

Summary

Name of work: Annual maintenance contract for Civil, Sanitary & Plumbing works at BITM, Kolkata & Staff quarters (Karmi Abas), Kasba, Kolkata for the year 2026-2027.	
Estimated Cost of Civil Works = Rs.	983,734.63
Estimated Cost of Plumbing & Sanitary Works = Rs.	291,863.54
Total Estimated Cost of Civil, Sanitary & Plumbing Works for BITM, Kolkata & Staff Quarters (Karmi Abas), Kasba, Kolkata = Rs.	1,275,598.17
Say Rs.	1,275,598.00
Add Labour Welfare Cess @ 1 % on Rs. 1,275,598.00	12,756.00
Cost of work including labour welfare cess Rs.	1,288,354.00
Add GST @ 18 % on Rs. 1,288,354.00	231,904.00
Estimated cost of the work Rs.	1,520,258.00

(Rupees Fifteen lacs Twenty thousand Two hundred & Fifty Eight Only)

BILL OF QUANTITIES (CIVIL WORK)

Name of work: Annual maintenance contract for Civil, Sanitary & Plumbing works at BITM, Kolkata & Staff Quarters (Karmi Abas), Kasba, Kolkata for the year 2026-2027.					
Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.0	Earth Work :::				
1.1	Surface dressing of the ground including removing vegetation and in- equalities not exceeding 15 deep and disposal of rubbish, lead up to 150 m and lift up to 1.5 m. All kinds of soil.	20	Sqm	27.88	557.60
1.2	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), in all sorts of soil (including soil mixed with garbage/ heterogenic soil but excluding laterite or sandstone), including dressing of sides and ramming of bottoms, bailing out of water etc. as required all complete., for all lift, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 150 m.	5	Cum.	212.51	1,062.55
1.3	Filling with 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 upto 150 m and lift upto 1.5 m. (Payment to be made on the basis of measurement of finished quantity of work)	5	Cum.	160.02	800.10
1.4	Supplying and filling in plinth with sand under floors, foundation etc. in layers and consolidating the same by thorough saturation with water, including ramming, dressing etc. all complete. (Payment to be made on measurement of finished quantity)	5	Cum.	1,733.86	8,669.30
2.0	Dismantling, Cutting Holes etc. :::				
2.1	Demolishing of brick work in cement mortar manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 150 meters lead as per direction of Engineer-in-charge.	1	Cum	1681.97	1681.97
2.2	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer in - charge. Nominal concrete 1:3:6 or richer mix (including equivalent design mix)	1	Cum	1,987.35	1,987.35
2.3	Demolishing of R.C.C. work manually/ by mechanical means including cutting of reinforcement, stacking of steel bars and disposal of unserviceable material within 150 meters lead as per direction of Engineer - in- charge.	1	Cum	2899.28	2899.28
2.4	Chipping of unsound/weak concrete material from slabs, beams, columns etc. with manual Chisel and/ or by standard power driven percussion type or of approved make including tapering of all edges, making square shoulders of cavities including cleaning the exposed concrete surface and reinforcement with wire brushes etc. and disposal of debris for all lead and lifts all complete as per direction of Engineer-In-Charge.				
2.4.1	75 mm average thickness	2	Sqm	308.60	617.20
2.4.2	50 mm average thickness	2	Sqm	209.29	418.58
2.5	Dismantling of old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 150 meters lead or as directed.	200	Sqm.	44.62	8924.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
2.6	Dismantling of doors, windows, ventilators and clerestory windows (steel or wood) shutter including chowkhats (Frame), architrave, holdfasts etc. all complete and stacking within a lead of 150 metres or as directed by the Engineer In Charge.	2	Each	299.79	599.58
2.7	Dismantling of old tiles work in floors and walls laid in cement mortar including removing of backing mortar and stacking servicable material within 150 metres lead as per direction of Engineer-in-charge.	10	Sqm.	59.92	599.20
2.8	Cutting holes up to 30x30 cm in walls including making good the same: With common burnt clay F.P.S. (non modular) bricks.	2	Each	340.28	680.56
2.9	Cutting holes up to 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including finishing complete so as to make it leak proof.	2	Each	369.02	738.04
2.10	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	20	Cum	215.49	4,309.80
3.0	Plain and Reinforced Concrete and Allied Works :::				
3.1	Providing and laying in position Plain cement concrete of specified grade excluding the cost of centering and shuttering:				
3.1.1	1:2:4 (1 Cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	1	Cum	6432.10	6432.10
3.2	Providing and laying in position Reinforced cement concrete of specified grade excluding the cost of centering, shuttering and reinforcement:				
3.2.1	1:2:4 (1 Cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	2	Cum	7007.59	14015.18
3.2.2	1:1½:3 (1 Cement : 1½ coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	1	Cum	7385.06	7385.06
3.3	Hire and labour charges for centering and shuttering including strutting, propping, necessary staging upto 3.5 m etc. and removal of form work for:				
3.3.1	Foundations, footings, bases for columns, copping of boundary wall etc.	10	Sqm.	320.16	3201.60
3.3.2	Suspended floors, roofs, landings, balconies and access platform.	5	Sqm.	757.02	3785.10
3.3.3	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	5	Sqm.	601.21	3006.05
3.3.4	Columns, Pillars, Piers, Abutments, Posts and Struts	2	Sqm.	784.82	1569.64
3.3.5	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc., including cost of de-shuttering and decentering at all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof (Plan area to be measured). For suspended floors, roofs, landing, beams and balconies (Plan area to be measured).	5	Sqm.	313.75	1568.75

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
3.4	Steel reinforcement for R.C.C. work in all sorts of structure including straightening, cutting, bending, placing in position and binding with 16gauge black annealed wire at every intersection all complete as per drawing and direction at any level. Thermo-Mechanically Treated bars of grade Fe500D or more. Make: TATA, Sail, Jindal, RINL, SRMB.	100	Kg	88.05	8805.00
3.5	Providing and laying damp-proof course 40 mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 12.5 mm nominal size derived from natural sources)	2	sqm	335.42	670.84
3.6	Supplying and laying Polythene sheet (150gm/ Sqm) over damp proof course or below flooring or roof terracing or in foundation or in foundation trenches.	100	Sqm.	24.00	2,400.00
3.7	Providing and erecting bamboo scaffolding of adequate height and strength, including necessary tying, bracing, staging and working platforms, complete in all respects for carrying out repair, plastering and painting works at height, including dismantling and removal of the scaffolding after completion of the work. (Mode of measurement: area in plan x mean height of staging upto any height & level)	500	Cum	35.00	17,500.00
4.0	Masonry and Allied Works :::				
4.1	Single brick flat soling with picked jhama bricks including ramming and dressing bed to proper level and filling joints with local sand.	10	Sqm.	361.00	3,610.00
4.2	Labour for laying single brick flat soling with departmental bricks including carriage of departmental bricks within a lead of 150 metres preparation of bed as necessary with brick joints properly filled in and packed with local sand or powdered earth and including necessary cushion of similar materials below the soling. (The item include the cost of obtaining local sand or powdered earth)	100	Sqm.	40.00	4,000.00
4.3	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in:				
4.3.1	Foundation and plinth in Cement mortar 1:6 (1 cement : 6 coarse sand).	1	Cum	5822.86	5822.86
4.3.2	Superstructure above plinth level up to floor V level in all shapes and sizes in Cement mortar 1:6 (1 cement : 6 coarse sand).	2	Cum	7434.21	14868.42
4.4	Half brick masonry (125mm)with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in				
4.4.1	Foundation and plinth in Cement mortar 1:4 (1 cement : 4 coarse sand).	1	Sqm.	738.89	738.89
4.4.2	Superstructure above plinth level up to floor V level in cement mortar 1:4 (1 cement : 4 coarse sand).	10	Sqm.	917.48	9174.80
4.4.3	Extra for providing and placing in position 2nos 6mm dia M.S. bars at every third course of half brick masonry.	10	Sqm.	85.56	855.60
4.5	Brick work 7.5 cm thick with common burnt clay F.P.S. (non modular) brick of class designation 7.5 in cement mortar 1:3 (1 cement : 3coarse sand) in superstructure above plinth level and upto floor five level.	5	Sqm	706.73	3533.65

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
4.6	Plaster (to wall, floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and raking out joints including throating, nosing and drip course, scaffolding/staging where necessary at any height.				
4.6.1	12mm thick cement plaster with 1:6 cement mortar (1 cement : 6 fine sand)	50	Sqm	272.15	13607.50
4.6.2	20mm thick cement plaster with 1:6 cement mortar (1 cement : 6 fine sand)	100	Sqm	367.39	36739.00
4.7	18mm thick plain cement mortar band (Raised type) in cement mortar 1:4 (1 cement : 4 fine sand).	50	Cm per mtr	9.31	465.50
4.8	Labour for Chipping of concrete surface before taking up Plastering work.	20	Sqm.	21.00	420.00
4.9	Ornamental brick edging (75 mm wide) in compound roads, gardens etc. with 1st class or picked jhama bricks laid diagonally on end and with a corner slightly raised from the adjoining surface thus giving saw tooth appearance including cutting trench laying bricks and repacking the trench thoroughly on both sides of the edging complete as per direction.	10	Mtr.	72.88	728.80
4.10	Bricks edging 75mm wide with picked jhama bricks, laid true to line and level including cutting necessary trench in soil or in hard metal surface, laying the bricks and repacking the trench (on both sides on the edging) with spoils and ramming the same thoroughly, complete as per direction. Brick-on- end edging (125 mm) depth	10	Mtr.	49.68	496.80
4.11	Labour for taking out brick on-edge of herring bone bond including removing debris to flank or berm sorting out serviceable materials and stacking.	10	Sqm.	17.32	173.20
4.12	Removing cement mortar from bricks and cleaning bricks including stacking within a lead of 50 m (stacks of cleaned bricks shall be measured).	500	Nos	5.47	2,735.00
5.0	Floor Finish and Allied Works :::				
5.1	Neat cement punning about 1.5mm thick in wall, dado, window, sill, floor etc. (Note: Cement consumption 0.152 cu.m per100 sq.m.)	50	Sqm.	65.27	3263.50
5.2	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 flooring with 20 mm nominal size stone aggregate.	1	Sqm.	501.44	501.44
5.3	Supplying, fitting and fixing Black Stone slab used in Kitchen slab, alcove, wardrobe etc. laid and jointed with necessary adhesive Cement mortar (1:2) including grinding or polishing as per direction of Engineer-in -Charge in Ground Floor. Slab thickness 20 to 25 mm.	1	Sqm.	643.00	643.00
5.4	18 mm to 22 mm thick, kota stone slab set in 20 mm thick(avg) cement mortar (1:4) in floor, stair & lobby including pointing in cement slurry with admixture of pigment matching the stone shade, including grinding, rounding off edges & polishing as per direction of Engineer-in-charge to match with the existing work. [Slurry for bedding @ 4.4 kg/Sqm and pointing @ 2.0 kg/Sqm]	1	Sqm.	1,024.00	1,024.00

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Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
5.9.2	(B) Wall : with Sand Cement Mortar (1:3) 15 mm thick & 2 mm thick cement slurry at back side of tiles using cement @ 2.91 kg/Sq.m & joint filling using white cement slurry @ 0.20 kg/Sq.m.				
5.9.2.1	(a) Area of each tile upto 0.09 sq m (Size upto 300x300mm) (i) Coloured decorative	1	Sqm.	757.00	757.00
5.9.2.2	(b) Area of each tile above 0.09 sq m (i) Coloured decorative	1	Sqm	1109.00	1,109.00
5.10	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid on 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) jointing with grey cement slurry @3.3 kg/sqm including grouting the joints with white cement and matching pigments etc. The tiles must be cut with the zero chipping diamond cutter only . Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily.				
5.10.1	Double charge vitrified tile polished finish				
5.10.1.1	Size of Tile 600 x 600 mm	1	Sqm	1,186.78	1,186.78
5.10.1.2	Size of Tile 600 x 1200 mm	1	Sqm	1,287.60	1,287.60
5.10.2	Glazed Vitrified tiles Matt/Antiskid finish of size				
5.10.2.1	Size of Tile 600 x 600 mm	1	Sqm	1,195.92	1,195.92
5.10.2.2	Size of Tile 600 x 1200 mm	1	Sqm	1,467.34	1,467.34
5.11	Providing and fixing Glass mosaic tiles on finished plain wall surface of size 20 mm x 20 mm x 4 mm in all colour, design , fixing in customize design as per direction of Engineer-in-Charge. The glass mosaic tiles to be fixed on the wall surface with the help of approved adhesive applied at the rate of 2.5 kg per sqm and grouting of the same. The rate is inclusive of all operation, material and required pattern approved by Engineer-in-Charge.	1	sqm	3,176.78	3,176.78
5.12	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 50 mm 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.				
5.12.1	60 mm thick cement concrete paver block of M-35 grade with approved colour, design & pattern	1	Sqm	853.68	853.68
5.12.2	80 mm thick C.C. paver block of M-35 grade with approved colour design and pattern.	1	Sqm	891.11	891.11

