

MUNICIPAL CORPORATION OF BHILAI

NIT

'सुविधा 24" अंतर्गत वार्ड क्र 28 आदिवासी नगर में सामुदायिक सह सार्वजनिक शौचालय निर्माण कार्य।

(As Per PWD Building SOR 01.01.2015, Electrical SOR 01.07.2015 & NON SOR ITEM)

SN	PARTICULERS OF ITEMS	QTY.	UNIT
(A)	AS PER PWD BUILDING SOR 01.01.2015		
1	Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits. In all types of soils.	162.64	Cum
2	Surface dressing of the ground including removing vegetation and making up undulations and inequalities not exceeding 15 cms in depth/ height including disposal of rubbish upto 1.5 m lift and lead upto 50m (at least 5m away from the dressed area).	185.00	Sqm
3	Extra for every additional lift of 1.5 m or part thereof. All types of soils 2nd Lift	32.63	Cum
4	Filling from available excavated stuff (Excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering with a lead upto 50 M. and lift upto 1.5 M.	37.21	Cum
5	Providing and filling in plinth with sand/ Crusher dust and hard moorum under floor in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering, including dressing etc. complete.	95.36	Cum
6	Providing and fixing form work including centring, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Foundations, footings, bases of columns plinth beam, curtain wall in any shape and size and all type of wall below plinth level.	111.04	Sqm
7	Providing and laying nominal mix plain cement concrete with crushed stone aggregate using concrete mixer in all works upto plinth level excluding cost of form work. 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size).	16.23	Cum
8	Providing and laying nominal mix reinforcement cement concrete with crushed stone aggregate using concrete mixer in all works upto floor five level excluding cost of reinforcement and form work. 1:1 ½ :3 (1 cement : 1 ½ coarse sand : 3 graded stone aggregate 20mm nominal size)	21.82	Cum
9	Providing and placing in position reinforcement for R.C.C. work including -- as per drawings including cost of binding wire all complete. Thermo-Mechanically treated bars.	5247.30	Kg
10	Brick work with modular fly-ash lime bricks (FaLG Bricks) conforming to IS:12894-2002 of class designation 4.0 in foundation and plinth in: Cement Mortar 1:6 (1 cement : 6 coarse sand)	42.13	Cum
11	Providing and fixing form work including centring, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Columns, Pillars, Piers and likes- rectangular or square in shape	65.05	Sqm
12	Providing and fixing form work including centring, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Suspended floors, roofs, access platform, balconies (plain surfaces) and shelves (cast in situ)	154.11	Sqm

