Development of Recreational Zone at Sangram Sagar Lake, Jabalpur (M.P.).

	BOQ SUMMARY SHEET	
Sr No.	Item Description	Amount (In Rs.)
1	BUILDING WORKS	10599730.00
2	LANDSCAPE WORKS	8352590.18
3	RETAINING WALL	9914265.00
4	ROAD WORKS	5798951.55
5	ELECTRICAL, LIGHTING and OTHER MISCELLANEOUS WORK	5299865.00
	TOTAL	39965401.73
	SAY RS	40000000.00
	In words	Rupees Four Crore Only

DETA	ILED ESTIM	ATE FOR DEVELOPMENT OF RECREATION	AL ZONE A	T SANGR	AM SAGAR	LAKE (REF.	SOR IN FORCE
		Total Area of Intervention	4.5 acers			•	
SERIAL NO	REF. NO.	DESCRIPTION OF ITEMS	Quantity	Unit	Rate	Revised Rates**	Total Amount
1		EXCAVATION					
	2.6 Pg No 15	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas(exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.					
	2.6.1	ALL KINDS OF SOIL					
_		Total for earth work in excavation	1366.86	CUM	127.00	114.30	156231.7551
2		FILLING					
	Vol II 2.25 Pg No 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.					
_		Total for filling by excavated earth	257.65	CUM	59.00	53.10	13681.3212
3		SUB-BASE					
	2.27 Pg No 19	Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete.					
	Vol II 2.27.1 Pg No 19	Crusher Stone Dust					
		Total for filling stone dust under plinth	359.78	CUM	628.00	565.20	203348.2212
4		P.C.C WORK					
	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering All work up to plinth Cement concrete grade M-10 (Nominal Mix) with 40 mm maximum size of stone aggregate					
	4.1.5	TOTAL POSITION CEMENT CONCRETE	496.35	m3	3528	3175.20	1575997.819
5		R.C.C					
	In force from 2012 UADD ,ISSOR Vol. 2.S NO-	Reinforced cement concrete work beams suspended floors roofs having slope of any degree landing bal. shelves chajjas lintels bands plain window sills stair cases and spiral stair case up to floor two level excluding the cost of centering shuttering finishing and reiforcement in concrete grade M-20 nomina mix with 20 mm nomial size graded stone aggregate -	450 (-	_			
		TOTAL R C C	173.17	m3	4728	4255.20	736871.4947
	In force from 2012 UADD ,ISSOR Vol. 2. S NO- 5.20 P-49	REINFORCEMENT 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.	34633.93	Kg	60	54.00	1870232.22
7		CENTERING AND SHUTTERING		_			
	UADD SOR	Centering and shuttering including strutting,					
		propping etc.and removal of form for					
		Foundations, footings, bases of columns, etc. For					
	20.1.1	mass concrete					
		Total for centering and shuttering in foundation for					
		stone wall	25.80	m2	138	124.20	3204.36
	20.1.6	Columns, Pillars, Piers, Abutments, Posts and Struts.					
	20.1.6	Total for centering and shuttering in column	249.90	m2	282	253.80	63424.62
		Lintels, beams, plinth beams, girders, bressumers					
	20.1.5	and cantilevers					
		Shuttering in Lintels					
	20.1.5	Total for centering and shuttering in lintels	788.53	m2	203	182.70	144063.7002
8		STONE MASONRY					
		Random rubble masonry with hard stone in					
	UADD SOR	foundation and plinth including levelling up with					
	7.1 /P-67	cement concrete M-5 stone aggregate 20mm					
	7.171 07	nominal size) at plinth level with :					
	7.1.1	Cement mortar 1:6					
	7.1.1	TOTAL STONE MASONRY IN FOUNDATION AND					
		PLINTH	21.58	m3	2977.0	2679.30	57808.5768
				5	20770		0700010700
		Stone work in plain ashlar in super structure upto					
		floor two level in cement mortar 1:6 (1 cement : 6					
	7.12/P-68	coarse sand) including pointing with cement mortar					
		1:2 (1 white cement : 2 stone dust) with an					
		admixture of pigment matching the stone shade :					
	7.12.1	One face dressed					
	7.12.1.1	Red sand stone or equivalent					
		TOTALSTONE MASONRY IN SUPER STRUCTURE	93.72	m3	3460.0	3114.00	291831.624
9		DPC					
		Providing and laying damp-proof course 50mm thick					
	UADD SOR	with cement Cement concrete grade M-15 (Nominal					
	4.1/P-34	Mix) with 20 mm maximum size of stone aggregate					
		,					
		TOTAL DPC	39.07	m2	226	203.40	7946.838
10		BRICK MASONRY					
		Brick work with mechanized autoclaved flyash lime					
	UADD SOR	bricks conforming to IS: 12894 :2002 of class					
	6.36/P-61	designation 100 in superstructure above plinth level					
		up to floor 2 level in.					
	6.35.2	For 230 mm thk outer Walls					
		TOTAL BRICK MASONRY	207.00	m3	3026	2723.40	563743.8
11		FLOORING					
		Kota/cuddapah stone slab 30 mm thick flooring over					
		20 mm (average) thick base laid over and jointed					
		with grey cement slurry mixed with pigment to					
	11.26.1/P-	match the shade of the slab including rubbing and					
	133	polishing complete with base of cement mortar (1					
		cement : 4 course sand) 1 : 4 (minimum size of kota					
		stone 0.25 sqm)					
		TOTAL KOTA STONE FLOORING	521.40	m2	899.00	809.10	421864.74
	l .			_	222.30		

