

BILL OF QUANTITIES FOR REMAINING CIVIL WORKS FOR CONSTRUCTION OF RSETI BUILDING AT BATHINDA.					

PART A : CIVIL WORKS					
Sr. no	Description	Unit	Qty	Rate	Amount
1	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, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
	All kinds of soil.	Cum	37.73		
2	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.				
		Cum	25.15		
3	Supplying and filling in plinth with Jamuna sand under floors, including watering, ramming, consolidating and dressing complete				
		Cum	196.62		
4	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering				
	1:4:8 (1 Cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size) 210	Cum	157.09		
5	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement :3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand including finishing the top smooth				
		Sqm	93.49		
6	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work, including pumping of R.M.C. from transit mixer to site of laying , excluding the cost of centering, shuttering finishing and reinforcement, including cost of 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 the 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).				
	All works above plinth & up to floor V level.	Cum	450.22		
7	Centering and shuttering including strutting, propping etc. and removal of form for :				
A	Columns, Pillars, Piers, Abutments, Posts and Struts.	Sqm	398.14		
B	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	Sqm	27.88		
C	Suspended floors, roofs, landings, balconies and access platform.	Sqm	1862.56		
D	Vertical and horizontal fins individually or forming box louvers band, facias and eaves boards.	Sqm	14.50		

8	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				
	Thermo-Mechanically Treated bars	Kg	67000.00		
9	Add for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections.	Rmt	662.12		
10	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 :				
	Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	222.13		
11	Half brick masonry 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.				
	Cement mortar 1:4 (1 cement :4 coarse sand)	Sqm	716.69		
12	Extra for providing and placing in position 2 Nos. 6mm dia. M.S. bars at every third course of half brick masonry.	Kg	445		
13	Providing precast cement concrete Jali 1:2:4 (1 cement : 2 coarse sand(zone-III) : 4 graded stone aggregate 6mm nominal size), reinforced with 1.6 mm dia mild steel wire, including centering and shuttering, roughening cleaning, fixing and finishing with cement mortar 1:3 (1 cement: 3 fine sand) etc. Complete, excluding plastering of the jambs, sills and soffits.				
	40mm thk	Sqm	25.6		
14	Wall lining butch work upto 10m height with Dholpur stone 40 mm thick rough facing on the exposed surface with stone strips of minimum length 300 mm and required width, including embedding every tenth layer and bottom most layer in masonry or concrete after making necessary chases of size 75x75 mm and by providing layer of 75 mm thick strips i/c 12 mm thick bed of cement mortar 1:3 (1 Cement : 3 coarse sand) i/c ruled pointing in cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment to match the shade of stone complete as per direction of Engineer-in-charge.				
		Sqm	120.5		
15	Providing and fixing 18mm 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 of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 coarse sand) with 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.				
	Granite of any colour and shade Area of slab over 0.50 sqm.	Sqm	43.55		
16	Extra for providing frosted glass panes 6 mm thick instead of ordinary float glass panes 6 mm thick in doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured).				
		Sqm	7.94		
17	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 :				

	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	Sqm	131.03		
18	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	131.03		
19	Providing 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 (hold fast lugs or dash fastener shall be paid for separately).				
	9.1.1 Second class teak wood	Cum	2.44		
20	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm) with necessary accessories and screws etc. complete.	Nos	31.00		
21	Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved quality).	Nos	22.00		
22	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 :	Nos	70.00		
	300x16 mm				
23	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 :				
A	250X10mm	Nos	35.00		
B	150X10mm	Nos	270.00		
24	Providing and fixing aluminium handles ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :				
	125mm	Nos	338.00		
25	Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows all complete.				
	With 5.5 mm Thick glass panes	Sqm	117.11		
26	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.				
	Fixed to openings /wooden frames with rawl plugs screws etc.	Kg	3470.77		
27	25mm thk. 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)	Sqm	669		

