

**NON- MOTORIZED TRANSIT (NMT) FROM GHANTA GHAR TO MADAN MAHAL
PHASE 1 - FROM NAUDRA BRIDGE TO PANDEY HOSPITAL (1.8 KM)**

SUMMARY SHEET

Sr No.	Item Description	Amount (In Rs.)
1	CYCLE TRACK	13,262,937.84
2	STORM WATER DRAIN (Cost -Right Bank)	2,590,886.69
3	STORM WATER DRAIN (Cost-Left Bank)	2,538,200.88
4	UTILITY DUCT	28,759,452.34
5	COMPOUND WALL	8,327,056.50
6	PEDESTARIAN TRACK	22,975,941.60
7	WATER SUPPLY	4,203,812.16
8	SIGNAGES, ROAD MARKING & FACILITIES	1,664,817.03
9	LANDSCAPING & HORTICULTURE	2,897,273.70
10	TREE GUARD & BENCHES	1,715,579.92
11	Missing RCC box type drain to connect existing up and downstream drain as per original drawing & design	9,515,013.13
	TOTAL	98,450,971.79
	Say	9.85 Crores

ESTIMATE OF CYCLE TRACK ON OMTI NALA NMT PHASE 3

S.No	Item No. / SOR Vol	PARTICULARS	Quantity	UNIT	SoR Rate (in Rs)	Reduced rate as per Order	Amount
1	5.17 (iii) pg no. 53-54 Vol III	Stress Absorbing Membrane (SAM) crack width above 9 mm and cracked area above 50 % (Providing and laying a single coat of a stress absorbing membrane over a cracked road surface, with crack width above 9 mm and cracked area above 50 % after cleaning with a mechanical broom, using modified binder complying with clause 521, sprayed at the rate of 15 kg per 10 sqm and spreading 11.2 mm crushed stone aggregates @ 0.12 cum per 10 sqm, sweeping the surface for uniform spread of aggregates and surface finished to conform to clause 902.)	9000.00	SqM	80.00	72.00	648000.00
	15.8 pg no. 105 Vol III	Providing, fitting and fixing mild steel railing complete as per standard drawing No.BD/1-88 and Technical Specification and as per relevant clauses of section 1900 and 2700.	3000.00	RM	2525.00	2272.50	6817500.00
2	NON SOR	Providing and Laying of PLASTITRAK, Roll-on Surfacing Material :A Solvent Free, High Build, Two pack, Seamless, Tough, skid resistant 1.0-1.5 mm thick red (or as required) based on Gloss and color retaining Acrylic Cross Linking Resin System for Cycle track and similar applications including surface cleaning and cost of all material etc. complete.	5400.00	SqM	1150.00	1035.00	5589000.00
3	8.10 pg no. 71 Vol III	Road Marking with Hot Applied Thermoplastic Compound with Reflectors Glass Beads on Bituminous Surface (Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectors glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes and as per relevant clauses of section-800.					
		a. At junction (cycle symbols 2500mm X 2000mm @ cycle box)	45	Nos	900.00	810.00	36450.00
		b. At 50m center to center distance (cycle symbols 1500mm X 1200mm @ cycle box)	65	Nos	900.00	810.00	52488.00
4	8.5 pg no. 70 Vol III	Direction and Place Identification signs with size more than 0.9 sqm size board. (Providing and erecting direction and place identification retro- reflectorised sign as per IRC :67 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminium sheeting, 2 mm thick with area exceeding 0.9 sqm supported on a mild steel angle iron post 75 mm x 75 mm x 6 mm (height from crown level of the road and bottom of the sign board shall not be less than 1.5 m.) , 2 Nos. firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing including painting of vertical post as per specification.					
		For cycle tracks / only for cycle type signboards .	10	Each	13831.00	12447.90	119499.84
		TOTAL					13262937.84

8	Providing and fixing of ISI marked pre cast reinforced cement concrete manhole cover including frame and transporting at site, cost of all material etc.(560mm dia extra heavy duty)	48.21	Nos.	1740.00	1566.00	75503.57	Item no.14.9.4, ISSR-2012 (Vol I), Water Supply, Sewerage and Tube well works
	Total					2538200.88	INR

