REPUBLIC OF KENYA

COUNTY GOVERNMENT OF NYANDARUA

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

PROPOSED ERECTION OF A CHAINLINK FENCE AND CONSTRUCTION OF A 3 DOOR PIT LATRINE AND URINAL AT PASSENGA DISPENSARY

FOR

THE DEPARTMENT OF HEALTH SERVICES

BILLS OF QUANTITIES

ARCHITECT,
COUNTY ARCHITECT,
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

ELEC/MECH ENGINEER
COUNTY ELEC / MECH. ENGINEER,
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

SEPTEMBER, 2024

FORM OF TENDER

TO: _____ *[Date)*_____

Dear Sir,

1 In accordance with the Conditions of Contract, Specifications, Drawings and Bills of Quantities for the execution of the above named Works, we, the undersigned offer to construct, install and complete such Works and remedy

any defects therein for the sum of Kshs._____*[Amount in figures]* Kenya Shillings_____

ON OF KA _____

_____*[Amount in words]*

2 We undertake, if our tender is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Project Manager's notice to commence, and to complete the whole of the Works comprised in the Contract within _____ Weeks

3 We agree to abide by this tender until ***120 days from date of tender***, and it shall remain binding upon us and may be accepted at any time before end of the said days

4 Unless and until a formal Agreement is prepared and executed this tender together with your written acceptance thereof, shall constitute a binding Contract between us.

5 We understand that you are not bound to accept the lowest or any tender you may receive.

Dated this _____ day of _____20_____

Signature _____in the capacity of_____

Duly authorized to sign tenders for and on behalf of

_____*[Name of the Tenderer]*

of_____ [*Address of the tenderer)*

Witness; Name_____

Address_____

Signature_____

Date_____

BUILDER'S WORKS

CHAINLINK FENCE

PROPOSED ERECTION OF A CHAINLINK FENCE AT PASSENGA DISPENSARY

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	ELEMENT NO. 01 - CHAINLINK FENCE				
	Site clearance				
A	Clear the site off bushes, grass, shrubs and all vegetation; cart away as directed.	SM	684		
	Open-type fencing				
	Comprising 125x100mm thick cranked reinforced precast concrete posts; 2875mm high above ground and 475mm below surface of ground at 3000mm regular intervals mortised I 300mm diameter 475mm deep mass concrete sorround (mix ratio 1:3:6) including all excavations and carting away. Chain Link Fencing comprising three galvanised mild steel strainer wires of 2.5mm diameter threaded through posts; 3.2mm galvanised mild steel 14 gauge chain link and three double strands of 12.5mm barbed wire spaced at 75mm centres at the cranked end on precast concrete posts. Intermediate posts at 30m apart supported both sides with 2100mm bracings/strainer posts and all corner posts supported thus including all excavations, concrete works in foundation pits; returning, filling-in, ramming and carting away surplus excavated materials. Include anchoring the chain link into the ground in 200x200mm deep mass concrete sorround/haunching (mix ratio 1:3:6) along its entire length.				
B	2875mm high; measured overall	LM	621		
C	Extra for straining post and single strut 2100mm long set diagonally in and including concrete 1:3:6 to base size 300mm diameter 475mm deep in hole size 300mm diameter 475mm deep including excavation, etc.	N0	26		
D	Extra for straining post and double struts 2100mm long set diagonally in and including concrete 1:3:6 to base size 300mm diameter 475mm deep in hole size 300mm diameter 475mm deep including excavation, etc.	N0	12		
	Element 01				
	CHAINLINK FENCE CARRIED TO SUMMARY			KSHS	

PROPOSED ERECTION OF A CHAINLINK FENCE AT PASSENGA DISPENSARY

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	ELEMENT NO. 02 - GATE				
	MILD STEEL GATE				
	Mild steel grilled gate; 75x50x4mm thick frame pluged to concrete or blockwork with 100mm long fishtailed 25x25x2mm thick angle section, 25x25x3mm thick hollow section vertical members at 150mm centers, 275mm wide x 4mm thick plate welded at the middle for signage, angles cut, mitred and welded; one coat manufacturer,s promer, complete with all neccessary iron mongery;all welding ground to smooth finish, all to the satisfaction of the project manager.				
A	Overall size 5500 x 2500mm in two equal leaves; including 4No. 150mm purpose made steel hinges, 2 No. drop bolts, 2No. Padlock hasp (pupose made) all welded.	N0	1		
B	Pedestrian gate size 1200 x 2500mm high	N0	1		
	Painting and Decorations				
	On Metal work				
	Prepare and apply one coat etching primer; one undercoat ant two coats gloss oil paint to Crown Solo or other equal and approved to: -				
C	General surfaces; over 300mm girth.	SM	31		
	Element 02				
	GATE CARRIED TO SUMMARY			KSHS	

