

ABSTRACT OF COST

S.NO	ROAD	LENGTH	AMOUNT
1	ROAD FROM STRECH SATKAR HOTEL TO HOME SCIENCE ROAD & TEEN PATTI CHOWK TO GOUMATA CHOWK	1470 METERS	95094628.21
2	ROAD STRECH FROM BLOOM CHOWK TO MADAN MAHAL POLICE STATION	1051 METERS	93034629.63
3	ROAD STRECH FROM MADAN MAHAL POLICE STATION TO RANITAAL JUNCTION	1132 METERS	87060850.89
4	ROAD STRECH FROM RANITAAL JUNCTION TO BALDEOBAGH	860 METERS	73199518.86
5	ROAD STRECH FROM YATAYAT TIRAHA TO PRANJAPE CHOWK (HANUMAN MANDIR)	824 METERS	68909172.63
	TOTAL		417298800.2

**ROAD FROM STRECH SATKAR HOTEL TO HOME SCIENCE ROAD &
TEEN PATTI CHOWK TO GOUMATA CHOWK
LENGTH 1470 METERS**

SUMMARY SHEET

Sr No.	Item Description	Amount (In Rs.)
1	ROAD	16006738.50
2	UTILITY DUCT	57352603.11
3	STORM WATER DRAIN	10589490.60
4	PEDESTRIAN TRACK	9689681.00
5	SIGNAGES, MARKING, LANDSCAPING	1456115.00
	TOTAL	95094628.21

**ROAD STRECH FROM BLOOM CHOWK TO MADAN MAHAL POLICE STATION
LENGTH - 1051 METERS**

SUMMARY SHEET

Sr No.	Item Description	Amount (In Rs.)
1	ROAD	31704599.05
2	UTILITY DUCT	43305991.67
3	STORM WATER DRAIN	9252991.31
4	PEDESTRIAN TRACK	7671002.60
5	SIGNAGES, MARKING, LANDSCAPING	1100045.00
	TOTAL	93034629.63

**ROAD STRECH FROM MADAN MAHAL POLICE STATION TO RANITAAL JUNCTION
LENGTH 1132 METERS**

SUMMARY SHEET

Sr No.	Item Description	Amount (In Rs.)
1	ROAD	26554186.14
2	UTILITY DUCT	43545679.14
3	STORM WATER DRAIN	8426709.42
4	PEDESTRIAN TRACK	7364966.20
5	SIGNAGES, MARKING, LANDSCAPING	1169310.00
	TOTAL	87060850.89

ROAD STRECH FROM RANITAAL JUNCTION TO BALDEOBAGH LENGTH 860 METERS

SUMMARY SHEET

Sr No.	Item Description	Amount (In Rs.)
1	ROAD	26736298.30
2	UTILITY DUCT	32227892.96
3	STORM WATER DRAIN	6681984.60
4	PEDESTRIAN TRACK	6594298.00
5	SIGNAGES, MARKING, LANDSCAPING	959045.00
	TOTAL	73199518.86

**ROAD STRECH FROM YATAYAT TIRAHA TO PRANJAPE CHOWK (HANUMAN MANDIR)
LENGTH 824 METERS**

SUMMARY SHEET

Sr No.	Item Description	Amount (In Rs.)
1	ROAD	22799762.92
2	UTILITY DUCT	30211120.07
3	STORM WATER DRAIN	7523447.44
4	PEDESTRIAN TRACK	6987597.20
5	SIGNAGES, MARKING, LANDSCAPING	1387245.00
	TOTAL	68909172.63

**ROAD FROM STRECH SATKAR HOTEL TO HOME SCIENCE ROAD &
TEEN PATTI CHOWK TO GOUMATA CHOWK
LENGTH 1470 METERS**

SUMMARY SHEET		
Sr No.	Item Description	Amount (In Rs.)
1	ROAD	16006738.50
2	UTILITY DUCT	57352603.11
3	STORM WATER DRAIN	10589490.60
4	PEDESTARIAN TRACK	9689681.00
5	SIGNAGES, MARKING, LANDSCAPING	1456115.00
	TOTAL	95094628.21

ESTIMATE OF ROAD						
ROAD STRECH FROM SATKAR HOTEL TO HOME SCIENCE ROAD & TEEN PATTI CHOWK TO GOUMATA CHOWK						
S.No.	UADD SOR Vol II & III, ITEM NO	Descriptions of Item	Quantity	Rate	Unit	Amount in Rs.
1	2.3, (i) Vol III	Dismantling				
		Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead 1000 meter.				
		Cement Concrete Grade M-15 & M-20	275.00	234.00	cum	64350.00
2	2.5 vol III	Dismantling of cement concrete pavement i/c breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials up to a lead upto 1000 meter, stacking serviceable and unserviceable materials separately and as per relevant clauses of section-200. Total quantity	142.73	716.00	cum	102191.10
	2.7 vol III	Dismantling kerb stone by manual means and disposal of dismantled material with all lifts and up to a lead upto 1000 meter and as per relevant clauses of section-200.				
		Total quantity	210.00	6.00	m	1260.00
	2.12 vol III	Removal of telephone / Electric poles including excavation and dismantling of foundation concrete and lines under the supervision of concerned department, disposal with all lifts and up to a lead of 1000 meter and stacking the serviceable and unserviceable material separately.				
		Total quantity	33.00	90.00	each	2970.00
1	3.1, Vol III	Excavation				
		Excavation for roadway in soil including loading in truck for carrying of cut earth to embankment site with all lifts and lead upto 1000 metres and as per relevant clauses of section-300				
		Total quantity	2160.90	98.00	cum	211768.20
2	3.11, Vol III	Earthwork				
		Construction of Embankment/Sub grade/ earth shoulders, as per clause 305 & its sub-clauses, Where required but with approved materials/soil like morrum CBR value not less then 7% i/c all lead & lifts i/c excavation, cost of watering, mpaction and maintenance of surface during construction to ensure shedding & preventing ponding of water (clause 305.3.6) shaping & dressing (clause 305.3.7), finishing etc. complete but excluding scarifying existing granular/bituminous road surface vide clause 305.6.				
		Total quantity	1029.00	272.00	cum	279888.00
3	4.8(a) I Vol III	Crusher Run Macadam				
		Crusher Run Macadam Base (Providing crushed stone aggregate, depositing on a prepared surface by hauling vehicles, spreading and mixing with a motor grader, watering and compacting with a vibratory roller to clause 410 to form a layer of sub-base/Base)				
		Total quantity	680.40	833.00	cum	566773.20
4	4.5 Vol III	WMM				

		Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub - base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density and as per relevant clauses of section - 400.				
		Total quantity	567.00	951.00	cum	539217.00
5	5.1 Vol III	Primer Coat				
		Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including clearing of road surface and spraying primer at the rate of 0.75 kg/sqm using mechanical / Manual means and as per relevant clauses of section 502.				
		Total quantity	2058.00	26.00	Sqm	53508.00
6	5.2 (ii) Vol III	Tack Coat				
		Providing and applying tack coat with bitumen emulsion using emulsion pressure distributor on the prepared bituminous / granular surface cleaned with mechanical broom and as per relevant clauses of section 503.				
		@0.25 kg per sqm (normal bituminous surfaces)				
			10290.00	9.00	sqm	92610.00
		@0.30 kg per sqm (dry & hungry bituminous surfaces/granular surfaces treated with primer)				
		Total quantity	11352.00	11.00	sqm	124872.00
	5.1	Providing and applying tack coat with bitumen emulsion using emulsion pressure distributor on the prepared bituminous/granular surface cleaned with mechanical broom and as per relevant clauses of section-503.				
	iv)	@0.35 kg per sqm (Non-bituminous surfaces) cement concrete pavement				
		Total quantity	3696.00	13.00	sqm	48048.00
7	5.6 (i) Vol III	Dense Bituminous Macadam				

		Providing and laying dense bituminous macadam (in two layers of 50mm thickness each or as per the instruction of engineer in charge) with hot mix plant batch using crushed aggregates of specified grading, premixed with bituminous binder, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete in all respects and as per relevant clauses of section-507. (Only cement will be used as filler) <i>(for Grading I (80-100mm thickness)</i>				
		Total quantity	1234.80	7161.00	cum	8842402.80
8	5.8 (iv) Vol III	Bituminous Concrete				
		Providing and laying bituminous concrete with hot mix plant using crushed aggregates of specified grading,premixed with bituminous binder,transporting the hot mix to work site,laying with a mechanical paver finisher to the required grade,level and alignment,rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects and as per relevant clauses of section-509.(Only cement will be used as filler).				
	5.8 i	for Grading I (50-65 mm thickness) with 60/70 bitumen				
		Total quantity	617.40	8223.00	cum	5076880.20
Total						16006738.50

