

**PROPOSED HANDLOOM UNIT
AT GOGAMUKH
LAKHIMPUR, ASSAM**

ABSTRACT OF COSTS

<i>Sl</i>	<i>Particulars</i>	<i>Ref</i>	<i>Amount (Rs)</i>
1	ESTIMATES:		
1	HANDLOOM UNIT	A.0	
3	TOTAL =		

Notes:

- 1) Estimates have been prepared in general as per the Delhi Schedule of Rates 2021.
- 2) Common Facilities include the Campus Development & Common Facilities Building which has been included in the Sericulture Unit.

**PROPOSED HANDLOOM UNIT
AT GOGAMUKH
LAKHIMPUR, ASSAM**

**BILL OF QUANTITIES
HANDLOOM UNIT BUILDING**

Sl	Particulars	Ref	Amount (Rs)
1	ESTIMATES:		
A.	HANDLOOM UNIT BUILDING:		
a)	CIVIL WORK =	A.1	
b)	PLUMBING & SANITATION WORK =	A.2	
c)	ELECTRICAL WORK(<i>Internal</i>) =	A.3	
2	TOTAL =		
	Say =		

Notes:

1) Estimates have been prepared in general as per the Delhi Schedule of Rates 2021.

**PROPOSED HANDLOOM UNIT
AT GOGAMUKH**

LAKHIMPUR, ASSAM

ESTIMATE - A.1 : CIVIL WORKS : HANDLOOM UNIT BUILDING

Item	Description	Quantity	Unit	Rate (Rs)	Amount (Rs)
				(in figures and words)	
1	EARTHWORK				
1.1 <i>DSR-Item no.-2.6</i>	EARTHWORK IN EXCAVATION Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth, lead upto 50m and lift upto 1.5m, as directed by Engineer-incharge.. All kinds of soil	259.3	CuM		
1.2 <i>DSR'21 (2.25)</i>	FILLING Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	163.4	CuM		
1.3 <i>DSR'21 (2.26)</i>	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials All kinds of soil	14.8	CuM		
1.4 <i>DSR'21 (2.25(a))</i>	Excavating, supplying and filling of local earth (including royalty) by mechanical transport up to a lead of 5km also including ramming and watering of the earth in layers not exceeding 20 cm in trenches, plinth, sides of foundation etc. complete.	569.4	CuM		
1.5 <i>DSR'21 (2.27)</i>	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	119.3	CuM		

<p>1.6 <i>DSR-Item no.-2.34</i></p>	<p>ANTITERMITE TREATMENT Supplying chemical emulsion in sealed containers including delivery as specified. Chlorpyriphos/ Lindane emulsifiable concentrate of 20%</p>	<p>103.3</p>	<p>Litre</p>		
<p>1.7 1.7.1 <i>DSR-Item no.-2.35.1</i></p>	<p>Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion): Along external wall where the apron is not provided using chemical emulsion @ 7.5 litres / sqm of the vertical surface of the substructure to a depth of 300mm including excavation channel along the wall & rodding etc. complete With Chlorpyriphos/ Lindane E.C. 20% with 1% concentration</p>	<p>170.0</p>	<p>Metre</p>		
<p>1.7.2 <i>DSR-Item no.-2.35.4</i></p>	<p>Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand) to match the existing floor: With Chlorpyriphos/ Lindane E.C. 20% with 1% concentration</p>	<p>1084.5</p>	<p>SqM</p>		
<p>2 2.1 <i>DSR'21 (4.1.5)</i></p>	<p>PLAIN CEMENT CONCRETE LEAN CONCRETE Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:3:6 (1 Cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources)</p>	<p>18.2</p>	<p>CuM</p>		
<p>3</p>	<p>REINFORCED CEMENT CONCRETE WORKS</p>				

<p><i>DSR'21 (5.33.1)</i></p>	<p>Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete. Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.</p>			
<p>3.1</p>	<p>All works upto plinth level Concrete of M25 grade with minimum cement content of 330 kg /cum</p>	<p>77.7</p>	<p>CuM</p>	
<p>3.2 <i>DSR'21 (5.33.2)</i></p>	<p>All works above plinth level upto floor V level Concrete of M25 grade with minimum cement content of 330 kg /cum</p>	<p>61.6</p>	<p>CuM</p>	
<p>4</p>	<p>FORMWORK Centering and shuttering including strutting, propping etc. and removal of form for:</p>			
<p>4.1 <i>(5.9.1)</i></p>	<p>Foundations, footings, bases of columns, etc. for mass concrete</p>	<p>323.6</p>	<p>SqM</p>	
<p>4.2 <i>(5.9.5)</i></p>	<p>Lintels, beams, plinth beams, girders, bressumers and cantilevers</p>	<p>750.6</p>	<p>SqM</p>	
<p>4.3 <i>(5.9.6)</i></p>	<p>Columns, Pillars, Piers, Abutments, Posts and Struts</p>	<p>328.7</p>	<p>SqM</p>	
<p>4.4 <i>(5.9.3)</i></p>	<p>Suspended floors, roofs, landings, balconies and access platform</p>			

	(i) Using 38mm thick plank	17.0	SqM
4.5 <i>(5.9.16)</i>	Edges of slabs and breaks in floors and walls Under 20 cm wide	52.2	RM
4.6 <i>(5.22)</i>	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. Thermo-Mechanically Treated bars of grade Fe-500D or more.	8908.7	Kg
4.7 <i>(5.22A)</i>	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level. Thermo-Mechanically Treated bars of grade Fe-500D or more.	6565.9	Kg
5	MASONRY		
5.1	SOLING		
5.2 <i>5.2.1 DSR'21(6.1.1)</i>	FULL BRICK WORK Brick work with common burnt clay F.P.S. (non-modular) bricks of class designation 7.5 in foundation and plinth in: Cement mortar 1:4 (1 cement: 4 coarse sand)	87.8	CuM
5.3 <i>5.3.1 DSR'21 (6.12)</i>	HALF BRICK WORK Half brick masonry with common burnt clay F.P.S. (non-modular) bricks of class designation 7.5 in foundations and plinth in: cement mortar 1:4 (1 cement: 4 coarse sand)	974.7	SqM
<i>5.3.2 DSR'21 (6.15)</i>	Extra for providing and placing in position 2 Nos 6mm dia. M.S. bars at every third course of half brick masonry.	974.7	SqM
6	FLOOR FINISHES		
<i>6.1 DSR'21 (11.3)</i>	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete. 40 mm thick with 20 mm nominal size stone aggregate	1137.3	SqM

6.2 <i>DSR'21</i> <i>(11.6)</i>	Cement plaster skirting up to 30 cm height, with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of neat cement. 18 mm thick	37.0	SqM
6.3 <i>DSR'21</i> <i>(11.13)</i>	Providing and fixing glass strips in joints of terrazo/ cement concrete floors. 40 mm wide and 4 mm thick	812.1	RM
6.4 <i>DSR'21</i> <i>(8.31)</i>	CERAMIC TILES ON WALLS Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	34.5	SqM
7	PLASTERING		
7.1 <i>DSR'21</i> <i>(13.1)</i>	CEMENT PLASTERING 12 mm cement plaster of mix : 1:6 (1 cement: 6 fine sand)	1754.5	SqM
7.2 <i>DSR'21(13.2)</i>	15 mm cement plaster on the rough side of single or half brick wall of mix :1:6 (1 cement: 6 fine sand)	567.5	SqM
7.3 <i>DSR'21</i> <i>(13.16)</i>	6 mm cement plaster of mix : 1:3 (1 cement : 3 fine sand)	17.0	SqM
8	STEELWORK		
8.1 <i>DSR'21</i> <i>(10.2)</i>	ROOF STRUCTURE Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	23571.7	Kg
8.2 <i>DSR'21</i> <i>(10.20)</i>	Providing and fixing bolts including nuts and washers complete.	130.2	Kg

<p>8.3 <i>DSR'21 (10.6)</i></p>	<p>ROLLING SHUTTER Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters 80x1.25 mm M.S. laths with 1.25 mm thick top cover</p>	<p>7.2</p>	<p>SqM</p>	
<p>8.4 <i>DSR'21 (10.26)</i></p>	<p>RAILINGS & OHT Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer. M.S. tube</p>	<p>1683.9</p>	<p>Kg</p>	
<p>8.5 <i>DSR'21(10.14.3)</i></p>	<p>DOOR FRAMES Providing and fixing pressed steel door frames conforming to IS: 4351, manufactured from commercial mild steel sheet of 1.60 mm thickness, including hinges, jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25 mm, or base ties of 1.60 mm, pressed mild steel welded or rigidly fixed together by mechanical means, including M.S. pressed butt hinges 2.5 mm thick with mortar guards, lock strike-plate and shock absorbers as specified and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer-in-charge: Profile E Fixing with adjustable lugs with split end tail to each jamb</p>	<p>119.3</p>	<p>RM</p>	
<p>8.6</p>	<p>WINDOWS AND VENTILATORS</p>			

<p>8.6.1 DSR'21 (10.31)</p>	<p>Providing and fixing angle iron frames for doors, windows and ventilators of mild steel Angle sections of size 35x35x5 mm, joints mitred and welded by angle iron 35x35x5 mm or 35x 5 mm flat pieces to the existing T-iron frame or to the wall with dash fastener, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer, all complete as per the direction of Engineer-In-charge.</p>	<p>1617.6</p>	<p>Kg</p>
<p>8.6.2 DSR'21 (10.30)</p>	<p>Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with: 4.0 mm thick glass panes</p>	<p>81.3</p>	<p>SqM</p>
<p>8.7 DSR'21 (9.48)</p>	<p>GRILLES Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete. Fixed to openings /wooden frames with rawl plugs screws etc.</p>	<p>1276.5</p>	<p>Kg</p>
<p>9 DSR'21 (12.45)</p>	<p>GYPSUM BOARD CEILING Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with</p>		

<p>10 10.1</p>	<p>nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with : 12.5 mm thick tapered edge gypsum plain board conforming to IS: 2095- (Part I) :2011 (Board with BIS certification marks)</p> <p>ROOFING METAL ROOFING</p>	<p>996.5</p>	<p>SqM</p>	
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<p><i>DSR'21(12.50)</i></p>	<p>Providing and fixing pre-coated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.</p>	<p>1256.6</p>	<p>SqM</p>	
<p>10.2 <i>DSR'21 (12.51)</i></p>	<p>Providing and fixing pre-coated galvanised steel sheet roofing accessories 0.50 mm (+0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete : Ridges plain (500 - 600mm)</p>	<p>122.0</p>	<p>RM</p>	
<p>11 <i>DSR'21 (9.20)</i></p>	<p>WOODWORK FLUSH DOOR Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters. 25 mm thick (for cupboard) including ISI marked nickel plated bright finished M.S. Piano hinges IS : 3818 marked with necessary screws</p>	<p>47.6</p>	<p>SqM</p>	
<p>12 12.1</p>	<p>PAINTING INTERIOR PAINT</p>			