28	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	51.37		
29	Extra for pre finished nosing to treads of steps of marble stone.	Rmt	189.12		
30	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 coarse sand) with joints finished flush.				
31	Red sand stone on stage steps	Sqm	20.45		
32	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joints with white cement and matching pigments etc., complete.				
33	Size of Tile 600x600 mm	Sqm	622.61		
34	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joint with white cement & matching pigments etc. complete.				
A	Size of Tile 600x600 mm	Sqm	278.04		
B	Filling Epoxy grouting in joints	Sqm	49.97		
35	Providing and laying Ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4 Coarse sand) including pointing the joints with white cement and matching pigment etc., complete.	Sqm	82.89		
	Filling Epoxy grouting in joints	Sqm	82.89		
36	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	278.04		
	Filling Epoxy grouting in joints	Sqm	278.04		
37	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 1mx1mx400micron, finished with 12mm 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.	Nos	16.00		

38	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 300mm height including cleaning the surface before treatment. b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115mm 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 2.75kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer in-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 Engineer-in-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 3mm 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 :				
	With average thickness of 120mm and minimum thickness at khurra as 65 mm.				
	Average thickness upto 150mm	Sqm	1191.31		
39	Providing & applying pre construction & during construction, Anti termite treatment for the entire area to be constructed in compliance with IS-6313 & through an approved agency using non repellent termiticide-Imdiachlorpid of Bayer India Ltd. or equivalent for the concentration as per manufacturer and with 10 years guarantee to keep the area free of all subterranean termite infestation.	Sqm	2142		
40	12 mm cement plaster of mix :				
	1:6 (1 cement: 6 fine sand)	Sqm	2520.36		
41	15 mm cement plaster on the rough side of single or half brick wall of mix :				
	1:6 (1 cement: 6 fine sand)	Sqm	2510.26		
42	6 mm cement plaster of mix :				
	1:3 (1 cement: 3 fine sand)	Sqm	2376.63		
43	Providing and applying plaster of paris putty of 3 mm thickness over plastered surface to prepare the surface even and smooth complete.				
		Sqm	7407.24		
44	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface :				
45	Water thinnable cement primer	Sqm	7407.24		
46	Colour washing such as green, blue or buff to give an even shade :				
	New work (two or more coats) with a base coat of white washing with lime	Sqm	4896.99		

47	Finishing walls with textured exterior paint of required shade : 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	2510.26		
48	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade: Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture.	Sqm	117.11		
49	Providing and fixing wire gauge shutters using galvanized M.S. wire gauge of average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm, for doors, windows and clerestory windows with hinges and necessary screws: 35 mm thick shutters. with ISI marked M.S. pressed butt hinges bright finished of required size. Kiln seasoned and chemically treated hollock wood	Sqm	117.11		
50	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws. Kiln seasoned and chemically treated hollock wood 35 mm thick shutters.	Sqm	117.11		
51	Providing and Fixing Machine Finishes Brick tile (terracota burnt in specified ratio) for wall cladding thickness varying from 1/2" to 1" and machine cut size 2"x9" in C.M.(1:3) (1 Cement : 3 Coarse Sand) ,complete with all finishings as per entire satisfaction of Engineer-in-charge.	Sqm	162.92		
52	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 / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) : Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kg	970.16		
53	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) Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kg	830		
54	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): With float glass panes of 5.5 mm thickness (weight not less than 12.50 kg/sqm)	Sqm	95		

55	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge	Nos	11		
56	Providing and fixing Brass 100mm mortice latch and lock with 6 levers without pair of handles (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	Nos	12		
57	Providing and fixing main entry glass door 12mm thick with all fittings	Sqm	5.2		
TOTAL PART A					
PART B :PUBLIC HEALTH WORKS					
SANITARY					
1	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100mm sand cast Iron P or S trap, 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 :				
	White Vitreous china Orissa pattern W.C. pan of size 580x440mm with integral type foot rests.	each	1		
	in toilets				
2	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I.brackets, 40mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete including painting of fittings and brackets, cutting and making good the walls and floors wherever required :				
	W.C. pan with ISI marked white solid plastic seat and lid.	each	15		
	in toilets				
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 wherever require :				
	White Vitreous China Flat back wash basin size 550x400 mm with single 15 mm C.P. brass pillar tap.	each	21		
	in toilets				
4	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 340x410x265mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :				
	One urinal basin with 5 litre white P.V.C. automatic flushing cistern.	each	10		
	in toilets				

