

BOQ OF CIVIL WORK: CONSTRUCTION OF ADMINISTRATIVE OFFICE, DIBRUGARH AT REAR SIDE OF DIBRUGARH BRANCH, BANK'S OWN PREMISES					
Sl. No.	DESCRIPTION	UNIT	Total Qty.	RATE	Amount
CIVIL WORK (CATEGORY A)					
I	EARTH WORKS				
1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth, 1.5m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth, lead up to 50m and for all lift, as directed by Engineer-in-Charge.				
i	All kinds of soil	Cum	181.00		
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), including dressing of sides and ramming of bottoms, for all lift, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
i	All kinds of soil	Cum	141.58		
3	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials.				
i	All kinds of soil	Cum	37.96		
4	Excavating trenches by mechanical / manual means of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, for all depth, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc., and disposing of surplus excavated soil as directed, within a lead of 50 m :				
a)	All kinds of soil				
i	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	metre	79.08		
5	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and for all lift.	Cum	170.44		
6	Carriage of Earth by mechanical transport including loading, unloading and Stacking including royalty & carriage up to 5 KM complete.	Cum	152.13		
7	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	Cum	17.59		
8	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50m outside the periphery of the area cleared.	Sqm	640.00		
9	Supplying chemical emulsion in sealed containers including delivery as specified.				
i	Chlorpyriphos/ Lindane emulsifiable concentrate of 20%	litre	47.72		
	Anti termite treatment				
10	Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti- termite treatment (excluding the cost of chemical emulsion) :				
i	Along the external wall below concrete or masonry apron using chemical emulsion @ 2.25 litres per linear metre including drilling and plugging holes etc. With Chlorpyriphos/ Lindane E.C. 20% with 1% concentration.	metre	79.08		
ii	Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 : 2 (1 cement : 2 Coarse sand) to match the existing floor : With Chlorpyriphos/Lindane E.C. 20% with 1% concentration.	Sqm	322.29		

II	CONCRETE WORKS				
11	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
i	1:3:6 (1 Cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources).	Cum	1.00		
ii	1:4:8 (1 Cement : 4 coarse sand (zone-III) derived from natural sources : 8 graded stone aggregate 40 mm nominal size derived from natural sources).	Cum	83.62		
12	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor, etc., up to floor five level, excluding the cost of centering, shuttering and finishing :				
i	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)	Cum	11.09		
13	Centering and shuttering including strutting, propping etc. and removal of form work for :				
i	Foundations, footings, bases for columns.	Sqm	64.07		
14	Providing and laying damp-proof course 50mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20mm nominal size derived from natural sources).	Sqm	16.38		
15	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification.	per bag of 50 kg cement used	4.19		
16	Providing and applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7 kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	Sqm	16.38		
17	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation leveling & dressing & finishing the top smooth.	Sqm	59.31		
III	REINFORCED CEMENT CONCRETE WORK				
18	Centering and shuttering including strutting, propping etc. and removal of form for :				
a	Foundations, footings, bases of columns, etc. for mass concrete	Sqm	248.28		
b	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.	Sqm	145.93		
c	Suspended floors, roofs, landings, balconies and access platform	Sqm	1131.13		
d	Shelves (Cast in situ)	Sqm	8.48		
e	Lintels, beams, plinth beams, girders, bressumers and cantilevers	Sqm	530.86		
f	Columns, Pillars, Piers, Abutments, Posts and Struts	Sqm	487.58		
g	Stairs, (excluding landings) except spiral-staircases	Sqm	36.08		
h	Small lintels not exceeding 1.5 m clear span, moulding as in cornices, window sills, string courses, bands, copings, bed plates, anchor blocks and the like	Sqm	64.02		
i	Edges of slabs and breaks in floors and walls				
	Under 20 cm wide	metre	372.23		
j	Weather shade, Chajjas, corbels etc., including edges	Sqm	45.46		

19	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				
i	Thermo-Mechanically Treated bars of grade Fe-500D or more.	kg	27865.85		
20	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				
i	Thermo-Mechanically Treated bars of grade Fe-500D or more.	kg	40377.22		
21	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete. Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.				
a)	All works upto plinth level				
i	Concrete of M30 grade with minimum cement content of 350 kg /cum	Cum	156.04		
b)	All works above plinth level upto floor V level				
i	Concrete of M30 grade with minimum cement content of 350 kg /cum	Cum	310.50		
IV	BRICK WORK				
22	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				
i	Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	3.28		
23	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :				
i	Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	1.41		
24	Providing and laying autoclaved aerated Concrete (AAC) blocks masonry with 100mm / 125 mm thick with Grade 1 AAC blocks of density 551 to 650 kg/cum conforming to IS:2185 (Part 3) in super structure above plinth level up to floor V level in cement mortar 1:4 (1 cement : 4 coarse sand). The rate includes providing and placing in position 2 Nos 6 mm dia M.S. bars at every third course of masonry work.	Cum	5.00		
25	Providing and laying Autoclaved Aerated concrete (AAC) blocks masonry 150mm to 300mm thick AAC with Grade-I blocks of density 551 to 650 kg/ cum conforming to IS: 2185 (Part 3) in super structure above plinth level up to floor V level with RCC band at sill level and lintel level with approved block laying polymer modified adhesive mortar all complete as per direction of Engineer-in-Charge. (The payment of RCC band and reinforcement shall be made for seperately).	Cum	203.66		
V	MARBLE & GRANITE WORK				
26	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size,approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.				