ESTIMATE OF ELECTRICAL DUCT						
ROAD FROM STRECH SATKAR HOTEL TO HOME SCIENCE ROAD & TEEN PATTI CHOWK TO GOUMATA CHOWK						
S No.	UADD SOR ITEM NO	Descriptions of Item	Quantity	Rate	Unit	Amount
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.				
		Total quantity	12936.00	202.00	cum	2613072.00
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				
		Total quantity	588.00	628.00	cum	369264.00
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 maxumum size of aggregate.				
		Total quantity	648.00	4154.00	cum	2691792.00
	5.1.1 Vol II	Providing and laying Plain / Reinorced cement concrete (mixed in concrete mixture) ... RCC Grade				
		M20 with 20mm maxumum size of aggregate.				
		Total quantity	4970.80	4728.00	cum	23501942.40
4	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.				
	5.20.6	Thermo-Mechanically Treated bars.				
		Taking average weight for estimate (Payable as actual design & weight calculations) Total quantity	292655.85	60.00	Kg	17559351.00

5	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.				
		Total quantity	18762.00	138.00	cum	2589156.00
6	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) Total quantity	21.90	4232.00	cum	92663.87
7	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) Total quantity	218.96	119.00	cum	26056.24
8	2.27.2 Vol II	Sand Filling				
		Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete.				
		Local Sand	6585.60	1201.00	cum	7909305.60
TOTAL						57352603.11

ESTIMATE OF STORM WATER DRAIN						
ROAD FROM STRECH SATKAR HOTEL TO HOME SCIENCE ROAD & TEEN PATTI CHOWK TO GOUMATA CHOWK						
S No.	UADD SOR ITEM NO	Descriptions of Item	Quantity	Unit	Rate	Amount
			1	2.9.1, Vol II	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.	
		Total quantity	2592.00	cum	202.00	523584.00
2	2.27.1 Vol II	Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete. Crusher Stone Dust				
		Total quantity	259.20	cum	628.00	162777.60
3	4.1.2 Vol II	Cement Concrete M-20 (Duct)				
		Providing and laying Plain / Reinforced cement concrete (mixed in concrete mixture) ... RCC Grade				
		M 15 with 20mm maximum size of aggregate.				
		Total quantity	264.00	cum	4154.00	1096656.00
3	5.1.1 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 :				
		Cement concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate.				
		Total quantity	1026.60	cum	4728.00	4853764.80
4	5.20.6 Vol II	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.				
	5.20.6	Thermo-Mechanically Treated bars				
		Total Weight of steel KG-	56411.67	60	Kg	3384700.20
5	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.				
		Total quantity	4116	138	Sqm	568008.00
TOTAL						10589490.60

ESTIMATE OF PEDESTRIAN PATH						
ROAD FROM STRECH SATKAR HOTEL TO HOME SCIENCE ROAD & TEEN PATTI CHOWK TO GOURMATA CHOWK LENGTH 1470 METERS						
S No.	UADD SOR ITEM NO	Descriptions of Item	Quantity	Rate	Unit	Amount
1	3.1, Vol III	Excavation				
		Excavation for roadway in soil including loading in truck for carrying of cut earth to embankment site with all lifts and lead upto 1000 metres and as per relevant clauses of section-300				
		Total	4860.00	98.00	cum	476280.00
2	3.11, Vol III	Earthwork				
		Construction of Embankment/Sub grade/ earth shoulders, as per clause 305 & its sub-clauses, Where required but with approved materials/soil like morrum CBR value not less than 7% i/c all lead & lifts i/c excavation, cost of watering, compaction and maintenance of surface during construction to ensure shedding & preventing ponding of water (clause 305.3.6) shaping & dressing (clause 305.3.7), finishing etc. complete but				
		Total	2646.00	272.00	cum	719712.00
4	4.1.5 Vol II	Cement Concrete M - 10				
		Providing and laying in position cement concrete in foundation up to plinth level. Cement concrete grade M-10 (Nominal Mix) with 40 mm maximum size of stone aggregate				
		Total	1125.00	3528.00	Sqm	3969000.00
	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 :				
		Cement concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate.				
		Total	66.00	4728.00	Sqm	312048.00
		Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.				
		Thermo-Mechanically Treated bars				
		Total Weight of steel KG-	3108.60	60	Kg	186516.00
5	11.29	Flag Stone				
		40 mm thick rubbed local Flag stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement :5 coarse sand) with joints 3mm thick, side buttered with cement mortar 1:2 (1 cement : 2 stone dust) admixed with pigment to match the shade of stone and pointing with same mortar (minimum size of kota stone 0.25 sqm)				
		Along Road				
	11.30.1	Red sand stone	3250.00	513.00	Sqm	1667250.00
	11.30.2	White sand stone	2250.00	532.00	Sqm	1197000.00
		At Junction				
	11.30.1	Red sand stone	375.00	513.00	Sqm	192375.00
	11.30.2	White sand stone	375.00	532.00	Sqm	199500.00

	11.20 Vol II	Chequerred precast cement concrete tiles 18-20mm thick in footpath & courtyard jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing and cleaning etc. complete on 20 mm thick bed of cement mortar 1:4 (1 cement: 4 coarse sand).				
		Along Road				
	11.20.3	Dark shade using ordinary cement.	1100.00	616.00	SqM	677600.00
		At junction				
		Dark shade using ordinary cement.	150.00	616.00	SqM	92400.00
6	8.1, Vol III, pg 69	Kerb Stone				
		Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade PCC on M-10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete and as per clause 408 of specifications. A Using Concrete Mixer				
		Total Quantity	2470.00	187.00	meter	461890.00
TOTAL						9689681.00

ESTIMATE OF ROAD MARKING, STREET FURNITURES & PLANTATION						
ROAD FROM STRECH SATKAR HOTEL TO HOME SCIENCE ROAD & TEEN PATTI CHOWK TO GOUMATA CHOWK LENGTH 1470 METERS						
S No.	UADD SOR ITEM NO	Descriptions of Item		Rate	Unit	Amount
			Quantity			
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.				
		Solid Lines in White Colour	294.00			
		Brocken Lines in White Colour	147.00			
		Stop Lines in White Colour	58.80			
		Applying Zebra Crossing	400.00			
		Total Quantity	899.80	900.00	Sqm	809820.00
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.				
			735.00	70.00	Sqm	51450.00
3	Item No 8.3 Vol III	Signages				
		Providing and fixing of retro- reflectorised 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 board shall 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.				
		90 cm equilateral triangle	5.00	3715.00	Nos	18575.00
		80 cm x 60 cm rectangular	10.00	4537.00	Nos	45370.00
	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.				
			40.00	292.00	each	11680.00
	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)				

			40.00	292.00	each	11680.00
4	Non Sor	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.As per Detail technical specification.	20.00	4537.00	Nos	90740.00
5	11.1 Vol III	Planting Permanent Hedges including Digging of Trenches (Planting permanent hedges including digging of trenches, 60 cm wide and 45 cm deep, refilling the excavated earth mixed with farmyard manure, supplied at the rate of 4.65 cum per 100 meters and supplying and planting hedge plants at 30 cm apart)	1600.00	230.00	Meter	368000.00
6	11.2 Vol III	Planting of Trees and their Maintenance for one Year (Planting of trees by the road side (Avenue trees) in 0.60 m dia holes, 1 m deep dug in the ground, mixing the soil with decayed farm yard/sludge manure, planting the saplings, backfilling the trench, watering, fixing the tree guard and maintaining the plants for one year)	100.00	488.00	Nos	48800.00
		TOTAL				1456115.00