5	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required :				
	Kitchen sink without drain board				
	610x510 mm bowl depth 200 mm.	each	8		
	in kitchen				
6	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				
	Flexible pipe				
	40 mm dia	each	8		
	for wash basin, sink				
7	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	each	21		
	with wash basin				
8	Providing and fixing 600x120x5mm glass shelf with edges round off, supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete.	each	3		
	with wash basin				
9	Providing and fixing toilet paper holder :				
	C.P. Brass	each	16		
	In w.c.				
10	Providing and fixing PTMT Bottle Trap for Wash basin and sink.				
	Bottle trap 31mm single piece moulded with height of 270mm, effective length of tail pipe 260mm from the centre of the waste coupling 77mm breadth with 25mm minimum water seal, weighing not less than 260gms.	each	19		
	in wash basin/sink				
11	Providing and fixing PTMT liquid soap container 109mm wide, 125mm high and 112mm 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	17		
	in w.c./w.basin				
12	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour.				
	450MM long towel rail with total length of 495mm, 78mm wide and effective height of 88mm, weighing not less than 170gms.	each	7		
	in toilets/bath				
13	Providing and fixing in position SWR UPVC soil waste vent or antisiphonage pipes as per IS -13592 of approved make (to the approval of Engineer-in-charge) including cutting, jointing, wastage, but excluding cost of lead jointing.				
	Type A				
	160 mm o/d SWR UPVC pipe line laid complete	mtr	221.5		
	110 mm o/d SWR UPVC pipe line laid complete	mtr	220		

	75 mm o/d SWR UPVC pipe line laid complete	mtr	88.5		
13	210 mm o/d SWR UPVC pipe line laid complete	mtr	521.23		
14	Providing and fixing in position SWR UPVC specials for soil waste or anti siphonage pipes as per IS-14735 of approved make (to the approval of Er. In-Charge) including cutting and wastage etc. cutting holes in walls roofs or floors etc. and making good to its original condition but excluding cost of lead joining.				
14	a) for 160mm i/d dia pipes				
	(iii) Bend With Door	each	35		
	(v) Cowl	each	5		
	(vi) Collar	each	10		
	(vii) Reducing tee ring type 160 mm X 110 mm	each	15		
	(viii) Reducing single Y 160 mm X 110 mm	each	5		
14	a) for 110mm i/d dia pipes				
	(iii) Bend With Door	each	32		
	(v) Cowl	each	4		
	(vi) Collar	each	8		
14	b) for 75mm i/d dia pipes				
	(iii) Bend With Door	each	12		
	(v) Cowl	each	2		
	(vi) Collar	each	4		
14	b) for 210mm i/d dia pipes				
	(iii) Bend With Door	each	11		
	(v) Cowl	each	1		
	(vi) Collar	each	2		
	WATER SUPPLY				
15	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet :				
	100 mm diameter	each	4		
	in toilets				
16	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931				
	15 mm nominal bore.	each	11		
	kitchen/ toilets				
17	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931.				
	15 mm nominal bore.	each	28		
	kitchen/ toilets				
18	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore				
	15mm nominal bore	each	22		
	bath = 6x2 = 12 No.				
	toilet=5x2 = 10 No.				
19	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc.				
	Internal work - exposed on wall				
a	15 mm dia. nominal bore	metre	97		