ESTIMATE FOR UTILITY DUCT ON OMTI NALA NMT PHASE 3

S No.	UADD SOR ITEM NO	Descriptions of Item	Measurement				Unit	Rate		Amount
			No.	L	B	H				
1	2.9.1, Vol II	Excavation								
		Excavation work in foundation trenches or drains not exceeding 1.5 m in width or 10 sqm on plan including dressing of sides and ramming of bottoms lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50m.								
		Ordinary rock								
		Excavation for Duct	2.00	1800.00	1.00	1.50	5400.00			
		Total Excavation					5400.00	cum	202.00	
									181.80	
									981720.00	
2	2.27.1 Vol II	Filling								
		Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete.								
		2.27.1 Crusher Stone Dust								
		For Duct	2.00	1800.00	1.00	0.10	360.00			
		Total					360.00	cum	628.00	
									565.20	
									203472.00	
3	4.1.1 Vol II	Cement Concrete M-15(Duct)								
		Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering All work up to plinth level.								
		M 15 with 20mm maximum size of aggregate.								
		P.C.C Bed	2.00	1800.00	1.00	0.10	360.00			
							360.00	cum	4154.00	
									3738.60	
									1345896.00	
4	5.1.1 Vol II	Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete work including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement. including Admixtures in recommended proportions as per IS 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. M-25 grade reinforced cement concrete by using 410 kg. of cement per cum of concrete. All work up to floor 2 level.								
		R.C.C. Base	2.00	1800.00	0.90	0.15	486.00			
		R.C.C. Wall	4.00	1800.00	0.15	1.05	1134.00			
		Middle RCC wall	2.00	1800.00	0.15	0.95	513.00			
		Total quantity of M25 Concrete					2133.00	cum	5245.00	
									4720.50	
									10068826.50	
5	Vol II 5.10	Providing, hoisting and fixing up to floor two level precast reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like including the cost of required centering, shuttering, finishing smooth with 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete but excluding cost of reinforcement with Cement concrete grade M-20 (Nominal Mix with 20 mm maximum size of stone aggregate)								
		Along Road								
		Precast Cover	3.00	1800.00	1.00	0.10	540.00			
		For Chamber								
		RCC Cover for Chamber	36.00	1.25	1.00	0.10	4.50			
		Total quantity					544.50	cum	6524.00	
									5871.60	
									3197086.20	
6	5.20.6 Vol II	Reinforcement for Duct								
		Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.								

		Taking average weight for estimate (Payable as actual design & weight calculations) Total quantity											
			Qty of Concrete x 0.8%x 7850				133952.40						
			Qty of Precast Cover x 0.8%x 7850				34194.60						
							168147.00	Kg	60.00	54.00	9079938.00		
7	20.1.1 Vol II	Form work for Duct											
		Centering and shuttering including strutting, propping etc.and removal of form for : 20.1.1 Foundations, footings, bases of columns, etc. For mass concrete.											
		R.C.C. wall outer	2.00	1800.00	1.10		3960.00						
		R.C.C. wall inner	2.00	1800.00	1.00		3600.00						
		R.C.C. Base wall	2.00	1800.00	0.15		540.00						
		Middle Wall	4.00	1800.00	0.90		6480.00						
		Total quantity					14580.00	cum	138.00	124.20	1810836.00		
8	6.1 Vol II	Brick work with well burnt chimney bricks in bulls patent trench kiln manufactured by ghol process,crushing strength not less than 40kg /sqcm and water absorption not more than 15% in foundation and plinth.											
		Cement mortar 1:6 (1 cement : 6 coarse sand)	24.00	4.60	0.20	0.30	6.62	cum	4232.00	3808.80	25229.49		
9	13.2 Vol II	15mm cement plaster on the rough side of single or half brick wall of mix : 1:5 (1 cement: 5 fine sand)	24.00	4.60		0.30	33.12	cum	119.00	107.10	3547.15		
10	2.27.2 Vol II	Sand Filling											
		Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete.											
		Local Sand	2.00	1800.00	0.75	0.70	1890.00						
							1890.00	cum	1201.00	1080.90	2042901.00		
TOTAL											28759452.34		

ESTIMATE FOR STORM WATER DRAIN LEFT BANK ON OMTI NALA NMT PHASE 3

S. No	Description	Unit	Quantity	Rate	Reduced rate	Amount (INR)	Reference
1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.						
a	Depth upto 1.5 m	Cum	1374.90	129.1	116.19	159749.16	Item no. 15.1, ISSR-2012 (Vol I), Water Supply, Sewearge and Tube well works, DUAD, MP
2	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	1284.97	29.00	26.10	33537.68	Item no. 15.8 (a), ISSR-2012 (Vol I), Water Supply, sewearge and Tube well works, DUAD, MP
3	Providing and fixing Open timbering in trenches including strutting, shoring and packing cavities where required complete (Measurement to be taken of the face timbered)						Item no. 2.20, ISSR-2012 (Vol II), Building works, DUAD, MP
a	Depth not exceeding 1.5m	Sq.m	1092.45	51.00	45.90	50143.46	
4	Close Timbering: Close timbering/steel in trenches including strutting, shoring and packing cavities (wherever required) complete. (Measurements to be taken of the face area timbered).						Item no. 2.16, ISSR-2012 (Vol II), Building works, DUAD, MP
	Depth not exceeding 1.5m	Sq.m	1092.45	99.00	89.10	97337.30	
5	Class Ab bedding: Providing and laying mechanically mixed cement concrete 20 mm maximum size graded crushed stone including cost of centering & shuttering.- M15	cum	147.43	4321	3888.90	573343.30	Item no.15.18 (ii), ISSR-2012 (Vol I), Water Supply, Sewerage and Tube well works

