

Maldives Police Service
Finance Department
Male' Rep of Maldives

Date:11-jun-17

PROJECT: Juvenile Detention (Arrestation fascility)

CLIENT: Maldives police service

LOCATION: Dhoonidhoo

BILL OF QUANTITIES

Item	Description	Qty	Unit	Rate	Amount
BILL No: 02					
	<u>GROUND WORKS</u>				
2.1	<u>GENERAL</u> (a) Rates Shall include for: leveling, grading, trimming, compecting to faces of excavation, keep sides plumb, back filling, consolidating and disposing surplus soil.				
2.2	<u>SITE CLEARING</u> (1) Clear site generally, whenever necessary cutting down trees, irrespective of sizes, grubbing roots, stumps etc. dispose of and carting debris, loose boulders, waste materials away from the site.	1.00	item		
2.3	<u>EXCAVATION</u> Note: Excavation quantities are measured to the faces of concrete members. Rates shall include for all additional excavation required to place the formwork/shuttering and dewatering the trenches for the required days.				
(1)	Excavation for Footing F1	3.16	m ³		
(2)	Excavation for Footing F2	3.94	m ³		
(3)	Excavation for Ground beams	23.66	m ³		
2.4	<u>BACK FILLING</u> Note:(a) Rates shall include for levelling, grading, trimming, compacting and similar. (b) Ground need to be compected to the required density by the consultant.				
(1)	Earth filling for ground beam & footings	8.44	m ³		
(2)	Well compacted earth filling under ground slab	120.00	m ³		

2.5 DAMP PROOF MEMBRANE

Note: Rates shall include for: dressing around and sealing to avoid all penetrations, laps and turnups.

Polythene damp proof membrane (500 gauge)
under:-

- | | | | |
|-----|---|--------|----------------|
| (1) | Footing F1 | 4.22 | m ² |
| (2) | Footing F2 | 5.26 | m ² |
| (3) | Ground Beam | 43.00 | m ² |
| (4) | Apply 2 coats of Brush Bond or similar on all concrete and masonry plastered surfaces below ground level and 300mm above from floor level in accordance with manufacturer's instructions. | 424.00 | m ² |

BILL No: 02 - GROUND WORKS

TOTAL OF BILL No: 02 - Carried over to summary

BILL No: 03				
<u>CONCRETE</u>				
3.1	<u>GENERAL</u> (a) Rates shall include for: provision to place in position; casting of all required items and finishing after removal of formwork and additional concrete required to conform to structural and excavated tolerances. (b) Rates shall include supply of all formwork item including form oil, timber, plywood, nails etc. (c) Mix ratio for reinforced concrete shall be 1:2:3 and lean concrete shall be 1:3:6 by volume.			
3.2	<u>LEAN CONCRETE</u> Note: Quantity is measured to the edges of concrete members. Rates shall be inclusive of any additional concrete required to place the formwork.			
(1)	50mm thick lean concrete to bottom of Footings (F1, F2) and Ground beam	52.50	m ²	
3.3	<u>REINFORCED CONCRETE</u> Note: In-situ reinforced concrete to: Add water proofing compound to concrete mix for walls and cover slab below ground level.			
3.3.1	<u>Foundation</u>			
(1)	Footing F1	0.96	m ³	
(2)	Footing F2	1.38	m ³	
(3)	Ground Beams (200x250mm)	9.97	m ³	
3.3.2	<u>Ground Floor</u>			
(1)	Columns , (200x200mm)	4.46	m ³	
3.3.6	<u>Roof Level</u>			
(1)	Attached Beams, (200x300mm)	12.90	m ³	
3.4	<u>FORMWORK</u> Note: 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.			
3.4.1	<u>Foundation</u>			
(1)	Footing F1	7.60	m ²	
(2)	Footing F2	15.60	m ²	
(3)	Ground Beams (200x250mm)	107.50	m ²	
3.4.2	<u>Ground Floor</u>			
(2)	Columns , (200x200mm)	89.28	m ²	
3.4.6	<u>Roof Level</u>			
(1)	Attached Beams , (200x300mm)	172.00	m ²	

