

HARBOUR DIVISION**NAME OF WORK :- Two Years Maintenance Contract for Non-Residential buildings inside Harbour Area (Civil Work)****SCHEDULE-B (BILL OF QUANTITY)**

Item No.	Description	Total Qty.	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
	PART - A (CIVIL WORK)						
1	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.						
	All kinds of soil	50.00	143.82		cum	Cubic Metre	7,191.00
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.	50.00	177.77		cum	Cubic Metre	8,888.50
3	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	15.00	1512.84		cum	Cubic Metre	22,692.60
4	Surface dressing of the ground including removing vegetation and in- equalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m	200.00	19.71		Sq.m	Square Metre	3,942.00
5	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 50 m outside the periphery of the area cleared.	2500.00	10.15		Sq.m	Square Metre	25,375.00
6	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level						
(a)	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	10.00	5155.61		cum	Cubic Metre	51,556.10
(b)	1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	10.00	4428.24		cum	Cubic Metre	44,282.40
7	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :						

Item No.	Description	Total Qty.	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
(a)	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size).	20.00	5854.94		cum	Cubic Metre	1,17,098.80
8	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement :						
(a)	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size).	10.00	7129.54		cum	Cubic Metre	71,295.40
9	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size).	15.00	7503.51		cum	Cubic Metre	1,12,552.65
10	Centering and shuttering including strutting, propping etc. and removal of form for all heights :						
(a)	Foundations, footings, bases of columns, etc. for mass concrete	150.00	215.57		Sq.m	Square Metre	32,335.50
(b)	Lintels, beams, plinth beams, girders, bressumers and cantilevers	100.00	425.85		Sq.m	Square Metre	42,585.00
(c)	Columns, Pillars, Piers, Abutments, Posts and Struts	100.00	562.98		Sq.m	Square Metre	56,298.00
(d)	Suspended floors, roofs, landings, balconies and access platform	100.00	536.59		Sq.m	Square Metre	53,659.00
(e)	Shelves (Cast in situ)	100.00	536.59		Sq.m	Square Metre	53,659.00
11	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete below plinth level. Thermo-Mechanically Treated bars of grade Fe-500D or more	2000.00	62.76		Kg	Kilogram	1,25,520.00
12	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete below plinth level. Thermo-Mechanically Treated bars of grade Fe-500D or more	2500.00	62.76		Kg	Kilogram	1,56,900.00
13	Providing and fixing up to floor five level precast cement concrete string or lacing courses, copings, bed plates, anchor blocks, plain window sills, shelves, louvers, steps, stair cases, etc., including hoisting and setting in position with cement mortar 1:3 (1 Cement : 3 coarse sand), cost of required Centering complete.						

Item No.	Description	Total Qty.	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20mm nominal size)	5.00	6494.43		Cum	Cubic Metre	32,472.15
14	Providing and fixing up to floor five level precast cement concrete solid block, including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering, shuttering complete : 1:1½:3 (1 Cement: 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size).	10.00	11033.72		Cum	Cubic Metre	1,10,337.20
15	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in: Cement mortar 1:4 (1 cement : 4 coarse sand)	10.00	4817.4		Cum	Cubic Metre	48,174.00
16	Random rubble masonry with hard stone in superstructure above plinth level and upto floor five level, including leveling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) at window sills, ceiling level and the like. Cement mortar 1:6 (1 cement : 6 coarse sand)	10.00	5792.99		Cum	Cubic Metre	57,929.90
17	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete. 40 mm thick with 20 mm nominal size stone aggregate	100.00	381.5		Sqm	Square metre	38,150.00
18	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) : 25 mm thick	50.00	1194.62		Sqm	Square metre	59,731.00
19	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.	50.00	744.42		Sqm	Square metre	37,221.00
20	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. Size of Tile 600x600 mm	100.00	991.66		Sqm	Square metre	99,166.00