PROPOSED ERECTION OF A CHAINLINK FENCE AT PASSENGA DISPENSARY

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	ELEMENT NO. 03 - COLUMNS AND WALLS				
	Site clearance				
A	Clear the site off bushes, grass, shrubs and all vegetation; cart away as directed.	SM	8		
	Oversite excavation				
B	Excavate oversite to remove top soil average 150mm deep and remove from site	SM	8		
C	Excavate for column bases starting from ground level not exceeding 1.50 meters.	CM	9		
	Concrete				
D	50mm thick mass concrete class Q (1:3:6) to bottoms of foundations	SM	6		
	Insitu concrete; reinforced; class 20 / 20; vibrated				
E	Column bases	CM	2		
F	Columns	CM	2		
	Bars; high yield steel; cold worked to B.S. 4461 including bends, hooks, tying wire and distance blocks				
G	12mm bars	KG	135		
H	8mm bars	KG	26		
	Sawn formwork to insitu concrete as described:-				
I	To sides; vertical or battering of column bases and columns	SM	22		
J	250x50mm weathered and throated pre cast concrete coping stones bedded and jointed to walls in cement sand (1:3) mortar	LM	7		
K	400x400mm weathered and throated pre cast concrete coping stones bedded and jointed to walls in cement sand (1:3) mortar	N0	5		
	Element 03				
	Columns and wall **Carried Forward**			**KSHS**	

PROPOSED ERECTION OF A CHAINLINK FENCE AT PASSENGA DISPENSARY

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	Brought Forward			**Kshs.**	
	FINISHES				
	Insitu finishes				
	Render; 18mm thick, 1 No. coatwork of cement and sand (1:3); wood floated to concrete or blockwork base generally to: -				
A	Columns	SM	16		
	Painting and Decorations				
	Prepare and apply one undercoat and three coats of first quality emulsion paint to the following surfaces				
B	Rendered surfaces	SM	16		
	Element 03				
	COLUMNS AND WALL **CARRIED TO SUMMARY**			**KSHS**	

PROPOSED ERECTION OF A CHAINLINK FENCE AT PASSENGA DISPENSARY

SUMMARY FOR CHAINLINK FENCE

Item	Element	Page. No	Amount
01	Chainlink Fence	CF / 2	
02	Gate	CF / 3	
03	Columns and wall	CF / 5	
	TOTAL FOR CHAINLINK FENCE CARRIED TO GRAND SUMMARY		

3 DOOR PIT LATRINE AND URINAL

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	ELEMENT NO. 01 - SUBSTRUCTURES				
	Site clearance				
A	Clear the site off bushes, grass, shrubs and all vegetation; cart away as directed.	SM	22		
	Oversite excavation				
B	Excavate oversite to remove top soil average 150mm deep and remove from site	SM	22		
C	Excavate oversite to reduce levels commencing from stripped level not exceeding 1.5 meters deep to be measured on site.	CM	22		
	Excavation				
	Bulk Excavation for pit in unstable Clay grounds including maintaining and supporting sides and keeping free from water, mud and fallen materials and trimming and levelling the surfaces				
D	- not exceeding 1.50 metres deep	CM	11		
E	- 1.50 to 3.00 metres deep	CM	11		
F	- 3.00 to 4.50 metres deep	CM	11		
G	- 4.50 to 6.00 metres deep	CM	11		
H	Excavate foundation trench starting from reduced level not exceeding 1.50 meters deep.	CM	13		
I	Excavate pits for column bases starting from pit level not exceeding 1.50 meters.	CM	6		
J	Extra-over all excavation for excavating in rock irrespective of class	CM	2		
K	Return, fill-in and rum selected excavated materials around foundations	CM	9		
L	Remove and cart away from site surplus excavated materials spread on site as shown by the Client.	CM	72		
	Element 02				
	Substructure (All Provisional)	**Carried Forward**		**Kshs.**	

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	Brought Forward			**Kshs.**	
	Filling				
A	Hardcore filling in making up levels, hand packed, exceeding 300mm thick in layers of 150mm maximum thickness	CM	5		
B	50mm thick murram blinding to surfaces of fill	SM	12		
	Antitermite treatment				
C	Premise 200 SC' or other equal and approved anti-termite insecticide treatment with ten years guarantee, applied strictly in accordance with manufacturer's instructions, to tops of fill and foundation walls	SM	12		
	Concrete				
D	50mm thick mass concrete class Q (1:3:6) to bottoms of foundations	SM	17		
	Insitu concrete; reinforced; class 20 / 20; vibrated				
E	Foundations in trenches irrespective of thickness	CM	4		
F	Beams	CM	2		
G	175mm thick suspended slab	SM	7		
H	150mm thick bed	SM	12		
	Bars; high yield steel; cold worked to B.S. 4461 including bends, hooks, tying wire and distance blocks				
I	12mm bars	KG	198		
J	10mm bars	KG	125		
K	8mm bars	KG	96		
	Element 02				
	Substructure (All Provisional)	**Carried Forward**		**Kshs.**	

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	Brought Forward			**Kshs.**	
	Fabric; B.S. 4483				
A	Reference A142 mesh 200 x 200 mm , weight 2.22 kgs per square meter (measured net - no allowance made for laps(including bends, tying wire and distance blocks	SM	12		
	Sawn formwork to insitu concrete as described:-				
B	To sides; vertical or battering of strip foundations.	SM	10		
C	To sides; vertical or battering of beams	SM	14		
D	To sides; vertical or battering of column bases and columns	SM	28		
E	Soffits of suspended pit latrine slab *(formwork left in place)*	SM	7		
F	Edges of ground floor slab; 75 to 150mm wide	LM	22		
	Foundation walling				
G	200mm thick approved local natural stone; roughly squared to foundation walling; bedding and jointing in cement sand (1:3) mortar	SM	84		
	Damp proofing				
H	Polythene sheet; 500 gauge, 200mm welted laps (no allowance made to laps), horizontal; 1 no. layer laid on compacted quarry dust blinding	SM	12		
I	200mm wide; B.S. 743 Type A bitumen hessian base 150 mm laps (no allowance made for laps); horizontal, 1 no. layer, bedded in cement sand (1:3) mortar	LM	196		
	Insitu finishings				
J	14mm thick 2 No. coat work cement sand (1:3) render; wood floated to concrete or blockwork base to walls; external	SM	6		
	Element 02				
	Substructure (All Provisional) **Carried Forward**			**Kshs.**	