	LIADD COD	C2 man this language and flagging with a grant					
	UADD SOR 2012 11.5	62 mm thick cement concrete flooring with concrete hardener topping under layer 50 mm thick cement					
	P-128	concrete grade M-15 (Nominal Mix with 20mm					
	F-126	maximum size of stone aggregate) and top layer					
		12mm thick cement hardener consisting of mix 1:2					
		(1 cement hardener mix : 2 graded stone aggregate					
		6mm nominal size) by volume. Hardening compound					
		is mixed @ 2 litre per 50kg of cement or as per					
		manufactures specifications. This includes cost of					
		cement slurry, but excluding the cost of nosing of					
		steps etc. complete.					
		· ·					
		TOTAL CEMENT CONCRETE FLOORING	309.00	Sq.m	387	348.30	107624.7
12		PAVEMENTS					
		Providing and laying 60 mm thick factory made					
	2012 11.46	cement concrete interlocking paver block of M -30					
	P-136	grade made by block making machine its strong					
		vibratory compaction and of approved size and					
		design/shape laid in required colour and pattern					
		over and including 50 mm thick compacted bed of					
		course sand, filling the joints with coarse sand etc.					
		all complete as per the direction of Engineer-in-					
		charge.					
		TOTAL FOR INTER LOCKING PAVER BLOCK	7440	Sqm	454	408.60	₹ 30,39,984.00
		TOTAL TON INTER EGENING FAVEN BLOCK	7440	Sqiii	737	400.00	(30,33,304.00
	UADD SOR	Filling with moorum for pipe bedding or over the					
		pipe including supply of moorum					
	15.9 P-	3 11 7					
	141		1080	CUM	384	345.60	₹ 3,73,248.00
13		WALL TILES					
		Providing and fixing Ist quality ceramic glazed wall					
		tiles conforming to IS :15622 (6 to 7mm thick) of					
		approved make in all colours, shades					
		exceptburgundy, bottle green, black of any size as					
	44 24/5 424	approved by Engineer-in-Charge in skirting, risers of					
	11.34/P-134	steps and dados over 12 mm thick bed of cement					
		Mortar 1:3 (1 cement : 3 coarse sand) and jointing					
		with greycement slurry @ 3.3kg per sqm including					
		pointing in white cement mixed with pigment of					
		matching shade complete.					
		TOTAL AREA FOR TILES	144.90	m2	686.00	617.40	89461.26
14							
		PLASTER					
	UADD SOR						
	UADD SOR 13.0/P-156	FINISHING WORK					
	13.0/P-156	FINISHING WORK 20mm cement plaster on the rough side of single or					
	13.0/P-156 13.3	FINISHING WORK 20mm cement plaster on the rough side of single or half brick wall of					
	13.0/P-156	FINISHING WORK 20mm cement plaster on the rough side of single or half brick wall of 1:6(1 cement: 5 fine sand)					
	13.0/P-156 13.3	FINISHING WORK 20mm cement plaster on the rough side of single or half brick wall of 1:6(1 cement: 5 fine sand) Total plaster on outer wall (Outer face only)	969.50	Sq. m	137.00	123.30	119539.35
	13.0/P-156 13.3	FINISHING WORK 20mm cement plaster on the rough side of single or half brick wall of 1:6(1 cement: 5 fine sand) Total plaster on outer wall (Outer face only) 15mm cement plaster on the rough side of single or	969.50	Sq. m	137.00	123.30	119539.35
	13.0/P-156 13.3 13.3.3	FINISHING WORK 20mm cement plaster on the rough side of single or half brick wall of 1:6(1 cement: 5 fine sand) Total plaster on outer wall (Outer face only) 15mm cement plaster on the rough side of single or half brick wall of mix	969.50	Sq. m	137.00	123.30	119539.35
	13.0/P-156 13.3 13.3.3	FINISHING WORK 20mm cement plaster on the rough side of single or half brick wall of 1:6(1 cement: 5 fine sand) Total plaster on outer wall (Outer face only) 15mm cement plaster on the rough side of single or	969.50	Sq. m	137.00	123.30	119539.35

		Total For Plaster					
15		POINTING					
		Pointing on stone work with cement mortar 1:3 (1					
	13.33	cement: 3 fine sand					
	13.33.1	Flush/ Ruled pointing					
		Total for Pointing in Stone	171.10	Sq. m	80.00	72.00	12319.2
16		PUTTY					
		Providing and applying 1.5 mm thick (in two coat)					
	UADD SOR	white cement based wall putty of best quality, over					
	13.26/P-156	plastered surface to prepare the surface even and					
		smooth complete.					
	13.26	SAME QTY AS TOTAL PLASTER QTY	2199.75	Sq. m	64.00	57.60	126705.6
17		PAINTING					
	13.47	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade					
	13.47.1	Finishing walls with Deluxe Multi surface paint system for interiors and exteriors using Primer as per manufacturers specifications:					
		Two or more coats applied @ 1.25 ltr/10 sqm. over and including one coat of Special primer applied @ 0.75 ltr/10 sqm.	2199.75	Sq. m	75.00	67.50	148483.125
18		SANITARY INSTALLATION					
	In force from 2012 UADD ,ISSOR Vol. 2. S NO-25.3 P-245	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I.brackets, 40mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete including painting of fittings and brackets, cutting and making good the walls and floors wherever required:					
	25.3.1	W.C. pan with ISI marked white solid plastic seat and	12.00	EACH	3823.00	3440.70	41288.4
	In force from 2012 UADD ,ISSOR Vol. 2, S NO-	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require					
		White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps.	12.00	EACH	1564.00	1407.60	16891.2
	In force from 2012 UADD ,ISSOR Vol. 2. S	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making goodthe walls wherever required:	12.00	L/ (CIT	1504.00	1407.00	10071.2
	25.10.1	Kitchen sink with drain board					
	25.10.1.1	25.10.1.1 510x1040 mm bowl depth 250mm.	20.00	EACH	7260.00	6534.00	130680