6	Providing and laying RCC NP3 socket & spigot pipes with rubber gasket joint including testing of joints (Conforming to IS; 458-1988,ISI marked laying as per IS 783:1985)						Item no.13.3 (ii), ISSR-2012 (Vol I), Water Supply, Sewerage and Tube well works	
a	300 mm	m	1272.86	827.00	744.30	947387.57	Item no.13.3 (ii), ISSR-2012 (Vol I), Water Supply, Sewerage and Tube well works	
b	Costing for connecting RCC chambers to Omti nalla at approx. 5 to 6 Locations as directed by JMC engineer with 300 mm dia RCC/HDPE Pipe and Costing for some Nallah Crossings required	At @10% of total pipe cost					94738.76	
7	RCC Chambers						Rate Analysis	
a	Providing & fixing of ISI marked pre cast reinforced cement concrete chambers for an avg. depth of 1m (0.7 MX 0.7 MX0.9M)	Nos.	54.64	11165.00	10048.50	549078.75		
8	Providing and fixing of ISI marked pre cast reinforced cement concrete manhole cover including frame and transporting at site, cost of all material etc.(560mm dia extra heavy duty)	Nos.	54.64	1740.00	1566.00	85570.71	Item no.14.9.4, ISSR-2012 (Vol I), Water Supply, Sewerage and Tube well works	
Total						2590886.7	INR	

ESTIMATE FOR COMPUND WALL ON OMTI NALA NMT PHASE 3

S.No	SOR Reference No.	Item	QTY	Unit	Rate	Reduced rate	Total
1	UADD SOR 2.6 Vol -II	Earth work in excavation by mechanical means (hydraulic Excavator)/manual Means over areas (exceeding 30 cm in depth . 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m , dsposed earth to be levelled and neatly dressed					
	2.6.1	All Kinds Of soil	625	Cum	127	114.3	71437.5
2	UADD SOR 4.1 Vol -II	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering. All work up to Plinth Level					
	4.1.5	Cement concrete grade M-15 (Nominal Mix) with 40 mm maximum size of stone aggregate	625	Cum	4094	3684.6	2302875
3	NON-SOR (In referenc e to tender No. IDA/EPR OC/2016-17/097 issued by Indore Develop ment Authorit y)	Providing and fixing Precast prestressd (PSPC) concrete poles & panels of M-25 grade with all fixtures for the construction of Boundary Wall. The poles having size 180 x 180 mm for fixing PSPC panels with 4 nos. Prestressed Wire of high tensile steel 4mm diameter Panels of 2000-2500 mm long x 600mm wide x 75 mm thick pre-stressed with 6 nos. of steel wire of 4mm dia to be inserted in grooves of poles. The poles to be fixed in PCC 1:3:6 with boulders in layers in pit size of 600X750X900mm below Ground Level. Cement Mortar ratio 1: 3 at joints of poles and panels item includes excavation of pits in all type of soil, its concreting. Fixing of precast poles & panels in line & level etc. complete as directd by Engineer in charge. For poles 2400 mm above GL and 1000 mm below GL					
			6096	sqm	1085	976.5	5952744
Total							8327056.5

ESTIMATE FOR PEDESTRIAN TRACK ON OMTI NALA NMT PHASE 3

S.No	Item No. / SOR Vol	PARTICULARS	Quantity	UNIT	Rate (in Rs)	Reduced rate	Amount
1	2.6.1 Vol II	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.					
			4392.00	cum	127.00	114.30	502005.60
3	2.27 Vol II	Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete.					
	2.27.1	Crusher Stone Dust					
			1296.00	cum	628.00	565.20	732499.20
	4.1.6 Vol II	Cement concrete grade M- 10 (Nominal Mix) with 40 mm maximum size of stone aggregate					
			1296.00	cum	3528.00	3175.20	4115059.20
5	5.1 Vol II	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :					
	5.1.1	Cement concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate.					
			1296.00	cum	4728.00	4255.20	5514739.20
6	NON SOR	Providing and laying 100 mm thick natural cobble stone block size 200mm x 200mm . Complete as per the direction of engineer incharge including locking edges and top surface use as runway for pedestrain whearever required with cement mortar 1:3 and pigment of required shade of stone block including cost of labour material etc . All complete.					
			7200.00	sqm	1250.00	1125.00	8100000.00
7	5.2 Vol II	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire upto floor two level including all wastage etc. complete.					
	5.20.1 Vol II	Mild steel and Medium Tensile steel bars.(Taking average weight for estimate, payable as per actual design and weight calculation)					
			61041.60	kgs	60.00	54.00	3296246.40
8	20.1 Vol II	Centering and shuttering including strutting, propping etc.and removal of form for :					
	20.1.1	Foundations, footings, bases of columns, etc. For mass concrete.					
			5760.00	sqm	138.00	124.20	715392.00
TOTAL							22975941.60

