

BILLS OF QUANTITIES

FOR THE

**CONSTRUCTION OF MACHINERY
ROOM FOR OIL PALM PROCESSING
AT JUMAPO IN THE NEW JUABEN
NORTH MUNICIPAL**

(NJNMA)

FOR

**NEW JUABEN NORTH MUNICIPAL
ASSEMBLY**

DATE: SEPTEMBER, 2026

ITEM	DESCRIPTION	Bill Amount (Gh¢)
	<u>CONTRACTUAL REQUIREMENTS</u>	
A	Perfomance Security	
B	Watching and Protection for the Works	
C	Transport for Workpeople	
D	First Aid Equipment	
E	Project Signboard	
F	Progress Photograph	
H	Plant, Tools and Vehicles	
J	Allow for providing all scaffolding, and apparatus profiles and apparatus generally required for the proper execution of the works. The contractor shall provide without extra charge all labour and equipment or apparatus required by the Engineer for the testing and measuring the works and for weighing, providing or testing the effeciency of any portion of the works	
	Temporary Buildings	
K	For the use of Employer's Representative: Allow for providing during the period of the Works, Offices with total floor area of not less than 25 square metres suitably divided, as directed by the Works Engineer so as to provide office for the use of the Clerk of Works, the Works Engineer, the Building Inspectorate Engineer and the Quantity Surveyor complete with lavatory and washing accomodation. Allow for furnishing these offices with suitable chairs, tables, plan chests, and shelving as required and for clearing away on completion and making good	
	Site Meetings	
L	The Contractor shall hold progress meetings which shall be attended by representatives of all Nominated Sub-Contractors/Suppliers engaged on the works, (and required by him/her to be present) to co-ordinate progress and ensure that the programme is met in all aspects.	5,000.00

ITEM	DESCRIPTION	Bill Amount (Gh¢)
	B/F	
	Temporary Stores Allow for providing and maintaining proper sheds for the storage and protection of materials etc. and other work that may be brought or executed at the site and remove on completion. Sheds for the storage of cement is to have floor raised from the ground.	
A		
B	Insurance	
C	Water for the works	
D	Temporary Lighting and Power	
E	Any other Preliminaries Item required for the works (To be listed and specified below)	
	Notices and Fees of Local Authorities and Public Undertakings Allow the provisional sum of GH¢ 15,000.00 for Local Authorities (EPA) Fees, Rates etc.	
F		
	TOTAL PRELIMINARIES CARRIED TO SUMMARY	

Item	Description	Qty	Unit	Rate GH¢	Amount GH¢
	CONSTRUCTION OF MACHINERY ROOM FOR OIL PALM PROCESSING AT JUMAPO IN THE NEW JUABEN NORTH MUNICIPAL <u>BILL NO. 2 SUBSTRUCTURE</u> <u>SITE PREPARATION</u> Clear site of all weeds and undergrowth, cut down small trees not exceeding 600mm girth, grub up roots, rake to heaps and burn on site or clear away <u>EXCAVATIONS AND EARTHWORK</u> Excavate oversite average 150mm deep to remove topsoil and vegetable matter; deposit in temporary spoil heaps or clear away from site <u>EXCAVATIONS AND EARTHWORK</u> Excavate trenches for foundation not exceeding 1.50m deep commencing from stripped level. Excavate pits to receive column bases not exceeding 1.50m deep commencing from stripped level. Extra over for excavation for in Rocks (Provisional) Backfill and compact selected excavated material around foundations Remove surplus excavated material away from site <u>Hardcore Filling</u> Approved imported hardcore laterite, well watered, well rammed and consolidated in 225mm thick layers in making up level under bed	44	m ²		
A					
B		44	m ²		
C		13	m ³		
D		4	m ³		
E		2	m ³		
F		9	m ³		
G		8	m ³		
H		12	m ³		
	<i>Carried Forward</i>				