DSR'21 (13.39)	Colour washing such as green, blue or buff to give an even shade : New work (two or more coats) with a base coat of white washing with lime	1754.5	SqM
12.2 DSR'21 (13.80)	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	20.0	SqM
12.3 DSR'21 (13.42)	Distemping with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gms/litre, of approved manufacturer, of required shade and colour complete, as per manufacturer's specification. Two or more coats on new work.	20.0	SqM
12.4 DSR'21 (13.44)	EXTERIOR PAINT Finishing walls with water proofing cement paint of required shade : New work (Two or more coats applied @ 3.84 kg/10 sqm)	567.5	SqM
12.5 12.5.2 DSR'21 (13.61)	PAINTING ON STEEL Painting with synthetic enamel paint of approved brand and manufacture to give an even shade : Two or more coats on new work	2229.6	SqM
13 DSR'21 (9.96)	FITTINGS (DOOR/WINDOW FITTINGS) Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete :		
13.1	Sliding Door Bolts 300 mm x 16 mm	23.0	Each
13.2 DSR'21 (9.97)	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete : 300 x 10 mm	23.0	Each

13.3 <i>DSR'21</i> <i>(9.100)</i>	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete : 125 mm	23.0	Each
13.4 <i>DSR'21</i> <i>(9.103)</i>	Providing and fixing bright finished brass 100 mm mortice latch and lock, ISI marked, with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS : 1868) aluminium lever handles of approved quality with necessary screws etc. complete.	23.0	Set
14 <i>DSR'21(4.17)</i>	<p>PLINTH PROTECTION</p> <p>Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.</p>	204.0	SqM
15 <i>DSR'21</i> <i>(6.44)</i>	Brick edging 7cm wide 11.4 cm deep to plinth protection with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 including grouting with cement mortar 1:4 (1 cement : 4 fine sand).	170.0	Rm
16 <i>DSR'21</i> <i>(16.12)</i>	<p>DRAIN</p> <p>Dry brick pitching half brick thick in drains including supply of bricks and preparing the surface complete : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5</p>	102.0	SqM
17 17.1	<p>PAVED AREA</p> <p>SUB-GRADE</p>		

<p><i>DSR'21 (16.1)</i></p>	<p>Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earthwith lead upto 50 metres.</p>	<p>53.0</p>	<p>SqM</p>		
<p>17.2 <i>DSR'21 (16.7)</i></p>	<p>Brick edging in full brick width and half brick depth including excavation, refilling and disposal of surplus earth lead upto 50 metres. With common burnt clay F.P.S. (non modular) bricks of class designation 7.5</p>	<p>41.3</p>	<p>Metre</p>		
<p>17.3 <i>DSR'21(16.91)</i></p>	<p>PAVER BLOCKS Providing and laying factory made chamfered edge Cement Concrete paver blocks in footpath, parks, lawns, drive ways or light traffic parking etc, of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand. complete all as per direction of Engineer-in-Charge. 80 mm thick C.C. paver block of M-30 grade with approved color design and pattern.</p>	<p>53.0</p>	<p>SqM</p>		
<p>TOTAL FOR CIVIL WORK / HANDLOOM UNIT (A.1) =</p>					

**PROPOSED HANDLOOM UNIT
AT GOGAMUKH**

LAKHIMPUR, ASSAM

ESTIMATE - A.2: PLUMBING & SANITARY WORK (*Handloom Unit*)

Item	Description	Quantity	Unit	Rate (Rs)	Amount (Rs)
				(in figures and words)	
1	SANITARY WORKS				
1.1 <i>DSR'21 (17.2)</i>	EUROPEAN TYPE WATER CLOSET Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required : W.C. pan with ISI marked white solid plastic seat and lid	3.0	Each		
1.2 <i>DSR'21 (17.16A)</i>	Providing and fixing 8 mm dia C.P. / S.S. Jet with flexible tube upto 1 metre long with S.S. triangular plate to European type W.C. of quality and make as approved by Engineer - in - charge.	3.0	Each		
1.3 <i>DSR'21 (17.4)</i>	URINAL Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required : One urinal basin with 5 litre white P.V.C. automatic flushing cistern	3.0	Each		

1.4 <i>DSR'21</i> <i>(17.7)</i>	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require: White Vitreous China Wash basin size 550x400 mm with a pair of 15 mm C.P. brass pillar taps	3.0	Each
1.5 <i>DSR'21</i> <i>(17.8)</i>	Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings.	3.0	Each
1.6 <i>DSR'21(17.10)</i>	KITCHEN SINK (STAINLESS STEEL) Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS:13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required : Kitchen sink without drain board 610x510 mm bowl depth 200 mm	1.0	Each
1.7 <i>DSR'21</i> <i>(17.32)</i>	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing :		
i)	Rectangular shape 453x357 mm	2.0	each
ii)	Rectangular shape 1500x450 mm	1.0	each
1.8 <i>DSR'21</i> <i>(17.33)</i>	Providing and fixing 600x120x5 mm glass shelf with edges round off, supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete.	3.0	each
1.9 <i>DSR'21</i> <i>(18.65)</i>	Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements, weighing not less than 106 gms.	3.0	each
1.10 <i>DSR'21</i> <i>(17.73)</i>	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fittings arrangement of approved quality and colour.		

	450 mm long towel rail with total length of 495 mm, 78 mm wide and effective height of 88 mm, weighing not less than 170 gms	3.0	each
1.11 <i>DSR'21</i> <i>(17.34)</i>	Providing and fixing toilet paper holder C.P. brass	3.0	each
1.12 <i>DSR'21</i> <i>(17.69)</i>	Providing and fixing PTMT Waste Coupling for wash basin and sink, of approved quality and colour. Waste coupling 38 mm dia of 83 mm length and 77mm breadth, weighing not less than 60 gms	4.0	each
1.13 <i>DSR'21</i> <i>(17.70)</i>	Providing and fixing CP Brass 32mm size Bottle Trap of approved quality & make and as per the direction of Engineer-in-charge.	4.0	each
1.14 <i>DSR'21</i> <i>17.35</i>	Providing and fixing soil, waste and vent pipes : 100 mm dia Centrifugally cast (spun) iron socket & spigot (S&S) pipe as per IS: 3989	58.9	Metre
1.15 <i>DSR'21(17.37)</i>	Providing and fixing M.S. holder-bat clamps of approved design to Sand Cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including cost of cutting holes and making good the walls etc. : For 100 mm dia pipe	14.0	each
1.16 <i>DSR'21</i> <i>(17.37)</i>	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete. 100 mm dia Sand cast iron S&S as per IS - 3989	5.0	each
1.17 <i>DSR'21</i> <i>(17.39)</i>	Providing and fixing plain bend of required degree. 100 mm dia Sand cast iron S&S as per IS : 3989	2.0	each
1.18 <i>DSR'21</i> <i>17.40</i>	Providing and fixing heel rest sanitary bend 100 mm dia Sand cast iron S&S as per IS - 3989	3.0	each

1.19 <i>DSR'21</i> <i>(17.43)</i>	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete. 100x100x100 mm Sand cast iron S&S as per IS - 3989	2.0	each
1.2 <i>DSR'21</i> <i>17.56</i>	Providing and fixing terminal guard : 100 mm Sand cast iron S&S as per IS - 3989	2.0	each
1.21 <i>DSR'21</i> <i>(17.58)</i>	Providing lead caulked joints to sand cast iron/centrifugally cast (spun) iron pipes and fittings of diameter : 100 mm	10.0	each
1.22 <i>DSR'21</i> <i>(17.60)</i>	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors : 100 mm inlet and 100 mm outlet Sand cast iron S&S as per IS: 3989	3.0	each
1.23 <i>DSR'21</i> <i>(17.65)</i>	Painting sand cast iron/ centrifugally cast (spun) iron soil, waste vent pipes and fittings with two coats of synthetic enamel paint of any colour such as chocolate grey, or buff etc. over a coat of primer (of approved quality) for ew work : 100 mm diameter pipe	58.9	metre
1.24 <i>DSR'21</i> <i>(19.33)</i>	Making soak pit 2.5m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design. With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1.0	each
2	INTERNAL WATER SUPPLY WORKS PIPING		

<p>2.1 <i>DSR'21</i> <i>(18.7)</i></p>	<p>Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.</p> <p>15 mm nominal dia Pipes 20 mm nominal outer dia pipe 25 mm nominal outer dia pipe 32 mm nominal outer dia pipe</p>	<p>6.0 6.0 54.1 4.5</p>	<p>RM RM RM RM</p>		
<p>2.2 <i>DSR'21</i> <i>(18.49)</i></p>	<p>BIB COCK Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 : 15 mm nominal bore</p>	<p>5.0</p>	<p>Each</p>		
<p>2.3 <i>DSR'21</i> <i>(18.52)</i></p>	<p>STOP COCK Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931. 15 mm nominal bore</p>	<p>6.0</p>	<p>Each</p>		
<p>2.4 <i>DSR'21</i> <i>(18.50)</i></p>	<p>SINK COCK Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms. 15 mm nominal bore</p>	<p>1.0</p>	<p>Each</p>		
<p>2.5 <i>DSR'21</i> <i>(18.22)</i></p>	<p>SHOWER Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet 100 mm diameter</p>	<p>3.0</p>	<p>Each</p>		
<p>2.6 <i>DSR'21</i> <i>(18.19)</i></p>	<p>VALVE Providing and fixing gun metal non-return valve of approved quality (screwed end) : 25 mm nominal bore Horizontal</p>	<p>1.0</p>	<p>Each</p>		
<p>3 3.1<i>DSR'21(12.41)</i></p>	<p>RAINWATER PIPES Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion,(i) Single socketed pipes. 110 mm diameter</p>	<p>26.4</p>	<p>RM</p>		

<p>3.2 <i>DSR'21</i> <i>(12.42)</i></p> <p>3.2.1</p> <p>3.2.2</p> <p>3.2.3</p>	<p>Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion.</p> <p>Bend 87.5° 110 mm</p> <p>Coupler 110 mm</p> <p>Single tee with door 110x110x110 mm</p>	<p>4.0</p> <p>6.0</p> <p>6.0</p>	<p>each</p> <p>each</p> <p>each</p>		
<p>3.3 <i>DSR'21</i> <i>(12.43)</i></p>	<p>Providing and fixing unplasticised - PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.</p> <p>110 mm</p>	<p>6.0</p>	<p>each</p>		
<p>4 <i>DSR'21</i> <i>(18.48)</i></p>	<p>WATER TANK Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.</p>	<p>2000.0</p>	<p>Litre</p>		
<p>5</p>	<p>NON-SCHEDULED ITEM SEPTIC TANK Supplying and placing plastic cylindrical vertical closed top (PVC) tank with manhole cover with locking and cleaning arrangement including providing pads of size as required for inlet and outlet pipes 4000 Ltr Capacity</p>	<p>1.0</p>	<p>each</p>		
<p>TOTAL: PLUMBING & SANITARY WORK / HANDLOOM UNIT (A.2) =</p>					

ESTIMATE OF INTERNAL ELECTRIFICATION WORKS FOR HANDLOOM UNIT AT GOGAMUKH

<i>Sl.No. / Sch. No.</i>	<i>Description of work</i>	<i>Qty</i>	<i>Unit</i>	<i>Rate(Rs.)</i>	<i>Amount(Rs.)</i>
A)	As per DSR (EM) 2022 Items :-				
1	INTERNAL WORK				
	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.				
1.10.1	Group A	12	Each		
1.10.2	Group B	70	Each		
1.10.3	Group C	59	Each		
1.12	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	61	Metre.		
1.14	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
1.14.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	350	Metre.		
1.14.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	1200	RM		
1.14.3	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	400	Metre		
1.14.4	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	50	Metre		
1.14.9	4 X 6 sq. mm + 2 X 6 sq. mm earth wire	120	Metre.		

