

BHARAT HEAVY ELECTRICALS LIMITED
Hyderabad - 502 032

SCHEDULE - A

NAME OF WORK:

Rate contract for carrying out Routine Annual Civil Maintenance works like Masonry, Flooring, Plumbing, Fabrication, Carpentry, Painting, Road works and Horticulture works, etc., in Township.

I / We _____ have read the condition of tender attached hereto and agree to abide by such conditions. I/We offer to execute the works in **HY/TA/OT-03/2015-16 Date: 13.07.2016** for **a period of 24 months** at the percentage below / at par / above the rates contained in Schedule of Rates quoted in the schedule appended below:

I / We further agree to sign an Agreement Bond to abide by the General Conditions of Contract and to carry out all works according to the specifications for materials and works of Bharat Heavy Electricals Limited, RC Puram, Hyderabad-502 032. In case of acceptance of the tender by the BHEL, I/We bind myself/ourselves to execute the contract documents within 7 days after notice that my/our tender has been accepted and this contract has been awarded to me/us and thus failing which I/We shall have no objection to the forfeiture of the Earnest Money amount to **Rs.2.00 lakhs** lodged with Bharat Heavy Electricals Limited, RC Puram, Hyderabad-502 032.

I / We further agree to include all tools & plants and consumables required for the work in my /our scope, we have quoted our percentage as below:

Sl. No.	Appx. Value of Work in Lakhs	Below (- %) / At par (0%) / Above (+ %) of the rates provided in BHEL Schedules of Rates enclosed in NIT	
		In figures	In words
1	Rs.700 Lakhs (Rs.350 Lakhs per year)		

Contractors Address:

Contractor

Executing Officer

BHARAT HEAVY ELECTRICALS LIMITED							
RAMACHANDRAPURAM UNIT, HYDERABAD							
						Tender Notice No:HY/TA/OT-03/2016-17	
						Dated: 13.07.2016	
Schedule of Rates							
Name of the work:Rate contract for carrying out Routine Annual Civil Maintenance works like Masonry, Flooring, Plumbing, Fabrication, Carpentry, Painting, Road works and Horticulture works.etc. in Township.							
BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
EARTH WORK							
1	2.6	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 disposal of excavated earth lead upto 50m and lift upto 1.5m, disposal earth to be levelled and neatly dressed.					
1.1	2.6.1	All kinds of soil	40	cum	129.35	5174.00	
2	2.7	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 disposal of excavated earth lead upto 50m and lift upto 1.5m, disposal earth to be levelled and neatly dressed.					
2.1	2.7.1	Ordinary rock	39	cum	197.75	7712.25	
2.2	2.7.3	Hard rock (blasting prohibited)	40	cum	490.10	19604.00	
3	2.25	Filling available excavated earth (excluding rock) in trenches, plinth sides of founding each deposited layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering, lead upto 50m and lift up to 1.5..	39	cum	83.80	3268.20	
4	2.28	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15cm deep and disposal of rubbish lead upto 50m and lift upto 1.5m					
4.1	2.28.1	All kinds of soil	40	100 sqm	935.25	37410.00	
5	2.31	Clearing jungle including uprooting of rank vegetation, brush wood trees and sapling of girth upto 30 cm measured at a height of 1m above ground level and removal of rubbish upto a distance of 50m outside the periphery of these area cleared.	77	One Sqm	4.82	371.14	
6	2.32	Clearing grass and removal of the rubbish up to a distance of 50m outside the periphery of the area cleared.	180	100 sqm	247.00	44460.00	
7	2.33	Felling trees of the girth (measured at a height of 1m above ground level) including cutting of trunks and branches removing the roots and stacking of serviceable material and disposal of unserviceable material.					
7.1	2.33.1	Beyond 30cm girth upto and including 60cm girth	40	each	148.20	5928.00	
7.2	2.33.2	Beyond 60cm girth upto and including 120cm girth	40	each	654.95	26198.00	
7.3	2.33.3	Beyond 120cm girth upto and including 240cm girth	40	each	3026.30	121052.00	
7.4	2.33.4	Above 240cm girth	35	each	6071.30	212495.50	
8	BHEL Approved Rate	Earth work excavation in slushy soils including removing the sewage water and scum from the pit of broken sewer lines, man holes, chambers etc., to enable building new ones (sewage gangman are to be engaged if necessary) etc., complete all as directed by Engineer-in-charge.(while excavating care should be taken about cables and shall intimate to Electrical Department/ Telephones Department to take care of the cables).	44	One Cum	213.88	9410.63	
9	BHEL Approved Rate	Providing lawn turfing with carpet grass of approved variety and levelling the surfaces after turfing including watering the area for 30 days etc complete as directed by Engg In charge.	75	Sqm	158.40	11880.00	Back up
10	BHEL Approved Rate	Supply of Cattle manure of good quality as directed by Engineer in charge etc.	40	Cum	320.00	12800.00	
CEMENT MORTAR WORKS							
11	3.1	Cement mortar 1:1(1 cement 1 fine sand)	40	cum	37.85	1514.00	Cement free issue.
12	3.2	Cement mortar 1:2(1 cement 2 fine sand)	40	cum	458.75	18350.00	Cement free issue.
13	3.3	Cement mortar 1:3(1 cement 3 fine sand)	40	cum	670.13	26805.00	Cement free issue.
14	3.4	Cement mortar 1:4(1 cement 4 fine sand)	40	cum	764.95	30598.00	Cement free issue.
15	3.5	Cement mortar 1:5(1 cement 5 fine sand)	40	cum	816.03	32641.00	Cement free issue.
16	3.6	Cement mortar 1:6(1 cement 6 fine sand)	40	cum	859.83	34393.00	Cement free issue.
17	3.7	Cement mortar 1.2 (1 cement 2 coarse sand)	40	cum	914.75	36590.00	Cement free issue.
18	3.8	Cement mortar 1.3 (1 cement 3 coarse sand)	40	cum	1183.73	47349.00	Cement free issue.
19	3.9	Cement mortar 1.4 (1 cement 4 coarse sand)	40	cum	1278.55	51142.00	Cement free issue.
20	3.1	Cement mortar 1:5 (1 cement 5 coarse sand)	40	cum	1329.63	53185.00	Cement free issue.
21	3.11	Cement mortar 1.6 (1 cement 6 coarse sand)	40	cum	1373.43	54937.00	Cement free issue.
22	3.12	Cement mortar 1:2(1 cement 2 stone dust)	40	cum	729.50	29180.00	Cement free issue.
23	3.13	Cement mortar 1:2(1 cement 2 marble dust)	40	cum	800.75	32030.00	Cement free issue.
24	3.14	Cement mortar 1:5(1 cement 5marble dust)	40	cum	1201.23	48049.00	Cement free issue.
CEMENT CONCRETE WORKS							
25	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering. All work upto plinth level					
25.1	4.1.2	1:1 1/2:3(1 cement 1 1/2 coarse sand :3 graded stone aggregate 20mm nominal size)	75	cum	2581.95	193646.25	Cement free issue.
25.2	4.1.3	1:2:4 (1cement 2:coars sand 4 grade stone aggregate 20mm nominal size)	75	cum	2655.65	199173.75	Cement free issue.
25.3	4.1.4	1:2:4 (1cement 2:coars sand 4 grade stone aggregate 40mm nominal size)	75	cum	2545.65	190923.75	Cement free issue.
25.4	4.1.5	1:3:6 (1cement 3:coars sand 6 grade stone aggregate 20mm nominal size)	75	cum	2746.35	205976.25	Cement free issue.
25.5	4.1.8	1:4:8 (1cement 4:coars sand 8 grade stone aggregate 40mm nominal size)	75	cum	2606.03	195451.88	Cement free issue.
25.6	4.1.9	1:4:8 (1 cement : 4 fine sand : 8 graded stone aggregate 40 mm nominal size)	20	cum	2343.98	46879.50	Cement free issue.
25.7	4.1.10	1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	20	cum	2602.43	52048.50	Cement free issue.
26	4.2	Providing and laying cement concrete in retaining walls return 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 etc. upto floor five level excluding the cost of centering shuttering and finishing :					

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26.1	4.2.2	1:1½:3 (1 cement:1½ coarse sand:3 graded stone aggregate 20 mm nominal size)	20	cum	3340.30	66806.00	Cement free issue.
27	4.3	Centering and shuttering including strutting, propping etc. and removal of form work for :					
27.1	4.3.1	Foundations, footings, bases for columns	10	sqm	166.90	1669.00	
28	4.6	Providing and fixing at or near ground level precast cement concrete in kerbs, edgings etc. as per approved pattern and setting in position with cement mortar 1:3 (1 cement 3 coarse sand) including the cost of required centering shuttering and finishing smooth with 6 mm thick cement plaster 1:3 (1 cement :3 fine sand) on exposed surfaces complete.					
28.1	4.6.1	1:2:4(1cement :2 coarse sand :4 graded stone aggregate 20mm nominal size)	70	cum	2825.36	197775.38	Cement free issue.
REINFORCED CEMENT CONCRETE WORKS							
29	5.1	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					cement/Steel free issue
29.1	5.1.2	1:1.5:3(1cement 1.5 coarse sand 3 grade stone aggregate 20mm nominal size)	55	cum	2771.85	152451.75	
29.2	5.1.3	1:2:4(1cement 2 coarse sand 4 grade stone aggregate 20mm nominal size)	55	cum	2845.50	156502.50	
30	5.2	Reinforced cement concrete work in walls (any thickness) including attached pilasters buttresses plinth and string course fillets columns pillars piers abutments posts and struts etc. up to floor five level excluding cost of centering shuttering finishing and reinforcement					cement/Steel free issue
30.1	5.2.2	1:1.5:3(1cement 1.5 coarse sand 3 grade stone aggregate 20mm nominal size)	55	cum	3412.75	187701.25	
30.2	5.2.3	1:2:4(1cement 2 coarse sand 4 grade stone aggregate 20mm nominal size)	20	cum	3486.40	69728.00	
31	5.3	Reinforced cement concrete work in beams, suspended floors, roofs having slope upto 15° landings, balconies, shelves, chajjas, intels, bands, plain window sills, staircases and spiral strair cases upto floor five level excluding the cost of centering shuttering finishing and reinforcement with 1:2:4(1cement 2 coarse sand 4 grade stone aggregate 20mm nominal size)	55	cum	3636.15	199988.25	cement/Steel free issue
32	5.9	Centering and shuttering including strutting propping etc. and removal of form work for :					
32.1	5.9.1	Foundations , Footings, bases for columns	40	sqm	166.90	6676.00	
32.2	5.9.2	walls (any thickness) including attached pilasters, butteresses plinth and string courses etc.	40	sqm	285.15	11406.00	
32.3	5.9.3	Suspended floors roofs, landing balconies and access platform	40	sqm	311.20	12448.00	
32.4	5.9.4	Shelves (cast in situ)	40	sqm	311.20	12448.00	
32.5	5.9.5	Lintels, beams, plinth beams, girders, bressumens and cantilevers.	40	sqm	262.25	10490.00	
32.6	5.9.6	Columns piers, abutments, pillars, posts and struts.	40	sqm	365.60	14624.00	
32.7	5.9.7	Stairs, (excluding landing) except spiral staircases	40	sqm	326.30	13052.00	
32.8	5.9.15	Small lintels not exceeding 1.5m clear span, moulding as in cornices, window sills, string courses, bands, coping bed plates, anchor blocks and the like	20	sqm	166.90	3338.00	
33	5.18	Providing precast cement concrete jali 1:2:4(1cement 2 coarse sand 4 graded stone aggregate 6mm nominal size) reinforced with 1.6mm dia mild steel wire including					
33.1	5.18.1	50mm thick	55	sqm	588.63	32374.41	
33.2	5.18.2	40mm thick	55	sqm	514.28	28285.16	
33.2	5.18.3	25mm thick	55	sqm	473.63	26049.41	
ENCASING ROLLED STEEL SECTION							
34	5.19	Encasing rolled steel section, in beams and columns with cement concrete 1:2:4(1cement 2 coarse sand 4 graded stone aggregate 12.5mm nominal size) including centering and shuttering complete but excluding cost of reinforcement.	28	cum	5403.65	151302.20	Cement / Steel will be issued free of cost
35	5.22	Reinforcement for RCC work including straightening, cutting bending placing in position and binding all complete.					cement/Steel free issue
35.1	5.22.3	Cold twisted bars	140	kg	7.37	1031.68	
35.2	5.22.4	Hot rolled deformed bars	200	kg	7.37	1473.83	
36	5.26	Providing and filling in position blown bitumen in expansion joints.	54	per cm depth per cm width per 100m	522.65	28223.10	
37.1	5.33.2	Providing and laying in position machine batched machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete work 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 with out impairing strength and durability as per direction of Engineer -in Charge. M-25 grade reinforced cement concrete by using 410kg of cement per cum of concrete. all work up to floor V level with readymix concrete.	30	cum	5781.50	173445.00	
38	5.34	Add or deduct for providing richer or leaner mixes respectively at all floor levels.					
38.1	5.34.1	Providing M-30 grade concrete by using 420kg of cement per cum of concrete instead of M-25 grade B.M.C/ R.M.C	55	cum	63.20	3476.00	
38.2	5.34.2	Providing M-35 grade concrete by using 428kg of cement per cum of concrete instead of M-25 grade B.M.C/R.M.C.	55	cum	126.45	6954.75	
38.3	5.34.3	Providing M-40 grade concrete by using 435kg of cement per cum of concrete instead of M-40 grade B.M.C/R.M.C.	55	cum	186.90	10279.50	
BRICK MASONRY							
39	6.1	Brick work with FPS bricks of class designation 75 in foundation and plinth in:					Cement free issue.
39.1	6.1.1	cement mortar 1:4(1cement :4 coarse sand)	20	cum	2956.54	59130.75	
39.2	6.1.2	cement mortar 1:6(1cement :6 coarse sand)	20	cum	2953.58	59071.63	
40	6.4	Brick work FPS brick of class designation 75 in superstructure above plinth level up to floor V level in all shapes and sizes in					Cement free issue.
40.1	6.4.1	cement mortar 1:4(1cement :4 coarse sand)	55	cum	3516.14	193387.56	
40.2	6.4.2	cement mortar 1:6(1cement :6 coarse sand)	55	cum	3513.18	193224.97	

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
41	6.13	Half brick masonry with FPS brick of class designation 75 in superstructure above plinth level upto floor V level.					Cement free issue.
41.1	6.13.1	cement mortar 1:3(1cement :3 coarse sand)	55	sqm	415.42	22848.04	
41.2	6.13.2	cement mortar 1:4(1cement :4 coarse sand)	55	sqm	415.06	22828.20	
STONE MASONRY							
42	7.7	Coursed rubble masonry (second sort) with hard stone in foundation and plinth with					Cement free issue.
42.1	7.7.1	cement mortar 1:6(1cement 6 coarses sand)	55	cum	2819.69	155082.81	
43	7.37	Stone work (machine cut edges Veneer work) for wall lining upto 10 m height, backing filled with a grout of 12 mm thick cement mortar 1:3 (1 Cement : 3 coarse sand) and jointed with Cement mortar 1:2 (1 cement : 2 stone dust), including rubbing and polishing complete. (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately).					cement free issue
43.1	7.37.1	Kota stone slabs exposed face dressed and rubbed.					
43.2	7.37.1.1	25 mm thick	20	sqm	1097.68	21953.63	
44	7.38	Stone tile work for wall lining upto 10 m height with special adhesive over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand), including pointing in white cement with an admixture of pigment to match					cement free issue
44.1	7.38.1	8mm thick (mirror polished and machine cut edge)					
44.2	7.38.1.1	Granite stone of any colour and shade	20	sqm	1405.72	28114.39	
WOOD/ PVC WORKS							
45	9.1	Providing wood work in frames of doors windows, clerestory windows and other frames, wrought framed and fixed in position					
45.1	9.1.1	Second class teak wood	40	cum	85813.30	3432532.00	
46	9.5	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows including ISI maked black enamelled M.S butt hinges with necessary screws excluding panelling which will be paid for separately.					
46.1	9.5.1	Second class teak wood					
46.2	9.5.1.1	35mm thick shutters	34	sqm	2434.05	82757.70	
46.3	9.5.1.2	30mm thick shutters	34	sqm	2162.65	73530.10	
47	9.6	Providing and fixing 35mm thick factory made laminated veneer lumber door shutter conforming to IS 14616 and TDS 15:2001(part B) including ISI marked black enameled M.S butt hinges with necessary screws as per directions of engineer in charge and panelling with panels of					
47.1	9.6.1	12mm thick plain grade-1, medium density flat pressed three layer particle board FPT-1 or grade wood particle board FPT-1 IS :3087 marked bonded with BWP type synthetic resin adhesive as per IS :848	34	sqm	2300.75	78225.50	
47.2	9.6.2	12mm thick pre laminated particle board (decorative lamination on both sides) grade- 1, medium density flat pressed three layer particle board FPT-1 or graded wood particle board FPT-1, conforming to IS 3087 bonded with BWP type synthetic resin adhesive as per IS 848 and prelaminated conforming to IS 12823 grade 1, type -II marked	34	sqm	2475.00	84150.00	
48	9.7	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured) panelling for panelled or panelled and glazed shutters 25mm to 40mm thick					
48.1	9.7.1	Second class teak wood	34	sqm	1950.35	66311.90	
49	9.9	Providing and fixing glazed shutters for doors windows and clerestory windows using 4mm thick float glass panes including black enamelled ISI marked MS butt hinges with necessary screws.					
49.1	9.9.1	Second class teak wood					
49.2	9.9.1.2	30mm thick	34	sqm	2645.70	89953.80	
50	9.16	Providing and fixing 25mm thick shutters for cup board etc.					
50.1	9.16.1	Panelled or Panelled and glazed shutters					
50.2	9.16.1.1	Second class teak wood including ISI marked anodised aluminium butt hinges with necessary screws	34	sqm	2440.25	82968.50	
50.3	9.16.2	Glazed shutters					
50.4	9.16.2.1	Second class teak wood including ISI marked anodised aluminium butt hinges with necessary screws	34	sqm	2463.25	83750.50	
51	9.18	Providing and fixing pre-laminated flat pressed 3 layer (medium density) particle board or grded wood particle board IS 3087 marked with one side decorative and other side balancing lamination grade I, type II exterior grade IS 12823 marked in shelves with screws and fitting wherever required edges to be painted with polyurethane prime fitting to be separately)					
51.1	9.18.1	18mm thick	34	sqm	1099.80	37393.20	
51.2	9.18.1.2	25mm thick	34	sqm	1187.80	40385.20	
52	9.2	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 band and face veneers on both faces of shutters					
52.1	9.20.2	30mm thick including ISI marked stainless steel butt hinges with necessary screws	34	sqm	1984.80	67483.20	
52.2	9.20.3	25mm thick (for cupboard) including ISI marked nickel plated bright finished MS piano hinges IS 3818 marked with necessary screws	34	sqm	1789.45	60841.30	
52.3	9.34.4	Providing and fixing 2nd class teak wood plain lining tongued and grooved on and including wooden plugs complete with necessary screws and priming coat on unexposed surface - 12 mm thick	34	sqm	1506.70	51227.80	
53	BHEL Approved Rate	Supply, fabrication and fixing of Ornamental M.S. grills for staircase door frames with shutters of approved quality and design including fixing of MS hold fasts in Cement concrete, cost of all materials etc., complete as directed by the Engineer-in-charge.	10	kg	68.00	680.00	
54	9.48	Providing and fixing MS grills of required pattern in frames of windows etc. with MS flats, square or round bars etc. all complete					
54.1	9.48.1	Fixed to steel windows by welding	34	kg	90.75	3085.50	
54.2	9.48.2	Fixed to opening / wooden frames with rawl plugs screws etc	34	kg	98.20	3338.80	
55	9.55	Providing and fixing ISI marked MS pressed butt hinges bright finished with necessary screws etc. complete					
55.1	9.55.1	125x65x2.12mm	34	each	28.15	957.10	
55.2	9.55.2	100x58x1.90mm	34	each	21.45	729.30	
55.3	9.55.3	75x47x3.10	34	each	17.10	581.40	
55.4	9.55.4	50x37x1.50mm	34	each	9.10	309.40	
56	9.56	Providing and fixing IS 1341 marked MS heavy weight butt hinges with necessary screws etc. complete					
56.1	9.56.1	125x90x4.00mm	34	each	50.25	1708.50	
56.2	9.56.2	100x75x3.50mm	34	each	30.70	1043.80	
56.3	9.56.3	75x60x3.10mm	34	each	19.75	671.50	
56.4	9.56.4	50x40x2.50mm	34	each	12.00	408.00	