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	Brought Forward			**Kshs.**	
	Prepare and apply three coats black bituminous paint on:-				
A	Rendered plinths, externally.	SM	6		
	Element 02				
	SUBSTRUCTURES **CARRIED TO SUMMARY**			**KSHS**	

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	ELEMENT NO. 03 - R.C SUPERSTRUCTURE				
	Insitu concrete; reinforced; class 20 / (20mm); vibrated				
A	Beams	CM	1		
	Reinforcement				
	Bars; high yield steel; cold worked to B.S. 4461 including bends, hooks, tying wire and distance blocks				
B	12mm diameter bars	KG	54		
C	8mm ditto	KG	20		
	Sawn formwork to insitu concrete as described:-				
D	To sides and soffits of beams	SM	10		
	Element 03				
	R.C SUPERSTRUCTURE **CARRIED TO SUMMARY**			**KSHS**	

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	ELEMENT NO. 04 - WALLING				
	NATURAL STONE WALLING				
A	200 mm thick approved local; chisel dressed both sides; bedding, jointing and pointing in cement sand (1:3) mortar - External	SM	32		
B	200mm ditto but Internal	SM	5		
C	150mm ditto	SM	8		
D	200 mm eaves filling, 200mm high including dressing between rafters	LM	10		
E	250x50mm weathered and throated pre cast concrete coping stones bedded and jointed to walls in cement sand (1:3) mortar	LM	7		
	Labour and material				
F	Raking cutting in 200mm thick natural stone walling	LM	4		
G	Extra over horizontal keying in 10mm thick rod in cement and sand (1:3) mortar; one coat of bituminous paint.	SM	32		
	Element 04				
	WALLING **CARRIED TO SUMMARY**			**KSHS**	

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	ELEMENT NO. 05 - ROOFING				
	Galvanized corrugated box profile sheet roofing; 28 gauge; Pre-painted				
A	Roof covering not exceeding 45^0 from horizontal; fixing to timber structure (m/s) with roofing nails and neoprene washers.	SM	15		
	CARPENTRY				
	The following in sawn celcured cypress - Grade 2				
B	100 x 50mm sawn cypress rafters	LM	16		
C	100 x 50mm wall plate fixed to concrete beam with 16gauge hoop iron	LM	11		
D	75 x 50mm sawn cypress purlins	LM	21		
	The following in wrot cypress				
E	200 x 25mm thick facsia/barge boards	LM	16		
	Painting and Decorations				
	On Woodwork				
	Prepare and apply one zinc plumbate primer and three coats of 'CROWN SOLO' or other equal and approved super gloss oil paint to:-				
F	Fascias; 200 to 300mm girth; external	LM	16		
	Element 05				
	ROOFING **CARRIED TO SUMMARY**			**KSHS**	

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	ELEMENT NO. 06 - OPENINGS				
	DOORS				
	Wrot celcured cypress framed frames and framings				
A	100 x 50 mm; 2 No. labours; plugged door frame	LM	16		
	50mm thick Framed ledged and braced match boarded door comprising 125x50mm top rail and stiles,200x50mm bottom rail,150x25mm tongued and grooved boarding vee jointed on one side and 6mm thick plywood panel on the other side.				
B	Door size 850 x 2100 mm high	N0	3		
	Iron mongery				
	Supply and fix the following to UNION catalogue or other equal and approved				
	To softwood, hardwood or the like fixing with screws				
C	150mm long stainless steel tower bolt	N0	6		
D	100mm steel butt hinges	PRS	4.5		
	Painting and Decorations				
	Aluminium primer or other equal and approved wood primer before fixing: -				
E	Backs of frame, board, etc over 100mm but not exceeding 200mm girth	LM	16		
	Knot, prime and stop and prepare and apply one undercoat and three coats of gloss oil paint to woodwork internally				
F	General surfaces of timber doors	SM	11		
G	Frames; 100mm to 200mm girth	LM	16		
H	Ditto not exceeding 100mm girth	LM	32		
	Element 06				
	OPENINGS **CARRIED TO SUMMARY**			**KSHS**	

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	ELEMENT NO. 07 - FINISHES				
	Wall finishes				
	Insitu finishes				
	Render; 18mm thick, 1 No. coat work of cement and sand (1:3); wood floated to concrete or blockwork base generally to: -				
A	Beams; external	SM	5		
	Plaster; 18mm thick, 2 No. coat work, 15mm first coat of cement sand (1:3); 3mm second coat of cement and lime putty (1:9); steel trowelled to concrete or blockwork base				
B	Walls; internal	SM	56		
	Floor finishes				
	Insitu Finishings				
	Screed; cement and sand (1:3) coloured				
C	40mm thick red-oxide screed to concrete or blockwork base generally to floors level; internal	SM	15		
D	100mm wide skirting; rounded junction with wall finish, coved junction with floor finish.	LM	30		
	Painting and Decorations				
	Prepare and apply one undercoat and three coats of first quality emulsion paint to the following surfaces				
E	Rendered surfaces	SM	5		
F	Plastered surfaces	SM	56		
	Urinal Slab				
G	Provide 100mm diameter golden brown muPVC pipe	LM	12		
H	100mm diameter floor trap	N0	2		
I	100mm diameter golden brown p-trap	N0	2		
	Element 07				
	Finishes **Carried Forward**			**Kshs.**	

