

**JABALPUR SMART CITY LIMITED****Abstract Estimate of****COMMAND AND CONTROL CENTRE at Jabalpur**

S. No.	Sub Estimate	Amount in Rs.				Total
		Civil Work	PHE Work @4% and at terrace @2%	Electrical Work @12% and at terrace 2%	Fire Safety Work @1%	
1	Foundation and Structure up to Plinth Level	77,00,225	-	-	-	77,00,225
2	Ground Floor	89,68,772	3,58,751	10,76,253	89,688	104,93,463
3	Mazenine Floor	10,90,199	43,608	1,30,824	10,902	12,75,533
4	First Floor	94,98,393	3,79,936	11,39,807	94,984	111,13,120
5	Terrace Floor	25,76,927	51,539	51,539	25,769	27,05,774
6	Boundary Wall and Paver	21,77,475	-	-	-	21,77,475
		<b>320,11,991</b>	<b>8,33,833</b>	<b>23,98,422</b>	<b>2,21,343</b>	<b>354,65,589</b>

**BILL OF QUANTITY - COMMAND & CONTROL CENTRE, JABALPUR**

**PILE FOOTING FOR BOUNDARY WALL**

S. No	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount in Rs.
	Excavation					
1	2.8.1, Vol. 2, Pg 16	Earth work in excavation by mechanical means (Hydraulic avator) / manual means in foundation enches 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 xcavated soil as directed, within a lead of 50 m2.8.1 All kinds of soil				
		For pile cap, (.65 x .65 x .35 m)	26.4			
			26.4	129	CuM	<b>3401.89</b>
	Concrete					
2	4.1.2, Vol. 2, Pg 34	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering All work up to plinth level				
		4.1.2 Cement concrete grade M-15 with 20 mm max.size of stone agg.				
		For pile cap Base	3.5			
		Total	3.5	4154	CuM	<b>14606.16</b>
3	16.9, Vol. 2, Pg 187	<b>Boring, providing and installing bored cast-in-situ reinforced cement concrete pile</b> of specified diameter and length below the pile cap <b>M 20</b> in cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with, bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. all complete, including removal of excavated earth with all lifts and leads (Length of pile for payment shall be measured upto bottom of pile cap).				
		Length 2.0M				
		(16.9.1) 300 mm dia piles	97.3			
		Total	97.3	1165	Rm	<b>113393.33</b>
4	5.1, Vol. 2, Pg 46	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 :				
		5.1.1 Cement concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate				
		Pile Cap	7.20			
		Column	1.28			
		Total	8.47	4728	Cum	<b>40065.47</b>
	Reinforcement					
5	5.20.6, Vol. 2, Pg 49	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire upto floor two level including all wastage etc. complete.				
		5.20.6 Thermo-Mechanically Treated bars.				
		Reinforcement for R.C.C. work @55kg/cum of column concrete	378.2			
		Reinforcement for R.C.C. work @160kg/cum of foundation concrete	1355.9			
		Reinforcement for R.C.C. work @120kg/cum of column concrete	153.3			
		Total	1887.4	60	Kg	<b>113241.98</b>

S. No	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount in Rs.
		<b>Back Filling &amp; Water Proofing</b>				
6	2.25, Vol. 2, Pg 19	Filling by 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				
		For foundation (volume of earth from excavation item)	26.37			
		Deduction for foundation concrete (volume from concrete item above)	-11.99			
		Total	14.38	59	CuM	<b>848.48</b>
7	4.11. Vol. 2, Pg 36	Extra for providing and mixing water proofing material in cement concrete work @ 1 kg per 50kg of cement.				
		in concrete upto plinth Measurement as above)	105.81			
		Volume of Concrete	105.81			
		Nos of Bag@410 kg or 8.2bags per cum	867.62		Per 50 kg cement	
				61.00		<b>52924.87</b>
		<b>Centering &amp; Shuttering</b>				
8	20.1.1, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for				
		20.1.1 Foundations, footings, bases of columns, etc. For mass concrete.				
		PILE CAP	43.61			
		Total	43.61	138.0	Sqm	<b>6017.54</b>
9	20.1.6, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for Columns, Pillars, Piers, Abutments, Posts, Struts.				
		Column	15.82			
		Total	15.82	282.00	Sqm	<b>4460.30</b>
						<b>348960.01</b>

**BILL OF QUANTITY - COMMAND & CONTROL CENTRE, JABALPUR**

**BOUNDARY WALL (Above Plinth)**

Structural Part						
S. No	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount in Rs.
	Concrete					
1	5.2.1, Vol. 2, Pg 46	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up to floor two level excluding cost of centering, shuttering, finishing and reinfor cement 5.2.1 Cement concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate				
		Total	20.81	5050	Cum	<b>105065.25</b>
	Reinforcement					
	Reinforcement for R.C.C					
2	5.20.6, Vol. 2, Pg 49	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire upto floor two level including all wastage etc. complete. 5.20.6 Thermo-Mechanically Treated bars.				
		Total	2295.1	60.00	Kg	<b>137707.20</b>
	Back Filling & Water Proofing					
3	4.10. Vol. 2, Pg 36	Providing and laying damp-proof course 50mm thick with cement Cement concrete grade M-15 (Nominal Mix) with 20 mm maximum size of stone aggregate				
		Total	31.01	226	Sqm	<b>7007.25</b>
4	4.12. Vol. 2, Pg 36	Applying a coat of residual petroleum bitumen of penetration 80/100 of approved quality using 1.7kg per square meter on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.				
		Quantity as above	31.01	102	Sqm	<b>3162.56</b>
5	4.11. Vol. 2, Pg 36	Extra for providing and mixing water proofing material in cement concrete work @ 1 kg per 50kg of cement.				
		Nos of Bag@410 kg or 8.2bags per cum	95.32	61.00	Per 50 kg cement	<b>5814.46</b>

S. No	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount in Rs.
	Centering & Shuttering					
6	20.1.6, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for Columns, Pillars, Piers, Abutments, Posts, Struts.				
		Total	132.86	282.00	Sqm	<b>37466.52</b>
7	20.1.5, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for				
		20.1.5 Lintels, beams, plinth beams, girders, bressumers and cantilevers.				
		Total	121.18	203.00	Sqm	<b>24599.54</b>
Architectural Part						
	Brick Work					
8	6.38, Vol. 2, Pg 62	Brick work with well burnt open bhatta bricks crushing strength not less than 25kg/cm <sup>2</sup> and water absorption not more than 20% in foundation and plinth In cement mortar 1:4.				
		Total	17.36	3136.0	CuM	<b>54450.68</b>
	Cement Plaster					
9	13.11, Vol. 2, Pg 157	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).				
		On Vertical faces in following areas				
		Total	364.73	149.00	Sqm	<b>54344.39</b>
	Stone Work					
10	11.29 Vol.2, Pg 130	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 coarse sand) including pointing with cement mortar 1:2 (1 cement : 2 stone dust) with an admixture of pigment to match the shade of stone. (minimum size of kota stone 0.25 m)				
		Total	53.25	477.0	SqM	<b>25398.44</b>
	Miscellaneous					
11	10.25 Vol. 2, Pg 116	Steel work welded in built up sections/ framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.				
		10.25.2 In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.				
		Total (A+B)	7126.25	67.00	Kg	<b>477458.51</b>

S. No	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount in Rs.
	Painting					
12	13.48.3 Vol. 2, Pg 162	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @0.90 ltr/10 sqm over an under coat of primer applied @ 0.80 ltr/ 10 sqm of approved brand or manufacture				
		Total	166.41	65.00	sqm	<b>10816.62</b>
13	13.26 Vol. 2, Pg 159	Providing and applying 1.5 mm thick (in two coat) white cement based wall putty of best quality, over plastered surface to prepare the surface even and smooth complete.				
		Quantity as above in Plaster (External)	364.73	82.00	SqM	<b>29907.65</b>
14	13.45. Vol. 2, Pg 161	Finishing walls with textured exterior paint of required shade :				
		New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including base coat of water proofing cement paint applied @ 2.20kg/10 sqm.				
		Quantity as above in External Plaster	364.73	125.00	SqM	<b>45590.93</b>
						<b>1018790.01</b>

BILL OF QUANTITY - COMMAND & CONTROL CENTRE, JABALPUR										
PAVER BLOCK										
Solid paver Area = 816.23 Sqm										
Structural Part										
S. No	SOR Item No.	Item of Work	Measurement				Quantity	Rate	Unit	Amount
			No.	L	B	H/D				
Surface Dressing										
1	2.28, Vol	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m.								
		(2.28.1) All kinds of soil.	1	816.2			816.23			
		Total					816.23	6.6	SqM	5411.60
Concrete										
2	4.1.2, Vo	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering All work up to plinth level								
		4.1.2 Cement concrete grade M-15 with 20 mm max.size of stone agg.								
		Paver block								
		Below Paver block (Area=816.23)	1	816.2		0.1	81.62			
		Total					81.62	4154	CuM	339061.94
Architectural Part										
Flooring										
3	11.47 Vo	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M-30 grade reflective type rubber moduled glossy colour paving block made by block making machine with strong vibratory compaction and of approved size and shape laid in required colour and pattern over and including 60mm thick compacted bed of stone dust filling the joints with sand etc. all complete as per the direction of Engineer in charge including locking edges wherever required wihing cement concrete M15 grade or cement mortar 1:3 with pigment of required shade to match the colour /shade of block including cost of labour, material , etc. all complete.								
		Paver block	1	816.2			816.23			
		Total					816.23	570.0	SqM	465251.10
<b>809724.65</b>										