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LENGTH - 1051 METERS**

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TOTAL		93034629.63

ESTIMATE OF ROAD**ROAD STRECH FROM BLOOM CHOWK TO MADAN MAHAL POLICE STATION
LENGTH - 1051 METERS**

S.No.	UADD SOR ITEM NO	Descriptions of Item	Measurement Quantity	Rate	Unit	Amount in Rs.
1	2.3, (i)	Dismantling Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead 1000 meter.				
		Cement Concrete Grade M-15 & M-20	182.04	234.00	cum	42597.36
2	2.5 vol III	Dismantling of cement concrete pavement i/c breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials up to a lead upto 1000 meter, stacking serviceable and unserviceable materials separately and as per relevant clauses of section-200.	62.87	716.00	cum	45011.34
3	2.7 vol II	Dismantling kerb stone by manual means and disposal of dismantled material with all lifts and up to a lead upto 1000 meter and as per relevant clauses of section-200.				
			168.00	6.00	m	1008.00

4	2.12 vol II	Removal of telephone / Electric poles including excavation and dismantling of foundation concrete and lines under the supervision of concerned department, disposal with all lifts and up to a lead of 1000 meter and stacking the serviceable and unserviceable material separately.				
			33.00	90.00	each	2970.00
5	3.1, Vol III	Excavation				
		Excavation for roadway in soil including loading in truck for carrying of cut earth to embankment site with all lifts and lead upto1000 metres and as per relevant clauses of section-300				
		Total	8742.72	98.00	cum	856786.56
6	3.11, Vol III	Earthwork				
		Construction of Embankment/Sub grade/ earth shoulders, as per clause 305 & its sub-clauses, Where required but with approved materials/soil like morrum CBR value not less than 7% i/c all lead & lifts i/c excavation, cost of watering, mpaction and maintenance of surface during construction to ensure shedding & preventing ponding of water (clause 305.3.6) shaping & dressing (clause 305.3.7), finishing etc. complete but excluding scarifying existing granular/bituminous road surface vide clause 305.6.				
		Total	4163.20	272.00	cum	1132390.40

7	4.8(a) I Vol III	Crusher Run Macadam				
		Crusher Run Macadam Base (Providing crushed stone aggregate, depositing on a prepared surface by hauling vehicles, spreading and mixing with a motor grader, watering and compacting with a vibratory roller to clause 410 to form a layer of sub-base/Base)				
		Total	2497.92	833.00	cum	2080767.36
8	4.5 Vol III	WMM				
		Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub - base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density and as per relevant clauses of section - 400.				
		Total quantity	2081.60	951.00	cum	1979601.60
9	5.1 Vol III	Primer Coat				
		Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including clearing of road surface and spraying primer at the rate of 0.75 kg/sqm using mechanical / Manual means and as per relevant clauses of section 502.				
		Total quantity	8326.40	26.00	Sqm	216486.40

10	5.2 (i) Vol III	Tack Coat				
		Providing and applying tack coat with bitumen emulsion using emulsion pressure distributor on the prepared bituminous / granular surface cleaned with mechanical broom and as per relevant clauses of section 503.				
		@0.25 kg per sqm (normal bituminous surfaces)				
			22334.40	9.00	Sqm	201009.60
		@0.30 kg per sqm (dry & hungry bituminous surfaces/granular surfaces treated with primer)				
		Total quantity	20035.40	11.00	sqm	220389.40
11	5.6 (i) Vol III	Dense Bituminous Macadam				
		Providing and laying dense bituminous macadam with hot mix plant batch using crushed aggregates of specified grading, premixed with bituminous binder, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete in all respects and as per relevant clauses of section-507. (Only cement will be used as filler) (for Grading I (80-100mm thickness) cum 7161.00)				
		Total quantity	2003.54	7161.00	cum	14347349.94

12	5.8 (iv) Vol III	Bituminous Concrete				
		Providing and laying bituminous concrete with hot mix plant using crushed aggregates of specified grading,premixed with bituminous binder,transporting the hot mix to work site,laying with a mechanical paver finisher to the required grade,level and alignment,rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects and as per relevant clauses of section-509.(Only cement will be used as filler). iv) for Grading II (30-45 mm thickness) with 60/70 bitumen				
		Total quantity	1194.27	8226.00	cum	9824065.02
13	8.1 (A) Vol III	Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade PCC on M-10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete and as per clause 408 of specifications.				
			2102.00	189.00	meter	397278
14	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.				

	4.1.4	Cement concrete grade M-10 (Nominal Mix) with 20 mm maximum size of stone aggregate	73.57			
			73.57	3595.00	Cum	264484
15	2.27 voll	Supplying and filling in plinth under floors including,watering, ramming consolidating and dressing complete.				
	2.27.1	Crusher Stone Dust	147.14			
			147.14	628.00	Cum	92404
Total						31704599.05

ESTIMATE OF ELECTRICAL DUCT

ROAD STRECH FROM BLOOM CHOWK TO MADAN MAHAL POLICE STATION
LENGTH 1051 METERS

S No.	UADD SOR ITEM NO	Descriptions of Item	Quantity	Rate	Unit	Amount
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				
		Total quantity	11448.80	202.00	cum	2312657.60
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				
		Total quantity	520.40	628.00	cum	326811.20
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 maxumum size of aggregate.				
		Total quantity	520.40	4154.00	cum	2161741.60
4	5.1.1 Vol II	Providing and laying Plain / Reinorced cement concrete (mixed in concrete mixture) ... RCC Grade				
		M20 with 20mm maxumum size of aggregate.				
		Total quantity	3935.11	4728.00	cum	18605176.44
5	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.				
	5.20.6	Thermo-Mechanically Treated bars.				
		Taking average weight for estimate (Payable as actual design & weight calculations) Total quantity	231679.31	60.00	Kg	13900758.41

6	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.				
		Total quantity	1270.00	138.00	cum	175260.00
7	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) Total quantity	15.64	4232.00	cum	66188.48
8	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) Total quantity	156.40	119.00	cum	18611.60
9	2.27.2 Vol II	Sand Filling				
		Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete.				
		Total quantity	4778.34	1201.00	cum	5738786.34
TOTAL						43305991.67

ESTIMATE OF STORM WATER DRAIN
ROAD STRECH FROM BLOOM CHOWK TO MADAN MAHAL POLICE STATION
LENGTH - 1051 METERS

S No.	UADD SOR ITEM NO	Descriptions of Item	Quantity	Unit	Rate	Amount
1	2.9.1, Vol II	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.				
		Total quantity	2081.60	cum	202.00	420483.20
2	2.27.1 Vol II	Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete.				
		Total quantity	208.16	cum	628.00	130724.48
3	4.1.2 Vol II	Cement Concrete M-20 (Duct)				
		Providing and laying Plain / Reinforced cement concrete (mixed in concrete mixture) ... RCC Grade				
		M 15 with 20mm maximum size of aggregate.				
		Total quantity	208.16	cum	4154.00	864696.64
4	5.1.1 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 :				

		Cement concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate.				
		Total quantity	899.58	cum	4728.00	4253214.24
5	5.20.6 Vol II	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.				
	5.20.6	Thermo-Mechanically Treated bars				
		Total Weight of steel KG-	52962.77	60	Kg	3177766.35
6	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.				
		Total quantity	2943	138	Sqm	406106.40
TOTAL						9252991.31

ESTIMATE OF PEDESTRIAN PATH

ROAD STRECH FROM BLOOM CHOWK TO MADAN MAHAL POLICE STATION

LENGTH - 1051 METERS

S No.	UADD SOR ITEM NO	Descriptions of Item	Quantity	Rate	Unit	Amount
1	3.1, Vol III	Excavation				
		Excavation for roadway in soil including loading in truck for carrying of cut earth to embankment site with all lifts and lead upto1000 metres and as per relevant clauses of section-300				
		Total quantity	3252.50	98.00	cum	318745.00
2	3.11, Vol III	Earthwork				
		Construction of Embankment/Sub grade/ earth shoulders, as per clause 305 & its sub-clauses, Where required but with approved materials/soil like morrum CBR value not less then 7% i/c all lead & lifts i/c excavation, cost of watering, mpaction and maintenance of surface during construction to ensure shedding & preventing ponding of water (clause 305.3.6) shaping & dressing (clause 305.3.7), finishing etc. complete but excluding scarifying existing granular/bituminous road surface vide clause 305.6.				
		Total quantity	1576.50	272.00	cum	428808.00
3	4.1.5 Vol II	Cement Concrete M - 10				

