

संचालनालय नगरीय प्रशासन एवं विकास, छत्तीसगढ़
चौथी मंजिल, डी-ब्लॉक, इन्द्रावती भवन, नया रायपुर

क्रमांक/संचा./2016/ 10055
प्रति,

नया रायपुर दिनांक : 26/10/2016

1. समस्त आयुक्त,
नगर पालिक निगम, छ.ग.।
2. समस्त मुख्य नगर पालिका अधिकारी,
नगर पालिका परिषद/नगर पंचायत, छ.ग.।

विषय :- मिशन क्लीन सिटी के अंतर्गत एसएलआरएम सेन्टर के मानक ड्राईंग-डिजाईन एवं प्राक्कलन का अनुमोदन।

संदर्भ :- छ.ग. शासन, नगरीय प्रशासन एवं विकास विभाग का पत्र क्र. 6690/7045/
2016/18 दिनांक 07.09.2016

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उपरोक्त विषयांतर्गत संदर्भित आदेश के अनुक्रम में मिशन क्लीन सिटी के अंतर्गत एसएलआरएम सेन्टर के मानक ड्राईंग-डिजाईन एवं प्राक्कलन का अनुमोदन किया जाता है। कृपया कार्यस्थल की स्थिति के अनुसार प्राक्कलन की विहित प्रक्रिया अनुसार तकनीकी स्वीकृति, क्षेत्रीय कार्यालय/यांत्रिकी प्रकोष्ठ/नगर निगम/निकाय में पदस्थ कार्यपालन अभियंता स्तर के अधिकारी से प्राप्त कर, मिशन के दिशा-निर्देशों के नियमानुसार अग्रिम कार्यवाही किया जाना सुनिश्चित करें।

संलग्न :- मानक ड्राईंग-डिजाईन एवं प्राक्कलन


मुख्य अभियंता

④ संचा. नगरीय प्रशासन एवं विकास
छत्तीसगढ़, नया रायपुर
नया रायपुर दिनांक : 26/10/2016

पृ.क्रमांक/2016/ 10056
प्रतिलिपि :-

1. विशेष सचिव, छ.ग. शासन, न.प्र. एवं वि.वि. मंत्रालय नया रायपुर।
2. संचालक संचालनालय नगरीय प्रशासन एवं विकास, छ.ग., नया रायपुर।
3. समस्त संयुक्त संचालक, न.प्र. एवं वि., क्षेत्रीय कार्यालय रायपुर/बिलासपुर/दुर्ग/
अंबिकापुर एवं जगदलपुर।
4. समस्त मिशन समन्वयक (MC)/उप मिशन समन्वयक (DMC) नगरीय प्रशासन एवं विकास,
छत्तीसगढ़।
5. समस्त कार्यपालन अभियंता, नगरीय प्रशासन एवं विकास, छ.ग.।
6. प्रोग्रामर, डाटा सेन्टर, संचालनालय को वेबसाइट में अपलोड करने हेतु।


मुख्य अभियंता

④ संचा. नगरीय प्रशासन एवं विकास
छत्तीसगढ़, नया रायपुर

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ESTIMATE FOR SLRM CENTER										
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S.NO	S.O.R.	DESCRIPTION	NOS	LENGT H	WIDT H	DEP TH	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
1.0 EARTH WORK										
1	1.1	Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of								
	1.1.1	In all types of soil								
		For Columns c-1	26	1.5	1.5	1.2	70.20			
						Total	70.20	✓cum	185.00	12987
2	1.2	Surface dressing of the ground including removing vegetation and making up undulations and inequalities not exceeding 15 cms in depth/ height including disposal of rubbish upto 1.5 m lift and lead upto	1	35	12		420.00	sqm	7.20	3024
3	1.17	Filling from available excavated stuff (Excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering with a lead upto 50 M. and lift upto 1.5 M.								
		For Columns								
		(Considering 30% of the excavated qty)	1	0.3	70.2		21.06	cum	65.00	1369
4	1.18	Providing and filling in plinth with sand/ Crusher dust and hard moorum under floor in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering, including dressing etc. complete.								
		For Columns								
		Total Excavation					70.20	✓		
		Less P.C.C.					-5.85	✓		
		Less Footing					-12.26	✓		
		Less Back filling qty					-21.06	✓		
		For plinth	1	26.8	9.6	0.5	128.64	✓		

6/21/10

S.NO	S.O.R.	DESCRIPTION	NOS	LENGT H	WIDT H	DEP TH	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
							159.67	cum	371.00	59238
2.0 FORM WORK										
5	2.1	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for:								
	2.1.1	Foundations, footings, base of columns and plinth beam in any shape and size.								
		For Columns c-1 footings	26	5.4		0.15	21.06			
		For Columns up to plinth lvi	26	1.2		1.1	34.32			
		For Plinth Beam								
		Long wall (OUTER)	2	26.8		0.3	16.08			
			2	27.2		0.3	16.32			
			4	9.6		0.3	11.52			
			2	10		0.3	6.00			
			4	2.8		0.3	3.36			
						Total	108.66	sqm	139.00	15104
3.0 CEMENT CONCRETE (PLAIN AND REINFORCED)										
6	3.1	Providing and laying nominal mix cement concrete with crushed stone aggregate using concrete mixer in foundation, plinth and at ground level excluding cost of form work.								
	3.1.3	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size).								
		For Foundation	26	1.5	1.5	0.1	5.85			
		FOR PLINTH AREA								
			1	26.8	9.6	0.1	25.73			
						Total	31.58	cum	2,970.00	93787
7	3.2	Providing and laying nominal mix reinforcement cement concrete with crushed stone aggregate using concrete mixer in all works upto floor five level excluding cost of reinforcement and form work.								
	3.2.1	1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size).								
		For Footing	26	1.35	1.35	0.15	7.11	✓		
		For trapezodial portion	26	1.8225	0.16	3.06	3.28	✓		

6/2/10

S.NO	S.O.R. NO.	DESCRIPTION	NOS	LENGT H	WIDT H	DEP TH	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
		For Columns up to plinth	26	0.3	0.3	1.1	2.57			
		For Plinth Beam	26	0.3	0.1	0.3	0.23			
		Long wall	2	27.2	0.2	0.3	3.26			
			3	9.6	0.2	0.3	1.73			
			2	2.8	0.2	0.3	0.34			
						Total	18.52	cum	4,163.00	77112
8	3.14	Providing and placing in position reinforcement for R.C.C. work including straightening, cutting, bending, binding etc. complete as per drawings including cost of								
	3.14.1	Thermo-Mechanically treated bars	1	18.52	100	1	1,852.3	kg	54.50	100951
7.0 BRICK WORK										
9	7.5	Brick work with modular fly-ash lime bricks (FALG Bricks) confirming to IS:12894-2002 of class designation 35 in foundation and plinth in:								
	7.5.4	Cement Mortar 1:6 (1 cement : 6 coarse sand)								
		For Wall Foundation (Below plinth beam)	18	2.7	0.2	0.3	2.92			
			6	3	0.2	0.3	1.08			
			3	2.9	0.2	0.3	0.52			
		For Steps	2	3	0.9	0.3	1.62			
			2	3	0.6	0.15	0.54			
			2	3	0.3	0.15	0.27			
						Total	6.95	cum	3,263.00	22672
		For Super Structure dining, tools room								
		Long wall	2	10	0.2	3.3	13.20	✓		
		Cross walls	2	2.8	0.2	3.3	3.70	✓		
		For wall	2	24	0.2	0.9	8.64	✓		
		End wall	1	9.6	0.2	0.9	1.73	✓		
		Deductions								
		For Main door	1	1.5	0.2	0.9	-0.27			
		For back side door	1	1.5	0.2	0.9	-0.27			
		deduction for door	2	0.9	0.2	2.1	-0.76			

G
2/1/10

S.NO	S.O.R. NO.	DESCRIPTION	NOS	LENGT H	WIDT H	DEP TH	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
		for window	3	1.5	0.2	1.5	-1.35			
						Total	24.62	cum	3,263.00	80329
10	7.6	Extra for brick work in								
	7.5.1	Above plinth and upto floor five level.					24.62	cum	121.00	2979
11	7.9	Half brick thick (9cm) brick masonry								
	7.9.2	Cement Mortar 1:4 (1 cement : 4								
		For partition walls								
		for dining	1	2.8	1	3.3	9.24			
		for washing unit	1	9	1	0.9	8.10			
			2	2.4	1	0.9	4.32			
		For tricycle unit	2	2.4	1	0.9	4.32			
		Deductions								
		deduction for door of dining area	1	0.9	1	2.1	-1.89			
		Deduction for washing unit	1	2	1	0.9	-1.80			
						Total	22.29	sqm	446.00	9942
12	9.15	Providing and fixing M.S. grill of								
		For Entrance Gate & back side gate	2	1.5	1	2.1	6.30			
		For windows	3	1.5	1	1.5	6.75			
						Total	13.05			
	(A)	Weight @30 Kg/m2	1	13.05	30		391.50			
		For angle frame of doors	2	20.00	Kg per door		40.00			
	B)	Horizontal post for Chain link fencing								
		50x50x6mm angle	2	24.20	4.5		217.80			
		50x50x6mm angle	1	9.80	4.5		44.10			
		Vertical post (50x50x6mm angle)	5	2.70	4.5		60.75			
						Total	754.15	kg	67.50	50906
13	9.43	Providing and fixing in position chain linked steel wire fabric made of 4 mm dia G.I. wire of required width in mesh to concrete/ wooden/ angle iron posts including securing and screwing with 2mm dia G.I. wire, G.I. staples, G.I.U-nails or steel pins etc., complete								

