YEAR GUARANTEE to the satisfaction of the Architect	SM	470		
Total Carried to collection for Substructures					-
SUBSTRUCTURES CONT'D.....					
A	1000 gauge polythenwe D.P.M underlay sheeting to bottom of slab with end side laps of 150mm.	SM	470		
B	Allow for keeping excavations free from all water by draining pumping or otherwise	Item			
C	Allow for maintaining and upholding sides of excavations as necessary clearing awy any debris, rubbish etc.	Item			
50 mm thick plain concrete mix 1:4:8 blinding to:					
D	Strip Footing Foundation	SM	124		
E	Column bases.	SM	110		
Vibrated Reinforced Concrete mix (1:1.5:3) class 25/20mm in;					
F	Column bases	CM	38		
G	Columns.	CM	5		
H	Strip Footing Foundation	CM	22		
I	150mm Thick floor slab.	SM	470		
Reinforcement					
High tensile steel reinforcemnt to B.S 4449 and B.S 4466 with and including all necessary tying wires and spacer blocks					
J	8mm diameter bars	KGS	534		
K	10mm diameter bars	KGS	551		
K	12mm diameter bars	KGS	628		
L	16mm diameter bars	KGS	1,682		
M	Steel Fabric Mesh reinforcement ref A 142 weighing 2.22Kg/M2 and to BS 4483 and with 150 mm side laps or equal and approved reinforcement in concrete slab including all necessary tying and support (No allowance for laps)	SM	470		
Sawn Formwork to: -					
N	Vertical sides of columns	SM	89		
O	Edges of slab, 75-150mm girth.	LM	150		
Total Carried to collection for Substructures					-
SUBSTRUCTURE CONTINUED					
Foundation walling					
A	200 mm thick natural quarry stone foundation walls: bedded and jointed in cement and sand (1:3) mortar	SM	306		
Plinths					
B	12mm Thick cement/sand (1:4) render to plinths	SM	18		
C	Approved bituminous paint to rendered surfaces	SM	18		
Total Carried to collection for Substructures					-
COLLECTION FOR SUBSTRUCTURE WORK					
Brought Forward from Page SUB/1					-
Brought Forward from Page SUB/2					-
Brought Forward from Page SUB/3					-
Total for Substructures Carried to Summary Page					-

PROPOSED 5NO. CLASSROOMS AT KHEMUNJHARY SCHOOL

Item	Description	Unit	Quantity	Rate	Amount
GROUND FLOOR					
ELEMENT NO.1					
REINFORCED CONCRETE SUPERSTRUCTURE					
<i>In situ concrete grade 25/20 including vibrating around reinforcement.</i>					
A	Columns	CM	12		
B	Beams	CM	18		
C	Staircase Waist and steps	CM	4		
D	Ramp slope and landing	CM	10		630
E	75mm Thick topping to slab and ribs	CM	42		
F	150mm thick suspended slab to the Veranda	SM	112		
G	150mm thick Staircase Landing	SM	6		
H	375x225x300 mm precast concrete hollow blocks to the slab ribs 125mm ribs	SM	274		
Reinforcements (All Provisional)					
<i>High tensile steel reinforcement to B.S 4449 and B.S 4466 with and including all necessary tying wires and spacer blocks</i>					
I	8mm diameter bars	KGS	2,016		
J	10mm diameter bars	KGS	1,093		
K	12mm diameter bars	KGS	893		
L	16mm diameter bars	KGS	1,287		
M	20mm diameter bars	KGS	4,002		
N	Steel Fabric Mesh reinforcement ref A 142 weighing 2.22Kg/M2 and to BS 4483 and with 150 mm side laps or equal and approved reinforcement in concrete slab including all necessary tying and support (No allowance for laps)	SM	444		
Formwork to :-					
O	Sides and soffits of beams.	SM	138		
P	Vertical sides of columns.	SM	201		
Q	Soffits of slab and landings.	SM	404		
R	Sloping soffits of staircase	SM	32		
S	Sloping soffits of Ramp	SM	66		
T	Riser 75-150mm girth	LM	48		
U	Edges of slab and landings 75-150mm girth.	LM	204		
Total for R.C. Superstructures Carried to Summary Page					-
Item	Description	Unit	Quantity	Rate	Amount
ELEMENT NO.2 WALLING					
<i>200mm thick machine dressed masonry walling bedded, jointed and pointed in cement/sand (1:3) mortar to architects approval</i>					
A	200mm thick External Wall	SM	265		
B	Ditto Internal walls	SM	90		