Item No.	Description	Total Qty.	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
21	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. Size of Tile 600x600 mm	200.00	1026.55		Sqm	Square metre	2,05,310.00
22	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. Granite of any colour and shade.						
(a)	Area of slab upto 0.50 sqm	80.00	3275.55		Sqm	Square metre	2,62,044.00
(b)	Area of slab over 0.50 sqm	50.00	3097.75		Sqm	Square metre	1,54,887.50
23	Marble work gang saw cut (polished and machine cut) of thickness 18 mm for wall lining (veneer work), backing filled with a grout of average 12 mm thick in cement mortar 1:3 (1 cement : 3 coarse sand), including pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment to match the marble shade (To be secured to the backing by means of cramps, which shall be paid for separately). Raj Nagar Plain white marble/ Udaipur green marble/ Zebra black marble.						
(a)	Area of slab upto 0.50 sqm	20.00	3379.18		Sqm	Square metre	67,583.60
(b)	Area of slab over 0.50 sqm	10.00	3498.67		Sqm	Square metre	34,986.70
24	12 mm cement plaster of mix in coarse sand: 1:4 (1 cement: 4 coarse sand)	1000.00	215.08		Sqm	Square metre	2,15,080.00
25	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster 1:6 (1 cement : 6 fine sand).	500.00	309.93		Sqm	Square metre	1,54,965.00
26	Providing and fixing 16 mm M.S. Fan clamps of standard shape and size in existing R.C.C. slab, including cutting chase, anchoring clamp to reinforcement bar, including cleaning, refilling, making good the chase with matching concrete, plastering and painting the exposed portion of the clamps complete.	10.00	327.88		Each	Each	3,278.80
27	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	1000.00	11.45		Sqm	Square metre	11,450.00

Item No.	Description	Total Qty.	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
28	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	9000.00	14.60		Sqm	Square metre	1,31,400.00
29	White washing with lime to give an even shade : Old work (two or more coats)	1000.00	13.30		Sqm	Square metre	13,300.00
30	Distempering with dry distemper of approved brand and manufacture (two or more coats) of required shade on new work, over and including water thinnable priming coat to give an even shade.	2000.00	113.79		Sqm	Square metre	2,27,580.00
31	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface : Water thinnable cement primer	1000.00	45.12		Sqm	Square metre	45,120.00
32	Finishing walls with Acrylic Smooth exterior paint of required shade : New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm).	2000.00	116.80		Sqm	Square metre	2,33,600.00
33	Painting wood work with Deluxe Multi Surface Paint of required shade. Two or more coat applied @ 0.90 ltr/10 sqm over an under coat of primer applied @0.75 ltr/10 sqm of approved brand and manufacture	150.00	101.43		Sqm	Square metre	15,214.50
34	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @ 0.90 ltr/ 10 sqm over an under coat of primer applied @ 0.80 ltr/ 10 sqm of approved brand and manufacture.	1000.00	98.04		Sqm	Square metre	98,040.00
35	Applying priming coat:						
(a)	With ready mixed pink or Grey primer of approved brand and manufacture on wood work (hard and soft wood)	150.00	43.02		Sqm	Square metre	6,453.00
(b)	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/ steel works	1000.00	38.85		Sqm	Square metre	38,850.00
36	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade : Two or more coats on new work	100.00	92.02		Sqm	Square metre	9,202.00
37	Lettering with black Japan/ Synthetic enamel/ floor enamel/ enamel paint of approved brand and manufacture as directed by engineering incharge.	5000.00	3.54		per letter per cm height	per letter per cm height	17,700.00
38	Distempering with dry distemper of approved brand and manufacture (one or more coats) and of required shade on old work to give an even shade.	4000.00	39.76		Sqm	Square metre	1,59,040.00