	In force						
	from 2012						
		Providing and fixing P.V.C. waste pipe for sink or					
		wash basin including P.V.C. waste fittings complete.					
	NO-25.28	wash bash merading review waste memberee.					
	P-249						
		Flexible pipe					
		40mm dia	32.00	EACH	57.00	51.30	1641.6
		Providing and fixing mirror of superior glass (of	32.00	EACH	37.00	51.50	1041.0
	-	approved quality) and of required shape and size					
		with plastic moulded frame of approved make and					
		shade with 6 mm thick hard board backing:					
	249	0 1 1 450 250 / 1 1: : \\450 250	11.00	54611	770.00	700.00	7702.2
	25.32.3	Oval shape 450x350mm (outer dimensions)MIRROR	11.00	EACH	778.00	700.20	7702.2
	2012 UADD	Providing and fixing medium grade G.I. pipes					
	,ISSOR Vol.	medium class (ISI mark)complete with G.I. fittings					
	2. S NO-	(ISI mark) and clamps, including cutting and making					
	23.10 P-	good the walls etc.					
	226	ŭ .					
	23.10.1	15 mm nominal bore 0.40kg	300.00	Meter	139.00	125.10	37530
	23.10.3	25mm nominal bore	200.00	Meter	232.00	208.80	41760
		Making connection of G.I. distribution branch with					
	. 23.13	G.I. main of following sizes by providing and fixing					
	P-226	tee, including cutting and threading the pipe etc.					
		complete					
	23.13	25 to 40 mm nominal bore	100.00	EACH	219.00	197.10	19710
		BRASS FITTINGS					
	23.15	Providing and fixing brass bib cock of approved quality	y :				
	23.15.1	15 mm nominal bore 0.40kg	50.00	EACH	224.00	201.60	10080
		Providing and fixing gun metal gate valve with C.I.					
	23.17	wheel of approvedquality (screewed end)					
	23.17.1	15 mm nominal bore each	25.00	EACH	135.00	121.50	3037.5
	23.17.2	25 mm nominal bore	15.00	EACH	245.00	220.50	3307.5
	23.16	Providing and fixing brass stop cock of approved quali	ity				
	23.16.1	15 mm nominal bore each	20.00	EACH	268.00	241.20	4824
		Providing and fixing ball valve (brass) of approved					
	23.18	quality, High or low pressure, with plastic floats					
		complete					
	23.18.1	15mm nominal bore	25.00	EACH	250.00	225.00	5625
		25 mm niminal bore	15.00	EACH	423.00	380.70	5710.5
		Providing and fixing C.P. brass soap container 109					
		mm wide,125 high 112 mm distance from wall of					
	00.55	standard shape with bracket of the same material					
	23.39	with all fittings etc. of approved quality and make					
		like Jaguor or equivalent conforming to					
		IS:specification.	20.00	Each	587.00	528.30	10566
		TOTAL COST of BUILDING WORKS					10599730.00
19		ROAD WORKS					
45.							
19.1		DISMANTLING /DEMOLISHING					

	T		-			-	-
	UADD	Dismantling manually/by mechanical means					
	Vol. 2.	including stacking of serviceable material and					
	15.43	disposal of unserviceable material within 50meters					
	P-181	lead as per direction of Engineer-in-charge:					
	15.43.2	bituminous road	1400	Sqm	85	76.50	₹ 1,07,100.00
		Demolishing C.C/R.C.C. work by mechanical means		•			. ,
		and stockpiling at designated locations and disposal					
	183	of dismantled materials up to a lead of					
		1000m,stacking serviceable and unserviceable					
		material separately including cutting reinforcement					
		bars.					
19.2		DRAIN EXCAVATION					
19.2	UADD SOR	Earth work in excavation by mechanical means					
	2012 2.8	(Hydraulic excavator) / manual means in foundation					
	P-16	· ·					
	P-10	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					
		Excavation for Drtain along the new road(both sides					
		of the road)	396	Cum	129	116.10	₹ 45,975.60
19.3		P.C.C					
	UADD SOR	Providing and laying in position cement concrete of					
	2012,	specified grade excluding the cost of centering and					
	Vol.2	shuttering All work up to plinth					
	.4.1						
	P-34						
	4.1.5	Cement concrete grade M-10 (Nominal Mix) with 40 mm maximum size of stone aggregate					
		PCC in Drtain along the new road(both sides of the road)	66	Cum	3528	3175.20	₹ 2,09,563.20
19.4		R.C.C					, ,
	UADD SOR	Reinforced cement concrete work in walls (any					
	2012,	thickness), including attached pilasters, buttresses,					
	Vol.2	plinth and string courses, fillets, columns, pillars,					
	5.2	piers, abutments, posts and struts etc. up to floor					
	P-46	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.					
		RCC in side walls of drain (2sidesX2 walls)	74.25	Cum	5050	4545.00	₹ 3,37,466.25
19.5		REINFORCEMENT	, 4.23	Cuiii	3030	7575.00	. 5,57,700.25
	UADD SOR	Reinforcement for R.C.C. work including					
		straightening, cutting, bending, placing in position					
	5.20	and binding including cost of binding wire upto floor					
	P-49	two level including all wastage etc. complete.					
	, 43	the level melading all wastage etc. complete.					
	5.20.4	Hot rolled deformed bars Fe 415 grade					
		Steel providing @80Kg per Cmec of concrete	14850	Kg	60	54.00	₹ 8,01,900.00
19.6		CENTERING AND SHUTTERING					
			l.				