		Providing and laying in position cement concrete in foundation Up to plinth level. Cement concrete grade M-10 (Nominal Mix) with 40 mm maximum size of stone aggregate				
		Total quantity	975.75	3528.00	Sqm	3442446.00
4	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 :				
		Cement concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate.				
		Total quantity	53.40	4728.00	Sqm	252475.20
		Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.				
		Thermo-Mechanically Treated bars				
		Total Weight of steel KG-	2515.14	60	Kg	150908.40
5	11.29	Flag Stone				
		40 mm thick rubbed local Flag stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement :5 coarse sand) with joints 3mm thick, side buttered with cement mortar 1:2 (1 cement : 2 stone dust) admixed with pigment to match the shade of stone and pointing with same mortar (minimum size of kota stone 0.25 sqm)				

		Along Road				
	11.30.1	Red sand stone	2160.00	513.00	Sqm	1108080.00
	11.30.2	White sand stone	1400.00	532.00	Sqm	744800.00
		At Junction				
	11.30.1	Red sand stone	500.00	513.00	Sqm	256500.00
	11.30.2	White sand stone	500.00	532.00	Sqm	266000.00
6	11.20 Vol II	Chequerred precast cement concrete tiles 18-20mm thick in footpath & courtyard jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing and cleaning etc. complete on 20 mm thick bed of cement mortar 1:4 (1 cement: 4 coarse sand).				
			1140.00	616.00	SqM	702240.00
7	8.1, Vol III, pg 69	Kerb Stone				
		Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade PCC on M-10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete and as per clause 408 of specifications. A Using Concrete Mixer				
			2080.00	187.00	meter	388960.00
					TOTAL	7671002.60

ESTIMATE OF ROAD MARKING, STREET FURNITURES & PLANTATION						
ROAD STRECH FROM BLOOM CHOWK TO MADAN MAHAL POLICE STATION						
LENGTH - 1051 METERS						
S No.	UADD SOR ITEM NO	Descriptions of Item	Measurement	Rate	Unit	Amount
			Quantity			
1	Item 8.10 Vol III	Road Marking				
		Solid Lines in White Colour				
		Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous Surface (Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising 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.				
			630.50	900.00	Sqm	567450.00
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.				
			425.00	70.00	Sqm	29750.00
3	Item No 8.3 Vol III	Signages				
		Providing and fixing of retro- reflectorised 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 board shall 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.				
		90 cm equilateral triangle	5.00	3715.00	Nos	18575.00
		80 cm x 60 cm rectangular	10.00	4537.00	Nos	45370.00
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 to IRC-79 and the drawings as per relevant clauses of section-800 of specifications.				
			40.00	292.00	each	11680.00
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)				
			40.00	292.00	each	11680.00

6	Non Sor	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.As per Detail technical specification.	20.00	4537.00	Nos	90740.00
7	11.1 Vol III	Planting Permanent Hedges including Digging of Trenches (Planting permanent hedges including digging of trenches, 60 cm wide and 45 cm deep, refilling the excavated earth mixed with farmyard manure, supplied at the rate of 4.65 cum per 100 meters and supplying and planting hedge plants at 30 cm apart)	1200.00	230.00	Meter	276000.00
8	11.2 Vol III	Planting of Trees and their Maintenance for one Year (Planting of trees by the road side (Avenue trees) in 0.60 m dia holes, 1 m deep dug in the ground, mixing the soil with decayed farm yard/sludge manure, planting the saplings, backfilling the trench, watering, fixing the tree guard and maintaining the plants for one year)	100.00	488.00	Nos	48800.00
TOTAL						1100045.00

**ROAD STRECH FROM MADAN MAHAL POLICE STATION TO RANITAAL JUNCTION
LENGTH 1132 METERS**

SUMMARY SHEET		
Sr No.	Item Description	Amount (In Rs.)
1	ROAD	26554186.14
2	UTILITY DUCT	43545679.14
3	STORM WATER DRAIN	8426709.42
4	PEDESTARIAN TRACK	7364966.20
5	SIGNAGES, MARKING, LANDSCAPING	1169310.00
TOTAL		87060850.89

ESTIMATE OF ROAD

ROAD STRECH FROM MADAN MAHAL POLICE STATION TO RANITAAL JUNCTION LENGTH 1132 METERS

S.No.	UADD SOR ITEM NO	Descriptions of Item		Rate	Unit	Amount in Rs.
			Quantity			
1	2.3, (i)	Dismantling				
		Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead 1000 meter.				
		Cement Concrete Grade M-15 & M-20	218.04	234.00	cum	51021.36
2	2.5 vol III	Dismantling of cement concrete pavement i/c breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials up to a lead upto 1000 meter, stacking serviceable and unserviceable materials separately and as per relevant clauses of section-200.	2.98	716.00	cum	2130.82
3	2.7 vol II	Dismantling kerb stone by manual means and disposal of dismantled material with all lifts and up to a lead upto 1000 meter and as per relevant clauses of section-200.	326.00	6.00	m	1956.00
4	2.12 vol II	Removal of telephone / Electric poles including excavation and dismantling of foundation concrete and lines under the supervision of concerned department, disposal with all lifts and up to a lead of 1000 meter and stacking the serviceable and unserviceable material separately.	33.00	90.00	each	2970.00
5	3.1, Vol III	Excavation				
		Excavation for roadway in soil including loading in truck for carrying of cut earth to embankment site with all lifts and lead upto 1000 metres and as per relevant clauses of section-300				
		Total quantity	1847.79	98.00	cum	1945.79
6	3.11, Vol	Earthwork				

		Construction of Embankment/Sub grade/ earth shoulders, as per clause 305 & its sub-clauses, Where required but with approved materials/soil like morrum CBR value not less than 7% i/c all lead & lifts i/c excavation, cost of watering, mpaction and maintenance of surface during construction to ensure shedding & preventing ponding of water (clause 305.3.6) shaping & dressing (clause 305.3.7), finishing etc. complete but excluding scarifying existing granular/bituminous road surface vide clause 305.6.				
		Total quantity	879.90	272.00	cum	239332.80
7	4.8(a) I	Crusher Run Macadam				
		Crusher Run Macadam Base (Providing crushed stone aggregate, depositing on a prepared surface by hauling vehicles, spreading and mixing with a motor grader, watering and compacting with a vibratory roller to clause 410 to form a layer of sub-base/Base)				
		For 53 mm maximum size				
		Total quantity	527.94	833.00	cum	439774.02
8	4.5 Vol III	WMM				
		Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub - base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density and as per relevant clauses of section - 400.				
		Total quantity	439.95	951.00	cum	418392.45
9	5.1 Vol III	Primer Coat				
		Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including clearing of road surface and spraying primer at the rate of 0.75 kg/sqm using mechanical / Manual means and as per relevant clauses of section 502.				
		Total quantity	1759.80	26.00	Sqm	45754.80
10	5.2 (i) Vol	Tack Coat				

		Providing and applying tack coat with bitumen emulsion using emulsion pressure distributor on the prepared bituminous / granular surface cleaned with mechanical broom and as per relevant clauses of section 503. '@0.25 kg per sqm				
		@0.25 kg per sqm (normal bituminous surfaces)				
		Total quantity	18734.40	9.00	Sqm	168609.60
		@0.30 kg per sqm (dry & hungry bituminous surfaces/granular surfaces treated with primer)				
		Total quantity	34441.80	11.00	sqm	378859.80
11	5.6 (i) Vol	Dense Bituminous Macadam				
		Providing and laying dense bituminous macadam with hot mix plant batch using crushed aggregates of specified grading, premixed with bituminous binder, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete in all respects and as per relevant clauses of section-507. (Only cement will be used as filler) (for Grading I (80-100mm thickness) cum 7161.00)				
		Total quantity	2117.58	7161.00	cum	15163990.38
12	5.8 (iv)	Bituminous Concrete				
		Providing and laying bituminous concrete with hot mix plant using crushed aggregates of specified grading,premixed with bituminous binder,transporting the hot mix to work site,laying with a mechanical paver finisher to the required grade,level and alignment,rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects and as per relevant clauses of section-509.(Only cement will be used as filler). iv) for Grading II (30-45 mm thickness) with 60/70 bitumen				
		Total quantity	1058.79	8226.00	cum	8709606.54