Item	Description	Qty	Unit	Rate GH¢	Amount GH¢
	Brought Forward				
	<u>PLAIN INSITU CONCRETE</u>				
	<u>Plain in-situ concrete (1:4:8-38mm aggregate)</u>				
A	50mm thick Blinding	1	m³		
	<u>Plain in-situ concrete (1:3:6-38mm aggregate)</u>				
B	Foundations	3	m³		
	<u>Reinforced in-situ vibrated concrete (1:2:4-20mm Aggregate) in:</u>				
C	Column bases	1	m³		
D	Columns	1	m³		
E	Ground beams	1	m³	-	-
F	200mm Floor Bed	26	m²	-	-
G	150mm Ramp	5	m²	-	-
	<u>REINFORCEMENT</u>				
	<u>Mild steel round Steel Bar Reinforcement to BS 449</u>				
G	16mm Diameter bars in Foundation Column	45	kg		
H	16mm Diameter bar in Column Base	81	kg		
K	10mm Diameter bar links in columns	20	kg		
	<u>Fabric Mesh</u>				
M	Fabric mesh reinforcement to BS 4483 Ref. No. A-193 and fixing in bed with 300mm minimum side and end laps (measured net - no allowance made for laps)	26	m²		
	<i>Carried Forward</i>			GH¢	

Item	Description	Qty	Unit	Rate GH¢	Amount GH¢
	Brought Forward			GH¢	
A	<u>Damp proof membrane</u> <u>Polythene damp-proof sheet below ground floor bed</u> Floor slab	26	m²		
B	ANTI TERMITE TREATMENT <u>Apply sun Pyrifus (48%EC) or similar approved anti - termite treatment chemical to compacted bed as directed by the engineer before placement of damp proof membrane</u> Compacted Filling	26	m²		
C	FORMWORK <u>Sawn Formwork to:</u> Vertical sides of Foundation columns	6	m²		
E	Edges of Floor bed 150mm thick	22	m		
F	<u>BLOCKWORK</u> <u>Solid concrete/quarry Blockwork in cement and sand (1:4) mortar in:</u> 150mm thick wall	38	m²		
H	<u>PLASTERWORK</u> <u>19mm thick cement and sand (1:4) render on</u> Plinth wall	13	m²		
J	<u>Prepare and apply three coats of Acrylic Emulsion Paint on:</u> Rendered Wall	13	m²		
	BILL NO. 2 <u>SUBSTRUCTURE</u> Carried to General Summary			GH¢	
					-

Item	Description	Qty	Unit	Rate GH¢	Amount GH¢
	<u>BILL NO. 3 SUPERSTRUCTURE (CIVIL WORKS)</u>				
	<u>CONCRETE WORK</u>				
	<u>Reinforced in-situ vibrated concrete(1:2:4-19mm aggregate)in:</u>				
A	Columns	1	m³		
B	Roof beams	1	m³		
C	Lintel	1	m³		
	<u>REINFORCEMENT</u>				
	<u>Mild steel round Steel Bar Reinforcement to BS 449</u>				
D	16mm Diameter bars in Column	114	kg		
E	16mm Diameter bars in Roof Beam/lintels	136	kg		
F	10mm Diameter as links in Column	135	kg		
G	10mm Diameter as stirrups in Roof Beam/lintel	99	kg		
	<u>FORMWORK</u>				
	<u>Sawn Formwork to:</u>				
K	Vertical sides of columns	14	m²		
L	Side and soffit of Roof Beam/lintels	13	m²		
	<u>CONCRETE WORK</u>				
	Carried to Summary			GH¢	

Item	Description	Qty	Unit	Rate GH¢	Amount GH¢
A	<u>BLOCKWORK</u>				
	<u>Solid concrete/quarry Blockwork in cement and sand (1:4) mortar in:</u>				
	150mm thick solid wall	48	m ²		
	<u>BLOCK WORK</u> Carried to Summary			GH¢	
	<u>ROOFING</u>				
	<u>Longspan Aluminium Roofing Sheet (IDT Prepainted)</u>				
	Supply and install 0.5mm gauge selflock longspan prepainted Aluzinc Colorlink roofing sheet covering strictly in accordance with manufacturer's specification	67	m ²		
	B Pre - formed 0.5mm Aluzinc Colorlink ridge cap 450mm girth	7	m		
	C Pre - formed 0.5mm Aluzinc Colorlink hip cap 450mm girth	126	m		
	D Pre - formed 0.5mm Aluzinc Colorlink Rain gutter fixed to the face of fascia board 600mm girth	22	m		
	<u>ROOFING</u> Carried to Summary			GH¢	

