

Bill of quantity for the work Provision of 05 nos. rooms along with bathroom for CCL employee and visthapit at New Coal Stock Birsa under Birsa Project Barka-Sayal Area.

Sl. No.	Description of work	Qty.	Unit	Rate	Amount	Remarks CCL SOR 2024
1	Part-A - Earth work in excavation by mechanical means (Hydraulic excavator) / manual means foundation trenches, drain not exceeding 1.5 m in width as well as 10 sqm on plan including dressing of sides and ramming of bottom, lift up to 1.5 m including getting out the excavated soil and disposal of surplus excavated soil as directed within a lead of 50 m. (All kinds of soils).	46.90	cum	188.45	8838.31	2.8.1
2	Supplying and filling in plinth with Jamuna sand under floors, including watering, ramming, consolidating and dressing complete.	33.82	Cum	1844	62364.08	2.27
3	Providing and laying cement concrete of specified grade excluding the cost of centering and shuttering in all works up to plinth level : 1:4:8 (1cement : 4 fine sand : 8graded stone aggregates 40 mm nominal size).	5.54	cum	5167.75	28629.34	4.1.8
4	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:Cement mortar 1:6 (1 cement : 6 coarse sand)	10.20	cum	5322.15	54285.93	6.1.2
5	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :Cement mortar 1:6(1 cement: 6 coarse sand)	48.58	cum	6494.75	315514.96	6.4.2

6	Reinforced cement concrete work in beams, suspended foors, roofs having slope up to 15* landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to foor five level, excluding the cost of centering, shuttering, finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources: 3 graded stone aggregate 20 mm nominal size derived from natural sources).	6.59	cum	8797.65	57976.51	5.3
7	Providing designation 75 A one brick flat soling joints filled with local sand including cost of watering taxes royalty all complete as per building specification and direction of Engineer in charge.	73.50	cum	333.65	24523.28	JH-15 5.6.1
8	12mm cement plaster finished with a floating coat of neat cement of mix: 1:4 (1cement : 4fine sand).	74.50	sqm	284.75	21213.88	13.7.2
9	Centering and shuttering including strutting, propping etc. and removal of form for:Weather shade, Chajjas, corbels etc., including edges	74.53	sqm	637.65	47524.05	5.9.19
10	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.Thermo-Mechanically Treated bars of grade Fe-500D or more.	1050.00	kg	75.85	79642.50	5.22.6
11	12 mm cement plaster of mix :1:6 (1 cement: 6 fine sand)	476.78	sqm	217.7	103795.01	13.1.2
12	Finishing walls with water proofing cement paint of required shade :New work (Two or more coats applied @ 3.84 kg/10 sqm)	294.00	sqm	74.7	21961.80	13.44.1
13	Providing and fixing 1mm thick M.S. sheet garage door with frames of 40x40x6mm angle iron, 3mm M.S. gusset plates at junctions and corners, all necessary fittings complete including applying a priming coat of approved steel primer: Using M.S. flats 30x6mm for diagonals and central cross place.	18.90	sqm	3730.4	70504.56	10.5.2

14	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.Fixed to steel windows by welding	154.00	kg	145.6	22422.40	9.48.1
15	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	1352.80	kg	92.55	125201.64	10.2
16	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade : Two or more coats on new work	48.88	sqm	99.9	4883.11	13.61.1
17	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-Charge) of total coated thickness 0.50mm (base metal of minimum 0.45mm thickness with total coating thickness of 0.05mm) 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.	126.00	sqm	571	71946.00	12.5

18	PART-B(Toilet) - Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All kinds of soil.	12.94	cum	188.45	2438.54	2.8.1
19	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	7.01	cum	114.4	801.94	2.25
20	Supplying and filling in plinth with Jamuna sand under floors, including watering, ramming, consolidating and dressing complete.	1.54	Cum	1844	2839.76	2.27
21	Providing and laying cement concrete of specified grade excluding the cost of centering and shuttering in all works up to plinth level : 1:4:8 (1cement : 4coarse sand : 8graded stone aggregates 40 mm nominal size).	2.26	cum	5167.75	11679.12	4.1.8
22	Providing and laying damp proof course, 40 mm thick with cement concrete 1:2:4 (1cement : 2coarse sand : 4graded stone aggregates 12.5 mm nominal size).	8.90	sqm	318.65	2835.99	4.10
23	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 5.0 in foundation and plinth in: Cement mortar 1:6 (1 cement : 6 coarse sand)	9.28	cum	5322.15	49389.55	6.1.2
24	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 5.0 in superstructure above plinth level up to floor V level in all shapes and sizes in : Cement mortar 1:6 (1 cement : 6 coarse sand)	9.28	cum	6494.75	60271.28	6.4.2
25	12 mm cement plaster of mix : 1:6 (1 cement: 6 fine sand)	12.28	sqm	217.7	2673.36	13.1.2
26	6 mm cement plaster of mix : 1:3 (1 cement : 3 fine sand)	9.60	sqm	195.85	1880.16	13.16.1

27	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster 1:6 (1 cement : 6 fine sand).	54.06	sqm	333.8	18045.23	13.11
28	12mm cement plaster finished with a floating coat of neat cement of mix: 1:4 (1cement : 4fine sand).	8.34	sqm	284.75	2374.82	13.7.2
29	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-Charge) of total coated thickness 0.50mm (base metal of minimum 0.45mm thickness with total coating thickness of 0.05mm) 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.	18.00	sqm	571	10278.00	12.5
30	Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	18.68	sqm	871.3	16275.88	8.31