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	Brought Forward			**Kshs.**	
	Weathering Slate and Vent Cowl				
A	Provide 4500 mm long ; 100mm ϕ pipe complete with a vent, cowl slate and 100 mm 90° bend.	No.	1		
	Element 07				
	FINISHES **CARRIED TO SUMMARY**			**KSHS**	

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	ELEMENT NO. 08 - RAMP				
	SUBSTRUCTURES.				
	Site clearance				
A	Clear the site off bushes, grass, shrubs and all vegetation; cart away as directed.	SM	7		
	Oversite excavation				
B	Excavate oversite to remove top soil average 150mm deep and remove from site	SM	7		
	Excavation				
C	Excavate oversite to reduce levels commencing from stripped level not exceeding 1.50 meters deep.	CM	6		
D	Excavate foundation trench starting from reduced level not exceeding 1.50 meters deep.	CM	8		
	Filling				
E	Hardcore filling in making up levels, hand packed, exceeding 300mm thick in layers of 150mm maximum thickness	CM	2		
F	50mm thick murram blinding to surfaces of fill	SM	6		
	Antitermite treatment				
G	Premise 200 SC' or other equal and approved anti-termite in	SM	6		
	Concrete				
H	50mm thick mass concrete class Q (1:3:6) to bottoms of four	SM	21		
	Insitu concrete; reinforced; class 20 / 20; vibrated				
I	Foundations in trenches irrespective of thickness	CM	2		
J	Ditto to bed - 150mm	SM	6		
	Element 08				
	Ramp	**Carried Forward**		**Kshs.**	

Item	Description of Works	Unit	Qty	Rate	Amount (Kshs)
	Brought Forward			**Kshs.**	
	Fabric; B.S. 4483				
A	Reference A142 mesh 200 x 200 mm , weight 2.22 kgs per square meter (measured net - no allowance made for laps(inclunding bends, tying wire and distance blocks	SM	6		
	Sawn formwork to insitu concrete as described:-				
B	To sides; vertical or battering of strip foundations.	SM	6		
C	To sides of beams.	SM	16		
D	Edges of ground floor slab; 75-150 mm wide	LM	14		
	Walling				
E	200mm thick approved local natural stone; roughly squared to foundation walling; bedding and jointing in cement sand (1:3) mortar	SM	19		
	Damp proofing				
F	Polythene sheet; 500 gauge, 200mm welted laps (no allowance made to laps), horizontal; 1 no. layer laid on compacted quarry dust blinding	SM	6		
	FINISHES:-				
	Floor finishes				
	Insitu Finishings				
	Screed; cement and sand (1:3) coloured				
G	40mm thick red-oxide screed to concrete or blockwork base generally to floors level; internal	SM	9		
	Element 08				
	RAMP **CARRIED TO SUMMARY**			**KSHS**	

SUMMARY FOR 3 DOOR PIT LATRINE AND URINAL

Item	Element	Page. No	Amount
01	Substructures (All Provisional)	PL / 5	
02	R.C Superstructure	PL / 6	
03	Walling	PL / 7	
04	Roofing Construction and Covering	PL / 8	
05	Openings	PL / 9	
06	Finishes	PL / 11	
07	Ramp	PL / 13	
	TOTAL FOR BUILDER'S WORKS CARRIED TO GRAND SUMMARY	**KSHS.**	

PROVISIONAL SUMS

	PROVISIONAL SUMS				
A	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 Allow a Provisional Sum of Kenya shillings One Hundred Thousand only for Supervisory Expenses	ITEM			
	PROVISIONAL SUMS **CARRIED TO SUMMARY**			**KSHS**	

PROPOSED ERECTION OF A CHAINLINK FENCE AND CONSTRUCTION OF A 3 DOOR PIT LATRINE AND URINAL AT PASSENGA DISPENSARY

GRAND SUMMARY

ITEM	DESCRIPTION	Page No.	FOR OFFICIAL USE ONLY	FOR TENDERER USE ONLY
			KSHS.	KSHS.
A	Chainlink Fence	CF / 6		
B	3 Door pit latrine and Urinal	PL / 14		
C	P.C & Provisional Sums	PS / 2		
	TOTAL CARRIED TO FORM OF TENDER INCLUSIVE OF 16% V.A.T.			

Amount in words. Kenya shillings .....

.....

.....**Cents** .....

Tenderer's Signature and stamp.....

Address .....

.....