ESTIMATE FOR WATER SUPPLY ALONG OMTI NALA NMT PHASE 3

S.No.	Item No. / SOR Vol	PARTICULARS	Quantity	UNIT	Rate (in Rs)	Reduced rate	Amount
1	15.1 pg no. 151 Vol I	Earth work in Excavation for pipe trench in all kinds of soil and WBM in areas including dressing, Watering and ramming and disposal of Excavated earth lead upto 50 meters and lift upto 1.5m, disposal earth to be leveled, neatly dressed.					
		0 to 1.5m	864.00	cum	129.10	116.19	100388.16
2	15.17 pg no. 152 Vol I	Providing and laying mechanically mixed cement concrete with crushed stone aggregate excluding centering and shuttering (with 40mm nominal size graded stone aggregate)					
	15.17 (a)(iii) pg no. 152 Vol I	M-10	144.00	cum	3529.00	3176.10	457358.40
3	4.3 pg no. 50-51 Vol I	Providing, laying and jointing socket & spigot centrifugally cast (Spun) Ductile Iron pressure pipes with inside cement mortar lining (class K-9) conforming to IS 8329/2000 with suitable Rubber Gasket (Push on) joints as per IS:5382/85 including testing of joint (laying conforming to IS 12288 : 1987)					
		100 mm diameter	3600.00	Meter	1102.10	991.89	3570804.00
	4.4 pg no. 51 Vol I	Labour for laying in position socket & spigot Ductile Iron (k-9) pressure pipes. [Conform to IS 12288:1987]					
		100 mm diameter	3600.00	Meter	14.00	12.60	45360.00
4	4.9 pg no. 53 Vol I	Providing and Laying ductile PN-16 type iron flanged spigot conforming to IS-9523/2000 having dimension as per table 24 of IS-9523/2000 in the nominal diameter/sizes with external bitumen coating and internal cement mortar lining with finishing as per clause 13 of IS-9523/2000. (laying conforming to IS 12288 : 1987)					
		100mm	90.00	Each	96.00	86.40	7776.00
	6.6 pg no. 81 Vol I	Providing & fixing cast iron butterfly valves including jointing & testing with cost of jointing material such as bolts, nuts and rubber insertion all complete as per IS :13095-1991	8.00	each	3073.00	2765.70	22125.60
		100mm dia					
		TOTAL					4203812.16

ESTIMATE FOR SIGNAGES, MARKING & FACILITIES OMTI NALA NMT PHASE 3

S.No	Item No. / SOR Vol	PARTICULARS	Quantity	Rate	Reduced rate	unit	Amount
1	Item 8.10 Vol III	Road Marking					
		Solid Lines in White Colour					
		Road Marking with Hot Applied Thermoplastic Compound with Reflectorisng Glass Beads on Bituminous Surface (Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorisng glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes and as per relevant clauses of section-800.					
			720.00	900.00	810.00	Sqm	583200.00
2	Item 8.8 Vol III	Painting lines, dashes, arrows etc					
		Painting lines, dashes, arrows etc on roads in two coats on new work with ready mixed road marking paint conforming to IS:164 on bituminous surface, including cleaning the surface of all dirt, dust and other foreign matter, demarcation at site and traffic control as per relevant clauses of section-800 & I.R.C.-67 including cost of paint etc. complete.					
			900.00	70.00	63.00	Sqm	56700.00
4	8.12 Vol III	Road Delineators (Supplying and installation of delineators (road way indicators, hazard markers, object markers), 80-100 cm high above ground level, painted black and white in 15 cm wide stripes, fitted with 80 x 100 mm rectangular or 75mm dia circular reflectorised panels at the top, buried or pressed into the ground and conforming toIRC-79 and the drawings as per relevant clauses of section-800 of specifications.					
			45.00	292.00	262.80	each	11826.00
5	8.20 Vol III	Road Markers/Road Stud with Lense Reflector (Providing and fixing of road stud 100x 100 mm, dia cast in aluminium, resistant to corrosive effect of salt and grit, fitted with lense reflectors, installed in concrete or asphaltic surface by drilling hole 30 mm upto a depth of 60 mm and bedded in a suitable bituminous grout or epoxy mortar, all as per BS 873 part 4:1973)					
			45.00	292.00	262.80	each	11826.00
1	8.3 pg no. 69 Vol III	Providing and fixing of retroreflectorisng cautionary, mandatory and informatory sign as per IRC :67 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm x 75 mm x 6 mm (height from crown level of the road and bottom of the sign boardshall not be less than 1.5 m.) firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing including painting of vertical post as per specification.					
	8.3 (i) pg no. 69 Vol III	90 cm equilateral triangle	9.00	3715.00	3343.50	each	30091.50
	8.3 (iv) pg no. 69 Vol III	80 cm x 60 cm rectangular	15.00	4537.00	4083.30	each	61249.50
2	16.59 CPWD SOR VOL 2	Manufacturing, supplying and fixing retro reflective sign boards made up of 2 mm thick aluminium sheet, face to be fully covered with high intensity encapsulated type heat activated retro reflective sheeting conforming to type - IV of ASTM-D 4956-01 in blue and silver white or other colour combination including subject matter, message (bilingual), symbols and borders etc. as per IRC ; 67:2001, pasted on substrate by an adhesive backing which shall be activated by applying heat and pressure conforming to class -2 of ASTM-D-4956-01 and fixing the same with suitable sized aluminium alloy rivets @ 20 cm c/c to back support frame of M.S. angle iron of size 25x25x3 mm along with theft resistant measures, mounted and fixed with 2 Nos. M.S. angles of size 35x35x5 mm to a vertical post made up to M.S. Tee section ISMT 50x50x6 mm welded with base plate of size 100x100x5 mm at the bottom end and including making holes in pipes, angles flats, providing & fixing M.S. message plate of required size, steel work to be painted with two or more coats of synthetic enamel paint of required shade and of approved brand & manufacture over priming coat of zinc chromate yellow primer (vertical MS-Tee support to be painted in black and white colours).Backside of aluminium sheet to be painted with two or more coats of epoxy paint over and including appropriate priming coat including all leads and lifts etc. complete as per drawing, specification and direction of Engineer--in-charge.					0.00
	16.59.1	Mandatory/ Regulatory sign boards of 900 mm diametre with support length of 3750 mm	42.00	4786.35	4307.72	NO	180924.03