Decorative Clay Grille Bricks					
C	150mm thick Decorative "Prompel" clay brick wall	SM	12		
Bituminous Damp Proof Course					
<i>Three ply hessian based bituminous felt damp proof course on levelled cement/sand mortar (1:3) mix;</i>					
D	200mm wide	LM	157		
Total for Walling Carried to Summary Page					-
Item	Description	Unit	Quantity	Rate	Amount
ELEMENT NO.3 WINDOWS					
<i>Steel casement window; purpose made standard metal casement sections complete with Zed sections; permanent ventilators comprising "T" bar gure and metal head; operable casements; coupling mullions; approved ironmongery; as per schedule. Pattern as shown in the Appendix to Architects approval</i>					
A	Window size 2400 x 1500mm high	NO	15		
B	Window size 2400 x 600mm high	NO	10		
Glazing					
<i>4mm Thick sheet glass and glazing to steel casement window with and including linseed putty; in</i>					
C	Clear Panes of various sizes	SM	68		
<i>Prepare metal surfaces: apply undercoat and two finishing coats first grade eggshell paint; as "Crown paints" or other equal approved metallic paint on metal surfaces to</i>					
D	General surfaces; window and burglarproofing grilles internally (measured flat overall)	SM	68		
E	General surfaces; windows externally (measured flat overall)	SM	68		
Window cill					
F	Precast concrete window cill and including finishing well, creating a throat and making good	LM	64		
Total for Windows Carried to Summary Page					-
Item	Description	Unit	Quantity	Rate	Amount
ELEMENT NO.4 DOORS					
Metal Doors					
<i>The following purpose made mild steel doors complete with hanging and locking accessories fabricate in accordance with the Architectural designs of onced primed with red oxide before delivery to the site by cutting and pinning fixing lugs to walls and plastering reveals in cement (1:3)mortar with all main frames in 50*40mm RHS Tubing.</i>					
A	Door size 1200 x 2400mm high in Double leave, a fanlight 300mm high; c/w all necessary ironmongery; to the storage cabinet	NO	5		
B	Door size 900 x 2100mm high in Single leave, a fanlight 300mm high; c/w all necessary ironmongery	NO	5		
Painting and Decorating					
C	Prepare and apply 2 coats of gloss oil paint to steel surfaces generally on steel doors	SM	48		
Glazing					
<i>4mm Thick sheet glass and glazing with and including linseed putty; in</i>					
D	Clear Panes of various sizes	SM	11		
Total Carried to collection for Doors					-
Item	Description	Unit	Quantity	Rate	Amount
ELEMENT NO.5 FINISHES					
Ceiling Finishes					
<i>15mm Thick plaster in cement/sand (1:3) floated with a steel trowel; to soffits of slab and concrete surfaces to receive paint fit:-</i>					
A	Suspended slab	SM	460		
<i>Prepare surfaces and apply 1 undercoat and 2 coats of silk vinyl paint to or other equal approved on plastered masonry or concrete surfaces; to</i>					
B	Soffits of slab	SM	460		
Wall Finishes Internally					
<i>15mm Thick plaster in cement/sand (1:3) floated with a steel trowel; to block walls and concrete surfaces inc:-</i>					
C	Wall surfaces to receive paint	SM	496		
<i>Prepare surfaces and apply 1 undercoat and 2 coats of silk vinyl paint to or other equal approved on plastered masonry or concrete surfaces; to</i>					
D	Plastered wall surfaces	SM	496		
White Boards					
E	2400x1200mm Aluminium magnetic white board to be mounted in all classes and laboratories	NO	5		
F	2400x1200mm Aluminium magnetic graph board to be mounted in all classes and laboratories	NO	5		
Soft Boards					
G	12 mm premium aluminium brown rectangular softboard to be mounted in all classes and laboratories	SM	14		
Total Carried to collection for Finishes					-
Item	Description	Unit	Quantity	Rate	Amount
Finishes Contd.....					
