

## ANNEXURE –“B” (Bill of Quantities - BOQ)

- I. Annexure – “Ba” Gulab Bagh Park
- II. Annexure – “Bb” Ravindrapuri Park
- III. Annexure – “Bc” Shastri Park
- IV. Annexure – “Bd” Macchodari Park

## I. Annexure – “Ba” Gulab Bagh Park

### Abstract of Cost

#### Approximate cost of Gulab Bagh Park, Varanasi (Area 1993.91 sqm)

S.No.	Description	Amount
1	Civil Works	3455695.55
2	Electrical Works	303250.00
3	Open Drain	1105000.00
4	Horticulture & Supply of Plants Works	473225.00
5	Miscellaneous Works	276500.00
6	Maintenance Cost	1560657.00
	<b>Total Amount</b>	<b>7174327.55</b>

### Project: Approximate cost of Gulab Bagh Park, Varanasi

Sl. No.	PWD SOR / DSR No.	Description	Unit	Qty.	Rate	Amount
<b>1</b>		<b>DISMANTLING AND DEMOLISHING WORK</b>				
i	DSR 15.7	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 meters lead as per direction of Engineer-in-charge.				
a	DSR 15.7.4	In Cement Mortar	Cum	47.00	843	39621.00
ii	DSR 15.3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 meters lead as per direction of Engineer - in- charge.	Cum	10.00	1455	14550.00
iii	DSR 15.5	Extra for cutting reinforcement bars manually/ by mechanical means in R.C.C. or R.B. work (Payment shall be made on the cross sectional area of R.C.C. or R.B. work) as per direction of Engineer-in-charge.	Sqm	20.00	500	10000.00
iv	DSR 15.6	Extra for scrapping, cleaning and straightening reinforcement from R.C.C. or R.B. work.	kg	996.00	4	3984.00
v	DSR 15.2	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 meters lead as per direction of Engineer - in - charge.				
	DSR 15.2.2	Nominal concrete 1:4:8 or leaner mix (i/c equivalent design mix)	Cum	10.00	616	6160.00
vi	DSR 16.83	Taking out existing CC interlocking paver blocks from footpath/ central verge, including removal of rubbish etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 meter lead as per direction of Engineer-in-Charge.	Sqm	71.00	54	3834.00
vii	DSR 1.1.18	Disposal of moorum/building rubbish/ malba/ similar unserviceable, dismantled or waste material by mechanical transport including loading, transporting, unloading to approved municipal dumping ground for lead upto 10 km for all lifts, complete as per directions of Engineer-in-charge.	Cum	138.00	210	28980.00
		<b>Sub Total</b>				<b>107129.00</b>
<b>2</b>		<b>EARTH WORK</b>				
i	DSR 2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.				
a	DSR 2.6.1	All Kinds of Soil	Cum	199.00	126	25064.05
ii	DSR 2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	Cum	91.00	126	11443.25

iii	DSR 2.27	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	Cum	13.00	918	11930.75
		Carriage of Material				
iv	231 (a)	Cartage of ballast, kankar, coal, Grit or Sand et. Including loading and unloading but excluding stacking on pucca roads.				
a		Earth (1 KM)	Cum	108.00	86	9234.00
		<b>Sub Total</b>				<b>57672.00</b>
<b>3 (A)</b>		<b>CEMENT CONCRETE WORK</b>				
i	281	Concrete with 4cm. gauge approved stone ballast, approved coarse sand and Cement in the proportion of 8:4:1 including supply of all materials labor and tools and plants etc. required for proper completion for the work.	Cum	113.00	4680	528840.00
<b>3 (B)</b>		<b>REINFORCEMENT CEMENT CONCRETE</b>				
i	283	R.C.C. work with cement approved coarse sand and 2 cm Gauge approved stone ballast in the proportion of 1:2:4 in lintels of doors and windows, excluding its fixing and binding the same with 24B.W.G.G.I binding wire and including necessary centering and shuttering etc. and also including S/o all materials required for proper completion of the work. Binding wire to be supplied by the contractor free of cost.	Cum		6950	
ii	284	As in Item No. 283 above but for slabs. 1:2:4	Cum		7510	
iii	b.	As in Item No. 284 above but with 1:1.5:3	Cum	1.00	8150	8150.00
iv	285	As in Item No. 283 above but in the lighter beam i.e. having spans up to 6m 1:2:4.	Cum		7700	
v	b.	As in Item No. 285 above but with 1:1.5:3	Cum	5.00	8350	41750.00
vi	287	As in Item No. 283 above but in RCC Raft foundation and footing with 4cm gauge approved stone ballast.1:2:4	Cum		6420	
vii	b.	As in Item No. 287 above but with 1:1.5:3	Cum	9.00	7030	63270.00
viii	288	As in Item No. 283 above but in RCC T Beam and slab roofs and RCC Columns in 1:2:4	Cum		7700	
ix	b.	As in item no. 288 above in RCC T- Beam slab and RCC columns but in 1:1.5:3.	Cum	6.00	8400	50400.00
x	DSR 5.22	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto All levels & Height				
a	DSR 5.22.6	Thermo-Mechanically Treated bars of grade Fe-500D or more	Kg	2165.00	57	122539.00
		<b>Sub Total</b>				<b>814949.00</b>
<b>4</b>		<b>Brick Work</b>				

i	303	M-150 brick work in 1:6 cement and sand of 1.25 fineness modulus mortar in foundation and plinth including supply of all material, labour and tools and plants. ect. required for proper completion of work.	Cum		4200	
ii	305	As in item 303 above but in 1:4 cement and sand of 1.25 fineness modulus mortar.	Cum	52.00	4370	227240.00
iii	309	As in item 302 to 307 above but in super structure including necessary cutting and moulding of bricks required and also including honey comb brick work, thickness of walls more than one brick and for extra labour to above items.	Cum		210	
iv	310	Same as item No. (309) above but for one brick wall add for extra labour.	Cum	9.00	4760	42840.00
v	(a)	As in item 309 above but walls of half brick t 1.5 mm (4-1/2") thick add for extra labour over item no. 310.	Cum	5.00	4855	24275.00
<b>Sub Total</b>						<b>294355.00</b>
<b>5</b>		<b>DAMP PROOF COURSE</b>				
i	360	2CM (3/4") thick damp proof course with cement and approved coarse sand 1:2 with and including water proofing material as ordered by the Engineer - in - charge in the proportion as specified by the manufacturers, including supply of all material, labour, T & P etc. required for proper completion of the work and including proper curing and shuttering as necessary.	Sqm	12.00	180	2160.00
ii	361	As in item (360) above but 2.5 cm (1") thick and of cement concrete consisting of 1 part cement 1-1/2 parts approved 13 mm. (1/2") graded stone grit and including water proofing materials as ordered by the Engineer - in -charge in the proportion as specified by the manufacture.	Sqm	12.00	250	3000.00
iii	NBC 5.7.1 (ii)	Painting on D. P. C. with two coats of air blown bitumen 85/50 or 85/25@ 1.7 Kg/Sqm. Aprox including cost of fuel if any.	Sqm	12.00	55	660.00
<b>5</b>		<b>ANTI-TERMITE TREATMENT</b>				
iv	NS	Providing and injecting chemical emulsion for Preconstructional antitermite treatment and creating a chemical barrier under and around the column pits. wall trenches. basement excavation top surface of plinth, filling junction of walls and floors, along, the external perimetre of building, expansion joints, surrounding of pipes and conduit etc. complete, plan area shall be measured. (Part II 1981) Aldrine emulsifiable concentrate or any other approved material such as chloropyriphos or Heptachlor or ehlordance will be used. The rate of application of chemical emulsion shall be as follows. (1) Treatment for Masonry & foundation 5 liters per Sq. M_ (2) Back fill in immediate contact with foundation 7.5 liters per Sq_ M. (3) Treatment of top surface of Plinth filling 5 litres per Sq. M. (4) Treatment of junctions of walls and the floors 7.5 litres per Sq. M. (5) treatment of soil along External perimeter of Building 7.50 litres per Sq. M. (6) Treatment of soil under Apron along external perimeter 5 liters per Sq. M.	Sqm	47.00	240	11280.00

		<b>Sub Total</b>				<b>17100.00</b>
<b>6</b>		<b>STEEL WORK</b>				
i	DSR 10.25	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel, plates etc. as required.				
a	DSR 10.25.2	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	kg	4478.00	86	384884.10
ii	DSR 10.26	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer.				
a	DSR 10.26.1	M.S.Tube	kg	1919.00	92	176548.00
iii	DSR 10.27	Providing and fixing carbon steel galvanized ( minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm <sup>2</sup> ), counter sunk head, comprising of 10 m dia polyamide PA 6 grade sleeve, including drilling of hole in frame , concrete/ masonry, etc. as per direction of Engineer-in-charge.				
a	DSR 10.27.4	10 x 140 mm	Each	32.00	103	3289.60
iv	NS	Supply, Fabrication, transportation, delivery at site and erection, installation and alignment of mild steel foundation Anchor bolt of approved size assembly in concrete along with nuts, lock nuts (as per IS:1363, 1364 and IS:3138), washers including welding, cutting, grinding, threading, drilling etc. all complete.	Kg	11.00	160	1760.00
		<b>Sub Total</b>				<b>566482.00</b>
<b>7</b>		<b>PLASTER WORK</b>				
i	DSR 13.11	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster 1:6 (1 cement : 6 fine sand).	Sqm	100.00	256	25555.00
ii	NS	Providing and fixing horizontal & vertical 24guage chicken mesh wire between junctions of column/beam, walls & conduit pipes wherever required, chicken wire mesh should be fixed with U nails 150 mm Centre to Centre before plastering the junction. The plastering of walls and beam/column in one vertical plane should be carried out in one go, including the payment of U nails, T&P etc. all complete under instruction of Engineer-in-charge.	Sqm	50.00	125	6250.00
iii	DSR 13.24	Extra for plastering done on moulding, cornices or architraves including neat finish to line and level:				
a	DSR 13.24.2	In two coats	Sqm	12.00	503	6038.40
		<b>Sub Total</b>				<b>37843.00</b>



<b>8</b>		<b>FLOORING WORKS</b>				
i	NS	Providing and laying 60mm thick factory made rubber molds cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required color and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge.	Sqm	561.00	616	345407.70
ii	DSR 11.53	Providing and fixing Glass mosaic tiles on finished plain wall surface of size 20 mm x 20 mm x 4 mm in all color, design , fixing in approved design. The glass mosaic tiles shall be fixed on the wall surface with the help of approved adhesive applied at the rate of 2.5 kg per sqm and grouting of the same. All completed as per direction of Engineer-in charge.	Sqm	362.00	1604	580557.50
iii	NS	Providing and laying C.C. pavement of mix M-25 with ready mixed concrete from batching plant. The ready mixed concrete shall be laid and finished with screed board vibrator , vacuum dewatering process and finally finished by floating, brooming with wire brush including panel shuttering etc. all complete as per specifications and directions of Engineer-in- charge. (Note:- Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/ recoverable separately).	Cum	32.00	6950	222400.00
iv	DSR 11.45	Providing and laying 500x500x40 mm thick Turf paver (Turf pave XD) on 150 mm thick sub grade of compacted bed of 20 mm thick nominal size stone aggregate and base course and filling with 150 mm thick jamuna sand, including spreading, well ramming, consolidating and finishing smooth etc. all complete as per direction of Engineer-in-charge.	Sqm	41.60	1113	46310.23
		<b>Sub Total</b>				<b>1194675.00</b>
<b>9</b>		<b>PAINTING WORKS</b>				#REF!
i	DSR 13.26	Providing and applying plaster of pfinaris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	Sqm	114.00	119	13531.80
ii	CPWD 13.47-1	Finishing walls with Premium Acrylic Smooth exterior paint with Silicon additives 1 of required shade New work (Two or more coats applied @ 1.43 Ltr/10sqm over and including base coat of water proofing cement paint applied @ 2.20 kg/ 10 sqm).	Sqm	114.00	225	25650.00
iii	641	Painting or varnishing new iron work in small areas or new wood with one coat (up to one sq. meter) of ready mixed priming paint and one coat of approved superior quality ready mix paint (2nd quality synthetic enamel paint of approved brand such as British paint, Shalimar, Asian or equivalent as approved by E/I) or • Varnish including supply of all materials, labour, T & P etc. required for proper completion of the work. Paint to be used should confirm the I. S. I. No. 103-1950.	Sqm	201.00	65	13065.00
iv	642	As in item (641) above but for every coat after first coat.	Sqm	201.00	29	5829.00
		<b>Sub Total</b>				<b>58076.00</b>
<b>10</b>		<b>REPAIR OF OLD WORK (EXISTING STRUCTURE)</b>				



i	800	Repair to plaster or painting in patches including removal of old plaster, raking out joints to 1 cm. Depth. Watering the area and then replastering or repainting of surface as the existing surface including supply of all materials, labour and tools and plants etc. required for the proper completion of the work Add to the respective item in chapter 13 for plaster and painting.	Sqm	1001.00	31	30530.50
ii	DSR 14.43	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	Sqm	2637.00	8	22018.95
iii	DSR 14.67	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade.				
iv	DSR 14.67.2	Old work (one or more coats applied @ 0.83 ltr/10 sqm).	Sqm	2637.00	47	124598.25
v	662	Finishing walls with one coat of water proof cement paint of approved quality on previously old treated surface with this paint to give an even shade including supply of all materials labour and tools and plants etc, required for proper completion of the work.	Sqm	1304.00	31	40424.00
vi	641	Painting or varnishing new iron work in small areas or new wood with one coat (up to one sq. meter) of ready mixed priming paint and one coat of approved superior quality ready mix paint (2nd quality synthetic enamel paint of approved brand such as British paint, Shalimar, Asian or equivalent as approved by E/I) or • Varnish including supply of all materials, labour, T & P etc. required for proper completion of the work. Paint to be used should confirm the I. S. I. No. 103-1950.	Sqm		65	
vii	642	As in item (641) above but for every coat.	Sqm		29	
viii	643	As in item (642) above but for every coat on previously painted old wood or iron work including its sand papering: rubbing and cleaning as required for proper completion of work.	Sqm	151.00	40	6040.00
ix	NS	Distemping with 1st quality acrylic distemper (ready mixed) of approved manufacturer, of required shade and color complete, as per manufacturer's specification.				
a	NS	Two or more coats on old work	Sqm	239.00	53	12702.85
x	NS	Graffiti painting on over head tank columns with approved paint, color and design etc. all complete as shown in drawing under instruction of Engineer-in-charge.	Sqm	237.00	300	71100.00
		<b>Sub Total</b>				<b>307414.55</b>
		<b>Grand Total</b>				<b>3455695.55</b>

### EXTERNAL LIGHTING

SUB WORK NO. III External Lighting						
S.No	DESCRIPTION	QTY	UNIT	RATE	AMOUNT	

SUPPLY,INSTALLATION OF FEEDER PILLAR / PANELS					
1	Design, manufacture, supply, installation, testing and commissioning of outdoor type external lighting feeder pillar of suitable size not less than 30 cm and upto 45 cm deep made out of M.S. sheet 2mm thick (14 SWG) duly compartmentalized, double door with locking arrangement (IP-54), duly fixed on MS angle iron frame work of size 50mm x 50mm x 6mm, 90 cm long legs out of which 45 cm duly grouted in cement concrete 1:2:4 (1 cement : 2 sand :4 stone aggrete 20mm) and having following accessories mounted inside the cubical panel i/c connection, inter connection with aluminium thimbles, earthling with two nos. earth studs duly painted with one coat of red oxide & two coats of superior quality enamel paint of approved shade complete etc. as reqd.				
	Supplying,Installing & fixing of following accessories in the existing cubical panel board / feeder pillar including connection testing etc. as reqd.				
	Power contactor 1 sets of single pole of suitable ratings				
	Astronomical Timer, Reference 04767 - Legrand make or equivalent from GE / Siemens / L&T				
	The above board shall be complete with 1 no. phase indicating lights, flush mounted Ammeter, Voltmeter, selector switches, protective fuses etc. at Incomer with all interconnections by min. 2.5 sq.mm. Copper wires.				
	Danger notice plate				
i	External Lighting Feeder Pillar :-				
	INCOMER : 40 AMP DP MCB (10 KA)				
	BUS BAR : 100 AMP, 500 Volts, 1 phase 50 HZ 2P high conductivity electrolytic Aluminium bus bar. The current density of bus bar shall be minimum 1.00 sq mm /amp.				
	The Maximum allowable temperature for the Bus bar to be restricted to 85 deg C. The temperature rise should be restricted to 35 deg C above ambient temperature.				
	OUT GOINGS : 4 nos. 6-32 AMP DP MCB (10 KA)	1	SET	50,000.00	50,000.00
<b>2</b>	<b>CABLES</b>				
	Supply & Laying of ISI marked aluminium conductor XLPE insulated cable as per IS 7098, armoured, served, sheathed 1100 volts grade.				
<b>b</b>	4 sqmm 2 core	70	RM	105.00	7,350.00
<b>3</b>	<b>Mini Mast Light</b>				
	Supply,Installation, testing and commissioning of Octagonal Poles of 6 M height High mast Light with 4 nos 45 watt LED luminaire with Erection, Testing& Commissioning	1	SET	90,000.00	90,000.00
<b>4</b>	<b>Solar Light</b>				

