PROPOSED BILLS OF QUANTITIES FOR CONSTRUCTION OF AN ECDE (ALL PROVISIONAL
KWALE COUNTY GOVERNMENT

Item	Description	Unit	Qty	Rate KShs	Amount KShs
	GENERAL PRELIMINARIES				
1.0	**Site**				
	The proposed Works will be located at ---------- , in Kwale County.				
2.0	**Scope of the works.**				
	The works involve construction of 2No classroom & Office block, Kitchen and 3-Door VIP latrine with The major work to be carried out in this contract include the following: 1. Excavation & Earthworks including fillings 2.Waterproofing. 3.Concrete works 4.Reinforcement 5.Formwork. 6.Walling. 7.Roofing. 8.Doors 9. Windows 10. Fittings. 11. Finishes. 12. Electrical works.				
3.0	**SIGN BOARD**				
	Allow for providing, erecting ,maintaining throughout the course of the contract and afterwards clearing away a signboard as designed,specified and approved by the Project Manager.				
4.0	**Temporary building.**				
	The Contractor must provide for a temporary building required for the storage of materials and clear it away on completion of the works to the satisfaction of the client.				
	CARRIED TO SUMMARY				

Item	Description	Unit	Qty	Rate KShs	Amount KShs
	SUBSTRUCTURE				
	Site Preparation				
1.0	Clear site of shrubs,grass,small trees girth not exceeding 600mm and grub roots and remove from site as directed.	SM	201		
2.0	Excavate oversite average 150mm deep to remove top vegetable soil and spread on site as directed.	SM	201		
3.0	Excavate trenches for wall foundation commencing from reduced level but not exceeding 1.5m deep.	CM	71		
4.0	Extra over all excavations for excavating in rock	CM	5		
	Planking and Dewatering				
5.0	Allow for all necessary earthwork support to sides of foundation trenches	ITEM	1		
6.0	Allow for all keeping excavations free of water and mud by pumping,bailing or other approved means.	ITEM	1		
	Fillings /Disposal				
7.0	Return,fill and ram selected imported murram material around foundation.	CM	39		
8.0	Load, wheel and deposite surplus excavated material where directed by architect on site not exceeding	CM	32		
9.0	300mm thick under floors compacted in 150mm layers.	CM	55		
10.0	50mm thick quarry dust blinding to surfaces of hardcore	SM	181		
	Carried Forward				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	Brought Forward				
1.0	Chemical anti- termite treatment executed complete by an approved specialist under a ten (10) year guarantee to the surfaces of blinded hardcore.	SM	201		
	Damp proof membrane				
2.0	500 gauge polythene or other equal and approved damp proof membrane laid under surface bed with 300mm side and end laps (measured net-allow for laps).	SM	201		
	Concreting				
3.0	50mm thick concrete blinding under strip foundations	SM	59		
4.0	200mm thick strip foundations	CM	12		
5.0	150mm thick floor beds	SM	201		
	REINFORCEMENT **Mesh fabric reinforcement to BS 4483 and and setting in concrete with 300mm side and end laps(measured net allow for laps)**				
6.0	Fabric mesh ref: A142 weighing 0.54Kg per square metre in floor bed and ramps.	SM	201		
	High yield square twisted reinforcement including cutting to lengths,bending,twisting and fixing ,including all necessary tying wires and spacing blocks to B.S. 4461:-				
7.0	8mm longitudinal bars in strip foundation	KG	125		
8.0	10mm cross(main) bars in strip foundation	KG	200		
	Carried Forward				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	Brought Forward				
	Sawn Formwork to:				
1.0	Edges of ground floor slab over 75mm but not exceeding 150mm high.	LM	62		
	Sub-wall				
	Walling in machine cut natural coral stone block obtained from an approved quarry,jointed and beded in cement sand mortar (1:3)				
2.0	200mm walls	SM	127		
	Three ply bituminous felt damp proof courses bedded in cement sand mortar (1:3) measured seperately.				