13	8.1 (A) Vol III	Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade PCC on M-10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete and as per clause 408 of specifications.				
			2264.00	189.00	meter	427896.00
14	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.				
	4.1.4	Cement concrete grade M-10 (Nominal Mix) with 20 mm maximum size of stone aggregate				
			118.86	3595.00	Cum	427301.70
15	2.27 voll	Supplying and filling in plinth under floors including,watering, ramming consolidating and dressing complete.				
	2.27.1	Crusher Stone Dust	118.86	628.00	Cum	74644.08
Total						26554186.14

ESTIMATE OF ELECTRICAL DUCT

ROAD STRECH FROM MADAN MAHAL POLICE STATION TO RANITAAL JUNCTION

LENGTH 1132 METERS

S No.	UADD SOR ITEM NO	Descriptions of Item	Quantity	Rate	Unit	Amount
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.				
		Total Excavation	11061.60	202.00	cum	2234443.20
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				
		Total	502.80	628.00	cum	315758.40
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 maxumum size of aggregate.				
			502.80	4154.00	cum	2088631.20
4	5.1.1 Vol II	Providing and laying Plain / Reinorced cement concrete (mixed in concrete mixture) ... RCC Grade				
		M20 with 20mm maxumum size of aggregate.				
		Total quantity of M20 Concrete	3909.54	4728.00	cum	18484281.48
5	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.				
	5.20.6	Thermo-Mechanically Treated bars.				
		Taking average weight for estimate (Payable as actual design & weight calculations)	230173.87	60.00	Kg	13810432.39
6	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.				
		Total quantity	3537.50	138.00	cum	488175.00

7	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)	17.20	4232.00	cum	72807.33
8	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)	172.04	119.00	cum	20472.76
9	2.27.2 Vol II	Sand Filling				
		Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete.				
			5021.38	1201.00	cum	6030677.38
TOTAL						43545679.14

ESTIMATE OF STORM WATER DRAIN						
ROAD STRECH FROM MADAN MAHAL POLICE STATION TO RANITAAL JUNCTION						
LENGTH 1132 METERS						
S No.	UADD SOR ITEM NO	Descriptions of Item	Quantity	Unit	Rate	Amount
1	2.9.1, Vol II	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.				
			2011.20	cum	202.00	406262.40
2	2.27.1 Vol II	Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete.				
			201.12	cum	628.00	126303.36
3	4.1.2 Vol II	Cement Concrete M-20 (Duct)				
		Providing and laying Plain / Reinorced cement concrete (mixed in concrete mixture) ... RCC Grade				
		M 15 with 20mm maxumum size of aggregate.				
			201.12	cum	4154.00	835452.48
4	5.1.1 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 :				

		Cement concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate.				
		TOTAL QUANTITY OF RCC	801.56	cum	4728.00	3789775.68
5	5.20.6 Vol II	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.				
	5.20.6	Thermo-Mechanically Treated bars				
		Total Weight of steel KG-	47191.85	60	Kg	2831510.70
6	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.				
		Total quantity	3170	138	Sqm	437404.80
TOTAL						8426709.42

ESTIMATE OF PEDESTRIAN PATH						
ROAD STRECH FROM MADAN MAHAL POLICE STATION TO RANITAAL JUNCTION						
LENGTH 1132 METERS						
S No.	UADD SOR ITEM NO	Descriptions of Item	Measurement	Rate	Unit	Amount
			Quantity			
1	3.1, Vol III	Excavation				
		Excavation for roadway in soil including loading in truck for carrying of cut earth to embankment site with all lifts and lead upto 1000 metres and as per relevant clauses of section-300				
		Total	3142.50	98.00	cum	307965.00
2	3.11, Vol III	Earthwork				
		Construction of Embankment/Sub grade/ earth shoulders, as per clause 305 & its sub-clauses, Where required but with approved materials/soil like morrum CBR value not less than 7% i/c all lead & lifts i/c excavation, cost of watering, compaction and maintenance of surface during construction to ensure shedding & preventing ponding of water (clause 305.3.6) shaping & dressing (clause 305.3.7), finishing etc. complete but excluding scarifying existing granular/bituminous road surface vide clause 305.6.				
		Total	1698.00	272.00	cum	461856.00
3	4.1.5 Vol II	Cement Concrete M - 10				
		Providing and laying in position cement concrete in foundation Up to plinth level. Cement concrete grade M-10 (Nominal Mix) with 40 mm maximum size of stone aggregate				
			942.75	3528.00	Sqm	3326022.00
4	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 :				
		Cement concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate.				
			55.80	4728.00	Sqm	263822.40

		Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.				
		Thermo-Mechanically Treated bars				
		Total Weight of steel KG-	2628.18	60	Kg	157690.80
5	11.29	Flag Stone				
		40 mm thick rubbed local Flag stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement :5 coarse sand) with joints 3mm thick, side buttered with cement mortar 1:2 (1 cement : 2 stone dust) admixed with pigment to match the shade of stone and pointing with same mortar (minimum size of kota stone 0.25 sqm)				
	11.30.1	Red sand stone	2240.00	513.00	Sqm	1149120.00
	11.30.2	White sand stone	1480.00	532.00	Sqm	787360.00
		At Junction				
	11.30.1	Red sand stone	250.00	513.00	Sqm	128250.00
	11.30.2	White sand stone	250.00	532.00	Sqm	133000.00
6	11.20 Vol II	Chequerred precast cement concrete tiles 18-20mm thick in footpath & courtyard jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing and cleaning etc. complete on 20 mm thick bed of cement mortar 1:4 (1 cement: 4 coarse sand).				
		Along Road				
	11.20.3	Dark shade using ordinary cement.	930.00	616.00	SqM	572880.00
		At junction				
		Dark shade using ordinary cement.	125.00	616.00	SqM	77000.00
7	8.1, Vol III, pg 69	Kerb Stone				
		Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade PCC on M-10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete and as per clause 408 of specifications. A Using Concrete Mixer				
		at Junction	1580.00			
		at Junction	250.00			
			1830.00	187.00	meter	342210.00
TOTAL						7364966.20

ESTIMATE OF ROAD MARKING, STREET FURNITURES & PLANTATION						
ROAD STRECH FROM MADAN MAHAL POLICE STATION TO RANITAAL JUNCTION						
LENGTH 1132 METERS						
S No.	UADD SOR ITEM NO	Descriptions of Item		Rate	Unit	Amount
			Quantity			
1	Item 8.10 Vol III	Road Marking				
		Solid Lines in White Colour				
		Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous Surface (Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising 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.				
			705.30	900.00	Sqm	634770.00
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.				
			522.50	70.00	Sqm	36575.00
3	Item No 8.3 Vol III	Signages				
		Providing and fixing of retro- reflectorised 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 board shall 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.				
		90 cm equilateral triangle	5.00	3715.00	Nos	18575.00
		80 cm x 60 cm rectangular	10.00	4537.00	Nos	45370.00

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 to IRC-79 and the drawings as per relevant clauses of section-800 of specifications.	40.00	292.00	each	11680.00
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)	40.00	292.00	each	11680.00
6	Non Sor	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.As per Detail technical specification.	20.00	4537.00	Nos	90740.00
7	11.1 Vol III	Planting Permanent Hedges including Digging of Trenches (Planting permanent hedges including digging of trenches, 60 cm wide and 45 cm deep, refilling the excavated earth mixed with farmyard manure, supplied at the rate of 4.65 cum per 100 meters and supplying and planting hedge plants at 30 cm apart)	1200.00	230.00	Meter	276000.00
8	11.2 Vol III	Planting of Trees and their Maintenance for one Year (Planting of trees by the road side (Avenue trees) in 0.60 m dia holes, 1 m deep dug in the ground, mixing the soil with decayed farm yard/sludge manure, planting the saplings, backfilling the trench, watering, fixing the tree guard and maintaining the plants for one year)	90.00	488.00	Nos	43920.00
TOTAL						1169310.00

**ROAD STRECH FROM RANITAAL JUNCTION TO BALDEOBAGH
LENGTH 860 METERS**

SUMMARY SHEET		
Sr No.	Item Description	Amount (In Rs.)
1	ROAD	26736298.30
2	UTILITY DUCT	32227892.96
3	STORM WATER DRAIN	6681984.60
4	PEDESTARIAN TRACK	6594298.00
5	SIGNAGES, MARKING, LANDSCAPING	959045.00
TOTAL		73199518.86