	Supply, Installation, Testing & Commissioning of Solar PV stand with Street 20W LED Lighting System comprising of one 75 Wp SPV module, one 12 V, 75 Ah Tubular Plate sealed maintenance free VRLA Gel Battery, one White LED luminary of 20W with in-built inverter, Charger, dusk to dawn circuit for automatic switching on & off at dusk to dawn, automatic dimming circuit (automatic/optional) based on real time clock for full bright operation during first six hours and half bright operation for rest hours, 4.5M pole, one charge-regulator, module mounting structure, Pole mounted Battery box, cables and other fittings along with 5 (five) years guarantee / warranty period (25 years for SPV Module).	3	Nos	45,000.00	135,000.00
<b>5</b>	<b>G.I. EARTHING</b>				
i	Supply & burrying of 600mm x 600mm x 6.0mm G.I. plate, vertically for earthing with its top at least 3 meters below ground level complete with 20 mm G.I. pipe for watering funnel, 300 mm square C.I. frame with hinged cover, masonry housing, alternate layers of coke and salt at least 150 mm thick alround including excavation and back filling etc. complete in all respects. (for Feeder Pillar)	2	Nos.	5,500.00	11,000.00
ii	Providing & fixing 25mm x 3mm G.I. strip on surface, in recess or in ground including connections etc. as required	14	RM	110.00	1,540.00
iii	Supply & burrying of 20 mm dia x 3 m long G.I. pipe (C class) vertically for earthing having 12 mm dia holes spaced 75 mm apart drilled upto 2 meter from the bottom complete with one earthing lead of no. 6 to 8 SWG G.I.wire in 15 mm dia. GI pipe upto switch board (from apron to switch) mm dia. GI pipe upto switch board (from apron to switch board the cost of GI pipe & GI wire will be extra), 300 mm square C.I. box with hinged cover, masonry housing alternate layer of charcoal/coke and salt atleast 150mm thick alround etc. as per the direction of engineer in-charge complete in all respect (for Pole Earthing)	2	Nos.	4,000.00	8,000.00
iv	Providing and laying 6 SWG dia G.I. wire on surface, in recess or in ground including connections for earthing as required.	12	RM	30.00	360.00
			TOTAL		303250.00

### PLUMBING

Open Drain						
Sl. No.	Description	UNIT	Qty		Rate	Amount in Rs.
1	Constructing open surface drain in Brick work including trenches including cost of excavation, bed concrete, cost of perforated covers etc. complete.					
a)	300 mm Width	RM	170	@	2500.00	Rs425,000.00
b)	400 mm Width	RM	100	@	2500.00	Rs250,000.00
2	Provision for carriage of material & other foreseen item etc., L.S.					Rs130,000.00
3	Provision for rain water harvesting arrangements	NO	1	@	300000	Rs300,000.00
4	Submersible and piping for irrigation	NO	1	@	300000	Rs300,000.00
	<b>TOTAL</b>					Rs1,105,000.00

### Horticulture works

#### Approximate cost of Gulab Bagh Park, Varanasi

#### Bill of Quantity for Horticulture works

#### 1 SOFT SCAPE WORKS

A	PLANTATION	UNITS	QUANTITY	RATE	AMOUNT
<b>A.1</b>	<b>EARTHWORK</b>				
1.1	Clearance and disposal of all debris on site after the construction, with all leads and lifts, removal of all weeds and other growth with roots by forking, breaking clods, rough dressing and proper leveling.	Sq.m.	725	15.00	10,875.00
1.2	Supplying and stacking of good earth at site including royalty and carriage for all leads. (earth measured in stacks will be reduced by 20% for payment).	cum.	150	300.00	45,000.00
1.3	Supplying and stacking of manure on site including royalty and carriage for all leads. (Manure measured in stacks will be reduced by 8% for payment).	cum.	75	600.00	45,000.00
1.4	Supplying and stacking of fertilizers at site including royalty and carriage	kg.		AS/RATE	2,000.00
1.5	Supplying and stacking of Insecticides, Pesticides and Weedicides at site including royalty and carriage. DURSBAN or equivalent 1 to 2lts/200lts of water and sprayed. As follows	lts.		LUMP SUM	5,000.00
1.6	Supply and stacking at site soil ammendment additives to imprve soil quality at site based on soil test report	As/rate		AS/RATE	5,000.00
	TOTAL				112,875
<b>A.2</b>	<b>TREES</b>				

2.1	The rate of the following items include for supply of plants as specified, transportation to site,excavation of pits and plantation as follows:				
2.1.1	Preparation of pits for trees by excavating 1.0 m x 1.0 m x 1.0 m deep, refilling the excavated earth after breaking clods and mixing with manure in the ratio 3:1 flooding with water, filling with earth if necessary, watering, fine dressing, leveling, supply and transportation and mixing of soil improvement, nutrients (including manure, fertilizers as required, and inside coat of DURSBN or equivalent in all pits). Planting and staking in full at the specified location, including replacement of unhealthy and dead plants in the maintenance period. Stacking and disposal of material declared unserviceable and surplus including all leads and lifts (Cost of manure and extra earth to be paid separately) and mandatory maintenance for specified period. The pits should be large enough to accommodate rootball 1/3 root depth on all sides. Maintenance of lawn for 12 months.	Nos.	29	800.00	23,200.00
	<b>TOTAL</b>				<b>23,200</b>
<b>A.3</b>	<b>SHRUBS &amp; CLIMBERS</b>				
3.1	The rate of the following items include for supply of plants as specified, transportation to site, excavation of pits and plantation as follows:				
3.1.1	Preparation of pits for Shrubs and Climbers by excavation (the required depths for the operation are given as follows) refilling the excavated earth after breaking clods and mixing with manure in the ratio 3:1. flooding with water, filling with earth if necessary, watering, fine dressing, leveling. Finally planting the specified shrub and staking in full in the pit. Maintaining the plants for 12 months,including replacement of unhealthy and dead plants in the maintenance period. Subsequently, stacking and disposal of material declared unserviceable and surplus including all leads and lifts (Cost of manure and extra earth to be paid separately).				
	Shrubs	Nos	11	250.00	2,750.00
	0.6mX 0.6mX 0.6m deep				
	<b>TOTAL</b>				<b>2,750</b>
<b>A.4</b>	<b>GROUND COVERS</b>				
4.1	Preparation of planting beds for ground covers by excavating to a depth of 0.30m, removing all foreign bodies over 50 mm dia refilling with the mix of earth and manure in the ratio 3:1 flooding with water, filling with earth if necessary, watering, dressing, leveling and finally planting the specified ground covers. Stacking and disposal of material declared unserviceable and surplus including all leads and lifts (Cost of manure and extra earth to be paid separately) all inclusive of the mandatory maintenance of 12 months.	Sq.m.	160	150.00	24,000.00
	<b>TOTAL</b>				<b>24,000</b>
<b>A.5</b>	<b>MAINTAINED LAWN</b>				

5.1	<b>Ground Preparation for grassing.</b>				
5.1.1	Excavating to a depth of 0.30m removing all foreign bodies over 50 mm dia, refilling with the mix of earth and manure in ratio 3:1, grade surface to finish levels, as indicated on grading plans. All finished areas shall slope to drain. Where no grades are shown, the areas shall have a smooth and continual grade between existing or fixed controls (such as walks, curbs, catch basins, elevations at steps or building) and levels shown on plans. Roll, scarify, rake and level as necessary to obtain true, even grassing surfaces. All finish grades shall meet approval of the Project Engineer before grassing is done.				
5.1.2	Grassing with turfing of specified grass including watering and maintenance of the lawn till the grass forms a thick carpet free of weeds and fit for mowing including mandatory maintenance of lawn for 12 months.	Sq.m.	430	150.00	64,500.00
	<b>TOTAL</b>				<b>64,500</b>
				<b>NET TOTAL</b>	<b>227,325</b>

### SUPPLY OF PLANTS

#### SUPPLY OF PLANTS : SCHEDULE OF QUANTITIES GULAB BAGH PARK

			Specifications						
The rate of the following items include for supply of plants (caliper measured 900mm above root bulb) as specified, transportation to site as follows:									
S.No.	Code	Botanical name	Height	Caliper	Spread	Unit	Qty	Rate	Amount
<b>TREES</b>									
1.0	DR	DELONIX REGIA	2.0M	50MM	1.2M	no.	3	1200	3600
2.0	PA	PLUMERIA ALBA	2.0M	50MM	1.2M	no.	6	1500	9000
3.0	CF	CASSIA FISTULA	2.0M	35MM	1.2M	no.	2	1200	2400
4.0	BB	BAHUNA BLAKEANA	2.0M	45MM	1.2M	no.	3	1800	5400
5.0	PL	POLYALTHIA LONGIFOLIA	2.0M	25MM	2.0M	no.	15	1500	22500
		<b>TOTAL</b>					<b>11</b>		<b>42,900</b>
<b>SHRUB &amp; CREEPER</b>									
1.0	JS	JASMINUM SAMBAC	0.6M	15MM	1.2M	no.	6	750	4500
2.0	TMC	TABERNAEMONTANA	1.2M	25MM	1.0M	no.	5	750	3750
		<b>TOTAL</b>					<b>18</b>		<b>8,250</b>
<b>Hedge</b>									
2.0	HP	HAEMELIA PATENS	0.15M	0.15M	50 per sqm	sqm.	12	450	5400
3.0	D	DURANTA	0.30M	0.15M	50 per sqm	sqm.	56	450	25200



4.0	CL	CLERODENDRUM INERME	0.15M	0.15M	50 per sqm	sqm.	10	450	4500
3.0	Ro	ROSA	0.9M	10MM	0.3M	sqm.	220	2000	440000
		<b>TOTAL</b>					<b>298</b>		<b>35,100</b>
		<b>GROUND COVERS</b>	<b>Height</b>	<b>Spread</b>	<b>per sqm</b>	<b>Unit</b>	<b>Qty in Sqm</b>	<b>Rate</b>	
1.0	WD	WEDELIA TRILOBATA	0.15	0.15M	50 per sqm	sqm.	115	450	51750
2.0	OP	OPHIOPHOGAN	0.15M	0.15M	50 per sqm	sqm.	12	450	5400
3.0	CI	CANNA INDICA	0.15M	0.15M	50 per sqm	sqm.	33	500	16500
		<b>TOTAL</b>							<b>73,650</b>
		<b>GRASS</b>			<b>Effect</b>				
1.0		SELECTION NO.1 (CARPET GRASS) LAWN			CARPET EFFECT	sqm.	430	200	86000
		<b>TOTAL</b>							<b>86,000</b>
		<b>NET TOTAL</b>							<b>245,900</b>

#### Miscellaneous works

Approximate cost of Gulab Bagh Park, Varanasi						
Bill of Quantity for Miscellaneous works						
S.No	Item of Work	Unit	Qty.	Rate	Amount	
1	Providing and fixing in Position of stone benches as approved design under instruction of Engineer-in-Charge.	Each	14.00	5000.00	70000.00	
2	Supply and fixing in position of Stainless Steel Dust-bin including all material required for fixing etc, all complete under instruction of Engineer in Charge.	Each	5.00	8500.00	42500.00	
3	Providing and fixing stainless steel grade - 304 2mm thick engraved signage board for information all complete under instruction of Engineer in Charge. (For Caution Marks)	Sqm	10.00	7000.00	70000.00	
4	Providing and fixing of LED singages for information all complete under instruction of Engineer-in-Charge. (For information)	Sqm	8.00	7500.00	60000.00	



5	Providing, Supplying & fixing Single sided Sign board of size 1320mm x 2540mm ( 50mm dia SS pipe of S 304 - grade 1 6mm . thick ). with inner frame of 1220mm x 2440mm (of 19mm x 24mm rectangle, 1.2mm Thick SS pipe of S-304 Grade ) along with diagonal support also of 19mm x 24mm rectangle, 1.2mm Thick SS pipe of S-304 Grade, with sign substrate of size 1220mm x 2440mm, of 4mm ACP with face fully covered by RETRO REFLECTIVE MICRO PRISMATIC Type IV Sheeting, and messages and symbols accordingly, fixed to inner frame of 1220mm x 2440mm of ( 19mm x 24mm rectangle, 1.2mm Thick SS pipe of S-304 Grade ) with the help of Very High Bond tape of 24mm wide and 2.3mm thick. .The board shall have a one leg support of 168mm dia 3 mm thick SS pipe of S-304 grade of height 4040mm with base plate of 10mm thick SS plate of size 600mm x 600mm with 4 Nos. stiffeners of 10mm SS plate of S- 304 grade. The boards shall be fixed on a foundation size of 1500mm x 900mm x 900mm with CC 1: 2: 4 laid with the help of shuttering and 12 Nos. of foundation bolts of 20mm dia SS, S-304 grade of 600mm length Complete. All relevant specs confirming to detail drawing enclosed. (For Gate )	Each	2.00	5000.00	10000.00
6	Providing and fixing tensile canopy of 2x3mtr. Size including ms work, finishing & painting all complete as per architecture drawing under instruction of Engineer in charge.	Each	3.00	8000.00	24000.00
					<b>276500.00</b>

**Total Cost of Miscellaneous Works =**

276500.00

**Maintenance cost for Approximate cost of Gulab Bagh Park, Varanasi for 5 Years**

Sl. No.	Description / Item	Amount (Rs.)	Remarks
1	Organic Manure & Inorganic Fertilizer	2500.00	
2	Tools & Equipments	1500.00	
3	Labour Cost (Watering, Weeding, Shrubs, Hedge Plants, Flowers & Trees)	13000.00	
	One Mali		
	Maintenance Cost for One Year	204000.00	
	Maintenance Cost for Second Year	206550.00	1.25% Extra for Escalation
	Maintenance Cost for Third Year	207060.00	1.5% Extra for Escalation
	Maintenance Cost for Forth Year	207570.00	1.75% Extra for Escalation
	Maintenance Cost for Fifth Year	210630.00	2% Extra for Escalation
4	Civil Work Maintenance Cost for 5 Years (Small construction If required)	172784.78	1% of Civil Works
5	E & M Maintenance Cost for 5 Years		
i	Electrical Maintenance (Labour, T&P& Material)	75812.50	5% of Electrical Works
ii	Machanical Maintenance (T&P, Labour & Matrial )	276250.00	5 % Machanical Works
	<b>Total cost for 5 Years</b>	<b>1560657.00</b>	

**Total Maintenance Cost**

**1560657.00**

<b>Abstract of Cost</b>		
<b>Approximate cost of Gulab Bagh Park, Varanasi (OUTER SIDE LANDSCAPE)</b>		
<b>S.No</b>	<b>Discription</b>	<b>Amount</b>
1	Civil Works	684329.00
2	Horticulture & Supply of Plants Works	55698.40
	<b>Total Amount</b>	<b>740027.40</b>

**Project: Approximate cost of Gulab Bagh Park, Varanasi (OUTER SIDE LANDSCAPE)**

Sl. No.	PWD SOR / DSR No.	Description	Unit	Qty.	Rate	Amount
<b>1</b>		<b>EARTH WORK</b>				
i	2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.				
a	2.6.1	All Kinds of Soil	Cum	5.00	126.00	630.00
ii	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	Cum	99.45	126.00	12530.53
iii	2.27	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	Cum	10.00	918.00	9180.00
		Carriage of Material				
iv	231 (a)	Cartage of ballast, kankar, coal, Grit or Sand et. Including loading and unloading but excluding stacking on pucca roads.				
a		Earth (1 KM)	Cum	94.45	86.00	8122.58
		<b>Sub Total</b>				<b>30463.00</b>
<b>2</b>		<b>CEMENT CONCRETE WORK</b>				
i	281	Concrete with 4cm. gauge approved stone ballast, approved coarse sand and cement in the proportion of 8:4:1 including supply of all materials labour and tools and plants etc. required for proper completion for the work.	Cum	32.53	4680.00	152248.39
		<b>Sub Total</b>				<b>152248.00</b>
<b>3</b>		<b>ROAD WORK</b>				
i	16.69	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	Cum	14.92	5012.65	74781.59
ii	NS	Providing and Laying of Interlocking Concrete Block Pavements having thickness 60 mm including leveling and dressing of surface to required level and slope, spreading and Sqm moistening 30m thick local sand on bend, filling joints with local sand on bend, filling joints with local sand etc. for proper completion of the work as per drawings and Technical Specification Clause 1504.	Sqm	315.71	655.00	206790.05

iii	16.75	Providing and laying C.C. pavement of mix M-25 with ready mixed concrete from batching plant. The ready mixed concrete shall be laid and finished with screed board vibrator , vacuum dewatering process and finally finished by floating, brooming with wire brush etc. complete as per specifications and directions of Engineer-in- charge. (The panel shuttering work shall be paid for separately). (Note:- Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/ recoverable separately).	Cum	10.64	6912.50	73562.55
<b>Sub Total</b>						<b>355134.00</b>
<b>4</b>	<b>STEEL WORK</b>					
i	502	Mild steel or iron work of small sizes and sections such as holding down bolts, hold fast tie rods, gratings etc. (when not included in an overall rates) wrought to required form including supply of steel and its wastage including cost of bolts, nuts if required and welding, grinding and making holes as required for proper completion of work Fabrication of holes, Doors chaukhats and nosing.	kg	1432.03	64.00	91649.62
<b>Sub Total</b>						<b>91650.00</b>
<b>5</b>	<b>PAINTING WORKS</b>					
i	641	Painting or varnishing new iron work in small areas or new wood with one coat (up to one sq. meter) of ready mixed priming paint and one coat of approved superior quality ready mix paint (2"d quality synthetic enamel paint of approved brand such as British paint, Shalimar, Asian or equivalent as approved by E/I) or • Varnish including supply of all materials, labour, T & P etc. required for proper completion of the work. Paint to be used should confirm the I. S. I. No. 103-1950.	Sqm	200.36	65.00	13023.22
ii	642	As in item (641) above but for every coat after first coat.	Sqm	200.36	29.00	5810.36
<b>Sub Total</b>						<b>18834.00</b>
<b>6</b>	<b>MISCELLANEOUS ITEM</b>					
i	NS	Supply and fixing Dust-bin including painting finishing etc, all complete.	Each	12.00	3000.00	36000.00
<b>Sub Total</b>						<b>36000.00</b>
<b>Grand Total</b>						<b>684329.00</b>

