

## **REPUBLIC OF KENYA**

## MINISTRY OF PUBLIC WORKS.

# PROPOSED INTERGRATED SCIENCE

# LABORATORY FOR NYAROHA

# PRIMARY SCHOOL

# **BILLS OF QUANTITIES**

KURIA EAST SUBCOUNTY WORKS OFFICER

MINISTRY OF PUBLIC WORKS

P.O. BOX 21 KEGONGA

APRILL 2024

915

GORI COUNTY COVERNME UBLIC WORKS ROADS & TRNS

0 9 MAY 2024

P. O. BOX 195 - 40400, MIGOP

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### PROPOSED INTERGRATED SCIENCE LABORATORY FOR NYAROHA PRIMARY SCHOOL

#### MAIN SUMMARY

ITEM	DESCRIPTION	PAGE	CONTRACTOR SUM	OFFICIAL
А	BUILDING WORKS	11	2,598,650.00	
В	PRIME COST & PROVISIONAL SUMS	PC/1	1,075,000.00	
	SUB TOTAL		3,673,650.00	
GRA	AND TOTAL INCLUSIVE (	OF V.A.T	3,673,650.00	

AMOUNT IN WORDS, KENYA SHILLINGS

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NYAR	OHA PRIMARY SCHOOL INTERGRATED SCIENCE LABORATO	DRY	Page	I,S,L,N	01 M.O.W 122
ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	INTERGRATED SCIENCE LABORATORY FOR NYAROHA PRIMARY SCHOOL				
	<u>ELEMENT NO. 1_SUBSTRUCTURE</u> (All provisional)				
А	Clear site of all tall grasses, shrubs and grub up roots and burn the arising	168	SM	25	4,200
В	Excavate over site average 150mm deep to remove top vegetable soil and cart away	168	SM	100	16,800
С	Excavate average 150mm deep to reduce levels and cart away	26	СМ	200	5,200
D	Excavate foundation trench not exceeding 1.5m deep from reduced level and deposit where directed	38	СМ	250	9,500
Е	Extra over for excavating in rock irrespective of class	29	СМ	1,000	29,000
F	Return, fill and well ram around foundations	62	СМ	200	12,400
G	Load and cart away extra excavated materials from site	36	СМ	200	7,200
Н	Allow for keeping trenches free from water.	Item			5,000
Ι	Allow for upholding sides of trenches by plunking and strutting	Item			5,000
	<u>Concrete works</u> Mass concrete mix 1:3:6 as described in:-				
J	50mm thick in trenches	38	SM	600	22,800
	Carried to collection			Kshs	117,100

NYAROHA PRIMARY SCHOOL INTERGRATED SCIENCE LABORATORY PageI,S,L,N02 M.O.W 1					
ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 1CONT'D</u>				
	<u>Reinforced concrete class 20/20 as described in:-</u>				
А	200mm thick strip foundation	8	СМ	14,000	112,000
В	150mm thick floor slab	170	SM	1,400	238,000
	<u>Sawn formwork as described to:-</u>				
С	Sides of floor slab.	54	LM	200	10,800
	<u>High yield square twisted bars to BS 4461</u> <u>(All provisional)</u>				
D	8mm in foundations	76	KG	200	15,200
E	10mm ditto	112	KG	200	22,400
	Foundation walling				
G	200mm roughly dressed natural stone walling in cement sand mortar	76	SM	1,500	114,000
	<u>Earthworks</u>				
Н	300mm hand packed hardcore filling in layers not exceeding 150mm depth	51	СМ	800	40,800
Ι	50mm thick murram blinding.	170	SM	150	25,500
J	Treat surface of blinded hardcore with insecticides.	170	SM	100	17,000
	Carried to collection			Kshs	595,700