Item	Description	Qty	Unit	Rate GH¢	Amount GH¢
	<u>CARPENTRY</u>				
	<u>Structural Timbers</u>				
	<u>All sawn hardwood are to be well treated with solignum or other equal approved wood preservatives</u>				
A	50 x 150mm Rafters	56	m		
B	50 x 75mm Ceiling Hangers	43	m		
C	50 x 50mm Ceiling Nogging/Joist	72	m		
D	50 x 150mm Ridge Pieces	7	m		
E	50 x 150mm Hip Rafters	16	m		
F	50 x 100mm Purlins	45	m		
G	50 x 100mm Horizontal Strut	12	m		
H	50 x 100mm King Post	14	m		
	<u>Carpenter's Metalworks</u>				
J	10mm diameter reinforcement bar inbedded into concrete roof beams and hook to the bottom chord and top chord with 100mm nails	20	m		
	<u>CARPENTRY</u>				
	Carried to Summary			GH¢	

Item	Description	Qty	Unit	Rate GH¢	Amount GH¢
	<u>JOINERY</u> <u>Timber for Joinery shall be well seasoned and approved hardwood with moisture content not exceeding 10%</u> <u>Fascial/Verge Board</u> <u>Wrot wood</u>				
A	25 x 225mm Fascia/Barge Boards	22	m		
	<u>Frames Sills</u> <u>Wrot wood</u>				
B	50 x 150mm Frame plugged to wall	37	m		
	<u>DOORS</u> <u>44mm thick (Finished Panelled door, comprising 100mm top rail and stiles, 150mm middle and bottom rails, open rebated and divided into panels and with 16 x 100mm architraves to cover door lining and fanlight as described in:</u>				
C	Door size 1100mm x 2050mm ditto	2	no		
	<u>Skirting board; Battens, Stops and Fillets</u>				
D	12 x 50mm Door stop	11	m		
	<u>IRONMONGERY</u> <u>Supply and fix the following ironmongery with screw to match</u>				
E	1½ Pair 100mm approved heavy duty brass butt hinges	4	No		
F	150mm approved heavy duty barrel bolt	4	No		
H	Approved cylindrical mortice lock with set of level handle	2	No		
	<i>Carried Forward</i>				

Item	Description	Qty	Unit	Rate GH¢	Amount GH¢
	Brought Forward				
	<u>Louvre Carrier</u>				
A	Pair Naco anodised aluminium louvre carrier 1422.4mm long with clips for 8No. Glass blades 150mm wide screwed to hardwood frames with screws to match	10	No.		
	<u>L30: STAIRS/WALKWAYS/BALUSTRADES</u>				
	<u>Burglar proofing</u>				
C	16mm diameter bar threaded through hardwood frame	70	m		
	<u>Works in Mesh or Expanded Metal</u>				
D	50 x 50 X 4mm square welded mesh fixed to window openings with battens (measured separately)	16	m²		
	<u>Sundries</u>				
E	Mosquito-proof woven plastic gauze cut to size and fixed to hardwood with battens (measured separately)	16	m²		
	<u>JOINERY</u>				
	Carried to Summary			GH¢	

Item	Description	Qty	Unit	Rate GH¢	Amount GH¢
	METAL WORKS				
	<u>Balustrade</u>				
	<u>Works in plates, bars, sections and tubes</u>				
	<u>Locally Made Balustrades</u>				
A	Supply and install local made balustrade to staircase side only before laying staircase floor tiles complete 900mm high including 50 x 10mm thick flat bar fabricated to 25 x 25 x 3mm thick square pipes with 88 x 20mm thick manzonina hardwood groove and screw to flat bar welded to 12mm thick square pipes in an approved pattern including painting and all necessary accessories to match	2	m		
B	Ditto, ramp	2	m		
	<u>METAL WORK</u>				
	Carried to Summary				