**Approximate cost of Gulab Bagh Park, Varanasi(Outer Landscape)  
Bill of Quantity for Horticulture works**

**1 SOFTSCAPE WORKS**

<b>A</b>	<b>PLANTATION</b>	<b>UNITS</b>	<b>QUANTITY</b>	<b>RATE</b>	<b>AMOUNT</b>
<b>A.1</b>	<b>EARTHWORK</b>				
1.1	Clearance and disposal of all debris on site after the construction, with all leads and lifts, removal of all weeds and other growth with roots by forking, breaking clods, rough dressing and proper leveling.	Sq.m.	123.86	15.00	1,857.90
1.2	Supplying and stacking of good earth at site including royalty and carriage for all leads. (earth measured in stacks will be reduced by 20% for payment).	cum.	18.58	300.00	5,573.70
1.3	Supplying and stacking of manure on site including royalty and carriage for all leads. (Manure measured in stacks will be reduced by 8% for payment).	cum.	6.19	600.00	3,715.80
1.4	Supplying and stacking of fertilizers at site including royalty and carriage	kg.		AS/RATE	200.00
1.5	Supplying and stacking of Insecticides, Pesticides and Weedicides at site including royalty and carriage. DURSBAN or equivalent 1 to 2lts/200lts of water and sprayed. As follows	lts.		LUMP SUM	500.00
1.6	Supply and stacking at site soil ammendment additives to imprve soil quality at site based on soil test report	As/rate		AS/ RATE	500.00
	<b>TOTAL</b>				<b>12,347</b>
<b>5.1</b>	<b>Ground Preparation for grassing.</b>				
5.1.1	Excavating to a depth of 0.30m removing all foreign bodies over 50 mm dia, refilling with the mix of earth and manure in ratio 3:1, grade surface to finish levels, as indicated on grading plans. All finished areas shall slope to drain. Where no grades are shown, the areas shall have a smooth and continual grade between existing or fixed controls (such as walks, curbs, catch basins, elevations at steps or building) and levels shown on plans. Roll, scarify, rake and level as necessary to obtain true, even grassing surfaces. All finish grades shall meet approval of the Project Engineer before grassing is done.				
5.1.2	Grassing with turfing of specified grass including watering and maintenance of the lawn till the grass forms a thick carpet free of weeds and fit for mowing including mandatory maintenance of lawn for 12 months.	Sq.m.	123.86	150.00	18,579.00
	<b>TOTAL</b>				<b>18,579</b>
				<b>NET TOTAL</b>	<b>30,926</b>

**SUPPLY OF PLANTS : SCHEDULE OF QUANTITIES  
GULAB BAGH PARK (OUTER LANDSCAPE)**

			Specifications						
The rate of the following items include for supply of plants (caliper measured 900mm above root bulb) as specified, transportation to site as follows:									
S.No.	Code	Botanical name	Height	Caliper	Spread	Unit	Qty	Rate	Amount
<b>GRASS</b>					<b>Effect</b>				
1.0		SELECTION NO.1 (CARPET GRASS) LAWN			CARPET EFFECT	sqm.	123.86	200	24772
<b>TOTAL</b>									<b>24,772</b>
<b>NET TOTAL</b>									<b>24,772</b>



## II. Annexure – “Bb” Ravindrapuri Park

<b>Abstract of Cost</b>		
<b>Approximate cost Ravindrapuri Park, Varanasi, (1808.332 Sqm)</b>		
<b>S.No</b>	<b>Discription</b>	<b>Amount</b>
1	Civil Works	4199018.60
2	Electrical Works	788250.00
3	Open Drain, Septic Tank & Toilet Works	1205000.00
4	Horticulture Works	570000.00
5	Miscellaneous Works	1918520.00
6	Mintenance Cost for 5 Years	1718852.00
	<b>Total Amount</b>	<b>10399640.60</b>

**Project: Approximate cost Ravindrapuri Park, Varanasi, (1808.332 Sqm)**

Sl. No.	PWD SOR / DSR No.	Description	Unit	Qty.	Rate	Amount
<b>1</b>		<b>DISMANTLING AND DEMOLISHING WORK</b>				
i	DSR 15.7	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 meter lead as per direction of Engineer-in-charge.				
a	DSR 15.7.4	In Cement Mortar	Cum	43.00	842.75	36238.25
ii	DSR 15.3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 meter lead as per direction of Engineer - in- charge.	Cum	10.00	1454.55	14545.50
iii	DSR 15.5	Extra for cutting reinforcement bars manually/ by mechanical means in R.C.C. or R.B. work (Payment shall be made on the cross sectional area of R.C.C. or R.B. work) as per direction of Engineer-in-charge.	Sqm	18.00	500.80	9014.40
iv	DSR 15.6	Extra for scrapping, cleaning and straightening reinforcement from R.C.C. or R.B. work.	kg	956.00	3.90	3728.40
v	DSR 15.2	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 meter lead as per direction of Engineer - in - charge.				
a	DSR 15.2.2	Nominal concrete 1:4:8 or leaner mix (i/c equivalent design mix)	Cum	5.00	615.15	3075.75
vi	DSR 16.83	Taking out existing CC interlocking paver blocks from footpath/ central verge, including removal of rubbish etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 metre lead as per direction of Engineer-in-Charge.	Sqm	105.00	53.95	5664.75
vii	DSR 1.1.18	Disposal of moorum/building rubbish/ malba/ similar unserviceable, dismantled or waste material by mechanical transport including loading, transporting, unloading to approved municipal dumping ground for lead upto 10 km for all lifts, complete as per directions of Engineer-in-charge.	Cum	57.00	209.90	11964.30
		<b>Sub Total</b>				<b>84231.00</b>
<b>2</b>		<b>EARTH WORK</b>				
i	DSR 2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.				
a	DSR 2.6.1	All Kinds of Soil	Cum	355.00	125.95	44712.25

ii	DSR 2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	Cum	204.00	125.75	25653.00
iii	DSR 2.27	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	Cum	20.00	917.75	18355.00
		Carriage of Material				
iv	231 (a)	Cartage of ballast, kankar, coal, Grit or Sand et. Including loading and unloading but excluding stacking on pucca roads.				
a		Earth (1 KM)	Cum	150.00	85.50	12825.00
		<b>Sub Total</b>				<b>101545.00</b>
<b>3 (A)</b>		<b>CEMENT CONCRETE WORK</b>				
i	281	Concrete with 4cm. gauge approved stone ballast, approved coarse sand and cement in the proportion of 8:4:1 including supply of all materials labour and tools and plants etc. required for proper completion for the work.	Cum	88.00	4680.00	411840.00
ii	282	Cast cement concrete as in door sills, chaukhat, boundary post or similar precast unit with cement , approved coarse sand and 20mm guage approved stone ballast in the proportion of 1:2:4 (class -150) excluding supply of reinforcement and its bending but including its fixing in position and binding with 24 B.W.G.G.I. binding wire including necessary centering & shuttering etc,. and also including supply of all material, labour, T&P etc. required for proper completion of work. Binding wire to be supplied by the contractor free of cost.	Cum	1.00	7150.00	7150.00
<b>3 (B)</b>		<b>REINFORCEMENT CEMENT CONCRETE</b>				
i	283	R.C.C. work with cement approved coarse sand and 2 cm Gauge approved stone ballast in the proportion of 1:2:4 in lintels of doors and windows, excluding its fixing and binding the same with 24B.W.G.G.I binding wire and including necessary centering and shuttering etc. and also including S/o all materials required for proper completion of the work. Binding wire to be supplied by the contractor free of cost.	Cum		6950.00	
ii	284	As in Item No. 283 above but for slabs. 1:2:4	Cum		7510.00	
iii	b.	As in Item No. 284 above but with 1:1.5:3	Cum	1.00	8150.00	8150.00
iv	285	As in Item No. 283 above but in the lighter beam i.e. having spans upto 6m 1:2:4.	Cum		7700.00	
v	b.	As in Item No. 285 above but with 1:1.5:3	Cum	5.00	8350.00	41750.00
vi	287	As in Item No. 283 above but in RCC Raft foundationg and footing with 4cm gauge approved stone ballast.1:2:4	Cum		6420.00	
vii	b.	As in Item No. 287 above but with 1:1.5:3	Cum	8.00	7030.00	56240.00
viii	288	As in Item No. 283 above but in RCC T Beam and slab roofs and RCC Colums in 1:2:4	Cum		7700.00	
ix	b.	As in item no. 288 above in RCC T- Beam slab and RCC coloumns but in 1:1.5:3.	Cum	4.00	8400.00	33600.00

x	DSR 5.22	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto All levels & Height				
a	DSR 5.22.6	Thermo-Mechanically Treated bars of grade Fe-500D or more	Kg	1939.00	56.60	109747.40
		<b>Sub Total</b>				<b>668477.00</b>
<b>4</b>		<b>BRICK WORK</b>				
i	303	M-150 brick work in 1:6 cement and sand of 1.25 fineness modulus mortar in foundation and plinth including supply of all material, labour and tools and plants. ect. required for proper completion of work.	Cum		4200.00	
ii	305	As in item 303 above but in 1:4 cement and sand of 1.25 fineness modulus mortar.	Cum	67.00	4370.00	292790.00
iii	309	As in item 302 to 307 above but in super structure including necessary cutting and moulding of bricks required and also including honey comb brick work, thickness of walls more than one brick and for extra labour to above items.	Cum		210.00	
iv	310	Same as item No. (309) above but for one brick wall add for extra labour.	Cum	22.00	4590.00	100980.00
v	(a)	As in item 309 above but walls of half brick 11.5 mm (4-1/2") thick add for extra labour over item no. 310.	Cum	6.00	4685.00	28110.00
		<b>Sub Total</b>				<b>421880.00</b>
<b>5</b>		<b>DAMP PROOF COURSE</b>				
i	360	2CM (3/4") thick damp proof course with cement and approved coarse sand 1:2 with and including water proofing material as ordered by the Engineer - in - charge in the proportion as specified by the manufacturers, including supply of all material, labour, T & P etc. required for proper completion of the work and including proper curing and shuttering as necessary.	Sqm	11.00	180.00	1980.00
ii	361	As in item (360) above but 2.5 cm (1") thick and of cement concrete consisting of 1 part cement 1-1/2 parts approved 13 mm. (1/2") graded stone grit and including water proofing materials as ordered by the Engineer - in -charge in the proportion as specified by the manufacture.	Sqm	11.00	250.00	2750.00
iii	NBC 5.7.1 (ii)	Painting on D. P. C. with two coats of air blown bitumen 85/50 or 85/25 @ 1.7 Kg/Sqm. Aprox including cost of fuel if any.	Sqm	11.00	55.00	605.00
<b>5</b>		<b>ANTI-TERMITE TREATMENT</b>				

iv	NS	<p>Providing and injecting chemical emulsion for Preconstructional antitermite treatment and creating a chemical barrier under and around the column pits. wall trenches. basement excavation top surface of plinth, filling junction of walls and floors, along, the external perimeter of building, expansion joints, surrounding of pipes and conduit etc. complete, plan area shall be measured. (Part II 1981) Aldrine emulsifiable concentrate or any other approved material such as chloropyriphos or Heptrachlor or ehlordance will be used. The rate of application of chemical emulsion shall be as follows. (1) Treatment for Masonary &amp; foundation 5 liters per Sq. M_ (2) Back fill in immediate contact with foundation 7.5 liters per Sq_ M. (3) Treatment of top surface of Plinth filling 5 litres per Sq. M. (4) Treatment of junctions of walls and the floors 7.5 litres per Sq. M. (5) treatment of soil along External perimeter of Building 7.50 litres per Sq. M. (6) Treatment of soil under Apron along external perimeter 5 liters per Sq. M.</p>	Sqm	39.00	240.00	9360.00			
<b>Sub Total</b>									<b>14695.00</b>
<b>6</b>	<b>STEEL WORK</b>								
i	DSR 10.25	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel, plates etc. as required.							
a	DSR 10.25.2	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	kg	13808.00	85.95	1186797.60			
ii	DSR 10.26	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer.							
a	DSR 10.26.1	M.S.Tube	kg	7435.00	92.00	684020.00			
iii	DSR 10.27	Providing and fixing carbon steel galvanised ( minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm <sup>2</sup> ), counter sunk head, comprising of 10 mm dia polyamide PA 6 grade sleeve, including drilling of hole in frame , concrete/ masonry, etc. as per direction of Engineer-in-charge.							
a	DSR 10.27.4	10 x 140 mm	Each	53.00	102.80	5448.40			
iv	NS	Supply, Fabrication, transportation, delivery at site and erection, installation and alignment of mild steel foundation Anchor bolt of approved size assembly in concrete along with nuts, lock nuts (as per IS:1363, 1364 and IS:3138), washers including welding, cutting, grinding, threading, drilling etc. all complete.	Kg	21.00	160.00	3360.00			
<b>Sub Total</b>									<b>1879626.00</b>
<b>7</b>	<b>PLASTER WORK</b>								
i	DSR 13.11	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster 1:6 (1 cement : 6 fine sand).	Sqm	229.00	255.55	58520.95			



ii	NS	Providing and fixing horizontal & vertical 24guage chicken mesh wire between junctions of column/beam, walls & conduit pipes wherever required, chicken wire mesh should be fixed with U nails 150 mm centre to centre before plastering the junction. The plastering of walls and beam/column in one vertical plane should be carried out in one go, including the payment of U nails, T&P etc. all complete under instruction of Engineer-in-charge.	Sqm	97.00	125.00	12125.00
iii	DSR 13.24	Extra for plastering done on moulding, cornices or architraves including neat finish to line and level:				
a	DSR 13.24.2	In two coats	Sqm	46.00	503.20	23147.20
		<b>Sub Total</b>				<b>93793.00</b>
<b>8</b>		<b>FLOORING WORKS</b>				
i	DSR 11.29	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 coarse sand), including pointing with cement mortar 1:2 (1 cement : 2 stone dust) with an admixture of pigment to match the shade of stone.				
a	DSR 11.29.1	Red Sand Stone	Sqm	320.00	743.70	237984.00
ii	NS	Providing and laying 60mm thick factory made rubber moulds cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge.	Sqm	228.00	615.70	140379.60
iii	602	2.5 cm. (1") thick 1:2:4 plain cement concrete floor with base concrete consisting of brick ballast, white lime & surkhi in the proportion of 100:16:32 laid in panels finished with 3 mm (1/8") floating coat of neat cement or cement and marble dust in ratio of 5:1 as specified above and including 8 cm. (3") thick base concrete above and removing any overlapping mortar at the joints of the panels if any and giving them a uniform finish, including supply of all materials. labour, T & P etc. required for proper completion of the work.	Sqm		850.00	
iv	605	As in item (602) above but floor shall be 4 cm. (1-1/2") thick instead of 2.5 cm. (1") thick and without base concrete.	Sqm	45.00	365.00	16425.00
v	631	Providing and fixing glass strips of 3 mm. Thickness in joints of floor and skirting at the time of laying floors flush with floor level including labour, tools plants etc. complete.				
a		(b) Of 35 min depth.	Rm	23.00	28.00	644.00
vi	NS	Providing and laying 30mm thick rubrized flooring as per design and specification all complete under instruction of Engineer in Charge.	Sqm	40.00	2850.00	114000.00
vii	NS	Providing & Laying pebble as design given in architecture drawing in black and white colours under instruction of Engineer in Charge.	Sqm	56.00	2300.00	128800.00



viii	NS	Providing and laying C.C. pavement of mix M-25 with ready mixed concrete from batching plant. The ready mixed concrete shall be laid and finished with screed board vibrator , vacuum dewatering process and finally finished by floating, brooming with wire brush including panel shuttering etc. all complete as per specifications and directions of Engineer-in- charge. (Note:- Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/ recoverable separately).	Cum	5.00	6950.00	34750.00
		<b>Sub Total</b>				<b>672983.00</b>
<b>9</b>	<b>PAINTING WORKS</b>					<b>#REF!</b>
i	DSR 13.26	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	Sqm	114.00	118.70	13531.80
ii	CPWD 13.47-1	Finishing walls with Premium Acrylic Smooth exterior paint with Silicon additives of required shade New work (Two or more coats applied @ 1.43 Ltr/sqm over and including base coat of water proofing cement paint aplied @ 2.20 kg/ 10 sqm).	Sqm	114.00	225.00	25650.00
iii	641	Painting or varnishing new iron work in small areas or new wood with one coat (up to one sq. meter) of ready mixed priming paint and one coat of approved superior quality ready mix paint (2nd quality synthetic enamel paint of approved brand such as British paint, Shalimar, Asian or equivalent as approved by E/I) or • Varnish including supply of all materials, labour, T & P etc. required for proper completion of the work. Paint to be used should confirm the I. S. I. No. 103-1950.	Sqm	742.00	65.00	48230.00
iv	642	As in item (641) above but for every coat after first coat.	Sqm	742.00	29.00	21518.00
v	N.S.	Painting with graffiti on wall surface as per specification and under instruction of Engineer-in-charge.	Sqm	114.00	650.00	74100.00
		<b>Sub Total</b>				<b>183030.00</b>
<b>10</b>	<b>REPAIR TO BOUNDARY WALL</b>					
i	800	Repair to plaster or painting in patches including removal of old plaster, raking out joints to 1 cm. Depth. Watering the area and then plastering or repainting of surface as the exiting surface including supply of all materials, labour and tools and plants etc. required for the proper completion of the work Add to the respective item in chapter 13 for plaster and painting.	Sqm	826.00	30.50	25193.00
ii	DSR 14.43	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	Sqm	826.00	8.35	6897.10
iii	641	Painting or varnishing new iron work in small areas or new wood with one coat (up to one sq. meter) of ready mixed priming paint and one coat of approved superior quality ready mix paint (2nd quality synthetic enamel paint of approved brand such as British paint, Shalimar, Asian or equivalent as approved by E/I) or • Varnish including supply of all materials, labour, T & P etc. required for proper completion of the work. Paint to be used should confirm the I. S. I. No. 103-1950.	Sqm		65.00	
iv	642	As in item (641) above but for every coat.	Sqm		29.00	

v	643	As in item (642) above but for every coat on previously painted old wood or iron work including its sand papering: rubbing and cleaning as required for proper completion of work.	Sqm	191.00	40.00	7640.00
vi	DSR 14.67	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade				
vii	DSR 14.67.2	Old work (one or more coats applied @ 0.83 ltr/10 sqm).	Sqm	826.00	47.25	39028.50
<b>Sub Total</b>						<b>78758.60</b>
<b>Grand Total</b>						<b>4199018.60</b>