21/10

S.NO	S.O.R. NO.	DESCRIPTION	NOS	LENGT H	WIDT H	DEP TH	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	9.43.1	Aperture 50x50mm								
			2	24.20		2.1	101.64			
			1	10.00		2.1	21.00			
		Deduction for doors/opening	2	1.50		1.2	-3.60			
						Total	119.04	Sqm	331.00	39402.24
14	11.3	Providing and making 15mm thick cement plaster on the rough side of single or half brick wall of mix								
	11.3.4	In Cement Mortar 1:6 (1 cement : 6 fine sand)								
		For external wall	2	3.2		3.9	24.96			
			1	10		3.9	39.00			
		For Shed area external walls	2	24		1.2	57.60			
			1	10		1.2	12.00			
		Internal area plaster					133.56	sqm		
			1	9.8		3	29.40			
			2	2.8		3	16.80			
15	11.2	12mm Th. Cement Plaster on walls				Total	179.76	sqm	107.00	19235
	11.2.4	In Cement Mortar 1:6 (1 cement : 6 fine sand)								
		For Internal walls Tools room	4	2.8		3	33.60			
			2	9.4		3	56.40			
		For shed area walls	2	24		0.9	43.20			
			1	9		0.9	8.10			
		Top of wall	2	24	0.2		9.60			
			2	9	0.2		3.60			
		For washing area	2	2.5		0.9	4.50			
			2	9		0.9	16.20			
		For trycle area	4	2.5		0.9	9.00			
		Deductions								
		For doors	3	0.9		2.1	-5.67			
		Windows	3	1.5		1.5	-6.75			
		Openings	2	1.5		0.9	-2.70			
						Total	169.08	sqm	91.50	15471

6/21/19

S.NO	S.O.R. NO.	DESCRIPTION	NOS	LENGT H	WIDT H	DEP TH	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
16	12.3	Cement Concrete Flooring with (1:2:4) Cement concrete (1 Cement :2 Sand:4 graded stone agreegate 12.5mm nominal size) finished with floating coat of neat cement.								
	12.3.1	40mm thick								
			1	26.6	9.6		255.36			
		For steps	1	3	0.9		2.70			
						Total	258.06	Sqm	222.00	57289
17	9.3.1	Steel work in tubular (round, square or rectangular hollow tubes etc.) structure in built-up sections, trusses and frame work including cutting, hoisting, fixing in position upto a height of 5m above plinth level, consisting of columns								
		9.3.1 Electric resistance or induction								
		PWD S.O.R.-P-80/I-9.3.1								
		For Truss								
		65mm dia pipe	1	22.8	7.9		180.12			
		40mm dia pipe	1	14.2	3.6		51.12			
						Total	231.24			
		For Gussest etc				Add 20%	46.25			
						Total	277.49			
		For Truss	10	277.49			2,774.88			
		For Purlin	12	27.2	7.9		2,578.56			
		For Vertical supports	20	3.2	14.4		921.60			
		For base plate etc					500			
						Grand Total	7,052.53	Kg	88.50	624149

4/10

S.NO	S.O.R. NO.	DESCRIPTION	NOS	LENGT H	WIDT H	DEP TH	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
18		Supply and fixing of polymer pre-coated galvalume profile sheets (PPGL) of approved size, shape and pitch of corrugation, total coated thickness (TCT) 0.60 mm +/- 5%, epoxy primer on both side of the sheet and colour polyester top coat 18-20 microns and 6-7 microns on bottom. Sheet should have protective guard film of 25 microns minimum to avoid scratches while 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 55mm) with EPDM seal or with polymer coated J or L hooks, bolts and nuts 8mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead 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.								
		Sheeting work	2	27.8	5.8		322.48			
		For side sheeting (tirangular area)	1	9.8	1.5		14.70			
		(For both ends)				Total	337.18	Sqm	693.00	233666
19	10.16.1	Providing and fixing pre-coated galvanised steel sheet roofing accessories 0.50 mm + /- 5% total coated thickness (TCT), Zinc coating 120gsm as per IS: 277 in 240mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws or with polymer coated J or L hooks, bolts and nuts and or G.I. seam bolts and nuts, G.I. plain and bitumen washers complete :								
		10.16.1 Ridges plain (500-600mm)								

6/11/00

S.NO	S.O.R. NO.	DESCRIPTION	NOS	LENGT H	WIDT H	DEP TH	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
		Ridge	1	27.8			27.80	Rmt	552.00	15346
20	10.16.6	Gutter. (600 mm over all girth).								
		Gutter	2	27.2			54.40	Rmt	629.00	34218
21	18.76.2	Providing and fixing on wall face or under floor UV stabilized Unplasticised Rigid PVC pipes (single socketed) having 3.2mm wall thickness conforming to IS : 13592 (4kg/sqcm) including required couplers, jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion etc complete.								
		For Rain water pipe	6	3.5			21.00	Rmt	267.00	5607
22	9.13	Providing and fixing steel door/window with M.S. sheet 1mm thick, frame of angle iron, diagonal braces of angle/ flat iron of suitable size, 3.00 mm M.S. gusset plates at junctions and corners, all necessary fittings complete including applying a priming coat of red oxide zinc chromate primer.								
		For Doors	3	0.9		2.1	5.67			
		For windows	3	1.5		1.5	6.75			
							12.42	m2		
		Weight @30 kg/m2	1	12.42	30		372.60	kg	75.00	27945
23	14.14	Finishing walls with water proofing cement paint of required shade to give an even shade								
	14.14.1	On new work (Two or more coats applied @ 3.84 kg/10 sqm)	2	3.20		3.9	24.96			
			1	10.00		3.9	39.00			
			2	24.00		1.2	57.60			
			1	10.00		1.2	12.00			
							133.6	41.00	Sqm	5476

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S.NO	S.O.R.		NOS	LENGT H	WIDT H	DEP TH	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
	NO.	DESCRIPTION								
24	14.9.1	Distempering with acrylic washable distemper to give an even shade								
	14.10.1	On new work (two or more coats)								
		For Internal Plaster					169.08			
		For 15mm th. Plaster					179.76			
						Total	348.84			
		deduct for water proof					-133.56			
						Total	215.28	sqm	38.00	8181
25	14.18	Painting on new work (two or more coats) to give an even shade with:								
	14.18.1	Satin synthetic enamel paint (top most approved branded quality)								
		For door	2x2	1.50		2.1	12.60			
			3x2	0.90		2.1	11.34			
		windows	3x2	1.50		1.5	13.50			
						Total	37.44	sqm	55.00	2059
								TOTAL		1618443

b

Detail estimate for construction of Fencing Wall

ESTIMATE FOR

100 M

SN	ITEM No	Description of Item	Dimension in mtrs				Quantity	Rate	unit	Amount (Rs.)
			No.	L	W	Height/Depth				
1		2	3	4	5	6	7	8	9	10
1	1.1	Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits.								
	1.1.1	In all types of soil	1	100.00	0.4	0.6	24.00			
							24.00	185.00	m ³	4440.00
2	3.1	Providing and laying nominal mix cement concrete with crushed stone aggregate using concrete mixer in foundation, plinth and at ground level excluding cost of form work.								
	3.1.3	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size).	1	100.00	0.4	0.1	4.00			
							4.00	2970.00	m ³	11880.00
2	1.18	Providing and filling in plinth with sand/ Crusher dust and hard moorum under floor in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering, including dressing etc. complete.								
		Total Excavation					24.00			
		less P.C.C.					-4.00			
		Less Brick work	1	100.00	0.3	0.4	-12.00			
			1	100.00	0.2	0.1	-2.00			
							6.00	371.00	m ³	2226.00
3	7.5	Brick work with modular fly-ash lime bricks (FALG Bricks) confirming to IS:12894-2002 of class designation 35 in foundation and plinth in:								
	7.5.4	Cement Mortar 1:6 (1 cement : 6 coarse sand)								
		For wall foundation	1	100.00	0.3	0.4	12.00			
		above ground level	1	100.00	0.2	0.8	16.00			
		Less PCC for hold fast for post	30	0.20	0.2	0.6	-0.72			

SN	ITEM No	Description of Item	Dimension in mtrs				Rate	unit	Amount (Rs.)	
			No.	L	W	Height/ Depth				Quantity
1		2	3	4	5	6	7	8	9	10
						Total	27.28	3,263.0	cum	89015
4	3.13	Providing and laying damp proof course (upto 50mm thick) with plain cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded crushed stone aggregate 20mm nominal size) including form work.								
		For wall	1	100.00	0.20	0.05	1.00			
						Total	1.00	4237.00	cum	4237.00
5	9.43	Providing and fixing in position chain linked steel wire fabric made of 4 mm dia G.I. wire of required width in mesh to concrete/ wooden/ angle iron posts including securing and screwing with 2mm dia G.I. wire, G.I. staples, G.I.U-nails or steel pins etc., complete								
	9.43.1	Aperture 50x50mm								
			1	100.00		1.5	150.00			
						Total	150.00	331.00	Sqm	49650.00
6	9.45	Providing and placing in position angle iron post and strut of required size including bottom to be split and bent at right angle in opposite direction for required length and drilling holes upto 10 mm dia as per requirement including priming coat with red oxide zinc chromate primer and placing the post/ strut in cement concrete block.								
		For Vertical Post (Angle 40x40x6)	30	2.40		3.5	252.00			
		For Inclined support	12	3.20		3.5	134.40			
		Angle for top and bottom	2	100.00		3.5	700.00			
						Total	1086.40	67.50	kg	73332.00
7	3.1	Providing and laying nominal mix plain cement concrete with crushed stone aggregate using concrete mixer in all works upto plinth level excluding cost of form work.								