Item No.	Description	Total Qty.	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
39	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade : One or more coats on old work	1000.00	63.60		Sqm	Square metre	63,600.00
40	Finishing walls with Acrylic Smooth exterior paint of required shade: Old work (Two or more coat applied @ 1.67 ltr/ 10 sqm) on existing cement paint surface	4000.00	78.12		Sqm	Square metre	3,12,480.00
41	Cleaning of terrace/loft water storage tank (inside surface area) upto 2000 litre capacity at all heights with coconut brushes, duster etc., removal of silt, rubbish from the tank and cleaning the tank with fresh water disinfecting with bleaching powder @ 0.5gm per litre capacity of tank, including marking the date of cleaning on the side of tank body with the help of stencil and paint and disposing of malba, all complete as per direction of Engineer-in-Charge. (The old date already written on tank should be removed with paint remover or black paint and if date is not written with the stencil or old date is not removed deduction will be made @ Rs. 0.10 per litre if during cleaning any GI fittings or ball cock is damaged that is to be repaired by contractor at his own cost and nothing extra will be paid on this account)	180000.00	0.28		litre	litre	50,400.00
42	Repair to plaster of thickness 12mm to 20 mm in patches of area 2.5 sqm and under, including cutting the patch in proper shape, raking out joints and preparing plastering the wall surface with white cement based polymer modified self curing mortar, including disposal of rubbish, all complete as per the direction of Engineer-In Charge.	200.00	378.25		Sqm	Square metre	75,650.00
43	Cleaning of under ground sump, Over Head R.C.C. Tank (independent staging) including disposal of slit and rubbish, all as per direction of Engineer-in-Charge. The cleaning shall consist following operations:-						
	Tank shall be emptied of water by pumping & bottom shall be cleaned of slit and other deposits. (ii) Entire surface area of the sump shall then scrubbed thoroughly with wire brush etc. and pressure washed with water. (iii) Chlorination of RCC internal surface by liquid chlorine. (iv) The treated surface shall be dried using air jetting and all loose particles shall be removal from the surface. (v) Finally the surface shall be treated with ultraviolet radiation etc. as per direction of Engineer-in-Charge.	3825.00	49.91		Sqm	Square metre	1,90,905.75
44	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm 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 580x440 mm with integral type foot rests	10.00	4046.95		Each	Each	40,469.50

Item No.	Description	Total Qty.	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
45	Taking out existing wooden door shutter, repair by cutting, painting etc. and refixing of repaired door shutters to existing door frames, including replacement of hinges with screws, etc. as required, all complete as per the direction of the Engineer-in-charge	20.00	228.17		Each	Each	4,563.40
46	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge						
	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	10.00	1404.97		Cum	Cubic metre	14,049.70
47	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in - charge.	10.00	2049.67		Cum	Cubic metre	20,496.70
48	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. In cement mortar	10.00	1188.92		Cum	Cubic metre	11,889.20
49	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead : Of area 3 sq. metres and below	15.00	211.89		Each	Each	3,178.35
50	Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead : Of area 3 sq. metres and below	15.00	82.81		Each	Each	1,242.15
51	Dismantling steel work manually/ by mechanical means in built up sections without dismembering and stacking within 50 metres lead as per direction of Engineer-in charge	2000.00	2.24		Kg	Klogram	4,480.00
52	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of:						
(a)	G.S Sheet	300.00	95.20		Sqm	Square Metre	28,560.00
(b)	Asbestos Sheet	300.00	44.63		Sqm	Square Metre	13,389.00
53	Dismantling W.C. Pan of all sizes including disposal of dismantled materials i/c malba all complete as per directions of Engineer-in- Charge.	15.00	77.49		Sqm	Square Metre	1,162.35