3.0	200mm wide horizontal layer.	LM	67		
	Plinths **12mm cement sand (1:4) render:Steel trowelled on concrete or stonework to:-**				
4.0	Concrete or masonry wall plinths	SM	25		
	Prepare and apply two coats bituminous paint on render to:-				
5.0	Rendered concrete or stone surfaces	SM	25		
	TOTAL FOR ELEMENT NO.1 SUBSTRUCTURE WORKS CARRIED TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ELEMENT NO.2				
	RAMP AND STEPS				
	The following in 1No ramp and step measuring 1500mm wide x 2500mm long				
1.0	Excavate pit for ramps/step bases commencing from reduced level but not exceeding 1.5m deep.	CM	3		
2.0	Remove excavated materials from site	CM	3		
	Mass concrete mix 1:3:6				
3.0	In ramps/step	CM	5		
	Formwork				
4.0	Sawn formwork to sides of ramps/step	SM	3		
5.0	Ditto to edges of risers	LM	9		
	TOTAL FOR ELEMENT NO. 2. RAMP AND STAIRS CARRIED TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ELEMENT NO. 3				
	VIBRATED REINFORCED SUPERSTRUCTURE				
	Insitu vibrated reinforced concrete mix 1:2:4 grade 20 as described in :-				
1.0	Beams	CM	5		
	High yield square twisted reinforcement including cutting to lengths,bending,twisting and fixing ,including all necessary tying wires and spacing				
2.0	12mm bars in beams	KG	263		
	Mild steel reinforcement to BS 4449				
3.0	8mm diameter bars in beams	KG	130		
	Formwork				
	Sawn softwood formwork to in-situ concrete as described:-				
4.0	Vertical sides and soffites of beams	SM	47		
	STEEL COLUMNS				
	Mild steel including grinding all welds smooth and painting with red oxide primer before delivery to site				
5.0	100mm Diameter Circular Hollow Section (C.H.S)mild steel column 3000mm long; one end built into concrete base and the other welded onto mild steel U-shaped	NO	6		
6.0	Extra Over above described for provision and welding of 100 x 75 mm U-shaped holder batt, twice drilled for	NO	6		
	TOTAL ELEMENT NO.3 VIBRATED REINFORCED CONCRETE SUPERSTRUCTURES CARRIED TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ELEMENT NO.4				
	WALLING SUPERSTRUCTURE				
	Machine cut walling				
1.0	and jointed in cement and sand mortar mix 1:3 with 20mm wide hoop iron reinforcement at every alternate course	SM	188		
	TOTAL ELEMENT NO.4 WALLING SUPERSTRUCTURE CARRIED TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ELEMENT NO. 5				
	ROOFING				
	The following in 14No. second grade celcured cypress timber trusses spanning 9200mm and 2100mm high				
1.0	100 x 50mm kingpost	LM	30		
2.0	150x50mm rafters.	LM	160		
3.0	100 x 50mm struts and ties	LM	160		
4.0	150 x 50mm tie beam	LM	140		
5.0	150 x 50 mm wall plate to verandah secured with 100mm diameter steel CHS columns and including 12 mm diameter mild steel bolt 150 mm long.	LM	23		
6.0	75x50mm Purlins.	LM	230		
	ROOF COVERING				
	Prepainted galvanised corrugated iron roofing sheet fixed approximately 3000mm average height from ground level with and including 100mm long galvanised roofing nails on timber purlins (ms) with one end and a half corrugation side lap and 150mm end laps with matching roofing rubbers				
7.0	28gauge box profile prepainted blue roof covering nailed to Timber Purlins	SM	276		
8.0	Matching ridge caps	LM	23		
9.0	Extra over roofing in transluscent sheet in matching profi	SM	5		
	Eaves filling				
10.0	200mm thick machine cut coral block eaves and gable filling	SM	42		
	WROT CYPRESS				
11.0	225x25mm fascia and bardge board	LM	63		
	Knot, prime,Stop and Prepare and apply three coats white brilliant gloss oil paint on-:				
12.0	Timber surfacs over 200 mm but not exceeding 300mm girth	LM	63		
	TOTAL ELEMENT NO.5 ROOFING WORKS CARRIED TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ELEMENT No. 6				
	DOORS				
	Mild steel Doors				
1.0	1200 x 2700mm high mild steel double plate pannel door comprising 4no 900 x 900mm high double plates complete with 100 x 50 x 3mm RHS framing and metal lugs including purpose made hanging and locking accessories once primed with red oxide primer before delivery to the site including three lever mortice lock as per 'Union' Ref 2277 or other equal and approved	NO	2		
2.0	Ditto but size 900 x 2700	NO	1		
	Glazing.				
3.0	Panes 0.1 - 0.5 square metres	SM	2		
	Painting				
	Prepare and apply three coats gloss oil paint to:-				
4.0	General surfaces of metal	SM	11		
	TOTAL FOR ELEMENT NO.6 DOORS CARRIED TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ELEMENT NO.7 **WINDOWS** **FRAMES.**				
	The following in wrot graded cedar				
1.0	150x50mm frame primed before fixing.	LM	78		
2.0	Ditto mullions ditto.	LM	39		
3.0	Ditto transome ditto.	LM	20		
	Supply and fix anadonised aluminium louvre jambs with 150mm wide blade carriers				
4.0	Set for 2 No. blade carriers.	PRS	39		
5.0	Set for 8 No. blade carriers.	PRS	39		
	Glazing.				
6.0	150X5mm glass panes with ground edges set loose in louvre clips.	LM	195		
	Burglar proofing				
7.0	16mm diameter burglar proof bars in plastic sheath fixed in timber frames.	LM	195		
8.0	Labour for drilling 16mm diameter hole through 50mm thick hardwood.	NO	520		
	Painting **Knot,prime,stop,prepare and apply three coats polyurethane varnish to:-**				
9.0	Frames exceeding 200mm but not exceeding 300mm	LM	117		
	TOTAL FOR ELEMENT NO 7 WINDOWS CARRIED TO SUMMARY.				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ELEMENT NO. 8 **FINISHES** **FLOOR FINISHES**				
	Floors and Skirting.				