4	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
1.26	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	80	Each		
1.24.5	6 pin 15/16 A socket outlet	10	Each		
1.24.4	3 pin 5/6 A socket outlet	61	Each		
1.24.3	15/16 A switch	10	Each		
1.24.1	5/6 A switch	201	Each		
1.27	Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc. as required.				
1.27.1	1 or 2 Module (75mmX75mm)	5	Each		
1.27.2	3 Module (100mmX75mm)	40	Each		
1.27.3	4 Module (125mmX75mm)	11	Each		
1.27.4	6 Module (200mmX75mm)	1	Each		
1.27.5	8 Module (125mmX125mm)	5	Each		
1.27.6	12 Module (200mmX150mm)	37	Each		
6/ 1.25	Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	55	Each		
7	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required . (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.)				
2.4.1	4 way (4 + 12), Double door	3	Each		

8/ 2.16	Supplying and fixing DP sheet steel enclosure on surface/ recess along with 25/32 A 240 V "C" curve DP MCB complete with connections, testing and commissioning etc. as required.	1	each		
9/	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
2.10.1	Single pole	37	Each		
10	Supplying and fixing following rating, four pole, 415 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
2.13.1	40 A	1	Each		
2.13.2	63 A	6	Each		
11/ 2.17	Supplying and fixing TP sheet steel enclosure on surface/ recess along with 16/25/32 A 415 V "C" curve TP MCB complete with connections, testing and commissioning etc. as required.	2	each		
12	Providing and fixing following rating and breaking capacity and pole MCCB with thermomagnetic release and terminal spreaders in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required.				
2.2.15	200 A,36KA,FPMCCB	1	Each		
13.00	Earth Station:				
5.2	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	4	Each		
14/ 5.7	Supplying and laying 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	250	Meter		

15/ 7.1	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.				
7.1.3	Above 95 sq. mm and upto 185 sq. mm	200	Metre		
Total of Schedule items (A)					
B) Non Schedule items :- As per Market rate					
1	Supply of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size for laying direct in ground with excavation, sand cushioning, protective covering and refilling the trench etc as required.				
	a) 3.5Core 150 Sq.mm PVCA Aluminium Cable	200.00	Meter		
1	Supplying including fitting fixing of following A.C. Ceiling fan complete with all accessories like down rod, canopy etc. of following sweeps with making necessary connection as approved by the Deptt.)as required complete and as directed by the Department [Without regulator].				
	1200 mm Sweep Orient make cat no. PEAK AIR or Equivalent make	55	Each		
2/ 27.2.1	Supplying including fitting fixing of following A.C. Exhaust fan in the existing hole on the wall of following sweeps with making necessary connection as approved by the Deptt.)as required complete and as directed by the Department.				
	Domestic				
	Hill Air 300 mm sweep (Orient make)	6	Each		

3/ 18.19	Supplying including installation, commissioning of vermin and dust proof totally enclosed, Phosphatised Powder Painted cubical indoor type floor/wall mounting compartmentalized panel board of size 1.35M X 1.50M X 0.40M made of 16 SWG/1.66 mm thick C.R. sheet and 35mm X 35mm X 5mm size angle having 4 no legs at the bottom. The panel board is to be erected in 1 : 3 : 6 PCC foundation including brick soling / grouting etc. complete neatly Wiring done with provision for one no 250 A 4pole MCCB or Switch Fuse Unit as incomer and provision for 8nos DP or TPN out going as specified and directed by the deptt. confirming to IP 43 protection comprising of the following electrical items:				
	1.25mm X 5mm 4 strip copper Bus-Bar 1.4 M length each				
	2. Digital 3 Phase Voltmeter Accuracy class 0.5 - 1 no				
	3. Digital 3 Phase Ammeter Accuracy class 0.5 - 1 no				
	4. Pilot Lamp with integral ckt LED 110- 230 V (Red, Yellow,& Blue - 3 no				
	5. Voltmeter & Ammeter Selector Switch - 2 no				
	6. 2 A Slide fuse unit - 3nos				
	(Incoming & Outgoing Switch Gear of reqd. rating will be measured and paid separately)	1	Each		
4/	Supplying with fitting and fixing 4P 10 KA 240/415V 50Hz MCB of the following capacity complete with making necessary connection as approved, specified and directed by the deptt.				
	C Series legrand, Hager make)				
	40A	2	Each		
	63A	4	Each		
5/	Supplying with fitting and fixing sheet steel, phosphatised, powder painted Single door surface mounting MCB enclosure incorporated with bus-bar, Neutral link, Earth bar and din rail etc fitted on wall with grouting nuts & bolts as reqd. complete with making necessary connection as approved, specified and directed by the deptt.				
	4 way single door	2	Each		
2	ILLUMINATION :-				

	Supply ,installation,testing & Commissioning of following LED light fixtures at all locations, heights and levels as directed ceiling and wall mounted luminaires inclusive of all accessories,lamps,fixing in ceilings,on slab soffits or wall as required etc. complete as per specification and laid out as per detailed drawing and directions (wiring work to be paid for separately) Sample of all fixtures shall be approved of prrior to installation				
a)	40W Batten tube light of Wipro make with cat no. LL24-541-XXX-57-CD	6	Each		
b)	20W Batten tube light of Wipro make with cat no. LL20-221-XXX-65NE3	71	Each		
c)	10W Batten light as wall bracket of Wipro make with cat no. LL20-111-XXX-65NE3	2	Each		
TOTAL : Non Schedule items (market rates) (B)					

GRAND TOTAL : TOTAL(A+B)

RATE ANALYSIS

1) Supply of UG cable 3.5C,150 Sq.mm

Description	Qty	Rate	Amount(Rs.)
Material Cable 3.5C,150Sq.mm Arm	1		

Total Cost of Material

Cartage @ 5% of A1

Total

Add 12% GST

Total

Overheads & Profits @ 15%

Total

Rate per Mtr

Say

AC Ceiling Fan 1200mm Sweep

Description	Qty	Rate	Amount
Material Cost of Fan		1	

Cartage 5%

Labour

Wireman @...../Day 0.1 Day

Khallas @/Day 0.1 Day

Add 12% GST

Overhead & Profit 15%

Rate

Say

AC Exhaust Fan 300mm sweep

Description	Qty	Rate	Amount
Material Cost of Fan		1	

Cartage 5%

Labour

Wireman @..../Day 0.25 Day

Khallas @/Day 0.25 Day

Add 12% GST

Overhead & Profit 15%

Rate

Say

Supply of UG cable 3.5C,240 Sq.mm

Description	Unit	Qty	Rate	Amount(Rs.)
Material Cable	1	Mtr		

Total Cost of Material

Cartage @ 5% of A1

Total

Add 12% GST

Total

Overheads & Profits @ 15%

Total

Rate per Mtr

Say

1) Supply of 8.5M HT pole

Description	Unit	Qty	Rate	Amount(Rs.)
Material 8.5 M HT pole	1	Mtr		

Total Cost of Material

Cartage @ 5% of A1

Total

Add 18% GST

Total

Overheads & Profits @ 15%

Total

Rate per unit

Say

1) Supply of UG cable 3C,6Sq.mm

Description	Unit	Qty	Rate	Amount(Rs.)
Material Cable 4C,6 Sq.mm Arm	1	Mtr		

Total Cost of Material

Cartage @ 5% of A1

Total

Add 12% GST

Total

Overheads & Profits @ 15%

Total

Rate per Mtr

Say

Fabricated Panel(with 250A FP Incoming & 8nos FP Outgoing)

Description	Qty	Rate	Amount
Material			
Cost of Panel		1	

Cartage 5%

Labour			
Wireman @...../Day		2 Day	
Khallasi @/Day		2 Day	

Add 18% GST

Overhead & Profit 15%

Rate

Say

SITC OF 4P MCB(C SERIES)

Description	Qty	Rate	40A FP MCB	63A FP MCB	
Material			Amount	Rate	Amount
Cost of MCB		1			

Cartage 5%

Labour					
Wireman @...../Day		0.25 Day			
Khallasi @/Day		0.25 Day			

Add 12% GST

Overhead & Profit 15%

Rate

Say

4 Way Single Door MCB Enclosure:-(Legrand Make)

Description	Qty	Rate	Amount
Material			
Cost of Enclosure		1	

Cartage 5%

Labour					
Wireman @...../Day		0.1 Day			
Khallasi @/Day		0.1 Day			

Add 12% GST

Overhead & Profit 15%

Rate

Say

SITC Luminaires(Lights) for internal electrification

Description	Qty	Batten light Wipro 40W		Batten light Wipro 20W		Batten light Wipro 10W(wall bracket light)	
		Rate	Amount	Rate	Amount	Rate	Amount
Material							
Fixtures	1						

Cartage 5%

Labour

Wireman @...../Day 0.25 Day

Khallasi @/Day 0.25 Day

Add 12% GST

Overhead & Profit 15%

Rate

Say

Luminaires(Lights) for external electrification

Description	Qty	Street light Wipro 30W	
		Rate	Amount
Material			
Fixtures	1		

Cartage 5%

Labour

Wireman @..../Day 0.25 Day

Khallasi @/Day 0.25 Day

Add 12% GST

Overhead & Profit 15%

Rate

Say

Octagonal Pole 6Mtr hight

Description	Qty	Rate	Amount
Material			
Cost of Pole	1		
PCC Foundation materials	1		