SUB WORK NO. III					
					External Lighting
S.No	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
<b>SUPPLY,INSTALLATION OF FEEDER PILLAR / PANELS</b>					
1	Design, manufacture, supply, installation, testing and commissioning of outdoor type external lighting feeder pillar of suitable size not less than 30 cm and upto 45 cm deep made out of M.S. sheet 2mm thick (14 SWG) duly compartmentalized, double door with locking arrangement (IP-54), duly fixed on MS angle iron frame work of size 50mm x 50mm x 6mm, 90 cm long legs out of which 45 cm duly grouted in cement concrete 1:2:4 (1 cement : 2 sand : 4 stone aggregate 20mm) and having following accessories mounted inside the cubical panel i/c connection, inter connection with aluminium thimbles, earthing with two nos. earth struds duly painted with one coat of red oxide & two coats of superior quality enamel paint of approved shade complete etc. as reqd.				
	Supplying, Installing & fixing of following accessories in the existing cubical panel board / feeder pillar including connection testing etc. as reqd.				
	Power contactor 1 sets of single pole of suitable ratings				
	Astronomical Timer, Reference 04767 - Legrand make or equivalent from GE / Siemens / L&T				
	The above board shall be complete with 1 no. phase indicating lights, flush mounted Ammeter, Voltmeter, selector switches, protective fuses etc. at Incomer with all interconnections by min. 2.5 sq.mm. Copper wires.				
	Danger notice plate				
i	<b>External Lighting Feeder Pillar :-</b>				
	INCOMER : 40 AMP DP MCB (10 KA)				
	BUS BAR : 100 AMP, 500 Volts, 1 phase 50 HZ 2P high conductivity electrolytic Aluminium bus bar. The current density of bus bar shall be minimum 1.00 sq mm /amp.				
	The Maximum allowable temperature for the Bus bar to be restricted to 85 deg C. The temperature rise should be restricted to 35 deg C above ambient temperature.				
OUT GOINGS : 4 nos. 6-32 AMP DP MCB (10 KA)	1	SET	50,000.00	50,000.00	
<b>2 CABLES</b>					
	Supply & Laying of ISI marked aluminium conductor XLPE insulated cable as per IS 7098, armoured, served, sheathed 1100 volts grade.				
b	4 sqmm 2 core	70	RM	105.00	7,350.00

<b>3 Mini Mast Lighting</b>					
	Supply, Installation, testing and commissioning of Octagonal Poles of 6 M height High mast Light with 4 nos 45 watt LED luminaire with Erection, Testing & Commissioning	1	SET	90,000.00	90,000.00
<b>4 Solar Light</b>					
	Supply, Installation, Testing & Commissioning of Solar PV stand with Street 20W LED Lighting System comprising of one 75 Wp SPV module, one 12 V, 75 Ah Tubular Plate sealed maintenance free VRLA Gel Battery, one White LED luminaire of 20W with in-built inverter, Charger, dusk to dawn circuit for automatic switching on & off at dusk to dawn, automatic dimming circuit (automatic/optional) based on real time clock for full bright operation during first six hours and half bright operation for rest hours, 4.5M pole, one charge-regulator, module mounting structure, Pole mounted Battery box, cables and other fittings along with 5 (five) years guarantee / warranty period (25 years for SPV Module).	4	Nos	45,000.00	180,000.00
<b>5 G.I. EARTHING</b>					
i	Supply & burrying of 600mm x 600mm x 6.0mm G.I. plate, vertically for earthing with its top at least 3 meters below ground level complete with 20 mm G.I. pipe for watering funnel, 300 mm square C.I. frame with hinged cover, masonry housing, alternate layers of coke and salt at least 150 mm thick alround including excavation and back filling etc. complete in all respects. (for Feeder Pillar)	2	Nos.	5,500.00	11,000.00
ii	Providing & fixing 25mm x 3mm G.I. strip on surface, in recess or in ground including connections etc. as required	14	RM	110.00	1,540.00
iii	Supply & burrying of 20 mm dia x 3 m long G.I. pipe (C class) vertically for earthing having 12 mm dia holes spaced 75 mm apart drilled upto 2 meter from the bottom complete with one earthing lead of no. 6 to 8 SWG G.I. wire in 15 mm dia. GI pipe upto switch board (from apron to switch) mm dia. GI pipe upto switch board (from apron to switch board the cost of GI pipe & GI wire will be extra), 300 mm square C.I. box with hinged cover, masonry housing alternate layer of charcoal/coke and salt atleast 150mm thick alround etc. as per the direction of engineer in-charge complete in all respect (for Pole Earthing)	2	Nos.	4,000.00	8,000.00
iv	Providing and laying 6 SWG dia G.I. wire on surface, in recess or in ground including connections for earthing as required.	12	RM	30.00	360.00
v	Providing and fixing of solar panel including design, engineering, installation, commission of grid connected solar etc. all complete under instruction of Engineer-in-Charge.	5	Kw	70,000.00	350,000.00
				<b>TOTAL</b>	<b>698250.00</b>

### Plumbing & Irrigation:

<b>SUB WORK NO. I</b>						
<b>Storm Water Scheme</b>						
<b>Open Drain</b>						
Sl. No.	Description	unit	Qty.		Rate	Amount in Rs.
1	Constructing open surface drain in Brick work including trenches including cost of excavation, bed concrete, cost of perforated covers etc. complete.					
a)	300 mm Width	RM	180	@	2500.00	450,000.00
b)	400 mm Width	RM	10	@	2500.00	25,000.00
2	Provision for carriage of material & other foreseen item etc., L.S.					130,000.00
3	Provision for rain water harvesting arrangements	NO	1	@	300000	300,000.00
4	Submersible and piping for irrigation	NO	1	@	300000	300,000.00
	<b>TOTAL</b>					12,05,000.00
	<b>TOTAL</b>					12,05,000.00

**Approximate cost Ravindrapuri Park, Varanasi, (1808.332 Sqm)**

**Bill of Quantity for Horticulture works**

## 1. SOFTSCAPE WORKS

A	PLANTATION	UNITS	QUANTITY	RATE	AMOUNT
<b>A.1</b>	<b>EARTHWORK</b>				
1.1	Clearance and disposal of all debris on site after the construction, with all leads and lifts, removal of all weeds and other growth with roots by forking, breaking clods, rough dressing and proper leveling.	Sq.m.	1050	15.00	15,750.00
1.2	Supplying and stacking of good earth at site including royalty and carriage for all leads. (earth measured in stacks will be reduced by 20% for payment).	cum.	200	300.00	60,000.00
1.3	Supplying and stacking of manure on site including royalty and carriage for all leads. (Manure measured in stacks will be reduced by 8% for payment).	cum.	115	600.00	69,000.00
1.4	Supplying and stacking of fertilizers at site including royalty and carriage	kg.		AS/RATE	2,000.00
1.5	Supplying and stacking of Insecticides, Pesticides and Weedicides at site including royalty and carriage. DURS BAN or equivalent 1 to 2lts/200lts of water and sprayed. As follows	lts.		LUMP SUM	2,000.00
1.6	Supply and stacking at site soil ammendment additives to imprve soil quality at site based on soil test report	As/rate		AS/ RATE	2,000.00
	<b>TOTAL</b>				<b>150,750</b>
<b>A.2</b>	<b>TREES</b>				
2.1	The rate of the following items include for supply of plants as specified, transportation to site,excavation of pits and plantation as follows:				
2.1.1	Preparation of pits for trees by excavating 1.0 m x 1.0 m x 1.0 m deep, refilling the excavated earth after breaking clods and mixing with manure in the ratio 3:1 flooding with water, filling with earth if necessary, watering, fine dressing, leveling, supply and transportation and mixing of soil improvement, nutrients (including manure, fertilizers as required, and inside coat of DURS BAN or equivalent in all pits). Planting and staking in full at the specified location, including replacement of unhealthy and dead plants in the maintenance period. Stacking and disposal of material declared unserviceable and surplus including all leads and lifts (Cost of manure and extra earth to be paid separately) and mandatory maintenance for specified period. The pits should be large enough to accomodate rootball 1/3 root depth on all sides. Maintenance of lawn for 12 months.	Nos.	25	800.00	20,000.00
	<b>TOTAL</b>				<b>20,000</b>
<b>A.3</b>	<b>SHRUBS &amp; CLIMBERS</b>				
3.1	The rate of the following items include for supply of plants as specified, transportation to site, excavation of pits and plantation as follows:				
3.1.1	Preparation of pits for Shrubs and Climbers by excavation (the required depths for the operation are given as follows) refilling the excavated earth after breaking clods and mixing with manure in the ratio 3:1. flooding with water, filling with earth if necessary, watering, fine dressing, leveling. Finally planting the specified shrub and staking in full in the pit. Maintaining the plants for 12 months, including replacement of unhealthy and dead plants in the maintenance period. Subsequently, stacking and disposal of material declared unserviceable and surplus including all leads and lifts (Cost of manure and extra earth to be paid separately).				
	Shrubs	Nos	18	250.00	4,500.00
	0.6mX 0.6mX 0.6m deep				
	<b>TOTAL</b>				<b>4,500</b>
<b>A.4</b>	<b>GROUND COVERS</b>				

4.1	Preparation of planting beds for ground covers by excavating to a depth of 0.30m, removing all foreign bodies over 50 mm dia refilling with the mix of earth and manure in the ratio 3:1 flooding with water, filling with earth if necessary, watering, dressing, leveling and finally planting the specified ground covers. Stacking and disposal of material declared unserviceable and surplus including all leads and lifts (Cost of manure and extra earth to be paid separately) all inclusive of the mandatory maintenance of 12 months.	Sq.m.	81	150.00	12,150.00
<b>TOTAL</b>					<b>12,150</b>
<b>A.5 MAINTAINED LAWN</b>					
5.1	<b>Ground Preparation for grassing.</b>				
5.1.1	Excavating to a depth of 0.30m removing all foreign bodies over 50 mm dia, refilling with the mix of earth and manure in ratio 3:1, grade surface to finish levels, as indicated on grading plans. All finished areas shall slope to drain. Where no grades are shown, the areas shall have a smooth and continual grade between existing or fixed controls (such as walks, curbs, catch basins, elevations at steps or building) and levels shown on plans. Roll, scarify, rake and level as necessary to obtain true, even grassing surfaces. All finish grades shall meet approval of the Project Engineer before grassing is done.				
5.1.2	Grassing with turfing of specified grass including watering and maintenance of the lawn till the grass forms a thick carpet free of weeds and fit for mowing including mandatory maintenance of lawn for 12 months.	Sq.m.	794	150.00	119,100.00
<b>TOTAL</b>					<b>119,100</b>
				<b>NET TOTAL</b>	<b>306,500</b>



### SUPPLY OF PLANTS : SCHEDULE OF QUANTITIES

			Specifications							
The rate of the following items include for supply of plants (caliper measured 900mm above root bulb) as specified, transportation to site as follows:										
S.No.	Code	Botanical name	Height	Caliper	Spread	Unit	Qty	Rate	Amount	
<b>TREES</b>										
1.0	AI	AZADIRACHTA INDICA	3.0M	50MM	2.0M	no.	2	1000	2000	
2.0	NA	NYCTANTHES ARBOR-TRISTIS	2.0M	35MM	1.2M	no.	4	700	2800	
3.0	DR	DELONIX REGIA	2.0M	50MM	1.2M	no.	3	1200	3600	
9.0	FB	FICUS BENGHALANSIS	3.0M	60MM	2.0M	no.	1	1800	1800	
4.0	FB	FICUS BENJAMINA	3.0M	50MM	1.2M	no.	2	1200	2400	
5.0	PA	PLUMERIA ALBA	2.0M	50MM	2.0M	no.	9	1500	13500	
6.0	CN	CITRUS NOBILIS	2.0M	35MM	1.2M	no.	2	750	1500	
7.0	CF	CASSIA FISTULA	2.0M	35MM	1.2M	no.	2	1200	2400	
<b>TOTAL</b>							<b>25</b>		<b>30,000</b>	
<b>SHRUB</b>										
1.0	MR	MORUS ALBA	2.0M	35MM	1.2M	no.	2	750	1500	
2.0	TMC	TABERNAEMONTANA	1.5M	25MM	1.0M	no.	9	750	6750	
<b>TOTAL</b>							<b>18</b>		<b>8,250</b>	
<b>Hedge</b>			<b>Height</b>	<b>Spread</b>	<b>shrubs per sqm</b>	<b>Unit</b>	<b>Qty in Sqm</b>	<b>Rate</b>		
2.0	HP	HAEMELIA PATENS	0.15M	0.15M	50 per sqm	sqm.	21	450	9450	
3.0	D	DURANTA	0.30M	0.15M	50 per sqm	sqm.	32	450	14400	
4.0	CL	CLERODENDRUM INERME	0.15M	0.15M	50 per sqm	sqm.	10	450	4500	
<b>TOTAL</b>							<b>63</b>		<b>28,350</b>	
<b>GROUND COVERS</b>			<b>Height</b>	<b>Spread</b>	<b>per sqm</b>	<b>Unit</b>	<b>Qty in Sqm</b>	<b>Rate</b>		
1.0	WD	WEDELIA TRILOBATA	0.15	0.15M	50 per sqm	sqm.	33	450	14850	
2.0	OP	OPHIOPHOGAN	0.15M	0.15M	50 per sqm	sqm.	15	450	6750	
3.0	CI	CANNA INDICA	0.15M	0.15M	50 per sqm	sqm.	33	500	16500	
<b>TOTAL</b>									<b>38,100</b>	
<b>GRASS</b>					<b>Effect</b>					
1.0		SELECTION NO.1 (CARPET GRASS) LAWN			CARPET EFFECT	sqm.	794	200	158800	
<b>TOTAL</b>									<b>158,800</b>	
<b>NET TOTAL</b>									<b>263,500</b>	



### Miscellaneous works

Approximate cost Ravindrapuri Park, Varanasi, (1808.332 Sqm)					
Bill of Quantity for Miscellaneous works					
S.No	Item of Work	Unit	Qty.	Rate	Amount
1	Supply and fixing in position red sand stone seat as per architectural drawings all complete under instruction of Engineer-in-Charge.	Each	8.00	20000.00	160000.00
2	Supply and fixing in position black granite seat around tree as per architectural drawings all complete under instruction of Engineer-in-Charge.	Each	1.00	60000.00	60000.00
3	Supply and fixing in position black granite seat under canopy as per architectural drawings all complete under instruction of Engineer-in-Charge.	Each	4.00	25000.00	100000.00
4	Supply and fixing outdoor gym equipment, Children Play equipment & Handicapped play area including finishing etc, all complete.	LS		1000000.00	1000000.00
5	Supply and fixing Dust-bin including painting finishing etc, all complete.	Each	10	3000.00	30000.00
6	Design Providing, Supplying & fixing Single sided Sign Board of size 450 mm x 450 mm with suitable inner frame and proper support, with sign substrate of suitable size of 4mm ACP sheet with face fully covered by RETRO REFLECTIVE MICRO PRISMATIC Type IV Sheeting and messages and symbols accordingly, fixed to inner frame with the help of Very High Bond tape of 24mm wide and 2.3mm thick. The board is to be fixed on RCC wall/pillar with dash fasteners of SS pipe of S-304 grade. All stainless steel items shall be of S-304 Grade (Material should be in compliance with Code of practise for Road signs, Indian Road Congress 2010, IRC-67-2010) Nos. 6) (EXTERNAL SIGNAGES)	Each	5	2000.00	10000.00
7	Providing and fixing stainless steel grade - 304 2mm thick engraved signage board for information all complete under instruction of Engineer in Charge.	Sqm	10	7000.00	70000.00
8	Supply and fixing in position of porta cabin toilet under instruction of Engineer in Charge as approved by Architect.	Each	2.00	244260.00	488520.00
					<b>1918520.00</b>

**Total Cost of Miscellaneous Works = 1918520.00**

**Maintenance cost for Approximate cost of Ravindrapuri Park, Varanasi (1808.332 Sqm) for 5 Years**

Sl. No.	Description / Item	Amount (Rs.)	Remarks
1	Organic Manure & Inorganic Fertilizer	2267.00	
2	Tools & Equipments	1360.00	
3	Labour Cost (Watering, Weeding, Shrubs, Hedge Plants, Flowers & Trees)	13000.00	
	One Mali		
	Maintenance Cost for One Month	<b>16627.00</b>	As Actual
	Maintenance Cost for One Year	199524.00	
	Maintenance Cost for Second Year	202018.05	1.25% Extra for Escalation
	Maintenance Cost for Third Year	202516.86	1.5% Extra for Escalation
	Maintenance Cost for Forth Year	203015.67	1.75% Extra for Escalation
	Maintenance Cost for Fifth Year	203514.48	2% Extra for Escalation
4	Civil Work Maintanace Cost for 5 Years (Small construction If required)	209950.93	1% of Civil Works
5	E & M Maintenance Cost for 5 Years		
i	Electrical Maintanace (Labour, T&P& Material)	197062.50	5% of Electrical Works
ii	Machenical Maintenance (T&P, Labour & Matrial )	301250.00	5% of Machenicla Works
	<b>Total cost for 5 Years</b>	<b>1718852.00</b>	

### III. Annexure – “Bc” Shastri Park

<b>Abstract of Cost</b>		
<b>Approximate cost of Shastri Park, Varanasi</b>		
<b>S.No</b>	<b>Discription</b>	<b>Amount</b>
1	Civil Works	4773791.00
2	Open Drain & Sewerage Scheme	1380000.00
3	Electrical Works	393250.00
4	Supply of Plants & Horticulture Works	570000.00
5	Miscellaneous Works	2188520.00
6	Maintenace Cost for 5 Years	1918589.00
<b>Total Amount in Rs.</b>		<b>11224150.00</b>