	114 D D C O D	0	1		1	1	
		Centering and shuttering including strutting,					
		propping etc.and removal of form for					
	20.1						
	P-209						
	20.12	Walls (any thickness) including attached pilasters,					
		butteresses, plinth and string courses etc					
		,,					
		Centring and shuttering in side walls of drain (2X2side	990	Sqm	216	194.40	₹ 1,92,456.00
		(-1					,,
19.7		ROADWAY EXCAVATION					
13.7	UADD	Excavation for roadway in soil including loading in					
	-	,					
		truck for carrying of cut earth to embankment site					
	Vol-iii	with all lifts and lead upto1000 metres and as per					
	3.1	relevant clauses of section-300					
		For Widening of Carriageway					
		Ch. 0 to 815, = 815m	2310.00				
		Total	2310.00	cum	98.00	88.20	₹ 2,03,742.00
19.8	3.11, Vol III	EARTHWORK					
		Construction of Embankment/Sub grade/ earth					
		shoulders, as per clause 305 & its sub-clauses,					
		Where required but with approved materials/soil					
		like morrum CBR value not less then 7% i/c all lead &					
		lifts i/c excavation, cost of watering, mpaction and					
		maintenance of surface during construction to					
		_					
		ensure shedding & preventing ponding of water					
		(clause 305.3.6) shaping & dressing (clause 305.3.7),					
		finishing etc. complete but excluding scarifying					
		existing granular/bituminous road surface vide					
		clause 305.6.					
		For Widening of Carriageway					
		Ch. 0 to 815, = 815m	1100.00				
		Total	1100.00	cum	272.00	244.80	₹ 2,69,280.00
	4.8(a) I Vol	Crusher Run Macadam					
19.9	III						
		Crusher Run Macadam Base (Providing crushed					
		stone aggregate, depositing on					
		a prepared surface by hauling vehicles, spreading					
		and mixing with a motor grader, watering and					
		compacting with a vibratory roller to clause 410 to					
		form a layer of sub-base/Base)					
		For 53 mm maximum size					
		For Widening of Carriageway					
			660.00		+	-	
		Ch. 0 to 815, = 815m	660.00	_	222.25	740 ==	T 4 0 4 000 00
46.15		Total	660.00	cum	833.00	749.70	₹ 4,94,802.00
19.10	4.5 Vol III	WMM					

15.14	Ш						
19.14	5.8 (iv) Vol	Bituminous Concrete					
		Total quantity	220.00	cum	7161.00	6444.90	₹ 14,17,878.00
		widening part	220.00				
			220.00				
		with hot mix plant batch using crushed aggregates of specified grading, premixed with bituminous binder, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete in all respects and as per relevant clauses of section-507. (Only cement will be used as filler) (for Grading I (80-100mm thickness) cum 7161.00)					
15.15		Providing and laying dense bituminous macadam					
19.13	5.6 (i) Vol III	Dense Bituminous Macadam		- 4		3.33	. ==,, 50,00
		Total quantity	2200.00 2200.00	sqm	11.00	9.90	₹ 21,780.00
		@0.30 kg per sqm (dry & hungry bituminous surfaces/granular surfaces treated with primer) For widening of carriageway	2200.00				
		Providing and applying tack coat with bitumen emulsion using emulsion pressure distributor on the prepared bituminous / granular surface cleaned with mechanical broom and as per relevant clauses of section 503.					
19.12	5.2 (i) Vol III	Tack Coat					
	F 2 (3) \/-1	Total quantity	2200.00	Sqm	26.00	23.40	₹ 51,480.00
		Ch. 0 to 815, = 815m	2200.00				
		emulsion on prepared surface of granular Base including clearing of road surface and spraying primer at the rate of 0.75 kg/sqm using mechanical / Manual means and as per relevant clauses of section 502. For Widening of Carriageway					
19.11	5.1 Vol III	Primer Coat Providing and applying primer coat with bitumen					
40.44		Ch. 0 to 815, = 815m Total quantity	550.00 550.00	cum	951.00	855.90	₹ 4,70,745.00
		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 and as per relevant clauses of section - 400. For Widening of Carriageway					
		Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC					

	19.3	Supplying & Stacking Sludge at Site including royalty					1
20.2	19.2	Supplying & Stacking of good earth at site including royalty & carriage up to 1km(earth measured in stacks will be reduced by 20% for Payment)	1504.5	СИМ	184.00	165.60	₹ 2,49,145.20
20.1	19.1	Trenching in ordinary Soil upto a depth of 60 Cm including removal & Stacking of serviceable Material and then disposing of by speading and neatly leveling with in lead of 50m and making up the trenched area to proper levels by filling with earth or earth mixed with sludge or/and manure before and after flooding trench with water(excluding cost of imported earth, sludge or manure)	889.5	CUM	129.00	116.10	₹ 1,03,270.95
20		LANDSCAPE WORKS					
							0.00001.00
		TOTAL COST FOR ROAD & DRAIN WORK					5798951.55
			154.00	Cum	628.00	565.20	₹ 87,040.80
	2.27.1	dressing complete. Crusher Stone Dust	154.00				
19.18	2.27 voll	Supplying and filling in plinth under floors including, watering, ramming consolidating and	77.00	Cuill	3333.00	3233.30	\ 2, 43 ,133.3U
19.17	4.1.4	Cement concrete grade M-10 (Nominal Mix) with 20 mm maximum size of stone aggregate	77.00 77.00	Cum	3595.00	3235.50	₹ 2,49,133.50
19.16	4.1 vol II	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering All work up to plinth level.					
			1100.00	meter	189.00	170.10	₹ 1,87,110.00
19.15		projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete and as per clause 408 of specifications.	1100.00				
	III	bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade PCC on M-10 grade foundation 150 mm thick, foundation having 50 mm					
	8.1 (A) Vol	Total quantity Construction of cement concrete kerb with top and	88.00	cum	8226.00	7403.40	₹ 6,51,499.20
		Providing and laying bituminous concrete with hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects and as per relevant clauses of section-509. (Only cement will be used as filler). iv) for Grading II (30-45 mm thickness) with 60/70 bitumen					