Page ......I,S,L,N ...03 M.O.W 122

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 1CONT'D</u>				
	Damp proofing				
А	500gauge damp proof membrane.	170	SM	150	25,500
В	200mm wide bituminous damp proof course	65	LM	100	6,500
	<u>Plinth finishes</u>				
С	12mm thick cement sand render in plinths.	9	SM	300	2,700
D	Prepare and apply two coats of black bituminous paint on plinths	9	SM	300	2,700
E	32mm thick sand cement floor finish on floors	86	SM	350	30,100
F	100mm high skirting	119	LM	100	11,900
	<u>Steel posts</u>				
G	75mm diameter steel posts 3000mm long with bottom cast into concrete and with a "U" bracket at the top to hold timber beam	8	N0	3,500	28,000
	Carried to collection			Kshs	107,400
	COLLECTION				
	Brought forward from pageI,S,L,N 1				117,100
	Brought forward from pageI,S,L,N 2				595,700
	Brought forward from page above				107,400
	TOTAL FOR ELEMENT NO. 1 SUBSTRUCTURE CARRIED TO SUMMARY			Kshs	820,200

NYAROHA PRIMARY SCHOOL INTERGRATED SCIENCE LABORATORY Page I, S, L, N					04 M.O.W 122	
ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT	
	<u>ELEMENT NO. 2</u>					
	CONCRETE FRAME					
	<u>Reinforced concrete class 20/25 as described in:-</u>					
А	Beams	4	СМ	14,000	56,000	
	<u>Sawn formwork as described to:-</u>					
В	Sides of beams	39	SM	550	21,450	
С	Soffits of ditto	23	LM	150	3,450	
	<u>High yield square twisted bars to BS 4461</u> <u>(All provisional)</u>					
D	12mm bars in beams	230	KG	200	46,000	
Е	8mm bars in beams	105	KG	200	21,000	
F	12mm cement sand screed on concrete frame.	39	SM	300	11,700	
	TOTAL FOR ELEMENT NO. 2 CONCRETE FRAME CARRIED TO SUMMARY			Kshs	159,600	

Page...I,S,L,N ...05 M.O.W 122

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 3 WALLING				
	Machine cut, natural stone walling in cement sand mortar (1:3) with 25mm SWG hoop iron after every alternate course.				
А	200mm thick	215	SM	1,600	344,000
В	Ditto to gable ends	39	SM	1,600	62,400
	<u>Sundries</u>				
D	200x225mm high eaves fillings in stonework.	32	LM	200	6,400
E	Seal the joint between roof covering and walling with cement sand mortar.	32	LM	100	3,200
	Wall finishes				
E	15mm cement sand limed plaster trowelled smooth to walls internally	158	SM	300	47,400
F	12mm cement sand render to external walls.	102	SM	300	30,600
	Prepare and apply one undercoat and two coats silk vynil paint to:-				
J	Plastered internal walls	158	SM	300	47,400
	Prepare and apply one undercoat and two coats plastic emulsion paint to:-				
К	Rendered external walls.	102	SM	300	30,600
	TOTAL FOR ELEMENT NO. 3 WALLING CARRIED TO SUMMARY			Kshs	572,000

Page ......I,S,L,N ...06 M.O.W 122

ITEM	DESCRIPTION	QTY	UNIT	1,3,L,N RATE	AMOUNT
	<u>ELEMENT NO. 4</u>				
	<u>ROOFING</u>				
	<u>CONSTRUCTION</u>				
	The following in first grade cypress timber, well seasoned and treated with good wood preservative				
А	150x50mm rafters	101	LM	300	30,300
В	150x50mm tie beam	85	LM	300	25,500
С	100x50mm ties and struts	123	LM	200	24,600
D	100x50mm wall plate	33	LM	200	6,600
E	75x50mm purlins	300	LM	200	60,000
F	225x25mm fascia board	59	LM	300	17,700
	<u>Roof covering</u>				
G	28gauge factory painted corrugated galvanized iron sheets.	213	SM	1,200	255,600
Н	30gauge factory painted ridge caps	17	LM	500	8,500
	<u>Prepare and apply one undercoat and two coats</u>				
	<u>super gloss paint to:-</u>				
Ι	Surfaces 200-300mm girth fascia	59	LM	75	2,400
	Carried to collection			Kshs	431,200