ESTIMATE OF ROAD
ROAD FROM STRECH RANITAAL JUNCTION TO BALDEOBAGH
LENGTH 860 METERS

S.No.	UADD SOR Vol II & III,	Descriptions of Item	Quantity	Rate	Unit	Amount in Rs.
1	2.3, (i)	Dismantling				
		Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead 1000 meter.				
		Cement Concrete Grade M-15 & M-20	260.85	234.00	cum	61038.90
2	2.5 vol III	Dismantling of cement concrete pavement i/c breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials up to a lead upto 1000 meter, stacking serviceable and unserviceable materials separately and as per relevant clauses of section-200.	81.68	716.00	cum	58479.30
3	2.7 vol II	Dismantling kerb stone by manual means and disposal of dismantled material with all lifts and up to a lead upto 1000 meter and as per relevant clauses of section-200.				
			168.00	6.00	m	1008.00
4	2.12 vol II	Removal of telephone / Electric poles including excavation and dismantling of foundation concrete and lines under the supervision of concerned department, disposal with all lifts and up to a lead of 1000 meter and stacking the serviceable and unserviceable material separately.				
			15.00	90.00	each	1350.00
5	3.1, Vol III	Excavation				
		Excavation for roadway in soil including loading in truck for carrying of cut earth to embankment site with all lifts and lead upto 1000 metres and as per relevant clauses of section-300				
		Total	6585.60	98.00	cum	6683.60
6	3.11, Vol III	Earthwork				

		Construction of Embankment/Sub grade/ earth shoulders, as per clause 305 & its sub-clauses, Where required but with approved materials/soil like morrum CBR value not less then 7% i/c all lead & lifts i/c excavation, cost of watering, mpaction and maintenance of surface during construction to ensure shedding & preventing ponding of water (clause 305.3.6) shaping & dressing (clause 305.3.7), finishing etc. complete but excluding scarifying existing granular/bituminous road surface vide clause 305.6.				
		Total	3136.00	272.00	cum	852992.00
7	4.8(a) I Vol	Crusher Run Macadam				
		Crusher Run Macadam Base (Providing crushed stone aggregate, depositing on a prepared surface by hauling vehicles, spreading and mixing with a motor grader, watering and compacting with a vibratory roller to clause 410 to form a layer of sub-base/Base)				
		Total	1881.60	833.00	cum	1567372.80
8	4.5 Vol III	WMM				
		Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub - base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density and as per relevant clauses of section - 400.				
		Total quantity	1568.00	951.00	cum	1491168.00
9	5.1 Vol III	Primer Coat				
		Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including clearing of road surface and spraying primer at the rate of 0.75 kg/sqm using mechanical / Manual means and as per relevant clauses of section 502.				
		Total quantity	6272.00	26.00	Sqm	163072.00
10	5.2 (i) Vol	Tack Coat				

		Providing and applying tack coat with bitumen emulsion using emulsion pressure distributor on the prepared bituminous / granular surface cleaned with mechanical broom and as per relevant clauses of section 503.				
		@0.25 kg per sqm (normal bituminous surfaces)				
			20384.00	9.00	Sqm	183456.00
		@ 0.30 kg per sqm (dry & hungry bituminous surfaces/granular surfaces treated with primer)				
		Total quantity	19012.00	11.00	sqm	209132.00
11	5.6 (i)	Dense Bituminous Macadam				
		Providing and laying dense bituminous macadam with hot mix plant batch using crushed aggregates of specified grading, premixed with bituminous binder, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete in all respects and as per relevant clauses of section-507. (Only cement will be used as filler) (for Grading I (80-100mm thickness) cum 7161.00)				
		Total quantity	1901.20	7161.00	cum	13614493.20
12	5.8 (iv) Vol	Bituminous Concrete				
		Providing and laying bituminous concrete with hot mix plant using crushed aggregates of specified grading,premixed with bituminous binder,transporting the hot mix to work site,laying with a mechanical paver finisher to the required grade,level and alignment,rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects and as per relevant clauses of section-509.(Only cement will be used as filler). iv) for Grading II (30-45 mm thickness) with 60/70 bitumen				
		Total quantity	950.60	8226.00	cum	7819635.60

13	8.1 (A) Vol III	Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade PCC on M-10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete and as per clause 408 of specifications.				
			1720.00	189.00	meter	325080.00
14	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.				
	4.1.4	Cement concrete grade M-10 (Nominal Mix) with 20 mm maximum size of stone aggregate	90.30	3595.00	Cum	324628.50
15	2.27 Vol II	Supplying and filling in plinth under floors including,watering, ramming consolidating and dressing complete.				
	2.27.1	Crusher Stone Dust	90.30	628.00	Cum	56708.40
	TOTAL					26736298.30

ESTIMATE OF ELECTRICAL DUCT

ROAD STRECH FROM RANITAAL JUNCTION TO BALDEOBAGH LENGTH 860 METERS

S No.	UADD SOR ITEM NO	Descriptions of Item	Quantity	Rate	Unit	Amount
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				
		Total Excavation	8624.00	202.00	cum	1742048.00
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				
		Total	392.00	628.00	cum	246176.00
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 maxumum size of aggregate.				
			392.00	4154.00	cum	1628368.00
4	5.1.1 Vol II	Providing and laying Plain / Reinorced cement concrete (mixed in concrete mixture) ... RCC Grade				
		M20 with 20mm maxumum size of aggregate.				
		Total quantity of M20 Concrete	3052.55	4728.00	cum	14432456.40
5	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.				
	5.20.6	Thermo-Mechanically Treated bars.				
		Taking average weight for estimate (Payable as actual design & weight calculations)	179718.88	60.00	Kg	10783132.88

6	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.				
		Total quantity	3596.00	138.00	cum	496248.00
	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)	15.64	4232.00	cum	66188.48
	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)	156.40	119.00	cum	18611.60
7	2.27.2 Vol II	Sand Filling				
		Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete.				
		Local Sand	2343.60	1201.00	cum	2814663.60
TOTAL						32227892.96

ESTIMATE OF STORM WATER DRAIN						
ROAD STRECH FROM RANITAAL JUNCTION TO BALDEOBAGH						
LENGTH 860 METERS						
S No.	UADD SOR ITEM NO	Descriptions of Item	Quantity	Unit	Rate	Amount
1	2.9.1, Vol II	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.				
			1632.00	cum	202.00	329664.00
2	2.27.1 Vol II	Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete.				
		Crusher Stone Dust	156.80	cum	628.00	98470.40
3	4.1.2 Vol II	Cement Concrete M-20 (Duct)				
		Providing and laying Plain / Reinorced cement concrete (mixed in concrete mixture) ... RCC Grade				
		M 15 with 20mm maxumum size of aggregate.				
		TOTAL QUANTITY	156.80	cum	4154.00	651347.20
4	5.1.1 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 :				

		Cement concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate.				
		TOTAL QUANTITY OF RCC	638.00	cum	4728.00	3016464.00
5	5.20.6 Vol II	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.				
	5.20.6	Thermo-Mechanically Treated bars				
		Total Weight of steel KG-	37562.25	60	Kg	2253735.00
6	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.				
		Total quantity	2408	138	Sqm	332304.00
TOTAL						6681984.60

ESTIMATE OF PEDESTRIAN PATH						
ROAD STRECH FROM RANITAAL JUNCTION TO BALDEOBAGH						
LENGTH 860 METERS						
S No.	UADD SOR ITEM NO	Descriptions of Item	Quantity	Rate	Unit	Amount
			1	3.1, Vol III	Excavation	
		Excavation for roadway in soil including loading in truck for carrying of cut earth to embankment site with all lifts and lead upto 1000 metres and as per relevant clauses of section-300				
		Total	2940.00	98.00	cum	288120.00
2	3.11, Vol III	Earthwork				
		Construction of Embankment/Sub grade/ earth shoulders, as per clause 305 & its sub-clauses, Where required but with approved materials/soil like morrum CBR value not less than 7% i/c all lead & lifts i/c excavation, cost of watering, mpaction and maintenance of surface during construction to ensure shedding & preventing ponding of water (clause 305.3.6) shaping & dressing (clause 305.3.7), finishing etc. complete but excluding scarifying existing granular/bituminous road surface vide clause 305.6.				
		Total	1548.00	272.00	cum	421056.00
3	4.1.5 Vol II	Cement Concrete M - 10				
		Providing and laying in position cement concrete in foundation Up to plinth level. Cement concrete grade M-10 (Nominal Mix) with 40 mm maximum size of stone aggregate				
		Total	882.00	3528.00	Sqm	3111696.00
4	5.1. Vol II	Reinforcement for R.C.C. work				
		Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :				
		Cement concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate.				
		Total	39.00	4728.00	Sqm	184392.00
		Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.				
		Thermo-Mechanically Treated bars				
		Total Weight of steel KG-	1836.90	60	Kg	110214.00
5	11.29	Flag Stone				
		40 mm thick rubbed local Flag stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement :5 coarse sand) with joints 3mm thick, side buttered with cement mortar 1:2 (1 cement : 2 stone dust) admixed with pigment to match the shade of stone and pointing with same mortar (minimum size of kota stone 0.25 sqm)				
		Along Road				
	11.30.1	Red sand stone	2000.00	513.00	Sqm	1026000.00
	11.30.2	White sand stone	1250.00	532.00	Sqm	665000.00
		At Junction				
	11.30.1	Red sand stone	300.00	513.00	Sqm	153900.00
	11.30.2	White sand stone	300.00	532.00	Sqm	159600.00