	I	T				1	1
20.4	19.4.1	Supplying & stacking at site dump manure From Approved Source including carriage up to 1 km(manure Measured in stacks will be reduced by 8% for payment) screened through sieve of I.S.designation 20mm	3153	CUM	105.00	94.50	₹ 2,97,958.50
20.5	19.5	Rough dressing the trenched ground including breaking clods.	2965	100 SQM	42.00	37.80	₹ 1,12,077.00
20.6	19.6	Uprooting Weeds From the trenched Area after 10 to 15 Days of its Flooding with water including Disposal of Uprooted Vegetation.	2965	100 CUM	137.50	123.75	₹ 3,66,918.75
20.7	19.8	Spreading of Sludge ,Dump manure & good earth in required thickness (cost of sludge, dump manure or And good earth to be paid separately)	1504.5	сим	15.00	13.50	₹ 20,310.75
20.8	MP PWD 23.10	Total Cast of Selection-one Grass (Carpet Grass)including Leveling shaping compaction work soil treatment, grass fixing charges cost of irrigation deweeding ,Hoeing & maintenance up to 90 Days					₹ 0.00
	23.10.4	With Grass Turf	1707.5	100 SQM	3174.00	2856.60	₹ 48,77,644.50
20.9		Preparation of beds for hedging and shrubbery by excavating 60cm deep and trenching the excavated base to a further depth of 30cm, refilling the excavated earth after breaking clods and mixing with sludge or manure in the ratio of 8:1(8 parts of stacked volume of earth after reduction by 20%: one part of stacked volume of sludge or manure after reduction by 8%), flooding with water, filling with earth if necessary, watering and finally fine dressing, leveling etc. including stacking and disposal of materials declared unserviceable and surplus earth by spreading and leveling as directed, within a lead of 50m lift up to 1.5 m complete (cost of sludge, manure or extra earth to be paid for separately).	2965	сим	62.00	55.80	₹ 1,65,447.00
20.10	19.14	Digging holes in ordinary Soil & refilling the same with the Excavated Earth mixed with Manure or sludge in the ratio of 2:1 by volume(2 Part of Stacked, Volume of earth after reduction by 20% 1 Part of Stacked Volume of manure after reduction by 8%) flooding with Water dressing including removal of rubbish & Surplus earth. If any with all leads & Lifts(Cost of manure / Sludge/ Soil if needed to be paid for separately)					₹ 0.00
	19.14.1	Holes 1.2 m dia and 1.2 m deep	50	EACH	182.00	163.80	₹ 8,190.00
	19.14.2	Holes 0.6 m dia and 0.6 m deep	110	EACH	24.00	21.60	₹ 2,376.00
		·					

20.11	19.16	Providing and fixing M.S. flat iron tree guard 60cm dia. and 2m height above ground level formed of 4 nos. 25x6mm and 8 nos. 25x3mm vertical M.S. flats rivetted to 3 nos. 25x6mm M.S. flat iron rings in two halves, bolted together with 8mm dia. and 30mm long bolts including painting two coats with paint of approved brand and manufacture over a coat of priming, complete in all respects.	160	EACH	2037.00	1833.30	₹ 2,93,328.00
20.12	19.19	Edging with bricks laid dry length wise including excavation, refilling, consolidating with hand packing and spreading neatly surplus earth within a lead of 50 m:					
	19.19.2	50 class designation.					
	19.19.2.1	chimney. Bricks	250	METER	34.00	30.60	₹ 7,650.00
20.13	MP PWD 23.24	Preparation of mounds of various size ans shape by available excavated/supplied earth in layers not exceeding 20 cm in depth, breaking clods, watering of each layer, dressing etc. lead upto 50m and lift upto 1.5 m complete as per direction of officeer-incharge	2090	CUM	153	137.70	₹ 2,87,793.00
		TREE BOTANICAL/COMMON NAME					
20.14	,Hotriculture	TREE BOTANICAL/COMMON NAME Supply and stacking of Cassia fistula (Amaltash) plant of height 120-135 cm. in big poly bags of size 25 cm as per direction of the officer-in-charge.assia fistula/Amaltas	15	EACH	60	54.00	₹ 810.00
20.15		Kigelia pinnata of plants height 150-165 cm. in big poly bags of plantssize25 cm pinnata	10	EACH	80	72.00	₹ 720.00
20.16	DSR 2016 ,Hotriculture	Supply and stacking of Delonix regia (Gulmohar) plant of height 150-165 cm. in big poly bags of size 25 cm as per direction of the officer-in-chargeJacaranda Mimisfolia/Neeli Gulmohar	20	EACH	60	54.00	₹ 1,080.00
20.17	,Hotriculture	Supply and stacking of Lagerstroemia flosreginae plant of height 150-165cm.in big poly bag of size 25 cm as per direction of the officer-in-charge.Lagerstroemia speciosa/Jarul	20	EACH	120	108.00	₹ 2,160.00
20.18	,Hotriculture	Supply and stacking of Bombax ceiba plant of height 150-165 cm. in big poly bags of size 25 cm as per direction of the officer-in-charge. Bombax ceiba/Silk cotton Tree	10	EACH	70	63.00	₹ 630.00
20.19	,Hotriculture	Plumeria alba of plants height 120-135 cm. with 2-3 branchesin bags of plants size 30 cmPlumeria alba/Champa	20	EACH	120	108.00	₹ 2,160.00