## BILL OF QUANTITY - Command & Control Center, Jabalpur

Based on UADD SOR Vol. 1 to 4 wef 10 May 2012						
S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
<b>MEZANINE FLOOR</b>						
	Concrete					
1	5.3, Vol. 2, Pg 46	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor two level excluding the cost of centering, shuttering, finishing and reinforcement with Cement concrete grade M-20 (Nominal Mix with 20 mm maximum size of stone aggregate).				
		beam				
		Total	<b>42.39</b>	<b>5120.00</b>	<b>Cum</b>	<b>217021.00</b>
	Reinforcement					
	Reinforcement for R.C.C					
2	5.20.6, Vol. 2, Pg 49	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire upto floor two level including all wastage etc. complete.				
		5.20.6 Thermo-Mechanically Treated bars.				
		Total	<b>6781.91</b>	<b>60.00</b>	<b>Kg</b>	<b>406914.37</b>
	Water Proofing					
3	4.12. Vol. 2, Pg 36	Applying a coat of residual petroleum bitumen of penetration 80/100 of approved quality using 1.7kg per square meter on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.				
		Quantity as above	<b>25.63</b>	<b>102</b>	<b>Sqm</b>	<b>2614.28</b>
	Centering & Shuttering					
4	20.1.3, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for				
		20.1.3 Suspended floors, roofs, landings, balconies and access platform				
		Total	<b>168.84</b>	<b>227.00</b>	<b>Sqm</b>	<b>38327.46</b>
5	20.1.5, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for				
		20.1.5 Lintels, beams, plinth beams, girders, bressumers and cantilevers.				
		Total	<b>176.35</b>	<b>203.00</b>	<b>Sqm</b>	<b>35798.97</b>
	Brick Work					
6	6.44, Vol. 2, Pg 62	Half brick masonry with open bhatta of class designation 25 in superstructure above plinth level upto floor 2 level including the cost of scaffolding.				
		Cement mortar 1 : 3				
		Total	<b>8.95</b>	<b>451.00</b>	<b>Sqm</b>	<b>4038.43</b>
	Cement Plaster					
7	13.16, Vol. 2, Pg 157	6 mm cement plaster of mix :				



S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
		1:3 (1 cement: 3 fine sand)				
		Total	<b>168.84</b>	<b>83.00</b>	<b>Sqm</b>	<b>14014.00</b>
8	13.1, Vol. 2, Pg 156	12 mm cement plaster of mix :				
		1:5 (1 cement: 5 fine sand)				
		On Vertical faces in following areas				
		Total	<b>194.26</b>	<b>102.00</b>	<b>Sqm</b>	<b>19814.36</b>
	Flooring					
9	Non SOR Item, MPPWD, 11.53 , Pg 205 (in force from August' 1st 2014)	Providing and laying vitrified floor tiles in different sizes with water absorption's less than 0.08% and conforming to IS : 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 sand) including grouting the joints with white cement and matching pigments etc., complete. 11.53.2 Size of Tile 600x600x9-l0 mm				
		Total	<b>114.05</b>	<b>894.00</b>	<b>SqM</b>	<b>101961.12</b>
10	Non SOR Item, MPPWD, 11.54 , Pg 205 (in force from August' 1st 2014)	Providing and laying Vitrified tiles in different sizes, with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make in all colours and shade in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 sand), including grouting the joint with white cement and matching pigments etc. complete. 11.54.2 Size of Tile 600x600x9-l0 mm				
		Total	<b>10.54</b>	<b>888.00</b>	<b>SqM</b>	<b>9357.30</b>
11	Non SOR Item, MPPWD, 11.60 , Pg 207 (in force from August' 1st 2014)	Providing and laying Antiskid endura floor tiles of any sizes, 12 mm thickness with water absorption's less than 0.08% and conforming to IS: 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement :4 sand) including grouting the joints with white cement with matching pigments etc., complete.				
		Total	<b>22.82</b>	<b>880.00</b>	<b>SqM</b>	<b>20079.84</b>
12	11.34 Vol. 2, Pg 134	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (6 to 7mm thick) 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.				
		Total	<b>95.07</b>	<b>686.00</b>	<b>SqM</b>	<b>65218.43</b>
13	Non SOR Item, MPPWD, 11.28, Pg 202 (in force from August' 1st 2014)	Granite work gang saw cut (polished and machine cut) of thickness 18mm for wall lining (veneer work), backing filled with a grout of average 12 mm thick in cement mortar 1:3 (1 cement : 3 sand) including pointing with white cement mortar 1:2 (1 white cement: 2 marble dust) with an admixture of pigment to match the marble shade: (To be secured to the backing by means of cramps, which shall be paid for separately). 11.28.1.2 Area of slab over 0.50 sqm				
		Total	<b>7.50</b>	<b>3720.00</b>	<b>SqM</b>	<b>27900.00</b>
	Joineries					



## BILL OF QUANTITY - Command & Control Center, Jabalpur

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
<b>TERRACE FLOOR</b>						
	Concrete					
1	.2, Vol. 2, Pg	Providing and laying cement concrete in retaining walls, return walls, 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. up to floor two level, excluding the cost of centering, shuttering and finishing :				
		4.2.2 Cement concrete grade M-15 with 20 mm max.size of stone agg.				
		4.13 Extra for concrete work in superstructure above floor Two level for each floors or part thereof. 254 Rs				
			<b>67.43</b>	<b>4565.00</b>	<b>CuM</b>	<b>307799.26</b>
2	B, Vol. 2, Pg	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor two level excluding the cost of centering, shuttering, finishing and reinforcement with Cement concrete grade M-20 (Nominal Mix with 20 mm maximum size of stone aggregate).				
		Staircase mumty & Water Tank				
		Total	<b>36.81</b>	<b>5211.00</b>	<b>Cum</b>	<b>191819.28</b>
	Reinforcement					
3	D.6, Vol. 2, Pg	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire upto floor two level including all wastage etc. complete.				
		Total	<b>4569.59</b>	<b>60.00</b>	<b>Kg</b>	<b>274175.28</b>
	Water Proofing					

4	1. Vol. 2, Pg	Extra for providing and mixing water proofing material in cement concrete work @ 1 kg per 50kg of cement.				
		Nos of Bag@410 kg or 8.2bags per cum	<b>126.94</b>	<b>61.00</b>	kgcem	<b>7743.25</b>
		Centering & Shuttering				
5	.6, Vol. 2, Pg	Centering & shuttering propping and removal of form for Columns, Pillars, Piers, Abutments, Posts, Struts.				
		Total	<b>117.18</b>	<b>282.00</b>	Sqm	<b>33045.32</b>
6	.3, Vol. 2, Pg	Centering & shuttering propping and removal of form for				
		20.1.3 Suspended floors, roofs, landings, balconies and access platform				
		Total	<b>156.30</b>	<b>227.00</b>	Sqm	<b>35479.64</b>
7	.5, Vol. 2, Pg	Centering & shuttering propping and removal of form for				
		20.1.5 Lintels, beams, plinth beams, girders, bressumers and cantilevers.				
		Total	<b>114.90</b>	<b>203.00</b>	Sqm	<b>23325.04</b>
		Brick Work				
8	9, Vol. 2, Pg	Brick work will well burnt open bhatta bricks crushing strength not less than 25kg/cm <sup>2</sup> and water absorption not more than 20% in above plinth level upto floor two level in cm 1:4.				
		Total	<b>93.76</b>	<b>3310.00</b>	CuM	<b>310357.80</b>
	6.4	Extra for brick work in superstructure above floor 2 level for each floors or part there of .	<b>93.76</b>	<b>407.00</b>	Sqm	<b>38161.82</b>
		Cement Plaster				
9	.6, Vol. 2, Pg	6 mm cement plaster of mix : 1:3 (1 cement: 3 fine sand)				
		Total	<b>156.30</b>	<b>83.00</b>	Sqm	<b>12972.73</b>
10	1, Vol. 2, Pg	12 mm cement plaster of mix :				

		1:5 (1 cement: 5 fine sand)				
		On Vertical faces in following area				
		Total	<b>123.66</b>	<b>102.00</b>	<b>Sqm</b>	<b>12613.75</b>

11	1, Vol. 2, Pg	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).				
		Total	<b>583.73</b>	<b>149.00</b>	<b>Sqm</b>	<b>86976.22</b>
	13.22 Vol. 2, Pg	Extra for plastering exterior walls of height more than 10 m from ground level for every additional height of 3 m or part thereof.	<b>583.73</b>	<b>20.00</b>	<b>Sqm</b>	<b>11674.66</b>
	Flooring					
12	20 Vol. 2, Pg	Providing and laying pressed clay tiles (as per approved pattern 20 mm nominal thickness and of approved size) on roofs jointed with cement mortar 1:4 (1 cement : 4 coarse sand) mixed with 2% integral water proofing compound laid over a bed of 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand) and finished neat complete.				
		Total	<b>662.22</b>	<b>493.00</b>	<b>SqM</b>	<b>326476.33</b>
13	21 Vol. 2, Pg	Providing gola 75x75 mm in cement concrete M-15 with aggregate 10mm and down gauge including finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design :				
		Total	<b>150.05</b>	<b>84.00</b>	<b>RM</b>	<b>12603.78</b>
	Joineries					