3.5	<p><u>REINFORCEMENT</u></p> <p>Note: (a) Rates shall include for: cleaning, fabrication, placing, the provision for all necessary temporary fixings and supports including tie wire and chair supports, laps and wastage.</p> <p>(b) All reinforcing bars except 6mm dia bars shall be high strength deformed bars.</p> <p>(c) The exact length exclusive of laps are given. The rates shall take into account laps and any wastage.</p>				
3.5.1	<u>Foundation</u>				
	<u>Footing (F1, F2) & Ground beam</u>				
	(1) 12 mm dia. bars	0.96	t		
	(2) 10 mm dia. bars	0.06	t		
	(3) 6 mm dia. bars	0.32	t		
3.5.2	<u>Ground Floor</u>				
	<u>Ground slab & columns</u>				
	(1) 10 mm dia. bars	2.38	t		
	(3) 6 mm dia. bars	0.16	t		
3.5.4	<u>Roof</u>				
	(1) 12 mm dia. bars in top beams	0.76	t		
	(2) 6 mm dia. bars in beams	0.22	t		
3.6	<u>OTHER CONCRETE WORKS</u>				
3.6.1	<u>RCC Well</u>				
	(1) 1800mm dia RCC ground water well 1.2m depth of water level as per the instruction given in the drawing all necessary pipe connections and all related works.	1.00	item		
3.6.3	<u>RCC door and window lintel and sill beams</u>				
	(1) 150x150mm lintel beams on all the necessary doors and windows and 150x150mm sill beam under all the windows shown in the drawings with the reinforcement, shuttering, plastering, etc....	1.00	item		
3.7	<u>WATER PROOFING</u>				
	Rates shall include for: dressing around and sealing to all penetrations.				
	(1) Apply crystalline or equivalent type water proofing material to the surface of toilet floors, toilet walls 450mm height, laundarys in accordance with the specifications and manufacturer's instruction.	1.00	item		
BILL No: 03 - CONCRETE TOTAL OF BILL No: 03 - Carried over to summary					

BILL No: 04				
<u>MASONRY AND PLASTERING</u>				
4.1	<u>GENERAL</u>			
	(a) Rates shall include for: blocks, cutting or leaving holes and openings as recesses, 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. (b) Mix ratio for Plastering & masonry shall be 1:3 Cement Mortar, tie rods, compression gap filler, nylon / plastic mesh as specified.			
4.2	<u>ALL EXTERNAL WALLS</u>			
4.2.1	<u>150mm thick hollow brick wall</u>			
(1)	Below Ground level	64.50	m ²	
(2)	Ground Floor	325.10	m ²	
4.3	<u>ALL INTERNAL WALLS</u>			
4.3.1	<u>150mm thick hollow brick walls</u>			
(1)	Ground Floor	278.74	m ²	
4.4	<u>PLASTERING</u>			
4.4.1	Note: 20mm Thick cement plastering on all EXTERNAL WALLS and concrete surface with 1:4 cement mortar mix as specified incl. wire mesh at joints of concrete surfaces and walls (first, second coats).			
(1)	Below Ground level	129.00	m ²	
(2)	Ground Floor	650.20	m ²	
4.4.2	Note: 12mm Thick cement plastering on all INTERNAL WALLS and concrete surface with 1:4 cement mortar mix as specified incl. wire mesh at joints of concrete surfaces and walls (first, second coats).			
(1)	Ground Floor	557.48	m ²	
4.5	<u>CEMENT SCREED FINISH</u>			
	Note: 40mm Thick cement screed on the concrete floor with 1:4 cement mortar mix incl. float finish to receive the tiles.			
(1)	Ground floor	320.00	m ²	
BILL No: 04 - MASONRY AND PLASTERING				
TOTAL OF BILL No: 04 - Carried over to summary				

