

PROJECT: NEIGRIHMS, Shillong: Additional Works

Bill of Quantities

CIVIL WORKS AND SERVICES

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
1.00	EARTH WORK					
1.01	Earth work in excavation over areas (exceeding 30 cm in depth, 1.5m in width as well as 10 Sq.m. on plan) including disposal of excavated earth lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.					
a)	All kinds of soil	10.00	Cum			
b)	Ordinary Rock	10.00	Cum			
c)	Hard Rock (blasting prohibited)	5.00	Cum			
1.02	Earth work in excavation in foundation trenches or drains (not exceeding 1.5m in width or 10 SqM. on plan) including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50m.					
a)	All kinds of soil	10.00	Cum			
b)	Ordinary Rock	5.00	Cum			
c)	Hard Rock (blasting prohibited)	5.00	Cum			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
1.03	Excavating trenches of required width for pipes, cables, etc. including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5m including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20cm. in depth including consolidating each deposited layer by ramming, watering etc. and disposing of surplus excavated soil as directed, within a lead of 50m					
a)	All kind of soil.					
	i) Pipes, cables, etc. exceeding 80mm dia but not exceeding 300mm dia.	80.00	Metre			
	ii) Pipes, cables, etc. exceeding 300mm dia but not exceeding 600mm dia.	10.00	Metre			
b)	Ordinary rock					
	i) Pipes, cables, etc. exceeding 80mm dia but not exceeding 300mm dia.	20.00	Metre			
	ii) Pipes, cables, etc. exceeding 300mm dia but not exceeding 600mm dia.	5.00	Metre			
SUB TOTAL						

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
2.00	CONCRETE WORK					
2.01	Providing and laying cement concrete of specified grade excluding the cost of centering and shuttering - All work upto plinth level.					
	a) 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size).	5.00	Cum			
	b) 1:4:8 (1 cement : 4 coarse sand :8 graded stone aggregate 40 mm nominal size).	5.00	Cum			
2.02	Providing and laying damp-proof course 40 mm thick with cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 12.5 mm nominal size)	15.00	Sqm			
2.03	Providing and Applying a coat of residual petroleum bitumen of penetration 80/100 of approved quality using 1.7 Kg per square metre on damp-proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	15.00	Sqm			
2.04	Extra for providing and mixing water proofing material in cement concrete work / plaster in the proportion recommended by the manufacturers.	5.00	per bag of 50Kg. of cement used in the mix			

Sub Total

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
3.00	REINFORCED CEMENT CONCRETE					
3.01	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring, shuttering, finishing and reinforcement-All work upto plinth level.					
	i) 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	5.00	Cum			
3.02	Reinforced cement concrete work in beams, suspended floors, roofs having slope upto 15°, landings, balconies, shelves, chajjas, lintels bands, plain window sill, staircases and spiral staircases up to floor five level excluding the cost of centring, shuttering and reinforcement with 1:2:4 (1 cement : 2 coarse sand: 4 graded stone aggregate 20 mm nominal size)	10.00	Cum			
3.03	Reinforced cement concrete work in walls (any thickness)including attached pilasters, buttresses, plinth and string courses, fillets, mullions, columns, pilars, piers, abutments, posts and struts, etc. Upto floor five level excluding the cost of centring, shuttering, finishing and reinforcement .					
a)	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	5.00	Cum			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
3.04	Centring and shuttering including strutting, propping etc. and removal of form for:					
a)	Foundations, footings, bases of columns etc., mass concrete, and precast shelves.	10.00	Sqm			
b)	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	20.00	Sqm			
c)	Suspended floors, roofs, landing and balconies.	75.00	Sqm			
d)	Columns, Pillars,mullions, Piers, Abutments, Post and struts	50.00	Sqm			
3.05	Reinforcement for RCC work including straightening, cutting, bending, binding and placing in position complete.					
a)	Cold twisted bars/ Thermo mechanically treated bars as mentioned in the drawing.	1.00	Tonne			

SUB-TOTAL

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
4.00	BRICK WORK					
4.01	Brick work with bricks of class designation 75 in Cement mortar 1:6 (1cement : 6 coarse sand)					
a)	In foundation and plinth	10.00	Cum			
b)	In Superstructure					
	i) From plinth level to floor V level.	40.00	Cum			
4.02	Half brick masonry with bricks of class designation 75 in Cement mortar 1:3 (1 cement : 3 coarse sand)					
a)	In foundation and plinth	20.00	Sqm			
b)	In Superstructure					
	i) From plinth level to floor V level.	50.00	Sqm			
4.03	Extra for providing and placing in position 2 Nos. 6 mm dia M.S. bars at every third course of half brick masonry.	50.00	Sqm			
	SUB-TOTAL					

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7

5.00 DOORS & WINDOWS

5.01 Providing and fixing anodised aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular and other sections of approved make conforming to IS:733 and IS: 1285, colour anodised to required shade according to IS: 1868. (Minimum anodic coating of grade 15), fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/ neoprene felt etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium `U'/snap beading for glazing/ panelling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and as directed. (Glazing and panelling to be paid for separately.)

(i) For fixed portions

2900.00 Kg

(ii) For shutters of doors, & windows including providing and fixing Stainless Steel friction hinges/ pivots and making provisions for fixing of fittings wherever required including the cost of PVC/ neoprene gasket required as per drawing and as directed. (Fittings shall be paid for separately.)