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
5.13	Taking out existing CC interlocking paver blocks from footpath/ central verge, including removal of rubbish etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 metre lead as per direction of Engineer-in-Charge.	10	Sqm	107.56	1,075.60
5.14	Laying old cement concrete interlocking paver blocks of any design/ shape laid in required line, level, curvature, colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge. (Old CC paver blocks shall be supplied by the department free of cost).	10	Sqm	328.97	3,289.70
5.15	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5 mm), including making drainage opening wherever required complete etc. as per direction of Engineer- in- charge (length of finished kerb edging shall be measured to calculate volume for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	0.5	cum	8,260.13	4,130.07
5.16	Polishing only of old marble or terrazzo work with oxalic acid powder using 33 gms. / Sqm. by manual labour / machine where necessary.	50	Sqm.	38.00	1,900.00
5.17	Mirror polishing on marble work/Granite work/stone work where ever required to give high gloss finish complete.	5	Sqm.	413.68	2,068.40
5.18	Taking out Mirzapur or glazed porcelain tiles carefully by chiselling from walls or floor including stacking serviceable material as directed.	2	Sqm.	106.00	212.00
5.19	Resetting old glazed porcelain/ ceramic tiles in 20 mm thick cement mortar (1:4) including 4 nos of key stone (10mm) fixed with adhesive of approved quality & 2 mm thick cement slurry using cement @ 2.91 Kg/Sqm at the back of tiles and finishing joints with white cement & colouring oxide (if required) to match the colour of tiles over application slurry @ 1.75 kg/Sqm below cement mortar including dismantling the old mortar etc.	2	Sqm.	404.00	808.00
6.0	Roofing, Down pipes etc :::				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
6.1	Supplying, fitting & fixing single skin colour coated trapezoidal profile for wall cladding, Roof shall be made of 0.45mm BMT (Base Metal Thickness) (0.5mm TCT) (Total coated thickness excluding paint), G550 (min 550 yield strength), of Zinalume metallic coating (ISI 5965) with high Solar Reflection Index (SRI) value for better cooling as per thermatech technology, 1000-1015 mm effective cover width with five major corrugation, 28mm high rib spaced at 203mm c/c with subtle square fluting in the pan and the end rib shall have anti-capillary groove and return leg. The steel sheet shall be fastened with 40 micron zinc coated or 25 micron zinc-tin alloy coated, hex head, self-drilling screw as per IS 3566-2002 class 3 fastener. The base steel shall be coated with zinc-aluminium alloy Zinalume (AZ150) (i.e. 55% Al & 43.4% Zinc, 1.6% Si) minimum of 150 g/Sqm coating total on both sides, pre painted with colour bond XRW (exterior roofing, walling) paint system of 35 micron Super Durable Polyester paint (SDP) with suitable inorganic pigment with no lead contents confirming ISI 5965. The sheet shall be free from defects and have brand marking of the manufacturer giving product details on the back of the sheet at regular interval confirming genuinity of the material.				
	DURASHINE Roof colour coated sheet of Tata Blue Scope Steel Brand 0.5 mm thick sheet (Payment to be made on area of finished work, no separate payment shall be made for end lap & side lap). Note: In the event of using 0.47 mm thick (total painted thickness) profile sheet in place of 0.50 mm thick profile sheet, the rate shall be reduced by Rs. 140/- per sqm, subject to approval of the	2	Sqm.	896.00	1,792.00
6.2	Providing and fixing precoated galvanised steel sheet roofing accessories of total coated thickness 0.50 mm (base metal of minimum 0.45 mm thickness with total coating thickness of 0.05 mm) with Zinc coating 120 gram 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 :				
6.2.1	Ridges plain (500 - 600mm) fitted with necessary bolts, screws, washers etc complete, with 300 mm lapping each way.	1	Mtr	434.62	434.62
6.2.2	Gutter (600 mm over all girth) fitted and fixed with necessary 50 mm X 6 mm M.S flat bar clamps bent to design, bolts, nuts, washers etc. complete, with 300mm End lapping.	1	Mtr	1,072.52	1,072.52
6.3	Supplying, fitting & fixing 2mm thick semi transparent solid Polycarbonate sheet, Trapezoidal profile corrugation matching with the profile sheet of TATA Bluescope, made of national brand, excluding the supporting frame work, fitted and fixed with 10mm dia x 55mm Self-driving screws, EPDM washers and silicon sealant/ putty etc. all complete with 150mm end lap and one corrugation minimum side lap complete as per specification & direction of Engineer-in-charge including materials, labour, taxes and all other incidental charges. (Payment to be made on area of finished work only, no separate payment shall be made for end lap & side lap).	1	Sqm	1600.00	1,600.00
6.4	Providing and fixing wind ties of 40x 6 mm flat GI section	5	Mtr.	159.69	798.45
6.5	Taking out wind-tie from roof including cutting out rusted bolts, nuts etc. and removing materials to any distance within the compound and stacking.	10	Mtr.	15.00	150.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
6.6	Taking out old damaged tarfelt from the roof, parapet etc. preparing the roof surfaces by removing all spoils, blisters, moss etc. from the working site and disposal of the same beyond the compound and cleaning the site in all respect as per direction of Engineer-in-Charge.	20	Sqm	12.00	240.00
6.7	Providing and laying APP (Atactic Polypropylene Polymer) modified prefabricated five layer 3 mm thick water proofing membrane, black finished reinforced with non-woven polyester matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 litre/sqm by the same membrane manufacture of density at 25°C, 0.87-0.89 kg/ litre and viscosity 70-160 cps. Over the primer coat the layer of membrane shall be laid using Butane Torch and sealing all joints etc, and preparing the surface complete. Lap joint shall be provided of 75 mm in longitudinal & 100 mm in transverse direction. The vital physical and chemical parameters of the membrane shall be as under : Joint strength in longitudinal and transverse direction at 23°C as 650/ 450N/ 5cm. Tear strength in longitudinal and transverse direction as 300/250N. Softening point of membrane not less than 150°C. Cold flexibility shall be upto - 2°C when tested in accordance with ASTM, D - 5147. The laying of membrane shall be got done through the authorised applicator of the manufacturer of membrane : 3 mm thick Make : Sika India Pvt Ltd or approved make.	2	sqm	457.97	915.94
6.8	Repairs to roof cracks with sand and cement mortar (1:4) including cutting grooves and cleaning cracks and grouting the cracks with net cement before repairs (cement 0.63 kg/m).	60	Mtr.	14.00	840.00
6.9	Fitting and fixing old pieces of asbestos, G.C.I. or C.I. sheets or plain sheets including closing old holes with washers and sheet-bolts and nuts, etc. and including fixing the same to supporting frame with necessary hook-bolts, washers, putty etc. (excluding cost of sheets). (Payment to be made on area of finished work.) (ii) With all new fittings including the cost thereof. (a) In roof	4	Sqm	104.00	416.00
6.10	Removing chockage of rain water pipes with split bamboo.	50	Mtr.	7.51	375.50
6.11	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.				
6.11.1	UPVC Pipes : 75 mm Dia	6	Mtr.	203.12	1,218.72
6.11.2	UPVC Pipes : 110 mm Dia	6	Mtr.	308.11	1,848.66
6.12	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.				
6.12.1	Coupler: 75mm	1	Each	74.86	74.86
6.12.2	Coupler: 100mm	1	Each	111.15	111.15
6.12.3	Single tee with door: 75mm	2	Each	134.05	268.10
6.12.4	Single tee with door: 100mm	2	Each	191.16	382.32
6.12.5	Single tee without door: 75mm	2	Each	117.81	235.62
6.12.6	Single tee without door: 100mm	2	Each	180.71	361.42
6.12.7	Bend 87.5 degree: 75 mm	2	Each	86.46	172.92