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
57	9.117	Providing and fixing factory made UPVC door frame made of UPVC extruded section having an overall dimensions as below (tolerance ± 1 mm) with wall thickness 2.0mm \pm 0.2mm, corners of the door frame to be mitred and welded of pastic, galvanized brackets and stainless steel screws . the hinges side vertical of the frames reinforced by galvanized stainless steel hinges fixed to the frame complete as per manufactures specification and direction of engineer in charge					
57.1	9.117.1	Extruded section profile size 48x40mm	34	mtr	185.15	6295.10	
57.2	9.117.2	Extruded Section Profile size 42x50mm	34	mtr	177.05	6019.70	
58	9.118	Providing and fixing to existing door frames					
58.1	9.118.1	24mm thick factory made PVC door shutters made of styles and rails of a UPVC hollow section of size 59x24mm and wall thickness 2mm \pm 0.2mm with inbuilt edging on both sides. The styles and rails mitred and joined at the corners by means of MS galvanized / plastic brackets of size 75x220 mm having wall thicknell 1.0mm and stainless steel screws. the styles of the shutter reinforced by inserting galvanized MS tube of size 20x20mm and 1mm \pm 0.1mm wall thickness. the lock rail made up of H section a UPVC hollow section of size 100x24 mm and 2 mm \pm 0.2mm wall thickness fixed to the shutter styles by means of plastic/ galvanized MS.U cleats. the shutter frame filled with a UPVC multi chambered single panel of size not less than 620 mm having over all thickness of 20mm and 1mm \pm 0.1mm wall thickness. the panels filled vertically and tie bar at two places by inserting horizontally 6mm galvanized MS rod and fastened with nuts and washers, complete as per manufacture's specification and washers complete as per manufacture's specification and direction of engineer in charge. (for W.C and bathroom door shutter)	34	sqm	2471.10	84017.40	
58.2	9.118.2	30mm thick factory made polyvinyl chloride (PVC) door shutter made of styles and rails of a UPVC hollow section of size 60x30mm and wall thickness 2mm \pm 0.2mm with inbuilt decorative moulding edging on one side. The styles and rails mitred and joined at the corners by means of MS galvanized/ plastic brackets of size 75x220mm having wall thickness 1.0mm and stainless steel screws. the styles of the shutter reinforced by inserting galvanized MS tube of size 25x20mm and 1mm \pm 0.1mm wall thickness.the lock rail made up of H section a UPVC hollow section of size 100x30mm and 2mm \pm 0.2mm wall thickness fixed to the shutter styles by means of plastic galvanized MS U cleats. the shutter styles by means of plastic / galvanized MS U cleats. the shutter frame filled with a UPVC multi chambered single panel of size not less than 620mm having over all thickness of 20mm and 1mm \pm 0.1mm wall thickness. the panels filled vertically and tie bar at two places by inserting horizontally 6mm galvanized MS rod and fastened with nuts and washers, complete as per manufacture's specification and drection of engineer in charge	34	sqm	2587.25	87966.50	
58.3	9.118.3	25mm thick PVC flush door shutters made out of a one piece multi chamber extruded PVC section of the size of 762 mm x 25mm or less as per requirment with an average wall thickness of 1mm \pm 0.3mm. PVC foam end cap of size 23x10mm are provided on both vertical edges to ensure the overall thickness of 25mm. an MS tube having dimensions 19mmx19mm is inserted along the hinges side of the door. core of the door shutter shuold be filled with high density polyrenthane foam. the top and bottom edges of the shutter are covered with an end cap of the size 25mm x 11mm. door shutter shall be reinforced with special polymeric reinforcements as per manufacture specification and direction of Engineer in charges to take up necessary hardware and fixtures. stickers indicating the locations of hardware will be pasted at appropriate places	34	sqm	2500.15	85005.10	
59	9.119	Providing and fixing factory made P.V.C. door frame of size 50x47mmwith a wall thickness of 5mm, made out of extruded 5mm rigid PVC foamsheet mitred at corners and joined with 2 Nos. of 150mm long brackets of 15x15mm M.S. square tube, the vertical door profiles to be reinforced with 19x19mm M.S. square tube of 19 gauge, EPDM rubber gasket weatherseal to be provided through out the frame. The door frame to be fixed tothe wall using M.S. screws of 65/100mm size complete as permanufacturers specification and direction of Engineer-in-Charge.	100	mtr	404.60	40460.00	
60	9.12	Providing and fixing factory made panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19 mm x 19 mm for styles and 15x15 mm for top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture . M.S. frame covered with 5 mm thick heat moulded PVC 'C' channel of size 30 mm thickness, 70 mm width out of which 50 mm shall be flat and 20 mm shall be tapered in 45 degree angle on both side forming styles and 5 mm thick, 95 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered on both sides to form lock rail. Top, bottom and lock rails shall be provided both side of the panel. 10 mm (5 mm x 2) thick, 20 mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail, paneling of 5 mm thick both side PVC sheet to be fitted in the M.S. frame welded/ sealed to the styles & rails with 7 mm (5 mm+2 mm) thick x 15 mm wide PVC sheet beading on inner side, and joined together with solvent cement adhesive. An additional 5 mm thick PVC strip of 20 mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive etc. complete as per direction of Engineer-in-charge, manufacturer's specification & drawing					
60.1	9.120.1	30 mm thick plain PVC door shutters	34	sqm	2499.20	84972.80	
60.2	9.120.2	30 mm thick pre laminated PVC door shutters	34	sqm	2958.00	100572.00	
61	BHEL Approved Rate	Supplying and fixing of medium Indian teakwood window shutters 30 mm thick fully glazed with 3 mm thick glass of approved quality including cost and fixing of MS fixtures, fittings and furniture of superior quality etc., complete as directed by the Engineer-in-charge.	34	One Sqm	2587.20	87964.80	
62	BHEL Approved Rate	Supplying and fixing of medium Indian teak wood window shutters 30 mm thick fully panelled including fixing of M.S. fixtures, fittings and furniture of superior quality etc., complete as directed by the Engineer-in-charge.	34	One Sqm	2476.60	84204.40	
63	BHEL Approved Rate	Supplying and fixing of medium Indian teak wood window shutters 30 mm thick partly panelled and partly glazed with 3 mm thick glass of approved quality including cost and fixing of MS fixtures, fittings and furniture of superior quality etc., complete as directed by the Engineer-in-charge.	34	One Sqm	2279.20	77492.80	
64	BHEL Approved Rate	Supply and fixing well seasoned medium Indian teak wood window / ventilator frames made out of scantling of size 75x75 mm including fixing of M.S hold fasts 16 mm dia MS rounds spaced at not more than 10.5cm centre to centre, cost of all materials etc., complete as directed by the Engineer-in-charge. (This includes dismantling the existing frames, brick work, P.C.C etc., and making good to a neat finish etc., complete wherever necessary).	34	One Sqm	2310.00	78540.00	

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
65	BHEL Approved Rate	Supply and fixing well seasoned medium Indian teak wood ventilator shutter 30 mm thick fully glazed top/side hung type, glazing with 3mm thick glass of approved quality.	34	One Sqm	2310.00	78540.00	
66	BHEL Approved Rate	Supplying and fixing weldmesh door partly panelled and partly weldmesh double leaf shutters 30 mm thick using medium Indian teakwood and weldmesh of size 75x25 mm, 10x8 gauge including supplying and fixing of M.S. fixtures, fittings and furniture of superior quality etc., complete as directed by the Engineer-in-charge.	34	One Sqm	2279.20	77492.80	
67	BHEL Approved Rate	Supply and fixing weldmesh door double leaf shutter 30 mm thick using best Indian teakwood and weldmesh of size 75 x 25mm, 10 x 8 gauge including supplying and fixing of MS fixtures, fittings and furniture of superior quality etc., complete as directed by Engineer-in-charge.	34	One Sqm	2048.20	69638.80	
68	BHEL Approved Rate	Supplying and fixing of weldmesh of size 75x25mm, 10x8 gauge with 75 x 25 mm seasoned medium Indian teakwood reapers to the existing windows including 2 coats of painting with synthetic enamel paint of approved shade and brand over a coat of primer, making holes wherever necessary for operating the fixtures, furniture, cost of all materials etc., complete.	34	One Sqm	1050.00	35700.00	
69	BHEL Approved Rate	Supplying and fixing of M.S flymesh of an approved quality to the existing door and window shutters with necessary wooden beeding wherever necessary, including removing the existing flymesh, cost of all materials etc., complete.	34	One Sqm	518.00	17612.00	
70	BHEL Approved Rate	Supplying and fixing of medium Indian teak wood door shutters 30 mm thick partly panelled and partly flymesh of approved quality including cost and fixing of M.S. fixtures, fittings and furniture of superior quality etc., complete.	50	One Sqm	2655.80	132790.00	
71	BHEL Approved Rate	Supplying and fixing of medium Indian teak wood door shutters 30 mm thick with fully flymesh of approved quality including cost and fixing of M.S. fixtures, fittings and furniture of superior quality etc., complete.	50	One Sqm	2293.20	114660.00	
72	BHEL Approved Rate	Supplying and fixing of best approved quality aluminium sheeting 24 gauge to the faces and edge of door shutters including fixing with best quality GI screws and cup washers, cost of all materials etc., complete as directed by the Engineer-in-charge. (The measurement shall be made for both sides of door only).	50	One Sqm	305.20	15260.00	
73	BHEL Approved Rate	Supplying of medium Indian teak wood planks of 19 mm thick in various sizes as directed upto a length of 2.40 M.	50	One Sqm	1919.40	95970.00	
74	BHEL Approved Rate	Supplying and fixing of seasoned medium Indian teakwood reapers of size 50 x 25 mm horizontally on the wall surface by providing wooden pegs and fixing with MS screws etc., complete.	50	One Rmt	81.90	4095.00	
75	BHEL Approved Rate	Supplying and fixing in position medium Indian teakwood cupboard shutters having frame of size 75 x 25 mm scantling and fixing 3 mm thick plywood sheets on both sides including cost of MS hinges, Nickle coated latches and oxidised aluminium fixtures and furniture of approved quality etc., complete as directed by the Engineer-in-charge.	50	One Sqm	1504.80	75240.20	
76	BHEL Approved Rate	Supply and fixing commercial Plywood sheets 4 mm thick plain lining with necessary screws, priming coat on exposed surface etc complete all as directed by Engineer-in-charge.	50	One Sqm	477.40	23870.00	
77	BHEL Approved Rate	Repairs to the existing doors, windows, ventilators and cup boards including frame, shutters, fittings, weldmesh, T.W beadings etc., all as directed by the Engineer-in-charge.	100	One Sqm	201.88	20188.00	
78	BHEL Approved Rate	Conveying from the stores of wooden / PVC - single / double leaf door shutters and fixing in position at places as directed with all required fittings etc (Door will be free issue from BHEL store)	50	One Sqm	181.44	9072.00	Shutters free issue
79	BHEL Approved Rate	Supplying and fixing laminated sheet of thickness not less than 1 mm of required design, brand, quality and size all as directed by the Engineer-in-charge.	50	One Sqm	403.20	20160.00	
80	APSSR-2014-15/BMT-G.45	Supplying and fixing M.S aldorp powder coated of 16 mm dia 300 mm long heavy type with plate folded hooks required nuts and bolts as directed by the Engineer-in-charge.	50	Each	204.42	10221.20	
81	APSSR-2014-15/BMT-G.43	Supplying and fixing M.S aldorp powder coated of 12 mm dia 200 mm long heavy type with required nuts and bolts as directed by the Engineer-in-charge.	50	Each	130.09	6504.40	
82	BHEL Approved Rate	Supplying and fixing of PVC netlon mesh of approved colour to the existing windows/Doors mesh shutters/Frames with male and female posting arrangements etc. complete as directed by the Engineer-in-charge.	50	One Sqm	272.00	13600.00	
83	BHEL Approved Rate	Labour charges for removing of existing old flymesh etc. complete as directed by the Engineer-in-charge.	50	One Sqm	40.00	2000.00	
84	APSSR-2014-15/BMS-W.05	Supply and fixing of 100 mm vertical blinds including imported spare parts and Indian fabric including cost of materials, fixtures and fittings etc., complete as directed by the Engineer-in-charge.	50	One Sqm	1355.00	67750.00	
85	BHEL Approved Rate	Providing and fixing Milkwhite acrylic sheet with 4mm thick & lettering with engraving & embossing.	50	One Sqm	1260.00	63000.00	
86	21.1.1.1/P.337	Providing & fixing anodised aluminium work for doors, windows, ventilators & partitions with extruded built up standard tubular & other sections of approved make conforming to IS : 733 & IS : 1285, anodised transparent or dyed to required shade according to IS : 1868. (Minimum anodic coating of grade AC 15), fixed with rawl plugs & 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 & joined mechanically wherever required including cleat angle. Aluminium snap beading for glazing/panelling, C.P. brass / stainless steel screws, all complete as per architectural drawings & the directions of Engineer-in-charge (glazing and panelling to be paid for separately), for all types of works	100	kg	358.30	35830.00	
87	BHEL Approved Rate	Supplying and fixing 12 mm thick Novapan / Duratoff or equivalent exterior grade phenol bended weather resistant melamine faced prelaminated particle board (PTX) for partition frame work door shutters, louvers with lipping etc., with teakwood reaper including cost of all materials, labour etc., complete.	10	sqm	624.00	6240.00	
88	BHEL Approved Rate	Supply and fixing of plain glass panes / pin headed / ground glass panes frosted of 4 MM thick of required sizes with proper wooden beadings/glass putty required for fixing to the existing broken glass panes along with the beading/glass putty, cost of all materials and labour etc complete all as directed.	50	sqm	600.60	30030.00	

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
89	21.3.2	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 5.50 mm thickness	50	sqm	905.75	45287.50	
90	9.17	Providing and fixing flat pressed 3 layer particle board medium density exterior grade (Grade-I) or graded wood particle board IS : 3087 marked to frame, backing or studding with screws etc. complete (Frames, Backing or studding to be paid separately)			0.00	0.00	
90.1	9.17.1	12 mm thick	50	sqm	488.10	24405.00	
90.2	9.17.2	18 mm thick	10	sqm	568.95	5689.50	
STEEL WORK*							
91	10.1	Structural steel work in single section fixed with or without connecting plate including cutting hoisting fixing in position and applying a priming coat of approved steel primer all complete	34	kg	8.07	274.31	Steel free issue
92	10.2	Structural steel work riveted bolted or welded in built up sections, strusses and framed work, hoisting fixing in position and applying a priming coat of approved steel primer all complete	34	kg	13.09	445.07	Steel free issue
93	10.3	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2mm and braced with flat iron diagonals 20x5mm size with top and bottom rail of T-iron 40x40x6mm dia steel pulleys complete with bolts nuts locking arrangement stoppers handles including applying a priming coat of approved steel primer	34	sqm	2516.20	85550.73	Steel free issue
94	10.4	Providing and fixing 1mm thick MS sheet sliding shutters with frame and diagonal braces of 40x40x6 mm angle iron 3mm MS gusset plates at the junction and corners 25mm dia pulley 40x40x6mm angle and T- iron guide at the top and bottom respectively including applying a priming coat of approved steel primer	34	sqm	1109.01	37706.23	Steel free issue
95	10.5	Providing and fixing 1mm thick MS sheet door with frame of 40x40x6mm angle iron and 3mm gusset plates at the junctions and corners all necessary fitting complete including applying a priming coat of approved steel primer					Steel free issue
95.1	10.5.1	Using MS angles 40x40x6mm for diagonal bracers	34	sqm	1146.36	38976.16	
95.2	10.5.2	Using flat 30x6mm for diagonal bracers and central cross piece	34	sqm	1143.57	38881.43	
96	10.6	Supplying and fixing rolling shutters of approved make made of required size MS 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 arrangement for inside and outside locking with push and pull operation complete including the cost of providing and fixing necessary 27.5cm long wire spring grade No. 2 and MS top cover of required thickness for rolling shutters					
96.1	10.6.1	80x1.25mm MS laths with 1.25mm thick top cover	34	sqm	1840.85	62588.90	
96.2	10.6.2	80x1.20mm MS laths with 1.20mm thick top cover	34	sqm	1583.40	53835.60	
96.3	10.6.3	80x0.90mm MS laths with 0.90mm thick top cover	34	sqm	1476.90	50214.60	
97	10.7	Providing and fixing mechanical device chain and crank operation for operating rolling shutters	34	each	429.85	14614.90	
98	10.8	Extra for providing mechanical device chain and crank operation for operating rolling shutters					
98.1	10.8.1	Exceeding 10.00 sqm and upto 16.80 sqm in the area	34	sqm	627.35	21329.90	
98.2	10.8.2	Exceeding 16.80 sqm in area	34	sqm	662.20	22514.80	
99	10.9	Extra for providing grided rolling shutters manufactured out of 8mm dia MS bar instead of laths as per design approved by engineer in charge (area of grill to be measured)	34	sqm	261.35	8885.90	
100	10.17	providing and fixing MS fan clamp type I or II of 16 mm dia MS bar bent to shape with hooked ends in RCC slabs, beams during laying including painting the exposed portion of loop all as per standard design complete	34	each	27.32	928.81	
101	10.18	Providing and fixing circular / Hexagonal cast iron or MS sheet box for ceiling fan clamp of internal dia 140mm, 73mm height, top lid of 1.5mm thick MS sheet with its top surface hacked for proper bonding top lid shall be screws into the cast iron/ MS sheet box by means of 3.3 mm dia. round headed screws , one lock at the corners . clamp shall be made of 12mm dia MS bar bent to shape as per standard drawing.	34	each	79.35	2698.00	
102	10.19	Providing and fixing MS round holding down bolts with nuts and washer plates complete	34	kg	67.80	2305.20	
103	10.2	Providing and fixing bolts including nuts and washers complete	34	kg	86.55	2942.70	
104	10.21	Providing and fixing MS rivets of sizes in positio.	34	kg	111.80	3601.20	
105	10.22	Welding by gas or electric plant including transportation of plant at site etc. complete	34	cm	2.20	74.80	
106	10.25	Steel work welded in built up sections/ frames work including cutting hoisting fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required,					
106.1	10.25.1	In stringers treads landing etc. of stair cases including use of chequered plate wherever required all complete	34	kg	67.20	2284.80	
106.2	10.25.2	In gratings frames guard bar ladder railing brackets gates and similar works	34	kg	77.90	2648.60	
107	10.26	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing balcony railing and staircase railing including applying a priming coat of approved steel primer					
107.1	10.26.1	M.S tube	34	kg	86.45	2939.30	
107.2	10.26.3	GI pipes	34	kg	93.30	3172.20	
108	BHEL Approved Rate	Fabrication & erection of Structural steel sections including angles, channels, beams, rods or any other structural steel section forming an integral part and erecting the same as directed.(Raw steel will be issued by BHEL free of cost at stores)	13000	kgs	17.60	228800.00	Steel free issue
109	BHEL Approved Rate	Labour charges only- Repair of Entrance Gates & Grill gates etc., including tack welding, providing aldop/ tower bolt, repairing /replacing hinges as per site condition.	34	Each	136.54	4642.43	Steel free issue
110	APSSR-2014-15/BMS-W.05	Labour charges for fixing grill doors with all necessary works like fixing hold fast into wall for necessary anchoring and making fit to the wall ..complete as directed by Engineer In charge.	1000	Kg	4.00	4000.00	Steel free issue
111	BHEL Approved Rate	Repairing of Car garage shutters with M.S. Rounds / Channels / Pipes / Sheet of 3.00 x 2.50 M approx.	10	Pair	713.30	7133.00	
112	BHEL Approved Rate	Manufacturing and fixing the garage shutters of size 3.00 x 2.50 M apppx. (With M.S. Angels, M.S. Pipes, M.S. sheet which will be supplied free of cost).	10	Pair	2982.92	29829.24	
113	APSSR-2014-15/BMS-W.05+BMM-V.14	Labour Charges - Fabricating and fixing of MS grill gates / door shutters of single leaf / double leaves, window or door frames / ornamental grills, tubular / structural trusses, columns gates etc, in position and shall be of approved quality and design including cost of fittings, fixtures and furniture, redoxide primer coat etc., complete as directed. (Raw steel will be issued by BHEL free of cost at stores)	10	kg	26.00	260.00	

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
114	BHEL Approved Rate	Site welding 6 mm fillet / tack including cost of required materials at all the places as directed.	50	rmt	140.00	7000.00	
115	BHEL Approved Rate	Repairing including making locking arrangements to steel door shutters, sliding doors/ rolling shutters, M.S. gates such as hinges, aldrops, tower bolts or any suitable arrangements including gas cutting, welding etc complete as directed by the Engineer-in-charge	34	Each Shutter / gate	280.00	9520.00	
116	BHEL Approved Rate	Repairing the existing M.S. grill gates / door shutters of single leaf / double leaves, window or door frames M.S. Ornamental grills, M.S tubular gates in position including welding, cost of all fittings, fixtures like peg stays, handles, pivot handles, pivot hinges etc. for windows, towerbolts, aldrops, hinges, looking hooks etc for doors, complete as directed by Engineer -in-charge.	10	each	136.54	1365.42	
117	BHEL Approved Rate	Supply and fixing of Megic eyes of approved design including cost of all materials etc complete all as directed by engineer-in-charge.	10	each	90.00	900.00	
FLOORING/TILE WORK							
118	11.3	Cement concrete flooring 1:2:4 (1cement 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.					cement free issue
118.1	11.3.1	40mm thick with 20mm nominal size stone aggregate	34	sqm	181.32	6164.97	
119	11.6	Cement plaster skirting (upto 30cm height) with cement mortar 1:3 (1cement 3 coarse sand) finished with a floating coat of neat cement					cement free issue
119.1	11.6.1	18mm thick	34	sqm	176.90	6014.43	
120	11.36	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS 15622 (thickness to be specified by the manufacture) 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 12mm thick bed of cement including pigment of matching shade etc. complete as per drawing specification and direction of engineer in charge	34	sqm	652.12	22172.11	cement free issue
121	11.37	Providing and laying ceramic glazed floor tiles 300x300mm (thickness to be specified by the manufacture) of 1 st quality conforming IS 15622 of approved make in colours such as white Ivory grey fume red brown laid on 20mm thick cement mortar 1:4(1 cement 4 coarse sand) including pointing the joints with white cement and matching pigment etc. complete.	34	sqm	692.42	23542.31	cement free issue
122	11.38	Providing and laying ceramic glazed floor tiles 300x300mm (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, gume red brown laid on 20mm thick bed of cement mortar 1:4(1 cement 4 coarse sand) including pointing the jointing the joints with white cement and matching pigment etc. complete	34	sqm	700.77	23826.21	cement free issue
123	11.41	Providing and laying polished vitrified floor tiles in different size (thickness to be specified by the manufacture) with water absorption's less than 0.08% and conforming to IS 15622 of approved make in all colours and shade, laid on 20mm thick cement mortar 1:4(1 cement 4 coarse sand) including grouting the joints with white cement and matching pigment etc. complete					cement free issue
123.1	11.41.1	Size of tile 50x50cm	35	sqm	1110.22	38857.73	
123.2	11.41.2	Size of tile 60x60cm	35	sqm	1264.97	44273.98	
123.3	11.41.3	Size of tile 80x80cm	35	sqm	1507.27	52754.48	
123.4	11.41.4	Size of tile 100x100cm	35	sqm	2173.97	76088.98	
124	11.42	Deduct for not using 20mm thick cement mortar 1:4(1 cement 4 coarse sand) bending in laying of floor tiles	34	sqm	360.15	12245.10	
125	11.43	Fixing glazed / ceramic vitrified floor tiles with cement based high polymer modified quick set tile adhesive (water based) conforming to IS 15477 using 5 kg adhesive per sqm of tile area in average 3mm thickness	34	sqm	336.75	11449.50	
126	BHEL Approved Rate	Ellis pattern flooring 20 mm thick cement concrete using one cement and three granite stone metal chippings of 3 to 10mm gauge including fine finishing, neat thread lining, curing, cost of all materials etc. complete.	34	One Sqm	127.94	4349.83	cement free issue
127	BHEL Approved Rate	Flooring with rough shahabad stone slabs of 20 to 30 mm thick and approved quality over a base of cement mortar 1:6 and pointing with CM 1:3 including curing, cost of all materials etc. complete.	34	One Sqm	105.79	3596.86	cement free issue
128	BHEL Approved Rate	Flooring / dadoing polished shahabad stone slabs of 25 mm thick (Tandur blue) uniform shade and approved quality, over a base of cement mortar 1:6 and pointing with cement paste including curing, cost of all materials etc.complete.	34	One Sqm	413.22	14049.34	cement free issue
129	BHEL Approved Rate	Removing the existing flooring and redoing the same with Ellis pattern flooring 20 mm thick cement concrete using one cement and three granite stone chippings of 3 to 10 mm gauge including fine finishing, neat thread lining, curing, disposing off the spoils within a lead of 2 km etc. complete as directed by the Engineer- in-charge.	34	One Sqm	140.54	4778.23	cement free issue
130	BHEL Approved Rate	Polishing to the existing mosaic / polished shahbad stone flooring using necessary / machines/materials such as carborandam stone etc including neat finishing etc complete as directed by Engineering - in - charge..	34	One Sqm	28.00	952.00	
131	BHEL Approved Rate	Removing the exiting cement flooring, supplying and laying of 25 mm thick (± 1 mm) designer floor tiles of approved colour and brand over a base of cement mortar 1:4, 20 mm thick, with required quantity of cement slurry for flooring including colouring pigment to match with tiles, cost of all materials etc complete all as directed by Engineer-in-charge.	34	One Sqm	699.34	23777.57	cement free issue
132	DSR.11.37/ Rate analysys	Labour charges for fixing tiles (both Vitrified /Ceramic tiles)- with cement mortar as base including pointing the joints with white cement and matching pigment, etc complete.	10	Sqm	219.63	2196.32	Cement / Tiles free issue
133	11.37+15.23 RA	Labour charges Removing and refixing of damaged floor / wall tiles of various sizes with cement motor as base including pointing the joints with white cement and matching pigment, etc complete.	10	sqm	239.93	2399.30	Cement / Tiles free issue
134	BHEL Approved Rate	Providing and laying Parking / interlocking tiles of 20 to 25mm thick depending on manufactures specification, over a bed of CC/CM, which will be paid spearately under separate item, all as directed by the Engineer in charge.	34	sqm	600.00	20400.00	cement free issue
135	8.2.	Providing and fixing 18mm thick gang saw cut mirror polished pre moulded and prepolished machine cut for kitchen platforms vanity counters window sills facias and similar locations of required size of approved shade colore 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 edge to give high gloss finish etc. complete at all levels.					cement free issue
135.1	8.2.1	Raj nagar plain white marble udaipur green marble / Zebra black marble					
135.2	8.2.1.1	Area of slab upto 0.50 sqm	34	sqm	1841.79	62620.71	
135.3	8.2.2	Granite stone of any colour and shade			0.00	0.00	
135.4	8.2.2.2	Area of slab over 0.50 sqm	34	sqm	3035.78	103216.47	
ROOFING							