b	20 mm dia. nominal bore	metre	37		
c	25 mm dia. nominal bore	metre	52		
d	40 mm dia. nominal bore	metre	168		
20	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. - External work				
	50 mm dia. nominal bore	metre	49		
21	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete :				
	25 to 40 mm nominal bore	each	30		
	50 to 80 mm nominal bore	each	20		
22	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
	25 mm nominal bore	each	5		
	40 mm nominal bore	each	4		
	50 mm nominal bore	each	3		
23	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank	ltrs	10250		
	1x750 ltr cap. = 750 1x1500 ltr cap. = 1500 4x2000 ltr cap. = 8000 total = 10250 ltrs				
24	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :				
	15 mm nominal bore	each	12		
	20 mm nominal bore	each	4		
	25 mm nominal bore	each	2		
25	Providing and fixing gun metal non- return valve of approved quality (screwed end) :				
	50 mm nominal bore				
	Horizontal	each	3		
	Vertical	each	4		
26	Constructing masonry Chamber 30x30x50 cm inside, in brick work in cement mortar 1:4 (1 cement :4 coarse sand) for stop cock, with C. I. surface box 100x100 x75 mm (inside) with hinged cover fixed in cement concrete slab 1:2:4 mix (1 cement :2 coarse sand : 4 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement :5 fine sand:10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement :3 coarse sand) 12mm thick finished with a floating coat of neat cement complete as per standard design :				
	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5.	each	14		
	for stop cock				

27	Constructing masonry Chamber 60x60x75 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100mm. top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement :2 coarse sand : 4 graded stone aggregate 20mm nominal size) , i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design :				
	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5.	each	20		
	for sluice valve etc				
	DRAINAGE				
28	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:				
	100 mm diameter S.W. pipe	metre	60		
	150 mm diameter S.W. pipe	metre	131		
	200 mm diameter S.W. pipe	metre	20		
29	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design :				
	With Sewer bricks conforming to IS : 4885				
	100x100 mm size P type	each	4		
	150 x 100 mm size P type.	each	4		
30	Providing and fixing 100 mm sand cast Iron grating for gully trap.	each	8		
31	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :				
a	300 mm dia. R.C.C. pipe	metre	118		
b	450 mm dia. R.C.C. pipe	metre	15		
32	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				
32	G.I.PIPES Pipes, cables etc, not exceeding 80 mm dia - 50mm dia	metre	65		
32	S.W.PIPES Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia.	metre	80		
32	Pipes, cables etc. exceeding 300 mm dia but not exceeding 600 mm	metre	15		

33	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size), inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design :				
	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5				
33	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :	each	8		
34	Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg) :	each	4		
35	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg), R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)				
	foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5				
35	Inside dimensions 455x610 mm and 45 cm deep for single pipe line :	each	10		
36	Inside dimensions 600x 850 mm and 45 cm deep for pipe line with three or more inlets :	each	10		
37	Extra for depth for manholes				
	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5				
37	Size 90x80 cm	metre	4		
37	Size 120x90 cm	metre	4		
38	Extra for depth beyond 45 cm of brick masonry chamber :				
	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5				
38	For 455x610 mm size	metre	4		
38	For 600x850 mm size	metre	4		
39	Providing and fixing partition for different type of urinals.				
39	Viterous white chinaware partition				
39.1.1	Small Partitions size 680mm x 355mm	each	3		
	TOTAL PART B				
	PART C :ROAD & EXTERNAL DEVELOPMENT				