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
6.12.8	Bend 87.5 degree: 100 mm	2	Each	122.75	245.50
6.12.9	Shoe: 75mm	1	Each	76.01	76.01
6.12.10	Shoe: 100mm	1	Each	107.64	107.64
6.12.11	Plain Y: 75 mm	1	Each	125.00	125.00
6.12.12	Plain Y: 100 mm	1	Each	223.00	223.00
7.0	Structural Steel, Grills, Gates etc. :::				
7.1	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete. Hot finished seamless type tubes. Make: TATA Structura.	20	kg	168.47	3,369.40
7.2	Providing & Fixing G.I. Ornamental grill of approved design joints continuously welded with G.I. Flats and Square bars for windows, railing etc. fitted and fixed with necessary screws and lugs including priming coat with approved steel primer all complete. Grill weighing above 10 Kg./sq.mtr and up to 16 Kg./sq. mtr. The weight of grill per sq.m. will be determined by taking the physical weight of fabricated grill and dividing the same by covered area of the same. No shop priming will be allowed to facilitate inspection of workmanship. Weight of grill is to be taken as per actual weight of grill.	20	Kg	194.59	3891.80
7.3	M.S. gate of Jail type as per approved design made of strong M.S. frame work, intermediate stiffeners and round / square bars or angles. M.S. sheet (not less than 14 gauge) gussets, cleats etc. including necessary riveting, bolting, welding, locking and hanging arrangements, fitting and fixing complete as per direction of the Engineer-in -charge.	0.2	Qntl.	10,090.00	2,018.00
7.4	Supplying 1.5mm thick M.S. sheet fitted and fixed on one or both faces of M.S./ W.I. gate etc. with point welding at not more than 150mm apart complete in all respect as per design including cost of all labour and materials.	2	Sqm.	1,304.00	2,608.00
7.5	Supply, fitting & fixing of collapsible gate with 40mm x 40mm x 6mm tee as top and bottom guide rail 20mm x 10mm x 2mm vertical channels 100 mm apart in full stretched position 20mm x 5 mm MS flat as collapsible gate bracings properly riveted and washered including 38mm steel rollers including locking arrangements, fitted and fixed in position with lugs set in cement concrete and including cutting necessary holes, chasing etc. in walls, floors etc. and making good damage complete.	1	Sqm.	4,330.00	4,330.00
7.6	Supply, fitting & fixing steel rolling shutter profile type with 18 BG approve type steel latch section 75mm wide, fitted with coil wire spring to necessitate the fitting of required nos of C.I. pulleys on heave type solid drawn seamless steel tube complete with locking arrangements both inside and outside specially built up side guide channels including providing a hood for the steel rolling shutter in the room, painting two coats of approved aluminium paint over a coat of red lead primer complete. (Measurement will be made on the area of opening covered by the rolling shutter corrected upto 2 decimal.)	1	Sqm.	3,270.00	3,270.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
7.7	Supplying fitting and fixing steel rolling grills link type, shutter with 18 B.G .of approved type steel to the section 75mm wide, fitted with coil wire spring to necessitate the fitting of required Nos. of C.I. Pulleys on heavy type solid drawn seamless steel tube complete with locking arrangements both inside and outside specially built up side guide channels including providing a hood for the steel rolling shutter in the room, painting two coats of approved aluminium paint over a coat of red lead primer complete. (Measurement will be made on the area of opening covered by the rolling shutter corrected upto 2 decimal.)	1	Sqm.	4,282.00	4,282.00
7.8	Repairing collapsible gate by cutting out all rivets as necessary re-assembling all members including welding pieces of channels, straightening bent bars and riveting with new rivets and fitting in position and painting two coats.	4	Sqm.	379.00	1,516.00
7.9	Greasing, oiling, cleaning collapsible gate and repairs to locking arrangements.	50	Sqm.	17.00	850.00
7.10	Greasing, oiling, cleaning rolling shutters excluding repairs to inside locks.	50	Sqm.	12.00	600.00
7.11	Labour for taking out rolling shutter (only shutter portion) dismantling by parts for repair or (replacement of damaged parts only), rehanging and refitting the same in position after necessary repairs (excluding the cost of supply of new parts).	4	Sqm.	283.00	1,132.00
7.12	Renewing seam pipe for rolling shutter as per existing size and shape fitting, fixing complete	3	Mtr.	210.00	630.00
7.13	Renewing side split pin for seam pipe for rolling shutter.	5	Each	26.00	130.00
7.14	Oiling and greasing of rolling shutter and repair to in side lock.	10	Sqm.	73.00	730.00
7.15	Renewing profile of rolling shutter including fitting fixing complete as per existing size and shape.	6	Mtr.	54.00	324.00
7.16	Renewing spring of rolling shutter as per existing size and shape including fitting fixing complete	2	Each	609.00	1,218.00
7.17	Renewing steel plated or oxidized casement stay or peg stay of steel window frames including painting two coats approved paint complete.	5	Each	70.00	350.00
7.18	Renewing one point steel (oxidised) handle of steel door and windows as directed including painting complete.	5	Each	61.00	305.00
7.19	Repairing steel shutter with new rivets including taking out and re-fixing, adjusting welding, cleaning, cutting holes mending good damage to match with the existing one.	1	Sqm.	401.00	401.00
7.20	Renewing hinge of steel shutter including taking out old one by cutting and fixing new hinges by welding and mending good damages complete.	2	Each	190.00	380.00
7.21	Welding in M.S. structural work with gas or electric				
7.21.1	(a) Tack weld	10	Point	9.00	90.00
7.21.2	(b) Continuous weld	10	Cm run	9.00	90.00
8.0	Painting, White washing, Polishing etc. :::				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
8.1	White washing including cleaning and smoothening surface thoroughly (5 parts of stone lime and 1 part of shell lime should be used in the finishing coat) all floors. Two coats or more (to be done on specific instruction).	10	Sqm.	18.66	186.60
8.2	Applying Decorative cement based paint of approved quality after preparing bed including scrapping the surface thoroughly on plastered or concreted surface (manufacturers specifications to be followed) at any floor. Old work (one or more coats @ 2.20 kg/10 sqm) complete.	10	Sqm.	61.88	618.80
8.3	Distempering with 1st quality acrylic distemper (ready mixed) having VOC (Volatile Organic Compound) content less than 50 gram/ litre, of approved brand and manufacturer including applying additional coats wherever required to achieve even shade and colour. Old work (one or more coats).	10	Sqm.	51.19	511.90
8.4	Applying priming coats (One or more coat) with water thinnable cement primer of approved brand and manufacture on wall surface, having low VOC (Volatile Organic Compound less than 50 grams/litre) content including scraping, removing of old paint and preparing the surface thoroughly, patch putty, removing of dust etc all complete as per manufacturer's specification and direction of the EIC (At any Floor). Make: Dulux Weathershield Alkali Bloc PU+ Primer, Asian paints Smart care Damp Sealth,	500	Sqm.	60.37	30185.00
8.5	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour. Make: ICI Dulux Super Clean 3 in 1/ Asian Paints Apcolite/ Berger Easy clean fresh.				
8.5.1	One coat	500	Sqm.	77.93	38965.00
8.5.2	Two coats	500	Sqm.	116.58	58290.00
8.6	Applying Exterior grade Acrylic primer of approved quality and brand on plastered or concrete surface old or new surface to receive decorative textured (matt finish) or smooth finish acrylic exterior emulsion paint including scraping and preparing the surface thoroughly, complete as per manufacturer's specification and as per direction of the EIC at any floor. One Coat of exterior primer applied @ 0.9 ltr/ 10 sqm. Make: Dulux Weathershield Alkali Bloc PU+ Primer, Asian paints Smart care Damp Sealth, Berger seal-o-prime.	500	Sqm.	40.78	20,390.00
8.7	Finishing walls with protective and decorative 100% Premium acrylic emulsion paint (Company Depot Tinted) having VOC less than 50 gm/litre and UV resistance as per IS15489:2004, Alkali & fungal resistance, dirt resistance exterior paint of required shade with silicon additives, including necessary scaffolding at any height, Scraping of moss, blister etc. thoroughly from exterior surface of walls by the use of scraper, wire brush etc all complete. Make: ICI weathershild Protect/ Asian paint Apex Ultima Protek/ Berger Long life10.				
8.7.1	One or more coats applied @ 0.83 ltr/10 sqm	50	Sqm.	72.29	3,614.50
8.7.2	Two or more coats applied @ 1.43 ltr/ 10 sqm	450	Sqm.	107.19	48,235.50

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
8.8	Applying priming coat (One or more coat) with ready mixed pink or Grey primer of approved brand and manufacture on wood work (hard and soft wood) having VOC content less than 50 gm/litre, including smoothening surfaces by sand papering etc. all	200	Sqm.	57.43	11486.00
8.9	Applying priming coat (One or more coat) with ready mixed red oxide/ zinc chromate primer of approved brand and manufacture on steel galvanized iron/ steel works, including removing of rust, old paints and smoothening of surfaces by sand papering etc all complete.	200	Sqm.	55.03	11006.00
8.10	Painting with best quality synthetic enamel paint of approved brand and manufacture (ICI Dulux Supergloss 5in1/ Asian Paints Apcolite/ Berger PU) including smoothening surface by sand papering, using of approved putty etc. if necessary to give an even shade.				
8.10.1	Two or more coats on wood work (hard and soft wood), steel works etc.	100	Sqm.	127.28	12728.00
8.10.2	Single coats on wood work (hard and soft wood), steel works etc.	100	Sqm.	76.37	7637.00
8.11	Providing and applying white cement based water proof putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth all complete including removing of old/ dilapidated putty wherever necessary. (Make: JK Shieldmax, Birla White Wallseal, Asian paints Smartcare.)	100	Sqm.	127.40	12740.00
8.12	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	500	Sqm	16.12	8,060.00
8.13	Removing old scales, blisters etc. of interior surface of walls, ceiling by scraping etc. and preparing smooth and even surface with rendering or cement mortar (1:2) (as necessary), to make the surface suitable for receiving distemper/ acrylic emulsion etc.. (Payment against this item will be made only when this has been done on the specific direction of the Engineer-in-charge)	500	Sqm	10.17	5,085.00
8.14	Scraping of moss, blister etc. thoroughly from exterior surface of walls necessitating the use of scraper, wire brush etc. (Payment against this item will be made only when this has been done on the specific direction of the Engineer-in-charge).	500	Sqm	7.00	3,500.00
8.15	Scraping and removing greasy soot from walls or ceiling of kitchen or similar smoke affected rooms and preparing the surface.	300	Sqm	11.00	3,300.00
8.16	Cement washing including cleaning and smoothening surface thoroughly (cement to be used @25 kg./100 Sqm. of surface for two coat). Two coats or more.	150	Sqm	14.24	2,136.00
8.17	Labour charges for applying paint of specified quality and shade with departmentally supplied paints, including necessary surface preparation, cleaning, scraping, sanding and making good the surface, complete in all respects at any height and level. For single coat of paint/ primer (Interior/ Exterior).	2000	Sqm	18.00	36,000.00
9.0	Carpenter's Work :::				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
9.1	Providing SAL wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length including a protective coat of painting at the contact surface of the frame excluding cost of concrete, Hinges and M.S.	0.10	Cum.	95128.59	9512.86
9.2	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows, fixing with butt hinges of required size with necessary screws, excluding panelling which will be paid for separately, all complete as per direction of Engineer-in-charge. 35 mm thick shutters made of Second class teak wood. (Note: Butt hinges and necessary screws shall be paid separately).	1	Sqm.	4,111.95	4,111.95
9.3	Providing and fixing ISI marked flush door shutters conforming to IS:2202 (Part I) non decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters. 30 mm thick shutters fixed with 4nos ISI marked Stainless Steel butt hinges of size 100mm x 58mm x 1.90mm with necessary screws. Make: Century/ Geen ply/ Sylvan/ Austin/ Merino.	3	Sqm	1773.33	5319.99
9.4	Providing & Fixing decorative high pressure 1 mm thick laminated sheet of plain /wood grain in gloss / matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS: 2046 Type S, including cost of adhesive of approved quality. Make: Century/	3	Sqm	732.57	2197.71
9.5	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid door/ window/ clerestory windows & other Frames/ Chowkhat comprising of virgin PVC polymer of K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice husk/ wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) fabricated with miter joints after applying PVC solvent cement and screwed with full body threaded star headed SS screws having minimum frame density of 750 kg/ cum, screw withdrawal strength of 2200 N (Face) & 1100 N (Edge), minimum compressive strength of 58 N/mm ² , modulus of elasticity 900 N/mm ² and resistance to spread of flame of Class A category with property of being termite/ borer proof, water/ moisture proof and fire retardant and fixed in position with M.S hold fast/ lugs/SS dash fasteners of required dia and length complete as per direction of Engineer-In-Charge. Frame size 50 x 100 mm. (Make: Century, Raunaq, Floresta or Equivalent as approve by the Engineer-in-Charge.)	5	Meter	773.71	3868.55

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
9.6	Providing and fixing factory made single extruded 30 mm thick WPC (Wood Polymer Composite) solid plain flush door shutter of required size comprising of virgin polymer of K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice husk/ wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) having minimum density of 650 kg/cum and screw withdrawal strength of 1800 N (Face) & 900 N (Edge), minimum compressive strength 50 N/mm ² , modulus of elasticity 850 N/mm ² and resistance to spread of flame of Class A category with property of being termite/ borer proof, water/ moisture proof and fire retardant and fixing with 4nos stainless steel butt hinges of size 100 mm x 58 mm x 1.90mm with necessary full body threaded star headed counter sunk S.S screws, including supplying and fixing of locking arrangement with heavy type SS Hasp bolt, SS door handles (Both side), SS tower bolt etc. all complete as per direction of Engineer-In- Charge.	2	Sq.m	3548.70	7097.40
9.7	Providing and fixing Fiber Glass Reinforced plastic (FRP) Door Frames of cross-section 90 mm x 45 mm having single rebate of 32 mm x 15 mm to receive shutter of 30 mm thickness. The laminate shall be moulded with fire resistant grade unsaturated polyester resin and chopped mat. Door frame laminate shall be 2mm thick and shall be filled with suitable wooden block in all the three legs. The frame shall be covered with fiber glass from all sides. M.S. stay shall be provided at the bottom to steady the	5	Metre	466.13	2330.65
9.8	30 mm thick Glass Fibre Reinforced Plastic (FRP) panelled door shutter of required colour and approved brand and manufacture, made with fire - retardant grade unsaturated polyester resin, moulded to 3 mm thick FRP laminate for forming hollow rails and styles, with wooden frame and suitable blocks of seasoned wood inside at required places for fixing of fittings, cast monolithically with 5 mm thick FRP laminate for panels conforming to IS: 14856, including fixing to frames.	2	Sqm.	3037.67	6075.34
9.9	Providing and fixing factory made uPVC door frame made of uPVC extruded sections having an overall dimension as below (tolerance ± 1 mm), with wall thickness 2.0 mm (± 0.2 mm), corners of the door frame to be Jointed with galvanized brackets and stainless steel screws, joints mitred and Plastic welded. The hinge side vertical of the frames reinforced by galvanized M.S. tube of size 19 X 19 mm and 1 mm (± 0.1 mm) wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturer's specification and direction of Engineerin- charge. Extruded section profile size 42x50 mm.	10	Mtr	270.52	2,705.20