1.0	40mm thick Cement Sand (1:4) and floor screed	SM	185		
2.0	20mm thick x 100mm high cement sand skirting (1:3)	LM	79		
3.0	Supply and fix 300 x 300 mm ceramic tiles fix with 2mm spacers and make good	SM	185		
	EXTERNAL WALL FINISHES **External walls**				
4.0	Extra over dressed stone walling for neat recessed horizontal key in cement mortar (1:3)	SM	117		
5.0	12mm thick cement,sand render,with wood float finish	SM	40		
6.0	Ditto rendered concrete surfaces	SM	18		
	Painting and decoration **Prepare and apply one undercoat and two finishing coats of exterior quality plastic cream emulsion paint on :-**				
7.0	Rendered wall surfaces	SM	40		
8.0	Rendered concrete surfaces	SM	18		
	Touch up primer, prepare and apply one undercoat and Two finishing coats first quality black gloss oil pain to metalwork				
9.0	General surfaces of mild steel 75-150mmgirth(Circular hollow section column sand holder batts)	LM	18		
	Carried Forward				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	Brought Forward				
	INTERNAL WALL FINISHES				
	Internal walls				
1.0	12mm thick cement,sand and lime plaster,with steel trowelled finish.	SM	219		
	Painting and decoration				
2.0	Prepare and apply one undercoat and two finishing coats first quality soft white plastic emulsion paint ditto.	SM	219		
3.0	Prepare and apply one finishing coat first quality gloss cream paint to wall skirting.	SM	90		
	CEILING FINISHES				
	ceiling				
4.0	6mm thick Plywood ceiling fixed to 50 x 50mm sawn cypress brandering(ms) at 600m centers both directions fixed with clout headed nails.	SM	147		
	Cornices				
5.0	Prime grade wrot cypress timber selected and kept clean 75 x 25mm cornice with two labours, together with center pulps	LM	87		
	Beadings				
6.0	Prime grade wrot cypress timber selected and kept clean 50 x 25mm beadings with two labours to conceal joints between ceiling boards	LM	260		
	Brandering				
	Sawn cypress				
7.0	50 x 50mm sawn cypress brandering nailed to tie beams	LM	300		
	Carried Forward				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	Brought Forward				
	Painting and decoration **Prepare and apply one undercoat and two finishing coats plastic emulsion paint on :-**				
1.0	Chipboard surfaces	SM	147		
2.0	Extra for forming trap door with cypress framingsize 600x600mm	NO	3		
	Knot,Prime,Stop, prepare and apply three coats first quality emulsion paint to:-				
3.0	Timber surfaces not exceeding 100mm girth	LM	87		
	EXTERNAL PAVINGS				
	Paving				
4.0	100 mm thick murrum fill well watered and compacted to 95% MDD.	SM	60		
5.0	60 mm thick precast concrete slabs laid and jointed in cement/sand mortar mix 1:3	SM	60		
	TOTAL ELEMENT No. 8 : FINISHES CARRIED TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ELEMENT No.9				
	FITTINGS				
	Chalk board				
1.0	40mm thick Cement sand mix 1:3 Chalkboard size 1200mm high x 6000mm long with chalk rail placed at a height of 1000mm above floor slab	NO	2		
	SHELVING				
2.0	Timber Board 18mm Shelving size 7000mm long x 450mm deep x 1200mm comprising 5No. horizontal divisions at 600mm C/C complete with all bearer plugs	NO	2		
	TOTAL ELEMENT NO.9: FITTINGS CARRIED TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ELEMENT NO. 11 **CONSTRUCTION OF TANK BASE** **The following in 1No.Tank platform(Base),3500mm diameter x 400mm high**				
1.0	Excavate oversite average 150mm deep,wheel and depost on site as directed.	SM	10		
2.0	Excavate for foundation trench not exceeeding 1.5m from the ground level	CM	10		
3.0	Return,fill and ram well selected excavated materials.	CM	4		
4.0	Load and cart away surplus excavated materials	CM	5		
5.0	300mm thick hardcore layer compacted in 2 layers and blinded with murram (m.s)	CM	3		
6.0	50mm thick murram blinding.	SM	10		
7.0	foundations	SM	7		
	aggregate				
8.0	200mm thick foundation concrete	CM	1		
9.0	150mm thick floor surface bed	SM	10		
	Steel Reinforcement **Steel bars cut and bent as required including short joining lengths,binding wire and spacer blocks**				
10.0	Y8 longitudinal bars in strip footings	KG	13		
11.0	Y10 cross (main) bars in strip foundation footing	KG	22		
	Sawn softwood formwork to:-				
12.0	Sides of floor bed 150mm to 225mm high	LM	11		
	Carried Forward				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	Brought Forward				
	Solid coral block walling in cement sand mortar (1:4)				
1.0	200mm thick machine cut coral block walling	SM	4		
2.0	12mm cement sand (1:4) render trowelled smooth	SM	4		
	Platform finishes				
3.0	25mm thick cement sand plaster to sides and top of platform	SM	12		
	RAINWATER HARVEST				
4.0	26 Gauge pre-painted galvanised steel box profile sheet trough and fixing accessories lapped and fixed to timber purlins (ms) in accordance with the manufacturers' instructions; 750mm girth	LM	25		
5.0	150 x 150mm square section rain water downpipe	LM	6		
6.0	Extra over guiter for outlets	NO	2		
	UPVC CYLINDRICAL TANKS VERTICAL (Diameter x Ht) as Roto or equally approved				
7.0	10,000Litrs 2400 x 2800mm	NO	1		
	Water pump cage				
8.0	Lockable steel cage measuring 500mm x 500mm x 550mm including a padlock	NO	1		
	BRASS BIB TAPS AS "PEGLAR" OR ANY OTHER APPROVED				
9.0	19mm Diameter	NO	1		
	TOTAL FOR ELEMENT NO.11: CONSTRUCTION OF TANK BASE CARRIED TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ECD CLASSROOM BLOCK				