1	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm. depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earth with lead upto 50 metres.	Sq.M	588.48		
2	Supplying and filling in plinth with Jamuna sand under floors, including watering, ramming, consolidating and dressing complete. (3" thk.)	cum	44.83		
3	Supplying and stacking at site - 90 mm to 45 mm size stone aggregate.				
	Laying, spreading and compacting stone aggregate of specified sizes to WBM specifications in uniform thickness, hand picking, rolling with 3 wheeled road / vibratory roller 8-10 tonne capacity in stages to proper grade and camber, applying and brooming requisite type of screening / binding material to fill up interstices of coarse aggregate, watering and compacting to the required density .	cum	59.18		
4	Supplying and stacking at site - 63 mm to 45 mm size stone aggregate.				
	Laying, spreading and compacting stone aggregate of specified sizes to WBM specifications in uniform thickness, hand picking, rolling with 3 wheeled road / vibratory roller 8-10 tonne capacity in stages to proper grade and camber, applying and brooming requisite type of screening / binding material to fill up interstices of coarse aggregate, watering and compacting to the required density.	cum	59.18		
5	Providing and applying tack coat using hot straight run bitumen of grade VG - 10 including heating the bitumen, spraying the bitumen with mechanically operated spray unit fitted on bitumen boiler, cleaning and preparing the existing road surface as per specifications :				
	On W.B.M. @ 0.75 Kg / sqm.	Sq.M	588.48		
6	2.5 cm premix carpet surfacing with 2.25 cum and 1.12 cum of stone chippings of 13.2mm and 11.2mm size respectively per 100 sqm. and 52 kg. and 56 kg. of hot bitumen per cum of stone chippings of 13.2 mm and 11.2 mm size respectively including a tack coat with hot straight run bitumen including consolidation with road roller of 6 to 9 tonne capacity etc. complete. (tack coat to be paid for separately) :				
	With paving Asphalt grade VG - 30 with no solvent	Sq.M	588.48		
7	Providing and laying seal coat over prepared surface of road with bitumen heated in bitumen boiler fitted with the spray set spraying using 98 kg of bitumen of grade VG - 10 and blinding surface with 0.90cum of stone aggregate of 6.7 mm size (Passing 11.2mm sieve and retained on 2.36mm sieve) per 100 sqm of road surface including rolling and finishing with power road roller all complete.	Sq.M	588.48		
8	Earth filling under floor with earth brought from outside				
	Total Earth filling	Cum	759.12		
9	Providing and fixing Kerb stone	Cum	11.19		

10	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 line sand etc. all complete as per the direction of Engineer-in-charge.	Sq.M	55.76		
11	Front boundary wall railing	1290.00	Kg		
11	Main gate	450.00	Kg		
12	Finishing walls with exterior decorative cement based paint such as snowcem, robbiacem etc. Two coats to give an even shade				
	Boundary wall	Sq.M	776.47		
13	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade:				
	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture.	Sq.M	147.91		
	TOTAL PART C				
	PART D : SEPTIC TANK + SOAKAGE PIT & Harvesting tank				
1	Constructing septic tanks conforming to IS:2470 with brick work in cement mortar 1:4 with coarse sand. Top slab in RCC 1:2:4 mix with necessary reinforcement, precast RCC baffle walls, 12mm thk. Plaster inside with cement mortar 1:3 with coarse sand, finished with a floating coat of neat cement, flooring with cement concrete 1:2:4, laid to slope, of minimum thickness 100mm, finished with 12mm thk. cement plaster 1:3 in coarse sand finished with a floating coat of neat cement, outside plaster 15mm thk. with cement mortar 1:5 in fine sand, cast iron tees of required size for inlet and outlet, CI vent pipes 50mm dia. brass wheel valves for removal of sludge, including SFRC manhole				
	light duty, 600x450mm size and plastic encapsulated MS foot rests at 300 mm intervals, complete excluding excavation and refilling for				
	one year cleaning cycle for: 100 users	No.	1		
2	Constructing soak pits 2500mm dia, 3000mm deep with 450x450mm dry brick honey comb shaft with class 75 bricks, shaft top covered with RCC slab in cement concrete mix 1:2:4, 100mm thk. With reinforcement, portion between honey comb shaft and outer wall, filled with brick bats and brick ballast, covered at the top with 25mm thick stone slabs & earth, SW drain pipes 100mm dia, 1800mm long including excavation and disposal of surplus earth in authorized dumps, complete.	No.	2		
	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				
	300 mm dia	Rmt	90		

3	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, beyond 90 metre & upto 150 metre depth below ground level				
	All types of soil				
	300 mm dia	Rmt	150		
5	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.				
	200 mm nominal size dia	Rmt	150		
6	Supplying, assembling, lowering and fixing in vertical position in bore well unplasticized PVC medium well screen (RMS) pipes with ribs, conforming to IS: 12818, including hire & labour charges, fittings & accessories etc. all complete, for all depths, as per direction of Engineer-in-charge.				
	200 mm nominal size dia	Rmt	150		
	TOTAL PART D				

Signature of the Contractor with Stamp