SN	PARTICULERS OF ITEMS	QTY.	UNIT
13	Providing and fixing form work including centring, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Beams, lintels, cantilevers & walls	52.06	Sqm
14	Providing and laying nominal mix reinforcement cement concrete with crushed stone aggregate using concrete mixer in all works upto floor five level excluding cost of reinforcement and form work. 1:1 ½ :3 (1 cement : 1 ½ coarse sand : 3 graded stone aggregate 20mm nominal size) + Extra for laying PCC/RCC of any grade in superstructure above plinth level for every floor or part thereof in addition to rate for foundation and plinth:	20.08	Cum
15	Extra for brick work in superstructure above plinth level for every floor or part thereof in addition to rate for foundation and plinth:	21.83	Cum
16	Half brick thick (9cm) brick masonry with modular well burnt clay bricks of crushing strength not less than 35 kg/sqcm and water absorption not more than 20% upto plinth level: Cement Mortar 1:3 (1 cement : 3 coarse sand)	64.11	Sqm
17	Extra for providing and placing in position hopping 25x1.60 mm or 2 Nos 6mm dia MS bars reinforcement at every third course of half brick masonry.	83.93	Sqm
18	Providing and fixing steel door/ window with M.S. sheet 1mm thick, frame of angle iron, diagonal braces of angle/ flat iron of suitable size, 3.00 mm M.S. gusset plates at junctions and corners, all necessary fittings complete including applying a priming coat of red oxide zinc chromate primer.	544.50	Kg
19	Providing and fixing M.S. grill of approved pattern made of M.S. flats or square or round bars welded to steel frame of windows etc. including applying a priming coat welded to frame with all necessary fitting complete including applying a priming of red oxide zinc chromate primer.	514.80	Kg
20	Providing and fixing M.S. frames of doors, windows, ventilators and cupboards joints mitred and welded with 15x3 mm lugs 10cm long embedded in cement concrete blocks 15x10x10cm of grade M-10 or with wooden plugs and screws or with dash fastener or rawl plugs and screws or with fixing clips or with bolts and nuts as required including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer. Angle-iron frames	252.00	Kg
21	Providing and making 6mm thick cement plaster of mix: In Cement mortar 1:4 (1 cement : 4 fine sand)	117.95	Sqm
22	Providing and making 12mm thick cement plaster of mix: In Cement Mortar 1:6 (1 cement : 6 fine sand)	128.25	Sqm
23	Providing and making 15mm thick cement plaster on the rough side of single or half brick wall of mix: In Cement Mortar 1:5 (1 cement : 5 fine sand)	236.16	Sqm
24	Providing and making 18 mm thick cement plaster with under layer of 12mm thick cement plaster 1:5 (1 cement : 5 fine sand) finished with a top layer of 6mm thick cement plaster 1:3 (1 cement : 3 fine sand).	20.46	Sqm
25	Cement concrete flooring with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm) finished with a floating coat of neat cement. 40 mm thick	137.64	Sqm
26	Providing and fixing ceramic glazed wall tiles conforming to IS : 15622 of approved make, colours, shades and size on wall and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with matching pigment complete.	165.42	Sqm

SN	PARTICULERS OF ITEMS	QTY.	UNIT
27	Providing and fixing 15mm thick Granite (machine cut, table rubbed & mirror polished on both sides) for partition curtain in toilets or similar locations of required size in wall with cement mortar 1:4 (1 cement : 4 coarse sand) including cutting chase in wall and joint with wall treated with white cement mixed with matching pigment including rubbing and polishing to edge moulding to give high gloss finish. Granite stone black	2.16	Sqm
28	Providing and laying ceramic glazed floor tiles conforming to IS : 15622 of approved size, make, colour, shade laid on 20 mm thick Cement Mortar 1:4 (1 cement : 4 coarse sand) including pointing the joints with white cement mixed with matching pigment etc., complete.	68.70	Sqm
29	Providing & laying 60mm thick precast interlocking concrete blocks of approved size (approx 305 sqcm) and shape/ pattern, over 40 mm thick average complete coarse sand bed with joints of 3mm thick filled by fine sand including leveling with surface vibrator, temping and sweeping etc. complete of minimum compressive strength of 250 kg/sq.cm Pigment Coloured (rubber mould) precast interlock concrete blocks	7.92	Sqm
30	Extra for providing edge moulding to 15mm thick stone counters, vanities etc. including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge. Marble work	14.40	Metre
31	Wall painting with acrylic premium emulsion (plastic) paint of required shade to give an even shade. On new work (two or more coats)	246.20	Sqm
32	Painting exterior surface with TEXTURED exterior paint of required shade as per manufacturer's specifications to give protective and decorative finish including cleaning washing of surface etc. complete with: On new work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including priming coat of exterior primer applied @ 2.20kg/ 10 sqm	194.86	Sqm
33	Painting on new work (two or more coats) to give an even shade with: Satin synthetic enamel paint	84.63	Sqm
34	Making 50mm thick plinth protection of plain cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded crushed stone aggregate 20mm nominal size) over 75mm bed of dry brick ballast 40mm nominal size well rammed and consolidated and grouted with sand including finishing the top smooth.	16.44	Sqm
35	Providing and fixing white vitreous china urinal basin with waste fitting as per IS : 2556, and other couplings in C.P. brass complete: Flat back half stall urinal of size 460x380x250mm	4	Each
36	Providing and fixing vitreous china wash basin with C.I. brackets, 32 mm C.P. brass waste of standard pattern, including painting of brackets, cutting and making good the walls wherever required : White size 450x325 mm	4	Each
37	Providing and fixing 600x450 mm beveled edge 4mm mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	2	Each
38	Providing and fixing on wall face or under floor UV stabilized Unplasticised Rigid PVC pipes (single socketed) having 3.2mm wall thickness conforming to IS : 13592 (4kg/sqcm) including required couplers, jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion etc complete. 75 mm dia Pipe	22.50	Rmt
39	110 mm dia pipe	25.00	Rmt
40	Providing and fixing on wall face UV stabilized Unplasticised - PVC moulded fittings/ accessories having 3.2mm wall thickness for Rigid PVC pipes conforming to IS : 13592 (heavy) jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion. Nahani trap 110x75mm	12	Each