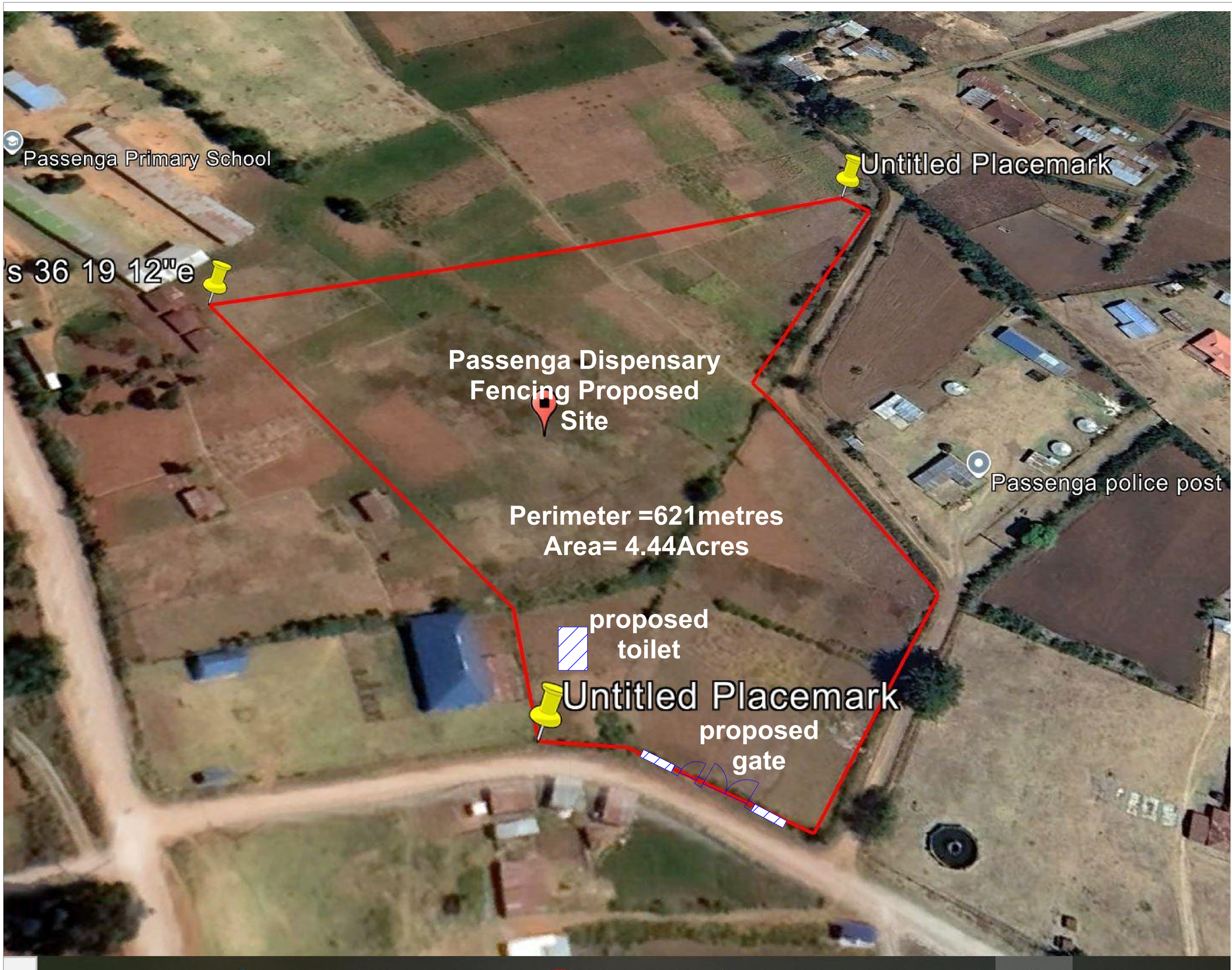
Date .....

Witness Signature .....

Address .....

.....

Date .....



NOTES

1. All dimensions are in milimetres unless specified otherwise.
2. All dimensions are to be read and not scaled/measured.
3. All masonry walls are to be reinforced with hoop iron at every alternate course.
4. All works to be executed in accordance with the local authority by-laws and relevant building codes and regulations.
5. D.P.C. to be provided for all ground floor masonry walling.
6. Provide permanent vents to all openings.
7. Any discrepancy to be reported to the designer.
8. Foundation depths to be determined on site.
9. All works to executed under supervison of a qualified resident engineer or architect.
10. Structural concrete to be class 25 (1:1.5:3) unless specified otherwise.
11. minimum covers to be
    - -stair, slabs and wall =20mm.
    - -beams main bars =30mm.
    - -columns main bars =40mm.
    - -foundation =50mm.
12. All tensile steel(Y) AND mild steel (R) to be in accordance with BS 4449 and fabric mesh to be in accordance with BS4483.
13. Minimum laps to be 55 times the diameter unless otherwise stated.
14. Nominal aggregate size to be 20mm.
15. Indmenity:the designer will not be liable for poor workmanshi ,poor methods of construction, poor quality materials by the contractor.

