

**WATERLOO TRAINING SCHOOL CORRECTIONAL CENTRE**

**ADDITIONAL WORKS: WATERLOO TRAINING SCH. REHABILITATION: KITCHEN , WATER SUPPLY & FENCING**

ITEM NO	DESCRIPTION	UNIT	QTY	UNIT RATE (Le)	AMOUNT (Le)
<b>KITCHEN</b>					
1.00	<b>SUBSTRUCTURE</b>				
	<u>Excavation</u>				
1.01	Excavate surfaces to remove top soil starting at ground level and maximum depth not exceeding 450mm and deposit in spoil heaps on site	m <sup>2</sup>	66		
1.02	Excavate trenches to receive foundations starting at site strip level excavation and maximum depth not exceeding 1000mm and deposit in spoil heaps on site	m <sup>3</sup>	20		
1.03	Extra over all excavations; excavating in rock or other hard material require the use of compressed air machine or other rock breaking method	m <sup>3</sup>	5		
	<u>Filling</u>				
1.04	Filling to excavations; selected excavated material deposited and compacted in layers	m <sup>3</sup>	8.5		
1.05	Ditto to make up levels below floors; selected excavated material	m <sup>3</sup>	9		
1.06	Ditto; imported excavated material off site	m <sup>3</sup>	10		
1.07	Ditto imported hardcore materials; 200mm thick	m <sup>3</sup>	7.9		
	<u>Surface Treatment</u>				
1.08	Level and compact bottom of excavations	m <sup>2</sup>	7.5		
1.09	Sand blinding average 50mm thick on hardcore falling failing	m <sup>2</sup>	7.5		
	<u>Disposal</u>				
1.10	Remove surplus excavated from site	m <sup>3</sup>	5		
	<u>Concrete Work in Foundation</u>				
1.11	Plain in-situ concrete mix (1:3:6 -19mm aggregate) in as strip foundation	m <sup>3</sup>	5		
	Total to Substructure B/D				

**. REHABILITATION: KITCHEN , WATER SUPPLY & FENCING**

ITEM NO	DESCRIPTION	UNIT	QTY	UNIT RATE (Le)	AMOUNT (Le)
	Total of substructure B/F				
	<b>SUBSTRUCTURE CONTINUED</b>				
1.12	Plain in-situ concrete mix (1:3:6 -19mm aggregate in 150mm thick ground floor slab and ramp	m <sup>3</sup>	7.5		
1.13	Reinforced in-situ in column bases and columns in foundations including reinforcement and formwork	m <sup>3</sup>	4		
	<b>FORMWORK</b>				
1.14	150mm of formwork right round the edge of the building	m <sup>2</sup>	5.53		
	<u>Blockwork in foundation</u>				
1.15	200mm thick solid Sandcrete block bedded and jointed in cement mortar (1:6) in foundation	m <sup>2</sup>	28		
1.16	12mm thick cement and sand (1:6) rendering in foundation	m <sup>2</sup>	28		
	<b>SUBSTRUCTURE CARRIED TO SUMMARY</b>				

**WATERLOO TRAINING SCHOOL CORRECTIONAL CENTRE**

**ADDITIONAL WORKS: WATERLOO TRAINING SCH. REHABILITATION: KITCHEN , WATER SUPPLY & FENCING**

ITEM NO	DESCRIPTION	UNIT	QTY	UNIT RATE (Le)	AMOUNT (Le)
2.00	<b><u>CONCRETE WORK</u></b>				
2.01	Reinforced in-situ concrete mix (1:2:4-19mm aggregate) in rectangular columns including reinforcement and formwork	m <sup>3</sup>	6		
2.02	Ditto in beams and lintels	m <sup>3</sup>	3.5		
2.03	<b><u>CONCRETE WORK CARRIED TO SUMMARY</u></b>				
3.00	<b><u>BLOCKWORK</u></b>				

3.01	Precast sandcrete (1:6) solid blocks bedded and jointed in cement mortar (1:6) in 200mm thick walls	m <sup>2</sup>	118		
3.03	<b><u>BLOCKWORK</u></b> <b><u>CARRIED TO SUMMARY</u></b>				
4.00	<b>ROOF</b>				
4.01	Corrugated coloured aluzinc sheets, 28 gauge x 2400mm long complete with all fixing accessories	m <sup>2</sup>	65		
4.02	600mm girth ridge/hip covering nailed to timber purlins to match roof covering	m	30		
4.03	<b><u>ROOFING</u></b> <b><u>CARRIED TO SUMMARY</u></b>				
5.00	<b>ROOF WOODWORK STRUCTURE</b>				
	Sawn hardwood timber treated with colored approve wood preservative, in				
5.01	50 x 150mm Ridge/Hip board	m	100		
5.02	50 x 100mm Rafters	m	200		
5.03	50 x 100mm Wall plates	m	70		
5.04	50mm x 100mm Ceiling joist	m	80		
5.05	50mm x 100mm King posts	m	10		
	Total of Roof Woodwork Structure B/d				

