## MUNICIPAL CORPORATION OF BHILAI

<u>NIT</u>

वार्ड क्र. 44, खुसीपार स्थित उड़िया स्कूल नवीन कॉलेज के पास सामुदायिक भवन निर्माण कार्य।

## (AS PER PWD BUILDING SOR 01.01.2015 & Electrical SOR 01.06.2020)

SN	PARTICULERS OF ITEMS	QTY.	UNIT
1	Exerciation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of executated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the executated area), including dressing and leveling of pits. In all types of soil	85.34	Cum
2	Surface dressing of the ground including removing vegetation and making up undulations and in-equalities 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).	80.00	Sqm
- 3	Extra for every additional lift of 1.5 m or part thereof.	16.22	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.	29.06	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.	90.50	Cum
6	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Foundations, footings, base of columns and plinth beam in any shape and size.	90.51	Sqm
7	Providing and laying nominal mix cement concrete with crushed stone aggregate using concrete mixer in foundation, plinth and at ground level excluding cost of form work. 1:3:6 (1 cement: 3 coarse sand: 6 graded stone aggregate 40mm nominal size).	10.71	Cum
8	Providing and laying noninial 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. 1:1½:3 (1 cement: 1½ coarse sand: 3 graded stone aggregate 20mm noninial size).	18.23	Cum
9	Providing and placing in position reinforcement for R.C.C. work including straightening, cutting, bending, binding etc. complete as per drawings including cost of binding wire all complete: Thermo-Mechanically treated bars	2954.00	Kg
10	Brick work with modular fly-ash lime bricks (FALG Bricks) confirming to IS:12894-2002 of class designation 35 in foundation and plinth in: Cement Mortar 1:6 (1 cement : 6 coarse sand)	17.89	Cum
11	Providing and fixing formwork including centering, sbuttering, strutting, stagting, propping bracing etc. complete and including its removal at all levels, for: Columns, Pillars, Piers and likes- rectangular or square in shape	39.44	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 (east in situ)	99.98	Sqm
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	33.97	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 (I cement: 1 ½: coarse sand: 3 graded stone aggregate 20mm nominal size) + Extra for laying PCORC of any grade in superstructure above plinth level for every floor or part thereof in addition to rate for foundation and plinth:	11.56	Cum
15	Extra for brick work in superstructure: Above plinth and upto floor five level.	17.18	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% in superstructure above plinth level upto floor five level. Cement Mortar 1.4 (1 cement : 4 coarse sand)	22.27	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.	22.27	Sqm
18	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 of red oxide zinc chromate primer.	243.00	Kg
19	Providing and fixing double glazed hermetically sealed glazing in aluminium windows, ventilators and partition etc. with 6 mm thick clear float glass both side having 12 mm air gap including providing EPDM gasket, perforated aluminium spacers, desiccants, sealant (Both primary and secondary sealant) etc. complete	9.72	Sqm

SN	PARTICULERS OF ITEMS	QTY.	UNIT
20	Providing and fixing flush door shutters, conforming to 1S 2202 (Part 1), interior grade, commercial type, core of block board construction with frame of first class hard wood and well matched commercial ply veneering with vertical grains, cross bands and face veneers on both faces of shutters excluding hinges 30mm thick (single leaf)	9.14	Sqm
21	Providing and fixing M.S. bright finished or black enameled Butt hinges IS: 1341 marked with necessary iron screws: 100x58x1.90 mm	15.00	No.
22	Providing and fixing M.S. bright finished or black enameled sliding door bolts with bolts, nuts and necessary iron screws $250 \times 16$ mm	10.00	No.
23	Providing and fixing M.S. bright finished or black enameled Tower bolts (Barrel type) with necessary iron screws 200mm	5.00	No.
24	Providing and fixing M.S. bright finished or black enameled handles with necessary iron screws 100 mm	10.00	No.
25	Providing and fixing MS bright finished single hanging door stopper with necessary MS steel screws complete.	10.00	No.
20	6mm thick cement plaster of mix: In Cement mortar 1:4 (1 cement : 4 fine sand)	112.46	Sqm
	12mm thick cement plaster of mix: In Cement Mortar 1:6 (1 cement : 6 fine sand)	123.35	Sqm
	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)	213.59	Sqm
29	Providing and making 12mm thick plain cement mortar bands in cement mortar 1:4 (1 cement : 4 fine sand) per cm width: Raised Band	180.00	Rmt
30	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 natching pigment etc., complete.	56.91	Sqm
31	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. Size 200x300mm	6.60	Sqm
32	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 surving 3.3 kg per sqm including pointing in white cement mixed with matching pigment complete.  Size 200x300mm	14.76	Sqm
33	KOTA stone slab 25mm thick in risers and treads of steps, skirtingdado and pillar laid in 12mm (Average) thick cement mortar 1:3 (I cement : 3 coarse sand) and jointed with grey cement shury mixed with pigment to match the shade of the slab including mobing and polishing complete, (single stone is to be used for irser and treads of steps and the width of. stone for skirting and dado shall be equal to the height of skirting/dado up to length of 1.0 M.)	3.51	Sqm
	Wall painting with acrylic luxury emulsion (plastic) paint (top most approved branded quality) to give an even shade.  On new work (two or more coats)	232.54	Sqm
35	Painting new exterior surface (two or more coats) with PREMIUM TEXTURED paint 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 )	213.59	Sqm
	Painting on new work (two or more coats) to give an even shade with: Satin synthetic enamel paint (top most approved branded quality)	35.99	Sqm
37	Providing and fixing one side polished 25 mm thick RAJIM SAND STONE shelves fixed in walls in cement mortar 1:3 [1 cement : 3 coarse sand) including finishing complete	7.20	Sqm
38	25mm thick cement concrete flooring with 1:2:4 cement concrete (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size) finished with floating cost of neat cement	31.56	Sqm
39	12.2 mm nomman sizer imisned with nosting cost of near cement  12.5 mm nomman sizer imisned with nosting cost of near cement  12.5 mm nomman sizer imisned with nosting cost of near cement  12.5 mm nomman sizer imisned with R.S. or C.I. brackets painted  white C.P. Brass chain with rubber plug 32 32mm pwe waste pipe complete including cutting and making good the floors  and walls where recuired. White size 450x325 mm  and walls where recuired. White size 450x325 mm	2.00	Nos.
-	P/F 600x 450 barrel edge mirror of superior class (of approved quality) complete with 6mm thick asbestos sheet ground	1.00	Nos.