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
136	12.41	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 10mm gap for thermal expansion (i) single socketed pipes					
136.1	12.41.1	75mm diameter	34	mtr	124.00	4216.00	
136.2	12.41.2	110mm diameter	34	mtr	206.90	7034.60	
137	12.50	Providing and fixing pre-coated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	10	sqm	601.75	6017.50	
138	12.51	Providing and fixing pre-coated galvanised steel sheet roofing accessories 0.50 mm (+ 0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete :					
138.1	12.51.1	Ridges plain (500 - 600mm)	10	mtr	620.75	6207.50	
138.2	12.51.2	Flashings/ Aprons.(Upto 600 mm)	10	mtr	602.50	6025.00	
138.3	12.51.3	North light curves	10	mtr	648.65	6486.50	
138.4	12.51.4	Barge board (Upto 300 mm)	10	mtr	567.05	5670.50	
138.5	12.51.5	Crimp curve	10	mtr	620.85	6208.50	
138.6	12.51.6	Gutter .(600 mm over all girth)	10	mtr	750.70	7507.00	
139	BHEL Approved Rate	Providing impervious coat in CM 1:4, 20 mm thick using approved water proofing compound at one Kg/bag of cement when the roof slab is green including arranging proper slopes, for easy flow of rain water, curing etc complete.	34	One Sqm	122.60	4168.27	cement free issue
140	BHEL Approved Rate	Labour charges for fixing AC sheet / Galvalumme sheet roofing and ceiling using 'J' bolts, nuts, bitumen / GI washers etc.complete, (only AC sheets/ Galvalumme sheets and ridges will be supplied free of cost at BHEL stores) all as directed by Engineer - in - charge.	34	One Sqm	56.00	1904.00	AC sheets / Galvalumme sheets and ridges free issue
141	BHEL Approved Rate	Labour charges Fixing of Hi-rib s galvalume /Zincalume sheets of 0.5 mm tk. 1 mtr width and length upto 12 mts with factory cut and fixing to the roof shall be crest fixed to roofpurlins with number 12-14 x 55 mm polymer coated galvanised hex head self drilling screws with integral washers and EPDM seals (4 fasteners for support) for sheet etc., complete asdirected - For roofing, side cladding and louvers with necessary fixtures. All the safety measures should be taken care by the agency itself.	34	One Sqm	105.00	3570.00	
142	BHEL Approved Rate	Fixing North Light curves/ Barges in required girth with 0.5 mm galvalume sheets upto a length of 2.5 M having curved width upto 600 mm fixing to the steel members with self drilling / self stitching, fasteners at a maximum of 500 mm c/c along the length of capping,flashing etc.,complete as directed by Engineer-in-charge. including the cost of labour etc.,complete,(North Light Curves / Barges Will be issued free of cost by BHEL at their Stores).All the safety measures should be taken by the agency itself.	34	One Rmt	77.00	2618.00	
143	BHEL Approved Rate	Dismantling the existing garrage structural work, AC sheets and MS angles including stacking & handing over of service cable materials and disposal of debris all as directed by Engineering - in - charge.	10	Each Shed	3600.00	36000.00	
144	BHEL Approved Rate	Providing and fixing in true horizontal level 600 mm x 600 mm false ceiling system manufactured by M/s. Armstrong World Industries using DUNE SUPREME RH 99 MICROLOOK EDGE WITH SILHOUETTE GRID, using hot dipped galvanized steel section, rotary stitched main tee of size 15mm x 42 mm web height, having 0.36 mm gauge at every 600 mm centre to centre maximum and rotary stitched cross tee of size 15 mm x 42 mm, having 0.33 mm gauge at every 600 mm. c/c. and wall angle of size 19 x 19 mm., having 0.35 mm gauge fixed to the periphery of the wall. The above grid is suspended at every 600mm c/c. in both directions using 2.0 mm. thick pre-straightened GI wire, and laying Dune Supreme Microlook Edge ceiling tiles manufactured by M/s. Armstrong World Industries, of size 600mmx600mmx15mm having NRC 0.50, Light reflectance of >85% (WT), thermal conductivity k = 0.052-0.057 W/mOK, Humidity Resistance of 99% (having LIFETIME GUARANTEE against SAG), having Fire Performance CLASS O / CLASS 1 (BS 476), surface having 3 coats of white paint - crisp finely granulated with microperforations, back of the tile duly sanded with a coat of protective paint over the formed grid and complete in all respect. Boards where light fixtures to be fixed shall be handed over to Department. M/s- Armstrong etc complete all as directed by Engineer-in-charge.	34	SQM	1264.00	42976.00	
FINISHING							
145	13.1	12mm cement plaster of mix (In fine sand)					cement free issue
145.1	13.1.1	1:4(1 cement 4 fine sand)	34	sqm	91.73	3118.92	
145.2	13.1.2	1:6(1 cement: 6 fine sand)	34	sqm	91.59	3114.16	
146	13.2	15mm cement plaster on the rough side of single or half brick wall of mix					cement free issue
146.1	13.2.1	1:4(1 cement 4 fine sand) (in coarse Sand)	34	sqm	74.52	2533.64	
146.2	13.2.2	1:6(1 cement: 6 fine sand)	34	sqm	105.23	3577.74	
147	13.3	20mm cement plaster of mix (In Fine sand)					cement free issue
147.1	13.3.1	1:4(1 cement 4 fine sand)	34	sqm	124.28	4225.46	
147.2	13.3.2	1:6(1 cement 6 fine sand)	34	sqm	123.63	4203.35	
		CEMENT PLASTER (IN COARSE SAND)					
148	13.4	12 mm cement plaster of mix :					cement free issue
148.1	13.4.2	1:6 (1 cement: 6 coarse sand)	10	sqm	100.14	1001.43	
149	13.5	15 mm cement plaster on rough side of single or half brick wall of mix :					cement free issue
149.1	13.5.2	1:6 (1 cement: 6 coarse sand)	10	sqm	115.48	1154.78	
150	13.6	20mm cement plaster of mix (In Coarse sand)					cement free issue
150.1	13.6.1	1:4(1 cement 4 coarse sand)	34	sqm	137.28	4667.46	
150.2	13.6.2	1:6(1 cement 6 coarse sand)	34	sqm	136.98	4657.25	
151	13.11	18mm cement plaster in two coats under layer 12mm thick cement plaster 1:5(1 cement 5 coarse sand) finished with a top layer 6mm thick cement plaster 1:6(1 cement 6 fine sand)	34	sqm	146.55	4982.53	cement free issue
152	13.12	18mm cement plaster in two coats under layer 12mm thick cement plaster 1:5(1 cement 5 coarse sand) finished with a top layer 6mm thick cement plaster 1:3(1 cement 3 coarse sand) finished rough with sponge.	34	sqm	151.04	5135.19	cement free issue

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
153	13.16	6mm cement plaster of Mix					cement free issue
153.1	13.16.1	1:3(1 cement 3 fine sand)	34	sqm	79.69	2709.34	
154	13.33	Pointing on stone work with cement mortar 1:3 (1 cement 3 fine sand)					cement free issue
154.1	13.33.1	Flush / Ruled pointing	44	sqm	105.01	4620.23	
154.2	13.33.2	Raised and cut pointing	34	sqm	188.20	6398.88	
155	13.34	Raised and cut pointing on stone work in white cement mortar 1:3(1 white cement 3 marble dust)	34	sqm	205.65	6992.18	
156	13.37	White washing with lime to give an even shape					
156.1	13.37.1	New work (three or more coats)	34	sqm	11.75	399.50	
157	13.39	Colour washing such as green , blue or buff to buff to give an even shape					
157.1	13.39.1	New work (two or more coats) with a base coat of white washing with lime	34	sqm	16.15	549.10	
157.2	13.39.2	New work (two or more coats) with a base coat of whitening	34	sqm	15.85	538.90	
158	13.41	Distemping with oil bound washable distemper of approved brand and manufacture to give an even shade					
158.1	13.41.1	New work (two or more coats) over and including priming coat with cement primer.	34	sqm	66.70	2267.80	
159	13.42	Distemping with 1st quality acrylic washable distemper (ready mixed) of approved manufacture and of required shade and colour complete as per manufacturer specification					
159.1	13.42.1	Two or more coats on new work	34	sqm	37.35	1269.90	
160	13.43	Applying one coat of cement primer of approved brand and manufacture on wall surface					
160.1	13.43.1	Cement primer	34	sqm	27.55	936.70	
161	13.46	Finishing walls with Acrylic smooth exterior paint of required shade					
161.1	13.46.1	New work (two or more coat applied @ 1.67 ltr/ 10 sqm) over and including base coat of water proofing cement paint applied @ 2.20kg/ 10sqms	34	sqm	67.50	2295.00	
162	BHEL Approved Rate	Painting the external wall surfaces by applying two or more coats of Acrylic smooth exterior paint (after completion of one coat prior clearance to be taken to apply the second coat with department officials) of BHEL supplied paint on existing old surface, including scrapping, cost of thinner, brushes labour, ladders, scaffolding, tools and other incidentals etc. complete up to 7m height including rectifying the wall cracks, patches etc with Birla wall care putty crack filler etc complete all as directed by Engineer-in-charge (Only Acrylic paint will be supplied by BHEL). All the safety precautions would be responsibility of the contractor.	34	Sqm	17.78	604.52	Paint free issue
163	13.52	Finishing with epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat preparation fo surface etc. complete					
163.1	13.52.1	on steel work	34	sqm	105.50	3587.00	
163.2	13.52.2	on concrete work	34	sqm	108.55	3690.70	
164	13.55	Painting (two or more coats) on rain water soil waste and vent pipes and fitting with black anticorrosive bitumastic paint approved brand and manufacture over and including a priming of ready mixed zinc chromate yellow primer on new work					
164.1	13.55.1	100mm dia meter pipes	34	mtr	25.60	870.40	
164.2	13.55.2	150mm dia meter pipes	34	mtr	38.20	1298.80	
165	13.61	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade (Iron work/Plastered surface/Signboards frames/wood work/Road speed breakers etc.)					
165.1	13.61.1	Two or more coats on new work	44	sqm	53.85	2369.40	
166	13.62.1	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	34	sqm	78.80	2679.20	
167	13.61.1+10 % EXTRA FOR SCAFFOLDING	Applying two or more coats of Synthetic Enamel Paint of given shade to old surfaces including scrapping, cost of thinner, brushes, labour tools, and other incidentals etc. complete up to 7m height. (Only Synthetic Enamel Paint will be supplied by BHEL, free of cost at their stores) etc. complete all as directed by Engineer-in-charge. All the safety precautions would be responsibility of the contractor.	5356	Sqm	39.96	214041.83	Paint free issue
168	13.63	Painting with aluminium paint of approved brand and manufacture to give an even shade as directed by Engineer In charge					
168.1	13.63.1	Two or more coats on new work	34	sqm	47.70	1621.80	
169	13.67	Varnishing with varnish of approved brand and manufacture					
169.1	13.67.1	Two or more coats of glue sizing with copal varnish over an under coat of flatting varnish	34	sqm	80.60	2740.40	
169.2	13.67.2	Two or more coats glue sizing with spar varnish or an under coat of flatting varnish	34	sqm	81.60	2774.40	
170	BHEL Approved Rate	Scrapping the existing paint surface, repairing the wall surface and supply and application of One coats of Altek Superfine lappam, applying one coat of required primer thorough polishing the area using emery papers of appropriate grade to get required level and finish of walls before painting the surfaces, as directed by the Engineer in charge etc complete.	34	sqm	144.00	4896.00	
171	BHEL Approved Rate	Scrapping the existing paint surface, repairing the wall surface and supply and application of Two coats of Altek Superfine lappam, applying one coat of required primer thorough polishing the area using emery papers of appropriate grade to get required level and finish of walls before painting the surfaces, as directed by the Engineer in charge etc complete.	34	sqm	160.00	5440.00	
172	BHEL Approved Rate	Providing & Applying two or more cots of Tractor emulsion paint of Approved shade including cost of all materials, labour etc. complete.	34	sqm	78.40	2665.60	
173	BHEL Approved Rate	Providing and applying altek luppam of 2 mm thickness over plastered surface to prepare the surface even and smooth including thorough scrapping to remove the old paint complete as directed by Engineer in charge.	34	Sqm	44.18	1502.26	
REPAIRS TO BUILDINGS							
174	14.26	Providing and fixing 25mm thick shutters for cup board etc					
174.1	14.26.1	Panelled or Panelled and glazed shutters					
174.2	14.26.1.1	Superior class teak wood including nickel plated bright finished MS piano hinges with necessary screws	34	sqm	3069.85	104374.90	
174.3	14.26.1.2	1st class teak wood including nickel plated bright finished MS piano hinges with necessary screws	34	sqm	2532.10	86091.40	
174.4	14.26.2	Glazed shutters					
174.5	14.26.2.1	Superior class teak wood including nickel plated bright finished MS piano hinges with necessary screws	34	sqm	3193.30	108572.20	
174.6	14.26.2.2	1st class teak wood including nickel plated bright finished MS piano hinges with necessary screws	34	sqm	2615.20	88916.80	
175	14.42.1	Old work (two or more coats)	10	sqm	7.05	70.50	
175.1	14.42.2	Old work (one or more coats)	10	sqm	4.35	43.50	
176	14.43	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	34	sqm	5.70	193.80	

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177	14.45	Distemping with oil bound washable distemper of approved brand and manufacture to give an even shade					
177.1	14.45.1	old work (two or more coats)	34	sqm	23.40	795.60	
178	14.46	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	34	sqm	7.50	255.00	
179	14.54	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade					
179.1	14.54.1	one or more coats on old work	34	sqm	35.20	1196.80	
180	14.66	Finishing walls with Acrylic smooth exterior paint of required shade					
180.1	14.66.1	old work (two or more coats applied @ 1.67ltr/10sqm) on existing cement paint surface)	34	sqm	48.30	1642.20	
180.2	14.66.2	old work (one or more coat applied @0.90 ltr/ 10sqm)	34	sqm	31.65	1076.10	
181	13.61.1	Painting to black boards with one coat of black board paint of approved brand including cost of all materials etc., complete all as directed by Engineer-in-charge.	34	One Sqm	53.85	1830.90	
182	BHEL Approved Rate	Applying golden colour or other approved colour to statues from 3' height to 8' height statue painting including scrapping the old surface and applying one or more coats to give good appearance including cost of scaffolding cost of all material all as directed by Engineer-in-charge.	34	Nos	2100.00	71400.00	
183	BHEL Approved Rate	Providing gultas in traingular shape of base 150 mm and height 150 mm with cement mortar 1:4, including fine finishing, cost of all materials etc complete all as directed by Engineer-in-charge.	34	One Rmt	35.00	1190.00	
184	BHEL Approved Rate	Providing bands to slab / chajja projections in cement mortar 1:4, 20 mm thick and 20 mm wide including cost of all materials, curing etc complete all as directed by Engineer-in-charge.	34	One Rmt	35.00	1190.00	
185	BHEL Approved Rate	Flooring and skirting with 25 mm thick polished shahabad stone slabs (Tandur blue) of required sizes over a base of 20 mm thick cement mortar 1:6 including pointing in CM 1:2, curing, cost of all materials etc complete all as directed by Engineer-in-charge	34	One Sqm	433.43	14736.48	
186	BHEL Approved Rate	Rectifying the wall cracks by chipping off the existing plastered surfaces to the required width, depth and applying cement slurry in the cracks to the required depth, making good all damages and finishing to match with the existing one by plastering with CM 1:5; 12/15 mm thick and a coat of white wash / snowcem / distemper etc as the case may be as directed by the Engineer-in-charge.	34	One Sqm	132.32	4498.99	
187	BHEL Approved Rate	Crack filling without pressure grouting: Routing out the cracks with a mechanically operated groove cutter and sealing with expansive crack filling compound - CERA POLY CRACKFILLER or equivalent and tooling to finish neatly. Providing ,two top coats of CRACKFLEX, single component highly flexible membrane coating (for a width of 10 cms with the crack at the center) or equivalent as per manufacturer's recommendation and curing adequately. Rate quoted includes cost of material, labour charges, conveyance, tool and all other incidental charges etc complete all as directed by Engineering - in -charge. (local market rate)	34	Rmt	105.00	3570.00	
DISMANTLING AND DEMOLISHING							
188	15.1	Demolishing lime concrete manually/ by mechanical means and disposal of material within 50 metres lead as per direction of Engineer-in-charge.	10	cum	234.2	2342	
189	15.2	Demolishing concrete manually / by mechanical means including disposal of material within 50mtr lead as per direction of engineer in charge					
189.1	15.2.1	1:3:6 or richer mix	34	cum	671.05	22815.70	
189.2	15.2.2	1:4:8 or leaner mix	34	cum	413.65	14064.10	
190	15.3	Demolishing RCC work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50mtr lead as per direction of engineer in charge	34	cum	978.95	33284.30	
191	15.5	Extra for cutting reinforcement bars manually by mechanical means in RCC or RB work (payment shall be made on the cross sectional area of RCC or RB work) as per direction of engineer in charge	34	sqm	325.15	11055.10	
192	15.6	Extra for scrapping, cleaning and straightening reinforcement from RCC or RB work	34	kg	2.60	88.40	
193	15.7	Demolishing brick work manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50mtr lead as per direction of engineer in charge					
193.1	15.7.4	In cement mortar	34	cum	566.60	19264.40	
194	15.9	Demolishing stone rubble masonry manually by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50mtr lead as per direction of engineer in charge					
194.1	15.9.2	In cement mortar	34	cum	676.05	22985.70	
195	15.12	Dismantling door windows and clerestory windows (steel or wood) quantity of stacks of cleaned material will be measured)					
195.1	15.12.1	Of area 3sqm and below	34	each	101.70	3457.80	
195.2	15.12.2	Of area beyond 3sqm	34	each	139.85	4754.90	
196	15.13	Taking out doors windows and clerestory window shutters(steel or wood) including stacking within 50mtr lead					
196.1	15.13.1	Of area 3sqm and below	34	each	39.70	1349.80	
196.2	15.13.2	Of area beyond 3sqm	34	each	52.45	1783.30	
197	15.17	Dismantling steel work in single sections including dismembering and stacking within 50mtr lead in					
197.1	15.17.1	RS joists	34	kg	0.95	32.30	
197.2	15.17.2	Channels angles tees and flats	34	kg	0.65	22.10	
198	15.18	Dismantling steel work in built up sections in angles tees flats and channels including all gusset plates bolts nuts cutting rivets welding etc. including dismembering and stacking within 50mtr lead	34	kg	1.55	52.70	
199	15.19	Dismantling steel work manually by mechanical means in built up section without dismembering and stacking within 50mtr lead as per direction of engineer in charge	34	kg	1.05	35.70	
200	15.4	Demolishing R.B. 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	cum	874.50	8745.00	
201	15.40	Dismantling precast concrete or stone slabs in walls, partition walls etc. including stacking within 50 metres lead					
201.1	15.40.1	Thickness up to 40 mm	10	sqm	80.40	804.00	
202	15.41	Dismantling cement asbestos or other hard board ceiling or partition walls including stacking of serviceable materials and disposal of unserviceable materials within 50mtr lead	34	sqm	15.85	538.90	
203	15.44	Dismantling G.I pipes (external work) including excavation and refilling trenches after taking out the pipes manually by mechanical means including stacking of pipes within 50mtr lead as per direction of engineer in charge					
203.1	15.44.1	15mm to 40mm nominal bore	34	mtr	44.10	1499.40	
203.2	15.44.2	Above 40mm nominal bore	34	mtr	50.30	1710.20	