BILL No: 05					
	<u>CEILING</u>				
5.1	<u>GENERAL</u> Rates shall include for: all labour in framing, notching and fitting around projections, pipes, light fittings, hatches, grilles and similar and complete with cleats, packers, wedges and timber bedding, etc.... similar nail and screws.				
5.2	<u>600 X 600mm concealed Gypsum board ceiling</u>				
(1)	9mm gypsum board 600 X 600 mm perforated panels with metal frame "BORAL or Equivalent" as per the manufacturers specifications and drawings.	305.44	m ²		
5.3	<u>Cement board ceiling</u> 6mm cement board with 30 x30 mm wooden purlin at 600 c/c				
(1)	Ground floor	94.60	m ²		
BILL NO: 05 - CEILINGS TOTAL OF BILL No: 05 - Carried over to summary					

BILL NO: 06**DOORS AND WINDOWS****6.1 GENERAL**

(a) Rates shall include for locks, latches, closures, push plates, pull handles, bolts, kick plates, hinges, door closer, door stoppers and all door & window hardware.

(b) Rates shall include for door frames, mullions, transoms, trims, glazing, tinting, timber panels, boarding, framing, lining, fastenings and all fixings.

(c) All Aluminium door and windows shall be 60-80 micron aluminium.

(d) All Timber doors shall Solid timber paneled door with paint finish.

(e) All Windows Glazing shall be 6-12mm blue reflective glass. (see door and window schedule)

6.2 Timber Door Units

(1) Door D1 (1200x2750mm)

2.00

nos

(2) Door D2 (850x2100mm)

14.00

nos

(3) Shutter door STD (2350x2500)

4.00

nos

6.3 Fiber Glass Door Units

(1) Door D3 (650x2100mm)

4.00

nos

(2) Door D1 (850x2350)

4.00

nos

6.4 Aluminium Window Units

(1) Window W1 (900x1400mm)

10.00

nos

(2) Window FG1 (1800x1400mm)

4.00

nos

(3) Window FG2 (1000x1400mm)

8.00

nos

(4) Window V1 (600x550mm)

4.00

nos

(5) Grill Door GD

2.00

nos

6.5 Curtains

Note: Supply and Installation of Curtains for all windows. Rates shall include for all accessories and completion of all necessary works. Specifications manufacturers details shall be submitted for consultants approval.

(1) Window W1 (900x1400mm)

10.00

nos

(2) Window FG2 (1000x1400mm)

2.00

nos

BILL NO: 06 -DOORS AND WINDOWS

TOTAL OF BILL No: 06 - Carried over to summary

BILL NO: 07**FINISHES****7.1 GENERAL**

Rates for tiling shall include for: fixing, bedding, grouting, pointing, finishing and any other similar works to ensure the required finish.

7.2 FLOOR FINISHES**7.2.1 Ground Floor**

Standard tile adhesive to be used for all tiling works

- | | | | |
|-----|--|--------|----------------|
| (1) | 600X600mm gloss Homogenous tiles on floor. | 305.44 | m ² |
| (2) | 200x200mm non-skid homogenous tiles on toilet floor | 16.00 | m ² |
| (3) | 600x300mm glosshomogenous tiles on toilet walls (2.7m Height.) | 96.99 | m ² |

7.3 TILE SKIRTINGS

Note: Tiles skirting between wall and floor as specified.

- | | | | |
|-----|--------------|--------|---|
| (1) | Ground floor | 290.00 | m |
|-----|--------------|--------|---|

BILL No: 07 - FINISHES**TOTAL OF BILL No: 07 - Carried over to summary**

BILL No: 08					
	<u>PAINING</u>				
8.1	<u>GENERAL</u> (a) Rates shall include for: the provision, erection and removal of scaffolding, preparation, 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 of "SAMHWA PAINT or Equivalent".				
8.2	<u>WALLS / CONCRETE SURFACES</u> Note: Oil based emulsion paint system with textured finish on plastered and concrete surfaces of all EXTERNAL WALL . 1 coat of wall sealer, 1 coat of textured and 2 coat of paint.				
(1)	Ground floor	650.20	m ²		
8.2.1	<u>WALLS</u> Note: Emulsion paint mat finish surfaces of all INTERNAL WALL . 1 coat of wall sealer and 2 coat of paint.				
(1)	Ground floor	557.48	m ²		
8.2.2	<u>CEILING / SOFFIT OF SLAB</u> Note: Emulsion paint oil based finish surfaces of all CEILING AREA . 1 coat of wall sealer and 2 coat of paint.				
(1)	Ground floor	305.44	m ²		
(2)	Cement board ceiling(external)	94.60	m ²		
BILL No: 08 - PAINTING TOTAL OF BILL No: 08 - Carried over to summary					