	SUMMARY				
1.0	SUBSTRUCTURE WORKS				
2.0	RAMP AND STEP				
3.0	VIBRATED REINFORCED CONCRETE SUPERSTRUCTURE				
4.0	WALLING SUPERSTRUCTURE				
5.0	ROOFING				
6.0	DOORS				
7.0	WINDOWS				
8.0	FINISHES				
9.0	FITTINGS				
11.0	CONSTRUCTION OF TANK BASE				
	CARRIED TO MAIN SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	BILLS OF QUANTITIES FOR PROPOSED 3-DOOR VIP LATRINE BLOCK WITH URINAL				
	ELEMENT NO. 1				
	SUBSTRUCTURE				
	(ALL PROVISIONAL)				
	Site clearance				
1.0	Clear site of shrubs,grass,small trees girth not exceeding 600mm and grub roots and remove from site as directed.	SM	47		
	Excavations and earth works				
2.0	Excavate vegetable soil,shrubs and undergrowth grub there roots and burn the uprising.	SM	34		
3.0	Excavate for strip foundation starting from strip level depth not exceeding 1.5m deep.	CM	17		
4.0	Excavation to pit latrine 1500mmx3500mm wide depth not exceeding 1.5m deep.	CM	8		
5.0	Ditto but from 1.5m but not exceeding 3.0m deep.	CM	8		
6.0	Ditto but from 3.0m but not exceeding 4.5m deep.	CM	8		
7.0	Ditto but from 4.5m but not exceeding 6.0m deep.	CM	8		
8.0	Return fill and rum selected excavated material.	CM	3		
9.0	Cart away surplus excavated material.	CM	25		
	Planking and strutting				
10.0	Allow for plunking and strutting	ITEM			
	Carried Forward				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	Brought Forward				
	Disposal of water				
1.0	Allow for keeping excavations free from water.	ITEM			
	Hardcore fillings				
2.0	Approved hardcore fill 300mm thick ,well watered and compacted to receive murram blinding(m.s)	SM	7		
	Quarry dust/murram blinding				
3.0	Approved 50mm thick murram blinding.	SM	7		
	Anti - termite treatment				
4.0	Gladiator T.C.L or any other equal and approved chemical anti-termite treatment to sub soil or filling	SM	7		
	Insitu Plain Concrete mix 1:3:6 in:				
5.0	50mm thick concrete blinding under strip foundations	SM	20		
6.0	50mm thick concrete blinding under pit linning strip foundations	SM	20		
	Insitu vibrated reinforced concrete mix 1:2:4 in				
7.0	200mm thick strip foundations	CM	3		
8.0	200mm thick under pit linning strip foundations	CM	3		
6.0	200mm x 200mm thick in fioor beams	CM	1		
7.0	150mm thick in suspended floor beds	CM	19		
	Carried Forward				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	Brought Forward				
	High yield square twisted reinforcement including cutting to lengths,bending,twisting and fixing ,including all necessary tying wires and spacing blocks to B.S. 4461:-				
1.0	8mm longitudinal bars in strip foundation	KG	25		
2.0	10mm cross(main) bars ditto	KG	40		
3.0	8mm longitudinal bars in strip foundation for pit linnng	KG	25		
4.0	10mm cross(main) bars ditto	KG	40		
5.0	12mm bars as main bars in suspended floors and beams	KG	185		
6.0	10mm bars as main bars in suspended floors	KG	74		
	Mild steel reinforcement to BS 4449				
7.0	8mm diameter bars as links to floor beams	KG	25		
	Mesh fabric reinforcement to BS 4483:Square mesh reference A142:weighing 2.22kilogrammes per square metre	SM	7		
8.0	In bebs 200mm laps				
	Formwork to:	SM	8		
9.0	Vertical sides of strip foundations	SM	8		
10.0	Vertical sides of strip foundations for pit linning	SM	13		
11.0	Soffits and sides of floor beams and slabs exceeding 3.0m high				
12.0	Vertical edges of beds over 75mm but not exceeding 150mm wide.	LM	27		
	Carried Forward				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	Brought Forward				
	Machine cut natural coral blocks beded in cement sand mortar (1:4) including hoop iron in every alternate course				
1.0	200mm walls	SM	70		
2.0	Ditto 200mm walls in pit lining	SM	83		
	Bituminous felt damp proof courses bedded in cement sand mortar (1:4) :300mm laps:-				
3.0	200mm wide horizontal	LM	29		
	12mm cement sand (1:4) render:Steel trowelled on concrete or stonework to				
4.0	Plinths	SM	9		
	Prepare and apply two coats bituminous paint on render to:-				
5.0	Plinth	SM	9		
	TOTAL ELEMENT NO.1 SUB-STRUCTURES CARRIED TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ELEMENT NO. 2				
	VIBRATED REINFORCED SUPERSTRUCTURE				
	Insitu vibrated reinforced concrete mix 1:2:4 grade 20 as described in :-				
1.0	Beams	CM	1		
	High yield square twisted reinforcement including cutting to lengths,bending,twisting and fixing ,including all necessary tying wires and spacing blocks to B.S. 4461:-				
2.0	12mm bars in beams	KG	73		
	Mild steel reinforcement to BS 4449				
3.0	8mm diameter bars in beams	KG	18		
	Formwork				
	Sawn softwood formwork to in-situ concrete as described:-				
4.0	Vertical sides and soffites of beams	SM	7		
	TOTAL ELEMENT NO.2 VIBRATED REINFORCED CONCRETE SUPERSTRUCTURES CARRIED TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ELEMENT NO.3				
	WALLING SUPERSTRUCTURE				
	Machine cut walling				
1.0	200mm thick machine cut coral block walling bedded and jointed in cement and sand mortar mix 1:3 with 20mm wide hoop iron reinforcement at every alternate	SM	60		
2.0	150mm thick precast concrete permanent vent block walling	SM	1		
	TOTAL ELEMENT NO.3 WALLING SUPERSTRUCTURE CARRIED TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ELEMENT NO. 4				
	ROOFING				
	The following in second grade celcured cypress and all the necessary for assembling and hoisting to position as per roofing details.				
