

BILL OF QUANTITIES

HALL at SAFE ROOM

CLIENT : MINISTRY OF EDUCATION, GOVERNEMNT OF MALDIVES

SUMMARY OF BILLS OF QUANTITIES
HALL at SAFE ROOM

DESCRIPTION	AMOUNT	%
Bill No: 01 - PRELIMINARIES		
Bill No: 02 - EXCAVATION AND FILLING		
Bill No: 03 - INSITU CONCRETE WORKS		
Bill No: 04 - MASONRY		
Bill No: 05 - DOORS, SHUTTERS & HATCHES		
Bill No: 06 - FLOOR, WALL, CEILING, AND ROOF FINISHINGS		
Bill No: 7 - PAINTING & DECORATIONS		
Bill No: 8 - MECHANICAL & ELECTRICAL SERVICES		
Bill No: 9 - PLUMBING		
Bill No: 10- ADDITIONS AND OMMISIONS		
TOTAL AMOUNT		

Safe Room
Male', Republic of Maldives

BILL OF QUANTITIES

ITEM	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
1.0.00	Bill №: 01 - PRELIMINARIES					
1.1.00	GENERAL NOTES <u>Abbreviations</u> m - metre nr - numbers m3 - cubic metres m2 m - linear metre t - tons inc. - including mm - millimetre SS - stainless steel GI - galvanized iron					
1.2.00	SITE MANAGEMENT COSTS Allow for all on and off site management cost including costs of foreman and assistants, temporary services, telephone, fax, hoardings & similar.	item	1.00			
1.3.00	SIGN BOARD Allow for sign board.	nr	1.00			
1.4.00	CLEAN-UP Allow for clean-up upon completion of works.	item	1.00			
1.5.00	INSURANCE, BONDS, GUARANTEES AND WARRANTIES Insurance as stated in the general conditions.	item	1.00			
1.6.00	TOTAL OF BILL №: 01 - Carried Over To Summary					

ITEM	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
2.0.00	Bill №: 02 - EXCAVATION AND FILLING					
2.1.00	GENERAL (a) Rates shall include for: leveling, grading, trimming, compacting to faces of excavation, keep sides plumb, backfilling, consolidating, and disposing surplus soil.					
2.2.00	SITE CLEARING					
2.2.01	Clear the area of site from rubbish and vegetable matters, stumps, roots. Rates shall include for removal of trees and tree stumps	m ²	25.50			
2.3.00	EXCAVATION					
	Excavation quantities are measured to the faces of concrete members. Rates shall include for all the additional excavation required to place the formwork. Rates shall include for backfilling.					
2.3.01	Excavation for Foundation pads	m ³	8.19			
2.3.02	Excavation for Foundation beams	m ³	0.81			
2.4.00	FILLING					
	Rate shall include for: levelling, grading, trimming, compacting and similar					
2.4.01	Compacted earth filling under ground slab	m ³	10.37			
2.5.00	DAMP-PROOF MEMBRANE					
	Rate shall include for: dressing around and sealing to all penetrations,laps and turnups.					
2.5.01		m ²	2.84			
2.6.00	DE-WATERING					
2.6.01	De-watering the excavation until completion of concrete work as required	item	1.00			
2.7.00	TOTAL OF BILL №: 02 - Carried Over To Summary					