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204	15.56	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50mtr lead	34	sqm	15.00	510.00	
205	15.57	Dismantling aluminium / Gypsum partitions doors windows fixed glazing and false ceiling including disposal of unserviceable surplus material and stacking of serviceable material with in 50mtr lead as directed by engineer in charge	34	sqm	15.90	540.60	
206	15.58	Demolishing C.C/ RCC work by mechanical means and stockpiling at designated locations and disposal of dismantled materials upto a lead of 1000m , stacking serviceable and unserviceable material separately including cutting reinforcement bars	34	cum	1075.90	36580.60	
SANITARY WORKS							
207	17.1	Providing and fixing water closet squatting pan(indian type WC pan) with 100mm sand cast iron P or S trap 10 ltr low level white PVC flushing cistern with manually controlled device (handle level) conforming to IS 7231 with all fitting and fixtures complete including cutting and making good the walls and floors wherever required					Cement free issue
207.1	17.1.1	White vitreous china orissa pattern WC pan of size 580x440mm with integral type floor rests	34	each	2935.06	99792.13	
208	17.2	Providing and fixing white vitreous china pedestal type water closet (european type WC pan) with seat and lid 10ltr low level white PVC flushing cistern with manually controlled device (handle level) conforming to IS 7231 with all fittings and fixtures complete including cutting and making good the wall and floors wherever required					Cement free issue
208.1	17.2.1	WC pan with ISI marked white solid plastic seat and lid	34	each	2856.06	97106.13	
208.2	17.2.2	WC pan with ISI marked black solid plastic seat and lid	34	each	2836.31	96434.63	
209	17.3	Providing and fixing white vitreous china pedestal type water closet (european type) with seat and lid 10 ltr low level white vitreous china flushing cistern and CP flush bend with fitting and CI brackets 40mm flush bend overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete including painting of fitting and brackets cutting and making good the walls and floors wherever required					Cement free issue
209.1	17.3.1	WC pan with ISI marked white solid plastic seat and lid	34	each	4191.76	142519.93	
209.2	17.3.2	WC pan with ISI marked black solid plastic seat and lid	34	each	4172.01	141848.43	
210	17.4	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 430x410x265mm sizes respectively with automatic flushing cistern with standard flush pipe and CP brass spreaders with brass unions and GI clamps complete including painting of fitting and brackets cutting and making good the walls and floors wherever required					Cement free issue
210.1	17.4.1	One urinal basin with 5 ltr white PVC automatic flushing cistern	34	each	2829.88	96215.96	
211	17.5	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350mm with white PVC automatic flushing cistern with fitting standard size CP brass flush pipe spreaders with unions and clamps (all in CP brass) with waste fitting as per IS 2556 CI trap with outlet grating and other couplings in CP brass including painting of fitting and cutting and making good the walls and floors wherever required					Cement free issue
211.1	17.5.1	Single half stall urinal with 5 ltr PVC automatic flushing cistern	34	each	5324.88	181045.98	
212	17.6	Providing and fixing one piece construction white vitreous china squatting plate with an integral longitudinal flushing pipe white PVC automatic flushing cistern with fitting standard size GI flush pipe for back and front flush with standard spreader pipes with fitting GI clamps and CP brass coupling complete including painting of fitting and cutting and making good the walls and floors etc. wherever required					Cement free issue
212.1	17.6.1	Single squatting plate with 5 ltr PVC automatic flushing cistern	34	each	3499.73	118990.88	
213	17.7	Providing and fixing wash basin with CI brackets 15mm CP brass pillar taps 32mm CP brass waste of standard pattern including painting of fittings and brackets cutting and making good the walls wherever require					Cement free issue
213.1	17.7.1	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps	10	each	1833.83	18338.31	
213.2	17.7.2	white vitreous china wash basin size 630x450mm with a single 15mm CP brass pillar tap	34	each	1614.43	54890.66	
213.3	17.7.4	White vitreous china flat back wash basin size 550x400mm with single 15mm CP brass pillar tap	34	each	1445.98	49163.36	
213.4	17.7.7	White Vitreous China Flat back wash basin size 450x300 mm with single 15 mm C.P. brass pillar tap	10	each	1324.03	13240.31	
213.5	17.7.8	White vitreous china surgeon type wash basin of size 660x460mm with a pair of 15mm CP brass pillar tap with elbow operated levers	34	each	3204.43	108950.66	
213.6	17.7.11	Stainless steel AISI 304(18/8) wash basin size 530x345mm with single 15mm CP brass pillar tap	34	each	2537.83	86286.26	
214	17.8	Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings.					Cement free issue
215	17.9	Providing and fixing kitchen sink with CI brackets CP brass china with rubber plug 40mm CP brass waste complete including painting the fittings and brackets cutting and making good the walls wherever required					Cement free issue
215.1	17.9.1	White glazed fire clay kitchen sink of size 600x450x250mm	34	each	2192.43	74542.66	
216	17.1	Providing and fixing stainless steel A ISI 304(18/8) kitchen sink as per IS 13983 with CI brackets and stainless steel plug 40mm including painting of fitting and brackets cutting and making good the walls wherever required					Cement free issue
216.1	17.10.1	Kitchen sink with drain board					
216.2	17.10.1.3	510x1040mm bowl depth 200mm	34	each	5625.58	191269.76	
216.3	17.10.2	Kitchen sink without drain board					
216.4	17.10.2.1	610x510mm bowl depth 200mm	34	each	3919.78	133272.56	
216.5	17.10.2.2	610x460mm bowl depth 200mm	34	each	3687.48	125374.36	
216.6	17.10.2.3	470x420mm bowl depth 178mm	34	each	2874.43	97730.66	
217	17.11	Providing and fixing white vitreous china laboratory sink with CI brackets CP brass china with rubber plug 40mm CP brass waste and 40mm CP brass trap with necessary CP brass unions complete including painting of fitting and brackets cutting and making good the wall wherever required					Cement free issue
217.1	17.11.1	Size 450x300x150mm	34	each	1925.28	65459.56	
217.2	17.11.2	Size 600x450x200mm	34	each	2744.13	93300.46	
218	17.13	Dismantling, Providing and fixing white vitreous china water closet squatting pan (indian type)					Cement free issue
218.1	17.13.1	Long pattern WC pan of size 580mm	34	each	745.18	25336.16	
218.2	17.13.2	Orissa pattern WC pan of size 580x440mm	34	each	1221.43	41528.66	
219	17.14	Extra for using coloured WC pan instead of white WC pan					
219.1	17.14.1	Orissa pattern WC pan 580x440mm	34	each	595.28	20239.56	
220	17.15	Providing and fixing white vitreous china pedestal type (european type/ wash down type) water closet pan					Cement free issue
220.1	17.15.1	White vitreous china pedestal type (european type) water closet pan	34	each	1140.13	38764.46	
221	17.16	Extra for using coloured pedestal type WC pan (european type) with low level cistern of same colour instead of white vitreous china WC pan and cistern					
221.1	17.16.1	White vitreous china pedestal type (european type) water closet pan	34	each	1158.58	39391.76	
222	17.17	Providing and fixing a pair of white vitreous china foot rests of standard pattern for squatting pan water closet					Cement free issue

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
222.1	17.17.1	250x130x30mm	34	pair	124.93	4247.66	
222.2	17.17.2	250x125x25mm	34	pair	136.58	4643.76	
223	17.18	Providing and fixing PVC low level flushing cistern with manually controlled device (handle level) conforming to IS 7231 with all fittings and fixtures complete					
223.1	17.18.1	10 Ltr capacity white	34	each	831.90	28284.60	
223.2	17.18.2	10 Ltr capacity coloured	34	each	887.35	30169.90	
224	17.19	Providing and fixing controlled flush low level cistern made of vitreous china with all fitting complete					
224.1	17.19.1	10 Ltr (full flush) capacity white	34	each	1474.10	50119.40	
224.2	17.19.2	10 Ltr (full flush) capacity coloured	34	each	1967.75	66903.50	
225	17.2	Providing and fixing solid plastic seat with lid for pedestal type WC pan complete					
225.1	17.20.1	white solid plastic seat with lid	34	each	383.25	13030.50	
225.2	17.20.2	black solid plastic seat with lid	34	each	363.50	12359.00	
226	17.22	Providing and fixing GI inlet connection for flush pipe connecting with WC pan	34	each	94.00	3196.00	
227	17.23	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 340x410x265mm sizes respectively.	34	each	786.79	26750.95	Cement free issue
228	17.24	Providing and fixing white vitreous china squatting plate urinal with integral rim longitudinal flush pipe	34	each	1526.24	51891.99	Cement free issue
229	17.25	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fitting					Cement free issue
229.1	17.25.1	Flat back wash basin of size 630x450mm	34	each	884.84	30084.52	
229.2	17.25.2	Flat back wash basin of size 550x400mm	34	each	716.44	24358.92	
229.3	17.25.3	Angle back wash basin of size 600x480mm	34	each	774.54	26334.32	
229.4	17.25.4	Angle back wash basin of size 400x400mm	34	each	571.24	19422.12	
229.5	17.25.5	Flat back wash basin of size 450x300mm	34	each	594.49	20212.62	
229.6	17.25.6	Surgeon type wash basin of size 660x460mm	34	each	1256.54	42722.32	
230	17.26	Providing and fixing kitchen sink including making all connections excluding cost of fittings					Cement free issue
230.1	17.26.1	White glazed fire clay sink of size 600x450x250mm	34	each	1647.94	56029.92	
231	17.27	Providing and fixing white vitreous china laboratory sink including making all connections excluding cost of fittings					Cement free issue
231.1	17.27.1	Size 450x300x150mm	34	each	1032.34	35099.52	
231.2	17.27.2	Size 600x450x200mm	34	each	1851.24	62942.12	
232	17.28	Providing and fixing PVC waste pipe for sink or wash basin including PVC waste fitting complete					
232.1	17.28.1	semi rigid pipe					
232.2	17.28.1.1	32mm dia	34	each	59.50	2023.00	
232.3	17.28.1.2	40mm dia	34	each	66.45	2259.30	
232.4	17.28.2	Flexible pipe					
232.5	17.28.2.1	32mm dia	34	each	65.30	2220.20	
232.6	17.28.2.2	40mm dia	34	each	67.60	2298.40	
233	17.29	Providing and fixing 100mm sand cast iron grating for gully trap	34	each	24.60	836.40	
234	17.3	Providing and fixing in position 25mm dia metre mosquito proof coupling of approved municipal design	34	each	34.50	1173.00	
235	17.31	Providing and fixing 600x450mm beveled edge mirror of superior glass (of approved quality) complete with 6mm thick hard board ground fixed to wooden cleats with CP brass screws and washers complete	34	each	674.05	22917.70	
236	17.32	Providing and fixing mirror of superior glass (approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing					
236.1	17.32.1	circular shape 450mm dia	34	each	731.30	24864.20	
236.2	17.32.2	Rectangular shape 453x357mm	34	each	598.30	20342.20	
236.3	17.32.3	oval shape 450x350mm (outer dimensions)	34	each	642.80	21855.20	
236.4	17.32.4	Rectangular shape 1500x450mm	34	each	1211.00	41174.00	
237	17.33	Providing and fixing 600x120x5mm glass shelf with edges round of supported on anodised aluminium angle frame with CP brass brackets and guard rail complete fixed with 40mm long screws rawl plugs etc. complete	34	each	341.25	11602.50	
238	17.34	Providing and fixing toilet paper holder					
238.1	17.34.1	CP brass	34	each	250.95	8532.30	
238.2	17.34.2	Vitreous china	34	each	259.75	8831.50	
239	17.35	Providing and fixing soil waste and vent pipes					
239.1	17.35.1	100mm dia					
239.2	17.35.1.1	sand cast iron S&S pipe as per IS 1729	34	mtr	734.30	24966.20	
239.3	17.35.1.2	Centrifugally cast (spun) iron socketed pipe as per IS 3989	34	mtr	857.30	29148.20	
239.4	17.35.2	75mm diameter					
239.5	17.35.2.1	sand cast iron S&S pipe as per IS 1729	34	mtr	656.60	22324.40	
239.6	17.35.2.2	Centrifugally cast (spun) iron socketed pipe as per IS 3989	34	mtr	744.50	25313.00	
240	17.36	Providing and filling the joints with spun yarn cement slurry and cement mortar 1:2(1 cement 2 fine sand) in SCI/CI pipes					
240.1	17.36.1	75mm dia pipe	34	each	47.55	1616.70	
240.2	17.36.2	100mm dia pipe	34	each	56.00	1904.00	
241	17.37	Providing and fixing MS holder bat clamps of approved design to sand cast iron/cast iron(spun) pipe embedded in and including cement concrete blocks 10x10x10cm of 1:2:4 mix (1 cement 2 coarse sand 4 graded stone aggregate 20mm nominal size) including cost of cutting holes and making good the walls etc.					Cement free issue
241.1	17.37.1	for 100mm dia pipe	34	each	109.60	3726.27	
241.2	17.37.2	for 75mm dia pipe	34	each	107.25	3646.37	
242	17.38	Providing and fixing bend of required degree with access door insertion rubber washer 3mm thick bolt and nuts complete					
242.1	17.38.1	100mm					
242.2	17.38.1.1	sand cast iron S&S pipe as per IS 1729	34	each	310.30	10550.20	
242.3	17.38.1.2	sand cast iron S&S pipe as per IS 3989	34	each	353.25	12010.50	
242.4	17.38.2	75mm diameter					
242.5	17.38.2.1	sand cast iron S&S pipe as per IS 1729	34	each	248.65	8454.10	
242.6	17.38.2.2	sand cast iron S&S pipe as per IS 3989	34	each	281.15	9559.10	
243	17.39	Providing and fixing plain bend of required degree					
243.1	17.39.1	100mm					
243.2	17.39.1.1	sand cast iron S&S pipe as per IS 1729	34	each	267.30	9088.20	
243.3	17.39.1.2	sand cast iron S&S pipe as per IS 3989	34	each	296.35	10075.90	
243.4	17.39.2	75mm diameter					
243.5	17.39.2.1	sand cast iron S&S pipe as per IS 1729	34	each	216.15	7349.10	
243.6	17.39.2.2	sand cast iron S&S pipe as per IS 3989	34	each	221.95	7546.30	
244	17.4	Providing and fixing heel rest sanitary bend					
244.1	17.40.1	100mm					
244.2	17.40.1.1	sand cast iron S&S pipe as per IS 1729	34	each	301.00	10234.00	
244.3	17.40.1.2	sand cast iron S&S pipe as per IS 3989	34	each	342.80	11655.20	
244.4	17.40.2	75mm diameter					
244.5	17.40.2.1	sand cast iron S&S pipe as per IS 1729	34	each	251.00	8534.00	
244.6	17.40.2.2	sand cast iron S&S pipe as per IS 3989	34	each	297.45	10113.30	
245	17.41	Providing and fixing double equal junction of required degree with access door insertion rubber washer 3 mm thick bolts and nuts complete					

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
245.1	17.41.1	100x100x100x100mm					
245.2	17.41.1.1	sand cast iron S&S aa per IS 1729	34	each	655.05	22271.70	
245.3	17.41.1.2	sand cast iron S&S as per IS 3989	34	each	747.95	25430.30	
245.4	17.41.2	75x75x75mm					
245.5	17.41.2.1	sand cast iron S&S aa per IS 1729	34	each	490.25	16668.50	
245.6	17.41.2.2	sand cast iron S&S as per IS 3989	34	each	583.15	19827.10	
246	17.42	Providing and fixing double equal plain junction of required degree					
246.1	17.42.1	100x100x100x100mm					
246.2	17.42.1.1	sand cast iron S&S aa per IS 1729	34	each	592.55	20146.70	
246.3	17.42.1.2	sand cast iron S&S as per IS 3989	34	each	679.65	23108.10	
246.4	17.42.2	75x75x75mm					
246.5	17.42.2.1	sand cast iron S&S aa per IS 1729	34	each	407.80	13865.20	
246.6	17.42.2.2	sand cast iron S&S as per IS 3989	34	each	541.35	18405.90	
247	17.43	Providing and fixing single equal plain junction of required degree with access door insertion rubber washer 3 mm thick bolts and nuts complete					
247.1	17.43.1	100x100x100x100mm					
248.2	17.43.1.1	sand cast iron S&S aa per IS 1729	34	each	446.20	15170.80	
248.3	17.43.1.2	sand cast iron S&S as per IS 3989	34	each	579.75	19711.50	
248.4	17.43.2	75x75x75mm					
247.5	17.43.2.1	sand cast iron S&S aa per IS 1729	34	each	333.45	11337.30	
247.6	17.43.2.2	sand cast iron S&S as per IS 3989	34	each	438.00	14892.00	
248	17.44	Providing and fixing single equal plain junction of required degree					
248.1	17.44.1	100x100x100mm					
248.2	17.44.1.1	sand cast iron S&S aa per IS 1729	34	each	383.45	13037.30	
248.3	17.44.1.2	sand cast iron S&S as per IS 3989	34	each	522.85	17776.90	
248.4	17.44.2	75x75x75mm					
248.5	17.44.2.1	sand cast iron S&S aa per IS 1729	34	each	297.45	10113.30	
248.6	17.44.2.2	sand cast iron S&S as per IS 3989	34	each	378.75	12877.50	
249	17.45	Providing and fixing double unequal junction of required degree with access door insertion rubber washer 3mm thick bolts and nut complete					
249.1	17.45.1	100x100x75x75mm					
249.2	17.45.1.1	sand cast iron S&S aa per IS 1729	34	each	678.50	23069.00	
249.3	17.45.1.2	sand cast iron S&S as per IS 3989	34	each	1026.95	34916.30	
249.4	17.46	Providing and fixing double unequal plain junction of required degree					
249.5	17.46.1	100x100x75x75mm					
249.6	17.46.1.1	sand cast iron S&S aa per IS 1729	34	each	615.75	20935.50	
249.7	17.46.1.2	sand cast iron S&S as per IS 3989	34	each	929.35	31597.90	
250	17.47	Providing and fixing single unequal junction of required degree with access door insertion rubber washer 3mm thick bolts and nut complete					
250.1	17.47.1	100x100x75mm					
250.1	17.47.1.1	sand cast iron S&S aa per IS 1729	34	each	492.65	16750.10	
250.2	17.47.1.2	sand cast iron S&S as per IS 3989	34	each	771.40	26227.60	
251	17.48	Providing and fixing single unequal junction of required degree					
251.1	17.48.1	100x100x75mm					
251.2	17.48.1.1	sand cast iron S&S aa per IS 1729	34	each	429.90	14616.60	
251.2	17.48.1.2	sand cast iron S&S as per IS 3989	34	each	673.85	22910.90	
252	17.49	Providing and fixing double equal plain invert branch of required degree					
252.1	17.49.1	100x100x100x100mm					
252.2	17.49.1.1	sand cast iron S&S aa per IS 1729	34	each	615.75	20935.50	
252.3	17.49.1.2	sand cast iron S&S as per IS 3989	34	each	633.20	21528.80	
252.4	17.49.2	75x75x75x75mm					
252.5	17.49.2.1	sand cast iron S&S aa per IS 1729	34	each	462.35	15719.90	
252.6	17.49.2.2	sand cast iron S&S as per IS 3989	34	each	489.10	16629.40	
253	17.5	Providing and fixing single equal plain invert branch of required degree					
253.1	17.50.1	100x100x100mm					
253.2	17.50.1.1	sand cast iron S&S aa per IS 1729	34	each	472.90	16078.60	
253.3	17.50.1.2	sand cast iron S&S as per IS 3989	34	each	482.20	16394.80	
253.4	17.50.2	75x75x75mm					
253.5	17.50.2.1	sand cast iron S&S aa per IS 1729	34	each	355.50	12087.00	
253.6	17.50.2.2	sand cast iron S&S as per IS 3989	34	each	370.60	12600.40	
254	17.51	Providing and fixing double unequal invert branch of required degree					
254.1	17.51.1	100x100x75x75mm					
254.2	17.51.1.1	sand cast iron S&S aa per IS 1729	34	each	656.40	22317.60	
254.3	17.51.1.2	sand cast iron S&S as per IS 3989	34	each	836.45	28439.30	
255	17.52	Providing and fixing single unequal plain invert branch of required degree					
255.1	17.52.1	100x100x75mm					
255.2	17.52.1.1	sand cast iron S&S aa per IS 1729	34	each	564.65	19198.10	
255.3	17.52.1.2	sand cast iron S&S as per IS 3989	34	each	609.95	20738.30	
256	17.53	Providing and fixing sand cast iron and S&S off sets as per IS 1729					
256.1	17.53.1	76mm off sets					
256.2	17.53.1.1	with 75mm dia pipe	34	each	268.40	9125.60	
256.3	17.53.1.2	with 100mm dia pipe	34	each	304.40	10349.60	
256.4	17.53.2	114mm off sets					
256.5	17.53.2.1	with 75mm dia pipe	34	each	337.00	11458.00	
256.6	17.53.2.2	with 100mm dia pipe	34	each	435.70	14813.80	
256.7	17.53.3	152mm off sets					
256.8	17.53.3.1	with 75mm dia pipe	34	each	420.15	14285.10	
256.9	17.53.3.2	with 100mm dia pipe	34	each	542.10	18431.40	
257	17.54	Providing and fixing sand cast iron S&S off sets as per IS 3989					
257.1	17.54.1	75mm off sets					
257.2	17.54.1.1	with 75mm dia pipe	34	each	268.40	9125.60	
257.3	17.54.2	150mm off sets					
257.4	17.54.2.1	with 75mm dia pipe	34	each	341.50	11611.00	
257.5	17.54.2.2	with 100mm dia pipe	34	each	457.65	15560.10	
258	17.55	Providing and fixing door piece insertion rubber washer 3mm thick bolts and nuts complete					
258.1	17.55.1	100mm					
258.2	17.55.1.1	sand cast iron S&S pipe as per IS 1729	34	each	446.20	15170.80	
258.3	17.55.1.2	sand cast iron S&S pipe as per IS 3989	34	each	469.40	15959.60	
258.4	17.55.2	75mm					
258.5	17.55.2.1	sand cast iron S&S pipe as per IS 1729	34	each	325.30	11060.20	
258.6	17.55.2.2	sand cast iron S&S pipe as per IS 3989	34	each	333.45	11337.30	
259	17.56	Providing and fixing terminal guard					
259.1	17.56.1	100mm					
259.2	17.56.1.1	sand cast iron S&S pipe as per IS 1729	34	each	240.60	8180.40	
259.3	17.56.1.2	sand cast iron S&S pipe as per IS 3989	34	each	244.10	8299.40	
259.4	17.56.2	75mm					
259.5	17.56.2.1	sand cast iron S&S pipe as per IS 1729	34	each	177.80	6045.20	
259.6	17.56.2.2	sand cast iron S&S pipe as per IS 3989	34	each	221.95	7546.30	
260	17.57	Providing and fixing collar					
260.1	17.57.1	100mm					
260.2	17.57.1.1	sand cast iron S&S pipe as per IS 1729	34	each	177.85	6046.90	
260.3	17.57.1.2	sand cast iron S&S pipe as per IS 3989	34	each	238.25	8100.50	
260.4	17.57.2	75mm					
260.5	17.57.2.1	sand cast iron S&S pipe as per IS 1729	34	each	132.50	4505.00	
260.6	17.57.2.2	sand cast iron S&S pipe as per IS 3989	34	each	169.65	5768.10	