1.0	100x50mm rafters.	LM	15		
2.0	75x50mm Purlins.	LM	21		
	ROOF COVERING				
3.0	28gauge Pre-painted blue box profile roof covering nailed to Timber Purlins	SM	21		
	Eaves filling				
4.0	200mm thick machine cut coral block eaves and gable filling	LM	18		
	WROT CYPRESS				
5.0	150x25mm fascia and bardge board	LM	20		
	Knot, prime,Stop and Prepare and apply three coats white brilliant gloss oil paint on-:				
6.0	Timber surfacs over 200 mm but not exceeding 300mm girth	LM	20		
	TOTAL ELEMENT NO.4 ROOFING WORKS CARRIED TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ELEMENT NO. 5				
	DOORS				
	Mild steel Doors				
1.0	900 x 2100mm high mild steel double plate pannel door comprising 4no 900 x 900mm high double plates complete with 100 x 50 x 3mm RHS framing and metal lugs including purpose made hanging and locking accessories once primed with red oxide primer before delivery to the site including three lever mortice lock as per 'Union' Ref 2277 or other equal and approved	NO	3		
	Painting				
	Prepare and apply three coats gloss oil paint to:-				
2.0	General surfaces of metal	SM	4		
	DOOR GRILLS				
	Heavy duty steel Door grilles comprising 16mm square bar perimeter framing and horizontal middle rail 12mm square bar ventical infilla st 150mm centres, 16 x 4 mm flat diamond shaped welded onto square bars primed as per crown paints primer the whole grille complete with fixing lugs and including				
9.0	Variours sizes	SM	5		
	TOTAL FOR ELEMENT NO.5 DOORS CARRIED TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ELEMENT NO. 6				
	FINISHES				
	Floor finishes				
1.0	40mm thick Cement Sand (1:4) and screed	SM	16		
2.0	Ditto,in 100mm high skirting ,with painted top, ditto	LM	13		
	Painting and decoration				
3.0	Prepare and apply one undercoat and two finishing coats of interior quality black gloss oil paint to ditto	LM	13		
	EXTERNAL WALL FINISHES				
	External walls				
4.0	Extra over dressed stone walling for neat recessed horizontal key in cement mortar (1:3)	SM	28		
5.0	12mm thick cement,sand render,with wood float finish	SM	2		
6.0	Ditto rendered concrete surfaces	SM	4		
	Painting and decoration				
	Prepare and apply one undercoat and two finishing coats of exterior quality plastic cream emulsion paint on :-				
7.0	Rendered wall surfaces	SM	2		
8.0	Rendered concrete surfaces	SM	4		
	Carried Forward				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	Brought Forward				
	INTERNAL WALL FINISHES				
	Internal walls				
1.0	12mm thick cement,sand and lime plaster,with steel trowelled finish.	SM	59		
	Painting and decoration				
2.0	Prepare and apply one undercoat and two finishing coats first quality soft white plastic emulsion paint ditto.	SM	59		
3.0	Prepare and apply one finishing coat first quality gloss cream paint to wall skirting.	SM	30		
	Wall tiles				
4.0	3 courses of ceramic wall tiles to internal urinal wall surfaces	SM	2		
	Copping stone				
5.0	Mass concrete copping stone mix (1:3) twice weathered and throated on top of screen wall	LM	6		
	MISCELLEANOUS				
6.0	U.P.V.C golden brown vent pipe 100mm diameter	LM	6		
7.0	U.P.V.C ballon guard(vent cap) 100mm diameter	LM	2		
8.0	50mm diameter PVC floor trap	NO	1		
	EXTERNAL PAVINGS				
	Paving				
9.0	100 mm thick murrum fill well watered and compacted to 95% MDD.	SM	20		
10.0	60 mm thick precast concrete slabs laid and jointed in cement/sand mortar mix 1:3	SM	20		
	TOTAL ELEMENT NO. 6: FINISHES CARRIED TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ECDE 3-DOOR VIP LATRINE & URINAL BLOCK SUMMARY				
1.0	SUBSTRUCTURE WORKS				
2.0	VIBRATED REINFORCED CONCRETE SUPER STRUCTURES				
3.0	SUPERSTRUCTURE WALLING				
4.0	ROOFING				
5.0	DOORS				
7.0	FINISHES				
	CARRIED TO MAIN SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	BILLS OF QUANTITIES FOR PROPOSED ECDE KITCHEN				
	ELEMENT NO. 1				
	SUBSTRUCTURE				
	Site Preparation				
1.0	Clear site of shrubs,grass,small trees girth not exceeding 600mm and grub roots and remove from site as directed.	SM	41		
2.0	Excavate oversite average 150mm deep to remove top vegetable soil and spread on site as directed	SM	41		
3.0	Excavate trenches for wall foundation commencing from reduced level but not exceeding 1.5m deep.	CM	16		
4.0	Extra over all excavations for excavating in rock	CM	1		
	Disposal of excavated materials				
5.0	Backfill and compact selected excavated materials	CM	10		
6.0	Remove surplus excavated materials from site	CM	6		
	Disposal of water				