	REVISION	DATE	REMARKS

PROJECT:
PROPOSED CONSTRUCTION OF A TOILET,CHAINLINK FENCE AND GATE AT PASSENGA DISPENSARY

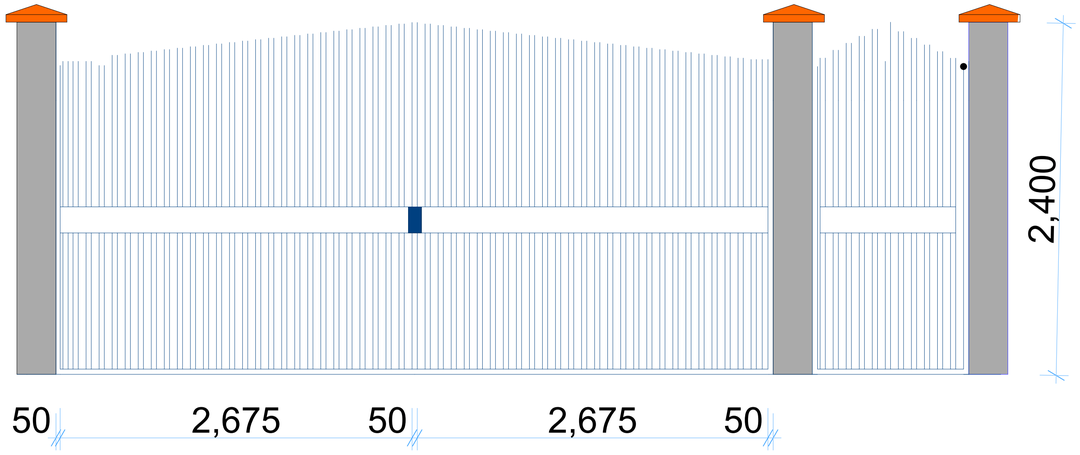
CLIENT:
DEPARTMENT OF HEALTH SERVICES.

DRAWN BY:
MICHAEL NJUGUNA

CHECKED BY:
O Wasike

DRAWING TITLE:
LAYOUT

DEPARTMENT OF PUBLIC WORKS,ROADS TRANSPORT & ENERGY.
COUNTY WORKS OFFICE.
NYANDARUA COUNTY
P.O BOX 701 OLKALOU.



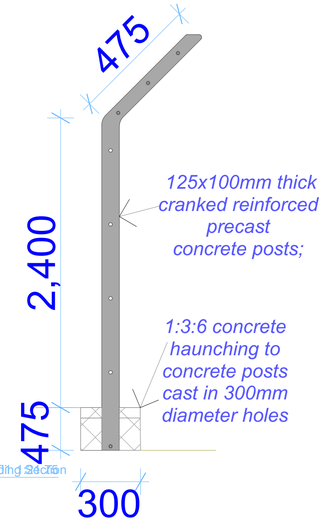
*Application of 2 coats of primer before installation