Item No.	Description	Total Qty.	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
54	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required : W.C. pan with ISI marked white solid plastic seat and lid	5.00	3878.39		Each	Each	19,391.95
55	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P. brass, including painting of fittings and cutting and making good the walls and floors wherever required : Single half stall urinal with 5 litre P.V.C. automatic flushing cistern	5.00	7089.81		Each	Each	35,449.05
56	Providing and fixing one piece construction white vitreous china squatting plate with an integral longitudinal flushing pipe, white P.V.C. automatic flushing cistern, with fittings, standard size G.I. / PVC flush pipe for back and front flush with standard spreader pipes with fittings, G.I. clamps and C.P. brass coupling complete, including painting of fittings and cutting and making good the walls and floors etc. wherever required. Single squatting plate with 5 litre P.V.C. automatic flushing cistern	5.00	5426.82		Each	Each	27,134.10
57	Providing and fixing wash basin with C.I. brackets, 15 mm dia CP Brass single hole basin mixer of approved quality and make, including painting of fittings and brackets, cutting and making good the walls wherever required:- (a) White Vitreous China Wash basin size 550x400 mm with a 15 mm CP Brass single hole basin mixer	10.00	2421.34		Each	Each	24,213.40
58	Providing and fixing 8 mm dia C.P. / S.S. Jet with flexible tube upto 1 metre long with S.S. triangular plate to European type W.C. of quality and make as approved by Engineer - in - charge.	10.00	209.55		Each	Each	2,095.50
59	Providing and fixing solid plastic seat with lid for pedestal type W.C. pan complete : White solid plastic seat with lid.	10.00	410.59		Each	Each	4,105.90
60	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete. Flexible pipe 32 mm Dia.	150.00	73.05		Each	Each	10,957.50
61	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 : Rectangular shape 453x357 mm	10.00	811.27		Each	Each	8,112.70
62	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors : 100 mm inlet and 100 mm outlet. Sand cast iron S&S as per IS: 3989	6.00	1122.87		Each	Each	6,737.22

Item No.	Description	Total Qty.	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
63	Providing and fixing M.S. stays and clamps for sand cast iron/centrifugally cast (spun) iron pipes of diameter : 100 mm	20.00	90.06		Each	Each	1,801.20
64	Providing and fixing PTMT 15 mm Urinal spreader size 95x69x100 mm with 1/2" BSP thread and shapes, weighing not less than 60 gms	100.00	64.93		Each	Each	6,493.00
65	Providing and fixing PTMT urinal cock of approved quality and colour. 15 mm nominal bore, 80 mm long, 42 mm high and 30mm wide with BSP female threads weighing not less than 48 gms	100.00	104.97		Each	Each	10,497.00
66	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)	250 mm dia. R.C.C. pipe	50.00	567.81		metre	metre	28,390.50
(b)	300 mm dia. R.C.C. pipe	100.00	631.44		metre	metre	63,144.00
67	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 40 mm nominal size), inside plastering 12 mm 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 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design : 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) : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	100.00	8180.97		Each	Each	8,18,097.00
68	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.						
(a)	Internal work Exposed on wall						
i	15 mm nominal outer dia Pipes	100.00	179.13		metre	metre	17,913.00
ii	20 mm nominal outer dia Pipes	100.00	227.57		metre	metre	22,757.00
iii	25 mm nominal outer dia Pipes	100.00	285.99		metre	metre	28,599.00
iv	32 mm nominal outer dia Pipes	100.00	350.67		metre	metre	35,067.00
(b)	Concealed work, including cutting chases and making good the walls etc.						
i	15 mm nominal outer dia Pipes	100.00	308.81		metre	metre	30,881.00

Item No.	Description	Total Qty.	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
ii	20 mm nominal outer dia Pipes	100.00	359.63		metre	metre	35,963.00
iii	25 mm nominal outer dia Pipes	100.00	438.24		metre	metre	43,824.00
iv	32 mm nominal outer dia Pipes	100.00	498.93		metre	metre	49,893.00
69	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge. External Work						
i	15 mm nominal outer dia Pipes	100.00	154.95		metre	metre	15,495.00
ii	20 mm nominal outer dia Pipes	100.00	192.68		metre	metre	19,268.00
iii	25 mm nominal outer dia Pipes	100.00	259.46		metre	metre	25,946.00
iv	32 mm nominal outer dia Pipes	100.00	304.54		metre	metre	30,454.00
v	50 mm nominal outer dia Pipes	100.00	568.30		metre	metre	56,830.00
vi	75 mm nominal outer dia Pipes	50.00	1393.28		metre	metre	69,664.00
vii	100 mm nominal outer dia Pipes	50.00	1968.23		metre	metre	98,411.50
70	Providing and fixing brass bib cock of approved quality : 15 mm nominal bore	50.00	212.70		Each	Each	10,635.00
71	Providing and fixing brass Stopcock of approved quality : 15 mm nominal bore	50.00	212.70		Each	Each	10,635.00
72	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :						
(a)	25 mm nominal bore	10.00	372.65		Each	Each	3,726.50
(b)	20 mm nominal bore	10.00	323.23		Each	Each	3,232.30
(c)	32 mm nominal bore	20.00	412.93		Each	Each	8,258.60
72	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :						
(a)	15 mm nominal bore	10.00	244.20		Each	Each	2,442.00
(b)	20 mm nominal bore	10.00	278.22		Each	Each	2,782.20
(c)	25mm nominal bore	20.00	279.41		Each	Each	5,588.20
73	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	8000.00	6.79		Per Litre	Per Litre	54,320.00