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
9.10	30 mm thick factory made Polyvinyl Chloride (PVC) door shutter made of styles and rails of a uPVC hollow section of size 60x30 mm and wall thickness 2 mm (± 0.2 mm), with inbuilt decorative moulding edging on one side. The styles and rails mitred and joint at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 25x20 mm and 1 mm (± 0.1 mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x30 mm and 2 mm (± 0.2 mm) wall thickness fixed to the shutter styles by means of plastic/ galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multichambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (± 0.1 mm) wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge.	2	Sqm.	2656.44	5312.88
9.11	Supplying, fitting and fixing M.S. clamp for door and window frame made of flat bent bar, end bifurcated with necessary screws etc in cement concrete (1:2:4) including cutting of brick work/ concrete work as per direction. (Cost of concrete will be paid separately) 40 mm x 6 mm x 200 mm long	12	Each	25.00	300.00
9.12	Providing and fixing IS: 12817 marked stainless steel butt hinges with stainless steel screws etc. complete.				
9.12.1	75 mm x 47 mm x 1.80 mm	10	Each	65.35	653.50
9.12.2	100 mm x 58 mm x 1.90mm	10	Each	87.44	874.40
9.13	Iron hasp bolt of approved quality fitted and fixed complete (oxidised) with 16 mm dia rod with centre bolt and round fitting - 300 mm long.	2	Each	166.00	332.00
9.14	Brass hasp bolt of approved quality fitted and fixed complete (oxidised) with 16 mm dia rod with centre bolt and round fitting - 300 mm long.	2	Each	657.00	1,314.00
9.15	Providing and fixing bright /matt finished Stainless Steel fancy handles of approved quality & make fixed with necessary SS screws etc. all complete as per direction of Engineer In Charge. 200mm length decorative type D-Handle.	6.0	Each	152.38	914.28
9.16	Providing and fixing Stainless Steel barrel / tower / socket bolt (full covered) of approved quality with necessary S.S. screws etc all complete.				
9.16.1	250mm long x 10mm dia bolt.	2.0	Each	230.00	460.00
9.16.2	75mm long x 10mm dia bolt.	4.0	Each	75.00	300.00
9.17	Providing and fixing bright finished brass hanging type floor door stopper with necessary screws, etc. complete.	5	Each	99.32	496.60
9.18	Supplying 'Godrej' mortice lock chromium plated with latch and keys 4 levers, including fitting and fixing complete	2	Each	1,081.00	2,162.00
9.19	Supplying, fitting and fixing Godrej Multi Lock or equivalent	3	Each	136.00	408.00
9.20	Hydraulic door closer of approved quality as per ISI standard fitted and fixed complete. Heavy type (I.S.I. Size 3) Godrej make or approved equivalent.	1	Each	2,064.00	2,064.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
9.21	Taking out and re-fixing after oiling and cleaning including adjusting spring of different types of automatic door closer with necessary screw complete.	10	Each	66.00	660.00
9.22	Taking out door and window shutters and rehangng the same with old fittings but with new iron screws.	10	Sqm	78.00	780.00
9.23	Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with :				
9.23.1	4.0 mm thick glass panes (Colour/ tinted/ smoke)	2	Sqm	869.19	1,738.38
9.23.2	5.5 mm thick glass panes (Colour/ tinted/ smoke)	2	Sqm	1,134.94	2,269.88
9.24	Refixing old glass panes with putty and nails	10	Sqm	595.86	5,958.60
9.25	Cleaning and removing paint mark from glass pane with spirit and removing strains etc.	50	Sqm.	17.00	850.00
9.26	Taking out existing partition / ceiling of particle board, Masonic board, ply board, soft board etc. of any thickness and re-fixing same in new position with necessary clamps making holes in walls floor, roof and mending damages in old and new one in cement concrete (4:2:1) with stone chips and cement plaster (1:4) and lime washing three coats complete.	10	Sqm.	55.00	550.00
9.27	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheet and galvanized with zinc coating of 150 gms/Sqm (both side inclusive) as per IS: 277 and consisting of angle cleats of size 25mm wide x 1.6mm thick with flanges of 27mm and 37mm, at 1200mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5mm 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 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 0.5mm thick bottom wedge of 80mm with tapered flanges of 26mm each having lips of 10.5mm, at 450mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64mm dia x 230mm long G.I. wire at every junction, including fixing perimeter channels 0.5mm thick 27mm height having flanges of 20mm and 30mm long, the perimeter of ceiling fixed to wall/ partition with the help of rawl plugs at 450mm 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 3.5x25mm at 230mm 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 150mm on both sides of joint and two coats of primer suitable for board, all as per manufacture's specification and also including the cost of making openings for light fittings, grills, diffusers, cut outs 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 ISI Mark on Board. (The rate includes of cost of all materials including taxes, cost of accessories, fittings and fixtures, scaffolding and labour charges etc. complete)	1	Sqm.	1,159.00	1,159.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
9.28	Providing and fixing of false ceiling with powder coated exposed G.I. Grid suspension system (E-Grid U-1520 or equivalent load carrying capacity with mid span deflection not exceeding 1/360 span with hanger spacing of 1200 mm c/c) consisting of Main Runner 3600 mm long, Cross Tee 1200 mm / 600 mm long and wall angle. The Wall Angle shall be fixed on PVC Dash Fasteners on the perimeter of the wall by steel screws with distance 300 mm c/c. The Main Runners to be placed @ 1200 mm. The Cross Tee 1200 mm will be inserted in the pre-cut slots of Main Runner at a regular interval of 600 mm to form a modular grid of 1200 mm x 600 mm. Additional Cross Tees of 600 mm shall be placed perpendicular to the Cross Tee 1200 mm long to finally form a grid of 600 mm X 600 mm. Grid of module size 600 mm X 600 mm shall be supported by 6 mm dia G.I. wire from purlins / soffit. 15mm thick OW Acoustic Board (Mineral Fibre Acoustic Ceiling Tiles) of approved pattern and size 595mm X 595mm with NRC value > 0.65 should be placed in the Grid module to form a False Ceiling. All complete as per the drawing & directions of Engineer-in-charge. a) Acoustic False Ceiling (with 15 mm thick OW Acoustic Board and E-Grid U-1520). At any Floor	1	Sqm.	1,357.00	1,357.00
10.0	Aluminium Work :::				
10.1	Supplying concealed type heavy duty PVC headed aluminium tower bolt for double leaf doors as per approved make and brand as per direction of Engineer-in-charge.				
10.1.1	300 mm long	2	Each	74.00	148.00
10.1.2	450 mm long	2	Each	164.00	328.00
10.2	Anodized aluminium barrel / tower / socket bolt (full covered) of approved quality manufactured from extruded section conforming to IS:204/74 fitted & fixed with cadmium plated screw.				
10.2.1	100mm long x 10mm dia bolt.	10	Each	53.00	530.00
10.2.2	150mm x 10mm dia bolt.	10	Each	63.00	630.00
10.2.3	300mm long x 12mm dia bolt.	5	Each	151.00	755.00
10.3	Anodized aluminium aldop / sliding bolts of approved quality manufactured from extruded section conforming to IS specification) (IS : 2681 / 66) fitted and fixed complete.				
10.3.1	300mm x 16mm dia bolt.	3	Each	231.00	693.00
10.4	Anodised aluminium D-type handle of approved quality manufactured from extruded section conforming to I.S. Specification (I.S. 230/72) fitted and fixed complete. With continuous base plate (Hexagonal/ Round rod)				
10.4.1	i) 100 mm grip x 10 mm dia rod.	5	Each	69.00	345.00
10.4.2	ii) 150 mm grip x 12 mm dia rod.	5	Each	111.00	555.00
10.5	Supplying, fitting and fixing heavy duty hydraulic (oil check) double action floor door spring along with top pin/set of pivots conforming to IS: 6315, with brass shoe, brass top centre aluminium top cover etc complete set as per direction of Engineer in charge. Make: Godrej or approved equivalent.	1	Each Set	3573.00	3,573.00
10.6	Supplying heavy duty top pin/set of pivots of local make and approved by the Engineer-in-charge. (This item to be provided where floor spring not used)	4	Pair	297.00	1,188.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
10.7	Supplying EPDM gasket of approved make and brand as per direction of Engineer in charge.				
10.7.1	EPDM/ weather gasket for outer frame and mullion	30	Mtr	15.00	450.00
10.7.2	Weather gasket/ wool pile for door vertical.	30	Mtr	19.00	570.00
10.8	Supplying 4 lever mortice lock of any approved make and brand as per direction of the Engineer-in-charge. 150 mm	1	Each	378.00	378.00
10.9	Supplying aluminium casted body hydraulic door closer as per ISI	2	Each	635.00	1,270.00
10.10	Supplying 250 mm long Heavy Type Aluminium window Peg stay	10	Each	55.00	550.00
10.11	Supplying Heavy duty aluminium handle (EBCO type) natural white	10	Each	96.00	960.00
10.12	Supplying Aluminium casted body Butt Hinge (KOBRA type) (Natural white).	10	Each Set	56.00	560.00
10.13	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer-in-charge complete.				
10.13.1	205 x 19mm	3	Pair	281.09	843.27
10.13.2	255 x 19mm	3	Pair	315.95	947.85
10.14	Removing aluminium door and window frame/ shutters positioning & re-fixing the same after repairing supply of necessary materials excluding aluminium section, glass, floor spring, rubber, felt, fitting & fixtures etc.	10	Sqm.	82.00	820.00
10.15	Repairing of shutters & outer frames of aluminium windows (excluding glass and gasket) after removing the existing damaged shutters and re-fixing the same in position after cutting (if necessary).	3	Each	275.00	825.00
10.16	Supplying PVC rollers for sliding windows as per direction of Engineer in charge	20	Each	14.00	280.00
10.17	Supplying anodized aluminium extruded section box hinge for casement window as per approved brand and make directed by Engineer-in-charge (natural white).	10	Each	44.00	440.00
10.18	Supplying & fitting Zinc powered coated star lock (Natural White)	10	Each	40.00	400.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
10.19	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / panelling, C.P. brass / stainless steel screws all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing & panelling to be paid for separately). Rate includes filling the gap in between aluminium frame & adjacent RCC/ Brick/Stone work by providing weather proof silicon/ epoxy sealant over backer rod of approved quality. (For payment purpose only the weight of Aluminium sections shall be considered, weight of fixing accessories such as screws, nuts, bolts, fasteners, EPDM rubber/ neoprene gasket etc. will not be taken into account for payment). Approved make of Aluminium section: Hindalco, Zindal.				
10.19.1	For fixed portion				
10.19.1.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	2	Kg	404.16	808.32
10.19.1.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	2	Kg	433.43	866.86
10.19.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing and fittings wherever required including the cost of EPDM rubber / neoprene gasket etc whatever required.				
10.19.2.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	2	Kg	488.70	977.40
10.19.2.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	2	Kg	517.97	1035.94
11.0	Miscellaneous Works :::				
11.1	Repairing crack in wall by cement grouting (1:2) including widening the crack on the surface (into V-section) cleaning and packing the same with cement mortar (1:2) and finishing off to match with adjacent surface.	50	Mtr.	13.92	696.00
11.2	Providing and applying of Silicon Sealant in construction joint, window glass, polycarbonate sheets to make joints water tight, after racking out of joints/ cracks wherever necessary & thorough cleaning at different levels.	5	Cartridge	275.00	1,375.00
11.3	Labour rates per day.				
11.3.1	a) Skilled (Mason/ Carpenter/ Fitter/ Painter/ Plumber/ Santras).	150	Each	846.00	126,900.00
11.3.2	b) Unskilled (Helper).	150	Each	694.00	104,100.00
11.4	Materials delivered and stacked at site as per direction of Engg.-in-charge.				
11.4.1	Bricks (1st Class)	500	Nos	12.00	6,000.00
11.4.2	Medium Sand	10	Cum.	2,519.00	25,190.00
11.4.3	Silver Sand	1	Cum.	1,778.00	1,778.00
11.4.4	Coarse Aggregate (Pakur variety) 20mm size	1	Cum.	3,556.00	3,556.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
11.4.5	Coarse Aggregate (Pakur variety) 10mm size	1	Cum.	3,556.00	3,556.00
11.4.6	White Cement	50	Kg.	50.00	2,500.00
11.4.7	Reinforcement (TMT Bar) Tor Steel Rods/HYSD/Fe 415/Fe 500/Fe 500 D (Other than SAIL/TATA/RINL)	20	Kg.	70.00	1,400.00
11.4.8	Cement OPC/ PSC/ PPC (53 Grade)	100	Kg.	6.50	650.00
11.4.9	Sika Rust Off (1Kg pack)	2	Kg.	280.00	560.00
11.4.10	Sika Rustop (1.25Kg pack)	2.5	Kg.	300.00	750.00
11.4.11	Dr. Fixit 101 LW+	5	Lit	180.00	900.00
11.5	Supplying, fitting and fixing C.I. Grating (heavy Type)				
11.5.1	Upto 100mm square or 100 mm Dia	10	Each	69.00	690.00
11.5.2	Above 100mm and upto 150mm square or round	10	Each	108.00	1,080.00
11.6	Providing and applying micro concrete of approved make as per manufacturer's specification over RCC work or brick work including cleaning the existing surface , curing etc all complete as per instruction of Engineer - in - Charge.	40	Kg	28.00	1,120.00
11.7	Cleaning compound premises of shrubs, plants, jungles etc by cutting and removing as directed (Specific permission of Engineer In-Charge prior to execution will be necessary). (Payment to be made on area cleared)	100	Sqm	11.00	1,100.00

Estimated Cost of Civil works ::: 983,734.63
Say Rs. 983,735.00

BILL OF QUANTITIES (PLUMBING & SANITARY WORK)

Name of work: Annual maintenance contract for Civil, Sanitary & Plumbing works at BITM, Kolkata & Staff Quarters (Karmi Abas), Kasba, Kolkata for the year 2026-2027.