SN	ITEM No	Description of Item	Dimension in mtrs				Rate	unit	Amount (Rs.)	
			No.	L	W	Height/ Depth				
1		2	3	4	5	6	7	8	9	10
	3.1.5	1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size).	30	0.20	0.2	0.6	0.72	4073.00		2932.56 ✓
8	11.2	12mm thick cement plaster of mix:								
	11.2.4	In Cement Mortar 1:6 (1 cement : 6 fine sand)								
		at Inside wall								
			1	100.00		0.85	85.00			
		For Top of wall	1	100.00		0.2	20.00			
										✓
						Total	105.00	91.50	sqm	9608
	11.3	12mm thick cement plaster of mix:								
	11.3.4	In Cement Mortar 1:6 (1 cement : 6 fine sand)	1	100.00		0.85	85.00			
										✓
						Total	85.00	107.00	sqm	9095
9	14.14	Finishing walls with water proofing cement paint of required shade to give an even shade								
	14.14.1	On new work (Two or more coats applied @ 3.84 kg/10 sqm)								
										✓
		Qty as per plaster area					190.0	41.00	Sqm	7790.00
						Total				✓264216
		Therefore Cost per Rmt								✓2642

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c

DETAIL ESTIMATE FOR FOOT PATH

ESTIMATE FOR
WIDTH
TOTAL AREA

100 M
2 M
200 M2

SN	S.O.R NO.	DESCRIPTION	No.	LENGT H	WID TH	HEIGH T	QTY	Rate	UNITS	Amount (Rs.)
1	1.1	Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits.								
	1.1.1	In all types of soil	2	100.00	0.3	0.45	27.00			
			2	2.00	0.3	0.45	0.54			
							27.54	185.00	m ³	5094.90
2	3.1	Providing and laying nominal mix cement concrete with crushed stone aggregate using concrete mixer in foundation, plinth and at ground level excluding cost of form work.								
	3.1.3	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size).	2	100.00	0.3	0.1	6.00			
			2	2.00	0.3	0.1	0.12			
							6.12	2970.00		18176
3	1.18	Providing and filling in plinth with sand/ Crusher dust and hard moorum under floor in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering, including dressing etc. complete.								
			1	99.60	1.6	0.2	31.87			
							31.87	371.00	m ³	11825
4	7.5	Brick work with modular fly-ash lime bricks (FALG Bricks) confirming to IS:12894-2002 of class designation 35 in foundation and plinth in:								
	7.5.4	Cement Mortar 1:6 (1 cement : 6 coarse sand)								
		For wall foundation	2	100.00	0.2	0.65	26.00			
			2	1.60	0.2	0.65	0.42			
						Total	26.42	3,263.0	cum	86195
5	3.13	Providing and laying damp proof course (upto 50mm thick) with plain cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded crushed stone aggregate 20mm nominal size) including form work.								
		For wall	2	100.00	0.20	0.05	2.00			
			2	1.60	0.20	0.05	0.03			

						Total	2.03	4237.00	cum	8609.58
6	11.2	12mm thick cement plaster of mix:								
	11.2.4	In Cement Mortar 1:6 (1 cement : 6 fine sand)								
		For wall	2	100.00	0.3	60.00				
		Top	2	2.00	0.3	1.20				
						Total	61.20	91.50	sqm	5600
7	11.3	15mm thick cement plaster of mix:								
	11.3.4	In Cement Mortar 1:6 (1 cement : 6 fine sand)	2	100.00	0.3	60.00				
			2	2.00	0.3	1.20				
						Total	61.20	107.00	sqm	6549
8	14.14	Finishing walls with water proofing cement paint of required shade to give an even shade								
	14.14.1	On new work (Two or more coats applied @ 3.84 kg/10 sqm)								
		Qty as per plaster area				61.2	41.00	Sqm		2510
9	12.65	Providing & laying 60mm thick precast interlocking concrete blocks of approved size (approx 305 sqcm) and shape/ pattern, over 40 mm thick average complete coarse sand bed with joints of 3mm thick filled by fine sand including leveling with surface vibrator, temping and sweeping etc. complete of minimum compressive strength of 250 kg/sq.cm								
	12.65.1	Plain normal coloured interlocked concrete block	1	99.60	1.6	159.36	436.00	m2		69481
						Total				214040.80
		Therefore Cost per SQM								1070.20

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ESTIMATE FOR TUBE WELL BORE

S.N O.	S.O.R. NO.	DESCRIPTION	NOS	LENG TH	WID TH	DEP TH	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
1	21.1	Boring/drilling bore well perfectly vertical for the specified depth suitable to receive required dia for casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart/bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer-in-charge upto 90 metre depth below ground level.								
	21.1.1	All types of soil								
	21.1.1.3	150MM DIA								
			1	25			25	Rmt	339.00	8475
	21.1.2	Rocky strata including Boulders.								
	21.1.2.3	150MM DIA	1	65			65	Rmt	396.00	25740
	21.2	Boring/drilling bore well perfectly vertical for the specified depth suitable to receive required dia for casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart/bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer-in-charge beyond 90 metre & upto 150 metre depth below ground level.								
		Rocky strata including Boulders.								
		150MM DIA	1	20			20	Rmt	424.00	8480
2	21.3	Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC medium well casing (CM) pipe of required dia, conforming to IS: 12818, including required hire and labour charges, fittings & accessories etc. all complete, for all depths, as per direction of Engineer-in-charge.								
	21.3.3	150mm nominal size dia	1	27.5			27.50	Rmt	540.00	14850

✓

3	21.10	Development of tube well in accordance with IS : 2800 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully								
		developed, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water samples & getting tested in approved laboratory, i/c disinfection of tube well, all complete, including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-in-charge								
			5				5.00	hour	654.00	3270
4	21.11	Providing and fixing suitable size threaded mild steel cap or spot welded plate to the top of bore well housing/ casing pipe, removable as per requirement, all complete for bore well of:								
	21.11.3	150mm nominal size dia	1				1.00	each	217.00	217
5	21.17	Carrying out the resistivity survey by VES method using Schlumberger configuration for locating the proper spot for drilling of tubewell within the selected habitation, including photography, interpretation of resistivity data and submission of report in the desired format along with resistivity readings, necessary graph and photographs. (only successful point is payable								
			1				1.00	each	1,502.00	1502
6	19.7	Providing and fixing on wall surface G.I. pipes medium class complete with G.I. fittings and clamps, including cutting, making good the walls etc. and testing of joints complete:								
	19.7.3	25 mm dia. nominal bore	1	50			50.00	Rmt	258.00	12900
	19.7.2	20 mm dia nominal bore	1	20			20.00	Rmt	185.00	3700
	19.7.1	15mm dia nominal bore	1	40			40.00	Rmt	149.00	5960
7	19.18	Providing and fixing gun metal non-return valve (horizontal type) of approved quality (screwed end) :								

8	19.18.2	32 mm nominal bore	1				1	Nos	556.00	556
9	19.16	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end):								
	19.16.1	25 mm nominal bore	2				2	Nos	436.00	872
								Total		86522
10	26.3.3	Providing and fixing of Submersibal Moter pump i/c all accecessories 2 HP single phase								
							1.00	Nos.	19886.00	19,886.00
	26.5.6	Supplying and fixing GI pipe B class 32 mm dia	1	30			30	Nos	298.00	8,940.00
	26.11	Supplying installation and commisioning of 1-3 HP 1 phase starter	1				1.00	Nos	4125.00	4,125.00
	26.14.2	Supplying and fixing following sizw submersible cable 3x2.5 sq.m	1				50.00		67.50	3,375.00
	14.15.2	Supplying and making waterproofing joint 3x2.5 sq.m	1				1.00		275.00	275.00
	26.16	Supplying and laying of approved make stainless steel of 6mm	50				50.00		16.50	825.00
								GRAND TOTAL		123948
								GRAND TOTAL		123948

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ESTIMATE FOR ELECTRIFICATION WORK

SOLAR EQUIPMENTS

S. NO	DESCRIPTION	NO S	LENG TH	WID TH	DEP TH	QTY	RATE (Rs.)	UNIT	AMOUNT (Rs)
1	Supply, Installation, Testing & Commissioning of Solar Photovoltaic (SPV) Garden lights with an auto on/off arrangement 40mmdia GI ISI pole effective height 3.0MT, inbuilt light with lithium ion Battery with 3yrs warranty, 6watt LED (complete in all respect including embaded in conc. .2x.2x.4M)	5				5.00			
						5.00	15000.00	Nos	75000.00
							Total		75000.0



STATE URBAN DEVELOPMENT AUTHORITY

SWATCH BHART MISSION

ABSTRACT

	NAME OF WORK	CONSTRUCTION OF TOILET BLOCK	
SN	PARTICULARS		AMOUNT
1)	BUILDING WORK		
A	CIVIL CONSTRUCTION COST		
(I)	UP TO PLINTH LEVEL		62350
(II)	FOR SUPER STRUCTURE		82095
		TOTAL CIVIL	144445
B	ELECTRICAL WORK		21243
			25882
C	SANITARY AND WATER SUPPLY WORK		38127
D	Biodigester		40000
		Total (A to D)	243815
			248454

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**CONSTRUCTION OF TOILET BLOCK
FOR SUPER STRUCTURE**

S.NO	S.O.R. NO.	DESCRIPTION	NOS	LENGT H	WIDT H	DEP TH	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
2.0 FORM WORK										
1	2.1	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for:								
2	2.1.5	Columns, Pillars, Piers and likes-rectangular or square in shape								
		For Columns	4	0.8		2.1	6.72	sqm	297.00	1996
3	2.1.8	Suspended floors, roofs, access platform, balconies (plain surfaces) and shelves (cast in situ)								
		For Slab	1	3.45	1.6	1	5.52			
		Projection alaround	2	3.85	0.3	1	2.31			
			2	2.6	0.3	1	1.56			
						Total	9.39	sqm	235.00	2207
4	2.1.9	Beams, lintels, cantilevers & walls								
		For slab beams								
		Long wall (OUTER)	2	3.85		0.2	1.54			
		Cross walls (OUTER)	2	2		0.2	0.80			
		Long wall (INNER)	2	3.45		0.2	1.38			
		Cross walls (INNER)	2	1.6		0.2	0.64			
						Total	4.36	sqm	202.00	881
3.0 CEMENT CONCRETE (PLAIN AND REINFORCED)										
5	3.2	Providing and laying nominal mix reinforcement cement concrete with crushed stone aggregate using concrete mixer in all works upto floor five level excluding cost of reinforcement and form work.								
	3.2.1	1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size).								
		For Columns in super structure	4	0.2	0.2	2.1	0.34			
		For slab and slab beam (including projection)	1	4.45	2.6	0.12	1.39			
		Long wall (OUTER)	2	3.85	0.2	0.2	0.31			
		Cross walls (OUTER)	2	1.6	0.2	0.2	0.13			
						Total	2.16	cum	4,260.50	9205

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S.NO	S.O.R. NO.	DESCRIPTION	NOS	LENGT H	WIDT H	DEP TH	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
6	3.14	Providing and placing in position reinforcement for R.C.C. work including straightening, cutting, bending, binding etc. complete as per drawings including cost of								
	3.14.1	Thermo-Mechanically treated bars	1	2.16	120	1	259.2	kg	54.50	14130
7.0 BRICK WORK										
7	7.5	Brick work with modular fly-ash lime bricks (FALG Bricks) confirming to IS:12894-2002 of class designation 35 in foundation and plinth in:								
	7.5.4	Cement Mortar 1:6 (1 cement : 6 coarse sand)								
		For Super Structure								
		Long wall (OUTER)	1	3.45	0.2	2.1	1.45			
			1	2.2	0.2	2.1	0.92			
		Cross walls (OUTER)	1	1.6	0.2	2.1	0.67			
			1	1.2	0.2	2.1	0.50			
		Deductions								
		for ventilator	3	0.6	0.2	0.4	-0.14			
		deduction for door	3	0.75	0.2	2.1	-0.95			
						Total	2.46	cum	3,263.00	8027
8	7.6	Extra for brick work in superstructure:								
	7.5.1	Above plinth and upto floor five level.					2.46	cum	121.00	298
9	7.9	Half brick thick (9cm) brick masonry with modular well burnt clay bricks of crushing strength not less than 35 kg/sqcm and water absorption not more than 20% in superstructure above plinth level								
	7.9.2 +7.12	Cement Mortar 1:4 (1 cement : 4 coarse sand)								
		For toilet walls								
		Long wall (INNER)	1	1.2	1	2.1	2.52			
		Cross walls (INNER)	1	1.25	1	2.1	2.63			
						Total	5.15	sqm	446.00	2295
10	7.20	Extra for providing and placing in position hopping 25x1.60 mm or 2 Nos 6mm dia MS bars reinforcement at every third course of half brick masonry.					5.15	sqm	62.50	322