6	11.20 Vol II	Chequerred precast cement concrete tiles 18x20mm thick in footpath & courtyard jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing and cleaning etc. complete on 20 mm thick bed of cement mortar 1:4 (1 cement: 4 coarse sand).				
		Along Road				
	11.20.3	Dark shade using ordinary cement.	650.00	616.00	SqM	400400.00
		At junction				
		Dark shade using ordinary cement.	120.00	616.00	SqM	73920.00
7	8.1, Vol III, pg 69	Kerb Stone				
		Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade PCC on M-10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete and as per clause 408 of specifications. A Using Concrete Mixer				
			1540.00	187.00	meter	287980.00
TOTAL						6594298.00

ESTIMATE OF ROAD MARKING, STREET FURNITURES & PLANTATION						
ROAD STRECH FROM RANITAAAL JUNCTION TO BALDEOBAGH						
LENGTH 860 METERS						
S No.	UADD SOR ITEM NO	Descriptions of Item	Quantity	Rate	Unit	Amount
1	Item 8.10 Vol III	Road Marking				
		Solid Lines in White Colour				
		Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous Surface (Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising 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.				
		Solid Lines in White Colour	146.00			
		Brocken Lines in White Colour	73.00			
		Stop Lines in White Colour	21.90			
		Applying Zebra Crossing	350.00			
			590.90	900.00	Sqm	531810.00
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.				
			365.00	70.00	Sqm	25550.00
3	Item No 8.3 Vol III	Signages				
		Providing and fixing of retro- reflectorised 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 board shall 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.				
		90 cm equilateral triangle	3.00	3715.00	Nos	11145.00
		80 cm x 60 cm rectangular	6.00	4537.00	Nos	27222.00
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.				
			30.00	292.00	each	8760.00

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)	30.00	292.00	each	8760.00
6	Non Sor	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.As per Detail technical specification.	14.00	4537.00	Nos	63518.00
7	11.1 Vol III	Planting Permanent Hedges including Digging of Trenches (Planting permanent hedges including digging of trenches, 60 cm wide and 45 cm deep, refilling the excavated earth mixed with farmyard manure, supplied at the rate of 4.65 cum per 100 meters and supplying and planting hedge plants at 30 cm apart)	1100.00	230.00	Meter	253000.00
8	11.2 Vol III	Planting of Trees and their Maintenance for one Year (Planting of trees by the road side (Avenue trees) in 0.60 m dia holes, 1 m deep dug in the ground, mixing the soil with decayed farm yard/sludge mannure, planting the saplings, backfilling the trench, watering, fixing the tree guard and maintaining the plants for one year)	60.00	488.00	Nos	29280.00
TOTAL						959045.00

**ROAD STRECH FROM YATAYAT TIRAHA TO PRANJAPE CHOWK (HANUMAN MANDIR)
LENGTH 824 METERS**

SUMMARY SHEET		
Sr No.	Item Description	Amount (In Rs.)
1	ROAD	22799762.92
2	UTILITY DUCT	30211120.07
3	STORM WATER DRAIN	7523447.44
4	PEDESTARIAN TRACK	6987597.20
5	SIGNAGES, MARKING, LANDSCAPING	1387245.00
TOTAL		68909172.63

ESTIMATE OF ROAD
ROAD STRECH FROM YATAYAT TIRAHA TO PRANJAPE CHOWK (HANUMAN MANDIR)

S.No.	UADD SOR Vol II & III	Descriptions of Item	Quantity	Rate	Unit	Amount in Rs.
1	2.3 Vol III	Dismantling				
		Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead 1000 meter.				
		Cement Concrete Grade M-15 & M-20	260.85	234.00	cum	61038.90
2	2.5 vol III	Dismantling of cement concrete pavement i/c breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials up to a lead upto 1000 meter, stacking serviceable and unserviceable materials separately and as per relevant clauses of section-200.	81.68	716.00	cum	58479.30
3	2.7 vol II	Dismantling kerb stone by manual means and disposal of dismantled material with all lifts and up to a lead upto 1000 meter and as per relevant clauses of section-200.	168.00	6.00	m	1008.00
4	2.12 vol II	Removal of telephone / Electric poles including excavation and dismantling of foundation concrete and lines under the supervision of concerned department, disposal with all lifts and up to a lead of 1000 meter and stacking the serviceable and unserviceable material separately.	20.00	90.00	each	1800.00
5	3.1, Vol III	Excavation				
		Excavation for roadway in soil including loading in truck for carrying of cut earth to embankment site with all lifts and lead upto 1000 metres and as per relevant clauses of section-300				
		Total	5537.28	98.00	cum	5635.28
6	3.11, Vol III	Earthwork				
		Construction of Embankment/Sub grade/ earth shoulders, as per clause 305 & its sub-clauses, Where required but with approved materials/soil like morrum CBR value not less then 7% i/c all lead & lifts i/c excavation, cost of watering, mpaction and maintenance of surface during construction to ensure shedding & preventing ponding of water (clause 305.3.6) shaping & dressing (clause 305.3.7), finishing etc. complete but excluding scarifying existing granular/bituminous road surface vide clause 305.6.				
		Total	2636.80	272.00	cum	717209.60
7	4.8(a) I Vol III	Crusher Run Macadam				
		Crusher Run Macadam Base (Providing crushed stone aggregate, depositing on a prepared surface by hauling vehicles, spreading and mixing with a motor grader, watering and compacting with a vibratory roller to clause 410 to form a layer of sub-base/Base)				
		Total	1582.08	833.00	cum	1317872.64
8	4.5 Vol III	WMM				

		Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub - base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density and as per relevant clauses of section - 400.				
		Total quantity	1318.40	951.00	cum	1253798.40
9	5.1 Vol III	Primer Coat				
		Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including clearing of road surface and spraying primer at the rate of 0.75 kg/sqm using mechanical / Manual means and as per relevant clauses of section 502.				
		Total quantity	5273.60	26.00	Sqm	137113.60
10	5.2 (i) Vol III	Tack Coat				
		Providing and applying tack coat with bitumen emulsion using emulsion pressure distributor on the prepared bituminous / granular surface cleaned with mechanical broom and as per relevant clauses of section 503.				
		@0.25 kg per sqm (normal bituminous surfaces)				
			19635.20	9.00	Sqm	176716.80
		@ 0.30 kg per sqm (dry & hungry bituminous surfaces/granular surfaces treated with primer)				
		Total quantity	15985.60	11.00	sqm	175841.60
11	5.6 (i) Vol III	Dense Bituminous Macadam				
		Providing and laying dense bituminous macadam with hot mix plant batch using crushed aggregates of specified grading, premixed with bituminous binder, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete in all respects and as per relevant clauses of section-507. (Only cement will be used as filler) (for Grading I (80-100mm thickness) cum 7161.00)				
		Total quantity	1598.56	7161.00	cum	11447288.16
12	5.8 (iv) Vol III	Bituminous Concrete				
		Providing and laying bituminous concrete with hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects and as per relevant clauses of section-509. (Only cement will be used as filler). iv) for Grading II (30-45 mm thickness) with 60/70 bitumen				
		Total quantity	799.28	8226.00	cum	6574877.28