ITEM	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
3.0.00	Bill №: 03 - INSITU CONCRETE WORKS					
3.1.00	GENERAL					
	(a) Rates shall include for: placing in position, making good after removal of formwork, mortar touch up to all concrete and casting in all required items; additional concrete required to conform to structural and excavated tolerances					
	(b) Mix ratio for reinforced concrete shall be 1:2:3 and lean concrete shall be 1:2:6.					
	(c) All structural concrete shall be GRADE M30 and lean concrete shall be GRADE M15					
	(d) Rates shall include for: concrete, formwork, reinforcement, cleaning, fabrication, placing, the provision for all necessary temporary fixings and supports including tie wires and chair supports, laps, distribution bars and wastage.					
	(e) Rates shall include for: all necessary boarding, supports, erecting, framing, temporary cambering, cutting, perforations for reinforcing bars, bolts, straps, ties, hangers, pipes and removal of formwork.					
	(f) Rates shall include for: cleaning, fabrication, placing the provision for all necessary temporary fixings and supports including tie wires and chair supports, laps, distribution bars and wastage.					
	(g) All reinforcing bars shall be high strength bars.					
	(h) Slab soffits to be finished fairfaced, use plasteciser and formwork with reducing agent.					
	(i) All exposed & external concrete members shall be casted with sika plastocrete plus or equivalent water proofing chemical.					
	(j) Rate shall include for applying 2 coats of waterproofing chemical to substructure.(Below ground level)					
3.1.01	Allow for Concrete Testing.	item	1.00			
3.2.00	MASS CONCRETE					
	Quantity is measured to the edges of concrete foundation members. Rates shall be inclusive for any additional concrete required to place the formwork.					
3.2.01	50 mm Lean Concrete (Foundations)	m ³	0.08			
3.3.00	REINFORCED INSITU CONCRETE					
	SUB-STRUCTURE					
	FOUNDATION PADS					
3.3.01	550 x 550 x 250mm Foundation pads, F1	m ³	0.30			
	FOUNDATION BEAMS					
3.3.02	300 x 175 mm Foundation beam, TB	m ³	0.60			
	COLUMNS					
3.3.03	175 x 175 mm Concrete columns C1	m ³	0.05			
3.4.00	GROUND FLOOR					
	COLUMNS					
3.4.01	175 x 175 mm Concrete columns C1	m ³	0.33			
	SLABS					
3.4.02	100 mm thk Concrete Slab on ground floor	m ³	0.93			
3.6.00	ROOF					
	BEAMS					
3.6.01	350 x 175 mm Beam RB	m ³	0.70			
	SLABS					
3.6.02	130 mm thick Concrete Slab on Roof level-01 130 mm this slab to be water proofed with MasterPel or similar water proofing agent	m ³	1.46			
3.8.00	OTHER WORKS					
	Lintel and Sill beams					
3.8.01	150 x 150 mm Beam LT1	item	0.03			
3.9.00	TOTAL OF BILL №: 03 - Carried Over To Summary					

ITEM	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
4.0.00	Bill №: 04 - MASONRY					
4.1.00	GENERAL (a) Rates shall include for: cleaning out cavities, forming rebated reveals and pointing and cleaning down to reveals where necessary; fractional size blocks, all necessary machine cutting, cutting or forming chases or edges of floor slabs, cutting or leavingholes and openings as recesses for and building in pipes, conduits, sleeves and similar as required for all trades; leaving surfaces rough or raking out joints for plastering and flashing, bedding frames or plates, building in joists, bearers or similar, temporary supports to openings, templates, reinforcement in walls and for all necessary making good.					
4.2.00	BLOCK WORK Cement block wall, bricks laid to form alternate courses of headers and stretchers, laid on and inc. mortar. (EXTERNAL WALLS)					
4.2.01	150 mm thk full height GROUND FLOOR	m ²	30.78			
4.2.02	150 mm thick 200mm high roof masonry wall	m ²	2.28			
4.2.03	150 mm thick masonry step	m ²	0.13			
4.3.00	TOTAL OF BILL №: 04 - Carried Over To Summary					

ITEM	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
5.0.00	Bill №: 05 - DOORS, SHUTTERS & HATCHES					
5.1.00	GENERAL (a) Rates shall include for locks, latches, closers, push plates, pull handles, bolts, kick plates, hinges and all door & window hardware. (b) Rates shall include for door frames, mullions, transoms, trims, glazing, tinting, timber panels, boardings, framing, lining, fastenings and all fixings. (c) Sizes are given overall outside dimensions of actual doors and windows. (d) Thickness and sizes of glass panels are shown on the Drawings and doors and windows schedule. (e) Rates shall include for all painting as specified (f) Rates shall include all items specified in the door schedule and specification.					
5.2.00	DOORS					
	GROUND FLOOR					
5.2.01	2100 x 850 D1 - 25x40x2.5mm RHS steel framed with steel panel steel double lock, bird lock and pad lock Steel double lock, bird lock and pad lock with all the requirements in the drawing	nr	1.00			
5.3.00	Others 50mm thick vent pipes	nr	16.00			
5.4.00	TOTAL OF BILL №: 05 - Carried Over To Summary					