**Project: Approximate cost of Shastri Park, Varanasi**

Sl. No.	PWD SOR / DSR No.	Description	Unit	Qty.	Rate	Amount
<b>1</b>		<b>DISMANTLING AND DEMOLISHING WORK</b>				
i	DSR 15.7	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 meter lead as per direction of Engineer-in-charge.				
a	DSR 15.7.4	In Cement Mortar	Cum	66.00	842.75	55621.50
ii	DSR 15.3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 meter lead as per direction of Engineer - in- charge.	Cum	18.00	1454.55	26181.90
iii	DSR 15.5	Extra for cutting reinforcement bars manually/ by mechanical means in R.C.C. or R.B. work (Payment shall be made on the cross sectional area of R.C.C. or R.B. work) as per direction of Engineerin-charge.	Sqm	27.00	500.80	13521.60
iv	DSR 15.6	Extra for scrapping, cleaning and straightening reinforcement from R.C.C. or R.B. work.	kg	1785.00	3.90	6961.50
v	DSR 15.2	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 meter lead as per direction of Engineer - in - charge.				
a	DSR 15.2.2	Nominal concrete 1:4:8 or leaner mix (i/c equivalent design mix)	Cum	7.00	615.15	4306.05
vi	DSR 16.83	Taking out existing CC interlocking paver blocks from footpath/ central verge, including removal of rubbish etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 meter lead as per direction of Engineer-in-Charge.	Sqm	375.00	53.95	20231.25
vii	DSR 1.1.18	Disposal of moorum/building rubbish/ malba/ similar unserviceable, dismantled or waste material by mechanical transport including loading, transporting, unloading to approved municipal dumping ground for lead upto 10 km for all lifts, complete as per directions of Engineer-in-charge.	Cum	466.00	209.90	97813.40
		<b>Sub Total</b>				<b>224637.00</b>
<b>2</b>		<b>EARTH WORK</b>				
i	DSR 2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.				

a	DSR 2.6.1	All Kinds of Soil	Cum	268.00	125.95	33754.60
ii	DSR 2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	Cum	215.00	125.75	27036.25
iii	DSR 2.27	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	Cum	41.00	917.75	37627.75
		Carriage of Material				
iv	231 (a)	Cartage of ballast, kankar, coal, Grit or Sand etc. Including loading and unloading but excluding stacking on pucca roads.				
a		Earth (1 KM)	Cum	52.00	85.50	4446.00
		<b>Sub Total</b>				<b>102865.00</b>
<b>3 (A)</b>		<b>CEMENT CONCRETE WORK</b>				
i	281	Concrete with 4cm. gauge approved stone ballast, approved coarse sand and cement in the proportion of 8:4:1 including supply of all materials labour and tools and plants etc. required for proper completion for the work.	Cum	135.00	4680.00	631800.00
ii	282	Cast cement concrete as in door sills, chaukhat, boundary post or similar precast unit with cement , approved coarse sand and 20mm guage approved stone ballast in the proportion of 1:2:4 (class - 150) excluding supply of reinforcement and its bending but including its fixing in position and binding with 24 B.W.G.G.I. binding wire including necessary centering & shuttering etc., and also including supply of all material, labour, T&P etc. required for proper completion of work. Binding wire to be supplied by the contractor free of cost.	Cum	1.00	7150.00	7150.00
<b>3 (B)</b>		<b>REINFORCEMENT CEMENT CONCRETE</b>				
i	283	R.C.C. work with cement approved coarse sand and 2 cm Gauge approved stone ballast in the proportion of 1:2:4 in lintels of doors and windows, excluding its fixing and binding the same with 24B.W.G.G.I binding wire and including necessary centering and shuttering etc. and also including S/o all materials required for proper completion of the work. Binding wire to be supplied by the contractor free of cost.	Cum		6950.00	
ii	284	As in Item No. 283 above but for slabs. 1:2:4	Cum		7510.00	
iii	b.	As in Item No. 284 above but with 1:1.5:3	Cum	1.00	8150.00	8150.00
iv	285	As in Item No. 283 above but in the lighter beam i.e. having spans upto 6m 1:2:4.	Cum		7700.00	
v	b.	As in Item No. 285 above but with 1:1.5:3	Cum	8.00	8350.00	66800.00
vi	287	As in Item No. 283 above but in RCC Raft foundationg and footing with 4cm gauge approved stone ballast.1:2:4	Cum		6420.00	
vii	b.	As in Item No. 287 above but with 1:1.5:3	Cum	16.00	7030.00	112480.00
viii	288	As in Item No. 283 above but in RCC T Beam and slab roofs and RCC Columns in 1:2:4	Cum		7700.00	
ix	b.	As in item no. 288 above in RCC T- Beam slab and RCC coloumns but in 1:1.5:3.	Cum	8.00	8400.00	67200.00



x	DSR 5.22	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto All levels & Height				
a	DSR 5.22.6	Thermo-Mechanically Treated bars of grade Fe-500D or more	Kg	3287.00	56.60	186044.20
<b>Sub Total</b>						<b>1079624.00</b>
<b>4</b>	<b>BRICK WORK</b>					
i	303	M-150 brick work in 1:6 cement and sand of 1.25 fineness modulous mortar in foundation and plinth including supply of all material, labour and tools and plants. ect. required for proper completion of work.	Cum		4200.00	
ii	305	As in item 303 above but in 1:4 cement and sand of 1.25 fineness modulous mortar.	Cum	73.00	4370.00	319010.00
iii	309	As in item 302 to 307 above but in super structure including necessary cutting and moulding of bricks required and also including honey comb brick work, thickness of walls more than one brick and for extra lab our to above items.	Cum		210.00	
iv	310	Same as item No. (309) above but for one brick wall add for extra labour.	Cum	17.00	4590.00	78030.00
v	(a)	As in item 309 above but walls of half brick t 1.5 mm (4-1/2") thick add for extra labour over item no. 310.	Cum	5.00	4685.00	23425.00
<b>Sub Total</b>						<b>420465.00</b>
<b>5</b>	<b>DAMP PROOF COURSE</b>					
i	360	2CM (3/4") thick damp proof course with cement and approved coarse sand 1:2 with and including water proofing material as ordered by the Engineer - in - charge in the proportion as specified by the manufacturers, including supply of all material, labour, T & P etc. required for proper completion of the work and including proper curing and shuttering as necessary.	Sqm	22.00	180.00	3960.00
ii	361	As in item (360) above but 2.5 cm (1") thick and of cement concrete consisting of 1 part cement 1-1/2 parts approved 13 mm. (1/2") graded stone grit and including water proofing materials as ordered by the Engineer - in -charge in the proportion as specified by the manufacture.	Sqm	22.00	250.00	5500.00
iii	NBC 5.7.1 (ii)	Painting on D. P. C. with two coats of air blown bitumen 85/50 or 85/25 @ 1.7 Kg/Sqm. Aprox including cost of fuel if any.	Sqm	22.00	55.00	1210.00
<b>6</b>	<b>ANTI-TERMITE TREATMENT</b>					

iv	NS	<p>Providing and injecting chemical emulsion for Preconstructional antitermite treatment and creating a chemical barrier under and around the column pits. wall trenches. basement excavation top surface of plinth,filling junction of walls and floors, along, the external perimeter of building, expansion joints, surrounding of pipes and conduit etc. complete, plan area shall be measured.</p> <p>(Part II 1981) Aldrine emulsifiable concentrate or any other approved material such as chloropyriphos or Heptrachlor or ehlordance will be used. The rate of application of chemical emulsion shall be as follows.</p> <p>(1) Treatment for Masonary &amp; foundation 5 liters per Sq. M_ (2) Back fill in immediate contact with foundation 7.5 liters per Sq_ M. (3) Treatment of top surface of Plinth filling 5 litres per Sq. M. (4) Treatment of junctions of walls and the floors 7.5 litres per Sq. M. (5) treatment of soil along External perimeter of Building 7.50 litres per Sq. M. (6) Treatment of soil under Apron along external perimeter 5 liters per Sq. M.</p>	Sqm	32.00	240.00	7680.00
<b>Sub Total</b>						<b>18350.00</b>
<b>6</b>	<b>STEEL WORK</b>					
i	DSR 10.25	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel, plates etc. as required.				
a	DSR 10.25.2	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	kg	5276.00	85.95	453472.20
ii	DSR 10.26	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer.				
a	DSR 10.26.1	M.S.Tube	kg	3517.00	92.00	323564.00
iii	DSR 10.27	Providing and fixing carbon steel galvanised ( minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm <sup>2</sup> ), counter sunk head, comprising of 10 mm dia polyamide PA 6 grade sleeve, including drilling of hole in frame , concrete/ masonry, etc. as per direction of Engineer-in-charge.				
a	DSR 10.27.4	10 x 140 mm	Each	58.00	102.80	5962.40
iv	NS	Supply, Fabrication, transportation, delivery at site and erection, installation and alignment of mild steel foundation Anchor bolt of approved size assembly in concrete along with nuts, lock nuts (as per IS:1363, 1364 and IS:3138), washers including welding, cutting, grinding, threading, drilling etc. all complete.	Kg	21.00	160.00	3360.00
<b>Sub Total</b>						<b>786359.00</b>
<b>7</b>	<b>PLASTER WORK</b>					
i	DSR 13.11	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster 1:6 (1 cement : 6 fine sand).	Sqm	228.00	255.55	58265.40

ii	NS	Providing and fixing horizontal & vertical 24 gauge chicken mesh wire between junctions of column/beam, walls & conduit pipes wherever required, chicken wire mesh should be fixed with U nails 150 mm centre to centre before plastering the junction. The plastering of walls and beam/column in one vertical plane should be carried out in one go, including the payment of U nails, T&P etc. all complete under instruction of Engineer-in-charge.	Sqm	58.00	125.00	7250.00
iii	DSR 13.24	Extra for plastering done on moulding, cornices or architraves including neat finish to line and level:				
a	DSR 13.24.2	In two coats	Sqm	69.00	503.20	34720.80
		<b>Sub Total</b>				<b>100236.00</b>
<b>8</b>		<b>FLOORING WORKS</b>				
i	NS	Providing and laying 60mm thick factory made rubber moulds cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge.	Sqm	409.00	615.70	251821.30
ii	NS	Providing & Laying pebble wash flooring as design given in architecture drawing under instruction of Engineer in Charge.	Sqm	18.00	2300.00	41400.00
iii	602	2.5 cm. (1") thick 1:2:4 plain cement concrete floor with base concrete consisting of brick ballast, white lime & surkhi in the proportion of 100:16:32 laid in panels finished with 3 mm (1/8") floating coat of neat cement or cement and marble dust in ratio of 5:1 as specified above and including 8 cm. (3") thick base concrete above and removing any overlapping mortar at the joints of the panels if any and giving them a uniform finish, including supply of all materials. labour, T & P etc. required for proper completion of the work.	Sqm		850.00	
iv	605	As in item (602) above but floor shall be 4 cm. (1- 1/2") thick instead of 2.5 cm. (1") thick and without base concrete.	Sqm	55.00	365.00	20075.00
v	631	Providing and fixing glass strips of 3 mm. Thickness in joints of floor and skirting at the time of laying floors flush with floor level including labour, tools plants etc. complete.				
		(b) Of 35 min depth.	Rm	82.00	28.00	2296.00
vi	NS	Providing and laying 40mm thick sand wash flooring over the base of 1:2:4 (1 Cement :2 Coarse sand : 4 Graded stone aggregate) cement concrete as per specification all complete as per approved design under instruction of Engineer-in-charge.(Note:Floring area shall be measured for payment.)	Sqm	27.00	1100.00	29700.00
vii	NS	Providing and fixing of heavy duty stone cobble (Size 100x100x100mm thick) of any colours, laid on 40mm thick bed mortar 1:4 (1 Cement :4 coarse sand) and jointing 10mm spaces between cobble stone with mortar and finish with grey cement slurry, the surface should be cleaned afterwards etc. all complete finished as per approved design & slope under instruction of Engineer-in-charge.	Sqm	52.00	1705.00	88660.00

viii	NS	Providing and laying 30mm thick rubrized flooring as per designe and specification all complete under instruction of Engineer-in-Charge.	Sqm	54.00	2850.00	153900.00
ix	DSR 11.53	Providing and fixing Glass mosaic tiles on finished plain wall surface of size 20 mm x 20 mm x 4 mm in all colour, design , fixing in approved design. The glass mosaic tiles shall be fixed on the wall surface with the help of approved adhesive applied at the rate of 2.5 kg per sqm and grouting of the same. All completed as per direction of Engineer-in-charge.	Sqm	367.00	1603.75	588576.25
x	NS	Providing and laying C.C. pavement of mix M-25 with ready mixed concrete from batching plant. The ready mixed concrete shall be laid and finished with screed board vibrator , vacuum dewatering process and finally finished by floating, brooming with wire brush including panel shuttering etc. all complete as per specifications and directions of Engineer-in- charge. (Note:- Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/ recoverable separately).	Cum	61.00	6950.00	423950.00
<b>Sub Total</b>						<b>1600379.00</b>
<b>9</b>	<b>PAINTING WORKS</b>					<b>#REF!</b>
i	DSR 13.26	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	Sqm	269.00	118.70	31930.30
iii	N.S.	Painting with graffiti on wall surface as per specification and under instruction of Engineer-in-charge.	Sqm	71.00	650.00	46150.00
iv	CPWD 13.47-1	Finishing walls with Premium Acrylic Smooth exterior paint with Silicon additives 1 of required shade New work (Two or more coats applied @ 1.43 Ltr/sqm over and including base coat of water proofing cement paint aplied @ 2.20 kg/ 10 sqrn).	Sqm	199.00	225.00	44775.00
v	641	Painting or varnishing new iron work in small areas or new wood with one coat (up to one sq. meter) of ready mixed priming paint and one coat of approved superior quality ready mix paint (2nd quality synthetic enamel paint of approved brand such as British paint, Shalimar, Asian or equivalent as approved by E/I) or • Varnish including supply of all materials, labor, T & P etc. required for proper completion of the work. Paint to be used should confirm the I. S. I. No. 103-1950.	Sqm	298.00	65.00	19370.00
vi	642	As in item (641) above but for every coat after first coat.	Sqm	298.00	29.00	8642.00
vii	DSR 13.71	Lettering with black Japan paint of approved brand and manufacture	Per Letter per cm	131.00	2.70	353.70
<b>Sub Total</b>						<b>151221.00</b>
<b>10</b>	<b>REPAIR OF OLD WORK (EXISTING STRUCTURE)</b>					

i	800	Repair to plaster or painting in patches including removal of old plaster, raking out joints to 1 cm. Depth. Watering the area and then replastering or repainting of surface as the existing surface including supply of all materials, labour and tools and plants etc. required for the proper completion of the work Add to the respective item in chapter 13 for plaster and painting.	Sqm	1453.00	30.50	44316.50
ii	DSR 13.23	Extra for plastering done on moulding, cornices or architraves including neat finish to line and level:				
a	DSR 13.23.1	In one coat	Sqm	28.00	305.45	8552.60
iii	DSR 14.43	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	Sqm	2448.00	8.35	20440.80
iv	641	Painting or varnishing new iron work in small areas or new wood with one coat (up to one sq. meter) of ready mixed priming paint and one coat of approved superior quality ready mix paint (2"d quality synthetic enamel paint of approved brand such as British paint, Shalimar, Asian or equivalent as approved by E/I) or • Varnish including supply of all materials, labour, T & P etc. required for proper completion of the work. Paint to be used should confirm the I. S. I. No. 103-1950.	Sqm		65.00	
v	642	As in item (641) above but for every coat.	Sqm		29.00	
vi	643	As in item (642) above but for every coat on previously painted old wood or iron work including its sand papering: rubbing and cleaning as required for proper completion of work.	Sqm	53.00	40.00	2120.00
vii	DSR 14.67	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade				
viii	DSR 14.67.2	Old work (one or more coats applied @ 0.83 ltr/10 sqm).	Sqm	910.00	47.25	42997.50
ix	662	Finishing walls with one coat of water proof cement paint of approved quality on previously old treated surface with this paint to give an even shade including supply of all materials labour and tools and plants etc, required for proper completion of the work.	Sqm	1123.00	31.00	34813.00
x	NS	Distempering with 1st quality acrylic distemper (ready mixed) of approved manufacturer, of required shade and colour complete, as per manufacturer's specification.				
a	NS	Two or more coats on old work	Sqm	211.00	53.15	11214.65
xi	NS	Graffiti painting on over head tank columns with approved paint, colour and design etc. all complete as shown in drawing under instruction of Engineer-in-charge.	Sqm	396.00	300.00	118800.00
xii	PWD 10.00	Providing and laying 350mm dia NP-3 RCC hume pipe medium duty conform to IS 458:2003 including collars/spigot jointed with stiff mixture of cement in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints, all taxes, transportation charges & contractor's profit etc. complete.	Rmt	4.00	1600.00	6400.00
<b>Sub Total</b>						<b>289655.00</b>
<b>Grand Total</b>						<b>4773791.00</b>



SUB WORK NO. III					
				External Lighting	
S.No	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
<b>SUPPLY, INSTALLATION OF FEEDER PILLAR / PANELS</b>					
1	Design, manufacture, supply, installation, testing and commissioning of outdoor type external lighting feeder pillar of suitable size not less than 30 cm and upto 45 cm deep made out of M.S. sheet 2mm thick (14 SWG) duly compartmentalized, double door with locking arrangement (IP-54), duly fixed on MS angle iron frame work of size 50mm x 50mm x 6mm, 90 cm long legs out of which 45 cm duly grouted in cement concrete 1:2:4 (1 cement : 2 sand : 4 stone aggregate 20mm) and having following accessories mounted inside the cubical panel i/c connection, inter connection with aluminium thimbles, earthing with two nos. earth struds duly painted with one coat of red oxide & two coats of superior quality enamel paint of approved shade complete etc. as reqd.				
	Supplying, Installing & fixing of following accessories in the existing cubical panel board / feeder pillar including connection testing etc. as reqd.				
	Power contactor 1 sets of single pole of suitable ratings				
	Astronomical Timer, Reference 04767 - Legrand make or equivalent from GE / Siemens / L&T				
	The above board shall be complete with 1 no. phase indicating lights, flush mounted Ammeter, Voltmeter, selector switches, protective fuses etc. at Incomer with all interconnections by min. 2.5 sq.mm. Copper wires.				
Danger notice plate					
<b>External Lighting Feeder Pillar :-</b>					
i	INCOMER : 40 AMP DP MCB (10 KA)				
	BUS BAR : 100 AMP, 500 Volts, 1 phase 50 HZ 2P high conductivity electrolytic Aluminium bus bar. The current density of bus bar shall be minimum 1.00 sq mm /amp.				
	The Maximum allowable temperature for the Bus bar to be restricted to 85 deg C. The temperature rise should be restricted to 35 deg C above ambient temperature.				
	OUT GOINGS : 4 nos. 6-32 AMP DP MCB (10 KA)	1	SET	50,000.00	50,000.00
<b>2 CABLES</b>					
Supply & Laying of ISI marked aluminium conductor XLPE insulated cable as per IS 7098, armoured, served, sheathed 1100 volts grade.					
b	4 sqmm 2 core	70	RM	105.00	7,350.00
<b>3 Mini Mast Light</b>					
Supply, Installation, testing and commissioning of Octagonal Poles of 6 M height High mast Light with 4 nos 45 watt LED luminaire with Erection, Testing & Commissioning		2	SET	90,000.00	180,000.00
<b>4 Solar Light</b>					