BILL No: 09					
	<u>ROOF TRUSS AND COVER</u>				
9.1	<u>GENERAL</u> (a) Rates shall include for: screws, nails, bolts, nuts, standard cable fixing or supporting clips, brackets, straps, rivets, plugs and all incidental accessories				
9.2	<u>ROOF FRAMES</u> Build up timber frames rest on wood plate anchored in roof beam in adherence with the drawing.				
(1)	Wooden rafters 50 x 150mm @850mm c/c, fully anchored on wood plate bolted to concrete frames.	494.00	m		
(2)	50x50mm wooden-Purlinss @600mm, fully anchored to rafters.	694.00	m		
(3)	Apply wood preservative chemical treatment to all the wooden members with the specifications and manufacturer's instruction.	1.00	item		
9.3	<u>ROOF COVER AND ACCESSORIES</u> Specified for MSP Trim deck lysaght roofing sheets, fixed in accordance to manufacturer's instruction, inclusive of all necessary accessories.				
(1)	MSP Trim deck lysaght roofing sheets	400.00	m ²		
(2)	4mm THK polythene bubble thermal insulation material	400.00	m ²		
(3)	Lysaght Gutter	120.00	m		
(4)	25x300mm timber fascia board	120.00	m		
(5)	75mm dia. Down pipe with accessories	8.00	nos		
BILL No: 09 - ROOF TRUSS AND COVER TOTAL OF BILL No: 09 - Carried over to summary					

BILL No: 10**HYDRAULICS & DRAINAGE****10.1 GENERAL**

(a) Rates shall include for sockets, running joints, connectors, elbows, junctions, valves, reducers, expansion joints, backnuts and similar, incidental fittings, 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.

10.2 PIPE WORK

(1) Allow for ground water connection and internal pipe works well to all toilets, laundrys inc. supply and laying of all pipe works.

1.00

item

(2) Allow for fresh water connection and internal pipework rain water tank to all toilets, laundrys, kitchen and counters inc. supply and laying of all pipes.

1.00

item

(3) Allow for Waste water and sewage connection and internal pipe works from all the toilets inc. supply and laying of pipes.

1.00

item

10.2.1 Sanitary Fixtures & Accessories

Note: (a)Sanitary fixtures complete including brackets, stop valves, fittings etc.

(b)All sanitary fittings shall be of 'COTTO' brand or equivalent.

(c)All fixtures shall be of 'COTTO' brand or equivalent.

(d) All Taps, Hand shower, Head shower, Bidet shower, towel ring, and towel bar should be plastic.

(e) All pipes shall be of 'UPVC' .

(e) All Kitchen Sink shall be os SS.

(1) Water Closets

4.00

nos

(2) Wash Basins

4.00

nos

(4) Low level Taps with Fresh water connection

4.00

nos

(5) Mirror with accessories

4.00

nos

(6) Floor drain

4.00

nos

(8) Muslim Shower

4.00

nos

(9) Stop Valves

8.00

nos

(10) Wash Basin Taps

4.00

nos

10.3	<u>PUMPING SYSTEM</u> Note: Supply and installation of appropriate capacity water pump (fresh water and ground water) complete pump system with automatic controle board including connecting valves to pipework and electricity as per requirements "Davy, Groundfos or equivalent".				
(2)	For Ground Water Connection	1.00	nos		
10.4	<u>DRAINAGE</u> Note: (a) Rates shall include for excavation, maintaining faces of drain pipe trenches and pits, backfilling, disposal of surplus soil, bends, junctions, reducers, expansion joints and all joints and other incidental materials. (b) All pipework shall be PVC				
10.5	<u>DISCHARGE PIPEWORK</u>				
(1)	All pipe connection from fixtures and upto the inspection chember.	1.00	item		
(2)	Connecting to the Septic tank.	1.00	item		
10.6	<u>INSPECTION CHEMBER</u> PCC Inspection Chambers (450 x600) for toilets with PVC screening net.	4.00	nos		
BILL No: 10- HYDRAULIC AND DRAINAGE TOTAL OF BILL No: 10 - Carried over to summary					