SN	PARTICULARS OF ITEMS	QTY.	UNIT
41	Providing and fixing vitreous china water closet (European type W.C. pan) with white ISI marked plastic seat and lid, 10 litre low level white P.V.C. flushing cistern (same colour), conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required White pedestal type	2	Each
42	Providing and fixing 15 mm nominal bore Brass bib/stop cock of B82 approved quality: Bib cock (250 grams)	22	Each
43	Stop cock (350 grams)	16	Each
44	Towel rail (600mm long x 20mm dia)	8	Each
45	Soap dish plate	8	Each
46	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings 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. CONCEALED WORK including cutting chases and making good the walls etc., 15mm nominal outer dia pipe	30.00	Rmt
47	20mm nominal outer dia pipe	18.00	Rmt
48	25mm nominal outer dia pipe	25.00	Rmt
49	32mm nominal outer dia pipe	75.00	Rmt
50	40mm nominal outer dia pipe	20.00	Rmt
51	50mm nominal outer dia pipe	15.00	Rmt
52	Providing and fixing stainless steel drain jali of approved make/quality.	12	Each
53	Providing and fixing brass/ gun metal gate valve with C.I. wheel of approved quality (screwed end): 25 mm dia	2	Each
54	32 mm dia	2	Each
55	40 mm dia	2	Each
56	Providing, laying and jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete : 100 mm diameter	60.00	Rmt
57	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete 150mm thick as per standard design: 100 mm dia S.W. Pipe	60.00	Rmt
58	Providing and fixing square-mouth S.W. gully trap grade 'A' complete with C.I. grating brick masonry chamber with well burnt modular clay bricks crushing strength not less than 35kg/cm ² , water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design : 150 x 100 mm size P type.	4	Each
59	Providing and constructing brick masonry chamber for underground pipe and bends with well burnt modular clay bricks crushing strength not less than 35kg/cm ² in cement mortar 1:4 (1 cement : 4 coarse sand) RCC cover of suitable size and 75mm thick with 1:1.5:3 mix (1 cement :1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size) including reinforcement 8mm dia bars at 150mm both ways and MS hooks for lifting, including foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design : Inside dimensions 500x700 mm and 45 cm deep for pipe line with one or two inlets :	10	Each