13	8.1 (A) Vol III	Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade PCC on M-10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete and as per clause 408 of specifications.				
			1648.00	189.00	meter	311472.00
14	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.				
	4.1.4	Cement concrete grade M-10 (Nominal Mix) with 20 mm maximum size of stone aggregate	115.36	3595.00	Cum	414719.20
15	2.27 voll	Supplying and filling in plinth under floors including,watering, ramming consolidating and dressing complete.				
	2.27.1	Crusher Stone Dust	230.72	628.00	Cum	144892.16
	Total					22799762.92

ESTIMATE OF ELECTRICAL DUCT

ROAD STRECH FROM YATAYAT TIRAHA TO PRANJAPE CHOWK (HANUMAN MANDIR)

LENGTH 824 METERS

S No.	UADD SOR ITEM NO	Descriptions of Item	Measurement				Rate	Unit	Amount	
			No.	L	B	H				Quantity
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								
		Total Excavation					8307.20	202.00	cum	1678054.40
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								
		Total					377.60	628.00	cum	237132.80
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 maxumum size of aggregate.								
		Total					377.60	4154.00	cum	1568550.40
4	5.1.1 Vol II	Providing and laying Plain / Reinorced cement concrete (mixed in concrete mixture) ... RCC Grade								
		M20 with 20mm maxumum size of aggregate.								
		Total quantity of M20 Concrete					2940.77	4728.00	cum	13903960.56
5	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.								
	5.20.6	Thermo-Mechanically Treated bars.								
		Taking average weight for estimate (Payable as actual design & weight calculations)								
		Qty of Concrete x 0.8%x 7850					173137.83	60.00	Kg	10388270.03
6	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.								
		Total quantity					3596.00	138.00	cum	496248.00
7	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)	20.00	4.60	0.10	1.70	15.64	4232.00	cum	66188.48

8	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)	20.00	4.60		1.70	156.40	119.00	cum	18611.60
9	2.27.2 Vol II	Sand Filling								
		Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete.								
			1.00	860.00	1.55	0.60	799.80			
		Local Sand	10.00	40.00	1.55	0.60	372.00	1201.00	cum	446772.00
							1171.80	1201.00	cum	1407331.80
TOTAL										30211120.07

ESTIMATE OF STORM WATER DRAIN						
ROAD STRECH FROM YATAYAT TIRAHA TO PRANJAPE CHOWK (HANUMAN MANDIR)						
LENGTH 824 METERS						
S No.	UADD SOR ITEM NO	Descriptions of Item	Quantity	Unit	Rate	Amount
1	2.9.1, Vol II	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.				
			1638.40	cum	202.00	330956.80
2	2.27.1 Vol II	Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete.				
			163.84	cum	628.00	102891.52
3	4.1.2 Vol II	Cement Concrete M-20 (Duct)				
		Providing and laying Plain / Reinorced cement concrete (mixed in concrete mixture) ... RCC Grade				
		M 15 with 20mm maxumum size of aggregate.				
			163.84	cum	4154.00	680591.36
4	5.1.1 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 :				
		Cement concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate.				
		TOTAL QUANTITY OF RCC	709.92	cum	4728.00	3356501.76
5	5.20.6 Vol II	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.				
	5.20.6	Thermo-Mechanically Treated bars				
		Total Weight of steel KG-	41796.54	60	Kg	2507792.40
6	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.				
		Total quantity	3947	138	Sqm	544713.60
TOTAL						7523447.44

ESTIMATE OF PEDESTRIAN PATH						
ROAD STRECH FROM YATAYAT TIRAHA TO PRANJAPE CHOWK (HANUMAN MANDIR)						
LENGTH 824 METERS						
S No.	UADD SOR ITEM NO	Descriptions of Item	Quantity	Rate	Unit	Amount
1	3.1, Vol III	Excavation				
		Excavation for roadway in soil including loading in truck for carrying of cut earth to embankment site with all lifts and lead upto1000 metres and as per relevant clauses of section-300				
		Total	3072.00	98.00	cum	301056.00
2	3.11, Vol III	Earthwork				
		Construction of Embankment/Sub grade/ earth shoulders, as per clause 305 & its sub-clauses, Where required but with approved materials/soil like morrum CBR value not less then 7% i/c all lead & lifts i/c excavation, cost of watering, mpaction and maintenance of surface during construction to ensure shedding & preventing ponding of water (clause 305.3.6) shaping & dressing (clause 305.3.7), finishing etc. complete but excluding scarifying existing granular/bituminous road surface vide clause 305.6.				
		Total	1483.20	272.00	cum	403430.40
3	4.1.5 Vol II	Cement Concrete M - 10				
		Providing and laying in position cement concrete in foundation Up to plinth level. Cement concrete grade M-10 (Nominal Mix) with 40 mm maximum size of stone aggregate				
			921.60	3528.00	Sqm	3251404.80
4	5.1. Vol II	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.				
		Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :				
		Cement concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate.				
			39.00	4728.00	Sqm	184392.00
		Thermo-Mechanically Treated bars				
		Total Weight of steel KG-	1836.90	60	Kg	110214.00

5	11.29	Flag Stone				
		40 mm thick rubbed local Flag stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement :5 coarse sand) with joints 3mm thick, side buttered with cement mortar 1:2 (1 cement : 2 stone dust) admixed with pigment to match the shade of stone and pointing with same mortar (minimum size of kota stone 0.25 sqm)				
		Along Road				
	11.30.1	Red sand stone	2000.00	513.00	Sqm	1026000.00
	11.30.2	White sand stone	1250.00	532.00	Sqm	665000.00
		At Junction				
	11.30.1	Red sand stone	500.00	513.00	Sqm	256500.00
	11.30.2	White sand stone	500.00	532.00	Sqm	266000.00
	11.20 Vol II	Chequerred precast cement concrete tiles 18-20mm thick in footpath & courtyard jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing and cleaning etc. complete on 20 mm thick bed of cement mortar 1:4 (1 cement: 4 coarse sand).				
		Along Road				
	11.20.3	Dark shade using ordinary cement.	650.00	616.00	SqM	400400.00
		At junction				
		Dark shade using ordinary cement.	200.00	616.00	SqM	123200.00
6	8.1, Vol III, pg 69	Kerb Stone				
		Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade PCC on M-10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete and as per clause 408 of specifications. A Using Concrete Mixer				
			1540.00	187.00	meter	287980.00
TOTAL						6987597.20

ESTIMATE OF ROAD MARKING, STREET FURNITURES & PLANTATION						
ROAD STRECH FROM YATAYAT TIRAHA TO PRANJAPE CHOWK (HANUMAN MANDIR)						
S No.	UADD SOR ITEM NO	Descriptions of Item	Measur ement	Rate	Unit	Amount
			Quantity			
1	Item 8.10 Vol III	Road Marking				
		Solid Lines in White Colour				
		Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous Surface (Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising 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.				
		Solid Lines in White Colour	164.80			
		Brocken Lines in White Colour	82.40			
		Stop Lines in White Colour	41.20			
		Applying Zebra Crossing	700.00			
			988.40	900.00	Sqm	889560.00
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.				
			412.00	70.00	Sqm	28840.00
3	Item No 8.3 Vol III	Signages				
		Providing and fixing of retro- reflectorised 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 board shall 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.				
		90 cm equilateral triangle	5.00	3715.00	Nos	18575.00
		80 cm x 60 cm rectangular	10.00	4537.00	Nos	45370.00
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 confirming toIRC-79 and the drawings as per relevant clauses of section-800 of specifications.				
			30.00	292.00	each	8760.00
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)				
			30.00	292.00	each	8760.00

6	Non Sor	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.As per Detail technical specification.	20.00	4537.00	Nos	90740.00
7	11.1 Vol III	Planting Permanent Hedges including Digging of Trenches (Planting permanent hedges including digging of trenches, 60 cm wide and 45 cm deep, refilling the excavated earth mixed with farmyard manure, supplied at the rate of 4.65 cum per 100 meters and supplying and planting hedge plants at 30 cm apart)	1120.00	230.00	Meter	257600.00
8	11.2 Vol III	Planting of Trees and their Maintenance for one Year (Planting of trees by the road side (Avenue trees) in 0.60 m dia holes, 1 m deep dug in the ground, mixing the soil with decayed farm yard/sludge manure, planting the saplings, backfilling the trench, watering, fixing the tree guard and maintaining the plants for one year)	80.00	488.00	Nos	39040.00
TOTAL						1387245.00