Item	Description	Qty	Unit	Rate GH¢	Amount GH¢
	<u>PLASTERWORK AND OTHER FLOOR, WALL AND CEILING FINISHINGS</u> <u>12mm cement and sand (1:4) rendering concrete or blockwork</u>				
A	Walls	96	m ²		
B	Columns	14	m ²		
C	Side and soffit of Roof Beam/lintels	13	m ²		
	<u>TERRAZZO TILING/IN-SITU TERRAZZO</u> <u>15mm Thick terrazzo of Approved Colour and Pattern</u> <u>Bedded and Jointed in approved Beds and Backings</u> <u>(Measured Separately)</u>				
F	Level bed (Corridor and Classrooms)	26	m ²		
	<u>Plain sheet ceiling finishings</u> <u>Ceiling</u>				
	<u>Ceiling, width exceeding 300mm, 6mm thick plywood, screwed and fixed to hardwood as described in</u>				
A	Horizontal ceiling lining	26	m ²		
B	Ditto, ceilings to eaves	13	m ²		
	<u>Beds and Backings</u>				
	<u>Cement and sand (1:3) mortar in:</u>				
C	40mm Thick average screeded bed to receive floor tiles(measured separately)	26	m ²		
	<u>PLASTERWORK AND OTHER FLOOR, WALL AND CEILING FINISHINGS</u> Carried to Summary				

Item	Description	Qty	Unit	Rate GH¢	Amount GH¢
A	<u>GLAZING</u>				
	<u>Standard plain glass panes 0.15 - 0.40m2 fixed to timber with glazing beads (measured separately)</u>				
	Standard plain glass; 6mm thick clear float glass as described louvre blades; 150mm wide x 600mm long	80	no		
	<u>GLAZING</u> Carried to Summary				
	<u>PAINTING AND DECORATING</u>				
	<u>Prepare and apply one mist coat and three coats of "weather shield" Acrylic Emulsion paint as on:</u>				
	A Walls	96	m ²		
	B Columns	14	m ²		
	C Side and soffit of Roof Beam/lintels	13	m ²		
	<u>Prepare and apply one coat of aluminium wood primer on back of joinery before fixing</u>				
L	Hardwood not exceeding 300mm girth	6	m ²		
	<u>Prepare and apply three coats of polyurethane Lacquer on general woodwork surface</u>				
A	General surfaces of hardwood	13	m ²		
L	Hardwood not exceeding 300mm girth	9	m ²		
	<u>PAINTING AND DECORATING</u> Carried to Summary				

Item	Description	Qty	Unit	Rate GH¢	Amount GH¢
	<u>ELECTRICAL INSTALLATION</u>				
	<u>DISTRIBUTION PANEL & MAINS CABLES</u>				
	<u>IEC 60439-1 Distribution Boards, Glands and Cable Lugs</u>				
1	12 way, 100A SPN MCB Consumer Unit with 100A integral switch 10kA with the following MCBs of IEC approve make or equivalent for lighting, socket circuits with following single phase MCCBs 6A 5 no 16A 5 no 20A 1 no 25A 1 no 32A 1 no	1	no		
2	10mm x 3 pvc/pvc copper cable(provisional)	15	m		
B	<u>LIGHTING FITTINGS</u>				
1	1 x 28w, Led surface mounted with apal diffuser	4	No.		
2	1 x 9w, Led surface mounted with apal diffuser	4	No.		
3	1200mm sweep ceiling fan as Crompton Greaves	2	No.		
C	<u>WIRING ACCESSORIES</u>				
1	10A 1gang 1way switch	5	No.		
2	10A 1gang 2way switch	5	No.		
3	13A 2gang switched socket outlet	5	No.		