7.0	Keep trenches free from general water	ITEM			
	Planking and strutting				
8.0	Allow for all necessary earthwork support to sides of foundation trenches	ITEM			
	Hardcore fillings				
9.0	300mm thick approved handpacked hardcore filling spread, levelled and compacted in 150mm layers.	CM	5		
	Anti - termite treatment				
10.0	Gladiator T.C.L or any other equal and approved chemical anti-termite treatment to sub soil or filling	SM	19		
	Carried Forward				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	Brought Forward				
	Damp proof membrane				
1.0	500 gauge polythene sheeting in damp proof membrane over murram blinding (measured seperately)	SM	19		
	Quarry dust/murram blinding				
2.0	50mm thick fillings as blinding to hardcore levelled and compacted	SM	19		
	Insitu Plain Concrete mix 1:3:6 in:				
3.0	50mm thick concrete blinding under strip foundations	SM	11		
	Insitu vibrated reinforced concrete mix 1:2:4 in				
4.0	200mm thick strip foundations	CM	2		
5.0	150mm thick floor beds	SM	19		
	High yield square twisted reinforcement including cutting to lengths,bending,twisting and fixing ,including all necessary tying wires and spacing blocks to B.S. 4461:-				
6.0	8mm longitudinal bars in strip foundation	KG	25		
7.0	10mm cross(main) bars ditto	KG	35		
	Mesh fabric reinforcement to BS 4483:Square mesh reference A142:weighing 2.22kilogrammes per square metre				
8.0	In bebs 200mm laps	SM	19		
	Carried Forward				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	Brought Forward				
	Formwork to:				
1.0	Vertical sides of strip foundations	SM	7		
2.0	Vertical edges of beds over 75mm but not exceeding 150mm wide.	LM	18		
	Machine cut natural coral block walling beded in cement sand mortar (1:4) including hoop iron in every alternate course				
3.0	200mm walls	SM	18		
	Bituminous felt damp proof courses bedded in cement sand mortar (1:4) :300mm laps:-				
4.0	200mm wide horizontal	LM	18		
	12mm cement sand (1:4) render:Steel trowelled on concrete or stonework to				
5.0	Plinths	SM	5		
	Prepare and apply two coats bituminous paint on render to:-				
6.0	Plinth	SM	5		
	TOTAL ELEMENT NO.1 SUB-STRUCTURES CARRIED TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ELEMENT NO. 2				
	VIBRATED REINFORCED SUPERSTRUCTURE				
	Insitu vibrated reinforced concrete mix 1:2:4 grade 20 as described in :-				
1.0	Beams	CM	2		
	High yield square twisted reinforcement including cutting to lengths,bending,twisting and fixing ,including all necessary tying wires and spacing				
2.0	12mm bars in beams	KG	70		
	Mild steel reinforcement to BS 4449				
3.0	8mm diameter bars in beams	KG	40		
	Formwork				
	Sawn softwood formwork to in-situ concrete as described:-				
4.0	Vertical sides and soffites of beams	SM	11		
	TOTAL ELEMENT NO.2 VIBRATED REINFORCED CONCRETE SUPERSTRUCTURES CARRIED TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ELEMENT NO.3				
	WALLING SUPERSTRUCTURE				
	Machine cut walling				
1.0	200mm thick machine cut coral block walling bedded and jointed in cement and sand mortar mix 1:3 with 20mm wide hoop iron reinforcement at every alternate	SM	43		
	TOTAL ELEMENT NO.3 WALLING SUPERSTRUCTURE CARRIED TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ELEMENT NO. 4				
	ROOFING				
	The following in 4 NO. second grade celcured cypress timber trusses				
1.0	100 x 50mm kingpost	LM	4		
2.0	100x50mm rafters.	LM	24		
3.0	100 x 50mm struts and ties	LM	16		
4.0	100X50mm tie Beams	LM	18		
5.0	75x50mm Purlins.	LM	30		
	ROOF COVERING				
6.0	28gauge box profile prepainted blue roof covering nailed to Timber Purlins	SM	31		
7.0	Matching ridge caps	LM	5		
	Eaves filling				
8.0	200mm thick machine cut coral block eaves and gable filling	LM	22		
	WROT CYPRESS				
9.0	225x25mm fascia and bardge board	LM	22		
	Knot, prime,Stop and Prepare and apply three coats white brilliant gloss oil paint on-:				
10.0	Timber surfacs over 200 mm but not exceeding 300mm girth	LM	22		
	TOTAL ELEMENT NO.4 ROOFING WORKS CARRIED TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ELEMENT No. 5				
	DOORS				
	Mild steel Doors				
1.0	900 x 2700mm high mild steel double plate pannel door comprising 4no 900 x 900mm high double plates complete with 100 x 50 x 3mm RHS framing and metal lugs including purpose made hanging and locking accessories once primed with red oxide primer before delivery to the site including three lever mortice lock as per 'Union' Ref 2277 or other equal and approved	NO	2		
	Glazing.				