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.0	G.I./ P.V.C. Pipe works and its Fittings :::				
1.1	Labour for dismantling/ refixing G.I. pipe with fittings.				
1.1.1	Upto 32mm dia.	2	Mtr.	6.00	12.00
1.1.2	Above 32mm & upto 65mm dia.	2	Mtr.	8.00	16.00
1.1.3	Above 65mm & upto 100mm dia.	2	Mtr.	11.00	22.00
1.2	Opening out leaky water supply pipe and making the joints water tight including cutting threads where necessary.				
1.2.1	Upto 40mm dia.	10	Each	59.00	590.00
1.2.2	50mm dia.	10	Each	69.00	690.00
1.2.3	65mm to 100mm dia.	10	Each	113.00	1,130.00
1.3	Labour for fitting and fixing GI specials including cost of jointing materials. Plug, Socket, Reducing socket, Bend, Plain equal elbow, Reducing elbow, Nipple, Short piece, Plain tee, Reducing tee, jam nut, union, long screw, cross etc.				
1.3.1	(i) Upto 25 mm dia	2	Each	7.00	14.00
1.3.2	(ii) Above 25 mm upto 50 mm dia	2	Each	10.00	20.00
1.3.3	(iii) Above 50 mm upto 80 mm dia	2	Each	11.00	22.00
1.4	Supplying , fitting and fixing Gun metal check valve tested to 21 Kg per Sq. cm.				
1.4.1	Vertical check valve - 50 mm dia.	1	Each	1447.00	1,447.00
1.4.2	Horizontal check valve - 50 mm dia.	1	Each	2203.00	2,203.00
1.5	Supplying, fitting and fixing gunmetal wheel valve of approved brand and make tested to 21 kg per sq.cm (for water lines only) ISI standard.				
1.5.1	80 mm	1	Each	5591.00	5,591.00
1.5.2	65 mm	1	Each	3929.00	3,929.00
1.5.3	50 mm	2	Each	2277.00	4,554.00
1.5.4	40 mm	1	Each	1590.00	1,590.00
1.5.5	32 mm	1	Each	1160.00	1,160.00
1.5.6	25 mm	2	Each	778.00	1,556.00
1.5.7	20 mm	1	Each	604.00	604.00
1.6	Supply & fixing of galvanised iron socket with I.S.I. mark				
1.6.1	15 mm dia.	2	Each	15.00	30.00
1.6.2	20 mm dia.	2	Each	22.00	44.00
1.6.3	25 mm dia.	2	Each	32.00	64.00
1.6.4	32 mm dia.	2	Each	45.00	90.00
1.6.5	40 mm dia.	2	Each	60.00	120.00
1.6.6	50 mm dia.	2	Each	92.00	184.00
1.6.7	65 mm dia.	2	Each	161.00	322.00
1.6.8	80 mm dia.	2	Each	226.00	452.00
1.7	Supply & fixing of GI plug				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.7.1	15 mm dia.	2	Each	10.00	20.00
1.7.2	20 mm dia.	2	Each	19.00	38.00
1.7.3	25 mm dia.	2	Each	27.00	54.00
1.7.4	32 mm dia.	2	Each	43.00	86.00
1.7.5	40 mm dia.	2	Each	55.00	110.00
1.7.6	50 mm dia.	2	Each	86.00	172.00
1.7.7	65 mm dia.	2	Each	107.00	214.00
1.7.8	80 mm dia.	2	Each	158.00	316.00
1.8	Supply and fixing of G.I. reducing socket with ISI mark.				
1.8.1	20 mm dia.	2	Each	24.00	48.00
1.8.2	25 mm dia.	2	Each	34.00	68.00
1.8.3	32 mm dia.	2	Each	50.00	100.00
1.8.4	40 mm dia.	2	Each	66.00	132.00
1.8.5	50 mm dia.	2	Each	101.00	202.00
1.8.6	65 mm dia.	2	Each	177.00	354.00
1.8.7	80 mm dia.	2	Each	248.00	496.00
1.9	Supply and fixing of G.I. bend.				
1.9.1	15 mm dia.	2	Each	34.00	68.00
1.9.2	20 mm dia.	2	Each	52.00	104.00
1.9.3	25 mm dia.	2	Each	83.00	166.00
1.9.4	32 mm dia.	2	Each	154.00	308.00
1.9.5	40 mm dia.	2	Each	214.00	428.00
1.9.6	50 mm dia.	2	Each	360.00	720.00
1.9.7	65 mm dia.	2	Each	835.00	1,670.00
1.9.8	80 mm dia.	2	Each	1,463.00	2,926.00
1.10	Supply of G.I. plain equal elbow of approved brand and make.				
1.10.1	15 mm dia.	2	Each	16.00	32.00
1.10.2	20 mm dia.	2	Each	26.00	52.00
1.10.3	25 mm dia.	2	Each	44.00	88.00
1.10.4	32 mm dia.	2	Each	66.00	132.00
1.10.5	40 mm dia.	2	Each	89.00	178.00
1.10.6	50 mm dia.	2	Each	139.00	278.00
1.10.7	65 mm dia.	2	Each	236.00	472.00
1.10.8	80 mm dia.	2	Each	365.00	730.00
1.11	Supply and fixing of G.I. plain tee of approved brand and make.				
1.11.1	15 mm dia.	2	Each	25.00	50.00
1.11.2	20 mm dia.	2	Each	41.00	82.00
1.11.3	25 mm dia.	2	Each	61.00	122.00
1.11.4	32 mm dia.	2	Each	87.00	174.00
1.11.5	40 mm dia.	2	Each	119.00	238.00
1.11.6	50 mm dia.	2	Each	189.00	378.00
1.11.7	65 mm dia.	2	Each	302.00	604.00
1.11.8	80 mm dia.	2	Each	420.00	840.00
1.12	Supply and fixing of G.I. reducing tee of approved brand and make.				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.12.1	20 mm x 15 mm	2	Each	45.00	90.00
1.12.2	25 mm x 15 mm / 20 mm	2	Each	67.00	134.00
1.12.3	32 mm x 15 mm / 20 mm / 25 mm	2	Each	96.00	192.00
1.12.4	40 mm x 15 mm / 20 mm / 25 mm / 32 mm	2	Each	131.00	262.00
1.12.5	50 mm x 15 mm / 20 mm / 25 mm / 32 mm / 40 mm	2	Each	208.00	416.00
1.12.6	65 mm x 50 mm	2	Each	332.00	664.00
1.12.7	80 mm x 50 mm	2	Each	461.00	922.00
1.13	Supply and fixing long screw (150mm long) of TATA make with sockets (TATA make) and jamnut.				
1.13.1	15 mm dia.	2	Each	32.00	64.00
1.13.2	20 mm dia.	2	Each	45.00	90.00
1.13.3	25 mm dia.	2	Each	59.00	118.00
1.13.4	32 mm dia.	2	Each	74.00	148.00
1.13.5	40 mm dia.	2	Each	98.00	196.00
1.13.6	50 mm dia.	2	Each	140.00	280.00
1.13.7	65 mm dia.	2	Each	284.00	568.00
1.13.8	80 mm dia.	2	Each	318.00	636.00
1.14	Supply and fixing G.I. union.				
1.14.1	15 mm dia.	2	Each	45.00	90.00
1.14.2	20 mm dia.	2	Each	69.00	138.00
1.14.3	25 mm dia.	2	Each	96.00	192.00
1.14.4	32 mm dia.	2	Each	140.00	280.00
1.14.5	40 mm dia.	2	Each	172.00	344.00
1.14.6	50 mm dia.	2	Each	263.00	526.00
1.14.7	65 mm dia.	2	Each	516.00	1,032.00
1.14.8	80 mm dia.	2	Each	728.00	1,456.00
1.15	Supply and fixing of G.I. short piece of TATA make (Above 50 mm & upto 150 mm)				
1.15.1	15 mm dia.	2	Each	46.00	92.00
1.15.2	20 mm dia.	2	Each	60.00	120.00
1.15.3	25 mm dia.	2	Each	73.00	146.00
1.15.4	32 mm dia.	2	Each	76.00	152.00
1.15.5	40 mm dia.	2	Each	102.00	204.00
1.15.6	50 mm dia.	2	Each	126.00	252.00
1.15.7	65 mm dia.	2	Each	175.00	350.00
1.15.8	80 mm dia.	2	Each	213.00	426.00
1.16	Supply and fixing of G.I. reducing elbow of approved brand and make.				
1.16.1	20 mm x 15 mm	2	Each	28.00	56.00
1.16.2	25 mm x 15 mm / 20 mm	2	Each	48.00	96.00
1.16.3	32 mm x 15 mm / 20 mm / 25 mm	2	Each	74.00	148.00
1.16.4	40 mm x 15 mm / 20 mm / 25 mm / 32 mm	2	Each	99.00	198.00
1.16.5	50 mm x 15 mm / 20 mm / 25 mm / 32 mm / 40 mm	2	Each	153.00	306.00
1.16.6	65 mm x 50 mm	2	Each	260.00	520.00
1.16.7	80 mm x 50 mm	2	Each	400.00	800.00
1.17	Dismantling and refixing bib cock or stop cock				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.17.1	15 mm	20	Each	12.00	240.00
1.17.2	20 mm	20	Each	16.00	320.00
1.18	Rewashing stopcock / bibcock / pushcock / pillar cock including gland packing if necessary.				
1.18.1	15mm	20	Each	13.00	260.00
1.18.2	25mm	20	Each	17.00	340.00
1.19	Renewing brass spindle and valve of stopcock / bibcock / pushcock / pillarcock - 15 mm	20	Each	74.00	1,480.00
1.20	Renewing C.I. clamp for pipe including cutting hole in wall etc				
1.20.1	25 mm	20	Each	32.00	640.00
1.20.2	32 mm	20	Each	45.00	900.00
1.20.3	40 mm	2	Each	46.00	92.00
1.20.4	50 mm	2	Each	58.00	116.00
1.20.5	80 mm	2	Each	127.00	254.00
1.21	Removing chokage in G.I. pipe including cleaning pipe.				
1.21.1	Upto 25mm dia.	20	Mtr.	7.00	140.00
1.21.2	Above 25mm & upto 50mm dia.	20	Mtr.	9.00	180.00
1.21.3	Above 50mm & upto 100mm dia.	20	Mtr.	10.00	200.00
1.22	Supplying, fitting and fixing G.I. gravity operated water tap for public use with pilfer proof arrangement of approved brand and make.				
1.22.1	15 mm dia.	2	Each	298.00	596.00
1.23	Supply of PVC pipes of approved make (medium duty/ schedule-80) conforming to ASTM-D-1785 and threaded to match with GI pipes as per IS: 1239 (Part-I).				
1.23.1	15 mm dia.	3	Mtr.	61.00	183.00
1.23.2	20 mm dia.	3	Mtr.	83.00	249.00
1.23.3	25 mm dia.	36	Mtr.	121.00	4,356.00
1.23.4	32 mm dia.	3	Mtr.	169.00	507.00
1.23.5	40 mm dia.	3	Mtr.	207.00	621.00
1.23.6	50 mm dia.	18	Mtr.	282.00	5,076.00
1.23.7	65 mm dia.	3	Mtr.	456.00	1,368.00
1.23.8	80 mm dia.	3	Mtr.	578.00	1,734.00
1.24	Labour for fitting and fixing high density poly-ethylene pipes or PVC pipes including cost of jointing materials, paints etc., fitting and fixing all necessary accessories, specials viz. socket, bend, tee, union, cross, elbow, nipple, long screw, reducing socket, reducing tee, short piece etc., cutting pipes, making threads, cutting holes in walls or R.C.C floor where necessary and mending good all damages excluding the cost of masonry or concrete work, if necessary, but including the cost of fitting and fixing holder bat clamps complete in all respect in any position above ground as per direction of the Engineer-in-charge. (Payment will be made on the centre line measurements of total pipe line including all specials).				
1.24.1	15 mm dia.	12	Mtr.	26.00	312.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.24.2	20 mm dia.	12	Mtr.	27.00	324.00
1.24.3	25 mm dia.	27	Mtr.	28.00	756.00
1.24.4	32 mm dia.	6	Mtr.	28.00	168.00
1.24.5	40 mm dia.	6	Mtr.	37.00	222.00
1.24.6	50 mm dia.	12	Mtr.	40.00	480.00
1.24.7	65 mm dia.	6	Mtr.	47.00	282.00
1.24.8	75 mm dia. / 80 mm dia.	6	Mtr.	56.00	336.00
1.25	Labour for fitting and fixing high density poly-ethylene pipes or PVC pipes including cost of jointing materials, paints etc., fitting and fixing all necessary accessories, specials viz. socket, bend, tee, union, cross, elbow, nipple, long screw, reducing socket, reducing tee, short piece etc., cutting pipes, making threads, cutting holes in walls or R.C.C floor where necessary and mending good all damages excluding the cost of masonry or concrete work, if necessary, but including the cost of fitting and fixing holder bat clamps complete in all respect for under ground work including cutting trenches upto 1.5 metre and refilling the same complete as per direction of the Engineer-in-charge. (Payment will be made on the centre line measurements of total pipe line including all specials).				
1.25.1	15 mm dia.	12	Mtr.	42.00	504.00
1.25.2	20 mm dia.	12	Mtr.	42.00	504.00
1.25.3	25 mm dia.	27	Mtr.	42.00	1,134.00
1.25.4	32 mm dia.	6	Mtr.	42.00	252.00
1.25.5	40 mm dia.	6	Mtr.	47.00	282.00
1.25.6	50 mm dia.	12	Mtr.	60.00	720.00
1.25.7	65 mm dia.	6	Mtr.	71.00	426.00
1.25.8	75 mm dia. / 80 mm dia.	6	Mtr.	85.00	510.00
1.26	Supply and fixing of PVC socket.				
1.26.1	15 mm dia.	5	Each	10.00	50.00
1.26.2	20 mm dia.	5	Each	14.00	70.00
1.26.3	25 mm dia.	10	Each	23.00	230.00
1.26.4	32 mm dia.	2	Each	33.00	66.00
1.26.5	40 mm dia.	2	Each	42.00	84.00
1.26.6	50 mm dia.	10	Each	53.00	530.00
1.26.7	65 mm dia.	1	Each	111.00	111.00
1.26.8	80 mm dia.	1	Each	180.00	180.00
1.27	Supply and fixing of PVC elbow.				
1.27.1	15 mm dia.	5	Each	13.00	65.00
1.27.2	20 mm dia.	5	Each	18.00	90.00
1.27.3	25 mm dia.	10	Each	27.00	270.00
1.27.4	32 mm dia.	2	Each	41.00	82.00
1.27.5	40 mm dia.	2	Each	69.00	138.00
1.27.6	50 mm dia.	10	Each	113.00	1,130.00
1.27.7	65 mm dia.	1	Each	165.00	165.00
1.27.8	80 mm dia.	1	Each	266.00	266.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.28	Supply and fixing of PVC Tee.				
1.28.1	15 mm dia.	5	Each	14.00	70.00
1.28.2	20 mm dia.	5	Each	23.00	115.00
1.28.3	25 mm dia.	10	Each	36.00	360.00
1.28.4	32 mm dia.	2	Each	56.00	112.00
1.28.5	40 mm dia.	2	Each	99.00	198.00
1.28.6	50 mm dia.	10	Each	125.00	1,250.00
1.28.7	65 mm dia.	1	Each	241.00	241.00
1.28.8	80 mm dia.	1	Each	349.00	349.00
1.29	Supply and fixing of PVC threaded Adopter (FT/MT).				
1.29.1	15 mm dia.	5	Each	11.00	55.00
1.29.2	20 mm dia.	5	Each	15.00	75.00
1.29.3	25 mm dia.	10	Each	19.00	190.00
1.29.4	32 mm dia.	2	Each	38.00	76.00
1.29.5	40 mm dia.	2	Each	68.00	136.00
1.29.6	50 mm dia.	10	Each	94.00	940.00
1.29.7	65 mm dia.	1	Each	113.00	113.00
1.29.8	80 mm dia.	1	Each	131.00	131.00
1.30	Supply and fixing of PVC Reducing Tee.				
1.30.1	20 mm x 15 mm	2	Each	37.00	74.00
1.30.2	25 mm x 15 mm	2	Each	43.00	86.00
1.30.3	25 mm x 20 mm	2	Each	47.00	94.00
1.30.4	40 mm x 15 mm	2	Each	101.00	202.00
1.30.5	40 mm x 20 mm	2	Each	102.00	204.00
1.30.6	40 mm x 25 mm	2	Each	74.00	148.00
1.30.7	40 mm x 32 mm	2	Each	153.00	306.00
1.30.8	50 mm x 25 mm	1	Each	210.00	210.00
1.30.9	50 mm x 32 mm	1	Each	181.00	181.00
1.30.10	65 mm x 40 mm	1	Each	302.00	302.00
1.30.11	65 mm x 50 mm	1	Each	295.00	295.00
1.30.12	80 mm x 25 mm	1	Each	468.00	468.00
1.31	Supply and fixing of PVC Reducing socket.				
1.31.1	20 mm x 15 mm	2	Each	15.00	30.00
1.31.2	25 mm x 15 mm	2	Each	26.00	52.00
1.31.3	25 mm x 20 mm	2	Each	23.00	46.00
1.31.4	32 mm x 25 mm	2	Each	30.00	60.00
1.31.5	40 mm x 25 mm	2	Each	71.00	142.00
1.31.6	40 mm x 32 mm	2	Each	43.00	86.00
1.31.7	50 mm x 25 mm	2	Each	137.00	274.00
1.31.8	50 mm x 40 mm	2	Each	66.00	132.00
1.31.9	65 mm x 40 mm	1	Each	114.00	114.00
1.31.10	65 mm x 50 mm	1	Each	117.00	117.00
1.31.11	80 mm x 40 mm	1	Each	136.00	136.00
1.31.12	80 mm x 50 mm	1	Each	141.00	141.00
1.31.13	80 mm x 65 mm	1	Each	151.00	151.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.32	Supply and fixing of PVC Threaded end cap.				
1.32.1	15 mm dia.	1	Each	10.00	10.00
1.32.2	20 mm dia.	1	Each	14.00	14.00
1.32.3	25 mm dia.	1	Each	18.00	18.00
1.32.4	32 mm dia.	1	Each	23.00	23.00
1.32.5	40 mm dia.	1	Each	34.00	34.00
1.32.6	50 mm dia.	1	Each	46.00	46.00
1.32.7	65 mm dia.	1	Each	70.00	70.00
1.32.8	80 mm dia.	1	Each	85.00	85.00
1.33	Supply and fixing of PVC Union.				
1.33.1	15 mm dia.	2	Each	28.00	56.00
1.33.2	20 mm dia.	2	Each	41.00	82.00
1.33.3	25 mm dia.	3	Each	56.00	168.00
1.33.4	32 mm dia.	1	Each	85.00	85.00
1.33.5	40 mm dia.	1	Each	122.00	122.00
1.33.6	50 mm dia.	3	Each	150.00	450.00
1.34	Supply and fixing of PVC Flange.				
1.34.1	50 mm dia.	2	Pair	160.00	320.00
1.34.2	65 mm dia.	1	Pair	253.00	253.00
1.34.3	80 mm dia.	1	Pair	310.00	310.00
1.35	Supply and fixing of PVC Reducing Elbow.				
1.35.1	25 mm x 15 mm	2	Each	67.00	134.00
1.35.2	25 mm x 20 mm	2	Each	63.00	126.00
1.35.3	80 mm x 50 mm	1	Each	235.00	235.00
1.36	Supplying & fixing P.V.C. clip.				
1.36.1	20 mm	20	Each	4.00	80.00
1.36.2	25 mm	20	Each	5.00	100.00
1.36.3	32 mm	10	Each	8.00	80.00
1.36.4	40 mm	10	Each	14.00	140.00
1.36.5	50 mm	10	Each	20.00	200.00
1.37	Supplying, fitting and fixing of CPVC Ball Valve conforming to IS-15778 : 2007 of approved make / brand.				
1.37.1	15 mm dia.	2	Each	99.00	198.00
1.37.2	20 mm dia.	4	Each	152.00	608.00
1.37.3	25 mm dia.	5	Each	239.00	1,195.00
1.37.4	32 mm dia.	1	Each	399.00	399.00
1.37.5	40 mm dia.	1	Each	553.00	553.00
1.37.6	50 mm dia.	2	Each	1,128.00	2,256.00