7		Seating Bench- Provision along footpath minimum spacing 200m c/c, or as directed by Engineer In-charge. Supply and install Seating of 1.75m L x 0.6m W manufactured of M-30 grade concrete using vibro compaction process and suitably reinforced for long use, treated with special anti-corrosive, water proof coating so as to make the surface glossy and water proof. To accomodate 3-4 persons. It shall be placed on footpath in a way that the pedestrians pass-by without disturbing the user. Installation as per the direction of Engineer in charge, complete incl. all consumables , TandP and Labours required for the job.Detail technical specification	45.00	12000.00	10800.00	NO	486000.00
9	4.8 UADD SOR VOL II	Precasting and placing in position 125 mm dia Bollards 600 mm high of required shape including providing M.S. Pipe Sleeve 50 mm dia 300 mm long in the Bollard and M.S. Pipes 40 mm dia and 450 mm long with 150x150x6mm M.S. plate welded at bottom and embedded 150mm in cement concrete grade M-10 (Nominal Mix with 20 mm maximum size of stone aggregate) including necessary excavation of size 250x 250x 450mm deep for the same in bitumen/ concrete pavement at specified spacing.	300.00	900.00	810.00	NO	243000.00
		TOTAL					1664817.03

DETAIL ESTIMATE OF LANDSCAPING

S.No	Item No. / SOR Vol	PARTICULARS	No	Length	Width	Depth/ Height	Quantity	UNIT	Rate (in Rs)	Reduced Rate	Amount
1	23.1 MP PWD SOR	Trenching in ordinary soil up to a depth of 60cm including removal and stacking of serviceable materials and then disposing of surplus soil, by spreading and neatly leveling within a lead of 50m and making up the trcnchcd area to propr levels by filling with earth or earth mixed with sludge or/and manure before and after flooding trench with water (excluding cost of imported earth, sludge or manure)	2	1500	1	0.6	1800.00	cum	207.00	186.30	335340.00
2	23.2 MP PWD SOR	Supplying and stacking of good earth at site including royalty if any and carnage (earth measured in stacks will be reduced by 20% for payment)	2	1125	1	0.2	450.00	cum	568.00	511.20	230040.00
3	23.3 MP PWD SOR	Supplying and stacking sludge at site including royalty and carriage (sludge measured in stacks will be reduced b 8% for payment)	2	1125	1	0.2	450.00	cum	715.00	643.50	289575.00
4	23.4 MP PWD SOR	Supplying and stackmg at site dump manure from approved source, including carriage (manure measured in stacks will be reduced by 8% for payment):	2	1125	1	0.2	450.00	cum	816.00	734.40	330480.00
5	23.5 MP PWD SOR	Rough dressing the trenched ground including breaking clods.	2	1500	1		3000.00	100 sqm	495.00	445.50	13365.00
6	23.6 MP PWD SOR	Uprooting weeds from the trenched area after 10 to 15 days of its flooding with water including disposal of uprooted vegetation.	2	1500	1		3000.00	100 sqm	168.00	151.20	4536.00
7	23.7 MP PWD SOR	Fine dressing the ground	2	1500	1		3000.00	100 sqm	126.00	113.40	3402.00
8	23.8 MP PWD SOR	Spreading of sludge, dump manure and / or good earth in required thickness as per direction of Officer-in-charge (Cost of sludge, dump manure and /or good earth to be paid separately).	2	1125	1	0.2	450.00	cum	18.00	16.20	7290.00
9	23.9 MP PWD SOR	Mixing earth and sludge or manure in the required proportion specified or directed by the Officer-in-charge									
		Adding the quantity of earth and sludge manure					1350.00	cum	12.00	10.80	14580.00
10	23.1 MP PWD SOR	Grassing with selected type of grass including watering and maintenance of the lawn for 30 days or more till the grass forms a thick lawn, free from weeds and fit for mowing including supplying good earth. if needed (the good earth shall be paid for separately):									
	23.10.3	In rows 5 cm apart in both directions.	2	1200	1		2400.00	100 sqm	4002.00	3601.80	86443.20
13	23.13 MP PWD SOR	Preparation of beds for hedging and shrubbery excavating further 30cm deep of already prepared trench, refilling the excavated earth after breaking clods and mixing with sludge or manure in the ratio of 8:1 (8 parts of stacked volume of earth after reduction by 20% : one part of stacked volume of sludge or manure after reduction by 8%), flooding with water, filling with earth if necessary, watering and finally fine dressing, levelling etc. including stacking and disposal of materials declared unserviceable and surplus earth by spreading and levelling as directed, within a lead of 50m lift upto 1.5 m complete (cost of sludge, manure or extra earth to be paid for separately)	2	1200	0.4	0.4	384.00	cum	75.00	67.50	25920.00
14	23.14	Digging holes in ordinary soil and refilling the same with the excavated earth mixed with manure or sludge in the ratio of 2:1 by volume (2 parts of stacked volume of earth after reduction by 20%: 1 part of stacked ' volume of manure after reduction by 8%) flooding with water, dressing including removal of rubbish and surplus earth. if any with all leads and lifts (cost of manure, sludge or extra good earth if needed to be paid for separately):									
	23.14.2	Holes 60 cm dia, and 60 cm deep.	300				300.00	68.00	61.2		18360.00
	23.14.3	holes 45 cm dia, and 45 cm deep.	600				600.00	21.00	18.9		11340.00