Wall Finishes Externally					
<i>15mm Thick plaster in cement/sand (1:3) floated with a steel trowel; to block walls and concrete surfaces inc:-</i>					
A	Wall surfaces to receive paint	SM	310		
<i>Prepare surfaces and apply 1 undercoat and 2 coats of silk vinyl paint to or other equal approved on plastered masonry or concrete surfaces; to</i>					
B	Plastered wall surfaces	SM	310		
Floor Finishes					
<i>Cement and sand (1:4) mortar finished with a wooden trowel to floor surfaces; in</i>					
C	38mm Thick finished wooden trowelled cement sand screed	SM	445		
<i>300 x 300 x 8mm Approved coloured NON-SLIP glazed ceramic floor tiles as "Sai Ceramics" or other equal and approved; to regular patterns; grouting joints in matching cement; to;</i>					
D	Floors; on level screed (m/s)	SM	445		
Staircase and ramp Finishes					
<i>Plaster 9mm first coat of cement lime putty and sand (1:2:5); 4mm second coat of cement lime putty and sand (1:1:5) steel trowelled to;</i>					
E	Landing	SM	18		
F	Risers	SM	12		
G	Treads	SM	12		
<i>Prepare surfaces; apply three coats first grade silk vinyl emulsion paint as "crown paints" or other approved; to steel trowelled plastered surfaces; in</i>					
H	Staircase landing	SM	18		
I	Risers	SM	12		
J	Treads	SM	12		
Total Carried to collection for Finishes					-
Item	Description	Unit	Quantity	Rate	Amount
Finishes Contd.....					
<i>32mm thick sand(1:3) screed backing to receive rustic ceramic floor tiles; Anti-slip ceramic tiles; coloured polished ceramic tiles</i>					
A	Soffits of waist	SM	14		
B	Soffits of landing	SM	8		
C	Edges of waist	LM	12		
<i>600*500*10mm thick coloured/polished anti-slip ceramic floor tiles bedded and jointed in cement and finished with matching colour waterproof grout</i>					
D	Soffits of waist	SM	28		
E	Soffits of landing	SM	16		
F	Edges of waist	LM	24		
G	100mm High skirting	LM	78		
Ramp Finishes					
<i>32mm thick sand(1:3) screed backing to receive rustic ceramic floor tiles; Anti-slip ceramic tiles; coloured polished ceramic tiles</i>					
H	Ramp floor to a slope, landings and sides	SM	66		
<i>12mm polished anti-slip terrazzo floor finish</i>					
I	Ramp floor to a slope, landings and sides	SM	66		
Total Carried to collection for Finishes					-
Item	Description	Unit	Quantity	Rate	Amount
Staircase Balustrading					
A	900mm High balustrading comprising 75mm diameter stainless steel handrail on 50mmx50mm SHS stainless steel moulded balusters at approximately 250mm centres; 6No middle rails; to profile of staircase; all to detail - see Appendix	SM	24		
<i>Prepare metal surfaces; apply undercoat and two finishing coats first grade eggshell paint; as "Crown paints" or other equal approved metallic paint on metal surfaces to</i>					
B	General surfaces; of metallic railing (measured flat overall)	SM	24		
WATERPROOFING					
C	Cement and Sand to the slab as waterproofing	SM	460		
Total Carried to collection for Finishes					-
Item	Description	Unit	Quantity	Rate	Amount
COLLECTION FOR FINISHES					
Brought Forward from Page FE/5					
-					
Brought Forward from Page FE/6					
-					
Brought Forward from Page FE/7					
-					
Total for Finishes Carried to Summary Page					-
Item	Description	Unit	Quantity	Rate	Amount
SUMMARY					
1	Superstructure R.C Frame				
2	Walling				
3	Windows				
4	Doors				
5	Finishes				
SUB-TOTAL FOR GROUND FLOOR BUILDERS WORK CARRIED TO CRAND SUMMARY					

PROPOSED 5NO. CLASSROOMS AT KIHUMBUINI PRIMARY SCHOOL

Item	Description	Unit	Qty	Rate	Amount															
	<u>P.C & PROVISIONAL SUMS</u>																			
	<i>The contractor shall include in his tender the following to be deducted in whole or in part as directed by the Project Manager</i>																			
	<u>ELECTRICAL WORKS</u>																			
A	Provide the Provisional Sum of Kshs. Six Hundred Thousand (600,000/=) only for Electrical Installations for all the works				600,000															
	<u>PROJECT MANAGER'S ADMINISTRATION EXPENSES</u>																			
B	Allow a Provisional Sum of KShs. Two Hundred fifty Thousand (100,000/=) only for Project Management.				100,000															
C	Allow a Provisional Sum of KShs. Two Hundred Thousand (100,000/=) only for PMC allowance				100,000															
	<u>CONTINGENCY</u>																			
D	Provide the Provisional Sum of Kshs. Three Hundred Thousand (300,000/=) only for Contingencies to be omitted or expended in whole or in part at the discretion of the Architect				300,000															
	Total Carried to Grand Summary				1,100,000															