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
261	17.58	Providing lead caulked joints to sand cast iron rain centrifugally cast (spun) iron pipes and fitting of diameter					
261.1	17.58.1	100mm	34	each	207.85	7066.90	
261.2	17.58.2	75mm	34	each	176.50	6001.00	
261.3	17.58.3	50mm	34	each	141.65	4816.10	
262	17.59	Providing and fixing MS stays and clamps for sand cast iron / centrifugally cast (spun) iron pipes of diameter					Cement free issue
262.1	17.59.1	100mm	34	each	58.80	1999.07	
262.2	17.59.2	75mm	34	each	49.45	1681.17	
262.3	17.59.3	50mm	34	each	42.55	1446.57	
263	17.6	Providing and fixing trap of self cleansing design with screws down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors					Cement free issue
263.1	17.60.1	100mm inlet and 100mm outlet					
263.2	17.60.1.1	sand cast iron S&S as per IS 3989	34	each	787.18	26764.16	
263.3	17.60.1.2	sand cast iron S&S pipe as per IS 1729	34	each	637.33	21669.26	
263.4	17.60.2	100mm inlet and 75 mm outlet					
263.5	17.60.2.1	sand cast iron S&S as per IS 3989	34	each	824.33	28027.26	
263.6	17.60.2.2	sand cast iron S&S pipe as per IS 1729	34	each	561.83	19102.26	
265	17.61	cutting chases in brick masonry walls for following diameter sand cast iron/ centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6(1 cement 3 coarse sand 6 grade stone aggregate 12.5 mm nominal size) including necessary plaster and painting in cement mortar 1:4(1 cement 4 coarse sand)					Cement free issue
265.1	17.61.1	100mm	34	mtr	220.74	7505.14	
265.2	17.61.2	75mm	34	mtr	158.91	5403.02	
265.3	17.61.3	50mm	34	mtr	104.04	3537.36	
266	17.62	painting CI cistern with bitumastic or any other anti corrosive paint inside and white paint over a coat of zinc chromate yellow primer (of approved quality) on the outside surface of the cistern flush pipe other fitting etc. complete for new work	34	each	338.10	11495.40	
267	17.63	Re-painting CI cistern with bitumastic or any other anti corrosive paint inside and white paint on the outside surface of the cistern flush pipe other fitting etc. complete including polishing of wooden seat and lid and cleaning of WC pan with acid wherever necessary	34	each	237.35	8069.90	
268	17.64	Repainting CI cistern with synthetic enamel paint of approved colour brand and manufacture on the outside surface fo cistern flush pipe other fitting etc. complete	34	each	100.60	3420.40	
269	17.65	painting sand cast iron / centrifugally cast (spun) iron soil waste vent pipes and fitting with paint of any colour such as chocolate grey or buff etc. over a coat of primer(of approved quality) for new work					
269.1	17.65.1	100mm dia metre pipes	34	mtr	28.75	977.50	
269.2	17.65.2	75mm dia metre pipe	34	mtr	22.00	748.00	
270	17.66	Repainting sand cast iron / centrifugally cast iron (spun) iron soil waste vent pipes and fitting with paint of any colour such as chocolate grey or buff etc.					
270.1	17.66.1	100mm dia metre pipes	34	mtr	14.30	486.20	
270.2	17.66.2	75mm dia metre pipe	34	mtr	10.70	363.80	
271	17.67	Repainting bath tub of size 1700x730x430mm with enamel paint	34	each	293.35	9973.90	
272	17.68	Providing and fixing vitreous china dual purpose closet suitable for use as squatting pan or european type water closet (angle indian WC pan) with seat lid with CP brass hinges and rubbers buffers 10ltr low level flushing cistern with fitting and brackets 40mm flush bend 20mm over flow pipe with specials of standard make and mosquito proof coupling of approved municippal design complete, including painting of fitting and brackets cutting and making good the walls and floors wherever required					
272.1	17.68.1	white vitreous china dual purpose WC pan with white solid plastic seat and lid with white vitreous china flushing cistern and CP flush bend	34	each	5744.30	195306.20	
273	17.69	Dismantling, Providing and fixing PTMT waste coupling for wash basin and sink of approved quality and colour					
273.1	17.69.1	waste coupling 31mm of 79mm length and 62mm breadth weighing not less than 45 grms	34	each	94.35	3207.90	
273.2	17.69.2	waste coupling 38mm of 83mm length and 77mm breadth weighing not less than 60grms	34	each	109.45	3721.30	
274	17.7	Dismantling, Providing and fixing PTMT bottle trap for wash basin and sink					
274.1	17.70.1	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 260 grms	34	each	403.30	13712.20	
274.2	17.70.2	Bottle trap 38mm 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 263 grms	34	each	435.30	14800.20	
275	17.71	Dismantling, Providing and fixing PTMT liquid soap container 109mm wide 125mm high and 112mm distance from wall of standard shape with bracket of the same material with snap fitting of approved quality and colour weighing not less than 105grms	34	each	180.10	6123.40	
276	17.72	Dismantling, Providing and fixing PTMT towel ring trapezoidal shape 215mm long 200mm wide with a minimum distances of 37mm from wall face with concealed fitting arrangement of approved quality and colour weighing not less than 88 grms	34	each	169.85	5774.90	
277	17.73	Dismantling, 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					
277.1	17.73.1	450mm long towel rail with total length of 495mm 78mm wide and effective height of 88mm weighing not less than 170grms	34	each	375.70	12773.80	
277.2	17.73.2	600mm long towel rail with total length of 645mm width 78mm and effective height of 88mm weighing not less than 190grms	34	each	415.20	14116.80	
278	17.74	Dismantling, Providing and fixing PTMT shelf 440mm long 124mm width and 36 mm height of approved quality and colour weighing not less than 300 grams	34	each	452.35	15379.90	
279	17.75	Dismantling, Providing and fixing PTMT 15mm urinal spreader size 95x69x100mm with 1/2" BSP thread and shapes weighing hot less than 60 grms	34	each	159.20	5412.80	
280	17.76	Dismantling, Providing and fixing PTMT urinal cock of approved quality and colour					
280.1	17.76.1	15mm nominal bore 80mm long 42mm high and 30mm wide with BSP female threads weighing not less than 48grm	34	each	123.15	4187.10	

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
281	17.77	Dismantling, Providing and fixing MS holder bat clamp of approved design to sand cast iron cast iron (spun) pipes comprising of MS flat brackets made of 50x5mm flat of specified shape projecting 75mm outside the wall surface and fixed on wall with 4nos 6mm dia expansion hold fasteners including drilling necessary holes in brick wall CC/RCC surface and the cost of bolts etc. the pipe shall be fixed to the already fixed brackets with the help of 30mm x 1.6mm galvanised MS flats of specified shape and of total length 420mm and shall be fixed with MS nuts bolts and washers of size of size 25x6mm , one bolts on each side of the pipe					
281.1	17.77.1	total bracket length 580mm of approved shape and design (for single 100mm dia pipe)	34	each	168.00	5712.00	
281.2	17.77.2	total bracket length 810mm of approved shape and design (for two 100mm dia pipes)	34	each	205.50	6987.00	
281.3	17.77.3	total bracket length 1040mm of approved shape and design (for three 100mm dia pipes)	34	each	242.90	8258.60	
282	BHEL Approved Rate	Rectifying the dampness due to leaking joints of Nahany traps alkathin / lead pipe connections to W.C's joints in AC pipes embedded in flooring including chasing brick work / concrete and making good after repairs in cement mortar including cost of all materials, curing etc complete for all specials all as directed by Engineer-in-charge.(trap and PVC Pipe if replaced will be measured separately)	100	Each	248.57	24857.00	
283	BHEL Approved Rate	Dismantling and replacing with new ones of approved make including chasing of brick work / concrete, making good in CM cost of all materials, curing for the following items etc complete all as directed by Engineer-in-charge.					
283.1	BHEL Approved Rate	Wash hand basins of size 22"x16" (without fittings)	34	Each	640.00	21760.00	
283.2	BHEL Approved Rate	Wash hand basins of size 18"x12" (without fittings).	34	Each	560.00	19040.00	
283.3	BHEL Approved Rate	Indian water closet 630 mm / 580 mm	34	Each	680.00	23120.00	
283.4	BHEL Approved Rate	European Water closets complete all as directed by Engineer-in-charge.	34	Each	960.00	32640.00	
283.5	BHEL Approved Rate	Standing type white glazed flat back urinals.	34	Each	480.00	16320.00	
283.6	BHEL Approved Rate	Porcelain 'P' trap of size 4"	34	Each	240.00	8160.00	
283.7	BHEL Approved Rate	Orissa Pan of approved make and size 580 x 440 mm	34	Each	800.00	27200.00	
284	BHEL Approved Rate	SWG gully traps 6"x6" or 4"x4" with CI frame and cover.	34	Each	172.91	5879.08	
285	BHEL Approved Rate	Fixing of white coloured PVC low level flushing cistern 10 lit capacity supplied from BHEL stores complete all as directed by Engineer-in-charge.	34	Each	320.00	10880.00	Flush Tanks free issued
286	17.9/RA	labour charges for Fixing kitchen black stone sinks of 1/2" thick, 24" x 18" x 7" with CI brackets CP brass china with CP brass waste complete including painting the fittings and brackets cutting and making good the walls wherever required. (Black stone sink along with waste water pipe,waste coupling and brackets will be free issue from BHEL store).	34	Each	431.58	14673.76	Black stone sink along with waste water pipe,waste coupling and brackets free issued
287	BHEL Approved Rate	Dismantling and replacing with new ones of approved make including cost of all materials etc complete all as directed by Engineer-in-charge.	10			0.00	
287.1	BHEL Approved Rate	1/2" C.P. pillar taps (500 gms) SEIKO DELUX HEAVY DUTY.	34	Each	283.15	9627.10	
287.2	BHEL Approved Rate	1/2" brass stop cock (400 gms)	34	Each	268.38	9124.92	
287.3	BHEL Approved Rate	3/4" brass stop cock.	34	Each	329.28	11195.52	
287.4	BHEL Approved Rate	1/2" X 18" PVC pipe connections. (Heavy duty).	34	Each	62.65	2130.10	
287.5	BHEL Approved Rate	PVC flexible pipe 32 mm dia.	34	Each	65.52	2227.68	
287.6	BHEL Approved Rate	3/4" polymer ball cock of ISI makes approved brand.	34	Each	270.19	9186.32	
287.7	BHEL Approved Rate	1/2" polymer ball cock of ISI makes approved brand.	34	Each	196.70	6687.80	
287.8	BHEL Approved Rate	E.W.C seat covers (solid) of any shade.	34	Each	428.26	14560.84	
287.9	BHEL Approved Rate	CP consealed stock cock 1/2" dia with internal brass threadings.	34	Each	367.46	12493.57	
287.10	BHEL Approved Rate	Hot and cold mixing viave of SEIKO DELUX make.	34	Each	1156.41	39318.08	
287.11	BHEL Approved Rate	C.P. waste coupling 1 1/4" dia (32 mm).	34	Each	178.18	6058.05	
287.12	BHEL Approved Rate	C.P. Nahani trap jalise 5" dia.	34	Each	19.45	661.16	
287.13	BHEL Approved Rate	Hot water connections.	34	Each	110.24	3748.02	
287.14	BHEL Approved Rate	C.I. brackets.	34	Each	90.78	3086.38	
287.15	BHEL Approved Rate	Porcelain foot rests 250 x 125 x 25 mm	34	Each	157.99	5371.66	

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
287.16	BHEL Approved Rate	1/2" C.I bib taps with brass internal, turning (Alto brand or equivalent).	34	Each	88.62	3013.08	
287.17	BHEL Approved Rate	1/2" Polymet bib taps (PTMT material) prayag make.	34	Each	166.43	5658.69	
287.18	BHEL Approved Rate	PVC shower swing type for the 1/2" 3/4" pipe (Prayag make).	34	Each	162.11	5511.60	
287.19	BHEL Approved Rate	1/2" C.I. stop cock with brass internal turnings (Alto or equivalent brand).	34	Each	144.82	4923.74	
288	BHEL Approved Rate	PVC syphon set suitable for PVC/CI law down flush tank of 10 litres capacity with all fittings etc.	34	Each	1060.92	36071.28	
289	BHEL Approved Rate	Supplying and fixing of PVC balls ISI marked for ball cocks in over head tanks and flush tanks for 20 mm dia.etc. complete all as directed by Engineer-in-charge.	34	Each	30.49	1036.73	
290	BHEL Approved Rate	Supplying and fixing CI Nahany trap 76 mm (3") dia in cement concrete 1:2:4 and 12.7 mm (5") dia CI grating hinged to Nahany trap including breaking of the flooring and redoing the same wherever necessary etc complete all as directed by Engineer-in-charge.	34	Each	280.00	9520.00	
291	BHEL Approved Rate	Removing and refixing GI pipe 13 to 40 mm dia including cost of jointing materials such as specials like collars, elbows, bends etc complete all as directed by Engineer-in-charge.	34	One Rmt	50.11	1703.60	
292	BHEL Approved Rate	Supplying and fixing Telephonic shower including cost of all materials and fixtures and fittings etc complete all as directed by Engineer-in-charge.	34	Each	1188.60	40412.40	
293	BHEL Approved Rate	Providing PVC storage tank covers located over the buildings to suit existing PVC storage tanks with nut and bolts etc complete all as directed by Engineer-in-charge.	34	Each	84.00	2856.00	
294	BHEL Approved Rate	Dismantling of the existing AC/PVC Pipe (old pipes are to be handed over to department as per instructions of the Engineer-in-charge) and supplying & fixing of 75 mm dia Prince/ Sudhakar make or equivalent quality as approved by Engineer-in-charge of PVC / SWR pipes (as per ISI standards) 4 kgs/ cm ² . etc complete all as directed by Engineer-in-charge.	34	Rmt	117.60	3998.40	
295	BHEL Approved Rate	Dismantling of the existing AC /PVC Pipes (the pipes are to be returned to department as per instructions of the Engineer-in-charge) and Supply & Fixing Prince / Sudhakar make or equivalent approved quality PVC / SWR pipes (as per ISI standards) 4 kg / cm ² ...110 mm dia etc complete all as directed by Engineer-in-charge.	34	Rmt	200.20	6806.80	
296	BHEL Approved Rate	Dismantling of the existing specials and Supplying & Fixing Prince / Sudhakar make or equivalent approved quality (U.V. resistant UPVC) SWR pipe fittings (as per ISI standards) etc complete all as directed by Engineer-in-charge.					
296.1	BHEL Approved Rate	75 mm dia plain bend.	34	Each	92.40	3141.60	
296.2	BHEL Approved Rate	75 mm dia plug bend.	34	Each	110.60	3760.40	
296.3	BHEL Approved Rate	75 mm dia off-set.	34	Each	84.00	2856.00	
296.4	BHEL Approved Rate	75 mm dia Single 'Y' with door.	34	Each	144.00	4896.00	
296.5	BHEL Approved Rate	75 mm dia pipe clip.	34	Each	21.00	714.00	
296.6	BHEL Approved Rate	75 mm dia single tee with door.	34	Each	121.80	4141.20	
296.7	BHEL Approved Rate	110 mm dia plain bend.	34	Each	96.00	3264.00	
296.8	BHEL Approved Rate	110 mm dia plug bend.	34	Each	120.00	4080.00	
296.9	BHEL Approved Rate	110 mm dia Single 'Y' with door.	34	Each	160.00	5440.00	
296.10	BHEL Approved Rate	110 mm dia Double 'Y' with door.	34	Each	200.00	6800.00	
296.11	BHEL Approved Rate	110 mm dia off-set.	34	Each	130.20	4426.80	
296.12	BHEL Approved Rate	110 mm dia vent cowl.	34	Each	46.20	1570.80	
296.13	BHEL Approved Rate	110 mm dia pipe clip.	34	Each	25.20	856.80	
296.14	BHEL Approved Rate	110 mm dia single tee with door.	34	Each	120.00	4080.00	
296.15	BHEL Approved Rate	110 mm dia coupler.	34	Each	81.20	2760.80	
WATER SUPPLY WORKS							
297	18.1	Providing and fixing Polyethene -Aluminium-Polythelene(PE-AL-PE) Complete Pressure Pipe conforming to IS -15450 U.V.stabilized for hot & cold water supply, capable to withstand temprature up to 80 C including all special fittings of composite metrial (engineering plastic bland and brass inserts wherever required) e.g. elbows, tees, reducers, couplers & connectors etc. with clamp at 1.00 metre speacing. this includes testing of joint complete as per directon of the Engineer in charge					Cement free issue
		Internal work-Exposed on wall					
297.1	18.1.1	1216(16 mm OD) pipe	34	metre	187.46	6373.63	
297.2	18.1.2	1620 (20 mm OD) pipe	34	metre	224.20	7622.85	
297.3	18.1.3	2025 (25 mm OD) pipe	34	metre	277.54	9436.48	
297.4	18.1.4	2532 (32 mm OD) pipe	34	metre	362.41	12322.09	
297.5	18.1.5	3240 (40 mm OD) pipe	34	metre	559.19	19012.30	
297.6	18.1.6	4050 (50 mm OD) pipe	34	metre	596.94	20295.80	

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
298	18.2	Providing and fixing Polyethylene-Aluminium-Polyethylene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 U.V.stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80 C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows, tees, reducers, couplers & connectors etc. with clamps at 1.00 metre spacing. This includes the costs of cutting chases and including testing of joints complete as per direction of the engineer in charge.					Cement free issue
Concealed work including cutting chases and making good the wall etc.							
298.1	18.2.1	1216 (16mm OD) Pipe	34	metre	292.84	9956.54	
298.2	18.2.2	1620 (20 mm OD) pipe	34	metre	335.49	11406.64	
298.3	18.2.3	2025(25mm OD) Pipe	34	metre	400.54	13618.34	
298.4	18.2.4	2532(32mm OD) Pipe	34	metre	502.19	17074.44	
299	18.7	Providing and fixing chlorinated polyvinyl chloride (CPVC) pipes, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fitting including of pipes with clamps at 1.00m spacing. This including jointing of pipes and fitting with one step CPVC solvent cement and testing of joints complete as per direction of engineer in charge					Required in place of GI pipe
Internal work-Exposed on wall							
299.1	18.7.1	15mm nominal outer dia. Pipes	34	mtr	133.66	4544.43	
299.2	18.7.2	20mm nominal outer dia. Pipes	34	mtr	156.80	5331.25	
299.3	18.7.3	25mm nominal outer dia. Pipes	34	mtr	197.49	6714.78	
299.4	18.7.4	32mm nominal outer dia. Pipes	34	mtr	252.21	8575.29	
299.5	18.7.5	40mm nominal outer dia. Pipes	34	mtr	347.79	11824.70	
299.6	18.7.6	50mm nominal outer dia. Pipes	34	mtr	513.89	17472.10	
300	18.8	providing and fixing chlorinated polyvinyl chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain and brass threaded fitting i/c fixing the pipe with clamps at 1.00m spacing. This including jointing of pipes and fitting with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of engineer in charge					Cement free issue
Concealed work including cutting chases and making good the walls etc.							
300.1	18.8.1	15mm nominal outer dia. Pipes	34	mtr	213.54	7260.34	
300.2	18.8.2	20mm nominal outer dia. Pipes	34	mtr	237.94	8089.94	
300.3	18.8.3	25mm nominal outer dia. Pipes	34	mtr	292.84	9956.54	
300.4	18.8.4	32mm nominal outer dia. Pipes	34	mtr	353.79	12028.84	
301	18.10	Providing and fixing GI pipes complete with GI fitting and clamps including cutting and making good the walls etc. Internal work-Exposed on wall					Cement free issue
301.1	18.10.1	15mm nominal bore	34	mtr	132.56	4507.13	
301.2	18.10.2	20mm nominal bore	34	mtr	153.21	5208.97	
301.3	18.10.3	25mm nominal bore	34	mtr	202.50	6884.92	
301.4	18.10.4	32mm nominal bore	34	mtr	252.94	8600.09	
301.5	18.10.5	40mm nominal bore	34	mtr	317.64	10799.76	
301.6	18.10.6	50mm nominal bore	34	mtr	407.19	13844.46	
302	18.11	Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, i/c making good the walls etc. concealed pipe, including painting with anti corrosive bitumastic paint, cutting chases and making good the wall :					
302.1	18.11.1	15 mm dia nominal bore	10	mtr	229.10	2291.00	
302.2	18.11.2	20 mm dia nominal bore	10	mtr	251.30	2513.00	
303	18.12	Providing and fixing GI pipe complete with GI fitting including trenching and refilling etc. External work					
303.1	18.12.1	15mm nominal bore	34	mtr	142.25	4836.50	
303.2	18.12.2	20mm nominal bore	34	mtr	161.25	5482.50	
303.3	18.12.3	25mm nominal bore	34	mtr	209.40	7119.60	
303.4	18.12.4	32mm nominal bore	34	mtr	248.55	8450.70	
303.5	18.12.5	40mm nominal bore	34	mtr	294.20	10002.80	
303.6	18.12.6	50mm nominal bore	34	mtr	355.95	12102.30	
303.7	18.12.7	65mm nominal bore	34	mtr	453.55	15420.70	
303.8	18.12.8	80mm nominal bore	34	mtr	573.40	19495.60	
304	18.13	Making connection of GI distribution branch with GI main of following sizes by providing and fixing tee including cutting and threading the pipe ect complete					
304.1	18.13.1	25 to 40mm nominal bore	34	each	277.35	9429.90	
304.2	18.13.2	50 to 80mm nominal bore	34	each	630.15	21425.10	
305	18.15	Providing and fixing brass bib cock of approved quality:					
305.1	18.15.1	15 mm nominal bore	34	each	205.60	6990.40	
305.2	18.15.2	20 mm nominal bore	34	each	266.15	9049.10	
305.3	18.16	Providing and fixing brass stop cock of approved quality :					
305.4	18.16.1	15 mm nominal bore	34	each	205.60	6990.40	
305.5	18.16.2	20 mm nominal bore	34	each	266.65	9066.10	
306	18.17	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end)					
306.1	18.17.1	25 mm nominal bore	34	each	372.95	12680.30	
306.2	18.17.2	32 mm nominal bore	34	each	450.90	15330.60	
306.3	18.17.3	40 mm nominal bore	34	each	546.05	18565.70	
306.4	18.17.4	50 mm nominal bore	34	each	780.60	26540.40	
306.5	18.17.5	65 mm nominal bore	34	each	1073.25	36490.50	
306.6	18.17.6	80 mm nominal bore	34	each	1832.95	62320.30	
307	18.18	Providing and fixing ball valve (brass) of approved quality ,High or low pressure ,with plastic floats complete :					
307.1	18.18.1	15 mm nominal bore	34	each	258.05	8773.70	
307.2	18.18.2	20 mm nominal bore	34	each	360.20	12246.80	
307.3	18.18.3	25 mm nominal bore	34	each	421.65	14336.10	
308	18.19	Providing and fixing gun metal non return of approved quality (screwed end)					
308.1	18.19.1	25 mm nominal bore					
308.2	18.19.1.1	Horizontal	34	each	383.45	13037.30	
308.3	18.19.1.2	vertical	34	each	395.05	13431.70	
308.4	18.19.2	32 mm nominal bore					
308.5	18.19.2.1	Horizontal	34	each	490.25	16668.50	
308.6	18.19.2.2	vertical	34	each	594.80	20223.20	
308.7	18.19.3	40 mm nominal bore					
308.8	18.19.3.1	Horizontal	34	each	620.25	21088.50	
308.9	18.19.3.2	vertical	34	each	817.70	27801.80	
308.10	18.19.4	50 mm nominal bore					
308.11	18.19.4.1	Horizontal	34	each	936.35	31835.90	
308.12	18.19.4.2	vertical	34	each	1110.55	37758.70	
308.13	18.19.5	65 mm nominal bore					
308.14	18.19.5.1	Horizontal	34	each	1681.95	57186.30	
308.15	18.19.5.2	vertical	34	each	1949.10	66269.40	
308.16	18.19.6	80 mm nominal bore					
308.17	18.19.6.1	Horizontal	34	each	2392.95	81360.30	
308.18	18.19.6.2	vertical	34	each	3089.85	105054.90	