a)	Granite stone slab colour black, Cherry/Ruby red				
i	Area of slab upto 0.50 sqm (For Window)	Sqm	73.36		
ii	Area of slab over 0.50 sqm (For Counter)	Sqm	8.48		
27	Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge. Granite work	Rmt	653.81		
28	Extra for providing opening of required size & shape for wash basins/ kitchen sink in kitchen platform, vanity counters and similar location in marble/Granite/Stone work including necessary holes for pillar taps etc. including rubbing and polishing of cut edge etc. complete.	Each	14.00		
29	Stone tile (polished) work for wall lining over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and cement slurry @ 3.3 kg/sqm including pointing in white cement complete.				
a)	8mm thick				
i	Granite of any colour and shade	Sqm	12.42		
VI	WOOD & PVC WORK				
30	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:				
i	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	Sqm	37.68		
31	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured).	Sqm	37.68		
32	Providing and fixing curtain rods of 1.25 mm thick chromium plated brass plate, with two chromium plated brass brackets fixed with C.P. brass screws and wooden plugs, etc., wherever necessary complete :				
i	20 mm dia	metre	79.90		
33	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.				
i	Fixed to steel windows by welding	Kg	879.33		
34	Providing and fixing aluminium sliding door bolts, ISI marked anodised anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete :				
i	300x16 mm	Each	21.00		
35	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :				
i	300x10 mm	Each	50.00		
ii	150x10 mm	Each	230.00		
36	Providing and fixing aluminium handles of approved make anodized (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete.				
i	125 mm	Each	50.00		
ii	100 mm	Each	230.00		
37	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc. complete.				
i	Single rubber stopper	Each	25.00		

38	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.	Each	25.00		
39	Providing & Fixing decorative high pressure 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.				
i	1.0 mm thick.	Sqm	75.36		
40	Providing and fixing PVC Door Frame of size 50x47 mm with a wall thickness of 5 mm (± 0.2 mm), made out of single piece extruded PVC profile, with mitred cut joints and joint with 2 nos of PVC bracket of size 190 mm x 100 mm long arms of cross section size 35 x 15 mm & self driven self tapping screws, the vertical door profiles to be reinforced with 40x20 mm M.S. rectangular tube of 0.8 mm , including providing EPDM rubber gasket weather seal throughout the frame, including jointing 5 mm PVC frame strip with PVC solvent cement on the back of the profile. The door frame to be fixed to the wall using 8 x100 mm long anchor fasteners complete, all as per manufacturer's specification and direction of Engineer -in- charge.	metre	37.80		
41	Providing and fixing factory made 30 mm thick door shutter made of solid PVC foam profile. The styles & rails shall be of size 75 mm x 30mm having wall thickness 5 mm. The styles, top & bottom rails shall have one side wall thickness of 15 mm integrally extruded on the hinge side of the profile for better screw holding power. The styles and rails shall be reinforced with M.S. tubes of size 33 mm x 17 mm x 1 mm, painted with primer , all four corners of reinforcement to be welded or sealed. Solid PVC extruded bidding (push fit type) will be set inside the styles and the rails with a cavity, to receive single piece extruded 5mm PVC sheet as panel. The styles and rails will be mitred cut and joint with the help of PVC solvent cement & self driven self tapping screws. Single piece extruded solid PVC lock rail of size 100 mm x 30 mm with wall thickness 5 mm & 15 mm integrally extruded in the middle of the lock rail & fixed with styles with the help of PVC solvent cement & self driven self tapping screws of size 100mm x 8 mm complete as per manufacturer's specifications and direction of Engineer-in-charge.				
i	Decorative finish (wood grained finish)	Sqm	10.08		
42	Providing and fixing certified restroom cubicle system of approved make comprising of green guard certified solid compact laminated water proof board, minimum 18 mm thick made as per IS: 2046 (phenolic core board) and as per BS-476/97 for fire retardant for toilet showers, water closet etc . The board shall be manufactured under high pressure and temperature by impregnating kraft papers and outer decorative papers with thermosetting phenolic/ melamine resins (low VOC). The cubicle system shall be resistant towards water, chemical, scratch, impact and heat and shall be anti bacterial, colour fast and shall have accessories like door knob, Gravity/ auto return hinges, privacy thumb turn with occupancy indicator, coat Hook, etc all in SS 304. The hardware and fixings includes anchoring of all fixed front panel to floor with SS 316 L brackets/ base plates with a clearance height upto 110 mm, and covered with SS 316 Shoe box plates, wall and corner joineries (brackets and channels) shall be SS 304 grade, SS 304 smm x 8 mm complete as per manufactur				

	The cubicle unit shall be installed in approved finish, shades and colours as per specifications and directions of Engineer-In-Charge, including minimum 5 (five) years warranty against any moisture related damages to all intermediate panels, doors, hardwares etc. Standard dimension of the cubicle system shall be of approx. 2100 mm Height(overall) x 1300mm Depth and 1600 mm Width which includes 750mm door size width.				
	I shaped Cubicle System consisting of front face panel including door and all necessary accessories, fittings and hardware etc.	Each	2.00		
	L shaped Cubicle System consisting of front face panel including door, intermediate panel and all necessary accessories, fittings and hardware etc.	Each	4.00		
VII STEEL WORK					
43	Providing and fixing pressed steel door frames conforming to IS: 4351, manufactured from commercial mild steel sheet of 1.60 mm thickness, including hinges, jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25 mm, or base ties of 1.60 mm, pressed mild steel welded or rigidly fixed together by mechanical means, including M.S. pressed butt hinges 2.5 mm thick with mortar guards, lock strike-plate and shock absorbers as specified and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer-in-charge:				
a)	Profile B				
i	Fixing with adjustable lugs with split end tail to each jamb.	metre	82.90		
44	Steel work welded in built up sections/ framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required				
i	In stringers, treads, landings etc. of stair cases including use of chequered plate wherever required, all complete.	Kg	192.50		
ii	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.	Kg	50.00		
45	Providing and fixing carbon steel galvanised (minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm ²), counter sunk head, comprising of 10 m dia polyamide PA 6 grade sleeve, including drilling of hole in frame , concrete/ masonry, etc. as per direction of Engineer-in-charge.				
i	10 x 60 mm	Each	38.00		
46	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	kg	285.88		
VIII FLOORING WORK					
47	52 mm thick cement concrete flooring with concrete hardener topping, under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacturer's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	Sqm	263.47		