	SN	PARTICULERS OF ITEMS	QTY.	UNIT
	41	Providing and fixing on wall face or under floor UV stabilized Unplasticised Rigid PVC pipes (single socketed) having 3.2mm wall thickness conforming to 18: 13592 (4kg/sqcm) including required couplers, jointing with seal ring conforming to 18: 5.382 leaving 10 mm gap for thermal expansion ete completegood the wall wherever required. For 75mm dia pipe	3.00	RMT.
1		For 100mm dia pipe	8.00	RMT.
4	13	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 themal expansion.  Nahami trap 110x75mm	2.00	Nos
4	4	Providing and fixing 15 mm nominal bore Brass bib/stop cock of approved quality: Bib cock (250 grams)	2.00	Nos.
4		Stop cock (350 grams)	2.00	Nos.
4	6	Providing and fixing 15 mm nominal bore C.P. brass fittings of approved make and conforming to IS:8931 including C.P. brass extension if required Towel rail (600mm long x 20mm dia)	2.00	Nos
4	7 :	Soap dish plate	2.00	Nos.
48	j	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 outnite of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same neluding testing of joints complete as per direction of Engineer in Charge CONCEALED WORK including cutting chases and making good the walls etc., CONCEALED WORK including cutting chases and making good the 5mm nominia outer dia pipe	15.00	RMT.
49	2	Omm nominla outer dia pipe	20.00	RMT.
50	2	5mm nominla outer dia pipe	10.00	RMT.
51	P	Providing and fixing stainless steel drain jali of approved make/quality	3.00	Nos
52	Р	roviding and fixing brass/ gun metal gate valve with C.I. wheel of approved quality (screwed end): 25mm dia.	1.00	Nos.
53	1	rowiding laying and jointing of glazed stoneware pipe grade "A" with stiff mixture of cement mortar in proportion of 11 cment: 1 Sand) including testing of joints and earth excavation, refilling and disposal of surplus eath complete in Il respect for-100mm dis S.W. pic.	3.00	RMT
54	P	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) Ill-round S.W. pipes including bed concrete 150nm thick as per standard design: 100mm dia S.W. pipe	3.00	RMT.
55	g	rowiding and fixing square mouth S.W. Gully trap of size 150, 100mm "P or "S type grade "A" complete with C.L rarting brick masonary chamber with locally available best quality bricks and 75 th. R.C. C. precast cover made of M-20 rade Cement cone. As per detailed drawings and direction of Engineer 150 x 100 mm size P type	2.00	Nos.
56	re Iii ir n	roviding and constructing brick masonry chamber for underground pipe and bends with well burnt modular clay bricks reathing strength not less than 35kg/cm2 in cement mortar 1:3 (I cement 1:4 ourses a and) RCC cover of suitable size and 5mm thick with 1:1.5.3 mix (I cement 1:1.5 coarse said 2: graded stone aggregate 20 mm nominal size) including einforcement 8mm dia bars at 150mm both ways and MS hooks for filting, including foundation concrete 1:5:10 (I cement 2:5 fines and 1:10 graded stone aggregate 40 mm nominal size), saide plastering 12 mm thick with cement mortar 1:3 (I cement 3 coarse sand) finished smooth with a floating coat of cat cement on valls and bed concrete etc. complete as per standard design paide dimensions 500x700 mm and 45 cm deep for pipe line with one or two inlets	1.00	No
57	b	twiding and placing on terrace (at all floor levels) polyethylene water storage tank ISI: 12701 marked with cover and uitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the ase support for tank	500.00	Litre
58	cc	roviding and fixing water closet squatting pan (Indian type W.C. pan ), 100mm sand cast fron P or S trap, 10 litre low evel P.V.C. flushing eistern (same colour) conforming to 1S: 7231, with flush bend and other fittings and fixtures omplete including cutting and making good the walls and floors wherever required white Orissa pattern W.C. pan of size 580x440 mm	1	No.
59	Pi	roviding and constructing soak pit 1.20x1.20x1.20x1 filled with brickbats including S.W. drain pipe 100 mm diameter and 1.20 m long complete as per standard design	2	No.
60	30	arthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with over plate having locking arrangement and watering pipe etc. with charcoal and salt as per specification and IS Code 035: 1987(R.2016)	1	Nos
61	cc	roviding and fixing 6 SWG dia G.l. wire on surface or in recess for loop earthing along with existing surface/ concealed anduit/ submain wiring/ cable as per specification.	50.00	Rmt