BILL No: 11

<u>ELECTRICAL & SPECIFIC INSTALLATIONS</u>			
11.1	<u>GENERAL</u>		
	(a) Design, provide and install electrical network for the entire building complete in accordance to the standerds set by the local governing body 'STELCO'.		
	(b) Rates shall include for: screws, nails, bolts, nuts, standard cable fixing or supporting clips, brackets, straps, rivets, plugs and all incidental accessories		
	(c) Rates for work in trench shall include for: excavation, maintaining faces of excavations, backfilling, compaction, appropriate cable covers, warning tape and disposal of surplus spoil.		
	(d) Rates for electrical isolators, conduits, fittings, equipment and similar items shall include for: all fixings to various building surfaces.		
	(e) Light end and switch end of wiring together measured as one point.		
	(f) A point wiring for power points is measured as one point for each socket outlet; other end of wire is not included in the quantity.		
	(g) Rates shall include for supply and complete installation.		
	(h) Three phase power supply.		
	11.2	<u>MAIN CONNECTIONS</u>	
(1)	Allow for connection to electrical mains from out side substation to main panel board.(1x 4 core 16 mm square pvc/pvc copper conductor cable)	62.00	m
(2)	Allow for connection to electrical mains from main panel board to floor floor distribution boards.	1.00	item
11.3	<u>ELECTRICAL BOARDS</u>		
	Note: Complete installation, including for all connections, earthing, painting, testing and similar of:		
(1)	3 Phase Floor Distribution Boards Three phase main panel board with connections from the mains including meters, cut-off fuse and other accessories	2.00	nos
11.4	<u>Electrical wiring</u>		
	Note: Electrical wiring with copper conductor cable in conduits in walls and concrete as per government regulations including necessary D-boards at each level.		
(1)	Wiring to Lights and fans.	1.00	item
(2)	Wiring to Socket outlets.	1.00	item

11.4	<p><u>LIGHTING</u> Note: All lights shall be LED, all switches, sockets etc. shall be 'LEGRAND brand or equivalent'.</p> <p>(1) Emergency light 2 hours non maintained. 4.00 nos</p> <p>(2) 2 Gang switch 24.00 nos</p> <p>(3) Weather proof Ceiling Recessed light 30W 16.00 nos</p> <p>(4) Ceiling Recessed light 24W 88.00 nos</p> <p>(5) 2x13A socket outlet (300 mm above floor level) 16.00 nos</p> <p>(6) Fan dimmer 14.00 nos</p> <p>(7) Ceiling fan with dimmer 1.2m dia (KDK or Equivalent) 14.00 nos</p>				
11.5	<p><u>AIR CONDITIONING SYSTEM</u> Note: Provide & install with all necessary wiring, fittings & accessories of Split type Airconditioning System as per drawings, specifications & contractor's shop drawings subject to consultants approval.</p> <p>(1) 12000 BTU split type inverter. 2.00 nos</p> <p>(2) 9000 BTU split type inverter. 8.00 nos</p>				
11.6	<p><u>CABLE TV EXTENSION</u> Note: Cable TV extension as per the drawings and from the concern authorities rules and regulations including all the connections and required TAPS/DBs, etc.</p> <p>(1) Cable TV sockets outlets 2.00 nos</p>				
11.7	<p><u>IT NETWORK</u> Provide & install with all necessary wiring, fittings & accessories IT Network System for the entire building as per drawings, specifications & contractor's shop drawings subject to consultants approval.</p> <p>(1) Internet outlet extension sockets 8.00 nos</p> <p>(2) Network Gigabit Switch 2.00 nos</p> <p>(3) Wall mount rack 6U 2.00 nos</p>				
11.8	<p><u>FIRE FIGHTING</u> Provide & install fire fighting equipment inclusive of all necessary connection as per local regulations as described.</p> <p>(1) CO2 Extinguisher(2kg) with cabinet 12.00 Nos</p> <p>(2) H2O Extinguisher 9 litre with cabinet 12.00 Nos</p>				
BILL No: 11 - ELECTRICAL					