	Supply, Installation, Testing & Commissioning of Solar PV stand with Street 20W LED Lighting System comprising of one 75 Wp SPV module, one 12 V, 75 Ah Tubular Plate sealed maintenance free VRLA Gel Battery, one White LED luminary of 20W with in-built inverter, Charger, dusk to dawn circuit for automatic switching on & off at dusk to dawn, automatic dimming circuit (automatic/optional) based on real time clock for full bright operation during first six hours and half bright operation for rest hours, 4.5M pole, one charge-regulator, module mounting structure, Pole mounted Battery box, cables and other fittings along with 5 (five) years guarantee / warranty period (25 years for SPV Module).	3	Nos	45,000.00	135,000.00
<b>5</b>	<b>G.I. EARTHING</b>				
i	Supply & burrying of 600mm x 600mm x 6.0mm G.I. plate, vertically for earthing with its top at least 3 meters below ground level complete with 20 mm G.I. pipe for watering funnel, 300 mm square C.I. frame with hinged cover, masonry housing, alternate layers of coke and salt at least 150 mm thick alround including excavation and back filling etc. complete in all respects. (for Feeder Pillar)	2	Nos.	5,500.00	11,000.00
ii	Providing & fixing 25mm x 3mm G.I. strip on surface, in recess or in ground including connections etc. as required	14	RM	110.00	1,540.00
iii	Supply & burrying of 20 mm dia x 3 m long G.I. pipe (C class) vertically for earthing having 12 mm dia holes spaced 75 mm apart drilled upto 2 meter from the bottom complete with one earthing lead of no. 6 to 8 SWG G.I.wire in 15 mm dia. GI pipe upto switch board (from apron to switch) mm dia. GI pipe upto switch board (from apron to switch board the cost of GI pipe & GI wire will be extra), 300 mm square C.I. box with hinged cover, masonry housing alternate layer of charcoal/coke and salt atleast 150mm thick alround etc. as per the direction of engineer in-charge complete in all respect (for Pole Earthing)	2	Nos.	4,000.00	8,000.00
iv	Providing and laying 6 SWG dia G.I. wire on surface, in recess or in ground including connections for earthing as required.	12	RM	30.00	360.00
			<b>TOTAL</b>		<b>393250.00</b>



## Plumbing

SUB WORK NO. I						Storm Water Scheme
						Open Drain
			Qty		Rate	Amount in Rs.
1	Constructing open surface drain in Brick work including trenches including cost of excavation, bed concrete, cost of perforated covers etc. complete.					
a)	300 mm Width	RM	230	@	2500.00	575000.00
b)	400 mm Width	RM	30	@	2500.00	75000.00
2	Provision for carriage of material & other foreseen item etc., L.S.					130000.00
3	Provision for rain water harvesting arrangements	NO	1	@	300000	Rs300,000.00
4.	Submersible and piping for irrigation		1		300000	Rs300,000.00
<b>TOTAL</b>						<b>Rs1,380,000.00</b>
Add 5% contingencies, Price Escalation & other unforeseen						Rs54,000.00
<b>TOTAL</b>						<b>Rs1,134,000.00</b>

**Approximate cost of Shastri Park, Varanasi**  
**Bill of Quantity for Horticulture works**

**1 SOFTSCAPE WORKS**

<b>A</b>	<b>PLANTATION</b>	<b>UNITS</b>	<b>QUANTITY</b>	<b>RATE</b>	<b>AMOUNT</b>
<b>A.1</b>	<b>EARTHWORK</b>				
1.1	Clearance and disposal of all debris on site after the construction, with all leads and lifts, removal of all weeds and other growth with roots by forking, breaking clods, rough dressing and proper leveling.	Sq.m.	1050	15.00	15,750.00
1.2	Supplying and stacking of good earth at site including royalty and carriage for all leads. (earth measured in stacks will be reduced by 20% for payment).	cum.	200	300.00	60,000.00
1.3	Supplying and stacking of manure on site including royalty and carriage for all leads. (Manure measured in stacks will be reduced by 8% for payment).	cum.	115	600.00	69,000.00
1.4	Supplying and stacking of fertilizers at site including royalty and carriage	kg.		AS/RATE	2,000.00
1.5	Supplying and stacking of Insecticides, Pesticides and Weedicides at site including royalty and carriage. DURS BAN or equivalent 1 to 2lts/200lts of water and sprayed. As follows	lts.		LUMP SUM	2,000.00
1.6	Supply and stacking at site soil ammendment additives to imprve soil quality at site based on soil test report	As/rate		AS/ RATE	2,000.00
	<b>TOTAL</b>				<b>150,750</b>
<b>A.2</b>	<b>TREES</b>				
2.1	The rate of the following items include for supply of plants as specified, transportation to site,excavation of pits and plantation as follows:				
2.1.1	Preparation of pits for trees by excavating 1.0 m x 1.0 m x 1.0 m deep, refilling the excavated earth after breaking clods and mixing with manure in the ratio 3:1 flooding with water, filling with earth if necessary, watering, fine dressing, leveling, supply and transportation and mixing of soil improvement, nutrients (including manure, fertilizers as required, and inside coat of DURS BAN or equivalent in all pits). Planting and staking in full at the specified location, including replacement of unhealthy and dead plants in the maintenance period. Stacking and disposal of material declared unserviceable and surplus including all leads and lifts (Cost of manure and extra earth to be paid separately) and mandatory maintenance for specified period. The pits should be large enough to accomodate rootball 1/3 root depth on all sides. Maintenance of lawn for 12 months.	Nos.	25	800.00	20,000.00
	<b>TOTAL</b>				<b>20,000</b>
<b>A.3</b>	<b>SHRUBS &amp; CLIMBERS</b>				
3.1	The rate of the following items include for supply of plants as specified, transportation to site, excavation of pits and plantation as follows:				

3.1.1	Preparation of pits for Shrubs and Climbers by excavation (the required depths for the operation are given as follows) refilling the excavated earth after breaking clods and mixing with manure in the ratio 3:1. flooding with water, filling with earth if necessary, watering, fine dressing, leveling. Finally planting the specified shrub and staking in full in the pit. Maintaining the plants for 12 months, including replacement of unhealthy and dead plants in the maintenance period. Subsequently, stacking and disposal of material declared unserviceable and surplus including all leads and lifts (Cost of manure and extra earth to be paid separately).				
	Shrubs	Nos	18	250.00	4,500.00
	0.6mX 0.6mX 0.6m deep				
	<b>TOTAL</b>				<b>4,500</b>
<b>A.4 GROUND COVERS</b>					
4.1	Preparation of planting beds for ground covers by excavating to a depth of 0.30m, removing all foreign bodies over 50 mm dia refilling with the mix of earth and manure in the ratio 3:1 flooding with water, filling with earth if necessary, watering, dressing, leveling and finally planting the specified ground covers. Stacking and disposal of material declared unserviceable and surplus including all leads and lifts (Cost of manure and extra earth to be paid separately) all inclusive of the mandatory maintenance of 12 months.	Sq.m.	81	150.00	12,150.00
	<b>TOTAL</b>				<b>12,150</b>
<b>A.5 MAINTAINED LAWN</b>					
<b>5.1 Ground Preparation for grassing.</b>					
5.1.1	Excavating to a depth of 0.30m removing all foreign bodies over 50 mm dia, refilling with the mix of earth and manure in ratio 3:1, grade surface to finish levels, as indicated on grading plans. All finished areas shall slope to drain. Where no grades are shown, the areas shall have a smooth and continual grade between existing or fixed controls (such as walks, curbs, catch basins, elevations at steps or building) and levels shown on plans. Roll, scarify, rake and level as necessary to obtain true, even grassing surfaces. All finish grades shall meet approval of the Project Engineer before grassing is done.				
5.1.2	Grassing with turfing of specified grass including watering and maintenance of the lawn till the grass forms a thick carpet free of weeds and fit for mowing including mandatory maintenance of lawn for 12 months.	Sq.m.	794	150.00	119,100.00
	<b>TOTAL</b>				<b>119,100</b>
				<b>NET TOTAL</b>	<b>306,500</b>

**SUPPLY OF PLANTS : SCHEDULE OF QUANTITIES**  
**Approximate cost of Shastri Park, Varanasi**

			Specifications						
The rate of the following items include for supply of plants (caliper measured 900mm above root bulb) as specified, transportation to site as follows:									
S.No.	Code	Botanical name	Height	Caliper	Spread	Unit	Qty	Rate	Amount
<b>TREES</b>									
1.0	AI	AZADIRACHTA INDICA	3.0M	50MM	2.0M	no.	2	1000	2000
2.0	NA	NYCTANTHES ARBOR-TRISTIS	2.0M	35MM	1.2M	no.	4	700	2800
3.0	DR	DELONIX REGIA	2.0M	50MM	1.2M	no.	3	1200	3600
9.0	FB	FICUS BENGHALANSIS	3.0M	60MM	2.0M	no.	1	1800	1800
4.0	FB	FICUS BENJAMINA	3.0M	50MM	1.2M	no.	2	1200	2400
5.0	PA	PLUMERIA ALBA	2.0M	50MM	2.0M	no.	9	1500	13500
6.0	CN	CITRUS NOBILIS	2.0M	35MM	1.2M	no.	2	750	1500
7.0	CF	CASSIA FISTULA	2.0M	35MM	1.2M	no.	2	1200	2400
<b>TOTAL</b>							<b>25</b>		<b>30,000</b>
<b>SHRUB</b>									
1.0	MR	MORUS ALBA	2.0M	35MM	1.2M	no.	2	750	1500
2.0	TMC	TABERNAEMONTANA	1.5M	25MM	1.0M	no.	9	750	6750
<b>TOTAL</b>							<b>18</b>		<b>8,250</b>
<b>Hedge</b>									
			<b>Height</b>	<b>Spread</b>	<b>shrubs per sqm</b>	<b>Unit</b>	<b>Qty in Sqm</b>	<b>Rate</b>	
2.0	HP	HAEMELIA PATENS	0.15M	0.15M	50 per sqm	sqm.	21	450	9450
3.0	D	DURANTA	0.30M	0.15M	50 per sqm	sqm.	32	450	14400
4.0	CL	CLERODENDRUM INERME	0.15M	0.15M	50 per sqm	sqm.	10	450	4500
<b>TOTAL</b>							<b>63</b>		<b>28,350</b>
<b>GROUND COVERS</b>									
			<b>Height</b>	<b>Spread</b>	<b>per sqm</b>	<b>Unit</b>	<b>Qty in Sqm</b>	<b>Rate</b>	
1.0	WD	WEDELIA TRILOBATA	0.15	0.15M	50 per sqm	sqm.	33	450	14850
2.0	OP	OPHIOPHOGAN	0.15M	0.15M	50 per sqm	sqm.	15	450	6750
3.0	CI	CANNA INDICA	0.15M	0.15M	50 per sqm	sqm.	33	500	16500
<b>TOTAL</b>									<b>38,100</b>
<b>GRASS</b>									
					<b>Effect</b>				
1.0		SELECTION NO.1 (CARPET GRASS) LAWN			CARPET EFFECT	sqm.	794	200	158800
<b>TOTAL</b>									<b>158,800</b>
<b>NET TOTAL</b>									<b>263,500</b>

### Approximate cost of Shastri Park, Varanasi

#### Bill of Quantity for Miscellaneous works

S.No	Item of Work	Unit	Qty.	Rate	Amount
1	Supply and fixing sand stone benches including finishing etc, all complete under instruction of Engineer - in - Charge.	Each	20.00	13500.00	270000.00
2	Supply and fixing seat with kota top including polishing, moulding, finishing etc., all complete under instruction of Engineer - in - Charge.	Each	7.00	9500.00	66500.00
3	Providing and fixing sand stone columns of different sizes as shown in drawing all complete under instruction of Engineer in Charge	Each	12.00	14000.00	168000.00
4	Supply and fixing of stepping stone as approved by architect under instruction of Engineer in charge	Each	12.00	4000.00	48000.00
5	Supply and fixing outdoor gym equipment, Children Play & Handicapped play equipment including finishing etc., all complete.	LS		1000000.00	1000000.00
6	Supply and fixing in position of Stainless Steel Dust-bin including all material required for fixing etc., all complete under instruction of Engineer in Charge.	Each	15.00	8500.00	127500.00
7	Providing, Supplying & fixing Single sided Sign Board of size 450 mm x 450 mm with suitable inner frame and proper support, with sign substrate of suitable size of 4mm ACP sheet with face fully covered by RETRO REFLECTIVE MICRO PRISMATIC Type IV Sheeting and messages and symbols accordingly, fixed to inner frame with the help of Very High Bond tape of 24mm wide and 2.3mm thick. The board is to be fixed on RCC wall/pillar with dash fasteners of SS pipe of S-304 grade. All stainless steel items shall be of S-304 Grade ( EXTERNAL SIGNAGES) (Material should be in compliance with Code of practise for Road signs, Indian Road Congress 2010, IRC-67-2010) (For Toilet)	Each	5.00	2000.00	10000.00
8	Supply and fixing in position of porta cabin toilet under instruction of Engineer in Charge as approved by Architect.	Each	2.00	244260.00	488520.00
5	Providing, Supplying & fixing Single sided Sign board of size 1320mm x 2540mm (50mm dia SS pipe of S 304 - grade 1 6mm . thick ). with inner frame of 1220mm x 2440mm (of 19mm x 24mm rectangle, 1.2mm Thick SS pipe of S-304 Grade ) along with diagonal support also of 19mm x 24mm rectangle, 1.2mm Thick SS pipe of S-304 Grade, with sign substrate of size 1220mm x 2440mm, of 4mm ACP with face fully covered by RETRO REFLECTIVE MICRO PRISMATIC Type IV Sheeting, and messages and symbols accordingly, fixed to inner frame of 1220mm x 2440mm of ( 19mm x 24mm rectangle, 1.2mm Thick SS pipe of S-304 Grade ) with the help of Very High Bond tape of 24mm wide and 2.3mm thick. .The board shall have a one leg support of 168mm dia 3 mm thick SS pipe of S-304 grade of height 4040mm with base plate of 10mm thick SS plate of size 600mm x 600mm with 4 Nos. stiffeners of 10mm SS plate of S- 304 grade. The boards shall be fixed on a foundation size of 1500mm x 900mm x 900mm with CC 1: 2: 4 laid with the help of shuttering and 12 Nos. of foundation bolts of 20mm dia SS, S-304 grade of 600mm length Complete. All relevant specs confirming to detail drawing enclosed. (For Gate )	Each	2.00	5000.00	10000.00
					<b>2188520.00</b>

**Total Cost of Miscellaneous Works = 2188520.00**

**Maintenance cost for Shastri Park For 5 Years**

Sl. No.	Description / Item	Amount (Rs.)	Remarks
1	Organic Manure & Inorganic Fertilizer	3000.00	
2	Tools & Equipments	2000.00	
3	Labour Cost (Watering, Weeding, Shrubs, Hedge Plants, Flowers & Trees)	15000.00	
	One Mali		
	Maintenance Cost for One Month	20000.00	As Actual
	Maintenance Cost for One Year	240000.00	
	Maintenance Cost for Second Year	243000.00	1.25% Extra for Escalation
	Maintenance Cost for Third Year	246645.00	1.5% Extra for Escalation
	Maintenance Cost for Forth Year	250961.29	1.75% Extra for Escalation
	Maintenance Cost for Fifth Year	255980.51	2% Extra for Escalation
4	Civil Work Maintenace Cost for 5 Years	238689.55	1 % of Civil Works
5	E & M Maintenance Cost for 5 Years		
i	Electrical Maintenace (Labour, T&P& Material)	98312.50	5% of Electrical Works
ii	Machenical Maintenance	345000.00	5% of Machenical Works
	<b>Total Maint. cost for 5 Years</b>	<b>1918589.00</b>	

## IV. Annexure – “Bd” Machhodari Park



<b>Abstract of Cost</b>		
<b>Approximate cost of Machhodari Park, Varanasi</b>		
<b>S.No</b>	<b>Discription</b>	<b>Amount</b>
1	Civil Works	12006347.00
2	Open Drain & Sewerage Scheme	3355000.00
3	Electrical Works	1676440.00
4	Horticulture	2758075.00
5	Supply of plant	2060600.00
5	Miscellaneous Works	2645000.00
6	Maintenace Cost for 5 Years	2314041.00
7	External Developemnt	2200000.00
<b>Total Amount in Rs.</b>		<b>29015503.00</b>