2.0	Panes 0.1 - 0.5 square metres	SM	1		
	Painting				
	Prepare and apply three coats gloss oil paint to:-				
3.0	General surfaces of metal	SM	5		
	TOTAL FOR ELEMENT NO.5 DOORS CARRIED TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ELEMENT NO.7				
	WINDOWS				
	FRAMES.				
1.0	150x50mm rectangular primed before fixing.	LM	12		
2.0	Ditto mullions ditto.	LM	3		
3.0	Ditto transome ditto.	LM	3		
4.0	20mm x 20mm stop.	LM	2		
	Supply and fix anadonised aluminium louvre jambs with 150mm wide blade carriers				
5.0	Set for 2 No. blade carriers.	Pairs	4		
6.0	Set for 8 No. blade carriers.	Pairs	4		
	Glazing.				
7.0	150X5mm glass panes with ground edges set loose in louvre clips.	LM	24		
	Burglar proofing				
8.0	16mm diameter burglar proof bars in plastic sheath fixed in timber frames.	LM	24		
9.0	Labour for drilling 16mm diameter hole through 50mm thick hardwood.	NO	36		
	Painting				
	Knot,prime,stop,prepare and apply three coats polyurethane varnish to:-				
10.0	Frames exceeding 100mm but not exceeding 200mm	LM	18		
	TOTAL FOR ELEMENT NO 7 WINDOWS CARRIED TO SUMMARY.				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ELEMENT NO. 7				
	FINISHES				
	Floor finishes				
1.0	40mm thick Cement Sand (1:4) and screed	SM	23		
2.0	Ditto,in 100mm high skirting ,with painted top, ditto	LM	14		
	Painting and decoration				
3.0	Prepare and apply one undercoat and two finishing coats of interior quality black gloss oil paint to ditto	LM	14		
	EXTERNAL WALL FINISHES				
	External walls				
4.0	Extra over dressed stone walling for neat recessed horizontal key in cement mortar (1:3)	SM	34		
5.0	12mm thick cement,sand render,with wood float finish	SM	5		
6.0	Ditto rendered concrete surfaces	SM	5		
	Painting and decoration				
	Prepare and apply one undercoat and two finishing coats of exterior quality plastic cream emulsion paint on :-				
7.0	Rendered wall surfaces	SM	5		
8.0	Rendered concrete surfaces	SM	5		
	INTERNAL WALL FINISHES				
	Internal walls				
9.0	12mm thick cement,sand and lime plaster,with steel trowelled finish.	SM	15		
	Carried Forward				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	Brought Forward				
	Painting and decoration				
1.0	Prepare and apply one undercoat and two finishing coats first quality soft white plastic emulsion paint ditto.	SM	15		
2.0	Prepare and apply one finishing coat first quality gloss cream paint to wall skirting.	SM	8		
	EXTERNAL PAVINGS				
	Paving				
3.0	100 mm thick murrum fill well watered and compacted to 95% MDD.	SM	17		
4.0	60 mm thick precast concrete slabs laid and jointed in cement/sand mortar mix 1:3	SM	17		
	TOTAL ELEMENT NO. 7 : FINISHES CARRIED TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	BILLS OF QUANTITIES FOR CONSTRUCTION OF CHIMNEY				
	The following in 1No.chimney:-				
	Insitu Plain Concrete mix 1:3:6 in:				
1.0	200mm thick strip foundations	CM	2		
	Machine cut natural blocks beded in cement sand mortar (1:4) including hoop iron in every alternate				
2.0	200mm walls	SM	14		
	12mm cement sand (1:4) render:Steel trowelled on concrete or stonework to				
3.0	Blockwork	SM	4		
	Painting and decoration				
4.0	Prepare and apply one undercoat and two finishing coats first quality soft white plastic emulsion paint ditto.	SM	4		
	VIBRATED REINFORCED SUPERSTRUCTURE				
	Insitu vibrated reinforced concrete mix 1:2:4 grade 20 as described in :-				
5.0	Beams	CM	1		
6.0	Suspended slab	SM	2		
	High yield square twisted reinforcement including cutting to lengths,bending,twisting and fixing ,including all necessary tying wires and spacing blocks to B.S. 4461:-				
7.0	12mm bars in beams	KG	5		
8.0	12mm Suspended slab	KG	16		
	Carried Forward				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	Brought Forward				
	Mild steel reinforcement to BS 4449				
1.0	8mm diameter bars in beams	KG	5		
	Formwork				
	Sawn softwood formwork to in-situ concrete as described:-				