1.38	Supplying & fixing UPVC Male adaptor brass threaded.				
1.38.1	15 mm dia.	2	Each	105.00	210.00
1.38.2	20 mm dia.	2	Each	139.00	278.00
1.38.3	25 mm dia.	4	Each	220.00	880.00
1.38.4	32 mm dia.	2	Each	321.00	642.00
1.38.5	40 mm dia.	2	Each	348.00	696.00
1.38.6	50 mm dia.	2	Each	598.00	1,196.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
1.39	Supplying & fixing UPVC Female adaptor brass threaded.				
1.39.1	15 mm dia.	2	Each	75.00	150.00
1.39.2	20 mm dia.	2	Each	103.00	206.00
1.39.3	25 mm dia.	4	Each	192.00	768.00
1.39.4	32 mm dia.	2	Each	273.00	546.00
1.39.5	40 mm dia.	2	Each	406.00	812.00
1.39.6	50 mm dia.	2	Each	576.00	1,152.00
2.0	Cisterns, P.V.C. tanks etc :::				
2.1	Supplying, fitting and fixing 10 ltr. PVC low down cistern conforming to IS specification with PVC fittings complete, C.I. brackets including two coats of painting to bracket etc.	2	Each	1,015.00	2,030.00
2.2	Supplying, fitting and fixing of low down cistern parts of approved make.				
2.2.1	Internal fitting for cistern complete.	3	Each	284.00	852.00
2.2.2	Outlet Assembly	3	Each	279.00	837.00
2.2.3	Inlet assembly	10	Each	64.00	640.00
2.2.4	Knob	4	Each	304.00	1,216.00
2.3	Renewing high pressure polythene ball cock of approved quality with polythene ball and aluminium lever complete for pipe of dia.				
2.3.1	i) 15mm	4	Each	71.00	284.00
2.3.2	ii) 20mm	4	Each	86.00	344.00
2.3.3	ii) 25mm	4	Each	120.00	480.00
2.4	Dismantling ball cock and re-fixing same after repairs including straightening lever and renewing split pin.				
2.4.1	15 mm dia.	10	Each	28.00	280.00
2.4.2	20 mm dia.	10	Each	33.00	330.00
2.4.3	25 mm dia.	10	Each	36.00	360.00
2.5	Changing the lather only of syphon of automatic cistern including taking out and refixing necessary parts.	20	Each	39.00	780.00
2.6	Supply, fitting and fixing PVC water storage tank of approved quality with closed top with lid. (Black) Multi layer.				
2.6.1	a) 500 Ltr. Capacity	1	Each	2,584.00	2,584.00
2.6.2	b) 1000 Ltr. Capacity.	1	Each	5,128.00	5,128.00
2.7	Cleaning and removing mud upto 2000 litre Water Tank including masonry reservoir.	50	Each	110.00	5,500.00
2.8	Cleaning and removing mud above 2000 litre Water Tank including masonry reservoir.	200	Cum	67.00	13,400.00
3.0	Wash Basins, Sinks etc and Fittings :::				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
3.1	Supplying, fitting and fixing white vitreous china best quality approved make wash basin with C.I. brackets on 75mm x 75mm x 75mm. Wooden blocks C.P. waste fittings of 32mm dia, one approved quality brass C.P. pillar cock of 15mm dia, C.P. china with rubber plug of 30mm dia., approved quality PVC waste pipe with C.P. nut 32mm dia, 900mm long approved quality PVC connection pipe with heavy brass C.P. nut 300mm long including mending good all damages and painting the brackets with two coats of approved paints.				
3.1.1	550mm x 400mm size.	1	Each	2,208.00	2,208.00
3.1.2	630mm x 450 mm size.	1	Each	3,260.00	3,260.00
3.2	Supplying, fitting and fixing pedestal of approved make for wash basin.	2	Each	1,497.00	2,994.00
3.3	White vitreous china sink supplied, fitted and fixed in position on C.I. brackets including two coats of painting of brackets. A) Plain edge sink with overflow. (i) 610 mm x 450 mm x 250 mm	0	Each	5,445.00	0.00
3.4	Supplying, fitting & fixing stainless steel (SS 304 grade) sink complete with waste fittings and two coats of painting C.I. brackets.				
3.4.1	Sink only, 630 mm x 550 mm x 180 mm.	1	Each	3,788.00	3,788.00
3.4.2	Sink with drain board 1050 mm x 450 mm x 180 mm	1	Each	5,006.00	5,006.00
3.5	Supplying, fitting and fixing complete Bottle waste trap (Heavy Quality)				
3.5.1	Chromium plated Bottle trap 32 mm with 190 mm long connecting pipe and wall flange (Equivalent to Code No. 545 & Model - Tropical / Sumthing Special of ESSCO or similar brand).	1	Each	629.00	629.00
3.5.2	PTMT Bottle trap 32 mm with connecting pipe (Prayag or equivalent).	1	Each	443.00	443.00
3.6	Supplying, fitting & fixing approved brand PVC connector white flexible with both end coupling with heavy brass over C.P. nut 15mm. dia				
3.6.1	300 mm long.	4	Each	57.00	228.00
3.6.2	450 mm long.	10	Each	82.00	820.00
3.6.3	600 mm long.	10	Each	107.00	1,070.00
3.6.4	750 mm long.	4	Each	117.00	468.00
3.6.5	900 mm long.	4	Each	147.00	588.00
3.7	Supplying, fitting and fixing approved brand 32 mm dia. P.V.C. waste pipe, with PVC coupling at one end fitted with necessary clamps.				
3.7.1	600 mm long.	4	Each	47.00	188.00
3.7.2	750 mm long.	4	Each	59.00	236.00
3.7.3	900 mm long.	4	Each	75.00	300.00
3.8	Supplying, fitting and fixing Waste fittings complete.				
3.8.1	C.P. over brass- 32 mm each	10	Each	190.00	1,900.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
3.8.2	Polythene- 32 mm	10	Each	44.00	440.00
3.8.3	Supply, Fitting & Fixing of 32 mm PVC Waste Nozzle with jamnut, full thread or half thread complete for wash basin/ urinal.	10	Each	48.00	480.00
3.8.4	Flexible waste pipe of 32 mm dia. for wash basin / urinal outlet.	10	Mtr.	22.00	220.00
3.9	Supplying, fitting and fixing C.I. bracket including two coats of painting				
3.9.1	a) Wash basin, Dental spitton	2	Each	135.00	270.00
3.9.2	(b) Sink, Drain board	2	Each	149.00	298.00
3.9.3	(c) Cistern	2	Each	94.00	188.00
3.10	Supplying, fitting and fixing pillar cock, bib cock & stop cock of approved make.				
3.10.1	CP Pillar Cock Super Deluxe with Aerator - 15 mm. (Equivalent to Code No. 508 & Model No. Tropical / Sumthing Special of ESSCO or similar brand).	2	Each	592.00	1,184.00
3.10.2	PTMT Pillar cock (Prayag or equivalent)- 15 mm	2	Each	222.00	444.00
3.10.3	Chromium plated Bib Cock short body (Equivalent to Code No. 511 & Model - Tropical/ Sumthing Special of ESSCO or similar brand	2	Each	539.00	1,078.00
3.10.4	Chromium plated Bib Cock long body with wall flange with aerator (Equivalent to Code No. 512 & Model - Tropical/ Sumthing Special of ESSCO or similar brand)	2	Each	659.00	1,318.00
3.10.5	Chromium plated Bib Cock (angular shape with wall flange) (Equivalent to Code No. 5037/ 5047 & Model - Florentine of Jaquar or similar brand)	2	Each	861.00	1,722.00
3.10.6	Chromium plated angular Stop Cock with wall flange (Equivalent to Code No. 5053 & Model - Florentine of Jaquar or similar brand).	5	Each	815.00	4,075.00
3.10.7	Chromium plated concealed Stop Cock heavy duty (Equivalent to Code No. 5083 & Model - Florentine of Jaquar or similar brand).	1	Each	953.00	953.00
3.10.8	PTMT(Polytetra) Bib Cock / Stop Cock (Prayag or equivalent)- 15mm.	10	Each	154.00	1,540.00
3.10.9	Supplying, fitting and fixing alloy iron with brass spindle bib cock/ stop cock of approved brand and make, spray painted and tested to 21 kg per sq.cm. - 15 mm.	2	Each	169.00	338.00
3.10.10	Chromium plated round shower with revolving joint 100 mm dia with rubid cleaning system (Equivalent to Code No. 542(N) & Model - Tropical / Sumthing Special of ESSCO or similar brand)	2	Each	452.00	904.00
3.10.11	Hand Shower (Health Faucet) with 1mtr Flexible Tube with Wall Hook(Equivalent to Code No.573 & Model -ALLIED of Jaquar or similar)	1	Each	1,251.00	1,251.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
3.10.12	CP 2-way bib Cock - 15 mm, supplied, fitted and fixed. (Code No.5041 & Model - FLORENTINE of JAQUAR or similar brand).	1	Each	1,269.00	1,269.00
3.10.13	Supplying, fitting and fixing 15 mm swan neck tap with left & right hand operating nob with aerator (Equivalent to Code No. 510, 510(A) and Model - TROPICAL / SUMTHING SPECIAL of ESSCO or similar brand)	2	Each	811.00	1,622.00
3.11	Supplying, fitting and fixing C.P. Extension pipe	10	Each	106.00	1,060.00
3.12	Supplying, fitting and fixing C.P. wall flange	10	Each	64.00	640.00
3.13	Re-fixing washbasin with or without waste fittings with brackets.	10	Each	70.00	700.00
3.14	Dismantling was basin with or without waste fitting with brackets.	5	Each	35.00	175.00
3.15	Re-fixing sink with or without waste fittings with brackets. Upto 750 mm length	5	Each	76.00	380.00
3.16	Dismantling sink with or without waste fittings with brackets.				
3.16.1	Upto 450 mm length	5	Each	40.00	200.00
3.16.2	450 mm and upto 600 mm length	5	Each	52.00	260.00
3.16.3	above 600 mm and upto 750 mm length	5	Each	59.00	295.00
3.17	Cleaning wash basin/ sink with acid.	10	Each	16.00	160.00
3.18	Dismantling of pillar cock of wash basin	20	Each	9.00	180.00
3.18.1	Refixing of pillar cock of wash basin	20	Each	9.00	180.00
3.19	Supplying, fitting and fixing bevelled edged mirror 5.5 mm thick silver red as per I.S. 3438 / 1965 together with brass C.P. hinges. 600 mm X 450 mm	4	Each	484.00	1,936.00
3.20	Supplying, fitting and fixing liquid soap container.				
3.20.1	Chromium plated.	4	Each	393.00	1,572.00
3.20.2	PTMT (Prayag or equivalent as approved).	4	Each	210.00	840.00
3.21	Supply, fitting and fixing towel rail with two brackets C.P. over brass- 25 mm dia and 600 mm long.	2	Each	430.00	860.00
3.22	Supplying, fitting and fixing PTMT smart shelf of approved make of size 300 mm.	2	Each	223.00	446.00
4	Inspection Pit, Soak Pit etc :::				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
4.1	Construction of circular soaks well 2.5 mtr. deep in all types of sandy soils with dry brickwork upto 1.6 mtr. from the bottom having 150mm intermediate cement brick work (1:4) band all round and cement brick work (1:4) upto 0.90 mtr. from top with 19mm thick cement plastering (4:1) to inside face upto the depth of cement brickwork, 15mm thick cement plaster (4:1) on outer face from top of the well upto G.L. and 6mm thick cement plaster (4:1) on top of the RCC cover slab including filling bottom 1.00 mtr. of inside of the well with brick metal (50mm to 63mm size) including RCC cover slab of 100mm thick with cement concrete (1:1.5:3) with stone chips with necessary reinforcement and shuttering including one 560mm dia RCC manhole cover (heavy type) of approved make supplied, fitted and fixed in the cover slab with necessary fittings making necessary, arrangements for pipe connection, excavation of well including shoring, dewatering and removing the excess earth from the premises as per direction complete in all respect with all costs of labour and materials.				
	With 250mm thick dry brick work and 250mm thick cement brick work (6:1) and 1.00m inside dia. (SAIL/TATA/RINL)	0	Each	16,627.00	0.00
4.2	Removing sludge from septic tank, soak well etc. by methor labour including disposal of the same outside the compound as directed. Upto 200 users. Beyond a lead of 150 metre and outside the Municipal limit	0	Each	5,695.00	0.00
4.3	Cleaning silt of inspection pit.	25	Each	154.00	3,850.00
4.3.1	Cleaning silt of master trap pit.	2	Each	1,152.00	2,304.00
4.4	Supplying, fitting and fixing in position RCC manhole / pit cover of approved make with rim (Heavy Type).				
4.4.1	450mm dia.	2	Each	276.00	552.00
4.4.2	560mm dia.	2	Each	338.00	676.00
4.5	Supplying, fitting and fixing in position C.I manhole / pit cover with rim.				
4.5.1	Round 450mm x 100mm x 25Kg.	1	Each	2,035.00	2,035.00
4.5.2	Round 450mm x 100mm x 50Kg.	1	Each	3,526.00	3,526.00
4.6	Supplying, fitting and fixing in position reinforced cement polymer concrete manhole/ gully pit cover with matching frame as per IS: 12592(M.D)				
4.6.1	Light duty gully pit cover (yard gully) with frame and hinge arrangement for opening of size, cover: 300mm x 275mm x 30 mm, Frame: 450mm x 375mm x 75 mm, Opening: 300mm x 225 mm, Weight: 43kg (approx).	2	Each	1,233.00	2,466.00
4.6.2	15 MT load bearing capacity round manhole cover provided with two lifter hooks fitted with matching frame size. Cover: 460 mm x 75 mm, Frame: 620 mm x 150 mm, Opening: 360mm, Weight: 100 kg (approx).	1	Each	2,536.00	2,536.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
4.6.3	5 MT load bearing capacity round manhole cover provided with two lifter hooks fitted with matching frame size. Cover: 565 mm x 65 mm, Frame: 665 mm x 125 mm, Opening: 470mm, Weight: 90 kg (approx).	1	Each	2,582.00	2,582.00
4.6.4	3 MT load bearing capacity round manhole cover provided with two lifter hooks fitted with matching frame size. Cover: 450mm x 50mm, Frame: 540mm x 100mm, Opening: 370mm, Weight: 46kg (approx).	1	Each	1,319.00	1,319.00
5	Soil Pipe and Fittings :::				
5.0	Supplying, fitting and fixing UPVC pipes (B-Type) & fittings conforming to IS:13592-1992 for above ground work including cost of jointing materials, all necessary specials, cutting pipes, cutting holes in wall or RCC floor where necessary and mending good all damages excluding the cost of masonry or concrete work, if necessary, but including the cost and fitting and fixing holder bat clamps (any floor) or for underground work including cutting trenches upto 1.5 metre and refilling the same complete as per direction of the Engineer-in-charge. (Payment will be made on centre line measurement of the total pipeline including specials.)				
5.1	Single socketed 3.0 metre length UPVC pipes - Above ground				
5.1.1	75 mm dia.	6	Mtr.	241.00	1,446.00
5.1.2	110 mm dia.	12	Mtr.	349.00	4,188.00
5.1.3	160 mm dia.	3	Mtr.	612.00	1,836.00
5.2	Single socketed 3.0 metre length UPVC pipes - Under ground				
5.2.1	75 mm dia.	3	Mtr.	269.00	807.00
5.2.2	110 mm dia.	3	Mtr.	376.00	1,128.00
5.2.3	160 mm dia.	3	Mtr.	639.00	1,917.00
5.3	Coupler				
5.3.1	75 mm dia.	2	Each	46.00	92.00
5.3.2	110 mm dia.	2	Each	85.00	170.00
5.3.3	160 mm dia.	1	Each	261.00	261.00
5.4	Plain Tee				
5.4.1	75 mm dia.	2	Each	46.00	92.00
5.4.2	110 mm dia.	2	Each	85.00	170.00
5.4.3	160 mm dia.	1	Each	262.00	262.00
5.5	Door Tee				
5.5.1	75 mm dia.	2	Each	101.00	202.00
5.5.2	110 mm dia.	2	Each	195.00	390.00
5.5.3	160 mm dia.	1	Each	514.00	514.00
5.6	Bend 45°				
5.6.1	75 mm dia.	2	Each	54.00	108.00
5.6.2	110 mm dia.	2	Each	89.00	178.00
5.6.3	160 mm dia.	1	Each	293.00	293.00
5.7	Bend 87.5°				
5.7.1	75 mm dia.	4	Each	61.00	244.00