*Locking devices to be provided during fabrication

*Infill-25x25mm SHS at 150mm c/c

*Frame -75x50x40mm

*Anchored to 300x300mm R.C column

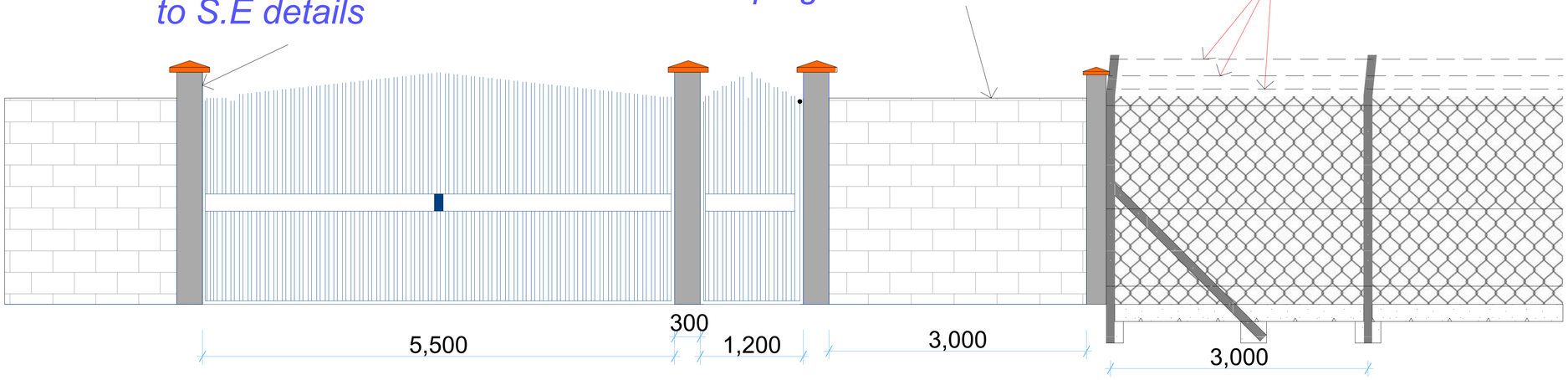


0. Ground Floor (7) 1:23.49

300mm thick R.C column to S.E details

200mm thick masonary wall complete with 25mm thick coping stone

3No. 12.5mm double strands barbed wire



0. Ground Floor (6) 1:29.84

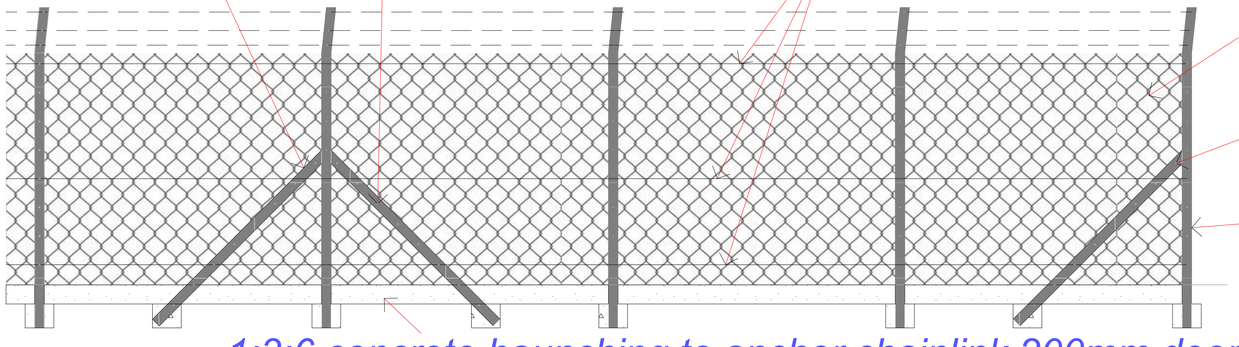
125x100x2100mm length strain at the intermediate posts

3No. 2.5mm diameter galvanised mild steel strainer wires

3.2mm galvanised mild steel chain link

125x100x2100mm length strain at every corner post

125mmx100mmx2875mm concrete post at 3000mm c/c spacing



1:3:6 concrete haunching to anchor chainlink 200mm deep by 200mm wide.

NOTES

1. All dimensions are in milimetres unless specified otherwise.
2. All dimensions are to be read and not scaled/measured.
3. All masonry walls are to be reinforced with hoop iron at every alternate course.
4. All works to be executed in accordance with the local authority by-laws and relevant building codes and regulations.
5. D.P.C. to be provided for all ground floor masonry walling.
6. Provide permanent vents to all openings.
7. Any discrepancy to be reported to the designer.
8. Foundation depths to be determined on site.
9. All works to executed under supervison of a qualified resident engineer or architect.
10. Structural concrete to be class 25 (1:1.5:3) unless specified otherwise.
11. minimum covers to be
    - -stair, slabs and wall =20mm.
    - -beams main bars =30mm.
    - -columns main bars =40mm.
    - -foundation =50mm.
12. All tensile steel(Y) AND mild steel (R) to be in accordance with BS 4449 and fabric mesh to be in accordance with BS4483.
13. Minimum laps to be 55 times the diameter unless otherwise stated.
14. Nominal aggregate size to be 20mm.
15. Indmenity:the designer will not be liable for poor workmanship ,poor methods of construction, poor quality materials by the contractor.

	REVISION	DATE	REMARKS

PROJECT:
PROPOSED CONSTRUCTION OF A CHAINLINK AND GATE

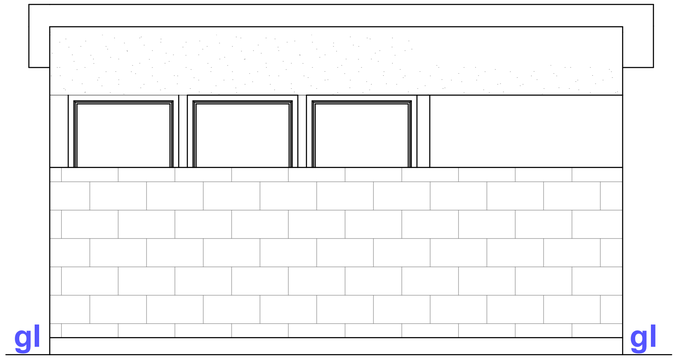
CLIENT:
DEPARTMENT OF HEALTH SERVICES.

DRAWN BY: MICHAEL NJUGUNA

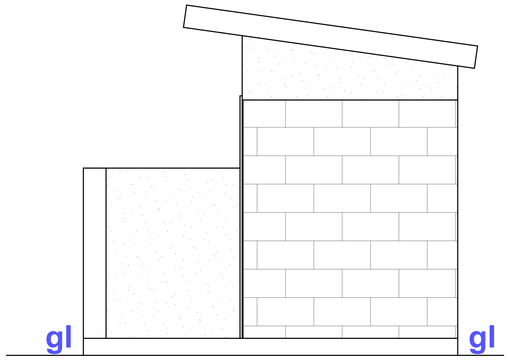
CHECKED BY: O Wasike

DRAWING TITLE: PLANS, SECTIONS,ELEVATION & DETAILS

DEPARTMENT OF PUBLIC WORKS,ROADS TRANSPORT & ENERGY.
COUNTY WORKS OFFICE.
NYANDARUA COUNTY
P.O BOX 701 OLKALOU.



ELEVATION 01



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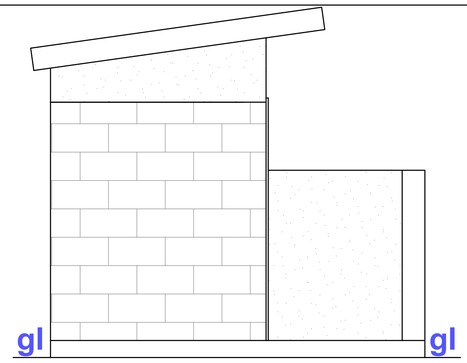

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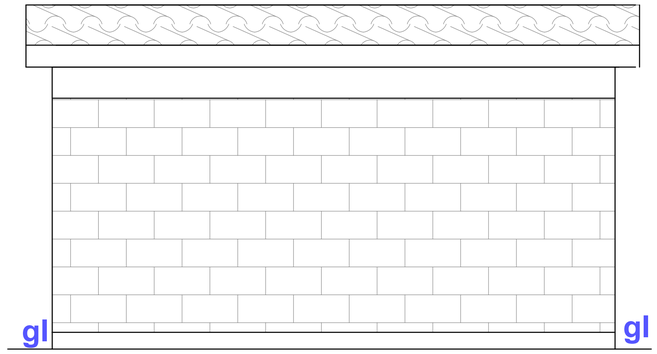