S.NO	S.O.R. NO.	DESCRIPTION	NOS	LENGT H	WIDT H	DEP TH	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
9.0 STEEL AND ALUMINIUM WORK										
11	9.13	Providing and fixing steel door/ window with M.S. sheet 1mm thick, frame of angle iron, diagonal braces of angle/ flat iron of suitable size, 3.00 mm M.S. gusset plates at junctions and corners, all necessary fittings complete including applying a priming coat of red oxide zinc chromate primer.								
		For Doors	3	0.75		2.1	4.73			
							4.73	m2		
		Weight @25 kg/m2	1	4.73	25		118.13	kg	75.00	8859
12	9.15	Providing and fixing M.S. grill of approved pattern made of M.S. flats or square or round bars welded to steel frame of windows etc. including applying a priming coat of red oxide zinc chromate primer..								
		For Ventilators	3	0.6	1	0.4	0.72			
						Total	0.72			
	(A)	Weight @30 Kg/m2	1	0.72	30		21.60	kg	67.50	1458
	9.16	Providing and fixing M.S. frames of doors, windows, ventilators and cupboards joints mitred and welded with 15x3 mm lugs 10cm long embedded in cement concrete blocks 15x10x10cm of grade M-10 or with wooden plugs and screws or with dash fastener or rawl plugs and screws or with fixing clips or with bolts and nuts as required including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer								
	9.16.2	For Door frames	3	18	kg/door		54.00	kg	73.50	3969
11.0 PLASTERING AND POINTING										
13	11.1	6mm thick cement plaster of mix:								
	11.1.2	In Cement mortar 1:4 (1 cement : 4 fine sand)								
		For Slab								
		for toilet	1	3.45	1.6		5.52			
		Proection	2	3.85	0.3		2.31			
			2	2.6	0.3		1.56			
						Total	9.39	sqm	87.00	817
14	11.2	12mm thick cement plaster of mix:								
	11.2.4	In Cement Mortar 1:6 (1 cement : 6 fine sand)								
		at Inside wall								

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S.NO	S.O.R. NO.	DESCRIPTION	NOS	LENGT H	WIDT H	DEP TH	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
		For toilet wall								
		Long wall (INNER)	2	2		0.8	3.20			
			3	1.25		0.8	3.00			
		Cross walls (INNER)	4	1.2		0.8	3.84			
			2	1		0.8	1.60			
		Partition wall	3	1.2		0.8	2.88			
			2	0.7		0.8	1.12			
		Deductions	3	0.6		0.4	-0.72			
		Doors								
			3	0.75		2.1	-4.73			
						Total	14.92	sqm	91.50	1366
15	11.3	Providing and making 15mm thick cement plaster on the rough side of single or half brick wall of mix								
	11.3.3	In Cement Mortar 1:5 (1 cement : 5 fine sand)								
		For external wall								
		Long wall (OUTER)	1	3.85		2.8	10.78			
		Cross walls (OUTER)	2	2		2.8	11.20			
		Toilet walls (partition wall)	1	2.2		2.8	6.16			
						Total	28.14	sqm	113.00	3180
12.0 FLOORING										
17	12.7	Providing and fixing ceramic glazed wall tiles conforming to IS : 15622 of approved make, colours, shades and size on wall and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with matching pigment complete.								
	12.7.2	Size 200x300mm								
		For walls								
		Toilet walls								
		Long wall (INNER)	4	1.2		1.5	7.20			
			2	1		1.5	3.00			
		Cross walls (INNER)	2	0.7		1.5	2.10			
			4	1		1.5	6.00			
		For shelf area	3	1.25		1.5	5.63			
		Deductions	3	0.75		1.5	-3.38			
						Total	20.55	Sqm	587.00	12063

✓

S.NO	S.O.R. NO.	DESCRIPTION	NOS	LENGT H	WIDT H	DEP TH	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
19	12.90	Providing and laying ceramic glazed floor tiles conforming to IS : 15622 of approved size, make, colour, shade laid on 20 mm thick cement Mortar 1:4 (1 cement : 4 coarse sand) including pointing the joints with white cement mixed with matching pigment etc.,complete.								
	12.9.1	For floor size 300x300	2	1	1.2		2.40			
			1	1	1.25		1.25			
			1	1.25	0.7		0.88			
						Total	4.53	Sqm	692.00	3131
14.0 DISTEMPERING, PAINTING AND FINISHING										
22	14.10	Wall painting with acrylic luxury emulsion (plastic) paint (top most approved branded quality) to give an even shade.								
	14.10.1	On new work (two or more coats)								
		For Internal Plaster					14.92			
		For Ceiling					9.39			
						Total	24.31	sqm	44.50	1082
23	14.15	Painting new exterior surface (two or more coats) with PREMIUM TEXTURED paint as per manufacturer's specifications to give protective and decorative finish including cleaning washing of								
	14.15.1	On new work (Two or more coats)					28.14	sqm	140.00	3940
24	14.18	Painting on new work (two or more coats) to give an even shade with:								
	14.18.1	Satin synthetic enamel paint (top most approved branded quality)								
		For Grill Painting					0.72			
		For Door shutters	6	0.75	1	2.1	9.45			
						Total	10.17	sqm	55.00	559
25	3.16	Making 50mm thick plinth protection of plain cement concrete 1:3:6 (1cement : 3 coarse sand : 6 graded crushed stone aggregate 20mm nominal size) over 75mm bed of dry brick ballast 40mm nominal size well rammed and consolidated and grouted with sand including finishing the top smooth								
		back side	2	3.85	0.6		4.62			
			2	3.2	0.6		3.84			
						Total	8.46	sqm	273.00	2310
						Total				82095

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**CONSTRUCTION OF TOILET BLOCK
ESTIMATE UP TO PLINTH LEVEL**

S.NO	S.O.R. NO.	DESCRIPTION	NOS	LENGT H	WIDT H	DEP TH	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
1.0 EARTH WORK										
1	1.1	Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of								
	1.1.1	In all types of soil								
		For Columns c-1	4	1.5	1.5	2	18.00			
		For below plinth beam	1	11.7	0.45	0.3	1.58			
		(3.85*2+2*2=11.7)				Total	19.58	cum	185.00	3623
2	1.2	Surface dressing of the ground including removing vegetation and making up undulations and inequalities not exceeding 15 cms in depth/ height including disposal of rubbish upto 1.5 m lift and lead upto	1	5	3		15.00	sqm	7.20	108
3	1.6	Extra for every additional lift of 1.5 m or part thereof.								
		For Columns c-1	4	1.5	1.5	0.5	4.50			
						Total	4.50	cum	26.50	120
4	1.17	Filling from available excavated stuff (Excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering with a lead upto 50 M. and lift upto 1.5 M.								
		For Columns								
		(Considering 30% of the excavated qty)	1	0.3	19.6		5.87	cum	65.00	382
5	1.18	Providing and filling in plinth with sand/ Crusher dust and hard moorum under floor in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering, including dressing etc. complete.								
		For Columns								
		Total Excavation					19.58			
		Less P.C.C.					-0.90			
		Less Footing					-2.12			
		Less Back filling qty					-5.87			
		For plinth	1	3.45	1.6	0.5	2.76			
							13.45	cum	371.00	4989
2.0 FORM WORK										

S.NO	S.O.R. NO.	DESCRIPTION	NOS	LENGT H	WIDT H	DEP TH	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
6	2.1	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for:								
	2.1.1	Foundations, footings, base of columns and plinth beam in any shape and size.								
		For Columns c-1 footings	4	5.4		0.25	5.40			
		For Columns up to plinth lvl	4	0.8		1.85	5.92			
		For Plinth Beam								
		Long wall (OUTER)	2	3.85		0.3	2.31			
		Cross walls (OUTER)	2	2		0.3	1.20			
		Long wall (INNER)	2	3.45		0.3	2.07			
		Cross walls (INNER)	2	1.6		0.3	0.96			
		Toilet walls (partition wall)	2	1.2		0.2	0.48			
			2	1.25		0.2	0.50			
						Total	18.84	sqm	139.00	2619
3.0 CEMENT CONCRETE (PLAIN AND REINFORCED)										
10	3.1	Providing and laying nominal mix cement concrete with crushed stone aggregate using concrete mixer in foundation, plinth and at ground level excluding cost of form work.								
	3.1.3	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size).								
		For Foundation	4	1.5	1.5	0.1	0.90			
		FOR PLINTH AREA	2	2.9	2.05	0.5	5.95			
						Total	6.85	cum	2,970.00	20330
11	3.2	Providing and laying nominal mix reinforcement cement concrete with crushed stone aggregate using concrete mixer in all works upto floor five level excluding cost of reinforcement and form work.								
	3.2.1	1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size).								
		For Footing	4	1.35	1.35	0.25	1.82			
		For Columns up to plinth	4	0.2	0.2	1.85	0.30			
		For Plinth Beam								
		Long wall	2	3.85	0.2	0.3	0.46			
		Cross walls	2	1.6	0.2	0.3	0.19			
		Toilet walls (partition wall)	1	1.2	0.1	0.2	0.02			
			1	1.25	0.1	0.2	0.03			
						Total	2.82	cum	4,163.00	11746