Item No.	Description	Total Qty.	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
74	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 : 15 mm nominal Bore	20.00	303.94		Each	Each	6,078.80
75	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931. 15 mm nominal bore	20.00	416.33		Each	Each	8,326.60
76	Providing and fixing PTMT bib cock of approved quality and colour. 15 mm nominal bore, 122mm long, weighing not less than 99 gms	100.00	100.31		Each	Each	10,031.00
77	Providing and fixing PTMT stop cock of approved quality and colour. 15 mm nominal bore, 86 mm long, weighing not less than 88 gms	100.00	72.21		Each	Each	7,221.00
78	Providing and fixing PTMT pillar cock of approved quality and colour. 15 mm nominal bore, 125 mm long foam flow, weighing not less than 120 gms	100.00	135.91		Each	Each	13,591.00
79	Providing high impact Polypropylene reinforced cement 6 mm thick corrugated sheets (as per IS: 14871) roofing up to any pitch and fixing with polymer coated J, or L hooks, bolts and nuts 8 mm dia.G.I. plain and bitumen washers or with self drilling fastener and EPDM washers etc. complete (excluding the cost of purlins, rafters and trusses), including cutting sheets to size and shape wherever require	300.00	323.47		Sqm	Sqm	97,041.00
80	Providing and fixing ridges and hips in fibre cement high impact polypropylene reinforced roofing with suitable fixing accessories or self drilling fastener and EPDM washer etc. complete. Corrugated serrated adjustable ridges	50.00	311.33		metre	metre	15,566.50

Item No.	Description	Total Qty.	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
81	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I.wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills,diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with :						
	Fully Perforated Gypsum Plaster Board of size 1200 x2400x12.5 mm having approx. 15 % perforated area with perforation size and pattern as approved by the Engineer-in-charge and as per manufacturer's specification, with all 4 side tapered and backed by acoustical tissue with NRC value not less than 0.60	100.00	1038.21		Sqm	Sqm	1,03,821.00
82	Providing and laying APP (Atactic Polypropylene Polymer) modified prefabricated five layer, 3 mm thick water proofing membrane, black finished reinforced with glass fibre matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 litre/sqm by the same membrane manufactured of density at 25°C, 0.87 - 0.89 kg/litre and viscocity 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 350/300 N/5 cm. Tear strength in longitudinal and transverse direction as 60/80N. 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	400.00	373.87		Sqm	Sqm	1,49,548.00
83	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)						
(a)	Second class teak wood	0.61	92103.87		cum	cum	56,183.36

Item No.	Description	Total Qty.	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
84	Providing and fixing ISI marked flush door shutters conforming to IS :2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters. 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	100.00	2160.27		sqm	sqm	2,16,027.00
85	Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc. complete						
a	125x64x1.90 mm	50.00	66.85		Each	Each	3,342.50
b	100X58X1.90 mm	50.00	60.31		Each	Each	3,015.50
86	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete :						
a	250x10 mm	50.00	262.05		Each	Each	13,102.50
b	200x10 mm	50.00	210.39		Each	Each	10,519.50
87	Providing and fixing bright finished brass door latch with necessary screws etc. complete : 300x16x5 mm	50.00	191.24		Each	Each	9,562.00
88	Providing and fixing bright finished brass handles with screws etc.complete: 125 mm	50.00	143.57		Each	Each	7,178.50
89	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.	30.00	717.96		Each	Each	21,538.80
90	Providing and fixing chromium plated brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles of approved quality with necessary screws etc. complete.	15.00	572.25		Each	Each	8,583.75
91	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) :						
(a)	For fixed portion. Powder coated aluminium (minimum thickness of powder coating 50 micron)	400.00	326.41		kg	Kilogram	1,30,564.00