15	23.15 MP PWD SOR	Providing and planting different variety of plants of approved quality and sizes as mentioned including making pits of required size at site, refilled with B.C. Soil mixture manuring and pesticide etc complete (to be paid separately) including watering and 90 days maintenance from the date of final bill as per direction of engineer in charge complete in all respect (B.C Mixture paid separately).									
	23.15.1	Any of one from Plameriya alba, fycus benjameena. Malkikeya champa. Begonia plumaric pudoca Plants (1.8 mtrs to 2.10 mtrs height.	150				150.00	each	645.00	580.50	87075.00
	23.15.2	Any of one from Lantana VAR Red, Lantana Blue White, Hemelia Mini. lantana varicated, ticoma Redicens, Spi Oala, Golden Dunanta.(height 0.3 m to 0.45m)	1500				1500.00	each	33.00	29.70	44550.00
	23.15.3	Any of one from Hibiscus Vice Rai, Gul Phinia. Bamboo Varicated. Chandani Vencated, Hamilia Pattern, Bouganvella. Canna Red/Yellow, Taqwamonasia. (height 0.3 m to 0.45 m)	450				450.00	each	54.00	48.60	21870.00
	23.15.4	Any Of one from Spathodia. Silver Oak, Thuja. Golden Bottle Brush, Exora Red (height 0.45 m to 0.60 m)	300				300.00	each	319.00	287.10	86130.00
	23.15.5	Any Of one from Glerodendron, Allamamala New, Allamanda Bail, Thima Bouganvella .	150				150.00	each	96.00	86.40	12960.00
	23.15.6	Any of one from Climetics, Venentora, (height 0.3 m to 0.45 m)	450				450.00	each	73.00	65.70	29565.00
	23.15.7	Foxtail Palm (1.80mtrs to 2.10mtrs Height)	75				75.00	each	1784.00	1605.60	120420.00
	23.15.9	Ficus Varicated (1.80mtrs to 2.10 mtrs height)	75				75.00	each	994.00	894.60	67095.00
	23.15.10	Casia Biflora (0.45mtrs to 0.60 mtrs height)	75				75.00	each	129.00	116.10	8707.50
20	23.22 MP PWD SOR	Providing and fixing M.S. tree guard 45 cm square In plan, height 1.20 metre ground level and 0.40 metre below ground level. The vertical members shall consist of four nos. angle iron of Size 25x25x3mm , 1.8 m long, one at each corner and 8 nos. flat iron of size 25x3 mm, 1.2 m long. The vertical members shall be welded to 4 nos. 25x6 mm M. S. flats placed horizontally around the vertical member of the cage. One name plate of 1 mm thick M.S. Sheet Of Size 250x100 mm shall be welded to the tree guard near the middle height and lettered PWD/ any other approved name. The tree guard shall be fixed to the ground by making suitable holes and by embedding four corners leg in the ground, including refillingwith two or more coats of synthetic enamel paint of approved brand and manufacture Over a coat Of primer, complete in all respect.	600				600.00	each	1585.00	1426.50	855900.00
21	23.24	Preparation of mounds of various size and shape by available excavated /supplied earth in layers not exceeding 20 cm in depth, breaking clods, watering of each layer, dressing etc lead upto 50 meter and lift upto 1.5 m complete as per direction Of Officer-in-charge .	75.00	5.00	4.00	0.60	900.00	cum	153.00	137.70	123930.00
22	23.25 MP PWD SOR	Providing Circular Cement Concrete pots of specified size, cast with cement concrete of nominal mix 1:2:4 (1 cement: 2 sand; 4 graded stone aggregate 6 mm nominal size), reinforced With 7 Nos (3 nos. horizontal and 4 nos. vertical "U" shape) M.S. wires of 3.5 mm dia as per design, including required form work, finishing with cement punning on exposed Surface, Curing for specified period and stacking in required rows and height, all complete as per direction of Officer-in-charge .									
	23.25.1	Top inside dia 35 cm, outer bottom dia 25 cm, total height 35 cm with wall thickness of 25.4 mm.	500.00				500.00	each	152.00	136.80	68400.00
TOTAL											2897273.70