**WATERLOO TRAINING SCHOOL CORRECTIONAL CENTRE**

**ADDITIONAL WORKS: WATERLOO TRAINING SCH. REHABILITATION: KITCHEN , WATER SUPPLY & FENCING**

ITEM NO	DESCRIPTION	UNIT	QTY	UNIT RATE (Le)	AMOUNT (Le)
	Total of Roof woodwork structure b/f <b>ROOF WOODWORK STRUCTURE CONTINUED</b>				
5.06	50mm x 75mm Struts and braces	m	85		
5.07	50 x 75mm purlins	m	400		
5.08	50mm x 75mm Ceiling noggings	m	90		
	Wrought hardwood timber, treated with clear approved wood preservative in				
5.09	25 x 225mm (finished) fascia/verge board	m	50		
5.10	12mm x 38mm wide cover strips	m	200		

ROOF STRUCTURE					
5.11	WOODWORK CARRIED TO SUMMARY				
6	METAL DOORS AND WINDOWS				
	DOORS				
6.01	750mm wide x 2050mm high in two leaves metal panel door with its accessories and six turn door lock	No	1		
6.02	750mm wide x 2050mm high single metal panel door with its accessories and six turn door lock	No	4		
	WINDOWS				
6.03	Provide vent windows made of double 5/8" diameter iron rods inside 50mm x 50mm RHS hollow pipe at 76mm center to centre both vertically and horizontally direction with mosquito wire mesh Dimension 1.5m wide x 1.5m high. The grided-end pipes of 5/8" dia rod 200mm long enbeded in 1:2:4 - 12mm aggregate mix reinforced concrete all round the edges of the vent window	No	4		
6.04	Provide 500mm wide x 1000mm high in two halves metal panel window with 5/8" dia guard bars with heavy duty steel tower bolts ,hinge hasps and staples in store	No	1		
6.05	METAL DOORS AND WINDOWS CARRIED TO SUMMARY				

#### WATERLOO TRAINING SCHOOL CORRECTIONAL CENTRE

#### ADDITIONAL WORKS: WATERLOO TRAINING SCH. REHABILITATION: KITCHEN , WATER SUPPLY & FENCING

ITEM NO	DESCRIPTION	UNIT	QTY	UNIT RATE (LE)	AMOUNT (Le)
7.00	<b><u>PLUMBING INSTALLATION</u></b>				
	<u>Plumbing and cold water installations in UPVC pipes and fittings including joints and support in the running length to the following</u>				
7.01	W.C	No	1		
7.02	Shower unit	No	1		
7.03	W.B	No	1		
	<u>Appliance by approved manufacturer</u>				

7.04	Vitreous China W.C suit complete with 9litre flushing cistern with float ball valve flexible connector ring seat and cover	No	1		
7.05	425m x 535m vitreous china wash hand basin complete with fixing brackets, 1Nr 12m pillar tap plug, chain and stay with waste outgo	No	1		
7.06	Shower fittings complete with shower rose and floor waste	No	1		
7.07	150 x 150mm chromium plated soap holder plugged and screwed to blockwall	No	1		
7.08	450m x 600m polished mirror plugged and screwed to wall with mirror screws	No	1		
7.09	Toilet roll holder plugged and screwed to wall	No	1		
7.10	Towel rail; chromium plated, 600mm end brackets, plugged and screwed to blockwork	No	1		
7.11	<b><u>PLUMBING INSTALLATION</u></b> <b><u>CARRIED TO SUMMARY</u></b>				

### WATERLOO TRAINING SCHOOL CORRECTIONAL CENTRE

#### ADDITIONAL WORKS: WATERLOO TRAINING SCH. REHABILITATION: KITCHEN , WATER SUPPLY & FENCING

ITEM NO	DESCRIPTION	UNIT	QTY	UNIT RATE (LE)	AMOUNT (Le)
8.00	<b><u>ELECTRICAL INSTALLATION</u></b>				
	This work is the continuation of the electrical installation works on the main building for inmates and officers				
	Supply and erect 2.5mm <sup>2</sup> PVC insulated cables and PVC sheathed cables in concealed 20mm diameter PVC conduit in circuit wiring with all MK boxes and				
8.01	fittings from distribution board				
8.02	Ceiling light points	No	4		
8.03	Wall light point for security	No	4		
8.04	Switch socket outlet points	No	3		
	<b>FITTINGS AND ACCESSORIES</b>				
8.05	13 amps double switch socket outlet	No	4		
8.06	1x36W (1200) corrosion resistant florescent light with all fittings complete	No	3		
8.07	Low energy bulbs for toilets	No	2		