**Project: Approximate cost of Machhodari Park, Varanasi**

Sl. No.	PWD SOR / DSR No.	Description	Unit	Qty.	Rate	Amount
<b>1</b>		<b>DISMANTLING AND DEMOLISHING WORK</b>				
i	DSR 15.7	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 meter lead as per direction of Engineer-in-charge.				
a	DSR 15.7.4	In Cement Mortar	Cum	83.00	843	69948.25
ii	DSR 15.3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 meter lead as per direction of Engineer - in- charge.	Cum	18.00	1455	26181.90
iii	DSR 15.5	Extra for cutting reinforcement bars manually/ by mechanical means in R.C.C. or R.B. work (Payment shall be made on the cross sectional area of R.C.C. or R.B. work) as per direction of Engineer-in-charge.	Sqm	34.00	501	17027.20
iv	DSR 15.6	Extra for scrapping, cleaning and straightening reinforcement from R.C.C. or R.B. work.	kg	1829.00	4	7133.10
v	DSR 15.2	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 meter lead as per direction of Engineer - in - charge.				
a	DSR 15.2.2	Nominal concrete 1:4:8 or leaner mix (i/c equivalent design mix)	Cum	8.00	615	4921.20
vi	DSR 16.83	Taking out existing CC interlocking paver blocks from footpath/ central verge, including removal of rubbish etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 metre lead as per direction of Engineer-in-Charge.	Sqm	525.00	54	28323.75
vii	DSR 1.1.18	Disposal of moorum/building rubbish/ malba/ similar unserviceable, dismantled or waste material by mechanical transport including loading, transporting, unloading to approved municipal dumping ground for lead upto 10 km for all lifts, complete as per directions of Engineer-in-charge.	Cum	635.00	210	133286.50
		<b>Sub Total</b>				<b>286822.00</b>
<b>2</b>		<b>EARTH WORK</b>				

i	DSR 2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.				
a	DSR 2.6.1	All Kinds of Soil	Cum	1985.00	126	250010.75
ii	DSR 2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	Cum	1351.00	126	169888.25
iii	DSR 2.27	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	Cum	85.00	918	78008.75
		Carriage of Material				
iv	231 (a)	Cartage of ballast, kankar, coal, Grit or Sand et. Including loading and unloading but excluding stacking on pucca roads.				
a		Earth (1 KM)	Cum	634.00	86	54207.00
<b>Sub Total</b>						<b>552115.00</b>
<b>3 (A)</b>	<b>CEMENT CONCRETE WORK</b>					
i	281	Concrete with 4cm. gauge approved stone ballast, approved coarse sand and cement in the proportion of 8:4:1 including supply of all materials labour and tools and plants etc. required for proper completion for the work.	Cum	397.00	4680	1857960.00
ii	279	Cement concrete with 4cm. Gauge approved stone ballast, approve coarse sand and cement in the proportion of 4:2:1 including supply of all materials, labour and T&P etc. required for proper completion of the work.			5790	
iii	279b	Same as SI 279 but 2cm. Gauge approved stone ballast.	Cum	3.00	6150	18450.00
iv	282	Cast cement concrete as in door sills, chaukhat, boundary post or similar precast unit with cement, approved coarse sand and 20 gauge approved stone ballast in the proportion of 1:2:4 (class-150) excluding supply of reinforcement and its bending but including its fixing in position and binding with 24 B.W.G.G.I. binding wire and including necessary centring and shuttering etc.,. and also including supply of all material, labour, T&P etc. required for proper completion of work. Binding wire to be supplied by the contractor free of cost.	Cum	2.00	7150	14300.00
<b>3 (B)</b>	<b>REINFORCEMENT CEMENT CONCRETE</b>					

i	283	R.C.C. work with cement approved coarse sand and 2 cm Gauge approved stone ballast in the proportion of 1:2:4 in lintels of doors and windows, excluding its fixing and binding the same with 24B.W.G.G.I binding wire and including necessary centering and shuttering etc. and also including S/o all materials required for proper completion of the work. Binding wire to be supplied by the contractor free of cost.	Cum		6950	
ii	284	As in Item No. 283 above but for slabs. 1:2:4	Cum		7510	
iii	b.	As in Item No. 284 above but with 1:1.5:3	Cum	3.00	8150	24450.00
iv	285	As in Item No. 283 above but in the lighter beam i.e. having spans upto 6m 1:2:4.	Cum		7700	
v	b.	As in Item No. 285 above but with 1:1.5:3	Cum	10.00	8350	83500.00
vi	287	As in Item No. 283 above but in RCC Raft foundationg and footing with 4cm gauge approved stone ballast.1:2:4	Cum		6420	
vii	b.	As in Item No. 287 above but with 1:1.5:3	Cum	17.00	7030	119510.00
viii	288	As in Item No. 283 above but in RCC T Beam and slab roofs and RCC Columns in 1:2:4	Cum		7700	
ix	b.	As in item no. 288 above in RCC T- Beam slab and RCC coloumns but in 1:1.5:3.	Cum	13.00	8400	109200.00
x	DSR 5.22	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto All levels & Height				
a	DSR 5.22.6	Thermo-Mechanically Treated bars of grade Fe-500D or more	Kg	4250.00	57	240550.00
<b>Sub Total</b>						<b>2467920.00</b>
<b>4</b>	<b>BRICK WORK</b>					
i	303	M-150 brick work in 1:6 cement and sand of 1.25 fineness modulous mortar in foundation and plinth including supply of all material, labour and tools and plants. ect. required for proper completion of work.	Cum		4200	
ii	305	As in item 303 above but in 1:4 cement and sand of 1.25 fineness modulous mortar.	Cum	343.00	4370	1498910.00
iii	309	As in item 302 to 307 above but in super structure including necessary cutting and moulding of bricks required and also including honey comb brick work, thickness of walls more than one brick and for extra lab our to above items.	Cum		210	
iv	310	Same as item No. (309) above but for one brick wall add for extra labour.	Cum	59.00	4590	270810.00
v	(a)	As in item 309 above but walls of half brick t 1.5 mm (4-1/2") thick add for extra labour over item no. 310.	Cum	4.00	4685	18740.00
<b>Sub Total</b>						<b>1788460.00</b>
<b>5</b>	<b>DAMP PROOF CONCRETE</b>					

i	360	2CM (3/4") thick damp proof course with cement and approved coarse sand 1:2 with and including water proofing material as ordered by the Engineer - in - charge in the proportion as specified by the manufacturers, including supply of all material, labour, T & P etc. required for proper completion of the work and including proper curing and shuttering as necessary.	Sqm	20.00	180	3600.00
ii	361	As in item (360) above but 2.5 cm (1") thick and of cement concrete consisting of 1 part cement 1-1/2 parts approved 13 mm. (1/2") graded stone grit and including water proofing materials as ordered by the Engineer - in -charge in the proportion as specified by the manufacture.	Sqm	20.00	250	5000.00
iii	NBC 5.7.1 (ii)	Painting on D. P. C. with two coats of air blown bitumen 85/50 or 85/25@ 1.7 Kg/Sqm. Aprox including cost of fuel if any.	Sqm	20.00	55	1100.00
<b>5</b>	<b>ANTI-TERMITE TREATMENT</b>					
iv	NS	Providing and injecting chemical emulsion for Preconstructional antitermite treatment and creating a chemical barrier under and around the column pits. wall trenches. basement excavation top surface of plinth,filling junction of walls and floors, along, the external perimetre of building, expansion joints, surroplan area shall be measured. (Part II 1981) Aldrine emulsifiable concentrate or any other approved material such as chloropyriphos or Heptrachlor or ehlordance will be used. The rate of application of chemical emulsion shall be as follows. (1) Treatment for Masonary & foundation 5 liters per Sq. M_ (2) Back fill in immediate contact with foundation 7.5 liters per Sq_ M. (3) Treatment of top surface of Plinth filling 5 litres per Sq. M. (4) Treatment of junctions of walls and the floors 7.5 litres per Sq. M. (5) treatment of soil along External perimeter of Building 7.50 litres per Sq. M. (6) Treatment of soil under Apron along external perimeter 5 liters per Sq. M.	Sqm	62.00	240	14880.00
<b>Sub Total</b>						<b>24580.00</b>
<b>6</b>	<b>STEEL WORK</b>					
i	DSR 10.25	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel, plates etc. as required.				
a	DSR 10.25.2	In gratings, frames, guard bar, ladder, railings, brackets, gatesand similar works	kg	13316.00	86	1144510.20
ii	DSR 10.26	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer.				
a	DSR 10.26.1	M.S.Tube	kg	8877.00	92	816684.00

iii	DSR 10.27	Providing and fixing carbon steel galvanized ( minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm <sup>2</sup> ), counter sunk head, comprising of 10 m dia polyamide PA 6 grade sleeve, including drilling of hole in frame , concrete/ masonry, etc. as per direction of Engineer-in-charge.				
a	DSR 10.27.4	10 x 140 mm	Each	68.00	103	6990.40
iv	NS	Supply, Fabrication, transportation, delivery at site and erection, installation and alignment of mild steel foundation Anchor bolt of approved size assembly in concrete along with nuts, lock nuts (as per IS:1363, 1364 and IS:3138), washers including welding, cutting, grinding, threading, drilling etc. all complete.	Kg	26.00	160	4160.00
<b>Sub Total</b>						<b>1972345.00</b>
<b>7</b>	<b>PLASTER WORK</b>					
i	DSR 13.11	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster 1:6 (1 cement : 6 fine sand).	Sqm	559.00	256	142852.45
ii	NS	Providing and fixing horizontal & vertical 24guage chicken mesh wire between junctions of column/beam, walls & conduit pipes wherever required, chicken wire mesh should be fixed with U nails 150 mm centre to centre before plastering the junction. The plastering of walls and beam/column in one vertical plane should be carried out in one go, including the payment of U nails, T&P etc. all complete under instruction of Engineer-in-charge.	Sqm	52.00	125	6500.00
iii	DSR 13.24	Extra for plastering done on moulding, cornices or architraves including neat finish to line and level:				
a	DSR 13.24.2	In two coats	Sqm	15.00	503	7548.00
<b>Sub Total</b>						<b>156900.00</b>
<b>8</b>	<b>FLOORING WORKS</b>					
i	NS	Providing and laying 60mm thick facioy made rubber moulds cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge.	Sqm	1706.00	616	1050384.20
ii	602	2.5 cm. (1") thick 1:2:4 plain cement concrete floor with base concrete consisting of brick ballast, white lime & surkhi in the proportion of 100:16:32 laid in panels finished with 3 mm (1/8") floating coat of neat cement or cement and marble dust in ratio of 5:1 as specified above and including 8 cm. (3") thick base concrete above and removing any overlapping mortar at the joints of the panels if any and giving them a uniform finish, including supply of all materials. labour, T & P etc. required for proper completion of the work.	Sqm		850	



iii	605	As in item (602) above but floor shall be 4 cm. (1-1/2") thick instead of 2.5 cm. (1") thick and without base concrete	Sqm	173.00	365	63145.00
iv	NS	Providing and laying 40mm thick colour full flooring with pebble & sand over the base of 1:2:4 (1 Cement :2 Coarse sand : 4 Graded stone aggregate) cement concrete as per specification all complete as shown in drawing under the instruction of engineer in charge.	Sqm	76.00	1150	87400.00
v	11.53	Providing and fixing Glass mosaic tiles on finished plain wall surface of size 20 mm x 20 mm x 4 mm in all colour, design , fixing in approved design. The glass mosaic tiles shall be fixed on the wall surface with the help of approved adhesive applied at the rate of 2.5 kg per sqm and grouting of the same. All completed as per direction of Engineer-incharge.	Sqm	345.00	1604	553293.75
vi	NS	Providing and laying C.C. pavement of mix M-25 with ready mixed concrete from batching plant. The ready mixed concrete shall be laid and finished with screed board vibrator , vacuum dewatering process and finally finished by floating, brooming with wire brush including panel shuttering etc. all complete as per specifications and directions of Engineer-in- charge. (Note:- Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/ recoverable separately).	Cum	163.00	6950	1132850.00
vii	11.8	Extra for making chequers of approved pattern on cement concrete floors, steps, landing, pavements etc.	Sqm	62.00	37	2284.70
viii	NS	Painting concrete pavement marking with adequate nos of coats to give uniform finish with road marking paint of superior make as approved pattern by the Engineer-in-charge, i/c cleaning the surface of ail dirt, scales, oil, grease and other foreign mater;al etc. and lining out complete.				
a	NS	New work (Two or more coats)	Sqm	62.00	133	8252.20
ix	DSR 11.45	Providing and laying 500x500x40 mm thick Turf paver (Turfpave XD) on 150 mm thick sub grade of compacted bed of 20 mm thick nominal size stone aggregate and base course and filling with 150 mm thick jamuna sand, including spreading, well ramming, consolidating and finishing smooth etc. all complete as per direction of Engineer-in-charge.	Sqm	109.00	1113	121338.80
x	DSR 11.29	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 coarse sand), including pointing with cement mortar 1:2 (1 cement : 2 stone dust) with an admixture of pigment to match the shade of stone.				
a	DSR 11.29.1	Red sand stone	Sqm	307.00	744	228315.90



xi	NS	Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12 mm thick cement mortar 1:3 (1 cement : 3 coarse sand) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade : (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) :				
a	NS	Red sand stone Mural of approved design and shape	Sqm	72.00	15000	1080000.00
<b>Sub Total</b>						<b>4327265.00</b>
<b>9</b>	<b>PAINTING WORKS</b>					
i	DSR 13.26	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	Sqm	513.00	119	60893.10
ii	CPWD 13.47-1	Finishing walls with Premium Acrylic Smooth exterior paint with Silicon additives 1 of required shade New work (Two or more coats applied @ 1.43 Ltr/sqm over and including base coat of water proofing cement paint applied @ 2.20 kg/10 sqm).	Sqm	513.00	93	47709.00
iii	641	Painting or varnishing new iron work in small areas or new wood with one coat (up to one sq. meter) of ready mixed priming paint and one coat of approved superior quality ready mix paint (2nd quality synthetic enamel paint of approved brand such as British paint, Shalimar, Asian or equivalent as approved by E/I) or • Varnish including supply of all materials, labour, T & P etc. required for proper completion of the work. Paint to be used should confirm the I. S. I. No. 103-1950.	Sqm	391.00	65	25415.00
iv	642	As in item (641) above but for every coat after first coat.	Sqm	391.00	29	11339.00
<b>Sub Total</b>						<b>145356.00</b>
<b>10</b>	<b>FENCING</b>					
i	DSR 16.17	Fencing with R.C.C. post placed at required distance, embedded in cement concrete blocks, every 15th post, last but one end post and corner post shall be strutted on both sides and end post one side only, provided with horizontal lines and two diagonals of barbed wire weighing 9.38 kg per 100 meter (minimum), between the two posts fitted and fixed with G.I. staples on wooden plugs or G.I. binding wire tied to 6 mm bar nibs fixed while casting the post (cost of R.C.C. posts, struts, earth work and concrete to be paid for separately) :- Payment to be made per metre cost of total length of barbed wire used.				
a	DSR 16.17.1	With G.I. barbed wire	Rmt.	1927.00	8	15897.75
<b>Sub Total</b>						<b>15898.00</b>
<b>11</b>	<b>REPAIR OF OLD WORK (EXISTING STRUCTURE)</b>					

i	800	Repair to plaster or painting in patches including removal of old plaster, raking out joints to 1 cm. Depth. Watering the area and then replastering or repainting of surface as the exiting surface including supply of all materials, labour and tools and plants etc. required for the proper completion of the work Add to the respective item in chapter 13 for plaster and painting.	Sqm	2190.00	31	66795.00
ii	DSR 13.23	Extra for plastering done on moulding, cornices or architraves including neat finish to line and level:				
a	DSR 13.23.1	In one coat	Sqm	16.00	305	4887.20
iii	DSR 14.43	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	Sqm	2315.00	8	19330.25
iv	641	Painting or varnishing new iron work in small areas or new wood with one coat (up to one sq. meter) of ready mixed priming paint and one coat of approved superior quality ready mix paint (2nd quality synthetic enamel paint of approved brand such as British paint, Shalimar, Asian or equivalent as approved by E/I) or • Varnish including supply of all materials, labour, T & P etc. required for proper completion of the work. Paint to be used should confirm the I. S. I. No. 103-1950.	Sqm		65	
v	642	As in item (641) above but for every coat.	Sqm		29	
vi	643	As in item (642) above but for every coat on previously painted old wood or iron work including its sand papering: rubbing and cleaning as required for proper completion of work.	Sqm	210.00	40	8400.00
vii	DSR 14.67	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade				
viii	DSR 14.67.2	Old work (one or more coats applied @ 0.83 ltr/10 sqm).	Sqm	1339.00	47	63267.75
ix	DSR 14.63	Distempering with 1st quality acrylic washable distemper (readymade) of approved manufacturer and of required shade and colour complete. as per manufacturer's specification.				
a	DSR 14.63.1	Two or more coats on old work	Sqm	944.00	30	28131.20
x	NS	Graffiti painting on over head tank columns with approved paint, colour and design etc. all complete as shown in drawing under instruction of Engineer-in-charge.	Sqm	99.00	300	29700.00
xi	DSR 14.64	Finishing walls with water proofing cement paint of required shade :				
a	DSR 14.64.1	Old work (one or more coats applied @ 2.20 kg/10 sqm) over priming coat of primer applied @ 0.80 litrs/10sqm complete including cost of Priming coat.	Sqm	750.00	56	41775.00
xii	PWD 10.00	Providing and laying 350mm dia NP-3 RCC hume pipe medium duty confirm to IS 458:2003 including collars/spigot jointed with stiff mixture of cement in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints, all taxes, transportation charges & contractor's profit etc. complete.	Rmt	4.00	1600	6400.00
<b>Sub Total</b>						<b>268686.00</b>
<b>Grand Total</b>						<b>12006347.00</b>

### Plumbing

SUB WORK NO. I Storm Water Scheme for Machhodari Park, Varanasi Bioswale Drain					
Sl. No.	Description	Unit	Qty	Rate	Amount in Rs.
1	Constructing Bioswale drain including trenches ,including cost of excavation, bed concrete boulders etc. complete.				
a)	150 mm Dia	Rmt.	750.00	3500.00	2625000.00
2	Provision for carriage of material & other foreseen item etc., L.S.				130000.00
4	Submersible and piping for irrigation	NO	2	30000	600000
	<b>TOTAL</b>				<b>3355000.00</b>