	Г			ı	1		
20.20	10346/P-53	Supply and stacking of plant Bauhinia acuminata height 60-75 cm. in earthen pots of size 20 cm Bauhinia blackeana/variegata/Kachnar	20	EACH	45	40.50	₹ 810.00
20.21	,Hotriculture 7.55/p169	Supply and stacking of Michelia champa (Golden Champa)plant of height90-105 cm. in earthen pots of size 25 cm as per direction of the officer-incharge.Michelia champaca/Champak	15	EACH	90	81.00	₹ 1,215.00
20.22		Alstonia scholaris of plants height 150-165 cm. in bag of plants size 25 cmAlstonia Scholaris/Saptapasrni	10	EACH	60	54.00	₹ 540.00
20.23	,Hotriculture	Nauclea cadamba (Kadam) of plants height 150-165 cm. in big poly bag of plants size 25 cmAnthocephalus	8	EACH	60	54.00	₹ 432.00
20.24	,Hotriculture	PALM TREES Supply and stacking of Foxtail palm plant of ht. 240-270 cm bottom girth 35-40 cm welldeveloped in big size HDPE bags as per direction of the officer-incharge. Wodeytia Bifurcata	10	EACH	650	585.00	₹ 5,850.00
20.25	,Hotriculture 7.41 /p-351	Supply and stacking of Fishtail palm plant of ht. 270-300 cm bottom girth 40-50 cm well developed in big size HDPE bags as per direction of the officer-in-charge(Royal palm)	10	EACH	550	495.00	₹ 4,950.00
20.26	,Hotricultur	Providing and Displaying Phoenix roebelenii palm well developed having 20 to 25 fresh &healthy leaves 90 to 105 cm ht. in 30 cm Cement Pot as per direction of the officer-in-chargePhoenix Roebelenii	10	EACH	513	461.25	₹ 4,612.50
			178				
		Supply & Planting of Shrubs					
20.27	,Hotriculture 9.4/P-385 (S1)	Supply and stacking of Bougainvillea (Variety Butiana, Lady Mary Baring, Mahara, Mohan, Scarlet Queen, Varigata, Glabra Formosa, Peruviana Odissi, Partha, Subhra, Thimma, Spectabilis L.N Birla, Refulgens) plant of height 30 cm. to 45 cm. with 2-3branches in 20 cm size of Earthen pots / Plastic pots & as per direction of the officer-incharge.	200	Each	35	31.50	₹ 6,300.00
20.28		Supply and stacking of plant Tecoma gaudichaudi of height 60-75 cm.with 5-6 branches in p.bag of size 25 cmTecoma guadichaudi/Yellow bells	500	Each	50	45.00	₹ 22,500.00
20.29		Supply and stacking of plant Murraya exotica of height 45-60 cm. inpoly bags of size 15 cmMurraya exotica/Jasmine, Kamini	500	Each	15	13.50	₹ 6,750.00

	DCD 2016	Drouiding and Displaying Funkashis will had a					1
20.30	,Hotriculture 5.19/p149 (S4)	Providing and Displaying Euphorbia milli hybrid variety plant with multi branch, full bloom, with fresh and healthy well developed having 30 to 45 cm ht. in 35 cm Cement Pots as per direction of the officer-in-charge. Euphorbia milii/Crown of Thorns	500	Each	615	553.50	₹ 2,76,750.00
20.31	,Hotriculture 8.28/P-371	Supply and stacking of plant Gardenia jasminoides of height 45-60 cm. with 3-4 branches in earthen pots of size 20 cm as per direction of the officer-in-charge.Gardenia jasminods/Cape Jasmine	175	Each	50	45.00	₹ 7,875.00
20.32	,Hotriculture	Supply and stacking of plant Hamelia patens of height 60-75 cm. with 6-8 branches in poly bags of size 25 cm as per direction of the officer-incharge. Ixora coccinea	300	Each	50	45.00	₹ 13,500.00
20.33	,Hotriculture	Supply and stacking of plant Hibiscus variegated of height 45-60 cm. with 3-4 branches and healthy variegated foliage in earthen pots of size 20 cm as per direction of the officer-incharge.Canna indica variegated	95	Each	40	36.00	₹ 3,420.00
20.34	,Hotriculture	Providing and Displaying Acalypha green well developed, fresh & healthy with good foliage, multi branch 30 to 45 cm ht. in 20 cm size Earthen Pot/ Plastic Pot bushy plant as per direction of the officer-in-charge. Acalypha green	75	Each	31	27.68	₹ 2,075.63
20.35	,Hotriculture 8.67/P-380	Supply and stacking of plant Tecoma gaudichaudi of height 90-105 cm.,bushy in big size HDPE bag as per direction of the officer-in- charge.Tecoma capensis/Cape Honeysuckle	50	Each	110	99.00	₹ 4,950.00
20.36	,Hotriculture 10079/P-19 (S11)	Providing of Raphis palm plant, having ht. 75 cm to 90 cm with 12 to 15 equal suckers, well developed, full of fresh & healthy leaves from bottom to top in 25 cm size Earthen pot / Plastic pot.Raphis excelsa/Raphis Palm	40	Each	450	405.00	₹ 16,200.00
20.37	,Hotriculture	Supply and stacking of plant Nerium oleander variegated of heigh t60-75 cm., multibranched in earthen pots of size 25 cm	40	Each	60	54.00	₹ 2,160.00
20.38	,Hotriculture	Supply and stacking of plant Mussaenda erythrophylla (Rosea) ofheight 60-75 cm. multi branched in earthen pots of size 25 cmMussaenda	10	Each	100	90.00	₹ 900.00
20.39	DSR 2016 ,Hotriculture	Supply and stacking of plant Nyctanthes arbor-tristis (Hasingar) of ht. 90-105 cm in Earthen pots of size 20 cmNyctanthes arbor-tristis/Harshingar	30	Each	40	36.00	₹ 1,080.00
20.40	DSR 2016 ,Hotriculture	Supply and stacking of plant Ficus reginold well branched, bushy of height 60-75 cm. inearthen pots of size 25 cm. Hymenocallis littoralis/Spider Lily	200	Each	100	90.00	₹ 18,000.00