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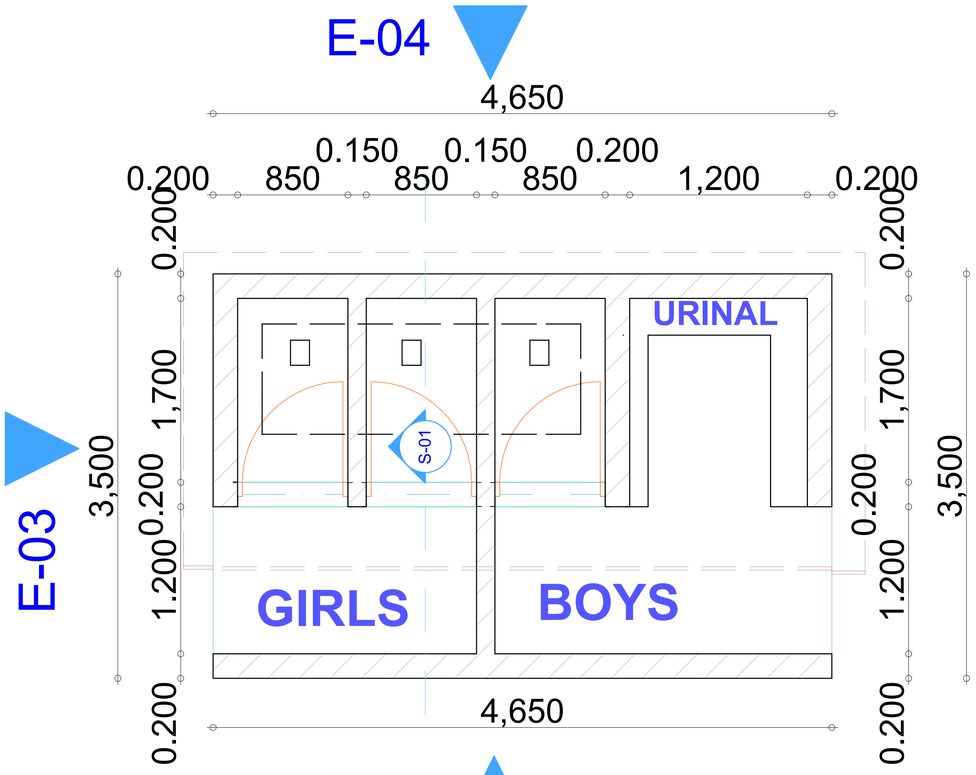
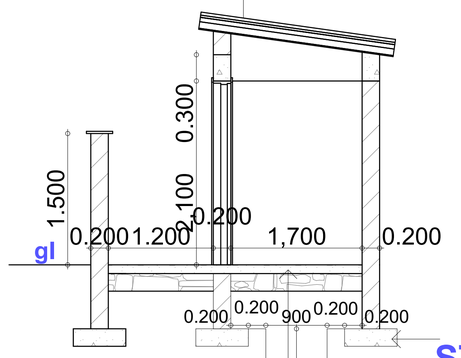


FLOOR PLAN LAYOUT

28gauge roofing sheets laid on 50x75mm purlins 50x150mm rafters 50x100mm wallplate



200X600MM STRIP FOUNDATION

40c/s mortor screed(1:3) on 150mm thick slab on 50mm murram blinding on 300mm consolidated hardcore fill

SECTION 01

NOTES

1. All dimensions are in milimetres unless specified otherwise.
2. All dimensions are to be read and not scaled/measured.
3. All masonry walls are to be reinforced with hoop iron at every alternate course.
4. All works to be executed in accordance with the local authority by-laws and relevant building codes and regulations.
5. D.P.C. to be provided for all ground floor masonry walling.
6. Provide permanent vents to all openings.
7. Any discrepancy to be reported to the designer.
8. Foundation depths to be determined on site.
9. All works to executed under supervison of a qualified resident engineer or architect.
10. Structural concrete to be class 25 (1:1.5:3) unless specified otherwise.
11. minimum covers to be
    - -stair, slabs and wall =20mm.
    - -beams main bars =30mm.
    - -columns main bars =40mm.
    - -foundation =50mm.
12. All tensile steel(Y) AND mild steel (R) to be in accordance with BS 4449 and fabric mesh to be in accordance with BS4483.
13. Minimum laps to be 55 times the diameter unless otherwise stated.
14. Nominal aggregate size to be 20mm.
15. Indmenity:the designer will not be liable for poor workmanship ,poor methods of construction, poor quality materials by the contractor.

	REVISION	DATE	REMARKS

PROJECT:

PROPOSED TYPE 3 DOOR PIT LATRINE

CLIENT:

EDUCATION DEPARTMENT

DRAWN BY:	CHECKED BY:
MARY WAWERU	O.WASIKE

DRAWING TITLE: PLANS, SECTIONS,ELEVATION & DETAILS

DEPARTMENT OF ROADS,PUBLIC WORKS AND TRANSPORT
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