SN	PARTICULARS OF ITEMS	QTY.	UNIT
60	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank	8000.00	Litre
61	Providing and fixing water closet squatting pan (Indian type W.C. pan), 100mm sand cast Iron P or S trap, 10 litre low level P.V.C. flushing cistern (same colour) conforming to IS : 7231, with flush bend and other fittings and fixtures complete including cutting and making good the walls and floors wherever required : White Orissa pattern W.C. pan of size 580x440 mm	8	Each
62	Half brick thick honey comb brick work with modular well burnt clay bricks of crushing strength not less than 35 kg/sqcm and water absorption not more than 20% upto plinth level. Cement Mortar 1:3 (1 cement : 3 coarse sand)	11.30	Sqm
63	Providing and making 12mm thick cement plaster of mix: In Cement Mortar 1:5 (1 cement : 5 fine sand)	35.27	Sqm
64	Neat Cement punning	35.27	Sqm
65	455x610 mm rectangular C.I. cover (light duty) the weight of the cover to be not less than 23 kg.	2.00	Sqm
66	Providing and laying nominal mix reinforcement cement concrete with crushed stone aggregate using concrete mixer in all works upto floor five level excluding cost of reinforcement and form work. 1:1 ½ :3 (1 cement : 1 ½ coarse sand : 3 graded stone aggregate 20mm nominal size) + Extra for brick work in superstructure above plinth level for every floor or part thereof in addition to rate for foundation and plinth:+ Above plinth and upto floor five level	5.46	Cum
67	Extra for brick work in superstructure above plinth level for every floor or part thereof in addition to rate for foundation and plinth:+ Above plinth and upto floor five level	5.40	Cum
68	Half brick thick (9cm) brick masonry with modular well burnt clay bricks of crushing strength not less than 35 kg/sqcm and water absorption not more than 20% upto plinth level: Cement Mortar 1:4 (1 cement : 4 coarse sand)+ Extra for half brick work in superstructure above plinth level for every story or part thereof in addition to rate for upto plinth level:	19.82	Sqm
69	Boring/drilling bore well perfectly vertical for the specified depth suitable to receive required dia for casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart/bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer-in-charge upto 90 metre depth below ground level. All types of soil 150 mm dia.	25.00	Rmt
70	Rocky strata including Boulders. 150 mm dia.	65.00	Rmt
71	Boring/drilling bore well perfectly vertical for the specified depth suitable to receive required dia for casing/ strainer ---- tools, plants & machineries required for the job, all complete as per direction of Engineer-in-charge beyond 90 metre & upto 150 metre depth below ground level. Rocky strata including Boulders. 150 mm dia.	20.00	Rmt
72	Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC medium well casing (CM) pipe of required dia, conforming to IS: 12818, including required hire and labour charges, fittings & accessories etc. all complete, for all depths, as per direction of Engineer -in-charge. 150 mm nominal size dia.	27.50	Rmt
73	Development of tube well in accordance with IS : 2800 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, -----by step draw down method, collecting water samples & getting tested in approved laboratory, i/c disinfection of tube well, all complete, including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-in-charge.	5.00	Hour

