### **ABSTRACT OF COST**

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

			_		_				
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SOMMAN 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 BALDEOBAGHLENGTH 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				
	item Description	(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				

	DOAD CERECU	ESTIMATE OF ROAD	ATTI CHOM	W TO CO		CHOMIK
		FROM SATKAR HOTEL TO HOME SCIENCE ROAD & TEEN F	ATTICHOW	K TO GO	UIVIATA	CHOWK
	UADD SOR Vol					
S.No.	II & III, ITEM	Descriptions of Item	Quantity	Rate	Unit	Amount in Rs.
	NO 2.2 (i)					
1	2.3, (i) Vol III	Dismantling				
	VOLIII	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
	2.5 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 ofdismantled materials up				
2		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
	3					
	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.				
		and unserviceable material separatery.				
		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 upto1000 metres and as per relevant clauses of section-				
		300 Total quantity	2160.90	98.00	cum	211768.20
				50.00		
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	1029.00	272.00	cum	279888.00
3	4.8(a) I Vol III	Crusher Run Macadam				
	-7.0(a) i VOI III	Crusher Run Macadam Base (Providing crushed stone				
		aggregate, depositing on a prepared surface by hauling				
		vehicles, spreading and mixing with a motor grader, watering				
		and compacting with a vibratory roller to clause 410 to form a				
		layer of sub-base/Base)				
	1	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				
	3.2 (II) VOI III	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.				
		relevant clauses of section 505.				
		@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
	5.67337.1	<u> </u>				
7	5.6 (i) Vol III	Dense Bituminous Macadam			1	

		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) (for Grading I (80-100mm thickness)				
		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					

D.C	NAD EDOM STD	ESTIMATE OF ELECTRICAL D		IOWK TO C	OLINAA	TA CHOWK
	UADD SOR	ECH SATKAR HOTEL TO HOME SCIENCE ROAD & T	EEN PATITCI			
S No.	ITEM NO	Descriptions of Item		Rate	Unit	Amount
			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.				
		lexcavated soils as directed, within a lead of soil.				
		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.				
		55 0				
		Total quantity	648.00	4154.00	cum	2691792.00
	5.1.1 Vol II	Droviding and laving Plain / Poincread coment				
	5.1.1 VOI 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
						<u> </u>

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
		Brick work with well burnt chimney bricks in				
		bulls patent trench kiln manifactured by ghol				
		process,crushing strength not less than 40kg				
		/sqcm and water absorption not more than 15%				
6	6.1 Vol II	in foundation and plinth.				
		Cement mortar 1:6 (1 cement : 6 coarse sand)				
		Total quantity	21.90	4232.00	cum	92663.87
		15mm cement plaster on the rough side of				
7	13.2 Vol II	single or half brick wall of mix :				
		1:5 (1 cement: 5 fine sand) <b>Total quantity</b>	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

	ROAD EROM STI	ESTIMATE OF STORM WATER I RECH SATKAR HOTEL TO HOME SCIENCE ROAD & T		OWK TO GO	OLIMATA (	-HO/MK
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	Providing and laying Plain / Reinorced cement concrete (mixed in concrete mixture) RCC Grade				
		M 15 with 20mm maxumum 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
		Total Weight of steel NO-	30411.07	- 00	'\g	3364700.20
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 GOUMATA CHOWK LENGTH 1470 METERS

S No.	UADD SOR	Descriptions of Item		Rate	Unit	Amount
	ITEM NO		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				
		upto1000 metres and as per relevant				
ļ		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 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				
		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				
-			1125.00	3528.00	Sqm	3969000.00
	5.1. Vol II					
	3.1. VOI 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.				
			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				]
		sgm)				]
		Along Road				
			3250.00	513.00	Sqm	1667250.00
	11.30.1	Red sand stone	3230:00	020:00		
	11.30.1 11.30.2	Red sand stone White sand stone	2250.00	532.00	Sqm	
	11.30.2	White sand stone At Junction	2250.00	532.00	Sqm	1197000.00
	11.30.2	White sand stone At Junction Red sand stone	2250.00 375.00	532.00 513.00	Sqm	1197000.00 192375.00
	11.30.2	White sand stone At Junction	2250.00	532.00	Sqm	1197000.00