14	4.2 Vol. 2, Pg	Providing and fixing pressed steel frames for doors, windows & ventilators confirming to IS: 4351 manufactured from commercial mild steel sheet of 1.25 mm thickness including hinges jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.25mm pressed mild steel welded or rigidly fixed together by mechanical means, adjustable lugs with split end tail to each jamb including steel butt hinges 2.5mm thick with mortar guards, lock strike-plate and shock absorbers as specified and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer-in-charge: 10.14.2 Single rebate 100x50mm				
		D2 (900 x 2100 mm)	<b>10.20</b>			
		Total	<b>10.20</b>	<b>334.00</b>	<b>RM</b>	<b>3406.80</b>
15	4.5 Vol. 2, Pg	Providing and fixing pressed steel doors, windows and ventilators confirming to IS: 4351 manufactured from commercial mild steel sheet of 3.15mm thickness and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer-incharge:				
		Total	<b>3.78</b>	<b>1473.00</b>	<b>SqM</b>	<b>5567.94</b>
		Add 10% for fittings etc.				<b>556.79</b>

	Painting					
16	8.3 Vol. 2, Pg	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @0.90 ltr/10 sqm over an under coat of primer applied @ 0.80 ltr/ 10 sqm of approved brand or manufacture				
		Total	<b>10.62</b>	<b>65.00</b>	<b>sqm</b>	<b>690.30</b>
17	26 Vol. 2, Pg	Providing and applying 1.5 mm thick (in two coat) white cement based wall putty of best quality, over plastered surface to prepare the surface even and smooth complete.				
		Quantity as above in Plaster (Internal+External)	<b>863.70</b>	<b>82.00</b>	<b>SqM</b>	<b>70823.01</b>
18	8.1 Vol. 2, Pg	Finishing wall with Delux multi surface Paint system for Interiors and exteriors using primer as per Specification - Two or more coats applied @1.25Ltr/ 10 sqm over & including one coat of special primer applied @0.75Ltr/ 10 sqm				
		Quantity as above in plaster	<b>279.96</b>	<b>75.00</b>	<b>SqM</b>	<b>20997.16</b>
19	5. Vol. 2, Pg	Finishing walls with textured exterior paint of required shade :				
		New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including base coat of water proofing cement paint applied @ 2.20kg/10 sqm.				
		Quantity as above in External Plaster	<b>583.73</b>	<b>125.00</b>	<b>SqM</b>	<b>72966.63</b>
	Miscellaneous					



20	6, Pg 206 (in	Providing and laying Vitrified tiles in different sizes, with water absorption less than 0.08% and conforming to IS: 15622, of approved brand and manufacturer in all colours and shade in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately). 11.56.2 Size of Tile 600x600x9-I O mm				
		Total	<b>257.12</b>	<b>1081.00</b>	<b>SqM</b>	<b>277951.04</b>
				.		
21	L1 MP PWD	Providing and supplying aluminium extruded tubular				
		Total	<b>322.65</b>	<b>359.00</b>	<b>Kg</b>	<b>115830.18</b>



**BILL OF QUANTITY - Command & Control Center, Jabalpur**

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
Ground floor						
	Concrete					
1	5.3, Vol. 2, Pg 46	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor two level excluding the cost of centering, shuttering, finishing and reinforcement with Cement concrete grade M-20 (Nominal Mix with 20 mm maximum size of stone aggregate).				
		Total	<b>268.26</b>	<b>5120.00</b>	<b>Cum</b>	<b>1373485.31</b>
2	5.2, Vol. 2, Pg 46	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up to floor two level excluding cost of centering, shuttering, finishing and reinforcement with cement 5.2.1 Cement concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate.				
		Total	<b>34.25</b>	<b>5050.00</b>	<b>Cum</b>	<b>172979.06</b>
	Reinforcement					
3	5.20.6, Vol. 2, Pg 49	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire upto floor two level including all wastage etc. complete.				
		5.20.6 Thermo-Mechanically Treated bars.				
		Total	<b>44805.35</b>	<b>60.00</b>	<b>Kg</b>	<b>2688320.79</b>
	Water Proofing					
4	4.12. Vol. 2, Pg 36	Applying a coat of residual petroleum bitumen of penetration 80/100 of approved quality using 1.7kg per square meter on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.				
		Quantity as above	<b>26</b>	<b>102</b>	<b>Sqm</b>	<b>2614.28</b>
	Centering & Shuttering					
5	20.1.6, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for Columns, Pillars, Piers, Abutments, Posts, Struts.				
		Total	<b>261.79</b>	<b>282.00</b>	<b>Sqm</b>	<b>73825.34</b>
6	20.1.7, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for				
		20.1.7 Stairs, (excluding landings) except spiral-staircases.				
		Total	<b>24.11</b>	<b>278.00</b>	<b>Sqm</b>	<b>6701.36</b>
7	20.1.3, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for				
		20.1.3 Suspended floors, roofs, landings, balconies and access platform				
		Total	<b>770.3</b>	<b>227.00</b>	<b>Sqm</b>	<b>174852.05</b>

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
8	20.1.5, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for				
		20.1.5 Lintels, beams, plinth beams, girders, bressumers and cantilevers.				
		Total	<b>1447.11</b>	<b>203.00</b>	<b>Sqm</b>	<b>293762.56</b>
	Brick Work					
9	6.39, Vol. 2, Pg 62	Brick work will well burnt open bhatta bricks crushing strength not less than 25kg/cm <sup>2</sup> and water absorption not more than 20% in above plinth level upto floor two level in cm 1:4.				
		Total	<b>133.94</b>	<b>3310.00</b>	<b>CuM</b>	<b>443334.38</b>
10	6.44, Vol. 2, Pg 62	Half brick masonry with open bhatta of class designation 25 in superstructure above plinth level upto floor 2 level including the cost of scaffolding.				
		Total	<b>337.350</b>	<b>451.00</b>	<b>Sqm</b>	<b>152144.85</b>
	Cement Plaster					
11	13.16, Vol. 2, Pg 157	6 mm cement plaster of mix :				
		1:3 (1 cement: 3 fine sand)				
		Total	<b>794.379</b>	<b>83.00</b>	<b>Sqm</b>	<b>65933.45</b>
12	13.1, Vol. 2, Pg 156	12 mm cement plaster of mix :				
		1:5 (1 cement: 5 fine sand)				
		On Vertical faces in following areas				
		Total	<b>2581.29</b>	<b>102.00</b>	<b>Sqm</b>	<b>263291.78</b>
13	13.11, Vol. 2, Pg 157	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).				
		Total	<b>1133.03</b>	<b>149.00</b>	<b>Sqm</b>	<b>168822.08</b>
	Flooring					
14	Non SOR Item, MPPWD, 11.53 , Pg 205 (in force from August' 1st 2014)	Providing and laying vitrified floor tiles in different sizes with water absorption's less than 0.08% and conforming to IS : 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 sand) including grouting the joints with white cement and matching pigments etc., complete. 11.53.2 Size of Tile 600x600x9-10 mm				
		Total	<b>563.43</b>	<b>894.00</b>	<b>SqM</b>	<b>503705.59</b>
15	Non SOR Item, MPPWD, 11.54 , Pg 205 (in force from August' 1st 2014)	Providing and laying Vitrified tiles in different sizes, with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make in all colours and shade in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 sand), including grouting the joint with white cement and matching pigments etc. complete. 11.54.2 Size of Tile 600x600x9-10 mm )				
		Total	<b>23.40</b>	<b>888.00</b>	<b>SqM</b>	<b>20777.87</b>

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
16	Non SOR Item, MPPWD, 11.60 , Pg 207 (in force from	Providing and laying Antiskid endura floor tiles of any sizes, 12 mm thickness with water absorption's less than 0.08% and conforming to IS: 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement :4 sand) including grouting the joints with white cement with matching pigments etc., complete.				
		Total	<b>22.82</b>	<b>880.00</b>	<b>SqM</b>	<b>20079.84</b>
17	11.34 Vol. 2, Pg 134	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (6 to 7mm thick) 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.				
		Total	<b>95.07</b>	<b>686.00</b>	<b>SqM</b>	<b>65218.43</b>
18	8.2Vol. 2, Pg 78	Providing and fixing 16mm thick gang saw cut mirror polished premoulded and prepolished) machine cut for kitchen platforms, vanity counters, window sills , facias and similar locations of required size of approved shade, colour 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. 8.2.8 Granite of any colour and shade 8.2.8.2 Area of slab over 0.50 sqm.				
		Total	<b>237.99</b>	<b>2544.00</b>	<b>SqM</b>	<b>605451.65</b>
19	8.3Vol. 2, Pg 79	Extra for providing full edge moulding to 16mm thick marble stone counters, Vanities etc. including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineerin- Charge. 8.3.2 Granite work.				
		Total	<b>81.00</b>	<b>146.00</b>	<b>RM</b>	<b>11826.00</b>
20	Non SOR Item, MPPWD, 11.33, Pg 203 (in force from August' 1st 2014)	Pre polished Granite stone work 18mm thick of any colour in riser of steps, skirting, dado and pillars laid on 12 mm average thick cement mortar 1:3 (1 cement:3 sand) and jointed with white cement slurry mixed with pigment to match the shade of slab.				
		Total	<b>16.08</b>	<b>3413.00</b>	<b>SqM</b>	<b>54881.04</b>
21	Non SOR Item, MPPWD, 11.28, Pg 202 (in force from August' 1st 2014)	Granite work gang saw cut (polished and machine cut) of thickness 18mm for wall lining (veneer work), backing filled with a grout of average 12 mm thick in cement mortar 1:3 (1 cement : 3 sand) including pointing with white cement mortar 1:2 (1 white cement: 2 marble dust) with an admixture of pigment to match the marble shade: (To be secured to the backing by means of cramps, which shall be paid for separately). 11.28.1.2 Area of slab over 0.50 sqm				
		Total	<b>7.50</b>	<b>3720.00</b>	<b>SqM</b>	<b>27900.00</b>