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
309	18.21	Providing and fixing uplasticised PVC connection pipe with brass unions					
309.1	18.21.1	30 cm length					
309.2	18.21.1.1	15 mmmnominal bore	34	each	51.35	1745.90	
309.3	18.21.1.2	20 mm nominal bore	34	each	59.50	2023.00	
309.4	18.21.2	45 cm length					
309.5	18.21.2.1	15 mmmnominal bore	34	each	61.70	2097.80	
309.6	18.21.2.2	20 mm nominal bore	34	each	73.35	2493.90	
310	18.22	Providing and fixing CP brass shower rose with 15 or 20mm inlet					
310.1	18.22.1	100 mm dia meter	34	each	58.15	1977.10	
310.2	18.22.2	150 mm dia meter	34	each	77.85	2646.90	
311	18.23	laying in position centrifugally cast spun iron S&S or flanged pipes(excluding cost of pipe)	34	quintal	101.70	3457.80	
312	18.24	Laying in position S&S or flanged CI special such as tees bends collars tapers and caps etc. (excluding cost fo specials)	34	quintal	186.10	6327.40	
313	18.25	Providing and laying S&S CI standard specials such as tees bends collars tapers caps etc., (Heavy class)					
313.1	18.25.1	Upto 300mm dia	34	quintal	4202.35	142879.90	
313.2	18.25.2	over 300mm dia	34	quintal	4318.50	146829.00	
314	18.26	Providing and laying flanged CI standard specials such as tees bends collars tapers caps etc. suitable for flanges jointing as per IS 1538					
314.1	18.26.1	Upto 300mm dia	34	quintal	6351.10	215937.40	
314.2	18.26.2	over 300mm dia	34	quintal	6699.55	227784.70	
315	18.27	Providing and laying S&S centrifugly cast (spun) iron pipes (class LA) conforming to IS 1536					
315.1	18.27.1	100 mm dia pipe	34	mtr	986.40	33537.60	
315.2	18.27.2	125 mm dia pipe	34	mtr	1237.15	42063.10	
315.3	18.27.3	150 mm dia pipe	34	mtr	1476.70	50207.80	
315.4	18.27.4	200 mm dia pipe	34	mtr	2516.30	85554.20	
315.5	18.27.5	250 mm dia pipe	34	mtr	3360.20	114246.80	
315.6	18.27.6	300 mm dia pipe	34	mtr	4437.80	150885.20	
316	18.28	Providing lead caulked joints to spun iron or CI pipes and specials including testing of joints but excluding the cost of pig lead					
316.1	18.28.1	100 mm diameter pipe	34	each	150.00	5100.00	
316.2	18.28.2	125 mm diameter pipe	34	each	220.65	7502.10	
316.3	18.28.3	150 mm diameter pipe	34	each	225.10	7653.40	
316.4	18.28.4	200 mm diameter pipe	34	each	298.65	10154.10	
316.5	18.28.5	250 mm diameter pipe	34	each	372.70	12671.80	
316.6	18.28.6	300 mm diameter pipe	34	each	448.75	15257.50	
316.7	18.28.7	350 mm diameter pipe	34	each	463.85	15770.90	
317	18.29	Supplying pig lead at site of work	32	quintal	10462.55	334801.60	
318	18.3	Providing flanged joints to double flanged CI / DI pipes and specials including testing of joints					
318.1	18.30.1	80 mm diameter pipe	34	each	92.65	3150.10	
318.2	18.30.2	100 mm diameter pipe	34	each	155.25	5278.50	
318.3	18.30.3	125 mm diameter pipe	34	each	165.70	5633.80	
318.4	18.30.4	150 mm diameter pipe	34	each	192.80	6555.20	
318.5	18.30.5	200 mm diameter pipe	34	each	198.65	6754.10	
318.6	18.30.6	250 mm diameter pipe	34	each	297.20	10104.80	
318.7	18.30.7	300 mm diameter pipe	34	each	306.50	10421.00	
318.8	18.30.8	350 mm diameter pipe	34	each	408.30	13882.20	
319	18.31	Providing and fixing CI sluice valves (with cap) complete with bolts nuts rubber insertions etc. (the tail pieces if required will be paid separately)					
319.1	18.31.1	100 mm dia pipe					
319.2	18.31.1.1	Class I	34	each	3068.35	104323.90	
319.3	18.31.1.2	Class II	34	each	3498.30	118942.20	
319.4	18.31.2	125 mm dia pipe					
319.5	18.31.2.1	Class I	34	each	3461.15	117679.10	
319.6	18.31.2.2	Class II	34	each	4181.45	142169.30	
319.7	18.31.3	150 mm dia pipe					
319.8	18.31.3.1	Class I	34	each	4487.75	152583.50	
319.9	18.31.3.1	Class II	34	each	5200.40	176813.60	
319.10	18.31.4	200 mm dia pipe					
319.11	18.31.4.1	Class I	34	each	8242.25	280236.50	
319.12	18.31.4.2	Class II	32	each	11260.60	360339.20	
319.13	18.31.5	250 mm dia pipe					
319.14	18.31.5.1	Class I	32	each	12037.80	385209.60	
319.15	18.31.5.2	Class II	32	each	16723.30	535145.60	
319.16	18.31.6	300 mm dia pipe					
319.17	18.31.6.1	Class I	32	each	16766.25	536520.00	
319.18	18.31.6.2	Class II	32	each	20950.60	670419.20	
320	18.32	Constructing masonry chamber 30x30x50 cm inside with 75 class designation brick work in cement mortar 1:4(1 cement 4 coarse sand) for stop cock with CI surface box 100x100x75mm (inside) with hinged cover fixed in cement concrete slab 1:2:4 mix (1 cement 2 coarse sand 4 graded stone aggregate 20mm nominal size) necessary excavation foundation concrete 1:5:10(1 cement 5 fine sand 10 graded stone aggregate 40mm nominal size) and 12mm thick finished with a floating coat of neat cement complete as per standard design					Cement free issue
320.1	18.32.1	With FPS bricks	34	each	733.71	24945.97	
321	18.33	Constructing masonry chamber 60x60x75 cm inside with 75 class designation brick work in cement mortar 1:4 (1 cement 4 coarse sand) for sluice valve with CI surface box 100mm top diameter 160mm bottom diameter and 180mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement 2 coarse sand 4 graded stone aggregate 20mm nominal size) 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 coarsed sand) 12mm thick finished with a floating coat of neat cement complete as per standard design					Cement free issue
321.1	18.33.1	With FPS bricks	34	each	4415.52	150127.68	
322	18.34	Constructing masonry chamber 90x90x100 cm inside with 75 class designation brick work in cement mortar 1:4 (1 cement 4 coarse sand) for sluice valve with CI surface box 100mm top diameter 160mm bottom diameter and 180mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement 2 coarse sand 4 graded stone aggregate 20mm nominal size) 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 coarsed sand) 12mm thick finished with a floating coat of neat cement complete as per standard design					Cement free issue
322.1	18.34.1	With FPS bricks	33	each	7581.04	250174.32	

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
323	18.35	Constructing masonry chamber 120x120x100 cm inside with 75 class designation brick work in cement mortar 1:4 (1 cement 4 coarse sand) for sluice valve with CI surface box 100mm top diameter 160mm bottom diameter and 180mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement 2 coarse sand 4 graded stone aggregate 20mm nominal size) 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 coarsed sand) 12mm thick finished with a floating coat of neat cement complete as per standard design					Cement free issue
323.1	18.35.1	With FPS bricks	34	each	10460.08	355642.55	
324	18.36	Constructing masonry chamber 60x60x75 cm inside with 75 class designation brick work in cement mortar 1:4 (1 cement 4 coarse sand) for sluice valve with CI surface box 100mm top diameter 160mm bottom diameter and 180mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement 2 coarse sand 4 graded stone aggregate 20mm nominal size) 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 coarsed sand) 12mm thick finished with a floating coat of neat cement complete as per standard design					Cement free issue
324.1	18.36.1	With FPS bricks	34	each	4224.83	143644.05	
325	18.37	Constructing masonry chamber60x45x50 cm inside with 75 class designation brick work in cement mortar 1:4 (1 cement 4 coarse sand) for sluice valve with CI surface box 100mm top diameter 160mm bottom diameter and 180mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement 2 coarse sand 4 graded stone aggregate 20mm nominal size) 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 coarsed sand) 12mm thick finished with a floating coat of neat cement complete as per standard design					Cement free issue
325.1	18.37.1	With FPS bricks	34	each	4013.05	136443.53	
326	18.46	Providing and fixing GI union in GI pipe including cutting and threading the pipe and making long screws etc. complete (new work)					
326.1	18.46.1	15 mmmnominal bore	34	each	119.60	4066.40	
326.2	18.46.2	20 mm nominal bore	34	each	142.85	4856.90	
326.3	18.46.3	25 mm nominal bore	34	each	154.45	5251.30	
326.4	18.46.4	32 mm nominal bore	34	each	189.30	6436.20	
326.5	18.46.5	40 mm nominal bore	34	each	229.95	7818.30	
326.6	18.46.6	50 mm nominal bore	34	each	307.70	10461.80	
326.7	18.46.7	65 mm nominal bore	34	each	551.60	18754.40	
326.8	18.46.8	80 mm nominal bore	34	each	656.15	22309.10	
327	18.47	Providing and fixing GI union in existing GI pipe line cutting and threading the pipe and making long screws including excavation refilling the earth or cutting of wall and making good the same complete wherever required					
327.1	18.47.1	15 mmmnominal bore	34	each	259.65	8828.10	
327.2	18.47.2	20 mm nominal bore	34	each	282.90	9618.60	
327.3	18.47.3	25 mm nominal bore	34	each	294.50	10013.00	
327.4	18.47.4	32 mm nominal bore	34	each	329.35	11197.90	
327.5	18.47.5	40 mm nominal bore	34	each	370.00	12580.00	
327.6	18.47.6	50 mm nominal bore	34	each	498.65	16954.10	
327.7	18.47.7	65 mm nominal bore	34	each	742.55	25246.70	
327.8	18.47.8	80 mm nominal bore	34	each	847.10	28801.40	
328	18.49	Providing and fixing CP brass bib cock of approved quality conforming to IS 8931					
328.1	18.49.1	15 mmmnominal bore	34	each	397.50	13515.00	
329	18.5	Providing and fixing CP brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810gms					
329.1	18.50.1	15 mmmnominal bore	34	each	411.40	13987.60	
330	18.51	Providing and fixing CP brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms					
330.1	18.51.1	15 mmmnominal bore	34	each	430.60	14640.40	
331	18.52	Providing and fixing CP brass stop cock (concealed) of standard design and of approved make conforming to IS 8931					
331.1	18.52.1	15 mmmnominal bore	34	each	426.55	14502.70	
332	18.53	Providing and fixing CP brass angle valve for basin mixer and geyser points of approved quality conforming to IS 8931a) 15mm nominal bore					
332.1	18.53.1	15mm nominal bore	34	each	449.35	15277.90	
333	18.54	Providing and fixing PTMT bib cock of approved quality and colour					
333.1	18.54.1	15mm nominal bore, 86mm long weighing not less than 88gms	34	each	130.10	4423.40	
333.2	18.54.2	15mm nominal bore, 122mm long weighing not less than 99gms	34	each	176.55	6002.70	
333.3	18.54.3	15mm nominal bore, 165mm long weighing not less than 110gms	34	each	199.80	6793.20	
333.4	18.54.4	15mm nominal bore, 90mm long weighing not less than 93gms	34	each	168.45	5727.30	
334	18.55	Providing and fixing PTMT stop cock of approved quality and colour					
334.1	18.55.1	15mm nominal bore, 86mm long weighing not less than 88gms	34	each	130.10	4423.40	
334.2	18.55.2	20mm nominal bore, 89mm long weighing not less than 88gms	34	each	164.95	5608.30	
334.3	18.55.3	concealed stop cock, 15mm nominal bore, 108mm long weighing not less than 108gms	34	each	214.90	7306.60	
335	18.56	Providing and fixing PTMT pillar cock of approved quality and colour					
335.1	18.56.1	15mm nominal bore, 107mm long weighing not less than 110gms	34	each	202.25	6876.50	
335.2	18.56.2	15mm nominal bore, 125mm long weighing not less than 120gms	34	each	277.25	9426.50	
336	18.57	Providing and fixing PTMT push cock of approved quality and colour					
336.1	18.57.1	15mm nominal bore, 98mm long weighing not less than 75gms	34	each	118.50	4029.00	
336.2	18.57.2	15mm nominal bore, 80mm long weighing not less than 46gms	34	each	106.85	3632.90	
337	18.58	Providing and fixing PTMT grating of approved quality and colour .					
337.1	18.58.1	Circular type					
337.2	18.58.1.1	100 mm nominal dia .	34	each	43.20	1468.80	
337.3	18.58.1.2	125 mmmnominal dia with 25mm waste hole	34	each	50.15	1709.10	
337.4	18.58.2	Rectangular type with openable circular lid .					
337.5	18.58.2.1	150 mm nominal size squire 100 mm diameter of the inner hinged round grating	34	each	124.50	4233.00	
338	18.6	Providing and fixing enclosed type water meter (bulk type) conforming to IS 2373 and tested by municipal board complete with bolts nuts rubber insertions etc. (the tail pieces if required will be paid separately)					
338.1	18.60.1	80 mm nominal bore	34	each	2880.60	97940.40	
338.2	18.60.2	100 mm nominal bore	34	each	4329.20	147192.80	
339	18.61	Providing and fixing CI dirt box stairner for bulk type water meter with nuts bolts rubber insertions ect complete conforming to IS 2373					
339.1	18.61.1	80mm dia	34	each	3340.90	113590.60	
339.2	18.61.2	100mm dia	34	each	5300.55	180218.70	
340	18.62	Providing and fixing PTMT ball cock of approved quality colour and make complete with Epoxy coated aluminium rod with L.P/ H.P.H.D plastic ball					
340.1	18.62.1	15mm nominal bore, 105mm long weighing not less than 138gms	34	each	193.00	6562.00	
340.2	18.62.2	20mm nominal bore, 120mm long weighing not less than 198gms	34	each	273.05	9283.70	

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
341	18.64	Providing and fixing PTMT swivelling shower 15mm nominal bore weighing not less than 40 gms	33	each	112.75	3720.75	
342	18.65	Providing and fixing PTMT soap Dish holder having length of 138mm breadth 102mm height of 75mm with concealed fitting arrangement. Weighing not less than 106gms	34	each	151.10	5137.40	
343	18.66	Providing and laying S&S CI standard specials such as tees bends collars tapers and caps etc suitable for flanged jointing as per IS 1538					
343.1	18.66.1	Upto 300mm dia	34	quintal	6989.95	237658.30	
343.2	18.66.2	Above 300mm dia	34	quintal	8906.40	302817.60	
344	18.74	Providing and fixing unplasticised PVC connection pipe with PTMT nuts collar and bush of approved quality and colour					
344.1	18.74.1	15mm nominal bore with 30cm length	34	each	59.50	2023.00	
244.2	18.74.2	15mm nominal bore with 45 cm length	34	each	67.55	2296.70	
345	18.75	Providing and fixing PTMT extension nipple for water tank pipe fitting of approved quality and colour					
345.1	18.75.1	15mm nominal bore. weighing not less than 32gms	34	each	43.00	1462.00	
345.2	18.75.2	20mm nominal bore. weighing not less than 40gms	34	each	50.00	1700.00	
345.3	18.75.3	25mm nominal bore. weighing not less than 62gms	34	each	72.05	2449.70	
346	18.76	Cutting holes up to 30x 30 cm in walls including making good the same					Cement free issue
346.1	18.76.1	with FPS bricks	34	each	135.04	4591.43	
347	18.77	Cutting holes up to 15 x 15 cm in RCC floors and roofs for passing drain pipe etc. and repairing the holes after insertion of drain pipe etc. with cement concrete 1:2:4(1 cement 2 coarse sand 4 grade stone aggregate 20mm nominal size) including finishing complete so as to make it leak proof	34	each	139.88	4756.08	Cement free issue
348	18.83	Labour for cutting CI pipe with steel saw					
348.1	18.83.1	80 mm dia meter C.I pipe	25	each cut	41.35	1033.75	
348.2	18.83.2	100 mm dia meter C.I pipe	25	each cut	55.65	1391.25	
348.3	18.83.3	125 mm dia meter C.I pipe	25	each cut	77.65	1941.25	
348.4	18.83.4	150 mm dia meter C.I pipe	25	each cut	104.70	2617.50	
348.5	18.83.5	200 mm dia meter C.I pipe	25	each cut	139.65	3491.25	
348.6	18.83.6	250 mm dia meter C.I pipe	25	each cut	173.10	4327.50	
348.7	18.83.7	300 mm dia meter C.I pipe	25	each cut	208.05	5201.25	
348.8	18.83.8	350 mm dia meter C.I pipe	25	each cut	241.45	6036.25	
349	BHEL Approved Rate	Labour charges for erection PVC tanks-1000Lts including transportation from Dept stores to work spot (including all necessary fittings and specials like ball cock, nipples..etc).	25	Each	760.00	19000.00	
350	17.18.1/RA	Only Labour charges for erection & commissioning og PVC flush tanks. (Flush tank & all required materials will be issued by BHEL at their stores).	25	Each	88.00	2200.00	Flush tank & Accessories free issue
351	BHEL Approved Rate	Supply & fixing of brass spindle rods for 3" to 14" valves, including machine threading and finishing and with check nut as per site requirement.(Finished item weight will be measured for payment)	10	kg	880.00	8800.00	
352	BHEL Approved Rate	Supply & Fixing of 114mm Alkthene pipes	25	Rmt	384.00	9600.00	
DRAINAGE WORKS							
353	19.1	Providing and 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					Cement free issue
353.1	19.1.1	100 mm diameter	34	mtr	137.50	4674.92	
353.2	19.1.2	150 mm diameter	34	mtr	200.29	6809.92	
353.3	19.1.3	200 mm diameter	34	mtr	297.90	10128.72	
353.4	19.1.4	250 mm diameter	34	mtr	414.79	14102.84	
353.5	19.1.5	300 mm diameter	34	mtr	560.28	19049.37	
354	19.4	Providing and fixing square mouth SW gully trap grade :A: complete with CI grating brick masonry chamber with water tight CI cover with frame of 300x300mm size(inside) the weighing of cover to be not less than 4.50kg and frame to be not less than 2.70kg as per standard design (RCC cover in places of CI cover)					Rate analysis
354.1	19.4.1	100x100mm size P type					
354.2	19.4.1.1	With FPS bricks class designation 75	34	each	1099.55	37384.62	
354.3	19.4.1.2	with sewer bricks conforming to IS 4885	34	each	1136.80	38651.12	
354.4	19.4.2	150x100mm size P type					
354.5	19.4.2.1	With FPS bricks class designation 75	34	each	1127.31	38328.37	
354.5	19.4.2.2	with sewer bricks conforming to IS 4885	34	each	1164.56	39594.87	
354.6	19.4.3	180x150mm size P type					
354.7	19.4.3.1	With FPS bricks class designation 75	34	each	1220.36	41492.33	
354.8	19.4.3.2	with sewer bricks conforming to IS 4885	34	each	1257.61	42758.83	
355	19.5	Dismantling of old SW pipe including breaking of joints and bed concrete stacking of useful materials near the site within 50m lead and disposal of unserviceable materials into municipal dumps					Cement free issue
355.1	19.5.1	100 mm diameter	34	mtr	24.40	829.60	
355.2	19.5.2	150 mm diameter	34	mtr	26.95	916.30	
355.3	19.5.3	200 mm diameter	34	mtr	28.70	975.80	
355.4	19.5.4	250 mm diameter	34	mtr	30.40	1033.60	
355.5	19.5.5	300 mm diameter	34	mtr	32.15	1093.10	
355.6	19.5.6	350 mm diameter	34	mtr	37.00	1258.00	
355.7	19.5.7	400 mm diameter	34	mtr	40.45	1375.30	
355.8	19.5.8	450 mm diameter	34	mtr	42.15	1433.10	
356	19.6	Providing and laying non- pressure NP2 class (light duty) RCC pipes with collars joints with stiff mixture of cement mortar in the proportion of 1:2 (1 cement 2 fine sand) including testing of joints etc. complete					Cement free issue
356.1	19.6.1	100 mm dia RCC pipe	34	mtr	215.45	7325.17	
356.2	19.6.2	150 mm dia RCC pipe	34	mtr	251.02	8534.53	
356.3	19.6.3	250 mm dia RCC pipe	34	mtr	337.22	11465.59	
356.4	19.6.4	300 mm dia RCC pipe	34	mtr	416.51	14161.40	
356.5	19.6.5	450 mm dia RCC pipe	34	mtr	606.91	20635.01	
356.6	19.6.6	500 mm dia RCC pipe	34	mtr	707.10	24041.42	
356.7	19.6.7	600 mm dia RCC pipe	34	mtr	1065.67	36232.64	
356.8	19.6.8	700 mm dia RCC pipe	34	mtr	1225.56	41669.12	
356.9	19.6.9	800 mm dia RCC pipe	34	mtr	1391.31	47304.49	
356.10	19.6.10	900 mm dia RCC pipe	34	mtr	1650.39	56113.37	
356.11	19.6.11	1000 mm dia RCC pipe	34	mtr	2079.16	70691.40	
356.12	19.6.12	1100 mm dia RCC pipe	34	mtr	2519.37	85658.72	
356.13	19.6.13	1200 mm dia RCC pipe	34	mtr	2655.06	90272.01	
357	19.7	Constructing brick masonry manhole in cement mortar 1:4(1 cement 4 coarse sand) RCC top slab with 1:2:4 mix (1 cement 2 coarse sand 4 graded stone aggregate 20mm nominal size) foundation concrete 1:4:8 mix (1 cement 4 coarse sand 8 graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3(1 cement 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4(1 cement 2 coarse sand 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design					Cement / Steel free issue