48	Cement plaster skirting up to 30 cm height, with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of neat cement. 18 mm thick.	Sqm	7.05		
49	Extra for pre finished nosing to treads of steps of marble / granite stone.	metre	81.36		
50	Extra for marble / granite stone flooring in treads of steps and risers using single length up to 2.00 metre.	Sqm	34.77		
51	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :				
i	25 mm thick.	Sqm	21.53		
52	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	Sqm	3.42		
53	Providing and laying Ceramic glazed floor tiles of size 300x300 mm(thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick bed of cement mortar 1:4 (1 Cement : 4 Coarse sand), jointing with grey cement slurry @3.3kg/sqm including pointing the joints with white cement and matching pigments etc., complete.	Sqm	16.43		
54	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	Sqm	39.10		
55	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.				
a)	Double charge vitrified tile polished finish of size				
i	Size of Tile 600 x 600 mm	Sqm	610.26		
b)	Glazed vitrified floor tiles polished finish of size				
i	Size of Tile 600 x 600 mm	Sqm	229.99		
c)	Glazed Vitrified tiles Matt/Antiskid finish of size				
i	Size of Tile 600 x 600 mm	Sqm	44.07		
56	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.				
i	Polished Granite stone slab colour of Black, Cherry/Ruby Red or equivalent	Sqm	127.97		

57	Crazy ceramic tile flooring, with under layer 12 mm thick cement mortar 1:4 (1 cement: 4 coarse sand), with joints not exceeding 5 mm, including filling the gaps with ordinary cement mixture & mixing with synthetic polyester fibre, triangular in shape having specific gravity of 1.34 to 1.40, cross section size ranging from 10 to 40 micron & length upto 6 mm , mixing fibre @ 125 grams per 50 kg of cement in cement mortar, including providing and mixing water proofing material in mortar @ 1 kg per 50 kg of cement, all complete as per direction of Engineer-in-charge.	Sqm	269.09		
IX	ROOFING				
58	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate 10 mm and down gauge), including finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design : In 75x75 mm deep chase	metre	112.32		
59	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete.	Each	6.00		
X	FINISHING WORK				
60	12 mm cement plaster of mix :				
i	1:6 (1 cement: 6 coarse sand)	Sqm	613.07		
61	15 mm cement plaster on rough side of single or half brick wall of mix :				
i	1:6 (1 cement: 6 coarse sand)	Sqm	584.19		
62	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement: 5 coarse sand) and a top layer 6 mm thick cement plaster 1:3 (1 cement: 3 coarse sand) finished rough with sponge.	Sqm	1018.31		
63	6 mm cement plaster of mix :				
i	1:3 (1 cement: 3 fine sand)	Sqm	1210.85		
64	Neat cement punning	Sqm	28.88		
65	Extra for plastering exterior walls of height more than 10 m from ground level for every additional height of 3 m or part thereof.	Sqm	388.48		
66	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	Sqm	1210.85		
67	Finishing walls with textured exterior paint of required shade :				
i	New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including priming coat of exterior primer applied @ 2.20kg/10 sqm	Sqm	1018.31		
68	Applying priming coat :				
i	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/ steel works	Sqm	25.00		
69	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :				
i	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	Sqm	208.32		
70	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	Sqm	1168.38		
71	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.				

i	Two coats	Sqm	2379.23		
72	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content.				
i	With ready mixed pink or grey primer on wood work (hard and soft wood) having VOC content less than 50 grams/ litre	Sqm	50.00		
ii	With water thinnable cement primer on wall surface having VOC content less than 50 grams/litre	Sqm	2379.23		
73	Add for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections.	metre	353.15		
XI ROAD WORK					
74	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-olling the sub grade and disposal of surplus earthwith lead upto 50 metres.	Sqm	264.68		
75	Extra for compaction of earth work in embankment under optimum moisture conditions to give at least 95% of the maximum dry density (proctor density).	Cum	59.55		
76	Painting runway/taxi track/apron marking with adequate nos of coats to give uniform finish with road marking paint of superior make as approved by the Engineer-in-charge, i/c cleaning the surface of all dirt, scales, oil, grease and other foreign material etc. and lining outcomplete.				
i	New work (Two or more coats)	Sqm	50.00		
77	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.	Sqm	264.68		
78	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 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	Cum	5.00		
79	Construction of granular sub-base by providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge.				
i	With material conforming to Grade-II (size range 53 mm to 0.075 mm) having CBR Value-25	Cum	39.70		