955.00 Kg

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
5.02	Deduct for providing powder coating for doors, windows ventilators and partitions with extruded built up standard tubular and other sections instead of anodising	3855.00	Kg			
5.03	Providing and fixing factory made medium density particle board flush door shutters flat pressed three-layer prelaminated particle board exterior grade, conforming to IS: 3087 grade-I and prelamination conforming to IS:12823 Grade-I Type-II both side decorative matt lamination of approved design, and edges sealed with water resistant paint and lipped with aluminium "U" type edge beading around the shutter, including fixing with angle cleat, grip strip, cadmium plated steel screws including fixing of aluminium hinges 100x63x4 mm etc. complete as per architectural drawing and as directed (cost of "U" beading and hinges is included)					
a)	a) 25mm thick.	70.00	Sqm			
5.04	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions, curtain walls etc. with neoprene gasket etc. complete as per the architectural drawings and as directed. (Cost of aluminium snap beading shall be paid in basic item).					
a)	With glass panes of 5.50mm thickness (weight not less than 13.75 kg./sqm.)	105.00	Sqm			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
5.05	Extra for providing frostings on glass panes of 10.00 kg/sqm. (5.5mm thick) instead of ordinary glass panes 10.0 kg/sqm. (5.5mm thick) respectively in doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured)	20.00	Sqm			
5.06	Providing and fixing aluminium handles colour anodised (anodic coating not less than grade AC10 as per IS: 1868) to required colour or shade with necessary screws etc. complete.					
a)	125 mm.	35.00	Each			
b)	100 mm	100.00	Each			
5.07	Providing and fixing aluminium tower bolt colour anodised (anodic coating not less than grade AC10 as per IS: 1868) to required colour or shade with necessary screws etc.					
a)	250 x 10 mm	25.00	Each			
5.08	Providing and fixing aluminium sliding door bolts colour anodised (anodic coating not less than grade AC 10 as per IS : 1868) to required colour or shade with necessary nuts, screws etc. complete :					
a)	250 x 16 mm	35.00	Each			
5.09	Providing and fixing aluminium pull bolt lock colour anodised (anodic coating not less than grade AC 10 as per IS : 1868) to required colour or shade with necessary nuts, screws etc. complete :					
		5.00	Each			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
5.10	Providing and fixing bright finished brass 100 mm mortice latch with one dead bolt & a pair of lever handles with necessary accessories and screws etc. complete . (Best make of approved quality)	5.00	Each			
5.11	Providing and fixing bright finished brass 100 mm mortice latch and lock with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS :1868) aluminum lever handles with necessary accessories and screws etc. complete . (Best make of approved quality)	5.00	Each			
5.12	Providing and fixing bright finished brass hydraulic door closer of approved quality with accessories and screws etc. complete.					
a)	Sleek Design type	35.00	Each			
5.13	Providing and fixing aluminium hanging floor door stopper colour anodised to required colour & shade with necessary screws etc. complete					
a)	Twin rubber stopper	35.00	Each			
5.14	Providing and fixing 35mmx12mm wooden moulded beading/moulding to door and window frames with iron screws, plugs and priming coat on unexposed surface etc. complete					
a)	Approved quality 1st class sal wood	150.00	Metre			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
5.15	Providing and fixing powder coated aluminium grills(10mm) made out with special extruded sections(Min. weight 4.0 kg/sqm) fixed with suitable means approved and as directed by Engineer in Charge including all complete.					
		3750.00	Sqm			
5.16	Providing and fixing 30mm thick factory made P.V.C rigid foam panelled door shutters for storage cabinet under counters of approved makes made from M.S. tube of 19x19 mm, 19 gauge for styles and 15x15 mm for top and bottom rails, covered with heat moulded PVC "C" channel of 5mm thick sheet and 30x50mm wide to form styles and 5 mm thick and 75 mm wide prelaminiated PVC sheets for top rail, lock rail and bottom rail on either side and 5 mm thick, 20 mm wide cross PVC sheet as gap insert for top rail and bottom rail, panelling of 5 mm thick PVC sheet prelaminiated on both sides fitted in the M.S. frame welded/sealed to the styles and rails with 5x30mm PVC sheet beading on either side and joined together with solvent cement adhesive etc., complete as per manufactrers specificaiton and direction of Engineer-in Charge fixed to frames wiht 4 Nos. M.S. powder coated butt hinges (For internal shutters)					
		170.00	Sqm			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
5.17	Providing and fixing flat pressed 3 layer particle board (medium density) particle or graded particle board conforming to IS:3087 with one side decorative and other side balancing lamination Grade I,type II exterior grade IS:12823 marked in shelves with screws and M.S or aluminium brackets wherever required, edges to be painted with polyuethene primer(Brackets to be separately)					
(a)	18 mm thick	95.00	Sqm			
5.18	Providing and fixing factory made P.V.C door frame of size 50x47 mm with a wall thickness of 5mm, made out of extruded 5 mm rigid PVC foram sheet mitred at corners and joined with 2 Nos. of 150 mm long brackets of 15x15mm M.S. Square tube, the vertical door profiles to be reinforced with 19x19mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided through out the frame. The door frame to be fixed to the wall using M.S. screws of 65/100mm size complete as per manufacturers specificaiton and direction of Engineer-in-charge					
		335.00	Metre			
5.19	Providing and fixing ISI Marked oxidised M.S. pressed butt hinges with necessary screws etc. complete. 100 x 58 x 1.90 mm					
		350.00	Each			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
5.20	Providing and fixing special quality bright finished brass cupboard or ward robe locks with four levers including necessary screws etc. complete (best make of approved quality):					
a)	50 mm	100.00	Each			
5.21	Providing and fixing 12 mm thick prelaminated three layer medium density(exterior grade) particle board Grade I. Type II conforming to IS:12823 bonded with phenol formaldehyde synthetic resin, of approved brand and manufacture in panelling fixed in aluminium doors, windows shutters and partition frames with C.P brass/ Stainless steel screws etc. complete as per architectural drawings and directions of Engineer-in -charge.					
a)	Prelaminated particle board with decorative lamination on both sides.	85.00	Sqm			