SN	PARTICULERS OF ITEMS	QTY.	UNIT
62	Providing and fixing metal clad. SP&N switch fuse unit (re-wirable), 230/250 volts, with porcelain re-wireble fuses including drilling holes on the board, connections, earthing the body etc. as per specification. (Thimbeling shall be paid separately), 32 mp	3 .	Nos
63	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, wire in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) 3 X 2.5 sq. mm in 20mm conduit	50.00	Mtr.
64	Supplying and fixing on surface/ recess following way, 240 volts SP&N MCB distribution board of sheet steel phosphatized and powder painted complete with timed copper busbar, neutral busbar, earth bar, din bar, detachable gland plate, including interconnections, earthing etc. as per specification. (But without MCB/RCCB/Isolator) 4 way simple door	1	Nos
65	Wiring for light/fan/ exhaust fan / call bell point with 3x1.5 sqmm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) with 5/6 amp piano type switch, phenolic laminated sheet, suitable size M.S. box etc as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5) Short Point	15	Point
66	Medium Point	15	Point
67	Short Point+Extra for providing and fixing light plug point on board in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) point wiring with piano type 3 pin 5/6 amp socket outlet and 5/6 amp switch including cost of phenolic laminated sheet and M.S. box etc. as per specification and 15: 694 (2010), IS: 9537 (2000 Part 5)	5	Points
68	Wiring for power plug point with 3x4 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with piano type 16 amp switch and 6 pin 16 amps socked routel with suitable size M.S. box, phenoile laminated sheet, earthing the switch box and socket outlet with same size wire etc. as per specification and 15: 694 (2010), 15: 9537 (2000 Part 5) Medium Point	5	Point
69	Supplying and fixing following piano type switch, socket, other accessories on the existing switch box/ cover including connections etc. as per specification.  Ceiling rose 3 pin 5 amps	15	each '
70	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as per specification.	20	М.
71	Supplying of following sizes ceiling fan 1200 mm dia sweep	4	Nos
72	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 300mm dia	1	Nos
73	Supplying, fixing, testing and commissioning of following LED lamps with inbuilt electronic driver heat sink and all other accessories in existing holder/luminaries as per specification and P.F. should be greater than 0.9. LED chip efficacy ratio 2 follo lumens (want. 12 watt	12	Nos
74	Demolishing cement concrete including disposal of material within 50 metre lead. 1:4:8 or leaner mix	0.17	Cum
75	Brick work with modular fly-ash lime bricks (FaLG Bricks) confirming to IS:12894-2002 of class designation 4.0 in foundation and plinth in: Cement Mortar 1:5 (1 cement : 5 coarse sand)	0.20	Cum
76	Supplying, filling, spreading & leveling stone boulders' Gravels' Coarse sand, in recharge pit, in the required layers and thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge, (excavation of pit will be paid separately).  Stone boulders of size range 5 cm to 20 cm, in recharge pit	1.15	Cum
77	Gravels of size range 5 mm to 10 mm, over the existing layer of boulders	0.61	Cum
78	Coarse sand of size range 1.5 mm to 2 mm over existing layer of gravel	0.26	Cum

Executive Engineer Municiapal Corporation Bhilai Assistant Engineer Municipal Corporation Bhilai Sub Engineer Municipal Corporation Bhilai