ITEM	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
6.0.00	Bill №: 06 - FLOOR, WALL, CEILING, AND ROOF FINISHINGS					
6.1.00	GENERAL (a) Rates shall include for: fixing, bedding, grouting, and pointing materials; making good around pipes, sanitary fixtures, and similar; cleaning down and polishing. (b) "Welding" is deemed to be in accordance with the specification and for the material to which it is to be used. Gusset plates, shoe plates, ends, caps, cleats, brackets, stiffeners, bolts, etc., are required to be included to the rate of the associated steel work in which they occur. (c) For the description of materials refer to the Drawings and technical					
6.2.00	PLASTERING					
6.2.01	20 mm thk cement plaster on external surface as specified on the drawing. Waterproofed with MasterPel product or equivalent. GROUND FLOOR	m ²	38.43			
6.2.03	16 mm thk cement plaster on internal surface as specified on the drawing GROUND FLOOR	m ²	31.35			
6.3.00	CEMENT SCREED					
6.3.01	50 mm thk cement screed with 2.5mm self levelling cement screed GROUND FLOOR	m ²	7.56			
6.3.02	35 mm thk cement screed with 2.5mm cement screed for the step GROUND FLOOR	m ²	0.35			
6.4.00	FLOOR TILING					
6.4.01	600 x 600 mm Homogenous Non-slip tiles GROUND FLOOR	m ²	7.56			
6.7.00	TOTAL OF BILL №: 06 - Carried Over To Summary					

ITEM	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
7.0.00	Bill №: 7 - PAINTING & DECORATIONS					
7.1.00	GENERAL (a) Rates shall include for: the provision, erection and removal of scaffolding, preparation, wall putty application, rubbing down between coats and similar work, the protection and/or masking floors, fittings and similar work, removing and replacing door & window furniture. (b) All painting work shall be carried in accordance with the Specifications. (c) All paints should be of Nippon brand or equivalent					
7.2.00	WALL PAINTING					
7.2.01	Weatherbound paint finish as specified (EXTERNAL SURFACES) GROUND FLOOR	m ²	38.43			
7.2.02	Emulsion paint finish including putty application on brick walls as specified (INTERNAL SURFACES) GROUND FLOOR	m ²	31.35			
7.3.00	CEILING PAINTING					
7.3.01	Emulsion paint finish including putty application on slab soffit GROUND FLOOR	m ²	7.56			
7.4.00	FLOOR PAINTING					
7.4.01	Epoxy floor paint GROUND FLOOR	m ²	7.56			
7.4.02	Step (2 coats of epoxy)	m ²	0.35			
7.4.03	Weatherbound paint finish as specified (SLAB SOFFIT) GROUND FLOOR	m ²	7.56			
7.4.04	Emulsion paint finish including putty application on ceiling as specified (CEILING) GROUND FLOOR	m ²	7.56			
7.5.00	TOTAL OF BILL №: 7 - Carried Over To Summary					