SUB-TOTAL

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
6.00	STEEL WORK					
6.01	Steel work welded in built up sections/frame work including cutting, hoisting, fixing in position,making holes,repairing and applying a priming coat of approved steel primer using structural steel etc. as required.					
a)	In gratings, frames, guard bar, ladders, railings, brackets, gates in similar works.	150.00	Kg			
b)	In stringers, treads, landings etc. of staircases including use of chequered plates, inserts etc. wherever required, all complete.	100.00	Kg			
	SUB-TOTAL					

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
7.00	FLOORING					
7.01	Providing and laying in ceramic glazed floor tiles (thickness to be specified by manufacturer) of 1st quality conforming to IS:13755, in all colours and shades except White,ivory,gre, Fume red Brown, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting and pointing the joints with white cement and matching pigment etc. complete.					
a)	Sizes upto 300mm x 395mm.	90.00	Sqm			
7.02	Providing and fixing 1st quality ceramic glazed tiles conforming to IS : 13753 of minimum thickness 5mm of approved make in all colours , shades except begundy, bottle green, black of any size as approved by Engineer-In-Charge in skirting, risers of steps and dados over 12mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3 kg per sqM including pointing in white cement mixed with pigment of matching shade complete. Size upto 300x300mm.					
		100.00	Sqm			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
7.03	Providing and laying 3mm thick epoxy resin based jointless antistatic flooring/skirting consisting of specially formulated epoxy resin of required shade/colour applied in three layers in order to ensure a permanent connection for the elimination of static electricity between the supporting base and the surface including scratch resistant coating, base screed of epoxy mortar as per requirement complete as per manufacture's specifications & as directed. (work to be got executed through a specialised agency).	1600.00	Sqm			
7.04	Providing and fixing mirror polished, machine cut for kitchen platforms, vanity counters facias and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1cement: 4coarse sand) with joints treated with white cement , mixed with matching pigment, epoxy touch ups, including rubbing, curing etc. complete at all levels.					
i)	Over 0.5 SqM and upto 1.0 SqM					
a)	18mm thick Granite stone	80.00	Sqm			

SUB- TOTAL

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
8.00	CEILING & ROOFING					
8.01	Providing and fixing of Stainless Steel Unperforated false ceiling in a buffed finish with 1200mm x 600 mm panels all complete with concealed suspension grid work, hairline joints to be sealed with silicone and as directed by Engineer in Charge.(The work to be got executed through specialized agency)					
			775.00 Sqm			
8.02	Providing and fixing at all heights mineral wool false ceiling of approved make & brand consisting of 600x600 mm size acoustic granulated mineral fibre tile and supporting frame work. The frame work to consist of main runners @1200 mm c/c & cross Tees 1200 and 600 mm long. The main runners are to be suspended by 4 mm dia GI suspension rods at 1200 mm c/c fixed to ceiling through MS angle cleats with dash fasteners of sufficient length, and oher end connected to acoustic mineral fibre tile surfaces of butt/Tegular/SLT edges conforming to RH-95, IS-476 class I through GI adjustment clips etc suitable or nominal panel of size 600x600 mm. The quoted also to include the cost of providing and fixing required accessories, nuts, bolts etc, painting the steel surfaces with a coat of approved primer and two coats of synthetic					

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
	enamel paint , making openings for light fittings, grills,diffusers, PA system speckers, fire alarm system fixtures,fire fighting fixture & open cutouts necessary as required with necessary supporting work frame etc complete as per drawing,specification & as directed.					
	NOTE:- (Plan area to be measured for payment, nothing extra to be paid)	20.00	Sqm			
8.03	Providing cutouts for electrical/HVAC fixtures in the already executed above item for mineral wool false ceiling including frame matching with the existing framework all complete and as directed.	20.00	Each			
8.04	Providing and replacing at all heights mineral wool false ceiling of approved make & brand consisting of 600x600 mm size acoustic granulated mineral fibre tile all complete as directed without supporting frame work.	20.00	Sqm			

SUB-TOTAL

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
9.00	FINISHING					
9.01	12 mm cement plaster of mix;					
a)	1:6 (1 cement: 6 fine sand)	375.00	Sqm			
9.02	15 mm cement plaster on the rough side of single or half brick wall of mix:					
a)	1:6 (1 cement: 6 fine sand)	375.00	Sqm			
9.03	6 mm cement plaster of mix.1:3 (1 cement : 3 fine sand)	100.00	Sqm			
9.04	Distemping with oil bound washable distemper of approved brand and manufacture to give an even shade New work (two or more coats) over including priming coat with cement primer	100.00	Sqm			
9.05	Providing and applying plaster of paris putty of 3mm thickness (average) over plastered surface to prepare the surface even and smooth complete	745.00	Sqm			
9.06	Painting with synthetic enamel paint of approved brand and manufacture of required color to give an even shade:					
a)	Two or more coats on new work over an under coat of suitable shade with ordinary paint including priming coat of ready mixed red oxide zinc chromate primer of approved brand and manufacture.	50.00	Sqm			
b)	Two or more coats on old work over an under coat of suitable shade with ordinary paint of approved brand and manufacture.	50.00	Sqm			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
9.07	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade.					
a)	Two or more coats on new work	695.00	Sqm			
9.08	Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete.					
a)	On Concrete /plaster work	50.00	Sqm			
SUB- TOTAL						