XII DRAINAGE WORKS					
80	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910, on 12 mm dia steel bar conforming to IS: 1786, having minimum cross section as 23 mmx25 mm and over all minimum length 263 mm and width as 165 mm with minimum 12 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	Each	21.00		
81	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality				
a)	H D - 20				
i	Circular shape 560 mm internal diameter	Each	4.00		
82	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design.				
i	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	1.00		
XIII PILE WORKS					
83	Boring, providing and installation bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. by percussion drilling using Direct mud circulation (DMC) or Bailer and chisel technique by tripod and mechanical Winch Machine all complete, including removal of excavated earth with all its lifts and leads (length of pile for payment shall be measured up to bottom of pile cap).				
I	500mm dia piles	metre	714.00		
84	Vertical load testing of piles in accordance with IS 2911 (Part IV) including installation of loading platform by Kentledge/Anchor piles method and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of Engineer in-charge.				
	Note:- 1 . Initial and Routine Load test shall not be carried out by Dynamic method of testing.				
	Note:-2. Testing agency shall submit the design of loading platform for the approval of Engineer-in-charge.				
a)	Single pile above 50 tonne and upto 100 tonne safe capacity				
i	Initial test (Test load 2.5 times the safe capacity)	per test	2.00		
ii	Routine test. (Test load 1.5 times the safe capacity)	per test	2.00		

85	Integrity testing of Pile using Low Strain/ Sonic Integrity Test/ Sonic Echo Test method in accordance with IS 14893 including surface preparation of pile top by removing soil, mud, dust & chipping lean concrete lumps etc. and use of computerised equipment and high skill trained personal for conducting the test & submission of results, all complete as per direction of Engineer-in-charge.				
	Note:- The inclusion of the above item in the schedule of work shall be judiciously decided by the technical sanctioning authority, keeping in view the quality control, Type of soil strata and importance of the project.	per test	68.00		
XIV	ALUMINIUM & GLAZING WORKS				
86	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, fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/neoprene felt etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. Glazing and paneling to be paid for separately) :				
a)	For fixed portion.				
i	Powder coated aluminium (minimum thickness of powder coating 50 micron)	kg	1289.82		
b)	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)				
i	Powder coated aluminium (minimum thickness of powder coating 50 micron)	kg	883.50		
87	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):				
i	With float glass panes of 5 mm thickness (weight not less than 12.50 kg/sqm)	Sqm	109.92		
88	Filling the gap in between aluminium frame and adjacent RCC/Brickwork/ Stone Work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge				
i	Upto 5mm depth and 5mm width	metre	429.94		
XV	WATER PROOFING WORKS				
89	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of :				
	(i) 1st course of applying cement slurry @ 4.4 Kg/sqm mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface. (ii) 2nd course of 20mm cement plaster 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface. (iii) 3rd course of applying blown or residual bitumen applied hot at 1.7 Kg. per sqm of area. (iv) 4th course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 Kg/sqm.)	Sqm	34.13		

90	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: (a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment. (b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs.				
	(c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineerin- charge. (d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineerin- charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. (e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer-in-Charge :				
i	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	Sqm	269.09		
91	Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservoir, sewage & water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineerin- charge. The product performance shall carry guarantee for 10 years against any leakage.				
i	For vertical surface two coats @0.70 kg per sqm	Sqm	70.84		
ii	For horizontal surface one coat @1.10 kg per sqm.	Sqm	27.46		

92	Providing and applying of swellable type water stop tape, 19mm x 25mm thick in linear meter (expansive nature) for construction joints treatment of RCC structure such as raft slab, retaining walls, water storage tank and at the junctions of raft slab with the retaining walls etc.. After cleaning the surface, one coat of required primer for swellable water stop tape shall be applied throughout the length of the joint @3.78 litre per 240 running meter. Over the primed surface swellable type water stop tape shall be placed. The work shall be carried out all complete as per specification and the direction of the Engineer-In-Charge. The product performance shall carry guarantee for 10 years against any leakage.	metre	38.18		
93	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. 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	Sqm	71.13		
94	Extra for covering top of membrane with Geotextile, 120 gsm non woven, 100% polyester of thickness 1 to 1.25 mm bonded to the membrane with intermittent touch by heating the membrane by Butane Torch as per manufactures recommendation.	Sqm	71.13		
	TOTAL OF CATEGORY A: SUB-TOTAL(I+II+III+IV+V+VI+VII+VIII+IX+X+XI+XII+XIII+XIV+XV)				0.00

CATEGORY B: SANITARY ,PLUMBING AND LAND DEVELOPMENT WORK

SUBHEAD-I: SANITARY INSTALLATIONS

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 :				
1.1	W.C. pan with ISI marked white solid plastic seat and lid	Each	9		
2	Providing and fixing toilet paper holder :				
2.1	C.P. brass	Each	9		
3	Providing and fixing wash basin with C.I.brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls where required :				
3.1	White vitreous china flat back wash basin size 630 x 450 mm with a single 15 mm C.P. brass pillar tap.	Each	12		
4	Providing & fixing stone slab table rubbed, edges rounded and polished of size 75 X 50cm deep and 1.8 cm thick fixed in urinal partitions by cutting chase of appropriate width with chase cutter and embedding the stone in chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregste 6mm nominal size) as per Engineer-in-charge and finished smooth				
4.1	White Agaria Marble Stone	sqm	5		