8.08	Supply and install the following boards, approved light fittings mains switch gear fuse etc and including 25mm <sup>2</sup> diameter concealed PVC conduits and wiring wiring Proteus TYPE B or similar approved 415/240 C 50HZ 100 Amp 8-way TP & N distribution board	No	1		
8.09	<b>ELECTRICAL INSTALLATION CARRIED TO SUMMARY</b>				
9.00	<b><u>FLOOR, WALL AND CEILING FINISHINGS</u></b>				
9.01	12mm thick cement and sand (1:4) rendering on walls (Internally and Externally)	m <sup>2</sup>	65		
9.02	31mm thick cement and sand (1:3) screeded bed laid level on concrete floor to receive ceramic floor tiles in kitchen and toilet	m <sup>2</sup>	36		
	<b>FLOOR, WALLS, CEILING FINISHING b/d</b>				

#### WATERLOO TRAINING SCHOOL CORRECTIONAL CENTRE

#### ADDITIONAL WORKS: WATERLOO TRAINING SCH. REHABILITATION: KITCHEN , WATER SUPPLY & FENCING

ITEM NO	DESCRIPTION	UNIT	QTY	UNIT RATE (LE)	AMOUNT (Le)
	<b><u>FLOOR, WALLS, FINISHING B/F</u></b>				
	<b><u>Tile Finishings</u></b>				
9.03	Non slip Porcelain floor tiles butt jointed straight on the the sides 450mm x 450 x 10mm thick laid level on cement and sand bedding in kitchen floor and toilet	m <sup>2</sup>	36		
9.04	6mm thick glazed wall tiles fixed vertically on rendered backing to walls in toilet	m <sup>2</sup>	28		
9.05	100mm wide ceramic skirting fixed vertically to walls	m <sup>2</sup>	50		
9.06	3/4mm Ceiling hard board nailed to ceiling timber	m <sup>2</sup>	56		
9.07	50mm x 50mm treated hardwood noggins to ceiling	m	30		
9.08	<b>FLOORS, WALLS, CEILING FINISHINGS CARRIED TO SUMMARY</b>				
10.0	<b><u>PAINTING AND DECORATING</u></b>				
10.01	Prepare and apply one coat sealer and two coats emulsion paint on rendered walls (Internally and Externally)	m <sup>2</sup>	236		

10.02	Ditto to soffit of hardboard ceiling	m <sup>2</sup>	45		
10.03	Prepare and apply one undercoat and two coats gloss paint on wood and metal doors and windows	m <sup>2</sup>	16		
10.04	Ditto on frames not exceeding 300mm grith	m <sup>2</sup>	2		
10.05	Ditto but on fascia board	m <sup>2</sup>	9		
10.06	<b><u>PAINTING AND DECORATING</u></b> <b><u>CARRIED TO SUMMARY</u></b>				
11	<b><u>COMPOSITE ITEM</u></b>				
11.01	<b><u>Kitchen Worktop</u></b> Worktop in with wash hand basin and ceramic tile finish comprising 100mm thick precast block as support walls and partitions, 100mm thick reinforced concrete slab with timber cupboard beneath basin and wall mounted above basin with plywood doors, timber frames, complete with lock, knob, hinges and painting overall size 7000mm long x 600mm wide x 900mm high	item	1		
11.02	<b><u>KITCHEN WORKTOP</u></b> carrird to summary				

### WATERLOO TRAINING SCHOOL CORRECTIONAL CENTRE

#### ADDITIONAL WORKS: WATERLOO TRAINING SCH. REHABILITATION: KITCHEN , WATER SUPPLY & FENCING

ITEM NO	DESCRIPTION	UNIT	QTY	UNIT RATE (Le)	AMOUNT (Le)
12	<b><u>EXTERNAL WORKS</u></b>				
	<b><u>Aprons/Surface Water Drain</u></b>				
12.01	Excavate surface to remove top soil staring at ground level and maximum depth not exceeding 750mm and deposit excavated materials in spoil heaps on site	m <sup>3</sup>	17		
12.02	150mm thick laterite hardcore material laid to slight falls to receive concrete aprons	m <sup>2</sup>	30		
12.03	75mm thick plain in-situ concrete mix (1:3:6 -37mm aggregate) in aprons complete with formwork to edges	m <sup>3</sup>	3		
12.04	600mm x 600mm x 50mm thick pre-cast reinforced concrete cover slabs over drains to entrance/exit of building	No	3		

12.05	Standard U section open drain channels set 150mm above ground complete with excavation and earthworks and laid to falls on and including 100mm thick concrete bed on sand base 375mm x 450mm deep concrete channels	m <sup>3</sup>	8		
12.06	<b>EXTERNAL WORKS CARRIED TO SUMMARY</b>				

### WATERLOO TRAINING SCHOOL CORRECTIONAL CENTRE

#### ADDITIONAL WORKS: WATERLOO TRAINING SCH. REHABILITATION: KITCHEN , WATER SUPPLY & FENCING

ITEM NO	DESCRIPTION	UNIT	QTY	UNIT RATE (Le)	AMOUNT (Le)
	<b>SUMMARY OF KITCHEN COST</b>				
1.00	SUBSTRUCTURE				
2.00	CONCRETE WORKS				
3.00	BLOCKWORK				
4.00	ROOFING				
5.00	ROOFING WOODWORK STRUCTURE				
6.00	METAL DOORS AND WINDOWS				
7.00	PLUMBING INSTALLATION				
8.00	ELECTRICAL INSTALLATION				
9.00	FLOOR, WALL, AND CEILING FINISHINGS				
10.00	PAINTING & DECORATION				
11.00	COMPOSITE ITEM				
12.00	EXTERNAL WORKS				
13.00	TOTAL KITCHEN CONSTRUCTION				
13.01	CONTINGENCY 5%				