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
	Joineries					
22	10.14.2 Vol. 2, Pg 115	Providing and fixing pressed steel frames for doors, windows & ventilators conforming to IS: 4351 manufactured from commercial mild steel sheet of 1.25 mm thickness including hinges jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.25mm pressed mild steel welded or rigidly fixed together by mechanical means, adjustable lugs with split end tail to each jamb including steel butt hinges 2.5mm thick with mortar guards, lock strike- plate and shock absorbers as specified and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer-in-charge: 10.14.2 Single rebate 100x50mm				
		Total	<b>57.30</b>	<b>334.00</b>	<b>RM</b>	<b>19138.20</b>
23	9.20 Vol. 2, Pg 90	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters using following hinges. 9.20.1 9.20.1 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.				
		Total	<b>14.49</b>	<b>1926</b>	<b>SqM</b>	<b>27907.74</b>
		Add 100% for fittings etc.				<b>27907.74</b>
24	9.10.12 Vol. 2, Pg 88,89	Providing and fixing factory made laminated veneer lumber glazed shutter conforming to IS: 14616 and TADS 15:2001 (Part B) , using 4mm thick float glass panes for doors, windows and clerestory windows including ...Engineer-in-charge. 9.10.1 30 mm thick shutters @Rs. 2006/- per sqm				
		Extra for providing frosted glass panes 4 mm thick instead of ordinary float glass panes 4 mm ..... (Area of opening for glass panes excluding portion inside rebates shall be measured). @Rs. 180/- per sqm Total Rate Rs. 2006+180 = 2186/-				
		Total	<b>1.80</b>	<b>2186</b>	<b>sqm</b>	<b>3934.80</b>
		Add 30% for fittings etc.				<b>1180.44</b>
	Painting					
25	13.48.3 Vol. 2, Pg 162	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @0.90 ltr/10 sqm over an under coat of primer applied @ 0.80 ltr/ 10 sqm of approved brand or manufacture				
		Total	<b>17.19</b>	<b>65.00</b>	<b>sqm</b>	<b>1117.35</b>
26	13.26 Vol. 2, Pg 159	Providing and applying 1.5 mm thick (in two coat) white cement based wall putty of best quality, over plastered surface to prepare the surface even and smooth complete.				
		Quantity as above in Plaster (Internal+ external)	<b>3608.66</b>	<b>82.00</b>	<b>SqM</b>	<b>295909.87</b>

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
27	13.48.1 Vol. 2, Pg 161	Finishing wall with Delux multi surface Paint system for Interiors and exteriors using primer as per Specification - Two or more coats applied @1.25Ltr/ 10 sqm over & including one coat of special primer applied @0.75Ltr/ 10 sqm				
		Quantity as above in plaster	<b>3375.67</b>	<b>75.00</b>	<b>SqM</b>	<b>253175.32</b>
28	13.45. Vol. 2, Pg 161	Finishing walls with textured exterior paint of required shade :				
		New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including base coat of water proofing cement paint applied @ 2.20kg/10 sqm.				
		Quantity as above in External Plaster	<b>1366.02</b>	<b>125.00</b>	<b>SqM</b>	<b>170752.52</b>
	Miscellaneous					
29	Non SOR Item, MPPWD, 10.25, Pg 182 (in force from August' 1st 2014)	Providing and fixing stainless steel ( Grade 304) railing made of Hollow tubes, channels, plates etc. including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete i/c fixing the railing with necessary accessories and stainless steel dash fasteners , stainless steel bolts etc., ofrequired size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge. ( for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.)				
		Total	<b>165</b>	<b>793.75</b>	<b>kg</b>	<b>130968.75</b>
30	Non SOR Item, MPPWD, 11.56, Pg 206 (in force from August' 1st 2014)	Providing and laying Vitrified tiles in different sizes, with water absorption less than 0.08% and conforming to IS: 15622, of approved brand and manufacturer in all colours and shade in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately). 11.56.2 Size of Tile 600x600x9-I O mm				
		Total	<b>244.30</b>	<b>1081.00</b>	<b>SqM</b>	<b>264088.95</b>
31	Non SOR Item (Ref - 8.1 , Pg 111 MP PWD in force from August 1st 2014)	Providing and supplying aluminium extruded tubular frame etc complete as per specification laid down in MP PWD SOR.				
		Total	<b>159.69</b>	<b>359</b>	<b>Kg</b>	<b>57327.39</b>

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
32	Non SOR Item (Ref - 8.2, Pg 111 MP PWD in force from August 1st 2014)	Designing, fabricating, testing, etc complete as per specification laid down in MP PWD SOR.				
		Total	<b>32.97</b>	<b>2674</b>	<b>Sqm</b>	<b>88150.55</b>
				.		
33	Non SOR Item (Ref - 8.3, Pg 112 MP PWD in force from August 1st 2014)	Providing, assembling and supplying vision glass panels etc complete as per specification laid down in MP PWD SOR.				
		Total	<b>29.67</b>	<b>3635</b>	<b>Sqm</b>	<b>107847.61</b>
				.		
34	Non SOR Item (Ref - 8.4, Pg 112 MP PWD in force from August 1st 2014)	Extra for openable side / top hung vision glass panels etc complete as per specification laid down in MP PWD SOR.				
		Total	<b>6.59</b>	<b>3009</b>	<b>Sqm</b>	<b>19838.82</b>
				.		
35	Non SOR Item (Ref - 8.6, Pg 112 MP PWD in force from August 1st 2014)	Providing and supplying Spandrel Glass Panels etc complete as per specification laid down in MP PWD SOR.				
		Total	<b>3.30</b>	<b>2174</b>	<b>Sqm</b>	<b>7166.76</b>
				.		
36	Non SOR Item (Ref - 21.18, Pg 365 MP PWD in force from August 1st 2014)	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top bottom pivot spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in-charge (Door handle, lock and stopper etc.to be paid separately).				
		Total	<b>8.64</b>	<b>4958.00</b>	<b>RM</b>	<b>42837.12</b>
				.		
37	Non SOR Item (Ref - 12.64 , Pg 233 MP PWD in force from August 1st 2014)	Glass fibre accoustical suspended false ceiling etc complete as per specification laid down in MP PWD SOR.				
		Total	<b>88.17</b>	<b>2461</b>	<b>kg</b>	<b>216994.84</b>



S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
38	12.45 Vol. 2, Pg 150	Providing and fixing at all height false ceiling including providing and fixing of frame work made of special sections power pressed from M.S. sheet and galvanised in accordance with zinc coating of grade 350 as per IS : 277 and consisting of angle cleats of size 25mm wide x 1.6mm thick with flanges of 22mm and 37mm at 1200mm centre to centre one flange fixed to the ceiling with dash fastener 12.5mm dia x 40mm long with 6mm dia bolts to the angle hangers of 25x25x0.55mm of required length, and other end of angle hanger being fixed with nut and bolts to G.I. channels 45x15x0.9mm running at the rate of 1200mm centre to centre to which the ceiling section 0.5mm thick button wedge of 80mm with tapered flanges of 26mm each having clips of 10.5mm at 450mm centre to centre shall be fixed in a direction perpendicular to G.I. channel with connecting clips made out of 2.64mm dia 230mm long G.I. wire at every junction including fixing the gypsum board with ceiling section and perimeter channels 0.5mm thick 27mm high having flanges of 20mm and 30mm long,				
		the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450mm centre to centre with 25mm long drive-all screws @ 230mm interval including jointing and fixing to a flush finish of tapered and square edges of the board with recommended filler, jointing tapes, finisher and two coats of primer suitable for board as per manufactures specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed all complete as per drawing and specification and direction of the Engineer in Charge but excluding the cost of painting with :				
		12.45.1) 12.5 mm thick tapered edge gypsum board conforming to IS: 2095- Part I.				
		Total	<b>59.36</b>	<b>718</b>	<b>SqM</b>	<b>42619.50</b>
						<b>8968772.00</b>