Item	Description	Qty	Unit	Rate GH¢	Amount GH¢
D	<u>CONDUIT PIPES, CONDUIT BOXES CONDUIT CABLES AND ACCESSORIES FOR FINAL CIRCUITS</u>				
	1 20mm dia Upvc conduit pipe	50	m		
	2 Circular box	5	No.		
	3 75mm x 75mm conduit box	10	No.		
	4 75mm x 135mm conduit box	5	No.		
	1 1.5mm2 insulated conduit copper cable for lights				
	Red/Brown	100	m		
	Black	100	m		
	G/Yellow	100	m		
	2 2.5mm2 insulated conduit copper cable for raw power sockets				
	Red/Brown	100	m		
	Black	100	m		
	G/Yellow	100	m		
	4 4.0mm2 insulated copper copper cable for Air Conditioner				
	Red/Brown	200	m		
	Black	200	m		
	G/Yellow	200	m		
	<u>CONDUIT PIPES, CONDUIT BOXES CONDUIT CABLES AND ACCESSORIES FOR FINAL CIRCUITS</u>				
	SUMMARY				
	<u>SUPPLY AND INSTALLATION OF ELECTRICITY METERS AND ITS ACCESSORIES</u>				
1	Supply and installation of ECG Energy saving metres (Single Phase)	1	No.		
2	Testing and Certification by Energy Commission	1	No.		
	<u>SUPPLY AND INSTALLATION OF ELECTRICITY METERS AND ITS ACCESSORIES</u>				
	SUMMARY				

Item	Description	Qty	Unit	Rate GH¢	Amount GH¢
A	<u>EARTHING SYSTEM</u>				
1	900mm x 900mm High conductivity annealed copper latticed mat as earth termination	2	No.		
2	16mm diameter, 1200mm long copper bonded earth electrode cad welded to four corners of earth mat	1	No.		
3	25mm x 3mm Gunmetal screw down test clam (Ref: A.N. WALLIS Cat No. JSG 253)	1	No.		
	<u>EARTHING</u> SUMMARY				
A	<u>COMPOUND LIGHTING</u>				
10	50W LED MODERN complete with Photo-electric cell	4	No.		
9	Installation accessories comprising bolts, nuts, washers,		item		
	<u>COMPOUND LIGHTING</u> SUMMARY				
	<u>SUMMARY</u>				
	CONDUIT PIPES, CONDUIT BOXES CONDUIT CABLES AND ACCESSORIES FOR FINAL CIRCUITS				-
	SUPPLY AND INSTALLATION OF ELECTRICITY METERS AND ITS ACCESSORIES				
	EARTHING				
	COMPOUND LIGHTING				
	<u>ELECTRICAL INSTALLATION</u> Carried to Summary				

Item	Description	Qty	Unit	Rate GH¢	Amount GH¢
	<u>BILL NO. 3 SUPERSTRUCTURE (CIVIL WORKS)</u>				
	SUBSTRUCTURE				
	<u>SUPERSTRUCTURE</u>				
	CONCRETE WORK				
	BLOCKWORK				
	ROOFING				
	CARPENTRY				
	JOINERY				
	METALWORKS				
	PLASTERWORK AND OTHER FLOOR, WALL AND CEILING FINISHINGS				
	GLAZING				
	PAINTING AND DECORATING				
	ELECTRICAL INSTALLATION				
	<u>BILL NO. 3 SUPERSTRUCTURE (CIVIL WORKS)</u>				
	Carried to General Summary			GH¢	

ITEM	Description	Qty	Unit	Rate (GH¢)	Amount (GH¢)
	<u>EXTERNAL WORKS</u>				
	<u>APRONS</u>				
A	Excavation of trench commencing at stripped level and not exceeding 1.5m deep	6	m ³		
B	Remove surplus excavated material away from site	8	m ³		
C	Backfill and compact selected excavated material around foundations	9	m ³		
	<u>Hardcore Filling</u>				
D	Approved imported hardcore filling well rammed in 225mm layers to make up levels under floor bed	6	m ³		
	<u>CONCRETE WORK</u>				
E	<u>Plain in-situ concrete (1:3:6-20mm aggregate)</u> Strip Foundation	1	m ³		
F	75mm thick Plain concrete (1:2:4-19mm agg) apron bed	13	m ²		
J	Sawn formwork to edges of bed, 150mm wide	22	m		
K	125mm thick wall	13	m ²		
N	30mm Thick average screeded bed to received floor tiles (measured separately)	13	m ²		
P	25mm thick cement and sand (1:3) render on wall trowelled hard and finished on bed	26	m ²		
Q	12mm thick cement and sand (1:4) rendering to side of aprons	13	m ²		
	<u>APRONS</u>				
	Carried to Summary				