SN	PARTICULERS OF ITEMS	QTY.	UNIT
74	Providing and fixing suitable size threaded mild steel cap or spot welded plate to the top of bore well housing/ casing pipe, removable as per requirement, all complete for bore well of: 150 mm dia	1	Each
75	Carrying out the resistivity survey by VES method using Schlumberger configuration for locating the proper spot for drilling of tube well within the selected habitation, including photography, interpretation of resistivity data and submission of report in the desired format along with resistivity readings, necessary graph and photographs. (only successful point is payable)	1	Each
76	Providing and fixing on wall surface G.I. pipes medium class complete with G.I. fittings and clamps, including cutting, making good the walls etc. and testing of joints complete: 25 mm dia. nominal bore	65.00	Rmt
(B)	AS PER PWD ELECTRICAL SOR 01.07.2015		
77	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal and salt as required.	2	Set
78	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ concealed conduit/ submain wiring/ cable as required.	70.00	Mtr.
79	Providing and fixing metal clad, SP&N switch fuse unit (re-wirable), 230/250 volts, with porcelain re-wirable fuses including drilling holes on the board, connections, earthing the body etc. as required. (Thimbeling shall be paid separately). 32 amp	1	Each
80	Wiring for circuit wiring 3x2.5 sqm PVC insulated cable of ISI marked in concealed rigid steel conduit of suitable size as required. 2 wire x 2.5 sqmm	25.00	Mtr.
81	Supplying and fixing on surface/ recess following way, 240 volts SP&N MCB distribution board of sheet steel phosphatized and powder painted complete with tinned copper busbar, neutral busbar, earth bar, din bar, detachable gland plate, including interconnections, earthing etc. as required. (But without MCB/RCCB/Isolator) 4 way, Single door	1	Each
82	Wiring for light/ fan/ exhaust fan / call bell point with 1.5 sqmm FR PVC insulated stranded copper conductor single core cable in concealed steel conduit, with 5 amp piano type switch, phenolic laminated sheet, suitable size M.S. box and earthing the point with same size cable etc as required. Short Point	12	Point
83	Medium Point	4	Point
84	Long point	4	Point
85	Wiring for light/ fan/ exhaust fan / call bell point with 1.5 sqmm FR PVC insulated stranded copper conductor single core cable in concealed steel conduit, with 5 amp piano type switch, phenolic laminated sheet, suitable size M.S. box and earthing the point with same size cable etc as required. Short Point + Extra for providing and fixing light plug point on board in concealed steel conduit point wiring with piano type 3 pin 5 amp socket outlet and 5 amp switch including cost of phenolic laminated sheet and M.S. box etc. as required.etc. as required.	2	Point
86	Wiring for power plug point with 2x4 sq mm FR PVC insulated stranded copper conductor cable in concealed steel conduit along with piano type 16 amp switch and 6 pin 16 amps socket outlet with suitable size M.S. box, phenolic laminated sheet, earthing the switch box and socket outlet with same size cable etc. as required. Short Point	2	Point
87	Supplying, fixing and testing of approved make bulk head luminaries consisting of pressure die cast Alu. Housing, lamp holder, prismatic glass cover, rubber gasket and wire guard deluxe type including fixing on wall as required, with necessary material complete.	4	Each
88	Ceiling rose 3 pin 5 amps	12	Each

SN	PARTICULERS OF ITEMS	QTY.	UNIT
89	Providing and fixing for house service connection G.I. pipe 50mm dia 3.2 metre long with 2 Nos 50x50x6mm angle iron bracket on wall and 75x90mm shackle insulator with straps including accessories complete	1	Set
90	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	10.00	Mtr.
91	Supplying, installation, testing and commissioning of following surface/ concealed type fluorescent fitting (luminaries) complete with electronic ballast/ copper ballast glow type starter but without fluorescent lamp, on ceiling/ wall surface, earthing the fitting etc. as required. 4' x 40 W single box type	2	Each
92	Supplying, installation, testing and commissioning of following sizes ceiling fan including wiring the down rods of standard length up to 30 cm with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable, earthing etc. complete as required. 1200 mm sweep	2	Each
93	Supplying and installing (overhead) service main with following size PVC insulated PVC sheathed aluminium conductor cables suspended with bobbin insulator on existing bearer wire in an approved manner and as per specification etc. or drawn in existing G.I. pipe bracket or conduit pipe wherever required, including connection, testing etc. 3½ x 25 sq. mm	20	Each
94	Supplying, installation, testing and commissioning of following sizes fancy exhaust fan having built in lovers in existing opening in wall including earthing etc. complete as required. 300 mm sweep	2	Each
95	Supplying, fixing, testing and commissioning of following CFL (Built in choke type) in existing lighting luminaries as required. 11 Watt	12	Each
(C) NON SOR ITEM			
96	Providing and fixing of Robe Hooks in toilets as directed	24	Each
97	Providing and filling of soak pit with brickbats including S.W. drain pipe 100 mm diameter and 1.20m long complete.	4.50	Cum
98	Providing and fixing of IHP submersible pump of approved make and quality including lowering the same and fixing of start and electronic control panel with request size of cable complete in all respect.	1	Each
99	Providing & Fixing in position sanitary napkin incineraor (ISI Marked) having capacity of minimum 5 napkins per hour complete in all respect.	30000.00	LS


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Assistant Engineer
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Sub Engineer
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