## BILL OF QUANTITY - Command & Control Center, Jabalpur

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
<b>First Floor</b>						
	Concrete					
1	5.3, Vol. 2, Pg 46	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor two level excluding the cost of centering, shuttering, finishing and reinforcement with Cement concrete grade M-20 (Nominal Mix with 20 mm maximum size of stone aggregate).				
		<b>Total</b>	<b>268.96</b>	<b>5120.00</b>	<b>Cum</b>	<b>1377066.37</b>
2	5.2, Vol. 2, Pg 46	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up to floor two level excluding cost of centering, shuttering, finishing and reinforcement 5.2.1 Cement concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate.				
		<b>Total</b>	<b>58.52</b>	<b>5050.00</b>	<b>Cum</b>	<b>295505.90</b>
	Reinforcement					
	Reinforcement for R.C.C					
3	5.20.6, Vol. 2, Pg 49	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire upto floor two level including all wastage etc. complete.				
		5.20.6 Thermo-Mechanically Treated bars.				
		<b>Total</b>	<b>44552.51</b>	<b>60.00</b>	<b>Kg</b>	<b>2673150.31</b>
	Water Proofing					
4	4.12. Vol. 2, Pg 36	Applying a coat of residual petroleum bitumen of penetration 80/100 of approved quality using 1.7kg per square meter on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.				
		Quantity as above	26	102	Sqm	2614.28
	Centering & Shuttering					
5	20.1.6, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for Columns, Pillars, Piers, Abutments, Posts, Struts.				
			447.23	282.00	Sqm	126118.30
6	20.1.7, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for				

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
		20.1.7 Stairs, (excluding landings) except spiral-staircases.				
		Total	42.18	278.00	Sqm	11727.37
7	20.1.3, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for				
		20.1.3 Suspended floors, roofs, landings, balconies and access platform				
		Total	751.3	227.00	Sqm	170534.20
8	20.1.5, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for				
		20.1.5 Lintels, beams, plinth beams, girders, bressumers and cantilevers.				
		Total	1453.24	203.00	Sqm	295008.57
	Brick Work					
9	6.39, Vol. 2, Pg 62	Brick work will well burnt open bhatta bricks crushing strength not less than 25kg/cm <sup>2</sup> and water absorption not more than 20% in above plinth level upto floor two level in cm 1:4.				
		Total	234.15	3310.00	CuM	775044.89
10	6.44, Vol. 2, Pg 62	Half brick masonry with open bhatta of class designation 25 in superstructure above plinth level upto floor 2 level including the cost of scaffolding.				
		Total	570.410	451.00	Sqm	257254.82
	Cement Plaster					
11	13.16, Vol. 2, Pg 157	6 mm cement plaster of mix :				
		1:3 (1 cement: 3 fine sand)				
		Total	793.437	83.00	Sqm	65855.25
12	13.1, Vol. 2, Pg 156	12 mm cement plaster of mix :				
		1:5 (1 cement: 5 fine sand)				
		On Vertical faces in following areas				
		Total	3430.20	102.00	Sqm	349880.82
13	13.11, Vol. 2, Pg 157	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).				
		Total	1133.03	149.00	Sqm	168822.08
	Flooring					

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
14	Non SOR Item, MPPWD, 11.53 , Pg 205 (in force from August' 1st 2014)	Providing and laying vitrified floor tiles in different sizes with water absorption's less than 0.08% and conforming to IS : 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 sand) including grouting the joints with white cement and matching pigments etc., complete. 11.53.2 Size of Tile 600x600x9-10 mm				
		Total	563.43	894.00	SqM	503705.59
15	Non SOR Item, MPPWD, 11.54 , Pg 205 (in force from August' 1st 2014)	Providing and laying Vitrified tiles in different sizes, with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make in all colours and shade in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 sand), including grouting the joint with white cement and matching pigments etc. complete. 11.54.2 Size of Tile 600x600x9-10 mm )				
		Total	23.40	888.00	SqM	20777.87
16	Non SOR Item, MPPWD, 11.60 , Pg 207 (in force from August' 1st 2014)	Providing and laying Antiskid endura floor tiles of any sizes, 12 mm thickness with water absorption's less than 0.08% and conforming to IS: 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement :4 sand) including grouting the joints with white cement with matching pigments etc., complete.				
		Total	22.82	880.00	SqM	20079.84
17	11.34 Vol. 2, Pg 134	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (6 to 7mm thick) 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.				
		Total	95.07	686.00	SqM	65218.43
18	8.2Vol. 2, Pg 78	Providing and fixing 16mm 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, colour 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. 8.2.8 Granite of any colour and shade 8.2.8.2 Area of slab over 0.50 sqm.				
		Total	44.99	2544.00	SqM	114460.92

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
19	8.3Vol. 2, Pg 79	Extra for providing full edge moulding to 16mm thick marble stone counters, Vanities etc. including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineerin- Charge. 8.3.2 Granite work.				
		Total	83.95	146.00	RM	
20	Non SOR Item, MPPWD, 11.33, Pg 203 (in force from August' 1st 2014)	Pre polished Granite stone work 18mm thick of any colour in riser of steps, skirting, dado and pillars laid on 12 mm average thick cement mortar 1:3 (1 cement:3 sand) and jointed with white cement slurry mixed with pigment to match the shade of slab.				
		Total	19.23	3413.00	SqM	65631.99
21	Non SOR Item, MPPWD, 11.28, Pg 202 (in force from August' 1st 2014)	Granite work gang saw cut (polished and machine cut) of thickness 18mm for wall lining (veneer work), backing filled with a grout of average 12 mm thick in cement mortar 1:3 (1 cement : 3 sand) including pointing with white cement mortar 1:2 (1 white cement: 2 marble dust) with an admixture of pigment to match the marble shade: (To be secured to the backing by means of cramps, which shall be paid for separately). 11.28.1.2 Area of slab over 0.50 sqm				
		Total	7.50	3720.00	SqM	27900.00
	Joineries					
22	10.14.2 Vol. 2, Pg 115	Providing and fixing pressed steel frames for doors, windows & ventilators conforming to IS: 4351manufactured from commercial mild steel sheet of 1.25 mm thickness including hinges jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.25mm pressed mild steel welded or rigidly fixed together by mechanical means, adjustable lugs with split end tail to each jamb including steel butt hinges 2.5mm thick with mortar guards, lock strike- plate and shock absorbers as specified and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer-in-charge: 10.14.2 Single rebate 100x50mm				
		Total	78.00	334.00	RM	26052.00

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
23	9.20 Vol. 2, Pg 90	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters using following hinges. 9.20.1 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.				
		Total	14.49	1926	SqM	27907.74
		Add 100% for fittings etc.				
24	9.10.12 Vol. 2, Pg 88,89	Providing and fixing factory made laminated veneer lumber glazed shutter conforming to IS: 14616 and TADS 15:2001 (Part B) , using 4mm thick float glass panes for doors, windows and clerestory windows including ...Engineer-in-charge. 9.10.1 30 mm thick shutters @Rs. 2006/- per sqm				
		Extra for providing frosted glass panes 4 mm thick instead of ordinary float glass panes 4 mm ..... (Area of opening for glass panes excluding portion inside rebates shall be measured). @Rs. 180/- per sqm Total Rate Rs. 2006+180 = 2186/-				
		Total	2.25	2186	sqm	4918.50
		Add 30% for fittings etc.				
	Painting					
25	13.48.3 Vol. 2, Pg 162	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @0.90 ltr/10 sqm over an under coat of primer applied @ 0.80 ltr/ 10 sqm of approved brand or manufacture				
		Total	23.40	65.00	sqm	1521.00
26	13.26 Vol. 2, Pg 159	Providing and applying 1.5 mm thick (in two coat) white cement based wall putty of best quality, over plastered surface to prepare the surface even and smooth complete.				
		Quantity as above in Plaster (Internal+ external)	4456.63	82.00	SqM	365443.40
27	13.48.1 Vol. 2, Pg 161	Finishing wall with Delux multi surface Paint system for Interiors and exteriors using primer as per Specification - Two or more coats applied @1.25Ltr/ 10 sqm over & including one coat of special primer applied @0.75Ltr/ 10 sqm				
		Quantity as above in plaster	4223.64	75.00	SqM	316773.06
28	13.45. Vol. 2, Pg 161	Finishing walls with textured exterior paint of required shade :				

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
		New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including base coat of water proofing cement paint applied @ 2.20kg/10 sqm.				
		Quantity as above in External Plaster	1366.02	125.00	SqM	170752.52
	Miscellaneous					
29	Non SOR Item, MPPWD, 10.25, Pg 182 (in force from August' 1st 2014)	Providing and fixing stainless steel ( Grade 304) railing made of Hollow tubes, channels, plates etc. including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete i/c fixing the railing with necessary accessories and stainless steel dash fasteners , stainless steel bolts etc., ofrequired size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge. ( for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.)				
		Total	412.5	793.75	kg	327421.88
30	Non SOR Item, MPPWD, 11.56, Pg 206 (in force from August' 1st 2014)	Providing and laying Vitrified tiles in different sizes, with water absorption less than 0.08% and conforming to IS: 15622, of approved brand and manufacturer in all colours and shade in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately). 11.56.2 Size of Tile 600x600x9-I O mm				
		Total	373.97	1081.00	SqM	404259.19
31	Non SOR Item (Ref - 8.1 , Pg 111 MP PWD in force from August 1st 2014)	Providing and supplying aluminium extruded tubular (See specification in PWD SOR)				
		Total	230.09	359	Kg	82602.66
32	Non SOR Item (Ref - 8.2, Pg 111 MP PWD in force from August 1st 2014)	Designing, fabricating, testing, (See specification in PWD SOR)				
		Total	47.50	2674	Sqm	127015.53