5	Providing and fixing white vitreous china battery based infrared sensor operated urinal of approx. size 610 x 390 x 370 mm having pre & post flushing with water (250 ml & 500 ml consumption), having water inlet from back side, including fixing to wall with suitable brackets all as per manufacturers specification and direction of Engineer-in-charge.	Each	8		
6	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS:13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required :				
	Kitchen sink with drain board				
6.1	510X1040mm bowl depth 200mm.	Each	1		
	Kitchen sink without drain board				
6.2	610x510 mm bowl depth 200 mm	Each	1		
7	Providing & fixing PVC waste pipe for sink including PVC waste fitting Complete				
	Flexible Pipe				
7.1	40 mm Dia	Each	2		
8	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing :				
8.1	Rectangular shape 453x357 mm	Each	12		
9	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.				
9.1	15mm nominal bore	Each	2		
10	Providing and fixing PTMT Bottle Trap for Wash basin and sink.				
10.1	Bottle trap 38 mm single piece moulded with height of 270 mm, effective length of tail pipe 260 mm from the centre of the waste coupling 77 mm breadth with 25 mm minimum water seal, weighing not less than 260 gms.(sink & urinal)	Each	13		
11	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour weighing not less than 105 gms.	Each	12		
12	Providing & fixing PTMT towel ring trapezoidal shape 215 mm long 200 mm wide with minimum distance of 37 mm from wall face with concealed fittings arrangement of approved quality and colour weighing not less than 88 gms	Each	12		
13	Providing and fixing C.P. brass bib cock of approved quality confirming to IS:8931				
13.1	15mm nominal bore	Each	9		
14	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS 8931.				
14.1	15 mm nominal bore	Each	23		
SUBHEAD-II: SANITARY FIXTURES AND FITTINGS INSTALLATIONS					
15	Providing and fixing C.P. brass health faucet with 8mm dia 1m long PVC tube and wall hook complete in all respects. all complete as directed by Engineer-in-charge.				
	Make Jaquar, Model No. ALD-563	Each	9		
16	Providing, Fixing, testing and commissioning of 15 mm dia C.P. brass 2 way bib cock with C.P. wall flange of approved quality and making good.				
	Make Jaquar, Model No. FLR-5041N	Each	9		
17	Providing, Fixing, testing and commissioning of C.P. brass wall / counter mounted sink mixer with C.P. wall flange, overhead swinging spout complete as required and making good.	No.	2		
	Make Jaquar, Model No. FLR-5165				
18	Providing and fixing solid state, no touch operting, fully hygienic hand drier of approved shade with single blower , with time delay, summer & winter control, music while drying, volume ON/OFF controls including providing necessary brackets, cable from drier to Plug, Plug top key and lock etc, complete as required.	Each	6		
19	Providing & Fixing of Grab bar 600 mm of non slipping grip as per standard specification of use in disabled toilet complete with brackets suitable for wall installation as per approved sample complete in all respect. (Make-Hindware, Parryware,Cera)	Each	1		

20	Providing and Fixing SS Swing grab bar , fixed to PVC cleats with C.P. brass screws wherever required with approved make & quality and as per the directions and to the satisfaction of Engineer-in-charge. (Make- Hindware, Parryware, Cera)	Each	1		
21	Providing and Fixing WC Pan Connector, fixed to PVC cleats with C.P. brass screws wherever required with approved make & quality and as per the directions and to the satisfaction of Engineer-in-charge. (Make- Hindware, Parryware, Cera)	Each	9		
SUBHEAD-III: INTERNAL DRAINAGE INSTALLATIONS					
21.0	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x 1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete.	Each	5.00		
22.0	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diameter and weighing not less than 440 grams.	Each	5.00		
23	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.				
23.1	110 mm diameter	Meter	55.00		
24	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.				
24.1	Coupler				
	110 mm	Each	5.00		
24.2	Single tee with door				
	110x110x110 mm	Each	5.00		
24.3	Shoe (Plain)				
	110 mm Shoe	Each	5.00		
25	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.				
25.1	110 mm	Each	19.00		
26	Providing and laying cement concrete 1:5:10 (1 cement: 5 coarse sand: 10 graded stone aggregate 40 mm nominal size) around CI HUBLESS including bed concrete as per standard design				
26.1	P/F M.S. cap 100 mm dia	Each	20.00		
27	Providing and fixing PVC floor trap self cleansing design with or without vent arm complete including cutting and making good the walls and floors. Make:Supreme,Finolex,Prince etc.,110mm dia inlet 110mm dia outlet	Each	11.00		
28	Providing and fixing PVC floor Drain self cleansing design with or without vent arm complete including cutting and making good the walls and floors. Make:Supreme,Finolex,Prince etc.,110mm dia inlet 110mm dia outlet	Each	4.00		
29	Providing and fixing SS grating with rim including setting in floor with white cement mortar and making good the floor (Chilli make) 125mm dia (Lowest retail price not less than 120/each. Make: Supreme, Finolex, Cera, crome etc.,	Each	15.00		
30	Providing and laying uPVC pipes of approved make confirming to IS 4985: 2000) working pressure 6 kg/cm ² including all fittings e.g. plain or door bends, junctions, cowls, offsets, Coupler, access pieces etc. jointing with rubber rings and solvent cement including cutting and making good the walls, floors, RCC work, etc., cutting chases and filling the same with cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) or cement mortar 1:4 (1 cement : 4 coarse sand)/ Fixing with clamps complete in all respects as per Direction of Engineer-incharge.				
30.1	40mm dia	Mtr.	47.00		
30.2	50mm dia	Mtr.	19.00		