S.NO	S.O.R. NO.	DESCRIPTION	NOS	LENGT H	WIDT H	DEP TH	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
12	3.14	Providing and placing in position reinforcement for R.C.C. work including straightening, cutting, bending, binding etc. complete as per drawings including cost of								
	3.14.1	Thermo-Mechanically treated bars	1	2.82	100	1	282.2	kg	54.50	15378
7.0 BRICK WORK										
13	7.5	Brick work with modular fly-ash lime bricks (FALG Bricks) confirming to IS:12894-2002 of class designation 35 in foundation and plinth in:								
	7.5.4	Cement Mortar 1:6 (1 cement : 6 coarse sand)								
		For Wall Foundation	1	11.7	0.2	0.4	0.94			
						Total	0.94	cum	3,263.00	3055
								TOTAL		62350

6

CONSTRUCTION OF TOILET BLOCK

ESTIMATE FOR SANITARY AND WATER SUPPLY WORK

SN	CSR ITEM NO	DESCRIPTION OF ITEM	UNIT	QTY.	RATE	AMOUNT
1	18.13.1	Providing and fixing white vitreous china urinal basin with waste fitting as per IS : 2556, and other couplings in C.P. brass complete: Flat back half stall urinal of size 460x380x250mm	Nos.	2	1776.00	3552.00
2	18.17.3	P/F white vitreous flat-back basin 580x400 mm with 15mm C.P. Brass pillar cock with R.S. or C.I. brackets painted white C.P. Brass chain with rubber plug 32 32mm pvc waste pipe complete including cutting and making good the floors and walls where required. White size 450x325 mm	Nos.	1	1203.00	1203.00
3	18.29	P/F 600x 450 barrel edge mirror of superior class (of approved quality) complete with 6mm thick asbestos sheet ground fixed to wooden cleats with brass screws & washer.	Nos.	2	599.00	1198.00
4	18.76	Providing and fixing on wall face or under floor UV stabilized Unplasticised Rigid PVC pipes (single socketed) having 3.2mm wall thickness conforming to IS : 13592 (4kg/sqcm) including required couplers, jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion etc complete good the wall wherever required.				
	18.76.1	For 75mm dia pipe	RMT.	5	182.00	910.0
	18.76.2	For 100mm dia pipe	RMT.	5	267.00	1335.0
5	18.77	Providing and fixing on wall face UV stabilized Unplasticised - PVC moulded fittings/ accessories having 3.2mm wall thickness for Rigid PVC pipes conforming to IS : 13592 (heavy) jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.				
	18.77.6	Nahani trap 110x75mm	Nos	2	90.50	181.0
6	18.4	Providing and fixing vitreous china water closet (European type W.C. pan) with white ISI marked plastic seat and lid, 10 litre low level white P.V.C. flushing cistern (same colour), conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required :				
	18.4.1	White pedestal type	Nos	1	2882.00	2882.0
7	19.13	Providing and fixing 15 mm nominal bore Brass bib/stop cock of approved quality:				
	19.13.1	Bib cock (250 grams)	Nos.	4	185.00	740.00

	19.13.3	Stop cock (350 grams)		Nos.	4	237.00	948.00
8	19.14	Providing and fixing 15 mm nominal bore C.P. brass fittings of approved make and conforming to IS:8931 including C.P. brass extension if required					
	19.14.16	Towel rail (600mm long x 20mm dia)		Nos	3	338.00	1014.00
	19.14.14	Soap dish plate		Nos.	3	163.00	489.00
9	19.5	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge CONCEALED WORK including cutting chases and making good the walls etc.,					
		CONCEALED WORK including cutting chases and making good the					
	19.5.1	15mm nominal outer dia pipe		RMT.	15	133.00	1995.00
	19.5.2	20mm nominal outer dia pipe		RMT.	5	167.00	835.00
	19.5.3	25mm nominal outer dia pipe		RMT.	8	213.00	1704.00
10	19.15	Providing and fixing stainless steel drain jali of approved make/quality		Nos	2	51.00	102.00
11	19.16	Providing and fixing brass/ gun metal gate valve with C.I. wheel of approved quality (screwed end):					
	19.16.1	25 mm dia		Nos.	1	436.00	436.00
12	20.1	Providing laying and jointing of glazed stoneware pipe grade "A" with stiff mixture of cement mortar in proportion of 1:1 (1 cement : 1 Sand) including testing of joints and earth excavation, refilling and disposal of surplus earth complete in all respect for:-					
	20.1.1	100mm dia S.W. pipe		RMT	5	162.00	810.00

W

13	20.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete 150mm thick as per standard design:					
	20.2.1	100mm dia S.W. pipe		RMT	5	357.00	1785.00
14	20.3	Providing and fixing square mouth S.W. Gully trap of size 150x100mm 'P' or 'S' type grade "A" complete with C.I. grating brick masonry chamber with locally available best quality bricks and 75 th. R.C.C. precast cover made of M-20 grade Cement conc. As per detailed drawings and direction of Engineer					
	20.3.2	150 x 100 mm size P type		Nos.	2	1397.00	2794.00
15	20.29	Providing and constructing brick masonry chamber for underground pipe and bends with well burnt modular clay bricks crushing strength not less than 35kg/cm ² in cement mortar 1:4 (1 cement : 4 coarse sand) RCC cover of suitable size and 75mm thick with 1:1.5:3 mix (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size) including reinforcement 8mm dia bars at 150mm both ways and MS hooks for lifting, including foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design					
	20.29.2	Inside dimensions 500x700 mm and 45 cm deep for pipe line with one or two inlets		Nos	2	1703.00	3406.0
16	19.42	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					
		500 lit capacity 1 nos		Lit	500	7.3	3650

6

17	18.1	Providing and fixing water closet squatting pan (Indian type W.C. pan), 100mm sand cast Iron P or S trap, 10 litre low level P.V.C. flushing cistern (same colour) conforming to IS : 7231, with flush bend and other fittings and fixtures complete including cutting and making good the walls and floors wherever required					
	18.1.3	White Orissa pattern W.C. pan of size 580x440 mm		Nos	2	2899	5798
		NON SOR ITEM				Total sor item	37767
18		Providing and fixing of Robe Hooks in toilets as directed.		Nos.	6	60.00	360.0
			Total of Sanitary Works				38127.00

CONSTRUCTION OF TOILET BLOCK
ESTIMATE FOR ELECTRICAL WORK

1.9-205 electrical work

S.NO	S.O.R. NO.	DESCRIPTION	UNIT	QTY	RATE (Rs.)	AMOUNT (Rs.)
1	14.2	Earthing with G.I. earth pipe 4.50 mtr long 40mm dia including accessories and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal and salt as required	Nos	1	3454.00 2093	3454.00 4186
2	14.19	Providing and fixing loop earthing 6.0 s.w.g dia G.I. wire in existing surface or recessed conduit along other wires as required	Rmt	15	13 20.50	307.50 195
3	9.9	Providing and fixing metal clad SP & NJ switch fuse unit (re wireable) 230/250 volts with porcelain rewirable fuse including drilling holes on the board connections earthing the body etc. as required (Thimblelling shall be paid separately)	Nos	1	931.00 690	931.00 690
	9.9.1	32 amp	Nos	1		
4	13.2	Wiring for circuit wiring 3x2.5 sqm PVC insulated cable of ISI marked in concealed rigid steel conduit of suitable size as required 2 wire x 2.5 sq mm	Mtr.	10	104 136	1040.00 1360
5	11.2	Supplying and fixing on surface / recess following way 240 volts SP & N MCB distribution board of sheet steel phosphatized and powder painted complete with tinned copper busbar neutral busbar earth bar din bar detachable gland plate including interconnections earthing etc. as required (But without MCB / RCCB/ Isolator)	Nos	1	602.00 446	602.00 446
	11.2.1	4 way single door	Nos	1		
6	1.1	Wiring for light/ fan/ exhaust fan / call bell point with 1.5 sqmm FR PVC insulated stranded copper conductor single core cable in concealed steel conduit, with 5 amp piano type switch, phenolic laminated sheet, suitable size M.S. box and earthing the point with same size cable etc as required.				
	1.1.1	Short Point	Point	2	292.00 246	594.00 492
	1.1.2	Medium Point	Point	2	528 483	966 966
	1.1.3	Long Point	Point	2	806 724	1448 1448

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7	1.1.1+	Point wiring for 3 Pin socket outlet point with 1.5 Sqm PVC insulated cable with copper conductor ISI mrked in concealed rigid pipe	Points	2	297 100 397.00	815 630 794.00
8	1.5.2	Wiring for power plug point with 2x4 sq mm FR PVC insulated stranded copper conductor cable in surface steel conduit along with piano type 16 amp switch and 6 pin 16 amps socket outlet with suitable size M.S. box, phenolic laminated sheet, earthing the switch box and socket outlet with same size cable including painting etc. as required	Nos	2	1028.00 874	2056.00 1748
9	8.14	Supplying, fixing and testing of approved make bulk head luminaire consisting of pressure die cast Alu. Housing, lamp holder, prismatic glass cover, rubber gasket and wire guard deluxe type including fixing on wall as required, with necessary material complete	Nos	1	430.00 257	430.00 257
10	7.9	Supplying and fixing 3 pin, 5 amp ceiling rose on the existing junction box/ wooden block including connection etc as required.	each	4	42.50 23 42.50	92 170.00
11	23.1	Providing and fixing for house service connection G.I. pipe 50mm dia 3.2 metre long with 2 Nos 50x50x6mm angle iron bracket on wall and 75x90mm shackle insulator with straps including accessories complete	Set	1	1601.00 769	1601.00 769
12	14.15	Providing and fixing of GI flat 25 x 5 mm on surface or recessed for down conductor and earth connection to main switch including clamps, nut bolt welding at site etc	M	10	166 359.00	1660 3590.00
13	8.8.2 8.10.1	Supplying, installation, testing and commissioning of following surface/ concealed type fluorescent fitting (luminaries) complete with copper ballast, glow type starter but without fluorescent lamp, on ceiling/ wall surface, earthing the fitting etc. as required	Nos	2	663 876.00	1326 1750.00
14	23.2	Supplying and installing (overhead) service main with PVC insulated aluminium conductor single core cables suspended with bobbin insulator (in group of 2/3/4 wires) on existing bearer wire in an approved manner and as per specification etc. or drawn in existing G.I. pipe bracket or conduit pipe wherever required, including connection, testing etc				

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DETAILED ESTIMATE FOR CONC. PAVEMENT