ITEM	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
8.0.00	Bill No: 8 - MECHANICAL & ELECTRICAL SERVICES					
8.1.00	<p>GENERAL</p> <p>(a) Design, provide and install electrical network for the entire building complete in accordance to standards set by the local governing body STELCO/FENAKA.</p> <p>(b) The following items and description and the drawings are given as a guidance as to the nature of the information required to be returned by the contractor. Should they not be appropriate the contractor should provide a similar BOQ using the Additions/Omissions sheets provided at the back of this BOQ.</p> <p>(c) The cost shall include for: screws, nails, bolts, nuts, standard cable fixing or supporting clips, brackets, straps, rivets, plugs and all incidental accessories.</p> <p>(d) Rate shall include for necessary chasings, trenching, conduits, cables, cable trays, fittings and clips, cutting holes and chases in brick work/ block work/ concrete work complete with all necessary accessories such as sockets, connections, cable glands and boxes, hardware clips, soldering and jointing materials etc., for proper installing and laying of cables.</p> <p>(e) Rates for electrical isolators, conduits, fittings, equipment and similar items shall include for: all fixings to various building surfaces.</p> <p>(f) A light fixture is measured as one point; switch end of wire is not included in the quantity.</p> <p>(g) A point wiring for power points is measured (regardless of 1 gang, 2 gang etc) as one point for each socket outlet; other end of wire is not included in the quantity.</p> <p>(h) All under ground cables directly buried in ground/run in trenches to be properly laid and covered with cable tiles/trench covers. Rate for under ground cables shall include for all necessary excavation, sand layers, concrete tiles, warning strips and back filling with approved quality earth properly compacted, hot dipped galvanized brackets for trenches, accessories, etc as applicable.</p> <p>(i) The contractors are requested to refer Conditions of Contract, Special Conditions of Contract, Drawings and Specification and other relevant documents related to this tender prior to pricing of the following items</p> <p>(j) The contractor shall provide a schedule of all builder's work in connection with details of such items as necessary, along with the tender.</p> <p>(k) Rates for materials/ plants/ equipments not approved for duty free facilities to be quoted on duty paid basis.</p> <p>(l) All equipments shall be guaranteed for a period of 12 months from the date of commissioning or date of practical completion of the project which ever later</p> <p>(m) The rate shall include for insurance during handling, rehandling, transport, storage until ready for installation, delivery of equipments up to the point of installation and until handing over.</p> <p>(n) The rates shall include for comprehensive maintenance during defects liability period of 12 months from the date of handing over</p> <p>(o) The tenderer shall submit the following information on the items/equipments quoted for together with the tender.</p> <ol style="list-style-type: none"> a. make b. model No. c. technical data d. country of manufacture e. delivery period f. lead time for manufacturing. g. port of shipping h. CIF value of each item in foreign currency. j. Optional items and their additional cost. (additional cost to be submitted separately) k. Schedule of items to be carried out by others connected to installation of generators/transformers/Electrical panels such as some builders work and electrical connection. l. Details of all special features m. schedule attached to specification. <p>(p) Rate for all electrical panels shall include for supply and installation of all necessary MCCBs, MCBS, EFRs, ELCBs, auxiliary contacts, Voltmeters, ammeters, Digital analyser,kWh meters, indicator lamps, selector switches, copper bus bars, inter locks, aligning and grounding of the panel, inter connectors, internal wiring connections to switch gear,steel channels and necessary hardware fixing insulating materials,all in fully enclosed metal clad panels and distribution boards completed as shown in drawing. They shall comply with the specifications and I.E.E.regulations and be complete to working order to the approval of local authorities.</p> <p>(q) Rate shall include for supply, installation, maintaining, testing and commissioning of the system for power and lighting according to drawings and specifications to working order.</p> <p>(r) All materials, equipment wiring shall confirm to local codes, specifications, standards/latest I.E.E. regulations (BS 7671).</p>					

ITEM	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
8.2.00	<u>MAIN DISTRIBUTION, SUB DISTRIBUTION AND DISTRIBUTION SYSTEM</u>					
	<u>Distribution Boards (DB)</u> Distribution Panel for each floor as shown on the drawing, complete with all incoming and outgoing MCBs, RCCBs, etc any other item required to working order, wall mounted wall mount steel powder coated, IP44 encloser with neutral link, earth bar and required accessories, all complete as per the specifications & drawings.					
8.2.01	Distribution Boards	nr	1.00			
	<u>MAIN / SUB CABLING</u> All under ground cables directly buried in ground/ in the trenches as applicable, to be laid properly and covered with cable tiles, protection tapes, etc for mechanical protection, PVC sleeves may use if required. Rate shall include for all necessary works/accessories such as excavation, sand layers, cable tiles, warning strips and back filling with approved quality earth,properly compacted, to the satisfication of the Engineer. All above ground cables shall be laid on cable tray/ trucnking /conduits as applicable and covered by tray covers, etc. for mechanical protection. PVC sleeves may use if required. Rate shall include for all necessary works/ accessories such as galvernized brackets, supporting materials, fittings, nails, cable ties, earthing, etc, trays shall be of required sizes, GI powder coated, and shotted, to the satisfication of Engineer					
	<u>CABLING UP TO MDB</u> Cabling from main Electrical source to DB	item	1.00			
8.3.00	<u>POINT WIRING AND FITTINGS</u> Rate shall include for supply & installation of cable, conduits for point wiring in concealed installations including lights,switches, power outlet,data points,isolators, etc, all as specified in the drawing					
8.3.01	Supply and Installation of 2 x 1C 1.5mm2 PVC/PVC/Cu + 2.5mm2 PVC/Cu earth cable c/w uPVC conduit, junction boxes etc. for lights and switches point wiring	nr	3.00			
8.4.00	<u>LIGHTS,SWITCHES AND SOCKETS</u> Rate shall include supply and installation of following lighting fixtures, socket outlets as specified and detailed, fixed in position including all fixing accessories, supports and connect to power, under following conditions 1. All bathrooms, out door light fixtures shall be IP65 2. All lamps/fittings shall be supplied by reputed manufacturer and relevent technical specification for each every fittings to be forwarded					
	<u>LIGHTS AND SWITCHES</u>					
8.4.01	Ceiling down light (18W)	nr	2.00			
8.4.04	Ceiling fan (52" - 54")	nr	1.00			
8.4.05	Ceiling fan switches	nr	1.00			
8.4.07	Light switch (2 G)	nr	1.00			
	<u>SOCKETS</u>					
8.5.01	13 A twin sockets	nr	1.00			
8.6.00	TOTAL OF BILL No: 8 - Carried Over To Summary					