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
10.00	DISMANTLING & MISCELLANEOUS WORKS					
10.01	Demolishing cement concrete including disposal of material within 50 metres lead (a) 1:4:8 or leaner mix	5.00	CuM			
10.02	Demolishing brick work (in foundation and super structure) with all excavation and filling etc. if any, including stacking of serviceable material and disposal of unserviceable material within 50 metre lead a) In cement mortar	5.00	CuM			
10.03	Demolishing RCC work including stacking of steel bars and disposal of unserviceable material within 50 meters lead.	3.00	CuM			
10.04	Dismantling doors, windows, clerestory windows (Aluminium, steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead: (a) Of area 3 SqM & below. (b) Of area beyond 3 SqM .	3.00 2.00	Each Each			
10.05	Dismantling C.I./S.C./UPVC / stone ware pipes / RCC pipes with fittings including excavation and refilling trenches after taking out the pipes, breaking lead caulked joints if any, melting of lead and making into blocks including stacking within 50 M lead complete as directed a) Upto 150mm diameter	5.00	Metre			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
10.06	Dismantling cement concrete flooring /stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metre lead complete as directed .	10.00	SqM			
10.07	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	100.00	Sqm			
10.08	Transportation and disposal of all trash/rubbish/material by trucks of 5 ton capacity from the site of work to the nearest dumping ground of the local authority, including loading, unloading and stacking etc. complete as directed by the Engineer.	3.00	Per trip			
10.09	Providing following brand new vehicle at any time for exclusive use of Engineer during currency of contract. The number of vehicles and period shall be informed by the Engineer as per requirement. The rates are inclusive of services of drivers, fuel, oil, lubricants, consumable stores and maintenance, parking charges, toll taxes etc. complete.					
a)	Indica or equivalent as required.	25000.00	Km			