31.0	Providing and fixing UPVC SWR pipe for soil, waste and vent pipe to IS : 13592 of SWR quality, including all fittings, like EG : Bends, Tees, Elbows, Collars, junction, inspection doors, cowls, offsets, access pipes, jointing with rubber ring / solvent cement by application of leak proof adhesive like FRP paste including cutting holes in walls and floors and making good. clipping to walls and slabs, trenching, refilling etc. complete Make: Supreme, Finolex, Prince				
31.1	110mm dia	Mtr.	225.00		
SUBHEAD-IV: WATER SUPPLY INSTALLATIONS					
32	Providing and fixing in position 25 mm diameter mosquito proof coupling of approved municipal design.	Each	2		
33	Providing and fixing CPVC pipes having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00 mt spacing. this includes jointing of pipes and fittings with one step CPVC solvent cement and testing of joints complete as per direction of engineer in charge.				
	Internal work -Exposed on Wall				
33.1	20 mm nominal outer dia pipes	Rm	27		
33.2	25 mm nominal outer dia pipes	Rm	12		
33.3	32 mm nominal outer dia pipes	Rm	20		
33.4	40 mm nominal outer dia pipes	Rm	20		
33.5	50 mm nominal outer dia pipes	Rm	20		
34	Providing and fixing CPVC pipes having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamps at 1.00 mt spacing. this includes jointing of pipes and fittings with one step CPVC solvent cement and the cost of cutting chases and making good the wall same including testing of joints complete as per the direction of engineer incharge				
	Concealed work including cutting chases and making good the wall etc.				
34.1	15 mm nominal outer dia pipes	Rm	10		
34.2	20 mm nominal outer dia pipes	Rm	75		
34.3	25 mm nominal outer dia pipes	Rm	42		
34.4	32 mm nominal outer dia pipes	Rm	16		
35	Providing and fixing G.I. pipes complete with GI fittings and clamps including cutting and making good the walls etc. (internal work)				
	For roof level				
35.1	20 mm dia, nominal bore	Rm	10		
35.2	25 mm dia, nominal bore	Rm	20		
35.3	32 mm dia, nominal bore	Rm	20		
35.4	40 mm dia, nominal bore	Rm	5		
35.5	50 mm dia, nominal bore	Rm	5		
36	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade				
36.1	Two more coast on new work	sqm	39		
37	Providing and fixing of gun metal gate valve with CI wheel of approved quality (screwed ends)				
37.1	25mm dia, nominal bore	Each	2		
37.2	32 mm dia, nominal bore	Each	4		
37.3	40 mm dia, nominal bore	Each	2		
37.4	50 mm dia, nominal bore	Each	1		
38.0	Structural steel work welded in built up sections, trusses and framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	kg	55		
39	Providing and fixing G.I. union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (new work)				
39.1	15mm nominal bore	Each	4		
39.2	20mm nominal bore	Each	4		
39.3	25mm nominal bore	Each	4		
39.4	32mm nominal bore	Each	4		
39.5	40mm nominal bore	Each	4		
39.6	50mm nominal bore	Each	4		

SUBHEAD-V: EXTERNAL SEWER AND DRAINAGE INSTALLATIONS

40	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :				
	All kinds of soil				
	up to 1.50 m depth				
40.1	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	metre	65.00		
41	Providing and laying in position cement concrete of grade excluding the cost of centering and shuttering - all work up to plinth level				
41.1	1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	CUM	4.00		
42.0	Constructing brick masonry manhole with F.P.S. bricks in cement mortar 1 : 4 (1 cement : 4 coarse sand) RCC top slab with 1 : 2 : 4 mix (1 cement : 2 coarse sand : 4 grade stone aggregate 20mm nominal size); foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 (1cement 3 coarse sand) finished with a floating coat of neat cement and making channels in cement concrete 1:2:4 (1cement : 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) finishd with a floating coat of neat cement complete as per standard design				
	Inside size 90 x 80 cm & 45 cm deep including CI cover with frame (light duty) 455 x 610mm internal dimension total wt. of cover & frame to be not less than 38 kg (wt. of cover 23 kg and wt. of frame 15 kg)				
42.1	With Common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	4.00		
43	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910, on 12 mm dia steel bar conforming to IS : 1786, having minimum cross section as 23 mmx25 mm and over all minimum length 263 mm and width as 165 mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	each	24.00		
44	Providing and fixing square mouth SW gully trap grade 'A' complete CI grating brick masonry chamber with bricks of class designation 75 and water tight CI cover with frame of 300 x 300 mm size (inside) the weight of cover to be not less than 13.00 kg and frame to be not less than 5 kg. as per standard design. (COVER MIN. 4.5 KG & FRAME MIN.2.7 KG)				
	180x150 mm size P type				
44.1	With Common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	2.00		
45	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete :				
45.1	150 mm diameter	metre	5.00		
45.2	200 mm diameter	metre	15.00		
46	Providing and laying non-pressure NP2 class (light duty) RCC pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete. (for storm drainage)				
46.1	150 mm dia RCC pipe	Meter	45.00		0.00
46.2	250 mm dia RCC pipe	Meter	5.00		0.00

47	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design :				
47.1	150 mm diameter	metre	5.00		
47.2	200 mm diameter	metre	15.00		
48	Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design :				
	Inside dimensions 500x700 mm and 45 cm deep for pipe line with one or two inlets :				
48.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	12.00		
49	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) cement plastered on both sides with cement mortar 1:3 (1cement : 3 coarse sand) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete				
49.1	For pipes 100 to 250 mm dia.	Item	1		
SUB-HEAD VI RAIN WATER HARVESTING					
DESILTING CHAMBER (1 No.)					
50	Earth work In excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30cm in depth. 1.5m in width as per as 10 sq.m on plan) including disposal of excavated earth, lead up to 50m and lift up to 1.5m, disposed earth to be levelled and neatly dressed.				
50.1	All kinds of soil	Cu.M	8.40		
51	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating Each deposited layer by ramming and watering , lead up to 50 m and lift up to 1.5m.	Cu.M	5.60		
52	Extra for every additional lift of 1.5 m or part there of in:				
52.1	All kinds of soil.	Cu.M	3.65		
53	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - all work upto plinth level.				
53.1	1:4:8 (1 cement :4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	Cu.M	0.30		
54	Centring and shuttering including strutting, proppintg etc. and removal of form for:				
54.1	Suspended floors,roofs, landings, balconies and access platform.	Sq.M	2.00		
55	Edges of slabs and breaks in floors and walls,				
55.1	Under 20 cm wide	R.M.	6.00		
56	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				
56.1	Thermo Mechanically Treated bars.	Kg.	23.55		
57	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge.				
	Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/recoverable separately).				
57.1	All works upto plinth level.	Cu.M	2.30		
58	Brick work with F.P.S. bricks of class designation 75 in foundation and plinth in:				
58.1	Cement mortar 1:4 (1 cement: 4 coarse sand)	Cu.M	5.25		
59	12 mm thick cement plaster of mix 1:4 (1 cement : 4 fine sand).	Cum	15.00		