Estimate for

100 Rmt

AS PER ROAD S.O.R. 1.1.2015

SN	REF	ITEM DESCRIPTION	Dimension in mtrs					Unit	Rate	Amount
			No.	Length	Width	Height/Depth	Quantity			
1	2	3	4	5	6	7	8	9	10	11
1	3.2	Excavation for roadway in soil using including loading in truck for carrying of cut earth to embankment site with all lifts and lead upto 1000 meters as per relevant clauses of section 300.								
	1	For pathway (By Mechanical means)	1	100.00	4.50	0.45	202.50			
						Total	202.50	cum	95.00	19237.50
2	4.1	Granular Sub-base as per Table:- 400-1 Construction of granular sub-base by providing close graded Material, , carriage of mixed Material to work site, spreading in uniform layers with motor grader on prepared surface watering, rolling and compacting with vibratory power roller at OMC to achieve the desired density, complete as per clause 401								
	Aa(i)	For grading III matring								
			1	100.00	4.50	0.20	90.00			
						Total	90.00	cum	1423.00	128070.00
3	4.10	Wet Mix Macadam (Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density.)								
			1	100.00	4.00	0.150	60.00			
							60.0	cum	1434.00	86040.00

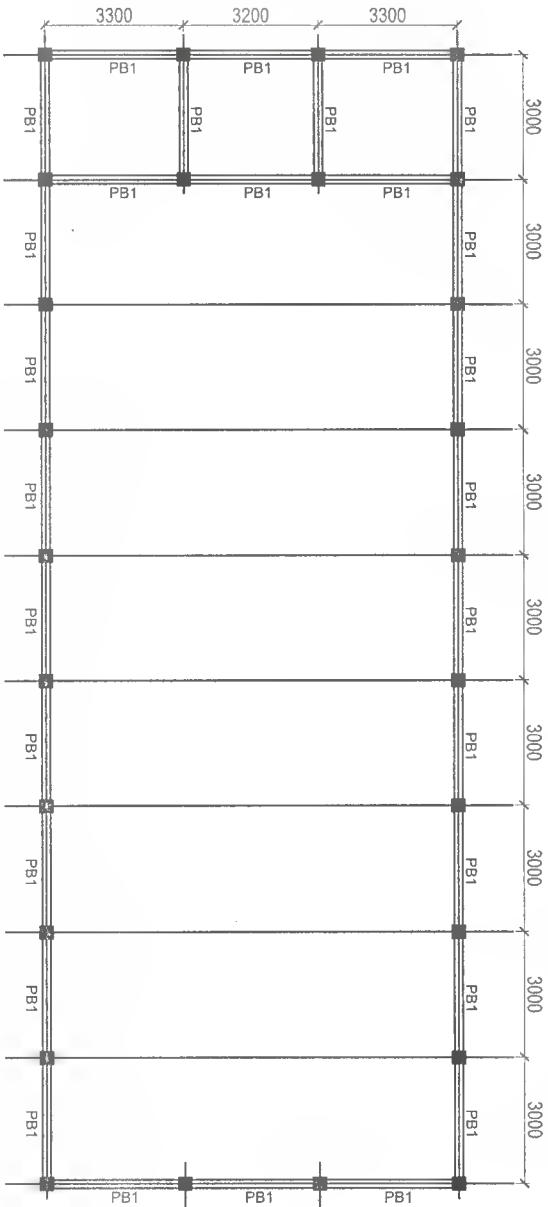


- 4 6.2 Cement Concrete Pavement (Construction of un-reinforced, dowel jointed, plain cement concrete pavement as per IRC:58 over a prepared sub-base, coarse and fine aggregate conforming to IS:383 and graded as per table 600-3 mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per drawing as per clause 602

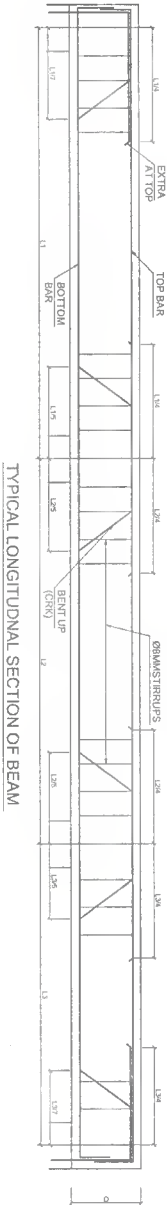
With Cement concrete grade M-30 and minimum cement content @ 375 kg/cum

	1	100.00	4.00	0.20	80.00	✓			
					Total	80.0	cum	4750.00	380000.00
									✓ 613347.5
								100.0 Rmt	
								Total (A)	✓ 6134.0

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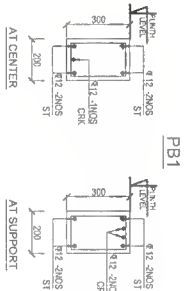
PLAN AT PLINTH LEVEL



TYPICAL LONGITUDINAL SECTION OF BEAM

NOTES:-

1. ALL DIMENSIONS ARE IN mm AND LEVELS ARE IN METER UNLESS OTHERWISE NOTED.
2. COVER TO THE REINFORCEMENT SHALL BE AS UNDER
a. CONCRETE FACES EXPOSED TO EARTH - 50MM
b. COLUMN-40MM
c. BEAMS & LINTEL - 25MM ON ALL SIDES
3. REINFORCEMENT BARS SHALL BE OF HIGH STRENGTH DEFORMED STEEL CONFORMING TO IS: 1786-1985
FY = 415 N/SQMM.
4. DEVELOPMENT LENGTH, ANCHORAGE LENGTH, HOOKS, & BENDS SHALL BE AS PER IS: 456-2000.
5. LAP LENGTH SHALL BE 50 TIMES THE DIA OF BAR.
6. GRADE OF CONCRETE SHALL BE M-20 (1:1.5:3) FOR R.C. WORK AS CONFORMING TO IS: 456-2000.
7. WORK SHALL BE CARRIED OUT AS PER THE NORMS CONFORMING TO IS: 456-2000.
8. SBC OF SOIL AT 2.0M DEPTH IN CONSIDERD AS 15T/M2.



DETAILS OF PLINTH BEAM

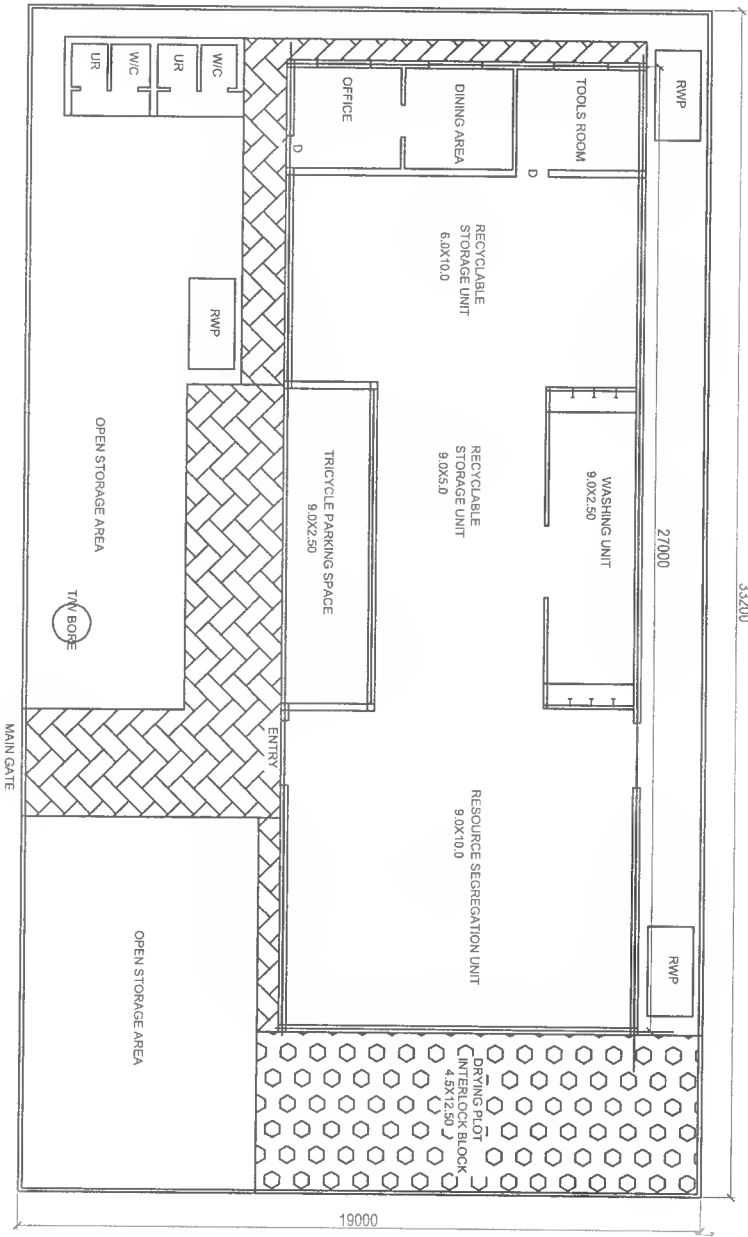
TYPE	SIZE	REINFORCEMENT					REMARKS
		BOTTOM	BENT UP	TOP	INT. SUPPORT	END SUPPORT	
PB1	200X300	2 - 12	1 - 12	2 - 12		1 - 12	

CONSTRUCTION OF SLRM CENTER

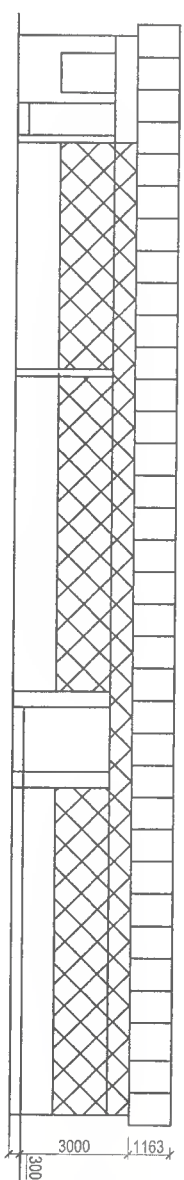
DATE	BY	DATE	BY	DATE	BY
DESIGNED	SA	DATE	BY	DATE	BY
CHECKED	SA	DATE	BY	DATE	BY
APPROVED	SA	DATE	BY	DATE	BY
DESIGN NO.	CONSTRUCTION OF SHED (PLINTH BEAM DETAILS)				
SHEET NO.	1	OF	1	NORTH	