Item No.	Description	Total Qty.	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
(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). Powder coated aluminium (minimum thickness of powder coating 50 micron)	200.00	395.36		kg	Kilogram	79,072.00
92	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of Engineer-in-charge.						
(a)	Pre-laminated particle board with decorative lamination on both sides	100.00	665.74		sqm	Suare Metre	66,574.00
93	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):						
(a)	With float glass panes of 5.50 mm thickness	70.00	927.89		sqm	Suare Metre	64,952.30
(b)	With float glass panes of 8 mm thickness	30.00	1047.31		sqm	Suare Metre	31,419.30
94	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.						
(a)	With stainless steel cover plate minimum 1.25 mm thickness	5.00	1714.20		each	each	8,571.00
95	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete	3000.00	78.37		kg	Kilogram	2,35,110.00
96	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.						
(a)	80x1.25 mm M.S. laths with 1.25 mm thick top cover						
		100.00	2106.16		sqm	Square Metre	2,10,616.00

Item No.	Description	Total Qty.	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
(b)	Extra for providing mechanical device chain and crank operation for operating rolling shutters. Exceeding 16.80 sqm in area	100.00	776.09		sqm	Square Metre	77,609.00
97	Providing & fixing 6mm thick multiwall poly carbonate sheet of required shape and shade complete with cost of nuts, bolts, washers, alluminium wind tie etc. filling of gap of sheets at joint of sheets with silicon. The work also comprises of fixing of alluminium jingles at bothsides of sheets as directed by Engineer-In-Charge.	300.00	697.00		Sqm	Square Metre	2,09,100.00
98	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.	300.00	665.70		sqm	Square Metre	1,99,710.00
99	Providing and laying full body Vitrified tiles in floors, Skirting, riser, dedo with different sizes (minimum thickness of 10mm), with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer,in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6 mm thickness, including grouting of joints of 3 mm width using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg),with epoxy grout material, upto floor four level complete as per direction of Engineer-in-charge.	150.00	915.00		Sqm	Square Metre	1,37,250.00
100	Providing, laying & jointing uPVC pipes of required working pressure as per I.S.I. including cutting and jointing the pipe ends as per manufacturer's instructions including the cost of all the specials plain & brass threaded fittings wherever required and, excavation and refilling of the trenches or fixing on walls or similar structures with clamps and testing the joints etc., complete as directed.						
(a)	15 mm dia.	20.00	150.00		Rmt	Running Metre	3,000.00
(b)	20 mm dia.	20.00	170.00		Rmt	Running Metre	3,400.00
(c)	25mm dia.	20.00	185.00		Rmt	Running Metre	3,700.00
(d)	32mm dia.	20.00	210.00		Rmt	Running Metre	4,200.00