ITEM	Description	Qty	Unit	Rate (GH¢)	Amount (GH¢)

ITEM	Description	Qty	Unit	Rate (GH¢)	Amount (GH¢)
	<u>PAVING AND LAND SCAPING</u>				
A	Excavate to reduce level for paving area maximum depth not exceeding 1.00 commencing from a stripped surface (Provisional)	5	m ³		
	<u>FILLING</u>				
D	Approved imported hardcore laterite, well watered, well rammed and consolidated 225mm thick filling in making up levels under bed	6	m ³		
E	Supply and spread quarry dust 50mm thick	36	m ²		
D	Spread Dampproof sheet to receive quarry dust	36	m ²		
F	Provide and Lay 100mm Hydraulically pressed cement and quarry dust paving blocks size 100 x 200mm of 80N/mm ² laid to an approved pattern and bed on 60mm thick dry quarry dust on laterite base (measured separately) including filling joints with sharp dry sand or quarry dust for parking lot	36	m ²		
	<u>Precast concrete</u>				
	<u>Precast vibrated concrete finished fair on all exposed surfaces including all moulds, bedded, jointed to approved pattern in:</u>				
G	600 x 600 x 50mm Thick concrete slabs	5	m ²		
	<u>PRE CAST CONCRETE KERBS</u>				
H	Provide and place precast concrete kerbs size 150 x 300mm chamfered top edge and finished fair on all exposed surfaces, bedded and jointed in cement and sand (1:3) mortar and including plain concrete bases,haunching to one sides	5	m		
	<u>PAVING</u>				
	Carried to Summary				

ITEM	Description	Qty	Unit	Rate (GH¢)	Amount (GH¢)

ITEM	Description	Qty	Unit	Rate (GH¢)	Amount (GH¢)
	<u>LANDSCAPING</u>				
A	Approved imported hardcore laterite, to receive black soil 100mm thick	15	m ²		
B	Supply and spread vegetative soil average 150mm thick	15	m ²		
C	Supply and apply manure and tilt the land	15	m ²		
D	Supply and Plant Green Grass	15	m ²		
E	Phobia - Anthophobia Flower	5	nr		
F	Visual Palm Tree	4	nr		
	<u>LANDSCAPING</u> Carried to Summary				
	<u>SURFACE DRAINAGE SYSTEM</u>				
A	Plain in-situ concrete (Grade 25) 'U'-drain size 450mm wide x 450mm deep with 150mm sides and 150mm base including all necessary formwork and disposal from site of surplus excavated material.	22	m		
	<u>DRAINS</u> Carried to Summary				
	<u>R: DISPOSAL SYSTEMS</u>				
	<u>R10: RAINWATER PIPEWORK/GUTTERS</u>				
B	Pipes; 100mm diameter uPVC ,straight fixed to concrete columns with braces including all associated pipe accessories	15	m		
	<u>R: DISPOSAL SYSTEMS</u> Carried To Summary				

ITEM	Description	Qty	Unit	Rate (GH¢)	Amount (GH¢)
	<u>COLLECTION</u> APRONS/RAMPS PAVING LANDSCAPING DRAINS DISPOSAL SYSTEMS <u>SURFACE DRAINAGE SYSTEM</u> Carried to Summary of Bill No. 5				

Item	Description	Amount(GH¢)
	<u>CONSTRUCTION OF MACHINERY ROOM FOR OIL PALM PROCESSING AT JUMAPO IN THE NEW JUABEN NORTH MUNICIPAL</u> <u>GENERAL SUMMARY</u> A BILL NO.1: PRELIMINARIES B BILL NO.2: CONSTRUCTION OF 1NO. CHPS COMPOUND AT KOFIKROM C BILL NO. 3: EXTERNAL WORKS <u>ESTIMATED COST</u> CONSTRUCTION OF MACHINERY ROOM FOR OIL PALM PROCESSING AT JUMAPO IN THE NEW JUABEN NORTH MUNICIPAL	