SANJEEV KASLIWAL & ASSOCIATES

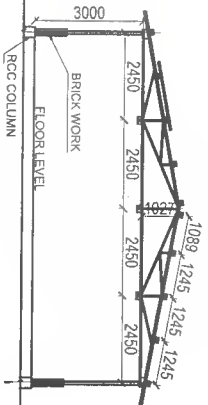
ARCHITECTS, ENGINEERS, R.C.C. DESIGNERS, SURVEYORS, VALUERS
SHOP NO. 6, BSP MARODA MARKET, BHILAI DURG (C.G.)
PH- 0788-2225826, 94790 48391, 93280-20191 (M)



PLAN



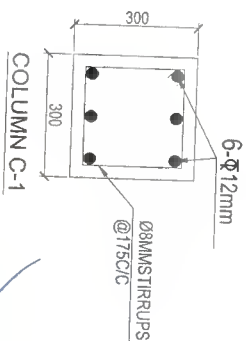
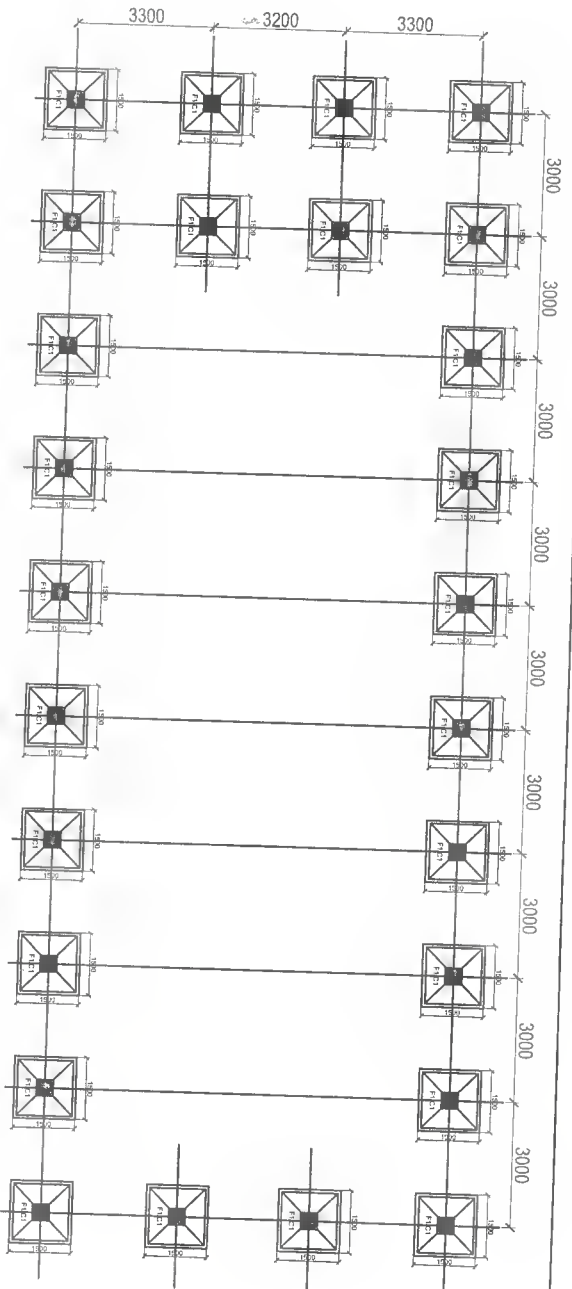
ELEVATION



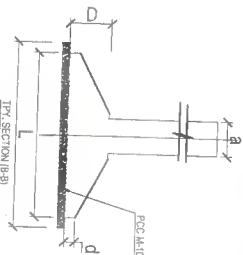
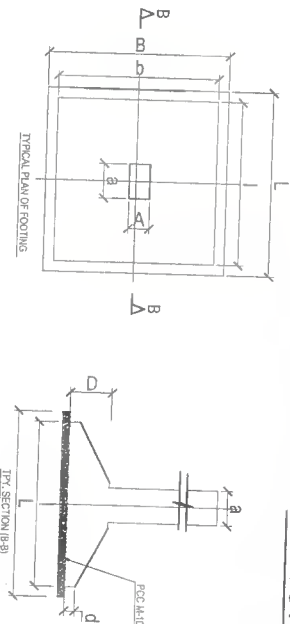
SECTIONAL VIEW

AREA STATEMENT			
PLOT AREA	36.20X19.0	687.80 M2	
SHED AREA	30.2X10.0	302.0 M2	
TOILET BLOCK	5.0X2.20	11.00 M2	

SANJEEV KASLIWAL & ASSOCIATES		ARCHITECTS ENGINEERS, R.C.C. DESIGNERS, SUPERVISOR, VALUERS	
GROUP NO. 1, 859, WANGDA MARKET, BHILAI, DURG (C.O.)		PH-0782255588, 94265 48301, 93530-20191 (M)	



LAY-OUT PLAN



SCHEDULE OF FOOTING (FOR SBC 15)

TYPE	SIZE				REINFORCEMENT	
	FOOTING				ALONG SHORT DIRECTION	ALONG LONG DIRECTION
L	B	I	b	d	D	
F1	1500	1500	1350	1350	150	300
					10MM @ 150C/C	10MM @ 150C/C

SCHEDULE OF COLUMN

TYPE	SIZE				REINFORCEMENT	
	FOOTING				ALONG SHORT DIRECTION	ALONG LONG DIRECTION
A	a	NOS	DIA	TIES		
C-1	300	300	6	12	8 MM DIA @ 125 C/C	

NOTES :-

1. ALL DIMENSIONS ARE IN mm AND LEVELS ARE IN METER UNLESS OTHERWISE NOTED.
2. COVER TO THE REINFORCEMENT SHALL BE AS UNDER
 - a. CONCRETE FACES EXPOSED TO EARTH - 50MM
 - b. COLUMN-40MM
 - c. BEAMS & LINTELS - 25MM ON ALL SIDES
3. REINFORCEMENT BARS SHALL BE OF HIGH STRENGTH DEFORMED STEEL CONFORMING TO IS: 1786-1985 $F_y = 415$ NISOMM.
4. DEVELOPMENT LENGTH, ANCHORAGE LENGTH, HOOKS, & BENDS SHALL BE AS PER IS: 456-2000.
5. LAP LENGTH SHALL BE 50 TIMES THE DIA OF BAR.
6. GRADE OF CONCRETE SHALL BE M-20 (1:1.5:3) FOR R.C.C. WORK AS CONFORMING TO IS: 456-2000.
7. WORK SHALL BE CARRIED OUT AS PER THE NORMS CONFORMING TO IS: 456-2000.
8. SBC OF SOIL AT 2.0M DEPTH IN CONSIDERED AS 15T/M².

CONSTRUCTION OF SLAB CENTER

DATE	SCALE	TITLE
10/10/18	1:100	CONSTRUCTION OF SHED (LAY-OUT PLAN)
10/10/18	1:100	CONSTRUCTION OF SHED (LAY-OUT PLAN)
10/10/18	1:100	CONSTRUCTION OF SHED (LAY-OUT PLAN)

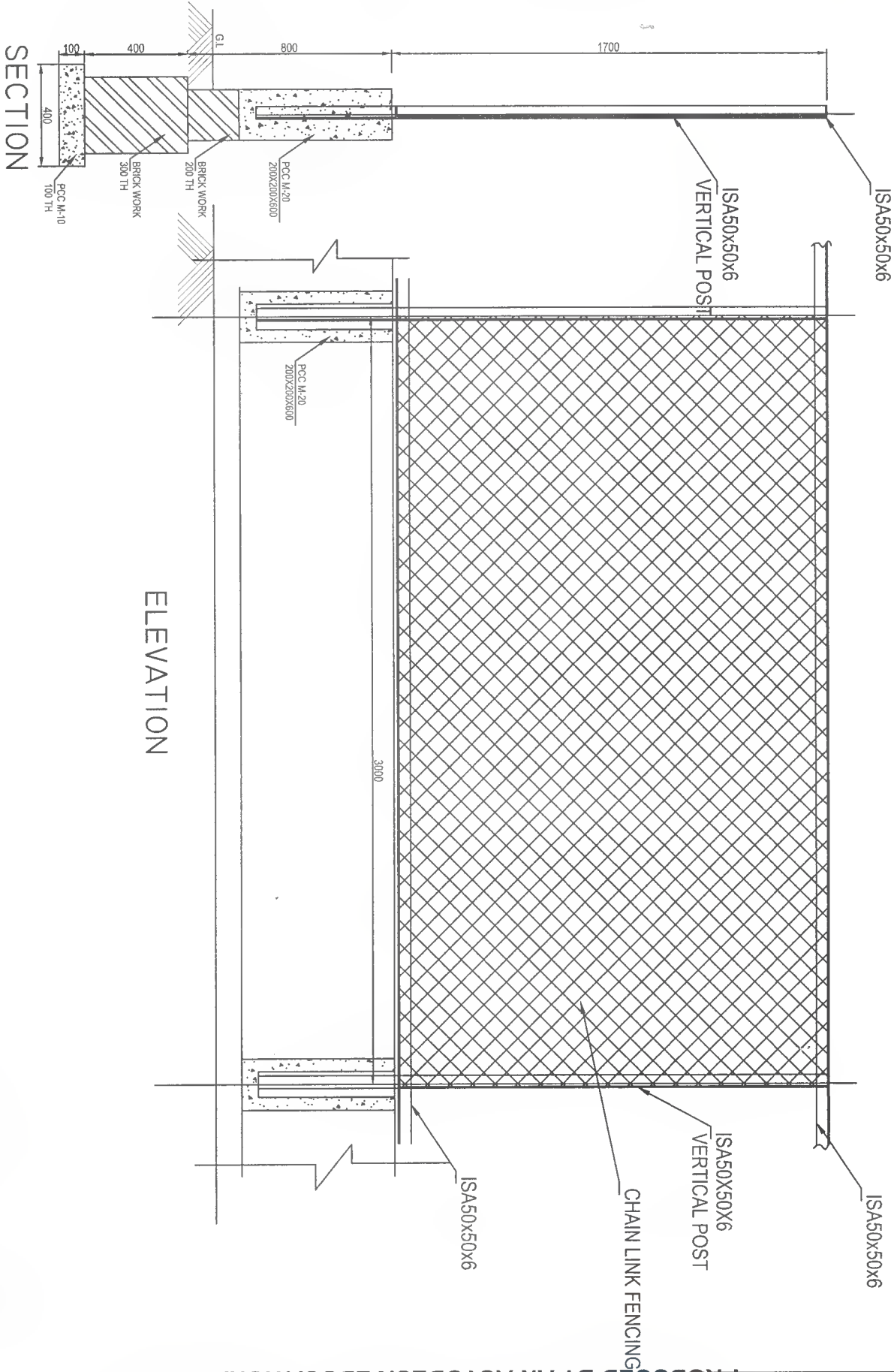
SANJEEV KASLIWAL & ASSOCIATES
ARCHITECTS, ENGINEERS, R.C.C. DESIGNERS, SURVEYORS, VALUERS
SHOP NO. 6, BSP MARGDA MARKET, BHILAI, DURG (C.G.)
PH-0786-2225826, 94790 48391, 93290-20191 (M)