Item No.	Description	Total Qty.	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
101	Providing & fixing UV stabilised fiberglass reinforced plastic sheet roofing up to any pitch, including fixing with polymer coated 'J' or 'L' hooks, bolts & nuts 8mm dia. G.I plain/bitumen washers complete but excluding the cost of purlins, rafters, trusses etc. The sheets shall be manufactured out of 2400 TEX panel roovigs incorporating minimum 0.3% ultra-violet stabiliser in resin system under approximately 2400 psi and hot cured. They shall be of uniform pigmentation and thickness without air pockets and shall conform to IS 10192 and IS 12866. The sheets shall be opaque or translucent, clear or pigmented, textured or smooth as specified. 2 mm thick flat	250.00	733.95		sqm	Square Metre	1,83,487.50
102	Repairing , Rewinding, Servicing of monoblock/ submercible water pumps various capacity including removing and Refixing and replacement of all the required spare parts i.e. mortar winding, capaciter, bearing etc. complete as directed by Engineer-In-Charge.						
(a)	0.5 HP to 1 HP Capacity	10.00	3,300.00		Each	Each	33,000.00
(b)	2 to 3 HP Capacity	10.00	4,500.00		Each	Each	45,000.00
103	Supplying & fixing of monoblock motor pump of diefferet capacity of approved quality with necessary fittings, making electrical connections, testing etc. complete as directed by the Engineer In-charge						-
(a)	0.5 HP Capacity	4.00	6,000.00		Each	Each	24,000.00
(b)	1 HP Capacity	6.00	10,000.00		Each	Each	60,000.00
(c)	2 HP Capacity	3.00	13,000.00		Each	Each	39,000.00
(d)	3 HP Capacity	3.00	18,000.00		Each	Each	54,000.00
104	Providing & fixing SWR PVC (I.S.I - IS 13592) waste or vent pipe including necessary specials such as Tees, Bends, Y's Plinth offsets, Shoes , Vent cowl etc. with bracket , screws on wooden plugs fixed on wall face including filling joints with solution & cement mortar 1:2 complete as directed.						
(a)	75 mm dia. (Outer Dia)	50.00	220.00		Rmt	Running Metre	11,000.00
(b)	110 mm dia. (OD)	50.00	250.00		Rmt	Running Metre	12,500.00
105	Supplying & fixing the following fixtures of Stainless Steel of approved quality to the doors, windows, ventilators etc. complete as directed by Engineer-in-Charge.						
(a)	Handle 100 mm size.	20.00	250.00		Each	Each	5,000.00
(b)	Aldrop 300 x 16 mm size	10.00	650.00		Each	Each	6,500.00
(c)	Mortice Lock (handle)	10.00	1,100.00		Each	Each	11,000.00
106	Operating of various capacity water pumps for pumping of fresh water from under ground water tanks to overhead water tanks at various location of office buildings including operating of valves by Deputing Operator or manpower with necessary Tranportation Vehicle and communication means etc as directed by Engineer-In-Charge	4020.00	160.00		Location Per Days	Location Per Days	6,43,200.00

Item No.	Description	Total Qty.	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
107	Deployment of Tractor with tractor trolley including labours for removing of solid waste// Garbage/Debrish material and disposing the same outside of cargo jetty area. The rates are including tractor trolley and labours, loading, unloading & lead upto 3 Km out side cargo jeetty area.	300.00	670.00		Trip	Trip	2,01,000.00
						Total	97,13,632.13
						saY	97,13,632.00
	I/ We am/are willing to carry out this work at _____% below The tendered rates mentioned above amount of my/our tender are put as under:-	I/ We am/are willing to carry out this work at _____% above The tendered rates mentioned above amount of my/our tender are put as under:-					
		(percentage should be written in figure and words)					
	Estimated amount put to tender Rs. _____	Estimated amount put to tender Rs. _____					
	Deduct _____% below(-) Rs. _____	Add _____% above(+) Rs. _____					
	Net Rs. _____	Total Rs. _____					
	In words (Rupees _____	In words (Rupees _____					
	_____)	_____)					

Item No.	Description	Total Qty.	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
	PART 'B' - CREDIT ITEM						
1	Taking away the steel scrap material by contractor from site. Rates are including loading, unloading and all taxes and profit.	2000.00	35.00		Kg	One Kilogram	70,000.00
				TOTAL OF PART 'B'			70,000.00
I/ We am/are willing to carry out this work at _____% below The tendered rates mentioned above amount of my/our tender are put as under:-				I/ We am/are willing to carry out this work at _____% above The tendered rates mentioned above amount of my/our tender are put as under:-			
				(percentage should be written in figure and words)			
Estimated amount put to tender Rs. _____				Estimated amount put to tender Rs. _____			
Deduct _____% below(-) Rs. _____				Add _____% above(+) Rs. _____			
Net Rs. _____				Total Rs. _____			
In words (Rupees _____				In words (Rupees _____			
_____)				_____)			