BILL OF QUANTITY - Command & Control Center, Jabalpur						
S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
Foundation and Structure up to Plinth Level						
		Surface Dressing				
1	2.28, vol 2	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m.				
		total /100	16	663	100Sqm	<b>10608.00</b>
Excavation						
1	2.8.1, Vol.	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				
			352.15	129	CuM	<b>45427.35</b>
Concrete						
1	16.3, Vol.	Boring, Providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap in M 35 cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and the length of the pile to be embedded in pile cap etc. all complete. (Length of pile for payment shall be measured upto to the bottom of pile cap) :16.9.3 450 mm dia piles				
		Total	540.0	2377	Rm	<b>1283580.00</b>

1	16.3, Vol.	Boring, Providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap in M 35 cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and the length of the pile to be embedded in pile cap etc. all complete. (Length of pile for payment shall be measured upto to the bottom of pile cap) : 16.3.2 400 mm dia piles				
		Total	200.0	2138	Rm	<b>427600.00</b>
1	, Vol. 2, Pg	Extra over item No. 16.3 for providing additional bulb in under reamed piles, under specified diameter (Only the quantity of extra bulbs are to be paid).				
		Total	108.0	1402	Each	<b>151416.00</b>

2	, Vol. 2, Pg	Extra over item No. 16.3 for providing additional bulb in under reamed piles, under specified diameter (Only the quantity of extra bulbs are to be paid).				
		Total	40.0	1290	Each	<b>51600.00</b>
2	5.1, Vol. 2	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 concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate.				
		Total	321.32	4728	Cum	<b>1519211.55</b>
		Reinforcement				
		Reinforcement for R.C.C				
3	5.20.6, Vo	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire upto floor two level including all wastage etc. complete.				
		5.20.6 Thermo-Mechanically Treated bars.				
		Total	57064.77	60	Kg	<b>3423886.22</b>
2	4.1.2, Vol.	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering All work up to plinth level				
		4.1.2 Cement concrete grade M-15 with 20 mm max.size of stone agg.				
			26	4154	CuM	<b>106342.40</b>



**BILL OF QUANTITY - Command & Control Center, Jabalpur**

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
Ground floor						
	Concrete					
1	5.3, Vol. 2, Pg 46	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor two level excluding the cost of centering, shuttering, finishing and reinforcement with Cement concrete grade M-20 (Nominal Mix with 20 mm maximum size of stone aggregate).				
		Total	<b>268.26</b>	<b>5120.00</b>	<b>Cum</b>	<b>1373485.31</b>
2	5.2, Vol. 2, Pg 46	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up to floor two level excluding cost of centering, shuttering, finishing and reinforcement with cement 5.2.1 Cement concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate.				
		Total	<b>34.25</b>	<b>5050.00</b>	<b>Cum</b>	<b>172979.06</b>
	Reinforcement					
3	5.20.6, Vol. 2, Pg 49	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire upto floor two level including all wastage etc. complete.				
		5.20.6 Thermo-Mechanically Treated bars.				
		Total	<b>44805.35</b>	<b>60.00</b>	<b>Kg</b>	<b>2688320.79</b>
	Water Proofing					
4	4.12. Vol. 2, Pg 36	Applying a coat of residual petroleum bitumen of penetration 80/100 of approved quality using 1.7kg per square meter on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.				
		Quantity as above	<b>26</b>	<b>102</b>	<b>Sqm</b>	<b>2614.28</b>
	Centering & Shuttering					
5	20.1.6, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for Columns, Pillars, Piers, Abutments, Posts, Struts.				
		Total	<b>261.79</b>	<b>282.00</b>	<b>Sqm</b>	<b>73825.34</b>
6	20.1.7, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for				
		20.1.7 Stairs, (excluding landings) except spiral-staircases.				
		Total	<b>24.11</b>	<b>278.00</b>	<b>Sqm</b>	<b>6701.36</b>
7	20.1.3, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for				
		20.1.3 Suspended floors, roofs, landings, balconies and access platform				
		Total	<b>770.3</b>	<b>227.00</b>	<b>Sqm</b>	<b>174852.05</b>

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
8	20.1.5, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for				
		20.1.5 Lintels, beams, plinth beams, girders, bressumers and cantilevers.				
		Total	<b>1447.11</b>	<b>203.00</b>	<b>Sqm</b>	<b>293762.56</b>
	Brick Work					
9	6.39, Vol. 2, Pg 62	Brick work will well burnt open bhatta bricks crushing strength not less than 25kg/cm <sup>2</sup> and water absorption not more than 20% in above plinth level upto floor two level in cm 1:4.				
		Total	<b>133.94</b>	<b>3310.00</b>	<b>CuM</b>	<b>443334.38</b>
10	6.44, Vol. 2, Pg 62	Half brick masonry with open bhatta of class designation 25 in superstructure above plinth level upto floor 2 level including the cost of scaffolding.				
		Total	<b>337.350</b>	<b>451.00</b>	<b>Sqm</b>	<b>152144.85</b>
	Cement Plaster					
11	13.16, Vol. 2, Pg 157	6 mm cement plaster of mix :				
		1:3 (1 cement: 3 fine sand)				
		Total	<b>794.379</b>	<b>83.00</b>	<b>Sqm</b>	<b>65933.45</b>
12	13.1, Vol. 2, Pg 156	12 mm cement plaster of mix :				
		1:5 (1 cement: 5 fine sand)				
		On Vertical faces in following areas				
		Total	<b>2581.29</b>	<b>102.00</b>	<b>Sqm</b>	<b>263291.78</b>
13	13.11, Vol. 2, Pg 157	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).				
		Total	<b>1133.03</b>	<b>149.00</b>	<b>Sqm</b>	<b>168822.08</b>
	Flooring					
14	Non SOR Item, MPPWD, 11.53 , Pg 205 (in force from August' 1st 2014)	Providing and laying vitrified floor tiles in different sizes with water absorption's less than 0.08% and conforming to IS : 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 sand) including grouting the joints with white cement and matching pigments etc., complete. 11.53.2 Size of Tile 600x600x9-10 mm				
		Total	<b>563.43</b>	<b>894.00</b>	<b>SqM</b>	<b>503705.59</b>
15	Non SOR Item, MPPWD, 11.54 , Pg 205 (in force from August' 1st 2014)	Providing and laying Vitrified tiles in different sizes, with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make in all colours and shade in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 sand), including grouting the joint with white cement and matching pigments etc. complete. 11.54.2 Size of Tile 600x600x9-10 mm )				
		Total	<b>23.40</b>	<b>888.00</b>	<b>SqM</b>	<b>20777.87</b>

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
16	Non SOR Item, MPPWD, 11.60 , Pg 207 (in force from	Providing and laying Antiskid endura floor tiles of any sizes, 12 mm thickness with water absorption's less than 0.08% and conforming to IS: 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement :4 sand) including grouting the joints with white cement with matching pigments etc., complete.				
		Total	<b>22.82</b>	<b>880.00</b>	<b>SqM</b>	<b>20079.84</b>
17	11.34 Vol. 2, Pg 134	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (6 to 7mm thick) 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.				
		Total	<b>95.07</b>	<b>686.00</b>	<b>SqM</b>	<b>65218.43</b>
18	8.2Vol. 2, Pg 78	Providing and fixing 16mm thick gang saw cut mirror polished premoulded and prepolished) machine cut for kitchen platforms, vanity counters, window sills , facias and similar locations of required size of approved shade, colour 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. 8.2.8 Granite of any colour and shade 8.2.8.2 Area of slab over 0.50 sqm.				
		Total	<b>237.99</b>	<b>2544.00</b>	<b>SqM</b>	<b>605451.65</b>
19	8.3Vol. 2, Pg 79	Extra for providing full edge moulding to 16mm thick marble stone counters, Vanities etc. including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineerin- Charge. 8.3.2 Granite work.				
		Total	<b>81.00</b>	<b>146.00</b>	<b>RM</b>	<b>11826.00</b>
20	Non SOR Item, MPPWD, 11.33, Pg 203 (in force from August' 1st 2014)	Pre polished Granite stone work 18mm thick of any colour in riser of steps, skirting, dado and pillars laid on 12 mm average thick cement mortar 1:3 (1 cement:3 sand) and jointed with white cement slurry mixed with pigment to match the shade of slab.				
		Total	<b>16.08</b>	<b>3413.00</b>	<b>SqM</b>	<b>54881.04</b>
21	Non SOR Item, MPPWD, 11.28, Pg 202 (in force from August' 1st 2014)	Granite work gang saw cut (polished and machine cut) of thickness 18mm for wall lining (veneer work), backing filled with a grout of average 12 mm thick in cement mortar 1:3 (1 cement : 3 sand) including pointing with white cement mortar 1:2 (1 white cement: 2 marble dust) with an admixture of pigment to match the marble shade: (To be secured to the backing by means of cramps, which shall be paid for separately). 11.28.1.2 Area of slab over 0.50 sqm				
		Total	<b>7.50</b>	<b>3720.00</b>	<b>SqM</b>	<b>27900.00</b>