SUB-TOTAL

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
11.00	INTERNAL PLUMBING , WATER SUPPLY & SANITARY FIXTURES					
A)	SANITARY FIXTURES & INTERNAL PLUMBING					
11.01	Providing and fixing white vitreous china wash basin with C.I./M.S. brackets, 15mm C.P. brass pillar taps, 32mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever required:					
a)	Flat back wash basin size 550 x 400 mm with a single 15mm C.P. brass pillar tap.	1.00	Each			
b)	Flat back wash basin size 550 x 400 mm with a pair of 15 mm C.P. brass pillar taps	1.00	Each			
c)	Surgeon type wash basin of size 660 x 460 mm with a pair of 15 mm C.P. brass pillar taps, with elbow operated levers.	9.00	Each			
11.02	Providing and fixing stainless steel AISI 304 (18/8) kitchen sink as per I.S 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					
a)	Kitchen sink with drain board					
i)	510x1040 bowl depth 178 mm	2.00	Each			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
11.03	Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. brass chain with rubber plug 40 mm C.P brass waste and 40 mm C.P.brass trap with necessary C.P. brass unions complete including painting of fittings and brackets cutting and making good the wall wherever required.					
a)	Size 450 x 300 x 150 mm	30.00	Each			
11.04	Providing and fixing bottle trap for wash basins and sinks.					
a)	32 mm dia	10.00	Each			
b)	40mm dia	32.00	Each			
11.05	Providing and fixing 600 x 450 mm bevelled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ent sheet ground fixed to wooden cleats with C.P. brass screws and washers complete.					
		10.00	Each			
11.06	Providing and fixing G.I EXTENSION PIECE for 100 mm dia floor trap formed out of main pipe(Type A) with multiple side inlets, suitable for various dia pipes, side connections, including all fixtures and fittings as per site conditions and as per standard details and water tight sealing of joints and area surrounding the grating and as directed.					
		45.00	Each			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
11.07	Providing and fixing towel rail complete with brackets fixed to wooden cleats with C.P. brass screws.					
a)	C.P. brass towel rail with two C.P. brass brackets 600 x 20 mm size.	29.00	Each			
11.08	Providing and fixing unplasticised PVC connection pipe with brass unions, 45 cm length.					
a)	15 mm dia nominal bore	50.00	Each			
11.09	Providing and fixing C.P. brass liquid soap container with C.P. brass lid and brackets fixed to wall with wooden cleats and C.P. brass screws, including cutting and making good the walls wherever required.	50.00	Each			
11.10	Providing and fixing CP brass twin coat hooks fixed on toilet door/wall with CP brass screws.	15.00	Each			
11.11	Providing and fixing solid state fully hygienic no touch hand drier of approved make rated for continuous repeat usage with solid state time delay LSF protection, with independent ambient level & seasonal control temperatures 230 volts, single phase 50HZ, 15 amp and AC supply in multiple stored, multiple grounded steel enclosure powder coated in required shade with one bracket for firm wall fixture, one meter sheathed 3 core flexible cable, I - three pin 15amps plug top complete.	5.00	Each			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
B)	SOIL, WASTE, RAIN WATER AND VENT PIPES					
11.12	Providing and fixing soil, waste and vent pipes.					
a)	100 mm dia.centrifugally cast (spun) iron S & S pipe	180.00	Metre			
b)	75 mm dia.centrifugally cast (spun) iron S & S pipe	15.00	Metre			
11.13	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 20mm nominal size) including cost of cutting holes and making good the walls etc.					
a)	for 100 mm dia. pipe	130.00	Each			
b)	for 75 mm dia. pipe	15.00	Each			
11.14	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.					
a)	100 mm Centrifugally cast (spun) iron S&S.	15.00	Each			
b)	75 mm Centrifugally cast (spun) iron S&S.	5.00	Each			
11.15	Providing and fixing plain bend of required degree.					
a)	100 mm Centrifugally cast (spun) iron S&S	15.00	Each			
b)	75 mm Centrifugally cast (spun) iron S&S	5.00	Each			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
11.16	Providing and fixing heel rest sanitary bend.					
a)	100 mm Centrifugally cast (spun) iron S&S	15.00	Each			
b)	75 mm Centrifugally cast (spun) iron S&S	1.00	Each			
11.17	Providing and fixing single equal plain junction					
	of required degree with access door.					
a)	100x100x100mm Centrifugally cast (spun) iron S&S	15.00	Each			
b)	75x75x75 mm Centrifugally cast (spun) iron S & S pipe	1.00	Each			
11.18	Providing and fixing single equal plain junction of required degree.					
a)	100x100x100mm Centrifugally cast (spun) iron S&S	25.00	Each			
b)	75x75x75 mm Centrifugally cast (spun) iron S & S pipe	1.00	Each			
11.19	Providing and fixing double equal plain junction					
	of required degree with access door.					
a)	100x100x100mm Centrifugally cast (spun) iron S&S	10.00	Each			
11.20	Providing and fixing single unequal plain					
	junction of required degree with access door.					
a)	100x100x75 mm Centrifugally cast (spun) iron S&S	10.00	Each			
11.21	Providing and fixing terminal guard.					
a)	100 mm Centrifugally cast (spun) iron S&S	15.00	Each			
b)	75 mm Centrifugally cast (spun) iron S&S	2.00	Each			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
11.22	Providing and fixing collar:					
a)	100 mm dia Centrifugally cast (spun) iron S&S	110.00	Each			
b)	75 mm dia Centrifugally cast (spun) iron S&S	15.00	Each			
11.23	Providing and fixing single equal plain invert branch of required degree					
a)	100x100x100mm Centrifugally cast (spun) iron S & S	5.00	Each			
11.24	Providing lead caulked joints to sand cast iron /centrifugally cast (spun) iron pipes and fittings of diameter:					
a)	100mm	250.00	Each			
b)	75 mm	35.00	Each			
11.25	Providing and fixing M.S. stays and clamps for sand cast iron / centrifugally cast (spun) iron pipes of diameter :					
a)	100 mm	110.00	Each			
b)	75 mm	15.00	Each			
11.26	Providing and fixing sand cast iron/centrifugally cast(spun) iron trap of self cleansing design with sand cast iron screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors:					
a)	100 mm inlet and 100 mm outlet	15.00	Each			
b)	100 mm inlet and 75 mm outlet	5.00	Each			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
11.27	Extra for providing and fixing stainless steel jali (grating) in place of C.I. grating with or without hole for waste pipe for floor/ Nahani trap.					
a)	100 mm dia weight not less than 100 gms.	40.00	Each			
11.28	Painting sand cast iron / centrifugally cast (spun) iron soil, waste vent pipes and fittings with paint of any colour such as chocolate, grey, or buff etc. over a coat of primer (of approved quality) for new work:					
a)	100 mm diameter pipe	155.00	Metre			
b)	75 mm diameter pipe	15.00	Metre			
11.29	Cutting holes upto 30 x 30 cm in walls including making good the same:					
a)	With F.P.S. bricks	5	Each			
11.30	Cutting holes upto 15 x 15 cm in RCC floors and roofs for passing drain pipe etc. and repairing the holes after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone stone aggregate 20 mm nominal size) including finishing complete					
a)	so as to make it leak proof.	10	Each			
11.31	Providing and laying 50mm thick cement concrete 1:2:4 (1 cement :2 coarse sand: 4 hard stone aggregate 20mm and down gauge) around C.I. pipes as per design and as directed.					
a)	75 mm dia	5.00	Metre			
b)	100 mm dia	35.00	Metre			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
11.32	Providing and fixing GI class-B pipe spouts for rain water 300mm long complete in all respects.					
a)	40 mm dia	5.00	Metre			
11.33	Providing and fixing on wall face unplasticised-PVC moulded fittings/ accessories for unplasticised-PVC rain water pipes conforming to IS: 4985 including jointing with seal ring conforming to IS:5382 leaving 10mm gap for thermal expansion.					
a)	Coupler					
i)	110mm	70.00	Each			
ii)	75mm	10.00	Each			
b)	Bend 87.5o					
i)	110mm bend	20.00	Each			
ii)	75mm bend	5.00	Each			
c)	Shoe (plain)					
i)	110mm	10.00	Each			
ii)	75 mm	1.00	Each			
11.34	Providing & fixing to the inlet mouth of rain water pipe cast iron grating 15cm diameter and weighing not less than 440 grams.					
		5.00	Each			
11.35	Providing and fixing cast brass clean out plug with suitable insert keys for opening male threaded joint fixed to G.I.socket complete (cleanout to be flushed with floor finish)					
a)	100 mm dia	15.00	Each			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
11.36	Providing and fixing floor drain points formed out of 65 mm dia GI elbow, including with 75mm dia Stainless Steel grating with frame, embedded in floor, all complete as directed.	10.00	Each			
11.37	Providing and fixing G.I.(heavy class) pipes and fittings conforming to IS: 1239 clamps and hinges including cutting chases and holes and making good the walls and ceiling for waste pipes from wash basins, urinals kitchen sink and equipment waste connections pump deliveries & suction & condensate drainage as directed.					
a)	32 mm nominal bore	45.00	Metre			
b)	40 mm nominal bore	30.00	Metre			
c)	50 mm nominal bore	10.00	Metre			
11.38	Providing and laying unplasticised - Rigid PVC pipes for drainage conforming to IS 13592 Type B including all PVC moulded fittings/ accessories and jointing with seal ring conforming to IS:5382 leaving 10 mm gap for thermal expansion, making holes in RCC slab/ walls and making good the slab/walls					
a)	160 mm diameter	340.00	Metre			
b)	110 mm diameter	65.00	Metre			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
11.39	Providing and fixing unplasticised-PVC pipe clips of approved design to unplasticised-PVC drainage 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.					
a)	160 mm diameter	70.00	Each			
b)	110 mm diameter	15.00	Each			
11.40	Providing and fixing M.S. stays and clamps for sand cast iron/ centrifugally cast (spun) iron pipes of diameter:					
a)	75 mm diameter	15.00	Each			
b)	100 mm diameter	100.00	Each			
11.41	Providing & fixing 125mm dia stainless steel cockroach trap with all accessories complete as per drawing.					
		5.00	Each			
C	WATER SUPPLY					
11.42	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc. (Internal work):					
a)	Concealed					
i)	15 mm dia nominal bore	70.00	Metre			
ii)	20 mm dia nominal bore	25.00	Metre			
iii)	25 mm dia nominal bore	30.00	Metre			
iv)	32 mm dia nominal bore	10.00	Metre			
v)	40 mm dia nominal bore	5.00	Metre			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
b)	Exposed on Wall					
i)	15 mm dia nominal bore	65.00	Metre			
ii)	20 mm dia nominal bore	80.00	Metre			
iii)	25 mm dia nominal bore	65.00	Metre			
iv)	32 mm dia nominal bore	60.00	Metre			
v)	40 mm dia nominal bore	15.00	Metre			
vi)	50 mm dia nominal bore	30.00	Metre			
vii)	65 mm dia nominal bore	10.00	Metre			
viii)	80 mm dia nominal bore	5.00	Metre			
11.43	Providing and fixing brass gate valve with C.I. wheel of approved quality (screwed end).					
i)	15 mm dia nominal bore	5.00	Each			
i)	20 mm dia nominal bore	10.00	Each			
ii)	25 mm dia nominal bore	10.00	Each			
iii)	32 mm dia nominal bore	7.00	Each			
iv)	40 mm dia nominal bore	3.00	Each			
v)	50 mm dia nominal bore	4.00	Each			
vi)	65 mm dia nominal bore	1.00	Each			
11.44	Painting G.I. pipes and fittings with white paint over a ready mixed priming coat, both of approved quality for new work..					
i)	15 mm dia nominal bore	65.00	Metre			
ii)	20 mm dia nominal bore	80.00	Metre			
iii)	25 mm dia nominal bore	65.00	Metre			
iv)	32 mm dia nominal bore	60.00	Metre			
v)	40 mm dia nominal bore	15.00	Metre			
vi)	50 mm dia nominal bore	30.00	Metre			
vii)	65 mm dia nominal bore	10.00	Metre			
viii)	80 mm dia nominal bore	5.00	Metre			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
11.45	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality.					
	i) 15 mm dia nominal bore	70.00	Metre			
	ii) 20 mm dia nominal bore	25.00	Metre			
	iii) 25 mm dia nominal bore	30.00	Metre			
	iv) 32 mm dia nominal bore	10.00	Metre			
	v) 40 mm dia nominal bore	5.00	Metre			
11.46	Providing and fixing G.I. union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (new work)					
	i) 15 mm dia nominal bore	25.00	Each			
	ii) 20 mm dia nominal bore	20.00	Each			
	iii) 25 mm dia nominal bore	20.00	Each			
	iv) 32 mm dia nominal bore	15.00	Each			
	v) 40 mm dia nominal bore	5.00	Each			
	vi) 50 mm dia nominal bore	7.00	Each			
	vii) 65 mm dia nominal bore	2.00	Each			
	viii) 80 mm dia nominal bore	1.00	Each			
11.47	Making chases upto 7.5 x 7.5 cm in walls including making good after housing G.I. pipe etc.	150.00	Metre			
11.48	Providing and fixing C.P brass long body bib cock of aproved quality conforming to IS standards and weighing not less than 690 gms					
	a) 15 mm nominal bore	30.00	Each			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
11.49	Providing and fixing C.P brass bib cock of approved quality.					
a)	15mm nominal bore.	10.00	Each			
11.50	Providing and fixing C.P. brass angle valve of approved quality conforming to IS:8931.					
a)	15mm nominal bore.	40.00	Each			
11.51	Providing and fixing ball valve (brass) of approved quality complete:- High or low pressure with plastic floats					
a)	15mm nominal bore	1.00	Each			
b)	20 mm nominal bore	5.00	Each			
11.52	Providing and placing on terrace (at all floors) polyethylene water storage tank ISI : 12701 MARKED indicating the BIS license No 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.	5000.00	Litre			