TOTAL OF BILL No: 11 - Carried over to summary					
	<u>Bill No: 12</u> <u>FURNITURE</u> <u>GENERAL</u> (a) The contractor must ensure actual site dimensions (b) Assembling price should be included. (c)The contractor shall ascertain that the work characters stipulated herein shall complete the whole of the work. No change or variation whatsoever shall be entertained unless or otherwise the written instructions from the owner. (D)Catalog should be included and all materials shall be of approved (superior) quality delivered and fixed in the first class workmanship [e] Contractor must refer given Floor layouts (Architectural floor plans) for furniture orientation and dimensions. E.g: Left sided and right sided workstations shown in floor plans. [f] Use Pictures given in Furniture Information for reference Only. Final furniture selection will be carried out after further discussion (Catalogues will be required) with the project winning contractor [g] Furniture approval: For furnitures ordering from abroad, price must include 2 persons travelling costs. (transportations, ticket, accommodation and food)				
12.0	<u>FURNITURE</u> (1) WORK STATION (R1) Desk (600mm x 1200mm) with cable grommet Side table 1000mm x 450mm Partitions - front (1200 x 1200mm) as per drawing Partitions - side (600 x 1200mm) as per drawing Partiton side- (1550mm x 1200mm) as per drawing Attached Three drawer set (L390 x B600 x H730) and CPU holder should be included. Material :Wood / Ready made wood Partition fabric colour: Grey Colour: Maple/ beech * For Left sided or Right sided workstation refer floor plans	2.00	nos		

(2)	WORK STATION (L1) Desk (600mm x 1200mm) with cable grommet Side table 1000mm x 450mm Partitions - front (1200 x 1200mm) as per drawing Partitions - side (600 x 1200mm) as per drawing Partiton side- (1550mm x 1200mm) as per drawing Attached Three drawer set (L390 x B600 x H730) and CPU holder should be included. Material :Wood / Ready made wood Partition fabric colour: Grey Colour: Maple/ beech * For Left sided or Right sided workstation refer floor plans	2.00	nos		
(3)	Discussion Table Discussion table for 5-6 people Dimensions: 42inch x 72inches Material :Solid Wood Colour: Walnut Black Medium back 6 Chair Seat: 21" W x 19"D Back: 19"W x 23"H	4.00	nos		
(4)	MEDIUM BACK CHAIR Seat: 21" W x 19"D Back: 19"W x 23"H Swivel chair with hydraulic height adjustment Polyurethane arm rest Lockable reclining system Material : Fabric Colour: Black	8.00	nos		
(5)	4 SEATER VISITOR BENCH Metal 4 seater visitor bench Leather seater colour: Black/ Blue Metal chrome plated armrests Material: Steel	6.00	nos		
(6)	12 COMPARTMENT STEEL LOCKER 36" X 15" (LK) Dimension: L915 x W381x H1828mm Material: Steel with epoxy coated Colour: Light grey	14.00	nos		
(7)	4 DRAWER FILING CABINET WITH RECESS HANDLE Dimensions: L463mm x W613x H1320 Lock on each drawer Material: Steel with epoxy coated	2.00	nos		

	Colour: Light grey				
(8)	12 COMPARTMENT BOOK SHELF (BS) Dimensions: H1745 x W1175 x D295mm Material: SOLID WOOD Colour: Wenge/walnut	2.00	nos		
(9)	OFFICE DESK Desk : 1200mm x 700mm Colour: Maple/beech	4.00	nos		
(10)	SIDE CABINET Dimension: L800 x W400 x H750mm Material: Laminated particle board Colour: Walnut	12.00	nos		

TOTAL OF BILL NO. 12 (FURNITURE)

TOTAL OF BILL No: 12 - Carried over to summary

	<u>Bill No: 13</u> <u>Additions</u>				

TOTAL OF BILL NO. 13 (ADDITIONS)

TOTAL OF BILL No: 13 - Carried over to summary

	<u>Bill No: 14</u> <u>Omissions</u>				

TOTAL OF BILL NO. 14 (OMISSIONS)

TOTAL OF BILL No: 14 - Carried over to summary