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
	Joineries					
22	10.14.2 Vol. 2, Pg 115	Providing and fixing pressed steel frames for doors, windows & ventilators conforming to IS: 4351 manufactured from commercial mild steel sheet of 1.25 mm thickness including hinges jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.25mm pressed mild steel welded or rigidly fixed together by mechanical means, adjustable lugs with split end tail to each jamb including steel butt hinges 2.5mm thick with mortar guards, lock strike- plate and shock absorbers as specified and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer-in-charge: 10.14.2 Single rebate 100x50mm				
		Total	<b>57.30</b>	<b>334.00</b>	<b>RM</b>	<b>19138.20</b>
23	9.20 Vol. 2, Pg 90	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters using following hinges. 9.20.1 9.20.1 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.				
		Total	<b>14.49</b>	<b>1926</b>	<b>SqM</b>	<b>27907.74</b>
		Add 100% for fittings etc.				<b>27907.74</b>
24	9.10.12 Vol. 2, Pg 88,89	Providing and fixing factory made laminated veneer lumber glazed shutter conforming to IS: 14616 and TADS 15:2001 (Part B) , using 4mm thick float glass panes for doors, windows and clerestory windows including ...Engineer-in-charge. 9.10.1 30 mm thick shutters @Rs. 2006/- per sqm				
		Extra for providing frosted glass panes 4 mm thick instead of ordinary float glass panes 4 mm ..... (Area of opening for glass panes excluding portion inside rebates shall be measured). @Rs. 180/- per sqm Total Rate Rs. 2006+180 = 2186/-				
		Total	<b>1.80</b>	<b>2186</b>	<b>sqm</b>	<b>3934.80</b>
		Add 30% for fittings etc.				<b>1180.44</b>
	Painting					
25	13.48.3 Vol. 2, Pg 162	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @0.90 ltr/10 sqm over an under coat of primer applied @ 0.80 ltr/ 10 sqm of approved brand or manufacture				
		Total	<b>17.19</b>	<b>65.00</b>	<b>sqm</b>	<b>1117.35</b>
26	13.26 Vol. 2, Pg 159	Providing and applying 1.5 mm thick (in two coat) white cement based wall putty of best quality, over plastered surface to prepare the surface even and smooth complete.				
		Quantity as above in Plaster (Internal+ external)	<b>3608.66</b>	<b>82.00</b>	<b>SqM</b>	<b>295909.87</b>



S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
27	13.48.1 Vol. 2, Pg 161	Finishing wall with Delux multi surface Paint system for Interiors and exteriors using primer as per Specification - Two or more coats applied @1.25Ltr/ 10 sqm over & including one coat of special primer applied @0.75Ltr/ 10 sqm				
		Quantity as above in plaster	<b>3375.67</b>	<b>75.00</b>	<b>SqM</b>	<b>253175.32</b>
28	13.45. Vol. 2, Pg 161	Finishing walls with textured exterior paint of required shade :				
		New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including base coat of water proofing cement paint applied @ 2.20kg/10 sqm.				
		Quantity as above in External Plaster	<b>1366.02</b>	<b>125.00</b>	<b>SqM</b>	<b>170752.52</b>
	Miscellaneous					
29	Non SOR Item, MPPWD, 10.25, Pg 182 (in force from August' 1st 2014)	Providing and fixing stainless steel ( Grade 304) railing made of Hollow tubes, channels, plates etc. including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete i/c fixing the railing with necessary accessories and stainless steel dash fasteners , stainless steel bolts etc., ofrequired size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge. ( for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.)				
		Total	<b>165</b>	<b>793.75</b>	<b>kg</b>	<b>130968.75</b>
30	Non SOR Item, MPPWD, 11.56, Pg 206 (in force from August' 1st 2014)	Providing and laying Vitrified tiles in different sizes, with water absorption less than 0.08% and conforming to IS: 15622, of approved brand and manufacturer in all colours and shade in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately). 11.56.2 Size of Tile 600x600x9-I O mm				
		Total	<b>244.30</b>	<b>1081.00</b>	<b>SqM</b>	<b>264088.95</b>
31	Non SOR Item (Ref - 8.1 , Pg 111 MP PWD in force from August 1st 2014)	Providing and supplying aluminium extruded tubular frame etc complete as per specification laid down in MP PWD SOR.				
		Total	<b>159.69</b>	<b>359</b>	<b>Kg</b>	<b>57327.39</b>

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
32	Non SOR Item (Ref - 8.2, Pg 111 MP PWD in force from August 1st 2014)	Designing, fabricating, testing, etc complete as per specification laid down in MP PWD SOR.				
		Total	<b>32.97</b>	<b>2674</b>	<b>Sqm</b>	<b>88150.55</b>
				.		
33	Non SOR Item (Ref - 8.3, Pg 112 MP PWD in force from August 1st 2014)	Providing, assembling and supplying vision glass panels etc complete as per specification laid down in MP PWD SOR.				
		Total	<b>29.67</b>	<b>3635</b>	<b>Sqm</b>	<b>107847.61</b>
				.		
34	Non SOR Item (Ref - 8.4, Pg 112 MP PWD in force from August 1st 2014)	Extra for openable side / top hung vision glass panels etc complete as per specification laid down in MP PWD SOR.				
		Total	<b>6.59</b>	<b>3009</b>	<b>Sqm</b>	<b>19838.82</b>
				.		
35	Non SOR Item (Ref - 8.6, Pg 112 MP PWD in force from August 1st 2014)	Providing and supplying Spandrel Glass Panels etc complete as per specification laid down in MP PWD SOR.				
		Total	<b>3.30</b>	<b>2174</b>	<b>Sqm</b>	<b>7166.76</b>
				.		
36	Non SOR Item (Ref - 21.18, Pg 365 MP PWD in force from August 1st 2014)	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top bottom pivot spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in-charge (Door handle, lock and stopper etc.to be paid separately).				
		Total	<b>8.64</b>	<b>4958.00</b>	<b>RM</b>	<b>42837.12</b>
				.		
37	Non SOR Item (Ref - 12.64 , Pg 233 MP PWD in force from August 1st 2014)	Glass fibre accoustical suspended false ceiling etc complete as per specification laid down in MP PWD SOR.				
		Total	<b>88.17</b>	<b>2461</b>	<b>kg</b>	<b>216994.84</b>
				.		

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
38	12.45 Vol. 2, Pg 150	Providing and fixing at all height false ceiling including providing and fixing of frame work made of special sections power pressed from M.S. sheet and galvanised in accordance with zinc coating of grade 350 as per IS : 277 and consisting of angle cleats of size 25mm wide x 1.6mm thick with flanges of 22mm and 37mm at 1200mm centre to centre one flange fixed to the ceiling with dash fastener 12.5mm dia x 40mm long with 6mm dia bolts to the angle hangers of 25x25x0.55mm of required length, and other end of angle hanger being fixed with nut and bolts to G.I. channels 45x15x0.9mm running at the rate of 1200mm centre to centre to which the ceiling section 0.5mm thick button wedge of 80mm with tapered flanges of 26mm each having clips of 10.5mm at 450mm centre to centre shall be fixed in a direction perpendicular to G.I. channel with connecting clips made out of 2.64mm dia 230mm long G.I. wire at every junction including fixing the gypsum board with ceiling section and perimeter channels 0.5mm thick 27mm high having flanges of 20mm and 30mm long,				
		the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450mm centre to centre with 25mm long drive-all screws @ 230mm interval including jointing and fixing to a flush finish of tapered and square edges of the board with recommended filler, jointing tapes, finisher and two coats of primer suitable for board as per manufactures specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed all complete as per drawing and specification and direction of the Engineer in Charge but excluding the cost of painting with :				
		12.45.1) 12.5 mm thick tapered edge gypsum board conforming to IS: 2095- Part I.				
		Total	<b>59.36</b>	<b>718</b>	<b>SqM</b>	<b>42619.50</b>
						<b>8968772.00</b>

## BILL OF QUANTITY - Command & Control Center, Jabalpur

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
<b>First Floor</b>						
	Concrete					
1	5.3, Vol. 2, Pg 46	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor two level excluding the cost of centering, shuttering, finishing and reinforcement with Cement concrete grade M-20 (Nominal Mix with 20 mm maximum size of stone aggregate).				
		<b>Total</b>	<b>268.96</b>	<b>5120.00</b>	<b>Cum</b>	<b>1377066.37</b>
2	5.2, Vol. 2, Pg 46	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up to floor two level excluding cost of centering, shuttering, finishing and reinforcement 5.2.1 Cement concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate.				
		<b>Total</b>	<b>58.52</b>	<b>5050.00</b>	<b>Cum</b>	<b>295505.90</b>
	Reinforcement					
	Reinforcement for R.C.C					
3	5.20.6, Vol. 2, Pg 49	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire upto floor two level including all wastage etc. complete.				
		5.20.6 Thermo-Mechanically Treated bars.				
		<b>Total</b>	<b>44552.51</b>	<b>60.00</b>	<b>Kg</b>	<b>2673150.31</b>
	Water Proofing					
4	4.12. Vol. 2, Pg 36	Applying a coat of residual petroleum bitumen of penetration 80/100 of approved quality using 1.7kg per square meter on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.				
		Quantity as above	26	102	Sqm	2614.28
	Centering & Shuttering					
5	20.1.6, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for Columns, Pillars, Piers, Abutments, Posts, Struts.				
			447.23	282.00	Sqm	126118.30
6	20.1.7, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for				