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
357.1	19.7.1.1	With FPS bricks with class designation 75	34	each	4766.06	162046.04	
358	19.9	Constructing brick masonry circular type manhole 0.91m internal dia at bottom and 0.56m dia at top in cement mortar 1:4(1 cement 4 coarse sand) in side cement plaster 12mm thick with cement mortar 1:3(1 cement 3 coarse sand) finished with a floating coat of neat cement foundation concrete 1:3:6(1 cement 3 coarse sand 6 graded stone aggregate 40mm nominal size) and making necessary channel in cement concrete 1:2:4(1 cement 2 coarse sand 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement all complete as per standard design					Cement free issue
358.1	19.9.1	0.91m deep with SFRC cover and frame (heavy duty HD-20 grade designation) 560mm internal diameter conforming to IS 12592 total weight of cover and frame to be not less than 182 kg, fixed in cement concrete 1:2:4(1 cement 2 coarse sand 4 graded stones aggregate 20mm nominal size) including centering shuttering all complete at the external surface shall be paid for separately)					
358.2	19.9.1.1	With FPS bricks with class designation 75	34	each	5410.34	183951.48	
358.3	19.9.1.2	with sewer bricks conforming to IS 4885	34	each	5565.44	189224.88	
359	19.1	Extra depth for circular type manhole 0.91m internal dia(at bottom) with beyond 0.91m to 1.67m					Cement free issue
359.1	19.10.1	with F.P.S bricks class designation 75	34	mtr	2685.20	91296.80	
359.2	19.10.2	with sewer bricks conforming to IS 4885	34	mtr	2922.70	99371.80	
360	19.15	Providing NS foot rests including fixing in manholes with 20x20x10 cm cement concrete blocks 1:3:6(1 cement 3 coarse sand 6 graded stone aggregate 20mm nominal size) as per standards design					Cement / Steel free issue
360.1	19.15.1	with 20x20mm square bar	34	each	222.84	7576.54	
360.2	19.15.2	with 20mm dia meter round bar	34	each	188.04	6393.34	
361	19.19	Providing and fixing in position pre cast RCC manholescover and frame of required shape and approved quality					
361.1	19.19.1	LD-2.5					
361.2	19.19.1.1	Rectangular shape 600x450mm internal dimensions	34	each	942.76	32053.98	
361.3	19.19.1.2	square shape 450mm internal dimensions	34	each	811.65	27596.03	
361.4	19.19.1.3	Circular shape 450mm internal diameter	34	each	765.20	26016.73	
361.5	19.19.2	MD-10					
361.6	19.19.2.1	square shape 450mm internal dimensions	34	each	913.31	31052.68	
361.7	19.19.2.2	Circular shape500mm internal diameter	34	each	851.90	28964.53	
361.8	19.19.3	HD-20					
361.9	19.19.3.1	Circular shape560mm internal diameter	34	each	1334.50	45372.93	
362	19.21	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls floors with cement concrete 1:2:4 mix(1 cement 2 coarse sand 4 grades stone aggregate 20mm nominal size) cement plastered on both sides with cement mortar 1:3(1 cement 3 coarse sand) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete					Cement free issue
362.1	19.21.1	For pipes 100 to 230mm diameter	34	each	242.48	8244.25	
363	19.24	Dismantling of manhole including RCC top slab CI cover with frame including stacking of useful materials near the site and disposal of unserviceable materials into municipal dumps within 50m lead					
363.1	19.24.1	Rectangular manhole 90x80cm and 45cm deep	34	each	705.60	23990.40	
363.2	19.24.2	Rectangular manhole 120x90cm and 90cm deep	34	each	1238.05	42093.70	
363.3	19.24.3	Rectangular arch type manhole 140x90cm and 2.45m deep	34	each	2342.20	79634.80	
363.4	19.24.4	Circular manhole 122cm diameter and 1.68m deep	34	each	1795.30	61040.20	
364	19.26	Raising manhole cover and frame slab to required level including dismantling existing slab and making good the damage as required (Raising depth of manhole to be paid separately)					
364.1	19.26.1	Rectangular manhole 90x80cm with rectangular cover 600x450mm of grade LD-2.5	34	each	1239.70	42149.80	
364.2	19.26.2	Rectangular manhole 120x90cm with circular cover 500mm dia of grade MD-10	34	each	1942.20	66034.80	
364.3	19.26.3	Rectangular manhole 120x90cm with circular cover 560mm dia of grade HD-20	34	each	1807.75	61463.50	
364.4	19.26.4	Circular manhole 140cm dia with circular cover 600mm dia of grade EHD-35	34	each	169.75	5771.50	
365	19.30	Constructing brick masonry chamber for underground CI inspection chamber and bends with 75 class designation bricks in cement mortar 1:4(1 cement 4 coarse sand) CI cover with frame (light duty) 455x610mm internal dimensions total weight of cover with frame to be not less than 38kg (weight of cover 23kg and weight of frame 15kg) RCC top slab with 1:2:4 mix(1 cement 2 coarse sand 4 graded stone aggregate 20mm nominal size) foundation concrete 1:5:10 (1 cement 5 fine sand 10 graded stone aggregate 40mm nominal size) inside plastering 12mm 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					Cement / Steel free issue
365.1	19.30.1	Inside dimensions 455x610mm and 45 cm deep for single pipe line					
365.2	19.30.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	34	each	3394.98	115429.15	
365.3	19.30.2	inside dimensions 500x700mm and 45cm deep for pipe line with one or two inlets					
365.4	19.30.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	34	each	3609.50	122722.83	
365.5	19.30.3	inside dimensions 600x850mm and 45cm deep for pipe line with three or more inlets					
365.6	19.30.3.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	34	each	4057.90	137968.52	Full spec
366	19.31	Extra for depth beyond 45 cm of brick masonry chamber					Full spec
366.1	19.31.1	For 455x610mm size					Full spec
366.2	19.31.1.1	with FPS bricks	34	mtr	2319.20	78852.72	Full spec
366.3	19.31.2	For 500x700 mm size					Full spec
366.4	19.31.2.1	with FPS bricks	34	mtr	2529.99	86019.58	Full spec
366.5	19.31.3	For 600x 850 mm size					Full spec
366.6	19.31.3.1	with FPS bricks	34	mtr	2938.81	99919.54	Full spec
367	BHEL Approved Rate	Cleaning of Inspection Chamber / Manholes of different sizes, and diameters, silt, sand, root from Chambers and waste materials to be removed and disposal upto 10 Meters etc complete as directed by the Engineer-in-charge.					
367.1	BHEL Approved Rate	For Inspection Chambers	34	Nos	337.40	11471.60	

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
367.2	BHEL Approved Rate	For main Man holes upto any depth existing in township.	22	Nos	737.80	16231.60	
368	BHEL Approved Rate	Cleaning of external Sewerlines SWG/RCC Line of different Diameters. With bamboos / roding by using rope with knots, the line should be clear with all organic materials etc including roots, removal of silt, obstructed sludge with required tools, removal of silt sand, material came from the manholes, disposal upto lift upon a distance of 2 KM or suitable place as directed by the Engineer-in-charge.					
368.1	BHEL Approved Rate	4" Dia SWG Line Cleaning	34	One Rmt	12.00	408.00	
368.2	BHEL Approved Rate	6" Dia SWG Line Cleaning	34	One Rmt	16.00	544.00	
368.3	BHEL Approved Rate	9" Dia SWG Line Cleaning	34	One Rmt	24.00	816.00	
368.4	BHEL Approved Rate	12" Dia SWG Line Cleaning	34	One Rmt	36.00	1224.00	
369	BHEL Approved Rate	Supply & placing in position of SFRC covers of following sizes & standard thickness of 50mm /75mm .					
369.1	BHEL Approved Rate	600x600	34	Each	640.00	21760.00	
369.2	BHEL Approved Rate	600x900	34	Each	960.00	32640.00	
369.3	BHEL Approved Rate	600x1200	34	Each	880.00	29920.00	
369.4	BHEL Approved Rate	450x900	34	Each	1120.00	38080.00	
370	BHEL Approved Rate	Repairs to existng manholes / IC chambers by removing / replaster in CM 1:4, 20mm thick	34	Each	320.00	10880.00	
371	4.10	Providing and laying damp-proof course 40 mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mnominal size).	50	sqm	132.05	6602.63	
371	4.12	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification.	50	Per 50 kg cement	35.35	1767.50	
374	CPWD 14.4.1/P.215	Making the opening in brick masonry for door / window/clerestory window including diamantling in floor or walls by cutting masonry and making ood the damages to walls, flooring and jambs complete to match existing surgance i/c disposal of mulba / rubbish to the nearest municipal dumping ground etc., complete all the directed by Engineer-in-charge. For door / window / clerestory window	10	sqm	366.65	3666.50	
ROAD WORKS							
375	16.1	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonnes capacity after excavating earth to an average of 22.5cm depth dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surface earth lead upto 50mtr	34	sqm	61.25	2082.50	
376	16.2	Extra for compaction of earth work in embankment under optimum moisture conditions to give at least 95% of the maximum dry density (proctor density)	34	cum	7.75	263.50	
377	16.3	Supplying and stacking at site					
377.1	16.3.1	90mm to 45mm size stone aggregate	34	cum	1010.75	34365.50	
377.2	16.3.2	63mm to 45mm size stone aggregate	34	cum	1100.80	37427.20	
377.3	16.3.3	53mm to 22.4mm size stone aggregate	34	cum	1190.80	40487.20	
377.4	16.3.9	Good earth	34	cum	260.70	8863.80	
377.5	16.3.10	moorum	34	cum	624.45	21231.30	
378	16.4	Laying spreading and compacting stone aggregate of specified sizes to WBM specifications including spreading in uniform thickness hand picking rolling with 3 wheeled road/ vibratory roller 8-10 tonnes 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.	400	cum	330.15	132060.00	
379	16.9	Scarifying metalled (water bound) road surface including disposal of rubbish lead upto 50m and consolidation of the aggregate received from scarifing with power road roller of 8 to 10 tonnes capacity	34	sqm	10.90	370.60	
380	16.11	Dry stone pitching 22.5cm thick including supply of stones and preparing surface completes	34	sqm	336.50	11441.00	
381	16.13	Cutting road and making good the same including supply of extra quantities of material ie aggregate moorum screening red bajri and labour required					
381.1	16.13.2	water bound macadam	34	cum	989.25	33634.50	
382	16.15	Supplying at site					Cement / Steel free issue
382.1	16.15.1	RCC standard post/ struts/ rails/ pales of mix 1:1.5:3(1cement 1.5coarse sand 3 graded stone aggregate 12.5mm nominal size) with wooden plugs or 6mm bar nibs wherever required as per direction of engineer in charge including fixing (cost of earth works in excavation, concrete works in foundation to be paid separately)	10	cum	13979.45	139794.50	
383	16.17	Fencing with RCC post placed at required distance embedded in cement concrete blocks every 15th post last but one end post and coner post shall be stuted on both sides and end post one side only, provided with horizontal lines and two diagonal of barbed wire 9.38kg per 100mtr (min) between the two posts fitted and fixed with GI staples on wooden plugs or GI binding wire tied to 6mm bar nibs fixed while casting the post (cost of RCC posts struts earth work and concrete to be paid for separately) payment to be made per metre cost of total length of barbed wire used					
383.1	16.17.1	With GI barbed wire	34	mtr	7.60	258.40	

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
384	16.2	welded steel wire fabric fencing with posts of specified material and of standard design placed and embedded in cement concrete blocks 45x45x60cm of mix 1:5:10(1cement 5 fine sand 10 graded stone aggregate 40mm nominal size) every 15th post last but one end post and corer post shall be struted on both sides and and end post on one side only and struts embedded in cement concrete blocks 70x45x50cm of the same mix provided with welded steel wire fabric fixed between the posts fitted and fixing with GI staples on wooden plugs or tied between the posts fitted and fixed with GI binding wire (cost of posts welded steel wire fabric painting earth work in excavation and concrete to be paid for separately)	34	sqm	20.65	702.10	
385	16.21	Engraving letters in hard Granite stone	34	per letter per cm height	3.00	102.00	
386	16.24	Providing and fixing precast reinforced cement concrete 1:1.5:3(1cement 1.5 coarse sand 3 graded stone aggregate 20mm nominal size) kilometres stones as per standard design including finishing smooth in 1:3 cement mortar (1cement fine sand) but excluding the cost of earth work concrete in foundation painting and lettering etc. which shall be paid for separately					Cement free issue
386.1	16.24.2	50x152.5x25cm size	34	each	2316.89	78774.14	
387	16.42	Cement concrete 1:2:4(1cement 2 coarse sand 4 grade stone aggregate 40mm nominal size) in pavements laid to required slope and camber in panels as required including consolidation finishing and tamping complete	34	cum	2644.15	89901.10	Cement free issue
388	16.43	Providing and laying desing mix cement concrete in roads taxi tracks and runways having a minimum works test beam flexural strength of 30 kg per cm2 at 28days using not less than 430kg. Of cement per cum of finished concrete coarse sand and grade stone aggregate of 40mm nominal size in appropriate proportions as per specified design criteria approved by engineer in charge mechanically vibrated using needle and surface vibrators including steel form work with sturdy MS channel sections including curing and approved joint filler and filling construction joints and dummy joints with approved joint filler and primer including rounding of the edges and filling the grooves10x25mm deep at top for construction joints and 10mmx50mm deep at top for dummy joints with joint sealing compound (conforming to grade B of IS 1834) including making necessary arrangements for expansion joints etc. all complete with readymix concrete.	34	cum	1717.85	58406.90	Cement free issue
389	16.44	Extra for providing and mixing hard crete of approved quality as per manufactures specification in cement concrete	34	ltr	43.00	1462.00	
390	16.47	Painting runway/ taxi track/ apron marking with adequate no 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 out complete					
390.1	16.47.1	New work (two or more coats)	34	sqm	94.90	3226.60	
390.2	16.47.2	Old work(one or more coats)	34	sqm	58.95	2004.30	
391	16.48	Painting road surface marking with adequate no of coats to give uniform finish with ready mixed road marking paint conforming to IS 164 on bitumious surface in white / yellow shade including cleaning the surface of all dirt scales oil grease and foreign material etc. complete					
391.1	16.48.1	New work (two or more coats)	34	sqm	95.75	3255.50	
391.2	16.48.2	Old work(one or more coats)	34	sqm	62.10	2111.40	
392	16.49	making bell mouth opening/ entrance of size 100x50x50cm for drainage pipe under footpath including providing cement concrete 1:3:6(1cement 3 coarse sand 6 grade stone aggregate 20mm nominal size) for shape of bell mouth including plastering providing and fixing precast RCC/SFRC slab including plastering with cement mortar 1:3(1 cement 3 fine sand) of 6 mm thickness on exposed surface of the slab and bell mouth including centring shuttering and neat cement punnig inside the bell mouth etc. all completee	34	each	1112.26	37816.67	Cement / Steel free issue
393	16.5	Providing and fixing glow studs of size 100x20mm made of heavy duty body shall be moulded ASA (acrylic styrene acryloretite) or HIP (high impact polystyrene) or ABC having electronically welded micro prismatic lens with abrasion resistant coating as approved by engineer in charge. the cats eye shall support a load of 13635kg tested in accordance with ASTM D 4280. the slope of retro- reflective surface shall be 35 +/-5 degress to base. the reflective panels on both sides with at least 12cm of reflective area up each side. the luminance intensity should be as per the specification and shall be tested as described in ASTM I:809 as recommended in BS 873 part 4 :1973. the studs shall be fixed to the road surface using the adhesive conforming to IS as per procedure recommended by the manufacturer complete and as per direction of engineer in charge	34	each	234.00	7956.00	
394	16.53	Providing and fixing concertina coil fencing with required dia 610mm(having 15nos round per 6metre length) up to 3m height of wall with existing angle iron Y shape placed 2.4m or 3.00m apart and with 9 horizontal RBT stud tied with GI staples and GI clips to retain horizontal including necessary bolts or GI barbed wire tied to angle iron all complete as per direction of engineer in charge with reinforced barbed tape(RBT) / spring core (2.5mm thick) wire of high tensile strength of 165kg/ sqmm with tape (0.52mm thick) and weight 43.478gm / metre (cost of MS angle CC blocks shall be paid separately)	34	mtr	269.20	9152.80	
395	16.59	Manufacturing supplying and fixing retro reflective sign boards made upof 2mm thick aluminium sheet, face to be fully covered with high intensityencapsulated type heat activated retro reflective sheeting conforming totype - IV of ASTM-D 4956-01 in blue and silver white or other colourcombination including subject matter, message (bi-lingual), symbols andborders etc. as per IRC ; 67:2001, pasted on substrate by an adhesivebacking which shall be activated by applying heat and pressureconforming to class -2 of ASTM-D-4956-01 and fixing the same withsuitable sized aluminium alloy rivets @ 20 cm c/c to back support frameof M.S. angle iron of size 25x25x3 mm along with theft resistantmeasures, mounted and fixed with 2 Nos. M.S. angles of size 35x35x5mm to a vertical post made up to M.S. Tee section ISMT 50x50x6 mmwelded with base plate of size 100x100x5 mm at the bottom end andincluding making holes in pipes, angles flats, providing & fixing M.S.message plate of required size steel work to be painted with two or morecoats of synthetic enamel paint of required shade and of approved brand& manufacture over priming coat of zinc chromate yellow primer (verticalMS-Tee support to be painted in black and white colours).Backside of aluminium sheet to be painted with two or more coats of epoxy paint overand including appropriate priming coat including all leads and lifts etc.complete as per drawing , specification and direction of Engineer--in-charge					
395.1	16.59.1	Mandatory / Regulatory sign boards of 900mm dia metre with part as length of 3750mm	34	sqm	4580.35	155731.90	

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
395.2	16.59.2	cautionary / warning sign boards of equilateral triangular shape having each side of 900mm with support length of 3650mm	34	sqm	3298.40	112145.60	
396	16.6	Manufacturing supplying and fixing retro reflective overhead signage boards made up of 2mm thick aluminium sheet face to be fully covered with high intensity and encapsulated lens type heat activated retroreflective sheeting conforming to type - III of ASTM-D-4956-01 as approved by Engineer-in-charge letters, borders etc. as per IRC : 67-2001 in silver white with blue colour back ground and with high intensity grade, pasted on substrate by pressure sensitive adhesive backing which shall be activated by applying pressure conforming to class II of ASTM-D-4956-01 and fixing the same to the plate of structural frame work by means of suitable sized aluminium alloys, rivets or bolts & nuts @ 300mm centre to centre all along the periphery as well as in two vertical rows along with theft resistant measures including the cost of painting with two more coats of epoxy paint in grey colour on the back side of aluminium sheet including appropriate priming coat. The rate includes the cost of rounding off the corners, lowering down the structural frame work from the gantry, fixing and erecting the same in position all complete as per drawings, specification and direction of the engineer-in-charge. (Structural frame work including M.S. plate to be provided separately. Rectangular area of the sheet only shall be measured for payment).					
396.1	16.60.1	Overhead informatory road signage	34	sqm	4516.50	153561.00	Spec to be added
397	16.61	Providing Retro-reflective regulatory sign board of size 900mm dia meter made out of 2mm thick aluminium sheet, face to be fully covered with high intensity encapsulated lens type retro -reflective sheeting as approved by Engineer-in-charge. Letter, symbols, borders etc. will be as per IRC - 67 with required colour scheme on the boards and with the high intensity grade A. The aluminium sheet to be riveted to M.S. frame of angle iron of size 40x40x4mm. The boards will be fixed to 1 No. 50x50mm square post made of M.S. angle 50x50x4mm, 4m long welded to the frame with adequate anti-theft arrangement. Sheet work to be painted with two more coats of synthetic enamel paint over an under coat (primer) and back side of aluminium sheet to be painted with two or more coats of epoxy paint including appropriate priming coat complete in all respects as per direction of Engineer-in-charge.	34	sqm	5061.65	172096.10	
398	16.62	Providing and applying 2.5mm thick road marking strips (retro reflective) of specified shade / colour using hot thermoplastic material by fully / semi automatic thermoplastic paint applicator machine fitted with profile shoe glass beads dispenser propane tank heater and profile shoe heater driven by experienced operator on road surface including cost of material labour T&P cleaning the road surface of all dirt seals oil grease and foreign material etc. complete as per direction of engineer in charge and accordance with applicable specification	34	sqm	505.80	17197.20	
399	16.65	providing and fixing post delineators (made of ABS body fitted with 2 nos 100mm dia) reflective and reflectors are mounted on MS pipe of 65mm dia duly power coated anti rust and theft steel not to be installed as per direction of engineer in charge	34	each	562.55	19126.70	
400	16.68	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 and of approved size and design / shape laid in required colour and pattern over and including 50mm thick compacted as per the direction of engineer in charge	34	sqm	536.65	18246.10	
401	16.69	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement 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 expect 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 CC kerb stone shall be approved by engineer in charge	34	cum	5017.76	170603.93	Cement free issue
402	16.72	Supplying and stacking of hard stone (for stone pitching) 22.5cm thick at site	34	cum	607.55	20656.70	
403	16.73	Dry stone pitching 22.5mm thick laid in courses and required profile with hammer dressed stones having no side less than 15cm with minimum depth of 20cm including preparing the bedding surfaces ect, all complete (payment for stone to be made separately)	34	sqm	181.05	6155.70	
404	16.74	75mm thick back filling for pitching including supplying of required materials and consolidation etc. complete with					
404.1	16.74.1	moorum	34	sqm	51.95	1766.30	
404.2	16.74.2	stone aggregate 20mm nominal size	34	sqm	105.35	3581.90	
404.3	16.74.3	Stone aggregate 40mm nominal size	34	sqm	97.35	3309.90	
405	16.75	Providing and laying CC pavement of mix M25 with ready mixed concrete from batching plant . The ready mixed concrete shall be laid and finished with screed board vibrator vacuum dewatering process and finally finished by floating brooming with wire brush etc. complete as per specification and directions of engineer in charge (the panel shuttering work shall be paid for separately)	34	cum	6067.10	206281.40	
406	16.76	Deduct for using of M20 grade concrete instead of M25 grade concrete in CC pavement	34	cum	164.95	5608.30	
407	16.77	Scarifying the existing bitumen road surface to a depth of 50mm and disposal of scarified material within all lifts and lead upto 1000mtr (by mechanical means)	34	sqm	2.90	98.60	
408	16.57	Providing and laying Bituminous Macadam using crushed stone aggregates of specified grading premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equipped with lectronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction and density, as per specifications, complete and as per directions of Engineer in charge.					
408.1	16.57.1	40/50 mm compacted thickness with bitumen of grade VG-30(60/70 grade) @ 5.5% (Percentage by weight of total mix) and lime filler @ 3% (percentage by weight of aggregate) prepared in batch type Hot mix plant of 100-120 TPH capacity, etc. complete all as directed by Engineer-in-charge.	50	cum	7926.20	396310.00	
409.1	16.33.1	2.5 cm premix carpet surfacing (hot mix plant) with 2.25 cum and 1.12 cum of granite stone chippings of 13.2 mm and 11.2 mm size respectively per 100 sqm. and 52 kgs and 56 kgs 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-10(80/100 grade) heated and then mixed with solvent at the rate of 70 gms per kg of asphalt all as directed by Engineer-in-charge.	100	sqm	148.89	14889.00	