60	Providing, laying and jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the proportion of 1:1 (1 cement: 1 fine sand) including testing of joints etc. complete:				
60.1	200 mm diameter	R.M.	3.00		
61	Supplying, filling, spreading & leveling coarse sand of size range 1.5 mm to 2 mm in recharge pit, in required thickness over gravel layer, for all leads & lifts, all complete as per direction of Engineer –in-charge.	Cu.M	0.27		
62	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality				
	L D- 2.5				
62.1	Rectangular shape 600x450mm internal dimensions	Each	2.00		
RECHARGE PIT (1 No.)					
63	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5m in width or 10 Sq.M on plan) including dressing of sides and ramming ob bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed, withen a lead of 50m.				
63.1	All kinds of soil	Cu.M	59.17		
64	Extra for every additional lift of 1.5 m or part thereof in excavation /banking excavated or stacked materials.				
64.1	All kinds of soil	Cu.M	22.60		
64.2	Ordinary or Hard Rock	Cu.M	15.05		
65	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating Each deposited layer by ramming and watering , lead up to 50 m and lift up to 1.5m.	Cu.M	25.65		
66	Providing and laying in position cement cncrete of specified grade excluding the cost of centring and shuttering - all work upto plinth level.				
66.1	1:4:8 (1 cement :4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	Cu.M	0.90		
67	Centring and shuttering including strutting, proppintg etc. and removal of form for:				
67.1	Suspended floors,roofs, landings, balconies and access platform.	Sq.M	10.75		
68	Edges of slabs and breaks in floors and walls,				
68.1	Under 20 cm wide	R.M.	12.56		
69	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.				
69.1	Thermo Mechanically Treated bars.	Kg.	175.00		
70	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge.				
	(Note :- Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/recoverable separately).				
70.1	All works upto plinth level.	Cu.M	1.48		
71	Brick work with F.P.S. bricks of class designation 75 in foundation and plinth in:				
71.1	Cement mortar 1:4 (1 cement: 4 coarse sand)	Cu.M	17.65		
72	12 mm thick cement plaster of mix 1:4 (1 cement : 4 fine sand).	Sq.M	30.00		
73	Providing, laying and jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the proportion of 1:1 (1 cement: 1 fine sand) including testing of joints etc. complete:				
73.1	<u>200 mm diameter</u>	R.M.	3.00		

74	Supplying, filling, spreading & leveling coarse sand of size range 1.5 mm to 2 mm in recharge pit, in required thickness over gravel layer, for all leads & lifts, all complete as per direction of Engineer –in-charge.	Cu.M	1.50		
75	Boring/drilling bore well of required dia for Casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart/bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer –in-charge, upto 90 metre depth below ground level.				
	All types of soil				
75.1	300 mm dia.	R.M.	20.00		
76	Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC medium well casing (CM) pipe of required dia, conforming to IS: 12818, including required hire and labour charges, fittings & accessories etc. all complete, for all depths, as per direction of Engineer –in-charge.				
76.1	150 mm nominal size dia.	R.M.	25.00		
77	Supplying, filling, spreading & leveling gravels of size range 4.6 mm to 4.8 mm, in the recharge pit, over the existing layer of boulders, in required thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge.	Cu.M	4.90		
78	Supplying, filling, spreading & leveling stone boulders of size range 5 cm to 20 cm, in recharge pit, in the required thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge.	Cu.M	4.90		
79	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality				
	L D- 2.5				
79.1	Rectangular shape 600x450mm internal dimensions	Each	2.00		
80	Providing and fixing hard drawn steel wire fabric 75x25 mm mesh of weight not less than 7.75 Kg per sqm to window frames etc. including 62x19 mm beading of second class teak wood and priming coat with approved steel primer all complete.	Sq.M	9.42		
81	Providing & fixing on wall face unplasticised -Rigid PVC rain water pipes conforming to IS:13592 Tyape A included jointing with seal ring conforming to IS:5382 leaving 10 mm gap for thermal expansion. (i)Single socketed pipes.				
81.1	110 mm diameter	Metre	120.00		
SUB-HEAD VII : BOREWELL INSTALLATION					
82.0	Boring/drilling bore well of required dia for casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart/ bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer -in-charge, upto 90 metre depth below ground level.				
	All types of soil				
82.1	300 mm dia	metre	40		
	Rocky strata including Boulders				
82.2	300 mm dia	metre	15		
83.0	Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC medium well casing (RMS) pipe of required dia, conforming to IS: 12818, including required hire and labour charges, fittings & accessories etc. all complete, for all depths, as per direction of Engineer -in-charge.				
83.1	150mm nominal size dia	metre	40		
84.0	Gravel packing in tubewell construction in accordance with IS: 4097, including providing gravel fine/ medium/ coarse, in required grading & sizes as per actual requirement, all complete as per direction of Engineer-in-charge.	cum	9		