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
5.7.2	110 mm dia.	4	Each	120.00	480.00
5.7.3	160 mm dia.	1	Each	338.00	338.00
5.8	Door Bend (T.S)				
5.8.1	75 mm dia.	2	Each	83.00	166.00
5.8.2	110 mm dia.	2	Each	147.00	294.00
5.8.3	160 mm dia.	1	Each	369.00	369.00
5.9	Plain Y				
5.9.1	75 mm dia.	1	Each	102.00	102.00
5.9.2	110 mm dia.	1	Each	206.00	206.00
5.9.3	160 mm dia.	1	Each	583.00	583.00
5.10	Vent Cowl				
5.10.1	75 mm dia.	1	Each	25.00	25.00
5.10.2	110 mm dia.	1	Each	33.00	33.00
5.10.3	160 mm dia.	1	Each	57.00	57.00
5.11	Pipe Clip				
5.11.1	75 mm dia.	10	Each	16.00	160.00
5.11.2	110 mm dia.	10	Each	21.00	210.00
5.11.3	160 mm dia.	5	Each	43.00	215.00
5.12	Nahani Trap	4	Each	105.00	420.00
5.13	Plain floor trap with Top tile & Strainer - 75 mm	3	Each	144.00	432.00
5.14	Supplying, fitting and fixing with cement jointing (1:3) salt glazed stoneware pipe including excavation of earth upto 1.50mm depth in all sorts of soil both mixed or unmixed and refilling (but excluding concreting at bottom and sides).				
5.14.1	150 mm.	2	Mtr.	334.00	668.00
5.14.2	300 mm.	2	Mtr.	927.00	1,854.00
5.15	Renewing cast iron inspection door with bolts and nuts complete for fittings of 50mm dia to 150mm dia HCI pipe.	4	Each	86.00	344.00
5.16	Supply, fitting and fixing C.I. round grating.				
5.16.1	100 mm dia.	7	Each	62.00	434.00
5.16.2	150 mm dia.	7	Each	85.00	595.00
5.17	Supply, fitting and fixing C.I. square jalli.				
5.17.1	100 mm.	5	Each	73.00	365.00
5.17.2	150 mm.	5	Each	102.00	510.00
5.17.3	225 mm.	5	Each	142.00	710.00
5.18	Supplying and fixing aluminium domical grating 125mm.	4	Each	56.00	224.00
5.19	Cleaning and removing silt from choked up gully pit.	20	Each	33.00	660.00
5.20	Removing chokage of H.C.I. or S.W. pipe or R.C.C. Hume pipe with split bamboo etc.				
5.20.1	a) Underground	300	Mtr.	11.00	3,300.00
5.20.2	b) Over ground	200	Mtr.	9.00	1,800.00
6.0	Water Closets and Urinals :::				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
6.1	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 :	2	Each	5,319.37	10,638.74
6.2	Supplying, fitting and fixing Anglo-Indian W.C. in white glazed vitreous chinaware of approved make in position complete with necessary bolts, nuts, etc. With 'S' trap (with vent)	1	Each	3,287.00	3,287.00
6.3	Supplying, fitting and fixing Orissa pattern water closet in white glazed vitreous chinaware of approved make in position complete excluding 'P' or 'S' trap (excluding cost of concrete for fixing). (i) 580 mm X 440 mm.	1	Each	1,613.00	1,613.00
6.4	Supplying, fitting and fixing Flat back urinal (half stall urinal) in white vitreous chinaware of approved make in position with brass screws on 75 mm X 75 mm X 75 mm wooden blocks complete.				
6.4.1	(i) 635 mm X 395 mm X 420 mm	2	Each	2,869.00	5,738.00
6.4.2	(i) 470 mm X 280 mm X 340 mm	1	Each	945.00	945.00
6.5	Supplying, fitting and fixing 32 mm dia. flush pipe of approved make with necessary fixing materials and clamps complete.				
6.5.1	a) Polythene flush pipe	10	Each	155.00	1,550.00
6.6	Supplying, fitting and fixing 18mm thick marble partition slab with white chawk doongri marble square cut, both sides polished with two front cover rounded and edges polished.	1	Sqm.	1,426.00	1,426.00
6.7	Supplying, fitting and fixing porcelain partition wall of approved make of size 618 mm x 310 mm complete in all respect	2	Each	1,132.00	2,264.00
6.8	Supplying, fitting and fixing Closet seat of approved make with lid and CP hinges, rubber buffer and brass screws complete.				
6.8.1	For E.W.C. - Bestolite (solid type) white	5	Each	715.00	3,575.00
6.8.2	For Anglo Indian - Plastic (hollow type) white	2	Each	485.00	970.00
6.9	Supplying, fitting and fixing CP brass toilet paper holder of approved make & brand.	2	Each	656.15	1,312.30
6.10	Supplying, fitting and fixing dome shaped C.P. waste grating for urinals. 32 mm.	5	Each	180.00	900.00
6.11	Dismantling and refixing of marble or mosaic partition.	5	Each	100.00	500.00
6.12	Dismantling of urinal.	12	Each	33.00	396.00
6.13	Refixing of urinal.	12	Each	35.00	420.00
6.14	Removing chokage of water closet, urinal and waste trap.	50	Each	26.00	1,300.00
6.15	Rectifying leakage of WC by new joints by methor mishtry.	50	Each	39.00	1,950.00
6.16	Renewing 15mm C.P. over brass spreader.	2	Each	295.00	590.00
6.17	Re-fixing flush pipe/ MS bend/ CP flush pipe with I.R. adapter after removing chokages.	10	Each	35.00	350.00
7.0	Miscellaneous :::				