NYAROHA PRIMARY SCHOOL INTERGRATED SCIENCE LABORATORY PageI,S,L,N07 M.O.W 12					
ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 4 CONT'D</u>				
	<u>Ceiling</u>				
А	50x50mm brandering	360	LM	150	54,000
В	75x50mm ceiling joists	248	LM	200	49,600
С	Supply and fix 12mm thick chipboard ceiling lining.	192	SM	1,100	211,200
D	15x75mm sawn cypress timber cornice	119	LM	100	11,900
	<u>Extra over ceiling for;-</u>				
Е	Forming trap door size 600x600mm and positioning in roof space on bearers.	2	N0	1,000	2,000
	<u>Prepare and apply one undercoat and two coats soft</u> white emulsion paint to:-				
F	Ceiling lining	192	SM	250	48,000
	Carried to collection			Kshs	376,700
	<u>COLLECTION</u>				
	Brought forward from pageI,S,L,N 7				431,200
	Brought forward from page above				376,700
	TOTAL FOR ELEMENT NO. 4 ROOFING CARRIED TO SUMMARY			Kshs	807,900

NYAROHA	PRIMARY SCHOOL	INTERGRATED	SCIENCE	LABORATORY

Page...I,S,L,N...08 M.O.W 122

DESCRIPTION	QTY	UNIT	RATE	AMOUNT
ELEMENT NO. 5 DOORS STEEL DOORS Purpose made steel double door size 1200x2400mm high in one coat red oxide primer and two coats gloss oil paint complete with burglar proof bars frame and steel door lock (union).		30,000		
<b>lazing</b> nm thick clear sheet glass and glazing in anes $0 - 0.5m2$ with putty.	1	SM	2,000	2,000
i <u>mber Doors</u> 5mm thick semi-solid mahogany paneled 5or size 900x2400mm high.	3	N0	4,950	14,850
<i>cames</i> 00x50mm thick mahogany timber frame nce rebated and moulded one edge.	18	LM	1,000	18,000
itto but twice rebated.	3	LM	800	2,400
0x25mm architrave	18	LM	150	2,700
5x25mm quadrant fillet	18	LM	100	1,800
				71,750
n itt )x	ce rebated and moulded one edge. to but twice rebated. £25mm architrave	ce rebated and moulded one edge. to but twice rebated. 3 425mm architrave 18 425mm quadrant fillet 18	ce rebated and moulded one edge. to but twice rebated. 25mm architrave 18 LM 25mm quadrant fillet 18 LM	ce rebated and moulded one edge. to but twice rebated. 25mm architrave 18 LM 150 25mm quadrant fillet 18 LM 100

NYAF	ROHA PRIMARY SCHOOL INTERGRATED SCIENCE LABORATO	RY	Page	eI,S,L,N0	9 M.O.W 122
ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 5 CONT'D</u>				
	IRON MONGERY				
	ALL AS PER UNION CATALOGUE				
Α	Three lever mortice lock complete with door furniture.	3	N0	3,500	10,500
В	100mm pressed steel butt hinges.	5	PRS	200	1,000
C	25mm diameter rubber door stop fixed to floor with rawl bolt.	3	N0	150	450
	<u>Prepare and apply three coats of clear varnish</u> <u>paint to:-</u>				
D	Doors overally	12	SM	200	2,400
Е	Surfaces 150 – 225mm girth	18	LM	50	900
	<u>Prime only back of frame</u>				
F	Surfaces 150 – 225mm girth	19	LM	50	950
	Carried to collection			Kshs	16,200
	COLLECTION				
	Brought forward from pageI,S,L,N 8				71,750
	Brought forward from page above				16,200
	TOTAL FOR ELELEMNT NO. 5 DOORS				
	CARRIED TO SUMMARY			Kshs	87,950

Page...I,S,L,N ...10 M.O.W 122

ITEM	DESCRIPTION	QTY	UNIT	<b>RATE</b>	AMOUNT
	ELEMENT NO. 6 <u>WINDOWS</u> Purpose made steel casement windows in one coat red oxide primer and two coatsgloss oil paint and complete with burglar proof bars, and locking				
	accessories				
А	Window size 1500x1400mm high.	5	N0	9,000	45,000
В	Ditto size 1500x600mm high.	2	N0	7,500	15,000
В	Ditto size 1500x1000mm high zinc plated steel lovred windows for 150mm blades	5	N0	7,000	35,000
	<u>Glazing</u>				
С	4mm thick clear sheet glass and glazing in panes 0 – 0.5m2 with putty	18	SM	2,000	36,000
	<u>Cill</u>				
D	225x75mm thick weathered concrete window cill reinforced with 8 gauge weld . mesh and including all necessary moulding and formwork and both sides fair fished	20	SM	1,000	20,000
	TOTAL FOR ELEMENT NO. 6 WINDOWS CARRIED TO SUMMARY			Kshs	151,000