85.0	Supplying, assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 mild steel screwed and socketed/ plain ended casing pipes of required dia, conforming to IS: 4270, of reputed & approved make, including painted with outside surface with two coats of anticorrosive paint of approved brand and manufacture, including required hire & labour charges, fittings & accessories, all complete, for all depths, as per direction of Engineer-in-charge.				
85.1	150 mm nominal size dia having minimum wall thickness 5.00 mm.	metre	40		
86.0	Supplying, assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 plain slotted (having slot of size 1.6/3.2 mm) mild steel threaded and socketed / plain bevel ended pipe (type A) of required dia, conforming to IS:8110, of reputed and approved make, having wall thickness not less than 5.40 mm, including painted with outside surface with two coats of anticorrosive bitumestic paint of approved brand and manufacture, including hire & labour charges, fittings & accessories, all complete, for all depths, as per direction of Engineer -in-charge.				
86.1	150 mm nominal size dia	metre	8		
87.0	Development of tube well in accordance with IS : 2800 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully developed, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water samples & getting tested in approved laboratory, i/c disinfection of tubewell, all complete, including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-in-charge.	hour	12		
89	<p>Supplying & Installation of approx 5 Hp submersible pump B.S or K.S.B or equivalent make with finolex cable 1x3x2.5 sqmm(upto 75mtr) with flexible conduit 25mm dia, electrical out door pannel with required electrical fitting such as MCB of 0-25Amp (Havell or Indocopp or MDS make), Volt & Ampere meter (AE make), single phase preventer (Minilac or VSP -1 make) starter (L&T or BCH make) etc of approved make, 40mm HDPE Pipe (25 mtr) and all accessories complete as per requirement of site.</p> <p>NOTES</p> <p>a) Contractor shall include the rate of electrical control panels complete with all accessories & controls, all Electrical/Mechanical items as required to operate the system automatic/manual.</p> <p>b) Contractor to select suitable HP of pumps .</p> <p>c) Level Controller with sufficient nos. of low / high level alarms, contacts with electrodes and control wiring for the automatic operation of water supply pumps, Submersible Sump Pumps, to achieve the functional requirement shall be provided. Control wiring between these pumps and water tanks shall be provided.Domestic water pumps must start at low water level in overhead domestic water tank & stop at high level in that water tank. Dry running protection shall be provided for all the pumps. Sequencing shall be provided for each set of pumps.</p>	Each	1		
SUB-HEAD: VIII WATER SUPPLY PUMPS AND ASSOCIATED PIPING					
90	Excavating trenches of required width for pipes, cables etc. including excavation for sockets and dressing of sides, ramming of bottom depth upto 1.5 M including getting out the excavated soil (HARD OR SOFT) and then returning the soil as required in layers not exceeding 20 cms in depth including consolidating each deposited layer by ramming, watering etc. and disposing of surplus excavated soil as directed within a lead of 50m. [hard/Dense soil]				
	All kind of soil				
90.1	Pipes,cables etc.exceeding 80mm dia.but not exceeding 300mm dia.	Mtr.	25		
91	Providing and fixing GI pipes complete with GI fittings including trenching and refilling etc				
91.1	20 mm dia, NB	Rm	5		
91.2	25 mm dia, NB	Rm	12		
91.3	32 mm dia, NB	Rm	5		

92	Structural steel work welded in built up sections, trusses and framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	kg	55		
93	Making connection of GI distribution branch with GI main by providing and fixing tee, including cutting and threading the pipe etc. complete.				
93.1	25 to 40 mm nominal bore	Item	4		
94	Providing and fixing of gun metal gate valve with CI wheel of approved quality (screwed ends)				
94.1	25mm dia, nominal bore	Each	1		
94.2	32 mm dia, nominal bore	Each	1		
94.3	40 mm dia, nominal bore	Each	2		
95	Providing and fixing gun metal non- return valve of approved quality (screwed end)				
	32 mm nominal bore				
95.1	Vertical	each	1		
	40 mm nominal bore				
95.2	Vertical	each	1		
96	Providing and fixing in position 25 mm diameter mosquito proof coupling of approved municipal design.	Each	2		
97	Providing & fixing of Garden hydrant outlet consisting 1 No. 20mm dia. Ball valve, Bib cock (Brass) for connecting rubber hose, pipes & fittings including brick masonry chamber 300x300x500mm.				
97.1	Bib Cock - 20mm		2		
97.2	Ball Valve - 20mm		2		
90	Providing, Fixing, installation, testing & commissioning of fully submersible CLEAR WATER pump for lifting of water from under ground water tank including panels, foundation, electrification and level control arrangement for automatic working (on/off) of the pump. The hydraulic diagram of the pump should be such that 10cum/hr flow should fall in between the curve and Q vrs H plot should show gentle rise. Complete in all respects with valves, header, NRV etc. Q = 85 LPM or 5 Cum/hr. H = 45m 1 Set = 1 W + 1 S	Set	1		
TOTAL OF CATEGORY B: SUB-HEAD(I+II+III+IV+V+VI+VII+VIII)]					-
CATEGORY C : SCRAP VALUE - DISMANTLING COST(SUBTRACTION)					
91	Existing R.C.C structure in the proposed plot: The scrap value of the existing valuation as per valuation report is Rs. 6,15,000.00 Cost for demolition: Rs. 2,56,000.00 Net cost of the structure (after deducting demolition Cost): Rs. 3,59,000.00 The bidder must not quote/offer to Bank below Rs. 3,59,000.00 After demolition of the building and toilet block at rear side, all materials (serviceable and unserviceable items, furniture fixtures and all the scrap items etc.) will become the Contractor's property and the contractor can use the items for their own purposes. This BOQ item also includes 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.	L/S	1.00		
TOTAL AMOUNT(CATEGORY A + CATEGORY B - CATEGORY C)					0.00

ALL RATES ARE EXCLUSIVE OF GST