<b>SUB WORK NO. II</b>					
<b>External Lighting for Machhodari Park, Varanasi</b>					
<b>S.No</b>	<b>DESCRIPTION</b>	<b>QTY</b>	<b>UNIT</b>	<b>RATE</b>	<b>AMOUNT</b>
<b>SUPPLY,INSTALLATION OF FEEDER PILLAR / PANELS</b>					
<b>1</b>	Design, manufacture, supply, installation, testing and commissioning of outdoor type external lighting feeder pillar of suitable size not less than 30 cm and upto 45 cm deep made out of M.S. sheet 2mm thick (14 SWG) duly compartmentalized, double door with locking arrangement (IP-54), duly fixed on MS angle iron frame work of size 50mm x 50mm x 6mm, 90 cm long legs out of which 45 cm duly grouted in cement concrete 1:2:4 (1 cement : 2 sand : 4 stone aggregate 20mm) and having following accessories mounted inside the cubical panel i/c connection, inter connection with aluminium thimbles, earthing with two nos. earth struds duly painted with one coat of red oxide & two coats of superior quality enamel paint of approved shade complete etc. as reqd.				
	Supplying, Installing & fixing of following accessories in the existing cubical panel board / feeder pillar including connection testing etc. as reqd.				
	Power contactor 1 sets of single pole of suitable ratings				
	Astronomical Timer, Reference 04767 - Legrand make or equivalent from GE / Siemens / L&T				
	The above board shall be complete with 1 no. phase indicating lights, flush mounted Ammeter, Voltmeter, selector switches, protective fuses etc. at Incomer with all interconnections by min. 2.5 sq.mm. Copper wires.				
	Danger notice plate				
<b>i</b>	<b>External Lighting Feeder Pillar :-</b>				
	INCOMER : 40 AMP 4P MCB (10 KA)				
	BUS BAR : 100 AMP, 500 Volts, 3 phase 50 HZ 4P high conductivity electrolytic Aluminium bus bar. The current density of bus bar shall be minimum 1.00 sq mm /amp.				
	The Maximum allowable temperature for the Bus bar to be restricted to 85 deg C. The temperature rise should be restricted to 35 deg C above ambient temperature.				
	OUT GOINGS : 14 Nos. 6-32 AMP DP MCB (10 KA)	1	SET	70,000.00	70,000.00
<b>2</b>	<b>CABLES</b>				

	Supply & Laying of ISI marked aluminium conductor XLPE insulated cable as per IS 7098, armoured, served, sheathed 1100 volts grade.				
<b>b</b>	4 sqmm 2 core	70	RM	900.00	63,000.00
<b>3</b>	<b>Mini Mast Lighting</b>				
	Supply, Installation, testing and commissioning of Octagonal Poles of 6 M height High mast Light with 4 nos 45 watt LED luminaire with Erection, Testing & Commissioning	10	SET	90,000.00	900,000.00
<b>4</b>	Supply, Installation, Testing & Commissioning of surface mounted light with <u>1x18W CFL</u> , 'S' type lamp (EB) (THD <30%) with electronic ballast (PF 0.95) or equivalent as approved.	Nos.	1	3,500.00	3,500.00
<b>5</b>	<b>Solar Light</b>				
	Supply, Installation, Testing & Commissioning of Solar PV stand with Street 20W LED Lighting System comprising of one 75 Wp SPV module, one 12 V, 75 Ah Tubular Plate sealed maintenance free VRLA Gel Battery, one White LED luminary of 20W with in-built inverter, Charger, dusk to dawn circuit for automatic switching on & off at dusk to dawn, automatic dimming circuit (automatic/optional) based on real time clock for full bright operation during first six hours and half bright operation for rest hours, 4.5M pole, one charge-regulator, module mounting structure, Pole mounted Battery box, cables and other fittings along with 5 (five) years guarantee / warranty period (25 years for SPV Module).	13	Nos	45,000.00	585,000.00
<b>6</b>	<b>G.I. EARTHING</b>				
i	Supply & burrying of 600mm x 600mm x 6.0mm G.I. plate, vertically for earthing with its top at least 3 meters below ground level complete with 20 mm G.I. pipe for watering funnel, 300 mm square C.I. frame with hinged cover, masonry housing, alternate layers of coke and salt at least 150 mm thick around including excavation and back filling etc. complete in all respects. (for Feeder Pillar)	2	Nos.	5,500.00	11,000.00
ii	Providing & fixing 25mm x 3mm G.I. strip on surface, in recess or in ground including connections etc. as required	14	RM	110.00	1,540.00
iii	Supply & burrying of 20 mm dia x 3 m long G.I. pipe (C class) vertically for earthing having 12 mm dia holes spaced 75 mm apart drilled upto 2 meter from the bottom complete with one earthing lead of no. 6 to 8 SWG G.I. wire in 15 mm dia. GI pipe upto switch board (from apron to switch) mm dia. GI pipe upto switch board (from apron to switch board the cost of GI pipe & GI wire will be extra), 300 mm square C.I. box with hinged cover, masonry housing alternate layer of charcoal/coke and salt atleast 150mm thick around etc. as per the direction of engineer in-charge complete in all respect (for Pole Earthing)	10	Nos.	4,000.00	40,000.00
iv	Providing and laying 6 SWG dia G.I. wire on surface, in recess or in ground including connections for earthing as required.	80	RM	30.00	2,400.00
			<b>TOTAL</b>		<b>1676440.00</b>

**Approximate cost of Machhodari Park, Varanasi (Area 14440 sqm)  
Bill of Quantity for Horticulture works**

**1 SOFTSCAPE WORKS**

<b>A</b>	<b>PLANTATION</b>	<b>UNITS</b>	<b>QUANTITY</b>	<b>RATE</b>	<b>AMOUNT</b>
<b>A.1</b>	<b>EARTHWORK</b>				
1.1	Clearance and disposal of all debris on site after the construction, with all leads and lifts, removal of all weeds and other growth with roots by forking, breaking clods, rough dressing and proper leveling.	Sq.m.	8025	15.00	120,375.00
1.2	Supplying and stacking of good earth at site including royalty and carriage for all leads. (earth measured in stacks will be reduced by 20% for payment).	cum.	2200	300.00	660,000.00
1.3	Supplying and stacking of manure on site including royalty and carriage for all leads. (Manure measured in stacks will be reduced by 8% for payment).	cum.	1200	600.00	720,000.00
1.4	Supplying and stacking of fertilizers at site including royalty and carriage	kg.		AS/RATE	15,000.00
1.5	Supplying and stacking of Insecticides, Pesticides and Weedicides at site including royalty and carriage. DURSBAN or equivalent 1 to 2lts/200lts of water and sprayed. As follows	lts.		LUMP SUM	25,000.00
1.6	Supply and stacking at site soil ammendment additives to imprve soil quality at site based on soil test report	As/rate		AS/ RATE	25,000.00
	<b>TOTAL</b>				<b>1,565,375</b>
<b>A.2</b>	<b>TREES</b>				
2.1	The rate of the following items include for supply of plants as specified, transportation to site,excavation of pits and plantation as follows:				



2.1.1	Preparation of pits for trees by excavating 1.0 m x 1.0 m x 1.0 m deep, refilling the excavated earth after breaking clods and mixing with manure in the ratio 3:1 flooding with water, filling with earth if necessary, watering, fine dressing, leveling, supply and transportation and mixing of soil improvement, nutrients (including manure, fertilizers as required, and inside coat of DURS BAN or equivalent in all pits). Planting and staking in full at the specified location, including replacement of unhealthy and dead plants in the maintenance period. Stacking and disposal of material declared unserviceable and surplus including all leads and lifts (Cost of manure and extra earth to be paid separately) and mandatory maintenance for specified period. The pits should be large enough to accommodate rootball 1/3 root depth on all sides. Maintenance of lawn for 12 months.	Nos.	68	800.00	54,400.00
<b>TOTAL</b>					<b>54,400</b>
<b>A.3 SHRUBS &amp; CLIMBERS</b>					
3.1	The rate of the following items include for supply of plants as specified, transportation to site, excavation of pits and plantation as follows:				
3.1.1	Preparation of pits for Shrubs and Climbers by excavation (the required depths for the operation are given as follows) refilling the excavated earth after breaking clods and mixing with manure in the ratio 3:1. flooding with water, filling with earth if necessary, watering, fine dressing, leveling. Finally planting the specified shrub and staking in full in the pit. Maintaining the plants for 12 months, including replacement of unhealthy and dead plants in the maintenance period. Subsequently, stacking and disposal of material declared unserviceable and surplus including all leads and lifts (Cost of manure and extra earth to be paid separately).				
	Shrubs	Nos	58	250.00	14,500.00
	0.6mX 0.6mX 0.6m deep				
<b>TOTAL</b>					<b>14,500</b>
<b>A.4 GROUND COVERS</b>					
4.1	Preparation of planting beds for ground covers by excavating to a depth of 0.30m, removing all foreign bodies over 50 mm dia refilling with the mix of earth and manure in the ratio 3:1 flooding with water, filling with earth if necessary, watering, dressing, leveling and finally planting the specified ground covers. Stacking and disposal of material declared unserviceable and surplus including all leads and lifts (Cost of manure and extra earth to be paid separately) all inclusive of the mandatory maintenance of 12 months.	Sq.m.	460	150.00	69,000.00
<b>TOTAL</b>					<b>69,000</b>
<b>A.5 MAINTAINED LAWN</b>					
5.1	<b>Ground Preparation for grassing.</b>				



5.1.1	Excavating to a depth of 0.30m removing all foreign bodies over 50 mm dia, refilling with the mix of earth and manure in ratio 3:1, grade surface to finish levels, as indicated on grading plans. All finished areas shall slope to drain. Where no grades are shown, the areas shall have a smooth and continual grade between existing or fixed controls (such as walks, curbs, catch basins, elevations at steps or building) and levels shown on plans. Roll, scarify, rake and level as necessary to obtain true, even grassing surfaces. All finish grades shall meet approval of the Project Engineer before grassing is done.				
5.1.2	Grassing with turfing of specified grass including watering and maintenance of the lawn till the grass forms a thick carpet free of weeds and fit for mowing including mandatory maintenance of lawn for 12 months.	Sq.m.	7032	150.00	1,054,800.00
	<b>TOTAL</b>				
				<b>NET TOTAL</b>	<b>2,758,075</b>

**SUPPLY OF PLANTS : SCHEDULE OF QUANTITIES  
MACHHODARI PARK**

			Specifications						
The rate of the following items include for supply of plants (caliper measured 900mm above root bulb) as specified, transportation to site as follows:									
S.No.	Code	Botanical name	Height	Caliper	Spread	Unit	Qty	Rate	Amount
<b>TREES</b>									
1.0	DR	DELONIX REGIA	2.0M	50MM	1.2M	no.	6	1200	7200
2.0	PA	PLUMERIA ALBA	2.0M	50MM	1.2M	no.	15	1500	22500
3.0	CF	CASSIA FISTULA	2.0M	35MM	1.2M	no.	5	1200	6000
4.0	BB	BAHUNA BLAKEANA	2.0M	45MM	1.2M	no.	3	1800	5400
5.0	PL	POLYALTHIA LONGIFOLIA	2.0M	30MM	2.0M	no.	12	1200	14400
6.0	FB	FICUS BENGHALENSIS	2.0M	35MM	2.0M	no.	1	2500	2500
7.0	MA	MORUS ALBA	2.0M	60MM	1.2M	no.	5	1200	6000
8.0	NA	NYCTANTHES ARBOR-TRISTIS	2.0M	25MM	1.2M	no.	4	1200	4800
9.0	AI	AZADIRACHTA INDICA	1.0M	60MM	2.0M	no.	13	1500	19500
10.0	CN	CITRUS NOBILIS	1.0M	25MM	1.2M	no.	12	1200	14400
11.0	CAL	CALLIANDRA	1.0M	25MM	1.2M	no.	11	1200	13200
<b>TOTAL</b>							<b>33</b>		<b>115,900</b>
<b>SHRUB &amp; CREEPER</b>									
1.0	FP	FICUS PANDA	0.6M	15MM	1.2M	no.	16	750	12000
8.0	TMC	TABERNAEMONTANA	1.2M	25MM	1.0M	no.	15	750	11250
<b>TOTAL</b>							<b>10</b>		<b>23,250</b>
<b>Hedge</b>									
			Height	Spread	shrubs per sqm	Unit	Qty in Sqm	Rate	
1.0	D	DURANTA	0.30M	0.15M	50 per sqm	sqm.	75	450	33750
2.0	CL	CLERODENDRUM INERME	0.45M	0.15M	50 per sqm	sqm.	187	450	84150
4.0	HP	HAEMELIA PATENS	0.3M	0.15M	51 per sqm	sqm.	56	450	25200
<b>TOTAL</b>							<b>318</b>		<b>143,100</b>
<b>GROUND COVERS</b>									
			Height	Spread	per sqm	Unit	Qty in Sqm	Rate	
1.0	WD	WEDELIA TRILOBATA	0.15	0.15M	50 per sqm	sqm.	93	450	41850
2.0	OP	OPHIOPHOGAN	0.15M	0.15M	50 per sqm	sqm.	53	450	23850
3.0	CI	CANNA INDICA	0.45M	0.15M	50 per sqm	sqm.	119	500	59500
4.0	LG	LEMON GRASS	0.15M	0.15M	51 per sqm	sqm.	117	750	87750

5.0	PL	PEACE LILLY	0.45M	0.15M	52 per sqm	sqm.	159	1000	159000
		<b>TOTAL</b>					<b>147</b>		<b>371,950</b>
		<b>GRASS</b>			<b>Effect</b>				
15.0		SELECTION NO.1 (CARPET GRASS) LAWN			CARPET EFFECT	sqm.	7032	200	1406400
		<b>TOTAL</b>							<b>1,406,400</b>
		<b>NET TOTAL</b>							<b>2,060,600</b>

**Approximate cost of Machhodari Park, Varanasi**  
**Bill of Quantity for Miscellaneous works**

S.No	Description of Item	Unit	Qty.	Rate	Amount
1	Supply and fixing sand stone benches including finishing etc, all complete under instruction of Engineer - in - Charge.	Each	18.00	13500.00	243000.00
2	Supply and fixing of precast cement concrete seat all complete as per approved desing under instruction of Engineer - in - Charge.	Each	10.00	20000.00	200000.00
3	Supply and fixing outdoor gym equipment, Children Play & Handicaped play equipment including finishing etc, all complete.	LS		1400000.00	1400000.00
4	Supply and fixing Dust-bin including painting finishing etc, all complete.	Each	25.00	5000.00	125000.00
5	Providing and fixing stainless steel grade - 304 2mm thick engraved signage board for information of speicified size etc all complete under instruction of Engineer in Charge.	Each	10.00	2500.00	25000.00
6	Providing and fixing of LED singages for information all complete under instruction of Engineer-in-Charge.	Sqm	8.00	6500.00	52000.00
7	Providing and fixing in position of sand stone small sculpture of approved desing including making of foundation, finishes etc. all complete under instruction of Engineer in Charge.	Each	8.00	50000.00	400000.00
8	Providing and fixing in position metal Fish Mural of approved size and shape including making of foundation, finishes etc. all complete under struction of Engineer-in-charge.	Each	1.00	20000.00	20000.00
9	Supply and fixing of stepping stone in position of approved design, size & finish all complete under instruction of Engineer in charge.	Each	30.00	4500.00	135000.00
10	Providing, Supplying & fixing Single sided Sign board of size 1320mm x 2540mm ( 50mm dia SS pipe of S 304 - grade 1 6mm . thick ). with inner frame of 1220mm x 2440mm (of 19mm x 24mm rectangle, 1.2mm Thick SS pipe of S-304 Grade ) along with diagonal support also of 19mm x 24mm rectangle, 1.2mm Thick SS pipe of S-304 Grade, with sign substrate of size 1220mm x 2440mm, of 4mm ACP with face fully covered by RETRO REFLECTIVE MICRO PRISMATIC Type IV Sheeting, and messages and symbols accordingly, fixed to inner frame of 1220mm x 2440mm of ( 19mm x 24mm rectangle, 1.2mm Thick SS pipe of S-304 Grade ) with the help of Very High Bond tape of 24mm wide and 2.3mm thick. .The board shall have a one leg support of 168mm dia 3 mm thick SS pipe of S-304 grade of height 4040mm with base plate of 10mm thick SS plate of size 600mm x 600mm with 4 Nos. stiffeners of 10mm SS plate of S- 304 grade. The boards shall be fixed on a foundation size of 1500mm x 900mm x 900mm with CC 1: 2: 4 laid with the help of shuttering and 12 Nos. of foundation bolts of 20mm dia SS, S-304 grade of 600mm length Complete. All relevant specs confirming to detail drawing enclosed. (For Gate )	Each	3.00	5000.00	15000.00
11	Installation of aeration devices in pond	each	3.00	10000.00	30000.00
	<b>Total Amount</b>				<b>2645000.00</b>

**Total Cost of Miscellaneous Works = 2645000.00**

**Maintenance cost for Machhodari Park For 5 Years**

Sl. No.	Description / Item	Amount (Rs.)	Remarks
1	Organic Manure & Inorganic Fertilizer	4000.00	
2	Tools & Equipments	2300.00	
3	Labour Cost (Watering, Weeding, Shrubs, Hedge Plants, Flowers & Trees)	15000.00	
	Maintenance Cost for One Month	<b>21300.00</b>	As Actual
	Maintenance Cost for One Year	255600.00	
	Maintenance Cost for Second Year	258795.00	1.25% Extra for Escalation
	Maintenance Cost for Third Year	259434.00	1.5% Extra for Escalation
	Maintenance Cost for Forth Year	260073.00	1.75% Extra for Escalation
	Maintenance Cost for Fifth Year	260712.00	2% Extra for Escalation
4	Civil Work Maintenance Cost for 5 Years	600317.35	1% of Civil work for 1 Year
5	E & M Maintenance Cost for 5 Years		
i	Electrical Maintenance (Labour, T&P& Material)	419110.00	5% of Electrical Work for 1 Year
	<b>Total Maint. cost for 5 Years</b>	<b>2314041.00</b>	

**Outside development for Machhodari Park**

Sl. No.	Description / Item	UNIT	Amount (Rs.)
1	Pathway		2000000.00
2	Horticulture		200000.00
<b>TOTAL</b>			<b>2200000.00</b>