13.02	TOTAL KITCHEN CONSTRUCTION COST CARRIED TO SUMMARY				

### WATERLOO TRAINING SCHOOL CORRECTIONAL CENTRE

#### ADDITIONAL WORKS: WATERLOO TRAINING SCH. REHABILITATION: KITCHEN , WATER SUPPLY & FENCING

ITEM NO	DESCRIPTION	UNIT	QTY	UNIT RATE (Le)	AMOUNT (Le)
14.00	<b>WATER SUPPLY</b> CONSTRUCT WATER TOWER OF REINFORCED CONCRETE, PROVIDE 10,000 LITRES PLASTIC WATER TANK AND DRILL BOREHOLE AND PROVIDE PIPE NETWORK FROM BORE HOLE TO WATER TANK PROVIDE SUBMERSIBLE PUMP & GENERATOR TO PUMP THE WATER FROM THE BOREHOLE TO THE WATER TANK ON THE REINFORCED CONCRETE WATER TOWER				
14.01	Drilling of Borehole including pipes and connection accessories from Borehole to water tank	item	1		
14.02	Provide high pressure submersive water pump (2.5HP) with the necessary fittings to supply water from the borehole the water tank on top of the concrete water tower for onwards distributions to kitchen, staff offices and cells	item	1		
14.03	Provide materials and construct a reinforced concrete water tower 2.4m x 2.4m by 6m high to the take the weight of 10,000 litres water stored in a millia PVC tank	item	1		
14.04	Provide and install 10,000 litres black millia water storage tank on to of the reinforced concrete water tank constructed	item	1		
14.05	Provide high pressured water pipes and fittings to supply water through gravity from the Milla water tank on top of the reinforced concrete water tower to cells, kitchen, and staff offices	item	1		
14.06	Provide 5 KVA diesel electrical generator to be with the submersible pump to send water to the water tank	item	1		
14.06	TOTAL WATER SUPPLY WORKS				
14.07	CONTINGENCY 5%				
14.08	<b>WATER SUPPLY CARRIEDB TO SUMMARY</b>				

**WATERLOO TRAINING SCHOOL CORRECTIONAL CENTRE**

**ADDITIONAL WORKS: WATERLOO TRAINING SCH. REHABILITATION: KITCHEN , WATER SUPPLY & FENCING**

ITEM NO	DESCRIPTION	UNIT	QTY	UNIT RATE (LE)	AMOUNT (Le)
15.00	<b>SECURITY FENCE CONSTRUCTION</b>				
15.01	Excavate trenches to receive foundation starting from strip level to a maximum depth of 1000mm	m <sup>3</sup>	191		
	<u>Fill</u>				
15.02	Fill the excavated area and compact round the blockwork and columns up to grand level	m <sup>3</sup>	88		
	<u>Concrete work in Foundation &amp; Columns</u>				
15.03	Plain insitu concrete mix (1:3:6 - 19mm dia aggregates as strip foundation	m <sup>3</sup>	46		
15.04	Reinforced concrete (1:2:4 -19mm dia aggregates) in columns and column bases	m <sup>3</sup>	68		
15.05	Crossed reinforced concrete beam midway of fence height (1:2:4 - 19mm dia aggregates) with cross-section of 300mm x300mm including 100mm thick spread on top of the fence blockwork	m <sup>3</sup>	34		
	<u>Reinforcement</u>				
15.06	12mm dia rods in column and column bases	tonne	3.2		
15.07	12mm dia rod in cross beam	tonne	1.5		
15.08	6mm dia rods as stirrups in columns, cross-beam and coping at the top of fence	tonne	1.4		
	<u>Formwork</u>				
15.09	Formwork in column and column bases	m <sup>2</sup>	824		
15.10	Formwork in cross-beam	m <sup>2</sup>	200		
15.11	Blockwork in Fence: Provide sancrete blocks made of 1:8 mix and install with 1:6 mix from strip foundation to height 5m above natural ground level	m <sup>2</sup>	1,613		
<b>FENCE WORK B/D</b>					

**WATERLOO TRAINING SCHOOL CORRECTIONAL CENTRE**

**ADDITIONAL WORKS: WATERLOO TRAINING SCH. REHABILITATION: KITCHEN , WATER SUPPLY & FENCING**

ITEM NO	DESCRIPTION	UNIT	QTY	UNIT RATE (LE)	AMOUNT (Le)
	<b>FENCE WORK CONTINUED</b>				
	Fence work b/f				
	<u>Gate</u>				
15.12	Provide and install steel plate gate 6m wide in two halves with all the accessories ( tower bolts, hinges , locks to security specification) as specified in the drawings and directed by the supervising engineer	Item	1		
	<u>Security razor wire installation</u>				
15.13	Provide Y shapes 16mm diameter rods as shown on the drawing and bed them in each column to anchor the rezor blade wire	No	109		
15.14	Provide 450mm diameter razor blade security wire and install on top of fence wall using the 16mm Y shaped rods as anchor	m	324		
15.15	SECURITY FENCE CONSTRUCTION WORKS				
15.16	CONTINGENCY 5%				
15.17	TOTAL FENCE CONSTRUCTION WORK carried to summary				

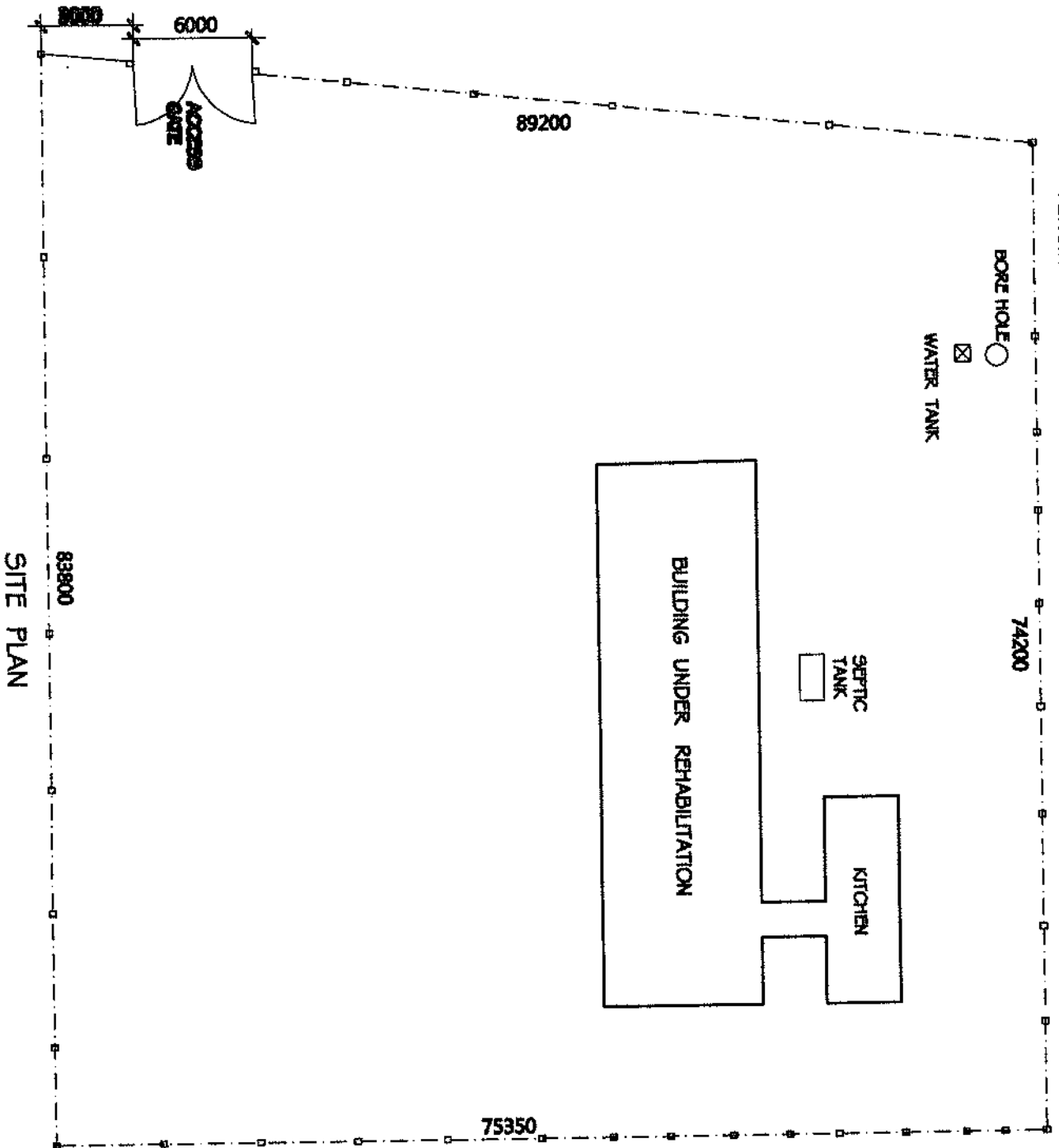
**WATERLOO TRAINING SCHOOL CORRECTIONAL CENTRE**

**ADDITIONAL WORKS: WATERLOO TRAINING SCH. REHABILITATION: KITCHEN , WATER SUPPLY & FENCING**

ITEM NO	DESCRIPTION	UNIT	QTY	UNIT RATE (LE)	AMOUNT (Le)
16.00	SUMMARY				
16.01	KITCHEN CONSTRUCTION				
16.02	WATER SUPPLY SYSTEM				