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410.1	16.31.1.1	Providing and applying tack coat using bitumen emulsion (Rapid setting) conforming with IS 8887-1995, on W.B.M./W.M.M. surface @ 0.40 kg/sqm by using emulsion pressure distributor including preparing the road surface and cleaning with mechanical broom etc., complete all as directed by Engineer-in-charge.	5000	sqm	13.26	66300.00	
410.2	16.31.1.2	Providing and applying tack coat using bitumen emulsion (Rapid setting) conforming with IS 8887-1995, on bituminous surface @ 0.25 kg/sqm by using emulsion pressure distributor including preparing the road surface and cleaning with mechanical broom etc., complete all as directed by Engineer-in-charge.	34	sqm	8.78	298.52	
411.1	16.30.1	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 surface @0.75 kg/Sqm all as directed by Engineer-in-charge.	34	sqm	33.54	1140.36	
411.1	16.30.2	Providing and applying tack coat using hot straight run bitumen of grade VG-10(80/100 grade), 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 bituminous surface @0.50 kg/Sqm all as directed by Engineer-in-charge.	34	sqm	24.59	836.06	
412	16.79	Providing,laying,spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm) to wet mix macadam(WMM) specification including premixing the material with water at OMC in mechanical mix plant,carriage of mixed material by tipper to site,for all leads & lifts,laying in uniform layers with mechanical paver finisher in sub-base/base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achieve the desired density,complete as per specifications and directions of Engineer in charge.	34	cum	1960.60	66660.40	
413	16.82	Taking out existing kerb stones of all types from footpath/central verge ,including removal of mortar etc,disposal of unserviceable material to the dumping ground ,for which payment shall be made separately and stacking of serviceable material within 50 metre lead and as per direction of Engineer in charge.	10	rmt	10.80	108.00	
414	16.85	laying at or near ground level old kerb stones of all types in position to the required line,level and curvature,jointing with cement mortar 1:3 (1 cement : 3 coarse aggregate) including making joints with or without grooves (thickness of joints,except at sharp curve,shall not be more than 5 mm) including making drainage opening wherever required etc complete as per direction of Engineer in charge.(Length of finished kerb edging shall be measured for payment).(Old kerb stone shall be supplied by the department free of cost)	10	rmt	29.95	299.51	
415	16.69	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement 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 expect at sharp curve shall not be more than 5mm) including making drainage opening wherever required complete etc. as per direction of engineer incharge(Length of finished kerb edging shall be measured for payment) precast CC kerb stone shall be approved by engineer in charge	10	CUM	5046.51	50465.10	
416	BHEL Approved Rate	Providing and laying premix bituminous macadam base course with stone aggregate of quality size and grading as specified in CPWD specification and straight run bitumen of grade 80/100 @ 4% by weight of total mix including hot mixing of stone aggregate and bitumen in hot mix plant, transporting mixed material and laying mixed material with paver finisher to the required level and grade, rolling with road roller of 8 to 10 tonne capacity to achieve the required compaction and densit of any thickness etc complete all as directed by Engineer-in-charge.	10	cm	10400.00	104000.00	
417	BHEL Approved Rate	Providing and laying seal coat over prpared surface of road with bitumen heated in bitumen boiler fitted with the spray set spraying using 98 kg of bitumen of grade 80/100 and blinding surface with 0.90 cm of stone aggregate of 6.7 mm size (Passing 11.2 mm sieve and retained on 2.36 mm sievel per 100 sqm of road surgace including rolling and finishing with power road roller etc complete, all as directed by Engineer-in-charge.	10	sqm	71.52	715.20	
418	BHEL Approved Rate	Supply and fixing of kerb stones os size 1.00 M x 0.15 m x 0.30 m twice dressed exposed faces and pointing with CM 1:3 including necessary excavation and refilling the gaps etc., complete all as directed by Engineer-in-charge.	10	rmt	640.00	6400.00	
HORTICULTURE WORKS							
419	23.1	Trenching in ordinary soil up to a depth of 60 cm including removal and stacking of serviceable materials and then disposing of surplus soil, by spreading and neatly leveling within a lead of 50 m and making up the trenched area to proper levels by filling with earth or earth mixed with sludge or/and manure before and after flooding trench with water (excluding cost of imported earth, sludge or manure)	10	cum	30.90	309.00	
420	23.2	Supplying and stacking of good earth at site including royalty and carriage up to 1 km (earth measured in stacks will be reduced by 20% for payment)	34	cum	260.70	8863.80	
421	23.3	Supplying and stacking of good earth at site including royalty and carriage up to 1 km (earth measured in stacks will be reduced by 8% for payment)	34	cum	215.15	7315.10	
422	23.4	Supplying and stacking at site dump manure from approved source including carriage up to 1 km (earth measured in stacks will be reduced by 8% for payment)					
422.1	23.4.1	Screened through sieves of IS designation 20mm	34	cum	138.30	4702.20	
422.2	23.4.2	Screened through sieves of IS designation 16mm	34	cum	152.60	5188.40	
422.3	23.4.3	Screened through sieves of IS designation 4.75mm	34	cum	164.10	5579.40	
424	23.5	Rough dressing the trenched ground including breaking clods	34	100sqm	59.85	2034.90	
425	23.6	Uprooting weeds from the trenched area after 10 to 15 days of its flooring with water including disposal of uprooted vegetation	34	100sqm	194.05	6597.70	
426	23.7	Fine dressing the ground	34	100sqm	145.90	4960.60	
427	23.8	Spreading of sludge, dump manure or / and good earth in required thickness (cost of sludge, dump manure or / and good earth to be paid separately)	34	cum	21.00	714.00	
428	23.9	Mixing earth and sludge or manure in proportion specified or directed.	34	cum	14.35	487.90	
429	23.10	Grassing with doob grass including watering and maintenance of the lawn for 30 days or more till the grass forms a thick lawn free from weeds and fit for mowing including supplying good earth if needed (the good earth shall be paid for separately)					
429.1	23.10.1	In rows 15cm apart in either direction	34	100sqm	700.25	23808.50	
429.2	23.10.2	in rows 7.5cm apart in either direction	34	100sqm	528.10	17955.40	
430	23.11	Renovating lawns including weeding cheeling the grass forking the ground top dressing with sludge or manure mixing the same with forked soil watering and maintaining the lawn for 30 days or more till the grass forms a thick lawn free from weeds and fit for mowing and disposal of rubbish as directed including supplying good earth if needed but excluding the cost of sludge or manure(the good earth shall be paid for separately)	34	100sqm	1353.10	46005.40	

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
431	23.12	Uprooting rank vegetation and weeds by digging the area to a depth of 60cm removing all weeds and other growth with roots by forking repeatedly breaking clods, rough dressing flooring with water uprooting fresh growths after 10 to 15 days and then fine dressing for planting new grass including disposal of all rubbish with all leads and lifts.	34	100sqm	2402.55	81686.70	
432	23.14	Digging holes in ordinary soil and refilling the same with the excavated earth mixed with manure or sludge in the ratio of 2:1 by volume (2 parts of stacked volume of earth after reduction by 20% :1 part of stacked volume of manure after reduction by 8%) flooring with water dressing including removal of rubbish and surplus earth., if any with all leads and lifts (cost of manure sludge or extra good earth if needed to be paid for separately)					
432.1	23.14.1	Holes 1.2 m dia and 1.2m deep	34	each	186.90	6354.60	
432.2	23.14.2	Holes 60cm dia and 60cm deep	34	each	80.20	2726.80	
433	23.16	Providing and fixing MS flat iron tree guard 60cm dia. And 2 m height above ground level formed of 4 nos. 25x6mm and 8 nos. 25x3mm vertical MS flats rivetted to 3 nos. 25x6mm MS flat iron rings in two halves bolted together with 8mm dia. And 30mm long bolts including painting two coats with paint of approved brand and manufacture over a coat of priming complete in all respects	34	each	2580.60	87740.40	
434	23.21	Excavation in dumped stones or malba including stacking of serviceable and material separately and disposal of unserviceable material lead up to 50m and lift up to 1.5m disposed material to be neatly dressed.	34	cum	200.80	6827.20	
435	23.22	Excavation in bajri path including stacking of serviceable and unserviceable material lead up to 50m and lift up to 1.5 m disposed material to be neatly dressed	34	cum	223.80	7609.20	
436	23.23	Excavation in water bound macadam road including stacking the serviceable material lead up to 50m and lift up to 1.5m disposed material to be neatly dressed	34	cum	275.40	9363.60	
437	23.24	Flooding the ground with water including making kiaries and dismantling the same	34	100sqm	110.85	3768.90	
438	BHEL Approved Rate	Grass cutting including light jungle, collection of stones, disposing, the cut grass and light jungle to places as directed by the Engineer-in-charge. The rate quoted shall include the cost of cutting, cleaning, loading, conveyance within a lead of 2 KM to places as directed and spreading etc complete.	34	SQM	1.05	35.70	
439	BHEL Approved Rate	Cutting the hedges around the quarters and public buildings with big scissors, knives etc including clearing and disposing the cut waste within a lead of 2 km all as directed by the Engineer-in-charge. The waste materials shall be cleared on the same day and the rate shall include all tools, transport etc.	34	One Cum	4.80	163.20	
440	BHEL Approved Rate	Uprooting and clearing parthinium and other weeds with big scissors, knives etc including clearing and disposing the cut waste within a lead of 2 km all as directed by the Engineer-in-charge. The waste materials shall be cleared on the same day and the rate shall include all tools, transport etc.	34	One Sqm	1.62	55.22	
442	BHEL Approved Rate	Arresting the growth of trees along the walls of the buildings in Township by applying glycol with ammonia od required quantity till tree is dried and removing the dried tree along with roots and disposing off, upto 2 KM lead etc complete as directed by Engineering - in - charge.	34	each	280.00	9520.00	
443	BHEL Approved Rate	Cutting of tree branches over buildings at more than 6 meters height and removing other kind of branches from the cut branch and stocking as directed by the Engineer-in-charge within a lead of 3 kms (separate payment will be made for transporting the tree branches from site to BHEL Nursery stockyard).					
443.1	BHEL Approved Rate	100 to 200 mm girth with its braches.	34	Each	47.88	1627.92	
443.2	BHEL Approved Rate	above 200 mm girth with its braches.	34	Each	79.24	2694.16	
PROVIDING MACHINARY							
444	BHEL Approved Rate	Supply of JCB	55	Per Hour	800.00	44000.00	
445	BHEL Approved Rate	Supply of Tractor with ripper / Trolley	25	Per Day	1600.00	40000.00	
446	BHEL Approved Rate	Supply of Tractor with hydraulic Lift with 4 USW	24	Per Day	3200.00	76800.00	
447	BHEL Approved Rate	Supply of water Tanker	25	Per Day	2000.00	50000.00	
448	BHEL Approved Rate	Supply of Kambi Series/ Machine for de-silting or De-choking or Removal of silt	20	Per Day	20000.00	400000.00	to check rate
449	BHEL Approved Rate	Supply of tractor with levelling blade & Plough equipment	25	Per Day	4160.00	104000.00	
450	BHEL Approved Rate	Supply of road roller on hire basis for rolling the grounds / play fields / filled up soil / rolling by the side of roads etc complete all as directed by Engineer-in-charge hire charges include cost of services operating staff and supply of lubricating oil etc complete all as directed by Engineer-in-charge.	10	perday 8 hrs	3040.00	30400.00	
451	BHEL Approved Rate	Providing a Mobile crane for lifting of trunk tree mains at road sides, electrical poles, placing of transformers whenever needed as directed by Engineer-in-charge, including cost of services of operating staff and supply of lubricant oil etc complete all as directed by Engineer-in-charge.	10	perday	3840.00	38400.00	
MISCELLANEOUS WORKS							
452	BHEL Approved Rate	Cleaning and removing all un wanted things from the roof terrace of various buildings at an elevated level of 12 to 20 metre from FFL. Rate includes labour, tools, wire brush, brooms, baskets etc., sweeping and clearing off all dirt, silt, dust, leaves and other foreign matters etc, with out damaging the terrace treatment and thereby collecting all the wastes in bags / casketc, lowering to ground floor with out affecting the working environment and dumping the same in the near by dust bins / earmarked areas / low lying areas etc complete. Sweeping has to be done only as and when necessary. Payment will be made only for the areas where actually the job was carried out.	50	One Sqm	1.61	80.50	
453	BHEL Approved Rate	Cleaning of water tanks of various sizes using minimum 150 gms cleaching powder for each tank of any number of parts including cost of bleaching powder. (The agency shall make his own arrangements for tools required and shall repair and replace the ball cocks damaged while cleaning).	44	Each Tank	46.20	2032.80	

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
454	BHEL Approved Rate	Labour charges for Fixing barbed wire fencing to the RCC poles / MS angles horizontally and diagonally with GI binding wire including cost of fixing materials. The payment shall be mad for running length of each row of fencing and including tightening the loose barbed wire wherever necessary. The barbed wire shall be supplied free of cost at BHEL stores.	40	One Rmt	11.87	474.88	Barbed wire is free issue
455	BHEL Approved Rate	Erection RCC poles/M.S angles posts in position by conveyng the same to the places as directed.	44	Each	46.17	2031.57	
456	BHEL Approved Rate	Carrying the earth / gravel from stacks to the areas of filling, spreading in layers of 150 mm thick watering, ramming and consolidation with power roller of required capacity so as to bring the surface to proper line, level camber and grade etc complete as directed by Engineer-in-charge	40	One Cum	25.20	1008.00	
457	BHEL Approved Rate	Labour charges for fixing of chain link mesh to the existng poles with a required tools, material etc complete all as directed by Engineer-in-charge.	44	Sqm	25.60	1126.40	Chain link mesh free issue
458	BHEL Approved Rate	Removing of silt and debris from the open drains and removing and replacing of approach paths wherever required to remove the silt underneath the approach paths, including loading, unloading and conveyance to a distance of 2 kms and spreading at the places as directed by the Engineer-in-charge.	40	One Rmt	7.45	297.92	
459	BHEL Approved Rate	Removal of silt, debris and vegetation growth from the nallahs including loading, unloading and conveyance to a distance of 2 kms and spreading at the places as directed by the Engineer-in-charge.					
459.1	BHEL Approved Rate	Bed width upto 5M	38	One Rmt	100.80	3830.40	
459.2	BHEL Approved Rate	Bed width upto 10M	34	One Rmt	201.60	6854.40	
460	BHEL Approved Rate	Removing silt and debris from the R.C.C hume pipes of all dia. Provided at the approaches to residential and non-residential buildings, etc.,	37	One Rmt	47.54	1759.13	
461	BHEL Approved Rate	Supply of SFRC Medium Duty Approach Slabs for open drains including transportation and placing at one location etc complete all as directed by Engineer-in-charge.					
461.1	BHEL Approved Rate	Size 1000 x 600 x 60 mm	38	No	1306.20	49635.60	
461.2	BHEL Approved Rate	Size 1200 x 600 x 60 mm	36	No	1563.80	56296.80	
462	BHEL Approved Rate	Providing and fixing 12 mm thick frameless toughened glass partitions of approved brand and manufacture including providing and fixing arrangement and making necessary holes for fixing required partition fittings including cost of 3M frosted film with specified design over the glass, and all other required fittings completed as per direction of Engineer-in-charge.	27	Sqm	5160.00	139320.00	
463	BHEL Approved Rate	Providing and fixing 12 mm thick frameless tough hand glass door shutter of approved brand and manufacture including providing and fixing top and bottom pivot, handle, SS door lock, stopper and floor spring type fixing arrangement and making necessary holes etc. for fixing required door fittings and including cost of 3M frosted film over the glass, and all other required fittings completed as per direction of Engineer-in-charge	20	Sqm	10800.00	216000.00	
464	BHEL Approved Rate	Supply & fixing precast RCC fencing poles of size of size 150mm square at bottom of the pole & 100mm square at top of the pole and length of the pole should be minimum 1800 length. (Specification should be checked for standard size) as directed by Engineer In charges.	10	each	320.00	3200.00	
Conveyance							
465	1.1.1	Conveyance by Manual or Mechanical means of Lime, Murram, building Rubbish including loading un-loading with lift of 50 m upto lead mentoned below all complete all as directed by Engineer in charge					
465.1	1.1.1.1	1 Km	40	Cum	66.23	2649.20	
465.2	1.1.1.2	2 Km	40	Cum	75.15	3006.00	
465.3	1.1.1.3	3 Km	40	Cum	83.99	3359.60	
466	1.1.2	Conveyance by Manual or Mechanical means of Earth including loading un-loading with lift of 50 m upto lead mentoned below all complete all as directed by Engineer in charge					
466.1	1.1.2.1	1 Km	40	Cum	82.78	3311.20	
466.2	1.1.2.1	2 Km	40	Cum	93.94	3757.60	
466.3	1.1.2.1	3 Km	40	Cum	104.98	4199.20	
467	1.1.4	Conveyance by Manual or Mechanical means of Excavated rock including loading un-loading with lift of 50 m upto lead mentoned below all complete all as directed by Engineer in charge					
467.1	1.1.4.1	1 Km	40	Cum	132.45	5298.00	
467.2	1.1.4.2	2 Km	40	Cum	150.31	6012.40	
467.3	1.1.4.3	3 Km	40	Cum	167.98	6719.20	
SUPPLY OF BUILDING MATERIALS							
468	16.3.3	Supply and stacking of 40 mm machine crushed granite metal including all incidental charges etc complete as directed by Engineer-in-charge.	40	One Cum	1190.80	47632.00	
469	16.3.3	Supply of 20 mm guage hard granite stone metal including cost and conveyance to site and stacking as directed by the Engineer-in-charge.	15	One Cum	1190.80	17862.00	
470	16.3.3	Supply of 12 mm guage hard granite stone metal including cost and conveyance and stacking as directed etc complete.	15	One Cum	1190.80	17862.00	
471	D.S.R-RA	Supply of ground moulded number bricks of best quality including cost and conveyance to site and stacking neatly as directed by the Engineer-in-charge.	10000	Nos	4.18	41814.00	
472	D.S.R-RA	Supply of good quality course River Sand Bhodan / Karimnagar / Kurnool / Sirisilla quality including cost and conveyance to site and stacking neatly as directed by the Engineer-in-charge.	100	One Cum	1300.88	130088.00	
473	16.3.7	Supply and spreading quarry stone dust on walking track, stadium etc, complete as directed by Engineer-in-charge.	15	One Cum	1425.85	21387.75	
Lettering of Boards and Banners							
474	BHEL Approved Rate	Applying one coat of synthetic enamel paint of Apcolite brand and an approved shade to the speed breakers and road sign boards including cost of all materials, labour etc complete etc complete all as directed by Engineer-in-charge.	10.00	Sqm	41.60	416.00	
475	BHEL Approved Rate	Painting the township layout on supplied boards approximate Size 3.00x1.50 M, as per the layout with different shades indicating the functional and residential buildings separately and in different colours for various types, bordering, index preparations, key plan etc, complete as per the instructions (The paints shall be of synthetic enamel for G.P of approved make). The rate quoted shall include rubbing the existing painting surface and cost of all the materials like brushes and paintsetc complete all as directed by Engineer-in-charge.	10.00	Sqm	879.20	8792.00	

BHEL ITEM NO	DSR 2012 REF NO	DESCRIPTION	PROPOSED INDICATIVE QTY***	UNIT	Contractors Unit Rate (Rs)	AMOUNT (Rs)	Remarks
476	BHEL Approved Rate	Preparing the supplied boards of different sizes to receive the painting as per the drawing and painting the letters of different sizes in different shapes with synthetic enamel paint of approved make in different shades as per the instructions. The quoted rate shall include rubbing of the existing painted surface to receive the new painting and cost of all materials like brushes, paints etc etc directed by Engineer-in-charge.	103.00	Sqm	421.50	43414.29	
477	BHEL Approved Rate	Providing radium sticker letters and arrow marks of approved colour and design and size. The base board will be supplied by the department and as directed by the Engineer-in-charge.	10.00	Sqm	2947.56	29475.60	
478	BHEL Approved Rate	Supply and fixing of multi colour digital printing on paper with lamination on 10 mm M.D.F.Board Supporting with Iron Frame including all incidental charges etc complete as directed by Engineer-in-charge etc directed by Engineering - in-charge.	2.00	Sqm	9100.00	18200.00	
479	BHEL Approved Rate	Supply and fixing of self glow radium sticker on the radium paper including cutting charges, fixing charges etc complete as directed by Engineer-in-charge.	10.00	Sqm	8842.68	88426.80	
480	13.71	Re-lettering with black Japan paint of approved brand and manufacture for numbering to shops with black ground paint and also including cost of all material etc complete all as directed by Engineer-in-charge.	10.00	per letter per centimeter height	1.70	17.00	
481	BHEL Approved Rate	Supply and fixing of radium plain sheet wherever required etc complete all as directed by Engineer-in-charge.	10.00	Sqm	1400.00	14000.00	
482	16.47.2	Labour charges for 2 coats painting run way / taxi track / apron marking with adequate number of coats to give uniform finish with road marking supplied paint including cleaning the surface of all dirt, scales, oil, grease and other foreign material etc and lining out etc complete all as directed by Engineer-in-charge.	10.00	Sqm	58.95	589.50	
483	16.78	Construction of granular sub base by providing close graded material conforming to specifications ,mixing in a mechanical 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,site conditions and directions of Engineer in charge.					
483.1	16.78.2	With material conforming to Ggrade -II (size range 53 mm to .075 mm) having CBR value -25	2.00	Cum	1990.65	3981.30	
484	BHEL Approved Rate	Supply and fixing of satin cloth flags of 1 mtr x 3 mtrs in size and providing BHEL monogram on the flag including stitching charges, cost of all materials etc complete all as directed by Engineer-in-charge.	10.00	Each	490.00	4900.00	
TOTAL (Rupees Three fifty lakhs only)						35000000.84	

***IMPORTANT NOTES: Indicative quantities subjected to variation based on requirement time to time as per the maintenance complaints and as per the discretion of Engineer IN charge.

Notes:	
1	A penalty of 0.5% of the gross value of work will be levied for every week's delay of work subject to a maximum penalty of 10% of the gross value of work.
2	The tender % age quoted by the contractor shall be inclusive of all taxes and duties other than service tax as applicable from time to time.
3	Service tax if paid by the contractor with respect to this work will be reimbursed by BHEL on production of documentary evidence for having paid the service tax by the contractor.
4	All the bills of the contractors will be cleared subject to the production of clearance certificate by the contractors in respect of compliance of all statutory requirement, issued by IR section of HR
5	The agency shall submit the I.R. clearance certificate for the above work and arrange to get the final bill sent to Finance within one month from the actual date of completion of work.
6	The maintenance period of the work is 06 months. The security deposit will be released after satisfactory completion of the work and after getting I.R clearance and payment of final bill.