ITEM	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
9.0.00	Bill No: 9 - PLUMBING					
9.1.00	GENERAL (a) Rates shall include for sockets, running joints, connectors, elbows, junctions, valves, reducers, expansion joints, backnuts and similar, incidental fitting, clips saddles, brackets, straps, hangers, screws, nails and fixing complete, including cutting and forming holes, excavating, laying pipes and backfilling trenches. (b) All pipe work and fittings shall be high pressure PVC. (c) Rates shall include for supply and fixing of all pipes. (d) All sanitary fixtures used shall be of superior quality and approved by the architect/consultant on submission of samples.					
9.2.00	DISCHARGE WORK					
9.2.01	Provide and fix UPVC pipes including vent pipes, vent cowls, cleaning eye, connections, fittings, valves, excavations, ducting, fixing with brackets, connecting to existing sewer line and leak testing.	item	1.00			
9.2.02	63mm dia rainwater pipe with drain	item	1.00			
9.3.00	TOTAL OF BILL No: 9 - Carried Over To Summary					

ITEM	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
10.0.00	Bill No: 10- ADDITIONS AND OMISSIONS					
10.1.00	ADDITIONS					
10.1.01	Bill No: 01 - PRELIMINARIES					
10.1.02	Bill No: 02 - EXCAVATION AND FILLING					
10.1.03	Bill No: 03 - INSITU CONCRETE WORKS					
10.1.04	Bill No: 04 - MASONRY					
10.1.05	Bill No: 05 - DOORS, SHUTTERS & HATCHES					
10.1.06	Bill No: 06 - FLOOR, WALL, CEILING, AND ROOF FINISHINGS					
10.1.07	Bill No: 07 - PAINTING & DECORATIONS					
10.1.08	Bill No: 08 - MECHANICAL & ELECTRICAL SERVICES					
10.1.09	Bill No: 09 - PLUMBING					
10.1.10	Bill No: 10 - INSULATION, FIRE STOPPING & FIRE PROTECTION					
	TOTAL					
10.2.00	OMISSIONS					
10.2.01	Bill No: 01 - PRELIMINARIES					
10.2.02	Bill No: 02 - EXCAVATION AND FILLING					
10.2.03	Bill No: 03 - INSITU CONCRETE WORKS					
10.2.04	Bill No: 04 - MASONRY					
10.2.05	Bill No: 05 - DOORS, SHUTTERS & HATCHES					
10.2.06	Bill No: 06 - FLOOR, WALL, CEILING, AND ROOF FINISHINGS					
10.2.07	Bill No: 07 - PAINTING & DECORATIONS					
10.2.08	Bill No: 08 - MECHANICAL & ELECTRICAL SERVICES					
10.2.09	Bill No: 09 - PLUMBING					
10.2.10	Bill No: 10 - INSULATION, FIRE STOPPING & FIRE PROTECTION					
	TOTAL					
16.3.00	TOTAL OF BILL No: 16 - Carried Over To Summary					