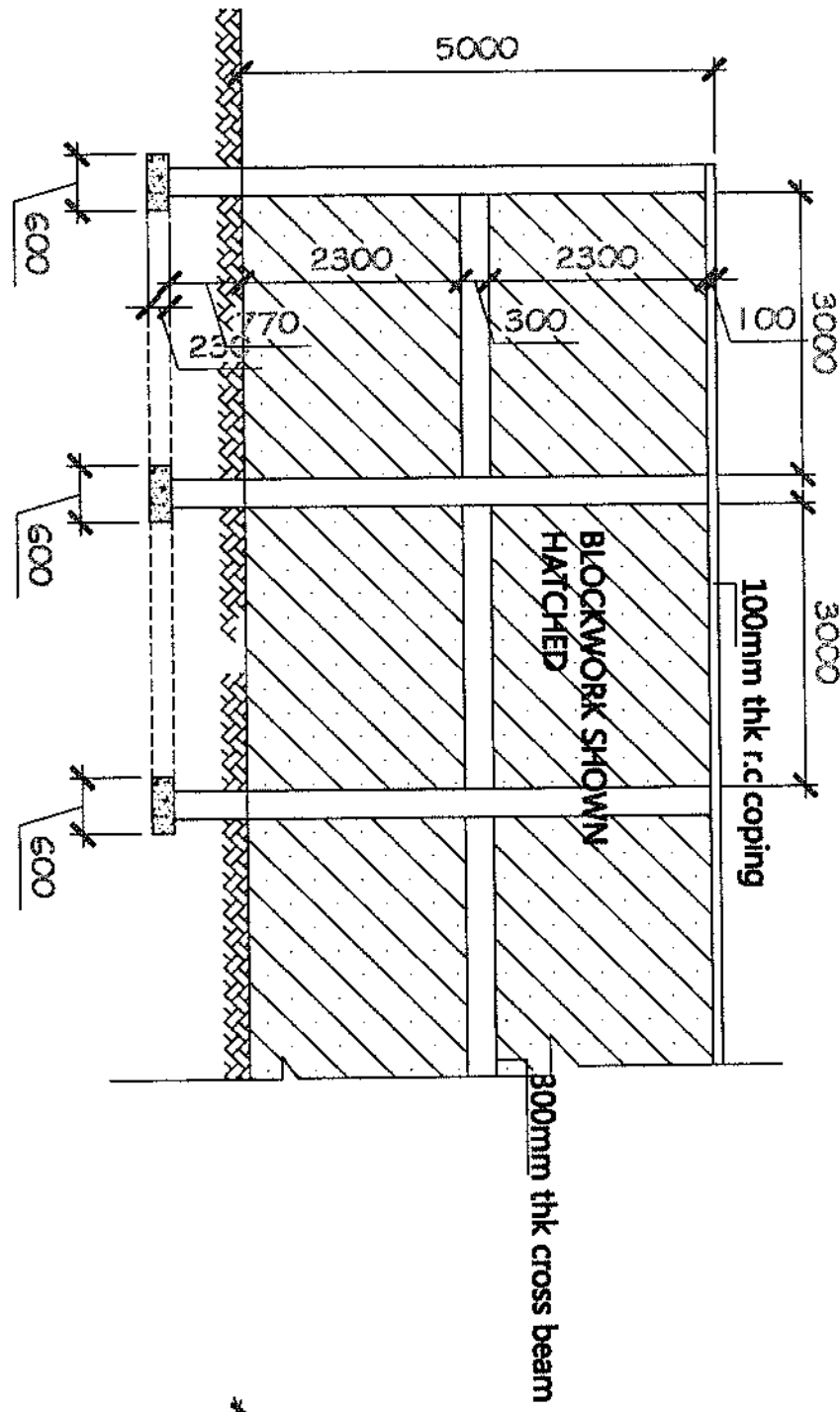
16.03	SECURITY FENCING				
16.04	TOTAL COSTS FOR ADDITIONAL WORKS FOR WATERLOO TRAINING SCHOOL:				