NYAROHA PRIMARY SCHOOL INTERGRATED SCIENCE LABORATORY Page I, S, L, N 11 M.O.W 122					
ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BUILDING WORKS				
	SUMMARY	<u>PAGE</u>			
1	SUBSTRUCTURE	I,S,LN 3			820,200
2	CONCRETE FRAME	I,S,LNL4			159,600
3	WALLING	I,S,LN 5			572,000
4	ROOFING	I,S,LN7			807,900
5	DOORS	I,S,LN9			87,950
6	WINDOWS	I,S,LN 10			151,000
	TOTAL BUILDING WORKS CARRIED TO MAIN SUMMARY			Kshs	2,598,650

INTEGRATED SCIENCE LABORATORY FOR NYARROHA PRIMARY SCHOOL

Page ...I,S,L,M ...12 M.O.W 122

ITEM	DESCRIPTION	UNIT	AMOUNT
			(KSHS)
	PRIME COST & PROVISIONAL SUMS		
	<u>Contigencies</u>		
A	Allow a provisional sum of Kenya shillings <b>sixty five</b> <b>thousand</b> (Kshs.65,000) only for <b>contigencies</b>	Sum	65,000
	<u>Electrical works</u>		
В	Allow a provisional sum of Kenya shillings <b>eighty</b> <b>thousand</b> (Kshs. 80,000) only for <b>Electrical works</b>	Sum	80,000
	<u>Project management</u>		
С	Allow a provisional sum of Kenya shillings <b>One</b> hundred thousand (Kshs. 180,000) only for project management and supervision	Sum	180,000
	<u>Lab Equipments</u>		
D	Allow a provisional sum of Kenya shillings <b>seven</b> <b>hundred and fifty thousand</b> (Kshs. 750,000) only for <b>worktops, fume cup board, extraction fan and</b>	<u>Crew</u>	750.000
	LPGgas installation	Sum	750,000
	TOTAL FOR PRIME COST & PROVISIONAL		
	SUMS CARRIED TO MAIN SUMMARY		1,075,000