ESTIMATE OF TREE GUARD & BENCHES

S.No	Item No. / SOR Vol II	PARTICULARS	Quantity	UNIT	Rate (in Rs)		Amount
TREE GUARD							
1	2.6.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.					
			144.00	cum	127.00	114.30	16459.20
3	2.27	Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete.					
	2.27.1	Crusher Stone Dust	28.80				
			28.80	cum	628.00	565.20	16277.76
4	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering All work up to plinth level.					
	4.1.2	Cement concrete grade M-15 (Nominal Mix) with 20 mm maximum size of stone aggregate	28.80	cum	4154.00	3738.60	107671.68
5	6.2	Brick work with well burnt chimney bricks in bulls patent trench kiln manufactured by ghol process, crushing strength not less than 40kg /sqcm and water absorption not more than 15% in foundation and plinth.	51.84	cum	4232.00	3808.80	197448.19
6	6.3	Brick work with chimney brick of class designation 40 in superstructure above plinth level upto floor 2 level including the cost of scaffolding in :					
		Cement mortar 1:6 (1 cement : 6 coarse sand)	66.24	cum	4220.00	3798.00	251579.52
7	7.4	Wall lining butch work upto 10m height with red/ white sand stone 40 mm thick rough facing on the exposed surface with stone strips of minimum length 300 mm and equired width including embedding every tenth layer and bottom most layer in masonry or concrete after making necessary chases of size 75x75mm and by providing layer of 75mm thick strips i/c 12mm thick bed of cement mortar 1:3 (1 Cement : 3 coarse sand) i/c ruled pointing incement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment to match the shade of stone complete as per direction of Engineer-in-charge.	460.80	sqm	1085.00	976.50	449971.20
							1039407.55
BENCHES							
1	2.6.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.	6.75				
			6.75	cum	127.00	114.30	771.53
3	2.27	Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete.					
	2.27.1	Crusher Stone Dust	2.25				
			2.25	cum	628.00	565.20	1271.70

4	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering All work up to plinth level.					
	4.1.2	Cement concrete grade M-15 (Nominal Mix) with 20 mm maximum size of stone aggregate					
			2.25				
			2.25	cum	4154.00	3738.60	8411.85
5	6.24	BRICK WORK Brick work with machine moulded modular bricks of class designation 40 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12mm deep complete from ground level up to plinth level in cement mortar 1:6 (1 cement : 6 coarse sand).	2.7945	cum	4021	3618.90	10113.02
6	7.32	Stone work, plain in copings, cornices, string courses and plinth courses, upto 75 mm thick in Cement mortar 1:6 (1 cement : 6 coarse sand) including pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade.					
	7.32.1	Red sand stone:	32.4	sqm	22483.00	20234.70	655604.28
							676172.37
TOTAL							1715579.92

DRAIN AT NMT PHASE -3

DATE	DESCRIPTION	AMOUNT
	DRAIN Crossing of the road length 30m COST	1,355,617.93
	DRAIN along the the road length 86m COST	8,159,395.21
	TOTAL COST	9,515,013.13

REMARK

connect existing up and downstream drain as per original							
Serial No	Reff.	Description of item	QTY	Unit	RATE	Reduced rate	AMOUNT
EARTH WORK							
1	UADD SOR VOL1 15 /P-151	Earth work in Excavation for pipe trench in all kinds of soil and WBM in areas including dressing, watering and ramming and disposal of Excavated earth lead upto 50 meters and lift upto 1.5m, disposal earth to be leveled, neatly dressed.					
		TOTAL	90.00	Cum	129	116	10,449.00
	15.2	Excavation for drain only MUDDY AREA for base of drain	165.00	Cum	155	140	23,017.50
xca		Dewatering and de-sludging					
	UADD SOR VOL-2 2.13/P-16	All water that may accumulate in excavations during the progress of the work from springs, or river seepage, broken water mains or drains (not due to the negligence of the contractor), and seepage from subsoil aquifer shall be bailed, pumped out or otherwise removed. The contractor shall take adequate measures for bailing and/or pumping out water from excavations and/or pumping out water from excavations and construct diversion channels, bunds, sumps, coffer dams etc. as may be required. Pumping shall be done directly from the foundation trenches or from a sump outside the excavation in such a manner as to preclude the possibility of movement of water through any fresh concrete or masonry and washing away parts of concrete or mortar. During laying of concrete or masonry and for a period of at least 24 hours thereafter, pumping shall be done from a suitable sump separated from concrete or masonry by effective means. Capacity and number of pumps, location at which the pumps are to be installed, pumping hours etc. shall be decided from time to time in consultation with the Engineer-in-Charge. Pumping shall be done in such a way as not to cause damage to the work or adjoining property by subsidence etc. Disposal of water shall not cause inconvenience or nuisance in the area or cause damage to the property and structure nearby. To prevent slipping of sides, planking and strutting may also be done with the approval of the Engineer-in-Charge.					
	UADD VOL2 2.24.1 P-19	In or under water and/or liquid mud, including pumping out water as required.(All water that may accumulate in excavations during the progress of the work from seepage, (not due to the negligence of the contractor), shall be bailed, pumped out or otherwise removed. The contractor shall take adequate measures for bailing and/or pumping out water from excavations and/or pumping out water from excavations and construct diversion channels, bunds, sumps, etc)		Mtr depth			13,513.93
	UADD VOL3 2.13/P-21	Dewatering of water caused by springs, tides or river seepage, broken water mains or drains or well or the like.	390	KL	51	46	17,901.00

		EARTH FILLING						-
	UADD VOL2 2.25/P-19	Filling by available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.						-
	2.25	FILLING OF EARTH AT same place as item no 15.2	165.00	cum	59	53	8,761.50	
2		P.C.C						-
	UADD VOL1 15.18/P-153	Providing & laying mechanically mixed cement concrete 20mm maximum size graded crushed stone including cost of centering & shuttering.						-
	(a)ii	Cement concrete grade M-15 (Nominal Mix) with 20 mm maximum size of stone aggregate						-
			17.375	Cum	4321	3889	67,569.64	
3		R.C.C						-
	UADD VOL1 15.18(b)/P-153	In walls and superstructure up to height above plinth (with 20mm nominal graded metal) excluding the cost of centering shuttering.						-
	iv	M-25 (design mix) cum						-
			124.07	Cum	5246	4721	585,760.49	
		FORM WORK						-
	UADD V- 2 20.1/P-209	Centering and shuttering including strutting, propping etc.and removal of form for.						-
	20.1.2	Walls (any thickness) including attached pilasters, butresses, plinth and string courses etc						-
			436.8	Sqm	216	194	84,913.92	
		STEEL REINFORCEMENT						-
	UADD SOR 5.2 P- 49	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire upto floor two level including all wastage etc. complete	Qty					
			9775.8		60	54	527,894.13	
		Add 3% for Contingencies						15,836.82
		TOTAL COST						1,355,617.9