r	T.	-	-	1		Ī	
20.41	,Hotriculture	Providing and displaying of Sanchezia nobilis plant, having ht. 30 cm & above, well developed with fresh & healthy foliage in 20 cm size of Earthen pot / Plastic pot & as per direction of the officer-incharge.	300	Each	35.9	32.31	₹ 9,693.00
20.42	,Hotriculture	3.81 Providing and displaying of Syngonium Variegated plant, mounted on moss stick 90 cm ht., 3 to 4 plants placed in each pot at equal distance, well developed with full of fresh & healthy leaves from bottom to top in 25 cm size of Earthen pot / Plastic pot & as per direction of the officer-in-charge.	300	Each	184.5	166.05	₹ 49,815.00
20.43		Providing and Displaying Bamboo Buddha Valley with fresh & healthy 5 to 6 suckers 1.80 m to 2.10m ht umbrella type plant well developed in 50 cm Cement Pot as per direction of the officer-in-charge.	35	Each	1435.0	1291.50	₹ 45,202.50
20.44		Providing and Displaying of Clerodendron inerme plant of ht. 30 cm to 40 cm multi branched in 25 cm size of Earthen Pot / Plastic Pot & as per direction of the officer-in-charge. Clerodendron splendens	30	Each	21	18.45	₹ 553.50
20.45		Providing and Displaying of Wadelia trilobata plant,full of leaves in 15 cm size of Poly bags & as per direction of the officer-in-charge.Wedelia trilobata	400	Each	15	13.86	₹ 5,544.00
20.46			26	Each	25	22.50	₹ 585.00
20.47	DSR 2016 ,Hotriculture 10.1.25 / P- 395	PETUNIA (area=300m2, plantation @150mmc/c. No of plant 50 , in 1m2 area; total plant =15000no,)	6000	Each	6	5.40	₹ 32,400.00
20.48	,Hotriculture	Marigold French Hybrid dwarf (Marigold)Marigold inca hybrid(area=500m2;@300mmc/c,no of plant in 1 m2 =16no;total plants=8000	5000	Each	4	3.60	₹ 18,000.00
20.49	DSR 2016 ,Hotriculture	Providing Plant Sunflower single well developed 8 to 10 half bloom buds multi branched in fresh & healthy full stacked with green painted bamboo stick stacking in 25 cm Earthen Pot/Plastic Pot.(area=250m2,@900mmc/c;in 1m2 no of plant =2no,;total plant 500	500	Each	60	54.00	₹ 27,000.00

20.50	,Hotriculture	Providing Plant Standard Rose (H.T. variety) 3 to 4 healthy branch 90 cm and above ht. well developed with one and above flowers in 25 cm Earthen Pot ,Rose(area for rose 400m2 plantation @300mmc/c;16 plant in 1m2;total plant 64000	3000	Each	140	126.00	₹ 3,78,000.00
		GROUND COVER/SPACING					
20.51	,Hotriculture 6.11/P-335	Providing and Displaying of Dianella variegated plant, with 3 to 4 variegated leaves in 20 cmsize of Earthen Pot / Plastic Pot & as per direction of the officer-in-charge. /(150mm c/c)for the area 326m2	2000	Each	31	27.68	₹ 55,350.00
20.52	,Hotriculture 6.16/P-337	Providing and Displaying of Iresine herbstii plant, of height 20-30 cm. full of branches well developed in 15 cm size of Earthen Pot / Plastic Pot & as per direction of the officer-in-charge.Iresine herbstii/(150mm c/c) for the area 207m2	2000	Each	15	13.86	₹ 27,720.00
20.53	DSR ,Hotriculture 10.1.11/P- 392 (G4)	Cineraria dwarf hybrid; for the area of 812 m2 ,per meter square no of plants are 45 ;hence no of plant=812x45=36540	5000	Each	7	6.30	₹ 31,500.00
20.54	,Hotriculture 10.1.31/P- 396 (G4)	Verbena hybrid verbena/(150mm c/c)for the area 592m2 in one m2 plant covered by 45 plants in 1m2	3000	Each	4	3.60	₹ 10,800.00
20.55	,Hotriculture 6.8/P-335	Providing and Displaying of of Chlorophytum (Green) plant, full of leafy suckers in 20 cm size of Earthen Pot / Plastic Pot & as per direction of the officer-in-charge.eranthemum red/(150mm c/c)for area 375m2	7000	Each	21	18.45	₹ 1,29,150.00
20.56	,Hotriculture	Providing and Displaying of of Chlorophytum- variegated plant, full of leafy suckers in 15 cm size of Earthen Pot / Plastic Pot & as per direction of the officer-in-charge.eranthemum green/(150mm c/c)for the area 375m2,25no in 1m2	3000	Each	21	18.45	₹ 55,350.00
20.57	,Hotriculture	Providing and Displaying of Ophiopogon plant, Green/Black full of leaves in 20 cm size of Earthen Pot / Plastic Pot Ophiopogon planiscapus/(300mm c/c)for area 745m2 25no in 1m2	2000	Each	21	18.45	₹ 36,900.00
20.58	,Hotriculture	Providing and Displaying of Asparagus sprengeri plant of height 30 cm to 45 cm, full of leafy branches in 20 cm size of Earthen Pot / Plastic Pot & as per direction of the officer-in-charge asparagus sprengeri/(200 mm c/c)for the area of 1100m2, 25no in 1m2	2500	Each	21	18.45	₹ 46,125.00