SUB TOTAL

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
12.00	SEWERAGE AND DRAINAGE					
12.01	Providing laying and jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the pro-portion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete.					
a)	100 mm diameter	30.00	Metre			
b)	150 mm diameter	100.00	Metre			
12.02	Providing and laying cement concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) alround S.W./RCC pipes including bed concrete as per standard design:					
a)	100 mm diameter	55.00	Metre			
b)	150 mm diameter	130.00	Metre			
c)	450 mm diameter	10.00	Metre			
12.03	Providing and fixing square-mouth S.W. gully trap grade 'A' complete with C.I. grating, brick masonry chamber with bricks of class designation 50 and water tight C.I. cover with frame of 300x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design.					
a)	100x100mm size P type	20.00	Each			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
12.04	Constructing brick masonry manhole with 75 class designation bricks in cement mortar 1:4 (1 cement : 4 coarse sand), R.C.C. top slab with 1:2:4 mix (1cement : 2 coarse sand : 4graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 (1cement : 4 coarse sand : 8graded stone aggregate 40 mm nominal size), inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, and making necessary channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement all complete as per standard design.					
a)	Inside size 90x80 cm and 60 cm deep including C.I. cover and frame (light duty), 455x610 mm internal diameter total weight of cover and frame to be not less than 38 kg.. (Weight of cover 23 Kg and weight of frame 15 Kg.)	13.00	Each			
b)	Inside size 120x90 cm and 90 cm deep including Precast RCC. cover and frame (MD 10), circular shape 500 mm internal diameter	7.00	Each			
12.05	Extra depth for manholes					
a)	Size 90 x 80 cm	6.00	Metre			
b)	Size 120 x90 cm	5.00	Metre			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
12.06	Providing and fixing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS: 10910 on 12 mm dia steel bar conforming to IS: 1786 having minimum cross section as 23 mm x 25 mm and over all minimum length 263 mm and width as 165 mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	235.00	Each			
12.07	Providing and laying non-pressure NP2 class (light duty) S & S R.C.C. pipes jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete.					
a)	100 mm dia R.C.C pipe	25.00	Metre			
b)	150 mm dia R.C.C pipe	30.00	Metre			
12.08	Providing and laying non-pressure NP3 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete.					
a)	450 mm dia. R.C.C. pipe.	60.00	Metre			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
12.09	Constructing brick masonry neutralisation Chamber with 75 class designation bricks in cement mortar 1:4 (1 cement : 4 coarse sand) RCC top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design.					
a)	Inside size 120x90 cm and 60cm deep including C.I.cover with frame (medium duty) 500mm internal diameter, total weight of cover and frame to be not less than 116 kg(weight of cover 58 kg and weight of frame 58 kg)	2.00	No			
12.10	Extra depth for Neutralisation chamber size 120x90 cm	0.50	Metre			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
12.11	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1 : 3 (1 cement : 2 coarse sand) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete:					
a)	For pipes 100 to 230 mm diameter	5.00	No.			
12.12	Constructing brick masonry gully chamber / catch basin 50x45x45 cm with bricks of class designation 75 in cement mortar 1:5 (1 cement : 5 fine sand) including 500 x 450 mm pre-cast RCC horizontal grating with frame complete as per standard design.	10.00	Each			
12.13	Extra depth for Gully chamber size 50x45 cm	5.00	Metre			
12.14	Providing and fixing insect proof coupling to vent pipes of underground tank/over head tank with threaded or flanged joints, including M.S. flanges, nuts, bolts, 3mm thick rubber insertions complete.					
a)	100 mm dia	1.00	Each			
12.15	Providing and fixing double seal type C.I. Manhole cover of 500 mm clear internal diameter of over all weight 116 kg (weight of cover 58 kg and weight of frame 58 kg) with locking arrangement complete in all respects.	10.00	Each			
SUBTOTAL						

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
13.00	EXTERNAL WATER SUPPLY					
13.01	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. (external work)					
a)	15 mm dia. nominal bore	5.00	Metre			
b)	20 mm dia. nominal bore	40.00	Metre			
13.02	Providing and fixing brass ferrule with C.I. Mouth cover including boring and tapping the main					
a)	20 mm nominal bore	2.00	Each			
13.03	Making connection of G.I. Distribution branch with G.I. Main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete."					
a)	25 to 40mm nominal bore	2.00	Each			
b)	50 to 100 mm nominal bore	2.00	Each			
13.04	Constructing masonry Chamber 30x30x50 cm, inside with 75 class designation brick work in cement mortar 1:5 (1 cement :5 fine sand) for gate valve, with C.I. surface box 100mm. x100x75 (inside) with hinged cover fixed in cement concrete slag 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement :3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design.					
		2.00	Each			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
13.05	Providing and filling sand of grading zone V or coarser grade around the G.I. pipes in external work.					
a)	15 mm dia nominal bore	5.00	Metre			
b)	20 mm dia nominal bore	20.00	Metre			
13.06	Providing and fixing gunmetal gate valve with C.I. wheel of approved quality(screwed end)					
a)	for 32 mm nominal bore	5.00	Each			
13.07	Providing and fixing brass stop cock of approved quality					
a)	15 mm nominal bore	5.00	Each			
a)	20mm nominal bore	12.00	Each			
13.08	Disinfecting G.I. /C.I. Water mains by flushing with water containing bleaching powder at 0.5gms per litre of water and cleaning the same with fresh water, operation to be repeated 3 times including getting the sample of water from disinfected main tested in the municipal laboratory.					
a)	32 mm dia C.I. pipe	150.00	Metre			

SUB TOTAL

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
14.00	FIRE FIGHTING SYSTEM					
14.01	Providing, fixing, jointing, testing and commissioning of heavy class M.S pipes conforming to IS 1239 with accessories like tees, elbows, flanged joints, rubber insertion, nuts, bolts or welded joints including fixing the pipe with suitable flat iron strip clamps/brackets, structural members, dash fastener , cutting hole and chases in walls, floor, R.C.C. slab etc. and making good the same, including painting pipes and fittings with a primer coat of steel primer and two coats of postal red enamel paint etc. complete as required.					
a)	100 mm dia	25.00	Metre			
14.02	Providing and fixing single headed hydrants flanged inlet with 63 mm female instantaneous outlet of gunmetal complete with male blank caps, chains conforming to IS:5290 type A with stainless steel orifice plate to keep the pressure not more than 3.5 kg/sq.cm at any point.	1.00	Each			
14.03	Providing 63mm dia 15 m long canvas hose pipe complete with gunmetal male & female coupling wire wound with the pipe The pipe shall confirm to IS: 4927.	1.00	Each			
14.04	Providing and fixing gunmetal branch pipe with 20mm dia nozzle conforming to IS:903. suitable for installation connections to hose coupling etc. as required.	1.00	Each			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
14.05	Providing and fixing C.I. non-return valve complete with gunmetal seat, bolts, nuts washer & rubber insertions as required conforming to IS:5312.					
a)	100 mm dia	1.00	Each			
14.06	Providing and fixing fire extinguisher of carbon dioxide type consisting of brand new high pressure steel cylinder bearing IS: 7285 mark and having the approval of controller of explosives Nagpur, wheel type valve bearing IS:3224 mark internal discharge tube, 1 meter long high pressure discharge hose, non conducting horn, suspension bracket, fully charged bearing IS: making fixed to wall as directed.					
a)	4.5kg capacity cylinder	2.00	Each			
14.07	Providing and fixing 9 liters capacity fire extinguisher water type gas pressure conforming to IS marking, fixed to wall.					
		2.00	Each			
14.08	Providing and fixing Dry Chemical Powder type fire extinguishers consisting of welded M.S. cylindrical body, squeeze lever discharge valve fitted with pressure indicating gauge internal discharge tube, 30 cms long high pressure discharge hose, discharge nozzle, suspension bracket, conforming to IS: 2171 finished externally with red enamel paint and fixed to wall with brackets complete with internal charge.					
a)	Capacity 4.5 Kg.	1.00	Each			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
14.09	Providing and fixing ABC type fire extinguishers complete in all respects.					
a)	Capacity 2.0 Kg.	1.00	Each			
14.10	Constructing masonry chamber 60x60x75 cm, inside with 75 class designation brick work in cement mortar 1:5 (1 cement: 5 fine sand) for sluice valve, with C.I. surface box 100mm top diameter, 160mm bottom diameter and 180mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design.	1.00	Each			
14.11	Providing 63mm dia 15 m long reinforced rubber lined hose pipe conforming to IS: 636-1992 Part-II with gunmetal male & female coupling wire wound with pipe as required.	1.00	Each			
14.12	Providing and fixing 25 mm dia air release valve complete	1.00	Each			
SUB TOTAL						

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
15.00	BOREWELLS & RAIN WATER HARVESTING					
A	BOREWELLS (5 Nos)					
15.01	Drilling with DTH of combination rig or suitable rig to suit site condition from ground level in all kind of soils and weathered rock including boulders (excluding rock) diameter of bore 250mm.	1300.00	Metre			
15.02	Extra for drilling in Ordinary Rock	800.00	Metre			
15.03	Extra for drilling in Hard Rock	370.00	Metre			
15.04	Providing and lowering MS housing pipe 200mm dia 7mm thick, conforming to IS :3589 including sockets of standard design.	150.00	Metre			
15.05	Supplying, lowering and fixing in position PVC bail plug with "U" hooks as per IS:2800-1964.	5.00	Each			
15.06	Providing and fixing in position threaded iron cap with locking arrangement of approved design to prevent foreign matters getting into the bore-hole as required.	5.00	Each			
15.07	Providing and laying rounded washed stone chips & served 3 to 6 mm nominal bore.	150.00	Cum			
15.08	Providing and laying cement concrete 1:2:4 mix for sanitary sealing of well at top.	3.00	Cum			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
15.09	Development of tubewell by pumping unit of air compressor including testing of yield depression and quantity of water contractor to obtain certificates for quality of water from competent authority.	100.00	per hour			
15.10	Providing and fixing G.I. pipe heavy class with fittings clamps flanges etc. conforming to IS 1239					
a)	50 mm dia	1100.00	Metre			
b)	65 mm dia	50.00	Metre			
c)	40 mm dia	50.00	Metre			
15.11	Providing and fixing brass full way valve with C.I. wheel of approved make, tested to a pressure of 21 kg/sqcm.					
a)	50 mm dia	5.00	Each			
15.12	Providing and fixing gunmetal non return valve of approved make tested to a pressure of 21kg/sqcm.					
a)	50 mm dia	5.00	Each			
15.13	Providing & fixing G.I pipes (Heavy Ckass) confirming to IS 1239 with special fittings in external works including earthwork ,excavationin all kinds of soil including ordinary rock,refilling, painting pipes & fitting with two coats of anti corrosive paint complete in alll respects(from borewell to water tank)					
a)	80 mm dia	1000.00	Metre			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
15.14	Providing & filling sand of grading zone V or coarser grade all around GI pipe in external work					
a)	80 mm dia	950.00	Metre			
15.15	Submersible pumps					
a)	Providing and installing submersible pump conforming to ISS: 8034-1976, capacity 10m ³ /hr at 142m head along with a directly coupled submersible type squirrel cage electric induction 20 H.P. motor suitable for operation on 400 V, 3 phase, 50 c.p.s. A.C. supply, water lubricated bearings and provided with pivoted segment type thrust bearings to withstand non-vertical lead with minimum wear and tear and duly fitted with device to take up the expansion of water with heating of motor complete in all respects.				Rate only Each	
b)	Providing and installing submersible pump conforming to ISS: 8034-1976, capacity 10m ³ /hr at 142m head along with a directly coupled submersible type squirrel cage electric induction 15 H.P. motor suitable for operation on 400 V, 3 phase, 50 c.p.s. A.C. supply, water lubricated bearings and provided with pivoted segment type thrust bearings to withstand non-vertical lead with minimum wear and tear and duly fitted with device to take up the expansion of water with heating of motor complete in all respects.				Rate only Each	

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
c)	Providing and installing submersible pump conforming to ISS: 8034-1976, capacity 10m ³ /hr at 142m head along with a directly coupled submersible type squirrel cage electric induction 10 H.P. motor suitable for operation on 400 V, 3 phase, 50 c.p.s. A.C. supply, water lubricated bearings and provided with pivoted segment type thrust bearings to withstand non-vertical lead with minimum wear and tear and duly fitted with device to take up the expansion of water with heating of motor complete in all respects.		Rate only Each			
d)	Providing and installing submersible pump conforming to ISS: 8034-1976, capacity 10m ³ /hr at 142m head along with a directly coupled submersible type squirrel cage electric induction 7.5 H.P. motor suitable for operation on 400 V, 3 phase, 50 c.p.s. A.C. supply, water lubricated bearings and provided with pivoted segment type thrust bearings to withstand non-vertical lead with minimum wear and tear and duly fitted with device to take up the expansion of water with heating of motor complete in all respects.		Rate only Each			

Item No	Description of Item	Qty.	Unit	Rate in Figures (in Rs.)	Rate in Words (in Rs.)	Amount (in Rs.)
1	2	3	4	5	6	7
e)	Providing and installing submersible pump conforming to ISS: 8034-1976, capacity 10m ³ /hr at 142m head along with a directly coupled submersible type squirrel cage electric induction 5 H.P. motor suitable for operation on 400 V, 3 phase, 50 c.p.s. A.C. supply, water lubricated bearings and provided with pivoted segment type thrust bearings to withstand non-vertical lead with minimum wear and tear and duly fitted with device to take up the expansion of water with heating of motor complete in all respects.		5 Each			
15.16	Cable end termination along with its accessories complete as required.		10 nos			
15.17	Supply and making straight through joint heat shrinkable type of size 4x4 sq.mm copper		20.00 set			
15.18	Supplying and fixing stainless steel wire rope of 10 to 12 mm dia for installation of submersible pumps.		2500.00 Kg			
SUB TOTAL						