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
		20.1.7 Stairs, (excluding landings) except spiral-staircases.				
		Total	42.18	278.00	Sqm	11727.37
7	20.1.3, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for				
		20.1.3 Suspended floors, roofs, landings, balconies and access platform				
		Total	751.3	227.00	Sqm	170534.20
8	20.1.5, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for				
		20.1.5 Lintels, beams, plinth beams, girders, bressumers and cantilevers.				
		Total	1453.24	203.00	Sqm	295008.57
	Brick Work					
9	6.39, Vol. 2, Pg 62	Brick work will well burnt open bhatta bricks crushing strength not less than 25kg/cm <sup>2</sup> and water absorption not more than 20% in above plinth level upto floor two level in cm 1:4.				
		Total	234.15	3310.00	CuM	775044.89
10	6.44, Vol. 2, Pg 62	Half brick masonry with open bhatta of class designation 25 in superstructure above plinth level upto floor 2 level including the cost of scaffolding.				
		Total	570.410	451.00	Sqm	257254.82
	Cement Plaster					
11	13.16, Vol. 2, Pg 157	6 mm cement plaster of mix :				
		1:3 (1 cement: 3 fine sand)				
		Total	793.437	83.00	Sqm	65855.25
12	13.1, Vol. 2, Pg 156	12 mm cement plaster of mix :				
		1:5 (1 cement: 5 fine sand)				
		On Vertical faces in following areas				
		Total	3430.20	102.00	Sqm	349880.82
13	13.11, Vol. 2, Pg 157	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).				
		Total	1133.03	149.00	Sqm	168822.08
	Flooring					

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
14	Non SOR Item, MPPWD, 11.53 , Pg 205 (in force from August' 1st 2014)	Providing and laying vitrified floor tiles in different sizes with water absorption's less than 0.08% and conforming to IS : 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 sand) including grouting the joints with white cement and matching pigments etc., complete. 11.53.2 Size of Tile 600x600x9-10 mm				
		Total	563.43	894.00	SqM	503705.59
15	Non SOR Item, MPPWD, 11.54 , Pg 205 (in force from August' 1st 2014)	Providing and laying Vitrified tiles in different sizes, with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make in all colours and shade in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 sand), including grouting the joint with white cement and matching pigments etc. complete. 11.54.2 Size of Tile 600x600x9-10 mm )				
		Total	23.40	888.00	SqM	20777.87
16	Non SOR Item, MPPWD, 11.60 , Pg 207 (in force from August' 1st 2014)	Providing and laying Antiskid endura floor tiles of any sizes, 12 mm thickness with water absorption's less than 0.08% and conforming to IS: 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement :4 sand) including grouting the joints with white cement with matching pigments etc., complete.				
		Total	22.82	880.00	SqM	20079.84
17	11.34 Vol. 2, Pg 134	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (6 to 7mm thick) 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.				
		Total	95.07	686.00	SqM	65218.43
18	8.2Vol. 2, Pg 78	Providing and fixing 16mm 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, colour 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. 8.2.8 Granite of any colour and shade 8.2.8.2 Area of slab over 0.50 sqm.				
		Total	44.99	2544.00	SqM	114460.92

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
19	8.3Vol. 2, Pg 79	Extra for providing full edge moulding to 16mm thick marble stone counters, Vanities etc. including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineerin- Charge. 8.3.2 Granite work.				
		Total	83.95	146.00	RM	12256.70
20	Non SOR Item, MPPWD, 11.33, Pg 203 (in force from August' 1st 2014)	Pre polished Granite stone work 18mm thick of any colour in riser of steps, skirting, dado and pillars laid on 12 mm average thick cement mortar 1:3 (1 cement:3 sand) and jointed with white cement slurry mixed with pigment to match the shade of slab.				
		Total	19.23	3413.00	SqM	65631.99
21	Non SOR Item, MPPWD, 11.28, Pg 202 (in force from August' 1st 2014)	Granite work gang saw cut (polished and machine cut) of thickness 18mm for wall lining (veneer work), backing filled with a grout of average 12 mm thick in cement mortar 1:3 (1 cement : 3 sand) including pointing with white cement mortar 1:2 (1 white cement: 2 marble dust) with an admixture of pigment to match the marble shade: (To be secured to the backing by means of cramps, which shall be paid for separately). 11.28.1.2 Area of slab over 0.50 sqm				
		Total	7.50	3720.00	SqM	27900.00
	Joineries					
22	10.14.2 Vol. 2, Pg 115	Providing and fixing pressed steel frames for doors, windows & ventilators conforming to IS: 4351manufactured from commercial mild steel sheet of 1.25 mm thickness including hinges jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.25mm pressed mild steel welded or rigidly fixed together by mechanical means, adjustable lugs with split end tail to each jamb including steel butt hinges 2.5mm thick with mortar guards, lock strike- plate and shock absorbers as specified and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer-in-charge: 10.14.2 Single rebate 100x50mm				
		Total	78.00	334.00	RM	26052.00
23	9.20 Vol. 2, Pg 90	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters using following hinges. 9.20.1 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.				
		Total	14.49	1926	SqM	27907.74

S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
		Add 100% for fittings etc.				<b>27907.74</b>
24	9.10.12 Vol. 2, Pg 88,89	Providing and fixing factory made laminated veneer lumber glazed shutter conforming to IS: 14616 and TADS 15:2001 (Part B) , using 4mm thick float glass panes for doors, windows and clerestory windows including ...Engineer-in-charge. 9.10.1 30 mm thick shutters @Rs. 2006/- per sqm				
		Extra for providing frosted glass panes 4 mm thick instead of ordinary float glass panes 4 mm ..... (Area of opening for glass panes excluding portion inside rebateshall be measured). @Rs. 180/- per sqm Total Rate Rs. 2006+180 = 2186/-				
		Total	2.25	<b>2186</b>	<b>sqm</b>	<b>4918.50</b>
		Add 30% for fittings etc.				<b>1475.55</b>
	Painting					
25	13.48.3 Vol. 2, Pg 162	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @0.90 ltr/10 sqm over an under coat of primer applied @ 0.80 ltr/ 10 sqm of approved brand or manufacture				
		Total	23.40	<b>65.00</b>	<b>sqm</b>	<b>1521.00</b>
26	13.26 Vol. 2, Pg 159	Providing and applying 1.5 mm thick (in two coat) white cement based wall putty of best quality, over plastered surface to prepare the surface even and smooth complete.				
		Quantity as above in Plaster (Internal+ external)	4456.63	<b>82.00</b>	<b>SqM</b>	<b>365443.40</b>
27	13.48.1 Vol. 2, Pg 161	Finishing wall with Delux multi surface Paint system for Interiors and exteriors using primer as per Specification - Two or more coats applied @1.25Ltr/ 10 sqm over & including one coat of special primer applied @0.75Ltr/ 10 sqm				
		Quantity as above in plaster	4223.64	<b>75.00</b>	<b>SqM</b>	<b>316773.06</b>
28	13.45. Vol. 2, Pg 161	Finishing walls with textured exterior paint of required shade :				
		New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including base coat of water proofing cement paint applied @ 2.20kg/10 sqm.				
		Quantity as above in External Plaster	1366.02	<b>125.00</b>	<b>SqM</b>	<b>170752.52</b>
	Miscellaneous					



S.No.	SOR Item No.	Item of Work	Quantity	Rate	Unit	Amount
29	Non SOR Item, MPPWD, 10.25, Pg 182 (in force from August' 1st 2014)	Providing and fixing stainless steel ( Grade 304) railing made of Hollow tubes, channels, plates etc. including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete i/c fixing the railing with necessary accessories and stainless steel dash fasteners , stainless steel bolts etc., ofrequired size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge. ( for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.)				
		Total	412.5	793.75	kg	327421.88
30	Non SOR Item, MPPWD, 11.56, Pg 206 (in force from August' 1st 2014)	Providing and laying Vitrified tiles in different sizes, with water absorption less than 0.08% and conforming to IS: 15622, of approved brand and manufacturer in all colours and shade in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately). 11.56.2 Size of Tile 600x600x9-I O mm				
		Total	373.97	1081.00	SqM	404259.19
				.		
31	Non SOR Item (Ref - 8.1 , Pg 111 MP PWD in force from August 1st 2014)	Providing and supplying aluminium extruded tubular (See specification in PWD SOR)				
		Total	230.09	359	Kg	82602.66
				.		
32	Non SOR Item (Ref - 8.2, Pg 111 MP PWD in force from August 1st 2014)	Designing, fabricating, testing, (See specification in PWD SOR)				
		Total	47.50	2674	Sqm	127015.53
				.		