							-
20.59	6.31/P-159	Providing and Displaying of Zebrina Trades cantia plant having in 20 cm size of Earthen Pot / Plastic Pot & as per direction of the officer-in-charge.	2500	Each	20.5	18.45	₹ 46,125.00
	(G16)						
		TOTAL FOR LANDSCAPE DEVELOPMENT					8352590.18
21		RETAINING WALL					
21.1		EXCAVATION					
	Vol II	(Hydraulic excavator) / manual means over areas					
1	2.6	(exceeding 30cm in depth. 1.5m in width as well as					
	Pg No 15 Vol II	10 sqm on plan) including disposal of excavated					
	2.6.1	All kinds of soil				114.30	₹ 1,02,870.00
	2.0.1 Pg No 15	All killus of soil	900.00	CUM	127.00	114.50	1,02,870.00
	FR NO 13		300.00	COIVI	127.00		
	Vol II	Filling by available excavated earth (excluding rock)					
2	2.25	in trenches, plinth, sides of foundations etc. in layers					
-	Pg No 19	not exceeding 20cm in depth, consolidating each					
	1611013	not exceeding zoom in depth, consonating each	750.00	CUM	59.00	53.10	₹ 39,825.00
21.2		REINFORCED CEMENT CONCRETE	750.00	COIVI	33.00	33.10	(33,023.00
21.2		REINI ORCED CEMENT CONCRETE					
	Vol II	Providing and laying in position machine batched,					
	5.31	machine mixed and machine vibrated design mix					
	Pg No 51	cement concrete of specified grade for reinforced					
		Retaining wall					
		Base	72.00			i	
		Trapezium Portion 1st (upto plinth level)	240.00			i	
		Trapezium Portion 2nd (Above Plinth level)	180.00				
		, ,	492.00	CUM	5245.00	4720.50	₹ 23,22,486.00
21.3		REINFORCEMENT					
	Vol II	straightening, cutting, bending, placing in position					
	5.20	and binding including cost of binding wire upto floor					
	Pg No 49	two level including all astage etc. complete.					
	Vol II	<u> </u>					
	5.20.6	Thermo-Mechanically Treated bars @ 200 Kg per				54.00	₹ 66,42,000.00
	Pg No 49	Cum	123000.00	KG	60.00		
21.4		CENTERING AND SHUTTERING					
	Vol II						
	20.1	Centering and shuttering including strutting,					
	Pg No 209 Vol II	propping etc.and removal of form for :					
	20.1.1	Foundations, footings, bases of columns, etc. For					
	Pg No 209	mass concrete.					
		Base	120.00				
		Trapezium Portion 1st (upto plinth level)	1500.00				
		The second secon	1620.00	SQM	138.00	124.20	₹ 2,01,204.00
	Vol II	Walla (any Abialmac-Viraly disa at 1 1 1 1 1	2020.00		230.00	0	_,,
	20.1.2	Walls (any thickness) including attached pilasters,					
	Pg No 209	butteresses, plinth and string courses etc					
		Trapezium Portion 2nd (Above Plinth level)	1200.00	SQM	216.00	194.40	₹ 2,33,280.00

24.5		DIACTED						
21.5		PLASTER						
	13.3	half brick wall of						
	13.3.3	1:6(1 cement: 5 fine sand)						
		Both sides of Retaining Wall	1500.00	Sq. m	137.00	123.30	₹ 1,84,950.0	
21.6		PUTTY						
		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.						
	13.26	SAME QTY AS TOTAL PLASTER QTY	1500.00	Sq. m	64.00	57.60	₹ 86,400.0	
21.7		PAINTING						
	13.47	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade						
	13.47.1	Finishing walls with Deluxe Multi surface paint system for interiors and exteriors using Primer as per manufacturers specifications:						
		Two or more coats applied @ 1.25 ltr/10 sqm. over and including one coat of Special primer applied @ 0.75 ltr/10 sqm.	1500.00	Sq. m	75.00	67.50	₹ 1,01,250.0	
		TOTAL FOR RETAINING WALL					9914265.0	
							552 125015	
22		LIGHTING & ELECTRICAL WORKS						
		25% of total Civil works cost					2649932.5	
22		MISCELLANEOUS						
23		Street/Site Furniture 25% Of total Civil Works					2649932.50	
		cost					2049932.30	
		TOTAL COST (BUILDING, ROAD, LANDSCAPE, RETAINING WALL)					39965401.73	
							Say 4 Crores	
Note:	The Maintenance of overall green belt including pruning of trees, cutting hedges and shrubs, filling gaps, changing of unhealthy plants, maintenance of lawns etc for 3 months from the date of final bill issued is included in the total bid cost.							

** All Items Rates has been redused by 10% as per order issued by directorate Urban administration and development, Bhopal M.P. dated 24.11.2017