Item no.	Description of item	Qty.	Unit	Rate (Rs)	Amount (Rs)
7.1	Repairing peets valve including renewing packing gland, acid wash etc.				
7.1.1	25mm to 40mm valve.	5	Each	38.00	190.00
7.1.2	40mm to 100mm valve.	5	Each	82.50	412.50
7.2	Dismantling and re-fixing of auto flush valve, cascade type cistern after cleaning with acid, changing washers adjusting the same etc. all complete.	10	Each	71.50	715.00
7.3	Supplying, fitting and fixing 15mm dia, 450mm long C.P. connector.	5	Each	165.00	825.00
7.4	Attention automatic cistern of urinal or PVC flushing cisterns of high / low level of adjustment upto 10 ltr, cleaning with acid etc.	20	Each	44.00	880.00
7.5	Dismantling & refixing of Bib cock, Pillar cock, Push cock, Angular, urinal spreader etc. after cleaning with acid, removing of chockage, renewing washer etc all complete.	40	Each	33.00	1,320.00

Estimated Cost of plumbing and sanitary work :::: 291,863.54

Say Rs. 291,864.00

List of Approved Make/ brand of materials:

As per CPWD guidelines for construction purpose list of approved/preferred make of indigenous brands / materials wherever applicable is provided herein below. However, approved equivalent materials and finishes of any other specialized firms may be used, in case it is established that the brand specified below are not available in the market and subject to approval of the alternate brand by the Engineer-in -Charge / Tendering Authority.

All the materials must be approved by the Engineer-in- Charge before supplying at site.

- i) **Cement:** Ultratech, ACC, Lafarge, Ambuja, JSW.
- ii) **Reinforcement:** TATA, SAIL, Jindal, RINL, SRMB.
- iii) **Vitrified/ Ceramic Tiles:** Kajaria, Johnson, Nitco, Orient, Somany.
- iv) **Cement Based Paint:** Duracem (Berger), Snowcem, Asianpaints, Shalimar.
- v) **Interior Primer:** ICI Dulux, Asian paints, Berger (Water Based Cement primer).
- vi) **Interior Acrylic Emulsion Paint :** ICI Dulux Super clean 3 in 1 /Berger Easy Clean fresh/ Asian paints Apcolite or equivalent as approved by the EIC.
- vii) **Exterior Primer:** ICI Dulux Weathershield Alkalibloc PU+, Asian paints Smart care Damp Sealth, Berger seal-o-primeor or equivalent as approved by the EIC.
- viii) **Exterior Acrylic Emulsion Paint:** ICI Dulux Weathershield Protect, Apex ultima Protek of Asian paint, Barger Weather coat long life 10 or equivalent as approved by the EIC.
- ix) **Synthetic Enamel primer :** ICI Dulux, Asian Paints, Berger or equivalent as approved by the EIC.
- x) **Synthetic Enamel paint :** ICI Dulux Supergloss 5in1/ Asian Paints Apcolite/ Berger PU or equivalent as approved by the EIC.
- xi) **Wood :** Only seasoned and knot/ crack free Teak Wood, Sal wood etc to be used.
- xii) **Ply Wood:** Only new & latest stock of first grade Phenol bonded plywood of Green ply (Green)/ Century (Club) make conforming IS:303, BWR grade to be used.
- xiii) **Decorative Laminate:** Greenlam, Centurymica or Equivalent.
- xiv) **Alu Board:** Eurobond/ Alex panels/ Alu Décor/ Alu bond
- xv) **Adhesive:** Fevicol, Araldite or equivalent should be used for frame jointing, ply fixing on frames, pasting works etc.
- xvi) **Glass:** Saint Gobain, Modi Guard, Ashai.
- xvii) **Aluminium Section:** Hindalco, Indalco, Jindal.
- xviii) **Floor Spring :** Godrej/ Ozone/ Hardwin / Garnish/ DORMA.
- xix) **Hydraulic Door Closer:** Godrej/ Ozone/ Hardwin/Garnish/ DORMA.
- xx) **Gypsum Board:** Gypsum India, Saint Gobain, USG Boral, Everest.
- xxi) **Vitreous Chinaware fixture:** Hindustan, Parryware, CERA, Hindware, Jhonson.
- xxii) **PVC Pipe & fittings:** Ori-plast, Supreme, Ashirvad, Astral.
- xxiii) **PVC Water Tank:** Sintex, Patton, Ashirvad, Supreme Plasto.
- xxiv) **PVC Cistern & Fittings:** Reliance Classic, Hindware, Parryware.
- xxv) **UPVC Pipe for rain water down pipe:** Ori-plast, Supreme, Ashirvad, Astral.
- xxvi) **CP brass Bib cock, Stop Cock, Angular etc:** Jaquar, Essco, Marc, Parryware.
- xxvii) **GI Pipe fittings:** Tata, Jindal or Equivalent.
- xxviii) **Gate Valve:** Leader, HM, Lakshmi.
- xxix) **Lock:** Godrej, Palm, Ozone, Hafele, Dorset.
- xxx) **Water Proofing Compound, Micro concrete:** Sika, SWC, Pedilite, CICO.
- xxxi) **Inner Parts of bibcock, stopcock, pillarcock etc.:** Essco, Jaquar, Parryware.
- xxxii) **CPVC Ball Valve :** Supreme, Ashirvad, Astral, Ori-Plast.
- xxxiii) **PVC Sanitary fixtures :** Prayag, Wtaertec, Pearl.

Digitally signed by SUBHASIS GHOSH
Date: 2026.09.15 10:14:43 IST
Location: eProcure-EPROC