Cartage 5%

Labour

Wireman @..../Day 1 Day

Meson @..../Day 1 Day

Khallasi @/Day 2 Day

Add 18% GST

Overhead & Profit 15%

Rate

Say

200KVA Transformer

Description	Qty	Rate	Amount
Material			
Cost of Transformer	1		

Cartage 5%

Labour			
Wireman @..../Day	3nosx1day		
Khallasi @/Day	6nos x1day		

Add 18% GST

Overhead & Profit 15%

Rate
Say

SITC of Substation Accessories-1

Description	Qty	Gang Operating Switch		D.O Fuse		Lightning Arrester		CT/PT Combine	
		Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount
Material									
Fixtures	1								

Cartage 5%

Labour			
Wireman @..../Day	1 Day		
Khallasi @/Day	1 Day		

Add 18% GST

Overhead & Profit 15%

Rate
Say

SITC of Substation Accessories-2

Description	Qty	11KV T Cross Arm		11KV Pin Insulator		11KV Disc insulator		Pole Clamp	
		Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount
Material									
Fixtures	1								

Cartage 5%

Labour			
Wireman @..../Day	0.1 Day		
Khallasi @/Day	0.1 Day		

Add 18% GST

Overhead & Profit 15%

Rate
Say

11KV line on 8.5M PSC pole(Per KM)

Description	Qty	Rate	Amount
Material			
Cost of Material	1		

Cartage 5%

Labour			
Wireman @..../Day	4nosx7day		
Khallasi @/Day	4nos x7day		

Add 18% GST

Overhead & Profit 15%

Rate
Say

4x70Sq.mm(11KV) Cable

Description	Qty	Rate	Amount
Material			
Cost of Cable		4	

Cartage 5%

Labour

Wireman @.../Day		0.2 Day	
Khallasi @ .../Day		0.2 Day	

Add 12% GST

Overhead & Profit 15%

Rate

Say

1C,50-95 Sq.mm(11KV) Cable Termination

Description	Qty	Rate	Amount
Material			
Cost of Termination kit		1	

Cartage 5%

Labour

Wireman @.../Day		1 Day	
Khallasi @ .../Day		1 Day	

Add 18% GST

Overhead & Profit 15%

Rate

Say

GI Pipe Earthing

Description	Qty	Rate	Amount
Material			
Cost of Material		1	

Cartage 5%

Labour

Wireman @.../Day		1 Day	
Khallasi @ .../Day		1 Day	

Add 18% GST

Overhead & Profit 15%

Rate

Say

Salt & Charcoal for earth station

Description	Qty	Rate	Amount
Material			
Cost of Material		1	

Cartage 5%

Labour

Wireman @..../Day 0.1 Day

Khallasi @/Day 0.1 Day

Add 18% GST

Overhead & Profit 15%

Rate

Say

GI strip 25x6mm

Description	Qty	Rate	Amount
Material			
Cost of Material		1	

Cartage 5%

Labour

Wireman @...../Day 0.05 Day

Khallasi @/Day 0.05 Day

Add 18% GST

Overhead & Profit 15%

Rate

Say

QUANTITY CALCULATIONS / HANDLOOM UNIT BUILDING

REF: (x) = PRODUCT / (+) = ADDITION / (-) = DEDUCTION AND (/) = DIVISION

(Note: All Area and Linear Measurements have been derived from CAD or Strl Programmes / all measurements in M or SqM)

BOQ Ref	Particulars	Calculations						Quantity					
		L/NOS		B/H		W/D		AR		BAY/VOL	Unit	Sub Total	Total
	REF DRGS: 1) ARCH/HU/GM/01 2) ARCH/HU/GM/02 3) ARCH/HU/GM/03 4) FDN-002-R1 5) FDN-003-R1 6) COL-003-R1 7) COL-004-R1 8) PL-101-R0 9) PL-102-R0(SHEET 1 OF 2) 10) PL-102-R0(SHEET 2 OF 2) 11) RF-401-R0 12) RB-201-R0(SHEET 1 OF 2) 13) RB-201-R0(SHEET 2 OF 2) 14) RF-203-R0 15) RF-204-R0(SHEET 1 OF 4) 16) RF-204-R0(SHEET 2 OF 4) 17) RF-204-R0(SHEET 3 OF 4) 18) RF-204-R0(SHEET 4 OF 4)												
	GENERAL REFERENCE DIMENSIONS AND MEASUREMENTS: i) Average GL from Survey Data = 97.50 Final Dressed and levelled GL = 97.50 Plinth Level = 98.25 a) Foundation Depth from NGL as per Structural Design data= (M) 1.50 b) Column height - GL to PL = (M) 0.75 c) Column height from PL to top of Roof Beam = (M) 3.30 ii) Foundation Depth from NGL as per Structural Design = 1.50 PCC = 0.10 Total Depth of Excavation = (M) 1.60												
1.1	EARTHWORK: Footings F1 24.00 x 1.40 x 1.40 x 1.60 = 75.26 F2 53.00 x 1.20 x 1.20 x 1.60 = 122.11 F3 3.00 x 1.50 x 1.50 x 1.60 = 10.80 CF1 1.00 x 2.80 x 1.50 x 1.60 = 6.72 CF2 3.00 x 2.50 x 1.20 x 1.60 = 14.40 ETP = 1.00 x 6.06 x 3.06 x 1.53 = 28.28 STEPS= 5.00 x 1.50 x 1.50 x 0.15 = 1.69												
											259.26 = CuM	259.26	259.3

BOQ Ref	Particulars	Calculations						Quantity						
		L/NOS		B/H		W/D		AR		BAY/VOL	Unit	Sub Total	Total	
1.2	Filling available earth	259.30	-	77.70 (RCC)	-	18.20 (PCC)	=	163.40	=		CuM	163.40	163.4	
1.3	Extra for additional lift = Office bldg													
	F1	24.00	x	1.40	x	1.40	x	0.10	=	4.70				
	F2	53.00	x	1.20	x	1.20	x	0.10	=	7.63				
	F3	3.00	x	1.50	x	1.50		0.10	=	0.68				
	CF1	1.00	x	2.80	x	1.50	x	0.10	=	0.42				
	CF2	3.00	x	2.50	x	1.20	x	0.10	=	0.90				
	ETP=	1.00	x	6.06	x	3.06	x	0.02	=	0.46				
										15	CuM	14.79	14.8	
1.4	Supplying, filling local earth= Main Building (A1-A6/01-20) = Quality Control Corridor (A6-A7/13-20)=	1.00	x	52.79	x	14.94	x	0.53	=	414.06				
	Office building (A7-B3/14-20) = Less (B2-B3/14-15) =	1.00	x	18.36	x	4.39	x	0.53	=	42.30				
		1.00	x	17.19	x	12.84	x	0.53	=	115.80				
		-1.00	x	1.00	x	5.46	x	0.53	=	-2.85				
	Total =									569.31	CuM	569.31	569.4	
1.5	Filling: UNDER PLINTH Main Building (A1-A6/01-20) = Quality Control Corridor (A6-A7/13-20)=	1.00	x	52.79	x	14.94	x	0.11	=	86.76				
	Office building (A7-B3/14-20) = Less (B2-B3/14-15) =	1.00	x	18.36	x	4.39	x	0.11	=	8.86				
		1.00	x	17.19	x	12.84	x	0.11	=	24.26				
		-1.00	x	1.00	x	5.46	x	0.11	=	-0.60				
	Total =									119.28	CuM	119.28	119.3	
1.6	Supply of ATT Per sqm @300c/c = 9 Total Litres = At 1% dilution =	169.97 1084.40	/ x	0.30 9.00	= =	566.6 9760								
						10326								
		1%	x	10326	=	103.26					ltrs	103.26	103.3	
1.7.1	Post Constr - periphery	2.00	(53.25	+	15.30	+	16.435)	169.97	=	Rm	169.97	170.0
1.7.2	Under floors = Main Building (A1-A6/01-20) = Quality Control Corridor (A6-A7/13-20)=	1.00	x	52.79	x	14.94	=	788.68						
	Office building (A7-B3/14-20) = Less (B2-B3/14-15) =	1.00	x	18.36	x	4.39	=	80.58						
		1.00	x	17.19	x	12.84	=	220.57						
		-1.00	x	1.00	x	5.46	=	-5.43						
								1084.40			SqM	1084.40	1084.5	
2	PCC :													
2.1	Footings													
	F1	24.00	x	1.40	x	1.40	x	0.10	=	4.70				
	F2	53.00	x	1.20	x	1.20	x	0.10	=	7.63				
	F3	3.00	x	1.50	x	1.50		0.10	=	0.68				
	CF1	1.00	x	2.80	x	1.50	x	0.10	=	0.42				
	CF2	3.00	x	2.50	x	1.20	x	0.10	=	0.90				
	PCC for Brick work under Plinth Beams = L = A1-B3/20	1.00	x	31.71	=	31.71								
	Less Cols 1-20/A1, A6,7/1-20	-5.00	x	0.30	=	-1.50								
		2.00	x	52.65	=	105.30								
	Less Cols A1-A6/01	-40.00	x	0.30	=	-12.00								
		1.00	x	14.80	=	14.80								
	Less Cols	-3.00	x	0.30	=	-0.90								

BOQ Ref	Particulars	Calculations							Quantity			
		L/NOS		B/H	=	W/D		AR	=	BAY/VOL	Unit	Sub Total
	A5/1-6	1.00	x	15.09	=	15.09						
	Less Cols	-3.00	x	0.30	=	-0.90						
	2,5/A1-A5	2.00	x	11.84	=	23.68						
	Less Cols	-5.00	x	0.30	=	-1.50						
	A3/2-5	1.00	x	5.76	=	5.76						
	Less Cols	-1.00	x	0.30	=	-0.30						
	12,9,6/A1-A5	3.00	x	11.07	=	33.21						
	Less Cols	-6.00	x	0.30	=	-1.80						
	A3/6-9	1.00	x	7.74	=	7.74						
	Less Cols	-2.00	x	0.30	=	-0.60						
	A4/6-8	1.00	x	6.04	=	6.04						
	Less Cols	-1.00	x	0.30	=	-0.30						
	7,8/A4-A5	2.00	x	3.17	=	6.34						
	14/A1-A5	1.00	x	11.12	=	11.12						
	Less Cols	-2.00	x	0.30	=	-0.60						
	A5/9-20	1.00	x	29.23	=	29.23						
	Less Cols	-8.00	x	0.30	=	-2.40						
	15,17/A3-A5	2.00	x	5.375	=	10.75						
	18/A3-A5	1.00	x	5.245	=	5.25						
	A3/15-17	1.00	x	2.49	=	2.49						
	Less Cols	-1.00	x	0.30	=	-0.30						
	A4/15-17	1.00	x	2.22	=	2.22						
	19/A1-A5	1.00	x	11.05	=	11.05						
	Less Cols	-1.00	x	0.30	=	-0.30						
	14-19/A3	1.00	x	11.94	=	11.94						
	Less Cols	-2.00	x	0.30	=	-0.60						
	14/A7-B2	1.00	x	11.55	=	11.55						
	Less Cols	-2.00	x	0.30	=	-0.60						
	15, 17/A7-B3	2.00	x	12.695	=	25.39						
	Less Cols	-3.00	x	0.30	=	-0.90						
	Less Cols	-2.00	x	0.30	=	-0.60						
	19/A8-B3	1.00	x	8.730	=	8.73						
	Less Cols	-1.00	x	0.30	=	-0.30						
	18/B1-B3	1.00	x	3.695	=	3.70						
	13/A6-A7	1.00	x	4.240	=	4.24						
	B2/14-15	1.00	x	5.480	=	5.48						
	A8, B1, B3/15-20	3.00	x	11.335	=	34.01						
	Less Cols	-6.00	x	0.30	=	-1.80						
	A8/15-17	1.00	x	3.41	=	3.41						
	B1/15-17	1.00	x	3.39	=	3.39						
	A8/15-16	1.00	x	1.08	=	1.08						
	B1-B3/15,17	2.00	x	3.695	=	7.39						
	B1-B3/17	1.00	x	3.555	=	3.56						
	B1, B2/17	2.00	x	0.97	=	1.94						
						419.35						
	ETP (DRG. HU/GG/ETP/01) =	1.00	x	6.06	x	3.06	x	0.10	=	1.85		
	STEPS=	3.00	x	3.00	x	1.20	x	0.10	=	1.08		
	STEPS=	1.00	x	7.36	x	1.20	x	0.10	=	0.88		
										18.15	=	CuM
												18.15
												18.2
3	RCC											
3.1.	In substructure upto plinth level:											
	Footings											
	Office bldg											
	F1	24.00	x	1.20	x	1.20	x	0.25	=	8.64		
	F2	53.00	x	1.00	x	1.00	x	0.25	=	13.25		
	F3	3.00	x	1.30	x	1.30	x	0.25	=	1.27		
	CF1	1.00	x	2.60	x	1.30	x	0.25	=	0.85		

BOQ Ref	Particulars	Calculations								Quantity				
		L/NOS		B/H		W/D		AR		BAY/VOL	Unit	Sub Total	Total	
	CF2	3.00	x	2.30	x	1.00	x	0.25	=	1.73				
	ETP base (6.06 x 3.06)	1.00	x	6.06	x	3.06	x	0.20	=	3.71				
	ETP slab=	1.00	x	5.86	x	2.86	x	0.15	=	2.51				
	ETP Beam =	1.00	x	2.40	x	0.15	x	0.15	=	0.05				
	Footings - total =									32.00	=	32.00		
	Columns upto PL -C1=	9.00	x	0.30	x	0.30	x	2.00	=	1.62	=	1.62		
	Corridor Columns upto PL -C2=	74.00	x	0.30	x	0.30	x	2.00	=	13.32	=	13.32		
	P1	10.00	x	0.30	x	0.30	x	2.00	=	1.80	=	1.80		
	Plinth Beam (391.55x0.23x0.30)	1.00	x	419.35	x	0.23	x	0.30	=	28.94	=	28.94		
	Total =										=	CuM	77.68	77.7
3.2	In superstructure from plinth level up to 2nd floor level:													
	Columns, pillars, slabs, stairs													
	Main bldg													
	Columns above PL -C1=	9.00	x	0.30	x	0.30	x	3.30	=	2.67				
	Columns above PL -C2=	74.00	x	0.30	x	0.30	x	3.30	=	21.98				
	Columns total =									24.65	=	24.65		
	Roof Beam	419.35	x	1.00	=	419.35								
	Less =	-2.00	x	11.07	=	-22.14								
		-1.00	x	8.84	=	-8.84								
		-1.00	x	3.61	=	-3.61								
		-1.00	x	7.25	=	-7.25								
		-1.00	x	3.70	=	-3.70								
						<u>373.82</u>								
	Roof Beam	1.00	x	373.82	x	0.23	x	0.3	=	25.79				
	Lintel Beam (358.85x0.15x0.15)	1.00	x	419.35	x	0.15	x	0.15	=	9.44				
	Beams total =									35.23	=	35.23		
	Chajja (External Windows) =	17.00	x	1.50	x	0.60	x	0.1	=	1.53				
	Bath Chajja =	3.00	x	0.90	x	0.60	x	0.1	=	0.16				
	Slab total =									1.69	=	1.69		
	TOTAL =										=	CuM	61.57	61.6
4	FORMWORK													
4.1	Foundations, footings, bases of columns for mass concrete.													
	Footings													
	Office bldg													
	F1	24.00	x	1.20	x	4.00	x	0.25	=	28.80				
	F2	53.00	x	1.00	x	4.00	x	0.25	=	53.00				
	F3	3.00	x	1.30	x	4.00	x	0.25	=	3.90				
	CF1	1.00	x	2.60	x	2.00	x	0.25	=	1.30				
		1.00	x	1.50	x	2.00	x	0.25	=	0.75				
	CF2	3.00	x	2.30	x	2.00	x	0.25	=	3.45				
	CF2	3.00	x	1.20	x	2.00	x	0.25	=	1.80				
	Footings - total =									93.00	=	93.00		
	Columns upto PL -C1=	9.00	x	0.30	x	4.00	x	2.00	=	21.60	=	21.60		
	Corridor Columns upto PL -C2=	74.00	x	0.30	x	4.00	x	2.00	=	177.60	=	177.60		
	P1	10.00	x	0.30	x	4.00	x	2.00	=	24.00	=	24.00		
	ETP base =	2.00	x	6.06	+	3.06	x	0.20	=	3.65	=	3.65		
	ETP baffle wall Beam =	3.00	x	2.40	+	0.00	x	0.15	=	1.08	=	1.08		
	ETP slab =	2.00	x	5.86	+	2.86	x	0.15	=	2.62	=	2.62		
	Upto PL - total =										=	SqM	323.54	323.6
4.2	Sides of tie beams, grade beams													
	Plinth Beams	1.00	x	419.35	x	2.00	x	0.3	=	251.61				
	Roof Beam	1.00	x	373.82	x	0.23	=			85.98				
		2.00	x	373.82	x	0.30	=			224.29				
	Lintel Beam	3.00	x	419.35	x	0.15	=			188.71				

BOQ Ref	Particulars	Calculations						Quantity						
		L/NOS		B/H		W/D		AR		BAY/VOL	Unit	Sub Total	Total	
	Beam total =								750.58	=	SqM	750.58	750.6	
4.3	Columns, pillars, posts...													
	Columns above PL -C1=	9.00	x	0.30	x	4.00	x	3.30	=	35.64				
	Columns above PL -C2=	74.00	x	0.30	x	4.00	x	3.30	=	293.04				
	Columns Shuttering =									328.68	=	SqM	328.68	328.7
4.4	Flat surfaces, slabs...													
	Chajja =	17.00	x	1.50	x	0.60	=	15.30						
	Bath Chajja =	3.00	x	0.90	x	0.60	=	1.62						
	Slab total =						=	16.92			=	SqM	16.92	17.0
4.5	Edges of slab	a		b		c								
	Chajja - [ax(b+2xc)] =	17.00	,	1.50	,	0.60	=	45.90						
	Bath Chajja - [ax(b+2xc)] =	3.00	,	0.90	,	0.60	=	6.30						
	Total =						=	52.20			=	RM	52.20	52.2
4.6	Steel Reinf upto plinth (BBS encl)=											Kg	8908.67	8908.7
4.7	Steel Reinf above plinth (BBS encl)=											Kg	6565.83	6565.9
5	MASONRY WORKS													
5.1	Soling: Brick flat													
5.2	FULL BRICK WORK													
5.2.1	GL to Plinth Beam =	419.35			x	0.75	x	0.23	=	72.34				
	ETP =	2.00	x	5.80	x	1.70	x	0.23	=	4.54				
		2.00	x	2.80	x	1.70	x	0.23	=	2.19				
	Overflow wall	1.00	x	2.80	x	1.40	x	0.23	=	0.90				
	Bafle wall	1.00	x	2.80	x	0.60	x	0.23	=	0.39				
	STEPS=	3.00	x	3.00	x	1.20	x	0.15	=	1.62				
		3.00	x	3.00	x	0.90	x	0.15	=	1.22				
		3.00	x	3.00	x	0.60	x	0.15	=	0.81				
		3.00	x	3.00	x	0.30	x	0.15	=	0.41				
	STEPS=	1.00	x	7.36	x	1.20	x	0.15	=	1.32				
		1.00	x	7.36	x	0.90	x	0.15	=	0.99				
		1.00	x	7.36	x	0.60	x	0.15	=	0.66				
		1.00	x	7.36	x	0.30	x	0.15	=	0.33				
	TOTAL=									87.71	=	CuM	87.71	87.8
5.3.1	HALF BRICK WORK													
	WALLS=	419.35												
	Less = Corridor area	-34.45												
		-3.00												
		-4.34												
		-1.15												
		-7.36												
	Total=	369.05			x	3.00	=	1107.15						
	LESS WINDOWS= W2	-18.00	x	1.20	x	1.35	=	-29.16						
	W1	-8.00	x	1.80	x	1.35	=	-19.44						
	W3	-3.00	x	0.60	x	1.00	=	-1.80						
	DOORS=D1	-2.00	x	1.20	x	2.10	=	-5.04						
	D2	-18.00	x	1.00	x	2.10	=	-37.80						
	D3	-3.00	x	0.75	x	2.10	=	-4.73						
	Rolling Shutter =	-2.00	x	1.50	x	2.10	=	-6.30						

BOQ Ref	Particulars	Calculations						Quantity				
		L/NOS		B/H		W/D		AR	BAY/VOL	Unit	Sub Total	Total
	VENTILATOR=	-18.00	x	1.20	x	0.50	=	-10.80				
		-8.00	x	1.80	x	0.50	=	-7.20				
		-2.00	x	1.20	x	0.50	=	-1.20				
		-18.00	x	1.00	x	0.50	=	-9.00				
	TOTAL=							974.69	=	SqM	974.69	974.7
5.3.2	Extra for providing								=	SqM	974.69	974.7
6	FLOOR FINISHES											
	CC FLOORING											
6.1	40mm thick CC flooring											
	Main Building =	1.00	x	53.25	x	15.40	=	820.05				
	Quantity Control etc. =	1.00	x	18.82	x	4.85	=	91.25				
	Office building =	1.00	x	17.65	x	13.30	=	234.59				
		-1.00	x	1.46	x	5.92	=	-8.61				
	Total =							1137.29	=	SqM	1137.29	1137.3
6.2	Cement Skirting Walls	1.00	x	369.05	x	0.10	=	36.91	=	SqM	36.91	37.0
6.3	Glass strips ON FLOOR @ .714M/SQM	0.71	x	1137.3			=	812.02	=	RM	812.02	812.1
6.4	Ceramic Wall Tiles											
	Office toilet=	3.82	x	2.80	x	1.00	=	13.23				
		1.65	x	1.20	x	1.00	=	1.98				
		3.82	x	2.80	x	1.00	=	10.68				
		1.65	x	1.20	x	1.00	=	1.98				
	CEO toilet=	1.20	x	2.10	x	1.00	=	6.60				
	Total =							34.47	=	SqM	34.47	34.5
7	PLASTERING											
7.1	INTERNAL PLASTER:											
	OUTTER WALL=	2.00	x	53.25	x	3.30	=	351.45				
		2.00	x	12.00	x	3.30	=	79.20				
	Office=	8.00	x	13.30	x	3.30	=	350.99				
		2.00	x	17.65	x	3.30	=	116.49				
	INTERNAL Walls:	4.00	x	11.64	x	3.30	=	153.65				
		16.00	x	12.00	x	3.30	=	633.60				
		2.00	x	5.68	x	3.30	=	37.46				
		2.00	x	6.59	x	3.30	=	43.49				
		2.00	x	3.47	x	3.30	=	22.87				
	Total=							1789.19				
	LESS WINDOWS= W2	-9.00	x	1.20	x	1.35	=	-14.58				
	W1	-4.00	x	1.80	x	1.35	=	-9.72				
	W3	-1.50	x	0.60	x	1.00	=	-0.90				
	DOORS=D1	-1.00	x	1.20	x	2.10	=	-2.52				
	D2	-9.00	x	1.00	x	2.10	=	-18.90				
	D3	-1.50	x	0.75	x	2.10	=	-2.36				
	Rolling Shutter	-2.00	x	1.50	x	2.10	=	-6.30				
	VENTILATOR=	-9.00	x	1.20	x	0.50	=	-5.40				
		-4.00	x	1.80	x	0.50	=	-3.60				
		-1.00	x	1.20	x	0.50	=	-0.60				
		-9.00	x	1.00	x	0.50	=	-4.50				
	ETP=	2.00	x	5.40	x	1.70	=	18.36				

BOQ Ref	Particulars	Calculations						Quantity				
		L/NOS		B/H		W/D		AR	BAY/VOL	Unit	Sub Total	Total
7.2	TOTAL INTERNAL PLASTER=	4.00	x	2.40	x	1.70	=	16.32				
								1754.49		SqM	1754.49	1754.5
	EXTERNAL WALLS =	2.00	x	53.25	x	3.30	=	351.45				
		2.00	x	12.30	x	3.30	=	81.18				
	Office=	2.00	x	13.30	x	3.30	=	87.75				
		2.00	x	17.65	x	3.30	=	116.46				
	LESS WINDOWS= W2	-9.00	x	1.20	x	1.35	=	-14.58				
	W1	-4.00	x	1.80	x	1.35	=	-9.72				
	W3	-1.50	x	0.60	x	1.00	=	-0.90				
	DOORS=D1	-1.00	x	1.20	x	2.10	=	-2.52				
	D2	-9.00	x	1.00	x	2.10	=	-18.90				
	D3	-1.50	x	0.75	x	2.10	=	-2.36				
	Rolling Shutter	-2.00	x	1.50	x	2.10	=	-6.30				
	VENTILATOR=	-9.00	x	1.20	x	0.50	=	-5.40				
		-4.00	x	1.80	x	0.50	=	-3.60				
		-1.00	x	1.20	x	0.50	=	-0.60				
		-9.00	x	1.00	x	0.50	=	-4.50				
TOTAL =							567.45					
TOTAL EXTERNAL PLASTER=							567.45		SqM	567.45	567.5	
7.3	6mm plaster											
	Chajja =	17.00	x	1.50	x	0.60	=	15.30				
	Bath Chajja =	3.00	x	0.90	x	0.60	=	1.62				
	Extra for ceiling(Chajja)=							16.92	=	SqM	16.92	17.0
8.1	ROOF STRUCTURE											
	Truss Member							KG/MTR				
	Truss-11a (1 no)											
	SHS 63.5x63.5x3.2	1.00	1	28.69				5.85	167.84	KG		
	SHS 40x40x3.2	1.00	1	21.89				3.49	76.38	KG		
	End plate	2.00	1	0.85		0.85		5	56.72	KG		
	Cleat Angle ISA 75x75x5	11.00	1	0.09				5.7	5.64	KG		
	Truss-11 (1 no)											
	SHS 63.5x63.5x3.2	1.00	1	28.69				5.85	167.84	KG		
	SHS 40x40x3.2	1.00	1	21.89				3.49	76.38	KG		
	End plate	2.00	1	0.85		0.85		5	56.72	KG		
	Cleat Angle ISA 75x75x5	12.00	1	0.09				5.7	6.16	KG		
	Truss-10 (1 no)											
	SHS 63.5x63.5x3.2	1.00	1	20.68				5.85	120.98	KG		
	SHS 40x40x3.2	1.00	1	12.96				3.49	45.23	KG		
	End plate	2.00	1	0.85		0.85		5	56.72	KG		
	Cleat Angle ISA 75x75x5	8.00	1	0.09				5.7	4.10	KG		
	Truss-1 (02 nos)											
	SHS 63.5x63.5x3.2	1.00	2	38.49				5.85	450.33	KG		
	SHS 40x40x3.2	1.00	2	18.43				3.49	128.64	KG		
	End plate	2.00	2	0.85		0.85		5	113.43	KG		
	Cleat Angle ISA 75x75x5	12.00	2	0.09				5.7	12.31	KG		
Truss-1A (01 noS)												
SHS 63.5x63.5x3.2	1.00	1	38.49				5.85	225.17	KG			
SHS 40x40x3.2	1.00	1	18.43				3.49	64.32	KG			
End plate	2.00	1	0.85		0.85		5	56.72	KG			
Cleat Angle ISA 75x75x5	12.00	1	0.09				5.7	6.16	KG			
Truss-2 (02 nos)												
SHS 63.5x63.5x3.2	1.00	2	49.81				5.85	582.72	KG			

BOQ Ref	Particulars	Calculations						Quantity		
		L/NOS		B/H	W/D	AR	BAY/VOL	Unit	Sub Total	Total
	SHS 40x40x3.2	1.00	2	40.61		3.49	283.47	KG		
	End plate	4.00	2	0.85	0.85	5	226.87	KG		
	Cleat Angle ISA 75x75x5	24.00	2	0.09		5.7	24.62	KG		
	Truss-3(01 noS)									
	SHS 63.5x63.5x3.2	1.00	1	38.79		5.85	226.92	KG		
	SHS 40x40x3.2	1.00	1	33.17		3.49	115.76	KG		
	End plate	4.00	1	0.85	0.85	5	113.43	KG		
	Cleat Angle ISA 75x75x5	22.00	1	0.09		5.7	11.29	KG		
	Truss-4(01 noS)									
	SHS 63.5x63.5x3.2	1.00	1	54.42		5.85	318.33	KG		
	SHS 40x40x3.2	1.00	1	29.25		3.49	102.08	KG		
	End plate	4.00	1	0.85	0.85	5	113.43	KG		
	Cleat Angle ISA 75x75x5	24.00	1	0.09		5.7	12.31	KG		
	Truss-5(01 noS)									
	SHS 63.5x63.5x3.2	1.00	1	42.61		5.85	249.24	KG		
	SHS 40x40x3.2	1.00	1	32.97		3.49	115.05	KG		
	End plate	4.00	1	0.85	0.85	5	113.43	KG		
	Cleat Angle ISA 75x75x5	19.00	1	0.09		5.7	9.75	KG		
	Truss-8 (08 noS)									
	SHS 63.5x63.5x3.2	1.00	8	40.60		5.85	1900.08	KG		
	SHS 40x40x3.2	1.00	8	34.52		3.49	963.80	KG		
	End plate	4.00	8	0.85	0.85	5	907.46	KG		
	Cleat Angle ISA 75x75x5	24.00	8	0.09		5.7	98.50	KG		
	Truss-9 (01 no)									
	SHS 63.5x63.5x3.2	1.00	1	40.52		5.85	237.04	KG		
	SHS 40x40x3.2	1.00	1	33.20		3.49	115.87	KG		
	End plate	2.00	1	0.85	0.85	5	56.72	KG		
	Cleat Angle ISA 75x75x5	23.00	1	0.09		5.7	11.80	KG		
	Truss-7 (01 no)									
	SHS 63.5x63.5x3.2	1.00	1	36.16		5.85	211.51	KG		
	SHS 40x40x3.2	1.00	1	27.31		3.49	95.29	KG		
	End plate	4.00	1	0.85	0.85	5	113.43	KG		
	Cleat Angle ISA 75x75x5	19.00	1	0.09		5.7	9.75	KG		
	Truss-6 (1 no)									
	SHS 63.5x63.5x3.2	1.00	1	21.65		5.85	126.65	KG		
	SHS 40x40x3.2	1.00	1	13.87		3.49	48.41	KG		
	End plate	2.00	1	0.85	0.85	5	56.72	KG		
	Cleat Angle ISA 75x75x5	11.00	1	0.09		5.7	5.64	KG		
	Truss-12 (1 no)									
	SHS 63.5x63.5x3.2	1.00	1	32.48		5.85	190.01	KG		
	SHS 40x40x3.2	1.00	1	11.00		3.49	38.39	KG		
	End plate	4.00	1	0.85	0.85	5	113.43	KG		
	Cleat Angle ISA 75x75x5	24.00	1	0.09		5.7	12.31	KG		
	Truss-5A (02 noS)									
	SHS 63.5x63.5x3.2	1.00	2	17.58		5.85	205.63	KG		
	SHS 40x40x3.2	1.00	2	10.17		3.49	70.95	KG		
	End plate	2.00	2	0.85	0.85	5	113.43	KG		
	Cleat Angle ISA 75x75x5	8.00	2	0.09		5.7	8.21	KG		
	Truss-13 (1 no)									
	SHS 63.5x63.5x3.2	1.00	1	5.91		5.85	34.57	KG		
	SHS 40x40x3.2	1.00	1	5.06		3.49	17.66	KG		
	End plate	4.00	1	0.85	0.85	5	113.43	KG		
	Cleat Angle ISA 75x75x5	4.00	1	0.09		5.7	2.05	KG		
	Truss-14 (1 no)									
	SHS 63.5x63.5x3.2	1.00	1	23.84		5.85	139.46	KG		

BOQ Ref	Particulars	Calculations						Quantity						
		L/NOS		B/H	W/D	AR	BAY/VOL	Unit	Sub Total	Total				
	SHS 40x40x3.2	1.00	1	33.51		3.49	116.95	KG						
	End plate	4.00	1	0.85	0.85	5	113.43	KG						
	Cleat Angle ISA 75x75x5	17.00	1	0.09		5.7	8.72	KG						
	Purline SHS 63.5x63.5x4.5	1.00	1	593.61		7.93	4707	KG						
	Purline SHS 63.5x63.5x4.5	1.00	1	974.18		7.93	7725	KG						
	Bearing plate 250x250x8mm	93.00	1	0.25	0.25	8.00	365	KG						
	Total =						= 23571.7 =	Kg	23571.69	23571.7				
8.2	Nuts & Bolts 16 mm Bolt 300 mm Long @ 4 nos on each Bearing plate	93.00	x	4.00	=	372.00	x	0.35	=	130.2 130.2	Kg	130.20	130.2	
8.3	Rolling shutter	2.00	x	1.50	x	2.40	=	7.20	=		SqM	7.20	7.2	
8.4	RAILINGS IN VERANDAH For 1 Sqm Railing (25 X 5 MM FLAT) -0.267x4= 0.10 x 8 = 0.55 x 4 = 0.611 x 4 = 0.75 x 3 = 0.125 x 3.14 x 2 = Total =	1.07 0.80 2.20 2.44 2.25 0.79 9.55												
	Weight of 25x5 Flat @ 0.98 =	9.36												
	Weight of 1x2m SHS40X40X3.2	2.00	X	@3.49	=	6.98								
	Weight per Sqm =	9.36	+	6.98	=	16.34					Kg/SqM			
	RAILINGS IN VERANDAH	35.60	x	1.00	=	35.60								
		4.35	x	1.00	=	4.35								
	Total area of railing =					39.95								
	Weight =	39.95	x	16.34	=					652.63				
	<u>Frame for Water Tank - 2 nos.</u>	(Ref: Drg No.- ARCH/CFC/04 dated -20/03/22)												
	OHT frame = (ANGLES)													
	< 75x75x5 = vertical support-	2.00	x	4.00	x	4.00	x	5.70	=	182.40				
	<50x50x5= horizontal =	2.00	x	4.00	x	2.00	x	3.80	=	60.80				
	<50x50x5= horizontal =	2.00	x	4.00	x	1.85	x	3.80	=	56.24				
	<50x50x5= horizontal =	2.00	x	4.00	x	1.72	x	3.80	=	52.29				
	<50x50x5= horizontal =	2.00	x	4.00	x	1.60	x	3.80	=	48.64				
	<50x50x5= horizontal =	2.00	x	4.00	x	1.60	x	3.80	=	48.64				
	<40 x 40 x 5 = Cross =	2.00	x	8.00	x	2.14	x	3.00	=	102.72				
	<40 x 40 x 5 = Cross =	2.00	x	8.00	x	2.01	x	3.00	=	96.48				
	<40 x 40 x 5 = Cross =	2.00	x	8.00	x	1.81	x	3.00	=	86.88				
	<40 x 40 x 5 = Cross =	2.00	x	8.00	x	1.65	x	3.00	=	79.20				
	<40 x 40 x 5 = Platform =	2.00	x	12.00	x	1.65	x	3.00	=	118.80				
	SHS- 40 x 40 x 2.6= railing=	2.00	x	4.00	x	0.90	x	2.92	=	21.02				
	40 x 40 x 2.6= Platform railing=	2.00	x	8.00	x	1.65	x	2.92	=	77.09				
	TOTAL=									1683.83	=	Kg	1683.83	1683.9
8.5	DOOR FRAMES	2.00	x	1.20	x	2.10	=			10.80				
		18.00	x	1.00	x	2.10	=			93.60				
		3.00	x	0.75	x	2.10	=			14.85				
	Total=									119.25	=	RM	119.25	119.3
8.6	Steel Windows & Ventilators WINDOWS= W2	18.00	x	1.20	x	1.35	=	29.16						

BOQ Ref	Particulars	Calculations							Quantity						
		L/NOS		B/H		W/D		AR	BAY/VOL	Unit	Sub Total	Total			
8.6.1	W1	8.00	x	1.80	x	1.35	=	19.44	@	19.90	=	Kg	1617.57	1617.6	
	W3	3.00	x	0.60	x	1.00	=	1.80							
	VENTILATOR=	18.00	x	1.50	x	0.50	=	13.50							
		8.00	x	1.80	x	0.50	=	7.20							
		2.00	x	1.20	x	0.50	=	1.20							
		18.00	x	1.00	x	0.50	=	9.00							
	TOTAL AREA =							81.30							
	For Window using 35x35x5 ms angle and 3x5 mm flat Window size = 1.80 x 1.35 = 2.43 sqm (1.80x2+1.35x2)x2x3.5 + 1.8x2x1.18= (ref: DAR - 10.31)	48.35	/	2.43	=	19.90		Kg per sqm							
8.6.2	TOTAL AREA FOR GLASS PANES =							81.30			=	SqM	81.30	81.3	
8.7	GRILLS														
	WINDOWS=W2	18.00	x	1.20	x	1.35	=	29.16							
	W1	8.00	x	1.80	x	1.35	=	19.44							
	W3	3.00	x	0.60	x	1.00	=	1.80							
	VENTILATOR=	18.00	x	1.50	x	0.50	=	13.50							
		8.00	x	1.80	x	0.50	=	7.20							
		2.00	x	1.20	x	0.50	=	1.20							
		18.00	x	1.00	x	0.50	=	9.00							
	TOTAL AREA=							81.30							
	WEIGHT @ 15.7 KG/SQM=							@ 15.70		=	1276.41	=	Kg	1276.41	1276.5
	For Grill using 25mm ms flat 3mm thick @150c/c Weight per Sqm of Grille= 8 x 2 x 25x5mm flat =15.7 kg														
9	GYPSUM BOARD CEILING														
	Unit	1.00	x	52.79	x	14.94	=	788.68							
	Less Boiling Unit =	-1.00	x	12.00	x	4.00	=	-48.00							
	Less Warehouse =	-1.00	x	11.35	x	4.00	=	-45.40							
	Corridor	1.00	x	18.36	x	4.39	=	80.58							
	Office	1.00	x	17.19	x	12.84	=	220.57							
	Total =							996.43			=	SqM	996.43	996.5	
10	ROOFING														
10.1	METAL ROOFING-Ref. Truss 2	17.64	x	2.00	x	10.045	=	354.29							
	Ref. Truss 8	54.45	x	2.00	x	8.285	=	902.24							
	Total =							1256.52			=	SqM	1256.52	1256.6	
10.2	ACCESSORIES														
	PLAIN RIDGE	34.50													
		13.50													
		42.42													
		23.34													
		8.23													
	TOTAL=	121.99									=	RM	121.99	122.0	
11	WOODWORK														
	FLUSH DOOR														
	DOORS=	2.00	x	1.20	x	2.10	=	5.04							
		18.00	x	1.00	x	2.10	=	37.80							
		3.00	x	0.75	x	2.10	=	4.73							
	TOTAL=							47.57			=	SqM	47.57	47.6	
12	PAINTING														

BOQ Ref	Particulars	Calculations						Quantity		
		L/NOS		B/H	W/D	AR	BAY/VOL	Unit	Sub Total	Total
12.1	INTERIOR PAINT INTERNAL PLASTER QTY = TOTAL=					= 1754.49 1754.49		= SqM	1754.49	1754.5
12.2	PUTTY(provisional)					20.00		= SqM	20.00	20.0
12.3	DISTEMPER (provisional)					20.00		= SqM	20.00	20.0
12.4	EXTERIOR PAINT					= 567.45		= SqM	567.45	567.5
12.5	PAINING ON STEEL PAINING 2 COATS= Grills area= Truss Area= Truss Member Truss-11a (1 no) SHS 63.5x63.5x3.2 SHS 40x40x3.2 End plate Cleat Angle ISA 75x75x5 Truss-11 (1 no) SHS 63.5x63.5x3.2 SHS 40x40x3.2 End plate Cleat Angle ISA 75x75x5 Truss-10 (1 no) SHS 63.5x63.5x3.2 SHS 40x40x3.2 End plate Cleat Angle ISA 75x75x5 Truss-1 (02 noS) SHS 63.5x63.5x3.2 SHS 40x40x3.2 End plate Cleat Angle ISA 75x75x5 Truss-1A (01 noS) SHS 63.5x63.5x3.2 SHS 40x40x3.2 End plate Cleat Angle ISA 75x75x5 Truss-2 (02 noS) SHS 63.5x63.5x3.2 SHS 40x40x3.2 End plate Cleat Angle ISA 75x75x5 Truss-3(01 noS) SHS 63.5x63.5x3.2 SHS 40x40x3.2 End plate Cleat Angle ISA 75x75x5 Truss-4(01 noS) SHS 63.5x63.5x3.2 SHS 40x40x3.2 End plate Cleat Angle ISA 75x75x5 Truss-5(01 noS)						= 81.30	SqM		
		1.00	1	28.69		0.30	8.61			
		1.00	1	21.89		0.18	3.94			
		2.00	1	0.85	0.85	2.00	2.89			
		11.00	1	0.09		0.30	0.30			
		1.00	1	28.69		0.30	8.61			
		1.00	1	21.89		0.18	3.94			
		2.00	1	0.85	0.85	2.00	22.69			
		12.00	1	0.09		0.30	0.32			
		1.00	1	20.68		0.30	6.20			
		1.00	1	12.96		0.18	2.33			
		2.00	1	0.85	0.85	2.00	22.69			
		8.00	1	0.09		0.30	0.22			
		1.00	2	38.49		0.30	23.09			
		1.00	2	18.43		0.18	6.63			
		2.00	2	0.85	0.85	2.00	45.37			
		12.00	2	0.09		0.30	0.65			
		1.00	1	38.49		0.30	11.55			
		1.00	1	18.43		0.18	3.32			
		2.00	1	0.85	0.85	2.00	22.69			
		12.00	1	0.09		0.30	0.32			
		1.00	2	49.81		0.30	29.88			
		1.00	2	40.61		0.18	14.62			
		4.00	2	0.85	0.85	2.00	90.75			
		24.00	2	0.09		0.30	1.30			
		1.00	1	38.79		0.30	11.64			
		1.00	1	33.17		0.18	5.97			
		4.00	1	0.85	0.85	2.00	45.37			
		22.00	1	0.09		0.30	0.59			
		1.00	1	54.42		0.30	16.32			
		1.00	1	29.25		0.18	5.27			
		4.00	1	0.85	0.85	2.00	45.37			
		24.00	1	0.09		0.30	0.65			

BOQ Ref	Particulars	Calculations						Quantity		
		L/NOS		B/H	W/D	AR	BAY/VOL	Unit	Sub Total	Total
	SHS 63.5x63.5x3.2	1.00	1	42.61		0.30	12.78			
	SHS 40x40x3.2	1.00	1	32.97		0.18	5.93			
	End plate	4.00	1	0.85	0.85	2.00	45.37			
	Cleat Angle ISA 75x75x5	19.00	1	0.09		0.30	0.51			
	Truss-8 (08 noS)									
	SHS 63.5x63.5x3.2	1.00	8	40.60		0.30	97.44			
	SHS 40x40x3.2	1.00	8	34.52		0.18	49.71			
	End plate	4.00	8	0.85	0.85	2.00	362.98			
	Cleat Angle ISA 75x75x5	24.00	8	0.09		0.30	5.18			
	Truss-9 (01 no)									
	SHS 63.5x63.5x3.2	1.00	1	40.52		0.30	12.16			
	SHS 40x40x3.2	1.00	1	33.20		0.18	5.98			
	End plate	2.00	1	0.85	0.85	2.00	22.69			
	Cleat Angle ISA 75x75x5	23.00	1	0.09		0.30	0.62			
	Truss-7 (01 no)									
	SHS 63.5x63.5x3.2	1.00	1	36.16		0.30	10.85			
	SHS 40x40x3.2	1.00	1	27.31		0.18	4.91			
	End plate	4.00	1	0.85	0.85	2.00	45.37			
	Cleat Angle ISA 75x75x5	19.00	1	0.09		0.30	0.51			
	Truss-6 (1 no)									
	SHS 63.5x63.5x3.2	1.00	1	21.65		0.30	6.50			
	SHS 40x40x3.2	1.00	1	13.87		0.18	2.50			
	End plate	2.00	1	0.85	0.85	2.00	22.69			
	Cleat Angle ISA 75x75x5	11.00	1	0.09		0.30	0.30			
	Truss-12 (1 no)									
	SHS 63.5x63.5x3.2	1.00	1	32.48		0.30	9.74			
	SHS 40x40x3.2	1.00	1	11.00		0.18	1.98			
	End plate	4.00	1	0.85	0.85	2.00	45.37			
	Cleat Angle ISA 75x75x5	24.00	1	0.09		0.30	0.65			
	Truss-5A (02 noS)									
	SHS 63.5x63.5x3.2	1.00	2	17.58		0.30	10.55			
	SHS 40x40x3.2	1.00	2	10.17		0.18	3.66			
	End plate	2.00	2	0.85	0.85	2.00	45.37			
	Cleat Angle ISA 75x75x5	8.00	2	0.09		0.30	0.43			
	Truss-13 (1 no)									
	SHS 63.5x63.5x3.2	1.00	1	5.91		0.30	1.77			
	SHS 40x40x3.2	1.00	1	5.06		0.18	0.91			
	End plate	4.00	1	0.85	0.85	2.00	45.37			
	Cleat Angle ISA 75x75x5	4.00	1	0.09		0.30	0.11			
	Truss-14 (1 no)									
	SHS 63.5x63.5x3.2	1.00	1	23.84		0.30	7.15			
	SHS 40x40x3.2	1.00	1	33.51		0.18	6.03			
	End plate	4.00	1	0.85	0.85	2.00	45.37			
	Cleat Angle ISA 75x75x5	17.00	1	0.09		0.30	0.46			
	Purline SHS 63.5x63.5x4.5	1.00	1	593.61		0.36	211			
	Purline SHS 63.5x63.5x4.5	1.00	1	974.18		0.36	347			
	Bearing plate 250x250x8mm	93.00	1	0.25	0.25	2.00	91			
	Railings (Item 8.4) =						= 39.95			
	<u>Frame for Water Tank - 2 nos.</u>									
	OHT frame = (ANGLES)									
	< 75x75x5 = vertical support-	2.00	x	4.00	x	4.00	x	0.30	=	9.60
	<50x50x5= horizontal =	2.00	x	4.00	x	2.00	x	0.20	=	3.20
	<50x50x5= horizontal =	2.00	x	4.00	x	1.85	x	0.20	=	2.96
	<50x50x5= horizontal =	2.00	x	4.00	x	1.72	x	0.20	=	2.75
	<50x50x5= horizontal =	2.00	x	4.00	x	1.60	x	0.20	=	2.56

BOQ Ref	Particulars	Calculations							Quantity							
		L/NOS		B/H		W/D		AR		BAY/VOL	Unit	Sub Total	Total			
	<50x50x5= horizontal =	2.00	x	4.00	x	1.60	x	0.20	=	2.56						
	<40 x 40 x 5 = Cross =	2.00	x	8.00	x	2.14	x	0.16	=	5.48						
	<40 x 40 x 5 = Cross =	2.00	x	8.00	x	2.01	x	0.16	=	5.15						
	<40 x 40 x 5 = Cross =	2.00	x	8.00	x	1.81	x	0.16	=	4.63						
	<40 x 40 x 5 = Cross =	2.00	x	8.00	x	1.65	x	0.16	=	4.22						
	<40 x 40 x 5 = Platform =	2.00	x	12.00	x	1.65	x	0.16	=	6.34						
	SHS- 40 x 40 x 2.6= railing=	2.00	x	4.00	x	0.90	x	0.16	=	1.15						
	40 x 40 x 2.6= Platform railing=	2.00	x	8.00	x	1.65	x	0.16	=	4.22						
									=	2229.56	=	SqM	2229.56	2229.6		
13	DOOR FITTINGS															
13.1	SLIDING DOOR BOLTS															
	DOORS=	23.00														
	TOTAL=	23.00									=	Each	23.00	23.0		
13.2	TOWER BOLTS	23.00									=	Each	23.00	23.0		
13.3	DOOR HANDLES	23.00									=	Each	23.00	23.0		
13.4	MORTICE LOCK	23.00									=	Each	23.00	23.0		
13.5	Electro- BUTT HINGE	46.00									=	Pair	46.00	46.0		
14	PLINTH PROTECTION	169.97	x	1.20	=					203.96	=	SqM	203.96	204.0		
15	brick edging	169.97							=	169.97	=	RM	169.97	170.0		
16	DRAIN	169.97							=	169.97	x	0.60	=	SqM	101.98	102.0
		(Item-1.7.1)														
17.1	SUB-GRADE	3.00	x	17.64	=					52.91						
	Total=									52.91	=	SqM	52.91	53.0		
17.2	Brick Edging	2.00	x(17.64	+	3)=			41.27						
										41.27	=	M	41.27	41.3		
17.3	PAVER BLOCKS									52.91	=	SqM	52.91	53.0		

BBS: HANDLOOM UNIT - REINF.													
SI No.	Description	Dia	Numbers		Length	Quantity	8 mm (Kg)	10 mm (Kg)	12 mm (Kg)	16 mm (Kg)	20 mm (Kg)	25 mm (Kg)	32 mm (Kg)
1	Foundation												
	F1(1500x1500x450) 24 nos	12	24	9	2	1.50	648.00	-	-	575.42	-	-	-
	F2(1250x1250x450) 53 nos	10	53	9	2	1.30	1240.20	-	765.20	-	-	-	-
	F-3 (1800x1800x450) 3 nos	12	3	15	2	1.70	153.00	-	-	135.86	-	-	-
	CF-1 (2900x1500x450) 1 nos	12	1	11	1	2.70	29.70	-	-	26.37	-	-	-
		12	1	20	1	1.62	32.30	-	-	28.69	-	-	-
	CF-2 (2600x1200x450) 3 no	12	3	9	1	2.80	75.60	-	-	67.13	-	-	-
		12	3	18	1	1.40	75.60	-	-	67.13	-	-	-
2	Columns upto plinth level												
	C1(300x300) 9 nos												
	Main bar	16	9	6	1	2.51	135.54	-	-	-	214.15	-	-
	Ties	8	9	44	1	1.04	411.84	162.68	-	-	-	-	-
	Ties	8	9	44	1	0.38	150.48	59.44	-	-	-	-	-
	C2(230x230) 74 nos												
	Main bar	12	74	6	1	2.51	1114.44	-	-	989.62	-	-	-
	Ties	8	74	44	1	0.76	2474.56	977.45	-	-	-	-	-
	Ties	8	74	44	1	0.31	1009.36	398.70	-	-	-	-	-
	P1(300x300) 10 nos												
	Main bar	16	10	4	1	2.51	100.40	-	-	-	158.63	-	-
	Ties	8	10	44	1	1.04	457.60	180.75	-	-	-	-	-
4	Plinth beams						0.00	-	-	-	-	-	-
	T/B main bar with lap	12	3	1	2	442.07	2652.42	-	-	2360.65	-	-	-
	Stirrup (419.35/0.18+1)	8	2456	1	1	1.24	3045.44	1202.95	-	-	-	-	-
5	ETP - base												
		10	1	2	21	6.06	254.52	-	157.80	-	-	-	-
		10	1	2	45	3.06	275.40	-	170.75	-	-	-	-
	Lintel	10	1	4	1	2.40	9.60	-	5.95	-	-	-	-
		8	1	17	1	0.66	11.22	4.43	-	-	-	-	-
	Slab	8	1	2	21	5.86	246.12	97.22	-	-	-	-	-
		8	1	2	45	2.86	257.40	101.67	-	-	-	-	-
6	Total =							3185.29	1099.71	4250.89	372.79	0.00	0.00
	l) Total upto Plinth =												8,908.67
7	Columns from plinth to top(lapping considered)												
	C1(300x300) 9 nos												
	Main bar	16	9	4	1	3.30	118.80	-	-	-	187.70	-	-
	Ties - Zone A (650mm)	8	9	23	1	1.04	215.28	85.04	-	-	-	-	-
	C2(230x230) 74 nos												
	Main bar	12	74	4	1	3.30	976.80	-	-	867.40	-	-	-
	Ties	8	74	23	1	0.76	1293.52	510.94	-	-	-	-	-
8	Lintel beam												
	T/B main bar	10	2	1	2	442.070	1768.28	-	1,091.03	-	-	-	-
	Lap	10	2	37	2	0.500	74.00	-	45.88	-	-	-	-
	Stirrup	8	2456	1	1	0.520	1277.12	504.46	-	-	-	-	-
9	Roof beams												
	T/B main bar	12	3	1	2	393.54	2361.21	-	-	2096.75	-	-	-
	Lap	12	3	33	2	0.600	118.80	-	-	105.73	-	-	-

Sl No.	Description	Dia	Numbers			Length	Quantity	8 mm	10 mm	12 mm	16 mm	20 mm	25 mm	32 mm
			(Kg)	(Kg)	(Kg)			(Kg)	(Kg)	(Kg)	(Kg)	(Kg)		
	Stirrup	8	2186.4	1	1	1.24	2711.14	1070.90	-	-	-	-	-	-
10	Total =							2171.34	1136.91	3069.88	187.70	0.00	0.00	0.00
II)	Total above Plinth =													6,565.83