31	Providing and laying ceramic glazed floor tiles 300x300 mm (thickness to be specified by the manufacture) of 1st quality conforming to IS:15622 of approved make in colours such as white, ivory, grey, fume red brown, laid on 20mm thick cement mortar 1:4 (1cement : 4coarse sand) including pointing the joints with white cement and matching pigment etc. complete.	4.88	sqm	762.8	3722.46	11.37
32	Providing and applying white cement based putty of average thickness 1mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	21.88	sqm	98.45	2154.09	13.8
33	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade : New work (two or more coats) over and including water thinnable priming coat with cement primer	21.88	sqm	115	2516.20	13.41.1
34	Finishing walls with water proofing cement paint of required shade : New work (Two or more coats applied @ 3.84 kg/10 sqm)	54.06	sqm	74.7	4038.28	13.44.1
35	Steel work in riveted, bolted or welded in built up sections, trusses and framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	26.10	kg	92.55	2415.56	10.2
36	Providing and fixing 1mm thick M.S. sheet garage door with frames of 40x40x6mm angle iron, 3mm M.S. gusset plates at junctions and corners, all necessary fittings complete including applying a priming coat of approved steel primer: Using M.S. flats 30x6mm for diagonals and central cross place.	2.58	sqm	3730.4	9624.43	10.5.2
37	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.	1000.00	per litre	8.4	8400.00	18.48

38	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and 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: 20 mm nominal outer dia pipes.	30.00	metre	399.2	11976.00	18.8.2
39	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. External work, including cutting chases and making good the walls etc. 20 mm nominal outer dia Pipes	20.00	metre	217.35	4347.00	18.9.2
40	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings. This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer-in-charge: External work: 25 mm nominal outer dia pipes.	150.00	metre	298.65	44797.50	18.9.3
41	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require: White Vitreous China Flat back wash basin size 550x 400 mm with single 15 mm C.P. brass pillar tap	2.00	each	1458.1	2916.20	17.7.4

42	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing :Rectangular shape 453x357 mm	2.00	each	919.1	1838.20	17.32.2
43	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required: White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	2.00	each	4774.45	9548.90	17.1.1
44	Providing and fixing P.T.M.T. towel rail complete with brackets fixed to wooden cleats with C.P. brass screws with concealed fittings arrangement of approved quality and colour: 450mm long towel rail with total length of 495mm, 78mm wide and effective height of 88mm weighing not less than 170gms.	2.00	each	447.4	894.80	17.73.1
45	Providing and fixing P.T.M.T. liquid soap container 109mm wide, 125mm high and 112mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality, colour and make, weighing not less than 105gms.	2.00	each	127	254.00	17.71
46	Providing and fixing C.P. brass bib cock of approved quality confirming to IS: 8931: 15mm nominal bore.	2.00	each	376.95	753.90	18.49.1
47	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make and confirming to IS 8931: 15mm nominal bore.	2.00	each	516.35	1032.70	18.52.1

48	Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth.	9.26	sqm	551.3	5105.04	4.17
49	Cement concrete flooring 1:2:4 (1cement : 2coarse sand : 4graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete. 40 mm thick with 20 mm nominal size stone aggregate. (CPWD SOR'14, Item No. 11.3.1)	4.20	sqm	452.5	1900.50	11.3.1
50	Part-C (10 users Septic Tank) - Earth work in excavation by mechanical means (Hydraulic excavator)/manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. 2.8.1 All kinds of soil.	8.05	cum	188.45	1517.02	2.8.1
51	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	2.68	cum	114.4	306.59	2.25
52	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	1.05	cum	5167.75	5426.14	4.1.8

53	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like, including the cost of required centering, shuttering but excluding cost of reinforcement, with 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size).	0.70	cum	8356.1	5849.27	5.12
54	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. 5.22.6 Thermo-Mechanically Treated bars	56.00	kg	75.85	4247.60	5.22.6
55	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 5.0 in foundation and plinth in: 6.1.2 Cement mortar 1:6 (1 cement : 6 coarse sand)	3.40	cum	5322.15	18095.31	6.1.2
56	Half brick masonry with FPS bricks of class designation 5.0 in foundation and plinth in cement mortar 1:4 (1 cement : 4 coarse sand).	0.90	sqm	673.45	606.11	6.12.2
57	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete. 40 mm thick with 20 mm nominal size stone aggregate. (CPWD SOR'14, Item No. 11.3.1)	3.60	sqm	452.5	1629.00	11.3.1
58	12 mm cement plaster finished with a floating coat of neat cement of mix : 1:4 (1 cement : 4 fine sand) (CPWD SOR'14, Item No. 13.7.2)	15.00	sqm	284.75	4271.25	13.7.2
59	Providing and fixing on wall face unplasticized 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: Single socketed pipes: 100 mm diameter.	18.00	metre	262.4	4723.20	12.41.2

60	Providing and fixing on wall face unplasticized PVC – moulded fittings / accessories for unplasticized rigid PVC rain water pipes conforming to IS:13592 Type A including jointing with seal ring confirming to IS: 5382 leaving 10mm gap for thermal expansion: Bend 87.5 degree: 110mm bend.	2.00	each	114.6	229.20	12.42.5.2
61	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg), R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand), finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design: Inside dimensions 455x610 mm and 45 cm deep for single pipe line : With common burnt clay F.P.S. (non modular) bricks of class designation 5.0	2.00	each	5215.45	10430.90	19.30.1.1
62	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design. With common burnt clay F.P.S. (non modular) bricks of class designation 5.0	2.00	each	21806.3	43612.60	19.32.1
		Total Rs.			1522190.91	
		Add GST @18%			273994.36	
		Total cost incl. GST Rs.			1796185.27	