- 37
- 38
- 39
- 40
- 41
- 42
- 43
- 44
- 45

46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63

64
65
66
67
68
69
70
71

72

73

74
75
76
77
78

79
80
81
82

83

	(a)II	Cement concrete grade M-15 (Nominal Mix) with 20 mm maximum size of stone aggregate	1	86	4.4	0.10	37.84	Cum				
		PCC under bricks work	2	3.5	1.25	0.10	0.875	Cum				
		PCC under hume pipe	2	600	1.5	0.10	180	Cum				
		TOTAL PCC					218.715	Cum	4321	3889	850,560.76	
3		R.C.C										
	UADD VOL1 15.18(b)/P-153	plinth (with 20mm nominal graded metal) excluding the cost of centering shuttering.										
	iv	M-25 (design mix) cum										
	a	BASE	1	86	4.2	0.2	72.24	Cum				
	b	SIDE WALL	2	86	2.35	0.2	80.84	Cum				
	c	TOP SLAB	1	86	4.2	0.2	72.24	Cum			0.00	
	d	Haunch (2 triangle equal 1 square)	1	86	0.15	0.15	1.935	Cum				
	A	RCC beam	2	3.5	0.45	0.6	1.89					
							229.145	Cum	5246	4721	1,081,885.20	
		FORM WORK										
	UADD V- 2 20.1/P-209	Centering and shuttering including strutting, propping etc.and removal of form for.										
	20.1.2	walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc										
		2 NO outer side wall	2	86		2.55	438.6	Sqm				
		2 NO inner side wall	2	86		2.35	404.2	Sqm				
		TOP SLAB BOTTEM PART	1	86		3.8	326.8	Sqm				
		For Beam Bottem	2	3.5		0.6	4.2	Sqm				
		Beam sides	8	3.5		0.45	12.6	Sqm				
							1186.4	Sqm	216	194	230,636.16	
	UADD V- 2 5.2/P-49	Filling available excavated earth in trenches, plinth sides of foundation in layers not exceeding 20cm. in depth including consolidation of each layer by ramming										
		Filling in the side of drain	2	86	5.5	2.4	946	Cum	29	26	24,690.60	
		STEEL REINFORCEMENT										
		8Φ @160mmc/c base [4400/160]X2,TOP	No	L			Kg/m					
		using in top and bottem8 mmdia@250mmc/c [3750/250]X4	44	86			0.4	1513.6	Kg			
		using in BOTTEM 12 mmdia@160mmc/c [10000/160]X2	1252	4.4			0.89	4902.83	Kg			
		using at TOP12 mmdia@200mmc/c	1000	4.4			0.89	3916	Kg			
		At sides wall 8Φ @250mmc/c	44	86			0.4	1513.6	Kg			
		At sides wall 12Φ @150mmc/c	2668	2.95			0.89	7004.834	Kg			
		Haunch bars 12 Φ @200 c/c[10000/200]X2	1000	1.3			0.89	1157	Kg			
		Reinforcement for Beam[1.89X250=472.5kg]						472.5	Kg			
								20480.37	Kg	60	54	1,105,939.76
	UADD SOR,Vol-1 13.1 P-138	(NP2) RCC socket & spigot pipes with rubber gasket joint including testing of joints. [Conforming to IS ; 458-1988, ISI marked laying as per IS 783:1985)										
		800 mm dia	2	600				1200	R/mr	2420	2178	2,613,600.00
	UADD SOR,Vol-2 P-15 2.3	Banking excavated earth in layers not exceeding 20 cm. in depth, breaking clods, watering, rolling each layer with ½ tonne roller, or wooden or steel rammers,and rolling every 3rd and top-most layer with power roller of minimum 8 tonnes and dressing up, in embankments for roads,flood banks, marginal banks,and guide banks etc.,lead upto 50 m and lift upto 1.5 m.										
	2.3.1	All kinds of soil						15000	Cum	128.00	115	1,728,000.00
	UADD SOR 15.3 P-177	mechanical means including stacking of steel bars and disposal of unserviceable material within 50 meters lead as per direction of Engineer-incharge.Dismantallingf										
			2	4	3	0.2	1.6	Cum				
			1	4	4.4	0.2	0.8	Cum				
								2.4	Cum	694	625	1,499.04
		TOTAL										7,921,742.92
		ADD 3% OF TOTAL COST CONTINGENCIES										237,652.29
		TOTAL COST										8,159,395.21

37
38
39
40
41
42
43
44

45

46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63

64
65
66
67
68
69
70
71

72

73

74
75
76
77
78

79
80
81
82

83