FENCING OF INMATE BLOCK UNDER REHABILITATION AT WATERLOO TRAINING SCHOOL

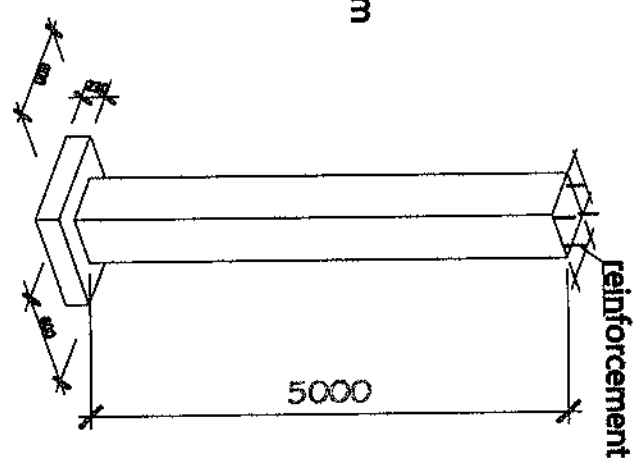


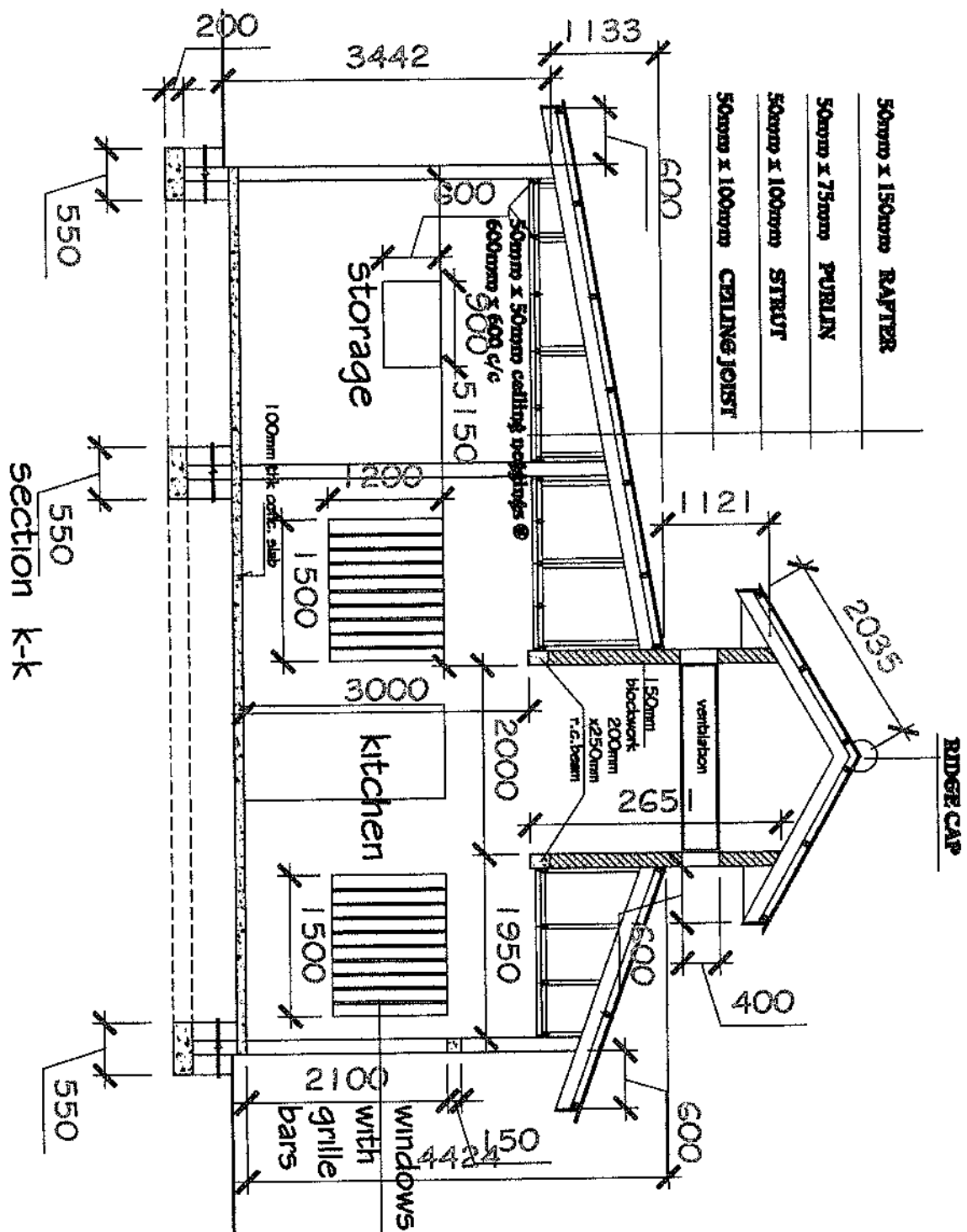
SITE PLAN

# WATERLOO TRAINING SCHOOL FENCING

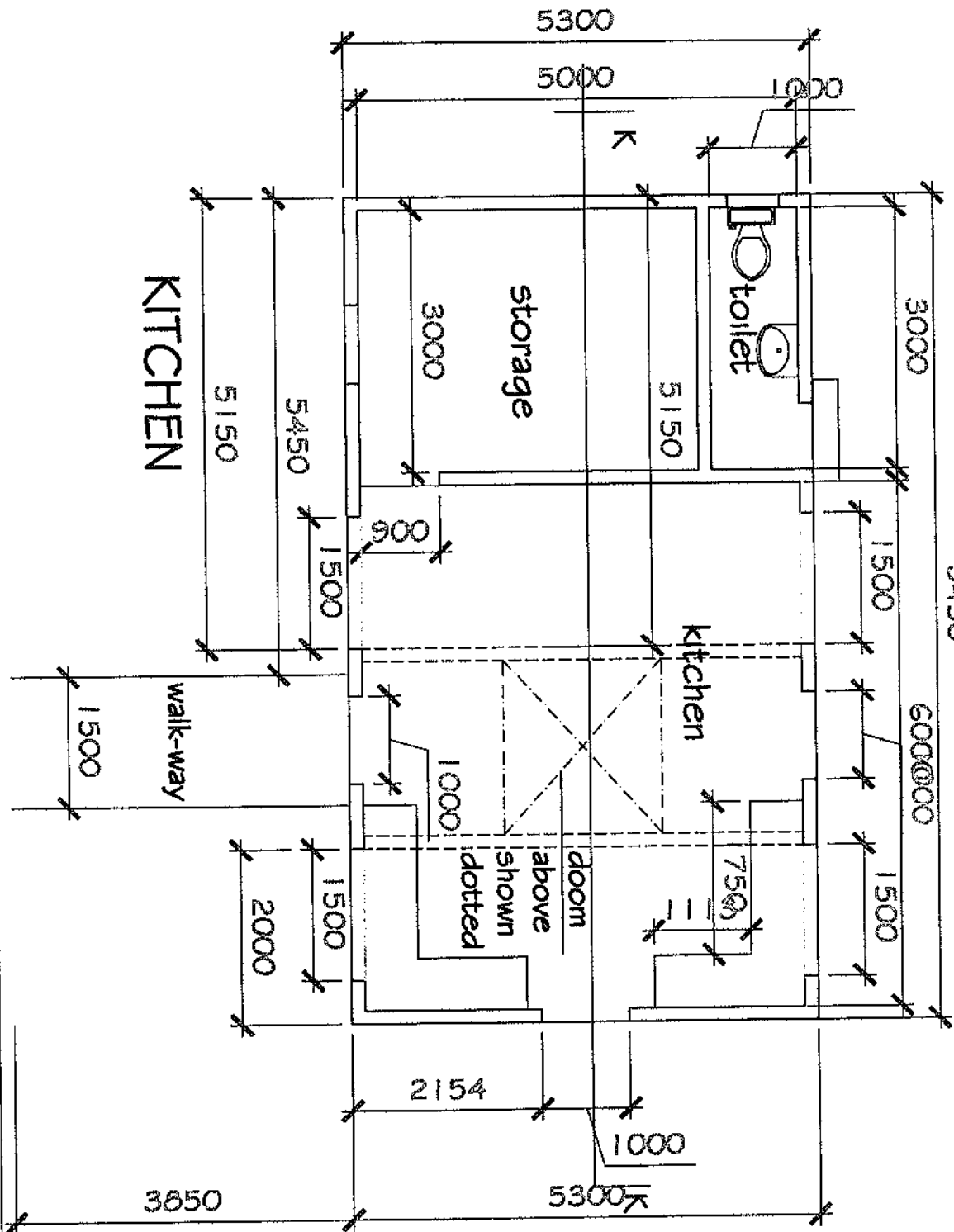


COLUMNS & BEAM DETAIL ALONG THE FENCE LINE

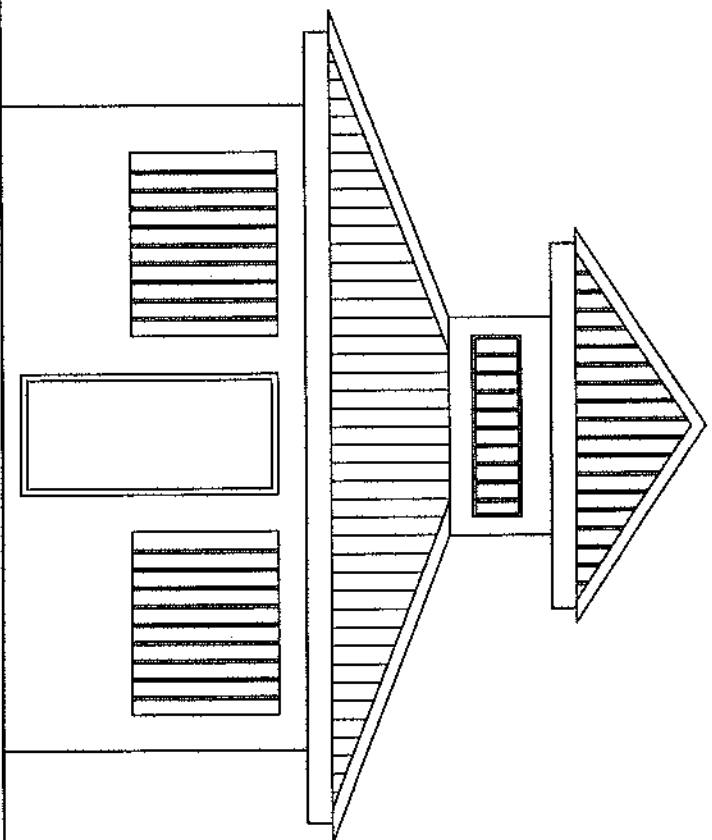




54-5101







side elevation

# TYPICAL WATER TANK TOWER DETAIL