2.0	Vertical sides and soffites of beams	SM	4		
3.0	Soffites of Suspended slab	SM	2		
	TOTAL CARRIED TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	ECDE KITCHEN BLOCK SUMMARY				
1.0	SUBSTRUCTURE WORKS				
2.0	VIBRATED REINFORCED CONCRETE SUPER STRUCTURES				
3.0	SUPERSTRUCTURE WALLING				
4.0	ROOFING				
5.0	DOORS				
6.0	WINDOWS				
7.0	FINISHES				
9.0	CHIMNEY				
	CARRIED TO MAIN SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	BILLS OF QUANTITIES FOR PROPOSED ECDE CENTRE MASONRY DIRECTIONAL SIGNAGE STAND MEASURING 1200mm WIDE x 1500mm High				
	The following in 1No. Masonry signage stand:-				
	Site Preparation				
1.0	Clear site of shrubs,grass,small trees girth not exceeding 600mm and grub roots and remove from site as directed.	SM	4		
2.0	Excavate oversite average 150mm deep to remove top vegetable soil and spread on site as directed	SM	4		
3.0	Excavate trenches for wall foundation commencing from reduced level but not exceeding 1.5m deep.	CM	1		
4.0	Extra over all excavations for excavating in rock	CM	1		
	Disposal of excavated materials				
5.0	Backfill and compact selected excavated materials	CM	1		
6.0	Remove surplus excavated materials from site	CM	1		
	Disposal of water				
7.0	Keep trenches free from general water	ITEM			
	Planking and strutting				
8.0	Allow for all necessary earthwork support to sides of foundation trenches	ITEM			
	Insitu Plain Concrete mix 1:3:6 in:				
9.0	200mm thick strip foundations	CM	1		
	Carried Forward				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	Brought Forward				
	Machine cut natural blocks beded in cement sand mortar (1:4) including hoop iron in every alternate course				
1.0	200mm walls	SM	3		
2.0	600 x 300 x 75mm PCC coping to top of wall	LM	2		
	12mm cement sand (1:4) render:Steel trowelled on concrete or stonework to				
3.0	Blockwork	SM	4		
	Painting and decoration				
4.0	Prepare and apply one undercoat and two finishing coats first quality soft white plastic emulsion paint ditto.	SM	4		
5.0	Allow for drawing the County logo and text reading "KWALE COUNTY GOVERNMENT" and the name of the ECDE Centre and the distance from the main road on both sides of the signage stand	ITEM			
6.0	Allow for drawing the County logo and the text reading " KWALE COUNTY GOVERNMENT' and the name of the ECDE Centre on both sides of the rendered and painted gable wall surfaces of the ECDE classroom	ITEM			
	TOTAL CARRIED SIGNATE AND DIRECTION TO SUMMARY				
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**

				KShs	KShs
	GURDRAILS AND MASS EXCAVATIONS				
	A, GURD RAILS				
1.0	60mm diameter x 2mm Thick steel pipe railing welded onto and including intermediate members - 40mm diameter x 2mm vertical balusters @ 1200mm centres and 25mm diameter x 1mm horizontal balusters @ 200mm centres in approved pattern	SM	20		
	Touch up primer prepare and apply three coats gloss oil paint as supplied by CROWN BERGER LTD. (or equivalent) on:-				
2.0	General metal surfaces	SM	20		
	B. MASS EXCAVATIONS AND FILLINGS				
3.0	Mass excavation; excavate in bulk approximately 2m deep to level site and dispose off site as directed.	CM	603		
	TOTAL CARRIED TO SUMMARY- GURD RAILS AND MASS EXCAVATIONS				

PROPOSED BILLS OF QUANTITIES FOR CONSTRUCTION OF AN ECDE (ALL PROVISIONAL
KWALE COUNTY GOVERNMENT

Item	Description	Unit	Qty	Rate KShs	Amount KShs
	MAIN SUMMARY				
1.0	PRELIMINARIES				
2.0	ECD CLASSROOM BLOCK				
3.0	3- DOOR VIP LATRINE AND URINAL BLOCK				
4.0	KITCHEN				
5.0	DIRECTIONAL SIGNAGE				
6.0	GURD RAILS AND EXCATIONS				
7.0	ELECTRICAL WORLS FOR CLASSROOMS				
	TOTAL 1				-
	Add 0.03% Capacity Building Levy (CBL)				-
	TOTAL 2				-
	ADD.				
	16% V.A.T				-
	TOTAL CARRIED TO FORM OF TENDER				
	SIGNATURE AND STAMP OF TENDERER				
	DATE				
	NAME AND ADDRESS				
	TENDERER'S WITNESS SIGNATURE				
	DATE				
	NAME AND ADDRESS				