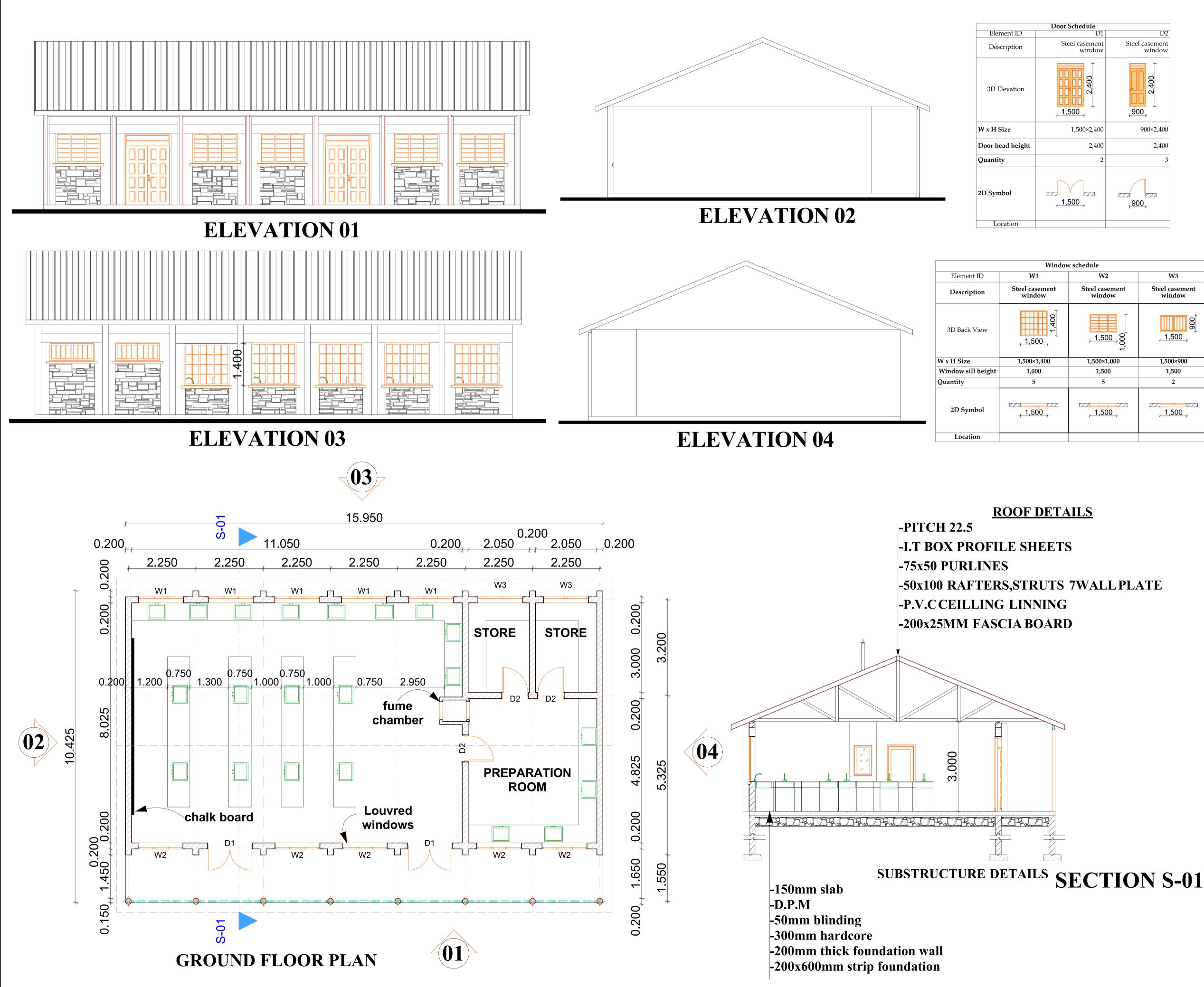
### PROPOSED INTERGRATED SCIENCE LABORATORY FOR NYAROHA PRIMARY SCHOOL

#### MAIN SUMMARY

ITEM	DESCRIPTION	PAGE	CONTRACTOR SUM	OFFICIAL
А	BUILDING WORKS	11	2,598,650.00	
В	PRIME COST & PROVISIONAL SUMS	PC/1	1,075,000.00	
	SUB TOTAL		3,673,650.00	
GRA	AND TOTAL INCLUSIVE (	OF V.A.T	3,673,650.00	

AMOUNT IN WORDS, KENYA SHILLINGS

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MAIN CONTRACTOR
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ment w	Steel casement window
1,000 <sub>++</sub>	1,500 <sub>*</sub>
000	1,500×900
	1,500
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- 1. All dimensions are in mm unless otherwise specified
- 2. Dimensions are to be taken as indicated in the drawing do not scale
- **3. Contractor check and verify all the** dimensions and refer any discrepancy before commencing work
- 4. D.P.Cunder all superstructure walls
- 5. Depth of foundation to be determined on site
- **MECHANICAL**
- 7. All plumbing and drainage works to comply with public health specification
- 8. S.V.P denotes soil vent pipe and is to be provide at the head of the drainage
- 9. Drains passing beneath buildings and drive way should be encased in 150mm concrete surround
- **10. All underground foul & waste drain shall** be of p.v.c, to complywith BS 5255
- **11. All inspection chamber covers & frame** shall be cast iron to complywith BS 497 Table 2 Grade A
- **12.** Minimum slopes in drain pipes to be 1% No chasing for pipes will be allowed in the slab
- **13. Plumbing pipes to be coordinated with** electrical conduites and any conflict clarified before commencement

NYAROHA PRIMARY SCHOOL P.O. BOX 231 - 40413 KEHANCHA

**CLIENT SIGNATURE...** 

DATE....

PROJECT

CLIENT

**PROPOSED LABORATORY BLOCK** 

Drawing title

**DRAWN BY:** 

CHECKED BY:

Approved by

Working Drawings

Scale drawing no. 1;100

project job no

NAME SIGNATURE

ISIAH

G.I.S

DATE

PW/KURE/CDF/N/L/05/24

MAY 2024



Arch L .Mochama Chief Architect

# DIRECTORATE OF PUBLIC WORKS

**BUILDINGS DEPARTMENT** 

FOR THE GOVERNMENT OF REPUBLIC OF KENYA