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PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

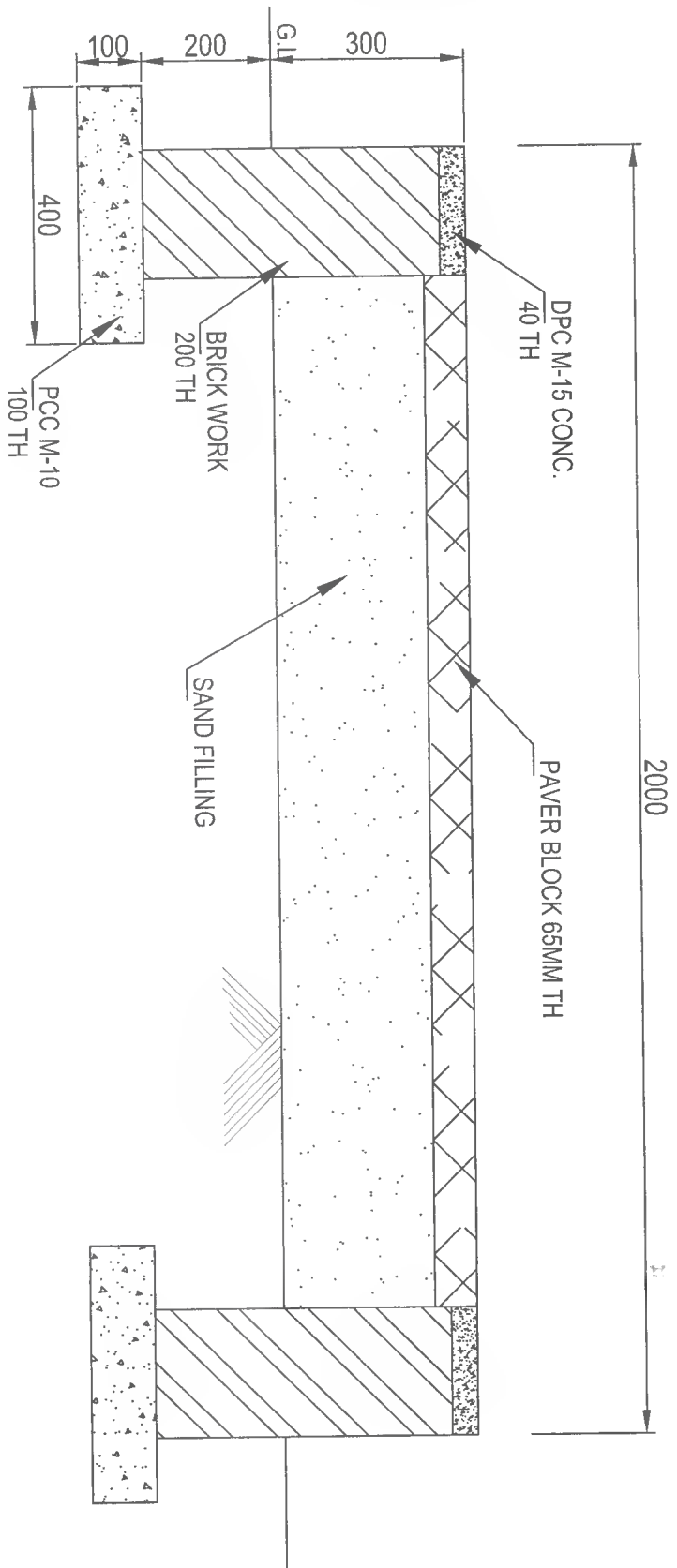


ELEVATION

SECTION

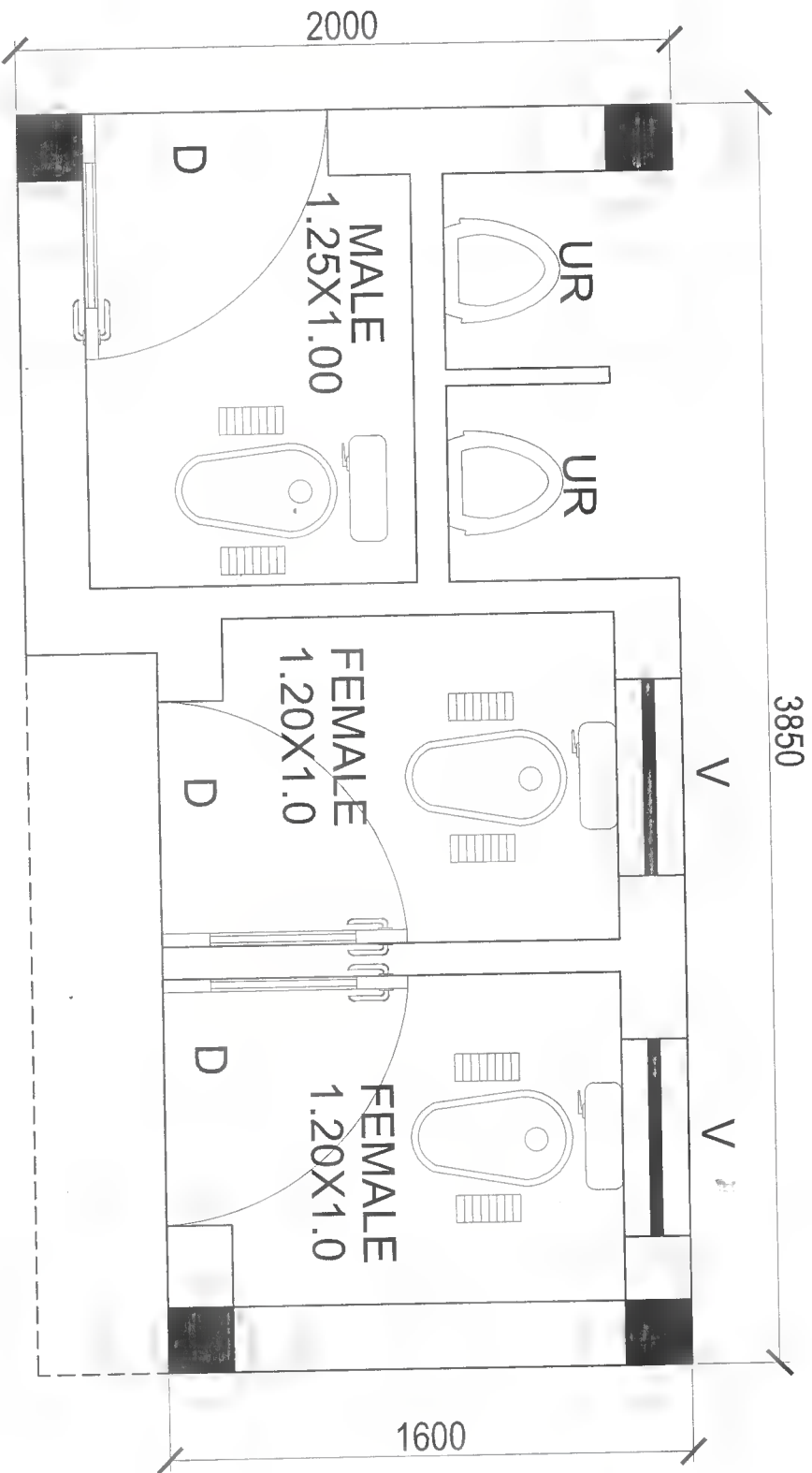
DETAILS OF FENCING

CONSTRUCTION OF SLIP CENTER			
DATE	SCALE	PROJECT	DATE
2020	1:100	100	2020
(FENCING DETAIL)			
DATE	SCALE	PROJECT	DATE
2020	1:100	100	2020
SANJEEV KASLIWAL & ASSOCIATES			
ARCHITECTS, ENGINEERS, R.C.C. DESIGNERS, SURVEYORS, VALUERS			
SHOP NO. 5, 1ST FLOOR, MARKET, BHADRA, DURG (C.G.)			
PIN: 0789222506, 9179 46371, 9829530191 (W)			



DETAILS OF PATHWAY

CONSTRUCTION OF SLAB CENTER			
DATE	TIME	SCALE	1/10
DESIGNER	NO.	DATE	1/10
CHECKER	NO.	DATE	1/10
APPROVAL	NO.	DATE	1/10
(PATHWAY DETAIL)			
SHEET No. 1 OF 1			
SANJEEV KASLIWAL & ASSOCIATES			
ARCHITECTS, ENGINEERS, R.C.C. DESIGNERS, SURVEYORS, VALUERS			
SHOP NO. 153, MARKET, BHILAI DURG (C.G.)			
PH: 0788-2228285, 94790 48391, 93290 20191 (M)			



PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

OPENING SCHEDULE

1.	D	0.75X2.10	3 NOS	STEEL FRAME AND SHEET DOOR
2.	V	0.6X0.40	3 NOS	STEEL VENTILATOR

AREA STATEMENT

BUILT UP AREA = 6.38 m²

TOTAL BUILT UP AREA = 6.38 m²

CONSTRUCTION OF SLAB CENTER

DRAWN	SIGN	DATE	TITLE	Scale	1:100
CHECKED	SIGN	DATE	(TOILET PLAN)	ISSUED FOR	
DESIGNED	SIGN	DATE		APPROVAL	
SCALE	DATE			CONSTRUCTION	
				SHEET No. 1	OF 1

SANJEEV KASLIWAL & ASSOCIATES
ARCHITECTS, ENGINEERS, R.C.C. DESIGNERS, SURVEYORS, VALUERS
SHOP NO. 6, BSP MARODA MARKET, BHILAI DURG (C.G.)
PH- 0788-2225626, 94790 48391, 93290-20191 (M)

PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT