

**PRESIDENT'S OFFICE**  
**REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT**



**BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF  
INTENSIVE CARE UNIT BUILDING**

November, 2021

# GENERAL SUMMARY

GENERAL DESCRIPTIONS	AMOUNT
BILL No 01 - PRELIMINARIES .....	
BILL No 02 - SPECIFICATIONS .....	
BILL No 03 - MEASURED WORKS {ICU BLOCK} .....	
BILL No 04 - PRIME COSTS AND PROVISIONAL SUMS	
<b>SUB-TOTAL</b>	
<b><u>INSURANCE CLAUSES:</u></b>	
<ul style="list-style-type: none"> <li>. Clause 13 - Contractor to maintain in joint names of the Employer and Contractor, Insurance Against Loss and Damages to the works by fire, earthquakes, etc.</li> <li>. Clause 54 - Performance Security</li> </ul>	
SUB-TOTAL ----- (1)	
<u>ADD:</u> 18% Value Added Tax (VAT) -----	
SUB-TOTAL ----- (2)	
<b>AMOUNT CARRIED TO FORM OF TENDER TShs.</b>	

Signed by ..... For and on behalf of .....

In the capacity of ..... made this ..... day of ..... 2021

ITEM	DESCRIPTIONS OF WORKS	TSHS.
	<p><b><u>DESCRIPTION OF SITE:</u></b></p> <p>A. The site is located District/Councils WITHIN TANZANIA COUNTRY</p> <p>B. The Contractor shall provide and maintain any necessary temporary roads; sleeper tracks; and temporary cross over during the execution of the works; clear away the same at completion and reinstate and make good any work disturbed to the satisfaction of the Local Authority and the Employer.</p> <p>C. The Contractor shall be deemed to have visited the site and satisfied himself as to:-</p> <ul style="list-style-type: none"> <li>i) The nature of the site</li> <li>ii) The amount of bush; rubbish or debris to be cleared away before commencement.</li> <li>iii) The nature of proximity and size of adjoining building and property.</li> <li>iv) The nature of existing communications by roads or otherwise.</li> <li>v) The means of access to the site.</li> <li>vi) The availability of land for the erection and positioning of all temporary structures; plant and materials necessary for the execution of the works.</li> <li>vii) The source of adequate supplies of labour, plant and materials for the completion of the works.</li> </ul> <p>D. If the Contractor wishes to execute trial holes before submitting his tender; he may do so in positions to be agreed with the Employer and at his sole expenses; including the reinstatement of the ground if so required by the Employer.</p> <p>E. The whole of the site will be available to the Contractor immediately upon the issue of the order to commence.</p> <p>F. Any sand; aggregate to or other building materials shall be the property of the Employer and shall not be used in the construction of the works without the written consent of the Employer.</p> <p>G. The Contractor is to satisfy himself as to any difficulties that the site may present and to make all necessary enquiries to any point which in his opinion requires further elucidation as no claim for lack of information on any of the above will be entertained.</p>	
	<b>TO COLLECTION TSHS.</b>	

ITEM	DESCRIPTIONS OF WORKS	TSHS.
A.	<p><b><u>DESCRIPTION OF WORKS:</u></b>                      The work within this contract comprises of: <b>Substructure, Frames ,Walls,ramp,Stairs, Roof, Doors, Windows, Service Engineering, Finishings, Decorations and External Works on Construction of Intensive Care Unit Building</b></p>	
B.	<p><b><u>SINGULAR AND PLURAL</u></b>                      Word importing the singular only also includes the plural.</p>	
C.	<p><b><u>LAW GOVERNING CONTRACT</u></b>                      The contract shall be in all respect to be constructed and operated in accordance with the law of Tanzania.</p>	
D.	<p><b><u>METHOD OF MEASUREMENT:</u></b>                      These Bills of Quantities have been prepared in accordance with the standard method of measurement of Building Works for East Africa first edition (metric) published by the architectural association of Kenya chapter of Quantity Surveyor Act; 1970; and applied equally to the measurement of proposed works and of variations by Quantity Surveyors.</p>	
E.	<p>Variation of 'Builder's Work' will be subject to the same amended rates of percentage of adjustment.</p>	
F.	<p><b><u>DEFINITIONS OF ABBREVIATIONS:</u></b>                      The Contractor should take due notice of the under mentioned abbreviations:-                      mm - millimetres                      cm - centimetres                      M<sup>3</sup> - cubic meters                      M<sup>2</sup> - square metres                      M - linear metres                      No - Number                      Kg - Kilograms                      P.C - Prime cost</p>	
G.	<p>The Contractor shall allow for keeping all records appertaining to the work and shall keep on the site a daily diary recording weather conditions; temperature; visitors to the site, etc.</p>	
H.	<p>The Contractor is to supply to the Employer such information as he may be required in connection with the work; including statement showing the number of men employed in all trades daily; and delivery notes (stating the name of the project) for all materials delivered to the site.</p>	
<b>TO COLLECTION TSHS.</b>		

ITEM	DESCRIPTIONS OF WORKS	TSHS.
<p>A.</p> <p>B.</p> <p>C.</p> <p>D.</p> <p>E.</p> <p>F.</p> <p>G.</p>	<p><b><u>EMPLOYER’S INSPECTION:</u></b></p> <p>No work shall be covered up until it is inspected and approved by the Employer.</p> <p>The Employer may at any time before the end of defects liability period or during any extended time where any defect are being made good, instruct the Contractor to open up; pull down; test or expose any part of the works in order to satisfy himself as to the quality of materials or workmanship used. If in the opinion of the Employer such parts are not in strict accordance with the contract documents he may order the Contractor to remove all defective work, replace with approved materials and reinstate any such part of the works and any other disturbed at his own expenses and to the entire satisfaction of the Employer. If any such parts of the works are found to be in accordance with the contract documents the Contractor will be reimbursed with the General conditions of contract.</p> <p><b><u>DISTURBANCE OR NUISANCE:</u></b></p> <p>The Contractor shall allow for taking all necessary precautions in the order and execution of the work so as to avoid causing disturbance or nuisance to the occupants of existing buildings and those adjacent to the works and for complying with the Employer’s instructions in this respect. The Contractor shall be in tort for such nuisance and shednets.</p> <p><b><u>TRESPASS, DAMAGE AND CARE OF WORKS:</u></b></p> <p>The Contractor shall prevent any trespass on the opinion adjoining property and he shall take all reasonable precautions during the progress of the contract to prevent any damage to the adjoining property or plant or private roadways and to prevent material; plant; rubbish and debris; etc. collecting on the adjoining property or roadways.</p> <p>Should the Contractor wish to erect scaffolding or to make use of adjoining property; he shall obtain prior permission from the Employer and clear away at a completion of his work or when directed and make good any damage to his satisfaction. Except as provided for in the General conditions of contract; the Contractor; shall be held responsible for the care of works generally until their completion; including all works executed and materials deposited on the site by himself or his Sub-Contractors or supplier together with all risks arising from weather; carelessness of operatives; damages and he shall make good all such damage or loss at his own expense</p> <p>The Contractor shall be responsible for the protection of any adjacent building; boundary walls; fences; services either overhead or underground and for the making good of or paying for all damage thereto; should such be caused in the course of building operations.</p> <p>The Contractor shall allow for making good all damage to the road; kerbs; surface water channels; etc. occasioned by heavy traffic; delivery of materials and building operations generally to the entire satisfaction of the Employer and shall be responsible for observing any by law of Local Authority regarding keeping the road free from mud; filth dirt; etc, out of the execution of the works.</p>	<p>-</p>
<b>TO COLLECTION TSHS.</b>		

ITEM	DESCRIPTIONS OF WORKS	TSHS.
<p>A.</p> <p>B.</p> <p>C.</p> <p>D.</p> <p>E.</p> <p>F.</p> <p>G.</p> <p>H.</p> <p>J.</p>	<p><b><u>PROTECTION FROM THE WEATHER:</u></b></p> <p>The Contractor shall allow for covering up and protecting all new work from injury by weather or any other cause. Any damage; loss or expense caused by non-compliance with the clause shall be at sole risk of the contract.</p> <p><b><u>TOOLS, PLANT AND SCAFFOLDING:</u></b></p> <p>Provide all necessary cranes, hoists, concrete mixer and other plant including ladder, staging, access gangways tackle, tarpaulins, tools, moulds templates and other requisites necessary for proper executing, adapting from time to time as may be necessary and maintain all plant and equipment during the course of the contract.</p> <p>The Contractor shall allow for providing adapting from time to time as may be necessary and maintaining all scaffolding scaffold boards and temporary staging, etc, necessary for the execution of the works.</p> <p>The Contractor is to provide everything necessary for the proper execution of the works according to the true intent and meaning of the drawings; etc. whether the same may or may not be particularly shown on the drawings; specifications provided that the same is reasonably to be inferred there from.</p> <p><b><u>SITE ACCOMODATION:</u></b></p> <p>The Contractor shall provide and maintain any necessary temporary office accommodation required by himself and his Sub-Contractors suitably equipped with desks; chairs; drawing boards; and electric lighting and telephone.</p> <p>The Contractor shall provide and maintain for his workers latrine facilities washing and drinking water, first aid equipment's and shelters equipped with tables; benches and checking facilities all to the reasonable satisfaction of the workers and approved by the Employer and Health Authorities.</p> <p>The Contractor shall provide and maintain any temporary storage, shed or buildings which in his opinion are necessary for himself and his Sub-Contractors for the execution of the works.</p> <p><b><u>WATER FOR THE WORKS</u></b></p> <p>The Contractor shall allow for all necessary clean fresh water for the works, including that required by Sub-Contractors and for any temporary plumbing metres and storage facilities and pay all charges in connection therewith and clear away on completion and make good works disturbed.</p> <p>The Contractor shall allow for providing and maintaining a temporary electricity supply for the works including that required by Sub-Contractor and for any meters and fittings to give artificial lighting and power necessary for the execution of the works and pay all charges, in connection and make good all works disturbed.</p>	
<b>TO COLLECTION TSHS.</b>		

ITEM	DESCRIPTIONS OF WORKS	TSHS.
<p>A.</p> <p>B.</p> <p>C.</p> <p>D.</p> <p>E.</p> <p>F.</p> <p>G.</p>	<p><b><u>WATCHING AND LIGHTING:</u></b></p> <p>The Contractor shall allow for providing and maintaining any barriers; hoarding; watching; lighting which must comply with the By-laws of requirements of the Local Authority and polycy regulations and the Contractor must give all requiste policies to those authorities and provide everything necessary to protect the general public workmen; plant; materials and the whole of the works</p> <p>No advertisement will be permitted without the written authority of the Employer.</p> <p><b><u>SIGN BOARD:</u></b></p> <p>The Contractor shall provide and erect a large sized sign board on the site showing the title of the contract, the name and address of the Employer; consultant, nominated suppliers and Sub-Contractor and such information as may be required by the Employer who shall provide the sign layout and colours of the Board. The board shall be repainted when necessary and removed when no longer required.</p> <p><b><u>PROTECTION:</u></b></p> <p>The Contractor is required to protect works section until completion.</p> <p><b><u>TESTING:</u></b></p> <p>Allow for testing all the installations required to be tested and provide everything necessary for this purpose and leave the whole in perfect working order to the satisfaction of the Employer and Local Authority.</p> <p><b><u>REMOVING RUBBISH AND CLEANING:</u></b></p> <p>The Contractor shall make good all defects and injuries to the works, clean down external faces wash off stains to face work, clean off marks mortar and cement, clean windows inside and out, scrub floors, flush drains run and leave all parts of the works clean, free from rubbish and waste materials and perfect on completion.</p> <p>The Contractor shall clean and cart away all rubbish as it accumulate and keep the works in orderly condition to the satisfaction of the Employer</p>	
	<p><b>TO COLLECTION</b></p>	
	<p><b><u>COLLECTION</u></b></p> <p><b>Page No. 8/1/1</b></p> <p><b>Page No. 8/1/2</b></p> <p><b>Page No. 8/1/3</b></p> <p><b>Page No. 8/1/4</b></p> <p><b>Page No. 8/1/5</b></p>	
<p><b>BILL No. 01- PRELIMINARIES CARRIED TO GENERAL SUMMARY</b></p>		

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
<p><b>BILL NR. 3- MEASURED WORKS</b></p> <p><b>ELEMENT NO. 1 - SUBSTRUCTURE</b></p> <p><b><u>EXCAVATION AND EARTHWORK</u></b></p> <p><b>A</b> Site clearance of small trees,shrubs and the like including grubbing up roots</p> <p style="text-align: right;">436      m<sup>2</sup></p> <p><b><u>Excavating</u></b></p> <p><b>B</b> Surfaces to reduce levels average 150mm deep vegetable soil and remove from site</p> <p style="text-align: right;">436      m<sup>2</sup></p> <p><b><u>Trenches in natural ground; to receive foundations; starting from reduced level</u></b></p> <p><b>C</b> Not exceeding 1.50 meters deep</p> <p style="text-align: right;">99      m<sup>3</sup></p> <p><b><u>Pits; to receive foundations; starting from stripped level</u></b></p> <p><b>D</b> Not exceeding 1.50 meters deep</p> <p style="text-align: right;">13      m<sup>3</sup>                      -                      -</p> <p><b>E</b> Extra over all kinds of excavations irrespective of depth for breaking up rock</p> <p style="text-align: right;">1      m<sup>3</sup></p> <p><b>F</b> Backfilling depositing and compacting in layers maximum 150mm thick imported materials around foundation</p> <p style="text-align: right;">48      m<sup>3</sup></p> <p><b>G</b> Remove away from the site surplus excavated materials</p> <p style="text-align: right;">64      m<sup>3</sup></p> <p><b><u>Disposal of water</u></b></p> <p><b>H</b> Keeping all excavation free from all water by pumping,bailing or others means necessary including spring or running water</p> <p style="text-align: right;">Item</p> <p><b><u>Plunking and Strutting</u></b></p> <p><b>J</b> Allow for provision and subsequent removal for plunking and strutting to uphold and maintain all forces of excavation</p> <p style="text-align: right;">Item</p>					
<p><b><u>To Collection</u></b></p>					



ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b><u>Filling</u></b>				
A	Sand filling in making up levels; average 200 mm thick	41	m <sup>3</sup>		
	<b><u>Hardcore and the like</u></b>				
B	150 mm thick beds; levelled compacted and blinded to receive damp proof membrane	325	m <sup>2</sup>		
	<b><u>Soil Sterilization</u></b>				
C	Chemical anti termite treatment around the building plinth	99	m		
D	Aldrin' solution applied at a rate of 7 litres per square metre	325	m <sup>2</sup>		
	<b><u>Concrete works</u></b>				
	<b><u>Insitu concrete plain grade 10' mix ratio (1:4:8)</u></b>				
E	50mm Thick blinding	8	m <sup>2</sup>		
	<b><u>Plain in-situ concrete; grade 15N/sq.mm nominal mix (1:3:6)</u></b>				
F	100mm Bed	325	m <sup>2</sup>		
G	Ditto to Ramp	30	m <sup>3</sup>		
H	Steps	1	m <sup>3</sup>		
J	Strip foundation	18	m <sup>3</sup>		
	<b><u>Vibrated Reinforced in-situ concrete; grade 20 nominal mix (1:2:4)</u></b>				
K	Column bases	4	m <sup>3</sup>		
L	Plinth beam	9	m <sup>3</sup>		
M	Columns	1	m <sup>3</sup>		
	<b><u>Reinforcement; bars; BS 4449:1969 hot rolled round high yield steel straight or bent</u></b>				
N	16mm Diameter bars	508	kg		
P	12mm Diameter bars	280	kg		
Q	8mm Diameter bars	312	kg		
<b>To Collection</b>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b><u>Sawn formwork to</u></b>				
A	Vertical sides of columns;	8	m <sup>2</sup>		
B	Vertical sides of plith beam	78	m <sup>2</sup>		
C	Vertical edge of bed, and the like over 75mm but not exceeding 150mm high	77	m		
D	Ditto to Ramp edge ditto	13	m		
E	Ditto to Steps 150mm high	12	m		
	<b><u>Walling</u></b>				
	<u>Concrete block B.S 2028 type A; 3.5N per square millimetre; solid in cement sand mortar (1:4)</u>				
F	230mm Thick wall	101	m <sup>2</sup>		
	<b><u>Damp-proof Courses (DPC)</u></b>				
G	230mm Wide Hessian based bitumen laid horizontally on solid blockwork	131	m		
	<b><u>Damp-proof Membrane (DPM)</u></b>				
H	500Gauge polythene sheet laying on blinded hardcore with 150mm sides and end laps	325	m <sup>2</sup>		
	<b><u>Sundries</u></b>				
J	12mm Cement and sand (1:3) external rendering to concrete block wall	50	m <sup>2</sup>		
K	Prepare and apply two coats of black bituminous paint on rendered or concrete surfaces, externally	50	m <sup>2</sup>		
	<b><u>To Collection</u></b>				
	<b><u>COLLECTION</u></b>				
	Page 2/1/1				
	Page 2/1/2				
	Page 2/1/3				
	<b><u>ELEMENT NO. 1 - SUBSTRUCTURE</u></b>				
	<b><u>CARRIED TO SUMMARY</u></b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
<b>ELEMENT NO. 2 - FRAME</b>					
<u>Concrete work</u>					
<u>Vibrated Reinforced in-situ concrete; grade 20 nominal mix (1:2:4)</u>					
A	Beams; horizontal or sloping not exceeding 15 degrees from horizontal	11	m <sup>3</sup>		
B	Columns	3	m <sup>3</sup>		
C	150mm thick suspended roof slab	10	m <sup>2</sup>		
D	150mm thick suspended roof gutter	65	m <sup>2</sup>		
E	150mm thick suspended gutter side walls	80	m <sup>2</sup>		
<u>Reinforcement; bars; BS 4449:1969 hot rolled round high yield steel straight or bent</u>					
F	16mm Diameter bars	200	kg		
G	12mm Diameter bars	1720	kg		
H	8mm Diameter bars	335	kg		
<u>Sawn formwork to.</u>					
J	Vertical sides of column	25	m <sup>2</sup>		
K	Horizontal sides and soffits of beams	119	m <sup>2</sup>		
L	To soffits of roof slab	10	m <sup>2</sup>		
M	To soffits of gutter	64	m <sup>2</sup>		
N	To sides of walls	160	m <sup>2</sup>		
<b><u>ELEMENT NO. 2 - FRAME CARRIED TO SUMMARY</u></b>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
<b>ELEMENT NO4: WALLS</b>					
<b><u>Block Work</u></b>					
<b><u>Internal wall</u></b>					
<u>Solid Concrete block B.S 2028 type A; with strength 5MPa bedded and jointed in cement sand mortar(1:4)</u>					
A	150mm Wall	181	m <sup>2</sup>		
<b><u>External wall</u></b>					
<u>Solid Concrete block B.S 2028 type A; abd above.</u>					
B	230mm Wall	265	m <sup>2</sup>		
C	250x100mm window cill	3	m		
<b><u>Metal Work/Partitions Works</u></b>					
<u>Powder coated 'Malt charcoal glazed Aluminium partitions to Architects design and approval, neoprene gaskets for bedding nylon brusher at head meeting stiles,and rails and stainless steel screw approved by Architect complete with 6mm single clear glass 1800mm high up to ceiling level after 1000mm high blockwall from floor finished level including bedding in approved compound and fixing to concrete background</u>					
D	Partition with frame filled inwith 6mm glass as per detailed Architeral drawings with 3Nr.of doormeasured separately (m	22	m <sup>2</sup>		
<u>Powder Coated 'Matt Charcoal" aluminium doors to pattern neoprene gaskets for bedding nylon brusher at head meeting stiles, stainless steel screws and all necessary ironmongery,to approval of Architect including bedding in approved compound in concrete background</u>					
E	40mm Thick door size 1200 x 2100mm high double swing door divided into two panels comprising of 40 x 70mm stiles , top, middle and bottom rail, lower panel filled in with and including 6mm thick MDF board 1000mm high infill, upper panell filled in with and including 6mm thick clear glass, complete with overhead door closer and other necessary ironmongery	3	No		
<b><u>ELEMENT NO4: WALLS CARRIED TO SUMMARY</u></b>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO 5: DOORS</b>				
	<b><u>Frames Hardwood materials</u></b>				
A	50x150mm Frame with one labour	120	m		
B	50x150mm Frame with one labour	15	m		
C	25 x 25mm Glazing beads	42	m		
	<b>Prime Quality Hardwood Paneled Doors</b>				
D	40mm Thick paneled double door size 1500 x 2100mm high comprising of 40x125mm rebated stiles, 40x125mm rebated top, middle and intermediate rail; 40x200mm bottom rail; divided into five panels; four equal vertical panels two on top and two on bottom each size 218x550mm; and a horizontal panel in between size 560x300mm; all panels filled in with and including 40mm thick hardwood boards.	2	No		
E	Ditto size 1200x2100mm high Double door	1	No		
F	Ditto size 900x2100mm high	2	No		
	<b>Flush door</b>				
G	Doors: formica plastic laminated facing both sides cherry Mkongo or Mninga or equal aproved hardwood lipping to all edges; solid core flush door; formic; storm grey with hardwood edge strip; 45mm thick MDF doors overall size 1500 x 2100mm ,double swing door	1	Nr.		
H	Ditto but size 900x2100mm Single leaf	12	Nr.		
J	Ditto with size 800x2100mm Single leaf	2	Nr.		
	<u>Ironmongery; supply and fix the following as manufactured by UNION."or other equal and approved to hardwood with matching screws"</u>				
K	150mm Brass butt hinges.	27	Pairs		
L	3 Lever Mortice lock	6	Nr.		
M	Two Lever Mortice lock	14	Nr.		
N	Stainless steel Heavy duty door closer	4	Nr.		
P	Double Action Swing Hinges for hardwood door approx 25 - 50Kg	6	pairs		
	<b><u>Clear glass</u></b>				
Q	5mm thick glass including beads glass over 0.5m <sup>2</sup> not exceeding 1.00m <sup>2</sup>	15	m <sup>2</sup>		
	<b><u>ELEMENT NO 5: DOORS CARRIED TO SUMMARY</u></b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<p><b>ELEMENT NO 6: WINDOWS</b></p> <p><u>Aluminium glazing approved by the Architect; single glazed combination frame and windows, 45 x 50mm Aluminium section framing, all mullions and transomes; epoxy power coat RAL 9006 finish, 6.14mm laminated glass pre assembled with stainless steel plates and screws window ironmongery, glazed beads, fiber mosquito net, rubber gaskets and backer rods and fixing to mansory or concrete grounds, sealing all around with non-hardening EPDM silicone sealant; screws bolts and fasteners</u></p> <p>A Window Size 1500 x 1800mm high</p> <p>B Ditto, Size 1500 x 1050mm high</p> <p>C Ditto, Size 900 x 1050mm high</p> <p><b>Composite items</b></p> <p><u>Supply and fix weldable Mild steel to smooth edges window grills comprising of 75 x75 mm RHS framework and braces, 25x25mm top, bottom, vertical and horizontal bars welded to frames spaced at 150mm centre to centre including all paints</u></p> <p>D Ditto, Size 1500 x 1800mm high</p> <p>E Ditto, Size 1500 x 1050mm high</p> <p>F Ditto, Size 900 x 1050mm high</p>				
	<p><b>ELEMENT NO6:WINDOWS CARRIED TO SUMMARY</b></p>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
<b>ELEMENT NO.7: ROOFING</b>					
<u>Sawn soft wood; Impregnated with Preservatives</u>					
A	50X150mm Tie Beam	276	m		
B	50X150mm Rafters	285	m		
C	50X100mm Kingpost and struts	510	m		
D	50X100mm Wall Plate	99	m		
E	50X75mm Purlins	473	m		
<b><u>Wrot soft wood; 'Podo'</u></b>					
F	20X250mm Fascia/Barge boards	30	m		
<u>28 gauge IT5 corrugated iron roofing sheets fixed to timber purlins with 150mm end laps, 1 1/2 corrugations side laps fixed with roofing nails</u>					
G	Root covering;sloping not exceeding 45 degrees from horizontal	396	m <sup>2</sup>		
H	Ridge capping	40	m		
J	Valley capping	12	m		
<b><u>Metal Works</u></b>					
K	16mm Diameter Anchor Bolts	64	No		
L	10mm thick steel plate	32	No		
<b><u>Roof drainage:</u></b>					
M	200mm Diameter UPVC class C rainwater down pipe neck with 710mm projection. With all accessories	32	M		
N	200mm down pipe shoe	8	No		-
P	200mm Diameter nozzle outlet.	8	No		
Q	Floor drain;200mm diameter/full bora	8	No		
<b><u>ELEMENT NO. 07- ROOFING CARRIED TO SUMMARY</u></b>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NO8: FINISHINGS</b>				
	<b><u>In situ finishings</u></b>				
	<u>Plastering in two coats steel trowelled to smooth finish internally</u>				
A	15mm To walls	590	m <sup>2</sup>		
B	15mm to sides of columns	25	m <sup>2</sup>		
C	Horizontal sides and opening soffites of beams	108	m <sup>2</sup>		
D	To soffits of roof slab	10	m <sup>2</sup>		
E	To soffits of gutter	64	m <sup>2</sup>		
F	To sides of walls	160	m <sup>2</sup>		
	<u>Plastering in two coats steel trowelled to smooth finish externally</u>				
G	22mm To walls	265	m <sup>2</sup>		
	<b>TILES, SLAB OR BLOCK FINISHINGS</b>				
	<u>Glazed ceramic wall tiles with cushion edges to BS 1281 fixed to backings with cement sand mortar and pointing with white cement</u>				
H	400 x 250 x 6mm Tiling to walls	37	m <sup>2</sup>		
	<u>Graniti GN 572 Mid Grey porcelain tiles "high quality" bedding in premixed thin set cement mortar and grouting with coloured sandless tile grout</u>				
J	600x600x9mm; 4mm diagonally/square joints ways; to floors levels	319	m <sup>2</sup>		
K	400 x400 x 8mm; 4mm diagonally/square joints ways to floor levels of toilets	6	m <sup>2</sup>		
L	150mm Thick skirting	203	m		
	<b><u>To Collection</u></b>				



ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>SUNDRIES</b>				
	<u>Floor edge strips</u>				
A	GENESIS ESA 10(10mm high) or similar and approved, aluminium straight edge trim; junctions of flooring finishes	31	m		
	<u>Weather Bars</u>				
B	6 x 25mm Brass weather bar strip at external door thresholds; in prepared groove	4	m		
	<b><u>Beds and Backings</u></b>				
	<u>Cement and sand (1:4) wood floated surface finish</u>				
C	32mm Bed to receive floor tiles	325	m <sup>2</sup>		
D	12mm Backing to receive wall tiles	37	m <sup>2</sup>		
	<u>Gypsum plasterboard BS 1230 Pt. 2 1970 tapered wallboard self tapping galvanized drive screws</u>				
E	9mm Thick ceiling; horizontal; internal	315	m <sup>2</sup>		
F	Cornice	203	m		
G	Extra over for ceiling access 600 x 600mm.	1	nr		
H	Supply and fix PVC ceiling complete including PVC and corner joint,shoe,nail and accessories	95	m <sup>2</sup>		
	<u>Sawn softwood pressure impregnated with preservatives</u>				
J	50x50mm brandering fixed at 600mm centre to centre	914	m		
	<u>Tanga stone or equal and approved other materials</u>				
K	Wall finishing materials to the extrenal façade as per drawings	22	m <sup>2</sup>		
	<b><u>To Collection</u></b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b><u>SLAB TREATMENT</u></b>				
	<i>Water proofing to exposed surface,concrete treatment for permanent corrosion free,water/ Moisture proofing by using by using krystol technology</i>				
	<i>Thoroughly clean concrete surfaces to remove all types of dirt; fill all visible cracks, honeycombs and holes as per krystol specification No 1; sand surface to smooth level,prepare and apply full coat of krystol T2; protect and cure properly as per manufacture's direction and krstol specification</i>				
A	To roof slabs.	10	M <sup>2</sup>		
B	To sides and bottom of concrete gutters.	225	M <sup>2</sup>		
C	Allow sum for LOGO for writing <b>ICU INTENSIVE CARE UNIT</b> to respective name of the council Hospital As per elevation by using ALUCOBOND Materials		Sum		
	<b><u>To Collection</u></b>				
	<b>COLLECTION</b>				
	Page 2/8/1				
	Page 2/8/2				
	Page 2/8/3				
	<b><u>ELEMENT NO 08: FINISHINGS</u></b>				
	<b><u>CARRIED TO SUMMARY</u></b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
<p><b>ELEMENT NO. 9: PAINTING AND DECORATIONS</b></p> <p><b><u>Internal works</u></b></p> <p><u>Prepare and apply one thinned coat and two full coats of wash 'n' ware paint</u></p>					
A	Plastered walls, columns, beams etc	877	m <sup>2</sup>		
B	Gypsum ceiling	315	m <sup>2</sup>		
<p><b><u>External works</u></b></p> <p><u>Prepare and apply one thinned coat and two full coats of weather guard paint to</u></p>					
C	Rendered surfaces	265	m <sup>2</sup>		
<p><u>Varnishing; internal work; prepare and apply three coats of clear polyurethane clear varnish; wood surfaces.</u></p>					
D	General surfaces	42	m <sup>2</sup>		
E	Frames, linings and associated mouldings 200-300mm girth	120	m		
<p><b><u>ELEMENT NO. 9: PAINTING AND DECORATIONS CARRIED TO SUMMARY</u></b></p>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
<p><b>ELEMENT NO. 10: SANITARY WARE INSTALLATIONS</b></p> <p><b><u>WASH HAND BASIN</u></b></p>					
A	<p>White vitreous wash hand basin (HWB), size 750x440x200mm complete with self closing; semi pedestal and chain stay hole; fairline ½in pillar taps with clear acrylic handles; 1¼in bead chain waste and plug; 80cm slotted tail bolt stay; isovalve servicing valves. rubber plug with slotted tail; 32mm plastic bottle trap with 75mm seal. And other accesories as manufactured by castleware or equal and approved</p>	4	No		
<p><b><u>SLUICE SINKS</u></b></p>					
B	<p>B22362 Wall Mounted slop Hopper with Draining Board stainless steel slop hopper manufactured from Grade 304 stainless steel for the efficient and hygienic disposal of waste including draining boards, top slab, intergral flushing rim, standard outlet for PVC sewerage systems Either P-trap or S- trap and the unit must be space -effective as per manufactured to the approval of Project Manager/ Engineer</p>	2	Nr.		
<p><b><u>SOAP DISH</u></b></p>					
C	<p>Ceramic soap dish Model A:101 as manufactured by castleware or equal aproved including fixing fixtures, fixed to the wall as per manufacturer recommendations</p>	2	Nr.		
<p><b><u>KITCHEN SINK</u></b></p>					
<p><u>Stainless steel kitchen single with single drainer complete with tap hole provided on the sink the waste unit as manufactured by castleware: sink Model No. D10050A including all fixing fixtures</u></p>					
D	<p>Overall size L1000 X W500mm x D180mm bowel size L380 x W330mm</p>	1	Nr.		
<p><b><u>To Collection</u></b></p>					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b><u>WC</u></b>				
A	Eastern type low level W.C suite vitrious china to B.S 3402 s/p-trap, 9litres flushing tank with single push button complete with all necessary accessories. "Casterware "	2	No		
	<b><u>TOILET PAPER ROLL HOLDER</u></b>				
B	Wall mounted stainless Toilet paper holder Model BC 70 complete with fixing accessories as manufactured by castleware or equal and approved	2	Nr.		
	<b><u>SHATTAF</u></b>				
C	Wall mounted 'trigger spray' shattaf Oasis chrome finish complete with fixing accessories as manufactured by castleware or equal and approved	2	Nr.		
	<b><u>BRUSH HOLDER</u></b>				
D	Toilet brush holder 'model : BC 60 as manufactured by castleware or equal and approved including all fixing fixtures	2	Nr.		
	<b><u>MIRROR</u></b>				
E	600 X 800 X4mm Thick mirror with JX -S501 as per castleware or other approved, fixed on lacquer with double sided self adhesive pads finished with bevelled edges.	2	Nr.		
	<b><u>FLOOR DRAIN</u></b>				
F	150 X150mm stainless steel grating ABS flange with adptor or ring complete with kerdin-fix bounding compound, all as to manufacturers recommendations	3	Nr.		
	<b><u>To Collection</u></b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b><u>COLD WATER INSTALLATION:</u></b>				
	<b><u>IPS pipes, Class D painted with special paint; including joints in running length.Fixing in accordance with maufacture's instructions.</u></b>				
	<b><u>Distribution pipes:</u></b>				
	<b><u>IPS pipes including screwed and socketted joints in running length:</u></b>				
A	25mm Diameter Polypipe, class D	50	M		
B	19mm Diameter Polypipe, class D	45	M		
C	Extra; elbow	23	No		
D	Ditto connectors	5	No		
E	Ditto Union	5	No		
F	Ditto Tee	5	No		
G	Ditto Reducing bush 25 x 19mm	5	No		
H	19 mm Diameter supply IPS pipes; in blockwork chase.	18	M		
J	Extra ditto; elbow	20	No		
K	Ditto tee	10	No		
L	Ditto: Union	10	No		
M	Ditto: Nipple	12	No		
N	Ditto: connector	1	No		
P	Ditto:tee connector	1	No		
Q	13 mm Diameter supply IPS pipes; in blockwork chase.	12	M		
	<b><u>To Collection</u></b>				

ITEM	DESCRIPTIONS OF WORKS	QTY	UNIT	RATE	AMOUNT
A	Extra reducing tee 19x19x13	10	No		
B	Extra; reducing bush 19x13	10	No		
C	Extra; 13mm elbow.	3	No		
D	Ditto; tee.	3	No		
E	Ditto: Nipple	6	No		
F	Ditto; socket	14	No		
	<b><u>Flexible piping:</u></b>				
G	Flexible pipe to cistern	2	No		
H	Flexible pipe to Hand Wash Basin and kitchen Sink	5	No		
J	Flexible pipe to sluice	2	No		
K	Angle valve	4	No		
L	Bib tape pex 1/2	2	No		
M	Pillar tape pex 1/2	4	No		
N	Stop cock pex 3/4	7	No		
	<b>GENERAL ITEMS</b>				
P	Thread seal tape	5	No		
Q	Shellack	1	No		
R	Tangit	1	No		
S	Bolts pairs 12mm length 100mm or 125mm	4	No		
T	Fisher plug pairs	22	No		
<b>TO COLLECTION</b>					

ITEM	DESCRIPTIONS OF WORKS	QTY	UNIT	RATE	AMOUNT
	<b><u>UPVC pipes;Class 'E'; including fittings in running length.</u></b>				
A	38mm Diameter pipe; in chase in block work.	60	M		
B	Extra; Equal tee 38x38x 38mm.	41	No		
C	Extra; elbow	30	No		
D	Ditto; Plug	6	No		
E	Extra; tee	15	No		
F	Ditto; bend	2	No		
G	Ditto; socket female thread	5	No		
H	50mm pipe	40	M		
J	Ditto; bend	2	No		
K	Ditto; socket female thread	4	No		
L	Plug	18	No		
	<b><u>SOIL AND PIPES:</u></b>				
	<b><u>UPVC pipes and fittings; Class 'B'; in running lengths; BS 4660 for underground pipes and B.S 3506 for pipes above ground.</u></b>				
M	50mm. Diameter pipes; fixed to walls.	12	M		
N	100mm Diameter pipes laid in trenches.	48	M		
P	Extra; 100mm Elbow	2	No		
Q	100mm Diameter PVC vent coil.	1	No		
R	P-Trap 4'	4	No		
S	Bottle trap flexible 38mm	10	No		
<b>TO COLLECTION</b>					



ITEM	DESCRIPTIONS OF WORKS	QTY	UNIT	RATE	AMOUNT
	<b><u>FIRE FIGHTING INSTALLATIONS:</u></b>				
A	9Kg, dry powder 'NAFFCO' or any other equal and approved fire extinguishers, fixed to wall with and including brackets plugged on block work.	2	No		
	<b><u>GULLY TRAPS</u></b>				
B	Construct a standard gully trap 300x300x300mm deep;in thick concrete block walls complete with benching and all fittings and gully trap cover	6	No		
	<b><u>TESTING</u></b>				
C	Allow for testing and commisioning the whole plumbing and drainage isntallation as per service Engineer approval	-	Item	-	
D	Builders work in connection to plumbing	-	Item	-	
	<b><u>SUNDRIES:</u></b>				
E	Allow for preparation and production of four (4) copies of 'AS BUILT DRAWINGS' of plumbing and engineering installations to Engineer's satisfaction.	-	Item	-	
	<b>COLLECTION</b>				
	<b><u>COLLECTIONS</u></b>				
	Page 3/10/1				
	Page 3/10/2				
	Page 3/10/3				
	Page 3/10/4				
	Page 3/10/5				
	Page 3/10/6				
	<b><u>ELEMENT NO. 10 SANITARY WARE AND INSTALLATIONS CARRIED TO SUMMARY</u></b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>ELEMENT NR.11- ELECTRICAL INSTALLATION</b>				
	<b>Power Distribution.</b>				
A	4Ways TPN distribution board (DB 3 ) with 100A/300mA RCCB incomer and outgoing MCBs as shown in Schematic diagram as ABB or approved equal.	1	No		
B	4C x16 mm <sup>2</sup> Cu,PVC/PVC cable from neaby Tanesco LV Pole to Distription Board(DB 1).	25	Lm		
	<b>Small Power Distribution</b>				
C	25mm Heavy duty PVC Conduity concealed under walls and roof for all power and Data points	100	Nos		
D	Single core 2.5 sqmm PVC copper cables from distribution Boards to all power outlet points				
	Red Wire	3	Roll		
	Black Wire	3	Roll		
	Green Wire	3	Roll		
E	Twin switch socket ABB or other equal approved	21	Nos		
F	Telecommunications outlet box	20	Nos		
	<b>Light Fittings</b>				
G	20mm Heavy duty PVC Conduity concealed under walls and roof for all Lighting and DataFire points	180	Nos		
H	Single core 1.5 sqmm PVC copper cables from distribution Boards to all lighting and ceiling fans outlet points				
	Red Wire	6	Roll		
	Black Wire	6	Roll		
	Green Wire	6	Roll		
J	<b>TYPE A:</b> 1 x 36W; 1200mm standard, fluorescent fitting as LIGHTING DIRECT PHOENIX	22	Nos		
	<b>TO COLLECTION</b>				-

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	56" Blade National Ceilling fan c/w fan regulator	4	Nos		
B	Ceiling light complete with energy saver 18w	13	Nos		
C	2 way 1 gang light switch as Legrand or equivalent	7	Nos		
D	1 way 1 gang light switch as Legrand or equivalent	11	Nos		
E	100mm diameter heavy gauge PVC Pipe	10	Nos		
F	Allow for earthing of the entire building in accordance with I.E.E. and TANESCO regulations to the whole of electrical installations	1	item		
G	Earth wire 4sqm	20	m		
H	Earth rod approved copper 16mm not less than 1200mm	2	No		
<b>Air condition</b>					
J	Smart inveter indoor wall mounted fan evaporating units with its outdoor unit, the indoor unit shall be commplete with a wireless remote controller, pipes brackets and connecting cable, coolling capacity 24000BTU/hr	7	No		
K	PVC conduits pipe sleeve class C size 2 inch in the ceiling/blockwall or duct for Airconditions, including Elbow and other connection	m	24		
<b><u>To Collection</u></b>					
<b><u>COLLECTION</u></b>					
Page 3/11/1					
Page 3/11/2					
<b><u>ELEMENT NO. 11 ELECTRICAL INSTALLATIONS</u></b>					

ITEM	DESCRIPTIONS OF WORKS	QTY	UNIT	RATE	AMOUNT
<b><u>ELEMENT NR. 12: ICT INSTALLATION</u></b>					
A	Switch 24-port with Gigabit Uplinks	0	PC		
B	Cat 6 UTP CABLE	1	PC		
C	6U data cabinet wall mounted including all accessories eg. PDU	0	PC		
D	Rack Mountable UPS 1100VA	0	PC		
E	1m Patch cord	6	PC		
F	3m Patch cord	6	PC		
G	Cat 6 patch panel 24 Port	0	PC		
H	Cable manager	0	PC		
J	Dual face plate	3	PC		
K	Back Box Single (Steel)	3	PC		
L	Conduit pipe 1.0"	10	PC		
<b>Sub Total for ICT Materials</b>					
<b>Add</b> :Labour cost for subtotal 1					
<b>Add</b> :Profit from Sub total 1					
<b>Add</b> : Attendance for sub total 1					
<b>Grand total for Element Nr. 12 ICT Installation carried to Summary Page</b>					

ITEM	DESCRIPTION	PAGE	AMOUNT
<b>BILL NR.3: MEASURED WORKS ICU BLOCK</b>			
	ELEMENT NO. 01 - SUBSTRUCTURE	3/1/3	
	ELEMENT NO. 02 - FRAME	3/2/1.	
	ELEMENT NO. 03 - STAIRS	NA	NA
	ELEMENT NO. 04- WALLS	3/4/1.	
	ELEMENT NO. 05- DOORS	3/5/1	
	ELEMENT NO. 06 - WINDOWS	3/6/1	
	ELEMENT NO. 07 - ROOF	3/7/1.	
	ELEMENT NO. 08 - FINISHINGS	3/8/3.	
	ELEMENT NO. 09 - PAINTING AND DECORATIONS	3/9/1.	
	ELEMENT NO.10- PLUMBING	3/10/6.	
	ELEMENT NO. 11 ELECTRICAL INSTALLATIONS	3/11/2.	
	ELEMENT NR. 12: ICT INSTALLATION	3/12/1.	
	<b>BILL NO.3 - MEASURED WORKS CARRIED GENERAL SUMMARY</b>	<b>T.Shs</b>	

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<b>BILL NR.4: PRIME COST AND PROVISIONAL SUM</b>				
	<b><u>PROVISIONAL SUM</u></b>				
A	Construction of Septic tank as instructed by Architect		Sum		
B	Soft and Hard landscaping instructed by Architect		Sum		2,000,000.00
C	Construction of Soak pit as instructed by Architect		Sum		
D	Construction of 10 Nr. Manhole as Per drawings		Sum		
E	Allow sum for construction of counter, including worktop and partition at nurse station/laboratory and any as will be instructed by Project Architect		Sum		6,000,000.00
	<b>BILL NR.4- PC AND PROVISIONAL SUMS WORK CARRIED TO GENERAL SUMMARY</b>				