I	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	Kerb Stone				
	69					
		Construction of cement concrete kerb with				
		top and bottom width 115 and 165 mm				
i						
		respectively, 250 mm high in M 20 grade				
		PCC on M-10 grade foundation 150 mm				
		PCC on M-10 grade foundation 150 mm thick, foundation having 50 mm projection				
		PCC on M-10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with				
		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				
		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				
		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.				
		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				
		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.	2470.00	187.00	meter	461890.00

#### **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

	LENGIH 14/U METERS					
S No.	UADD SOR ITEM NO	Descriptions of Item		Rate	Unit	Amount
			Quantity			
1	Item 8.10	Road Marking				
	Vol III	Solid Lines in White Colour				
		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.				
			204.00			
		Solid Lines in White Colour	294.00			
		Brocken Lines in White Colour Stop Lines in White Colour	147.00 58.80			
		Applying Zebra Crossing	400.00			
		Total Quantity	899.80	900.00	Sqm	809820.00
			033.00	500.00		000020.00
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.C67 including cost of paint etc. complete.				
		letc. complete.	735.00	70.00	Sqm	51450.00
			733.00	70.00	Jqm	31430.00
3	Item No 8.3	Signages				
	Vol III					
		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
		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.				
	8.12 Vol III	ISPECIFICATIONS.			1	44600.00
	8.12 Vol III	specifications.	40.00	292.00	each	11680.00
	8.12 Vol III		40.00	292.00	each	11680.00
	8.12 Vol III	Road Markers/Road Stud with Lense Reflector (Providing	40.00	292.00	each	11680.00
	8.12 Vol III		40.00	292.00	each	11680.00
	8.12 Vol III	Road Markers/Road Stud with Lense Reflector (Providing and fixing of road stud 100x 100 mm, dia cast in	40.00	292.00	each	11680.00
	8.12 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,	40.00	292.00	each	11680.00
	8.12 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	40.00	292.00	each	11680.00
	8.12 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	40.00	292.00	each	11680.00

			40.00	292.00	each	11680.00
4	Non Sor					
		Seating Bench- Provision along footpath mininimum				
		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						
		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				
	11.1	cum per 100 meters and supplying and planting hedge				
	Vol III	plants at 30 cm apart)	1600.00	230.00	Meter	368000.00
6						
		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,				
	11.2	backfilling the trench, watering, fixing the tree guard and	400	***	<u> </u>	
	Vol III	maintaining the plants for one year)	100.00	488.00	Nos	48800.00
		TOTAL				1456115.00

	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	PEDESTARIAN TRACK	7671002.60				
5	SIGNAGES, MARKING, LANDSCAPING	1100045.00				
	TOTAL	93034629.63				

### **ESTIMATE OF ROAD**

S.No.	UADD SOR ITEM NO	Descriptions of Item	Measuremen	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	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 ofdismantled 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 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	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

	1					
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
	(1)					
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 mantity	2002.54	7464.00		14247240.04
		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				
		oledine.				
		Total quantity	1194.27	8226.00	cum	9824065.02
	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				
13		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.				
		ciadse 100 of specifications.	2102.00	189.00		397278
			2102.00	193.00	meter	39/2/8
	4.1 vol II	Providing and laying in position cement				
		concrete of specified grade excluding the cost of				
14		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	
	2.27 voll	Supplying and filling in plinth under floors					
15		including, watering, ramming consolidating and					
		dressing complete.					
	2.27.1	Crusher Stone Dust	147.14				
			147.14	628.00	Cum	92404	
	Total 317045						

#### **ESTIMATE OF ELECTRICAL DUCT**

	UADD SOR	LENGTH 1051 METERS				
S No.	ITEM NO	Descriptions of Item		Rate	Unit	Amount
	TILIVITO		Quantity			
			Qualitity			
1	2.9.1, Vol II	Excavation				
	2.5.1, 70111	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.				
		sons as an ectea, within a lead of som.				
		Ordinary rock				
		Total quantity	11448.80	202.00	cum	2312657.60
		4.1.1.7				
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
	E 1 1 Vel II	Droviding and laving Plain / Painaread agreet				
	5.1.1 Vol II	Providing and laying Plain / Reinorced cement				
4		concrete (mixed in concrete mixture) RCC				
		Grade  M20 with 20mm maxumum size of aggregate.				
		with 2011111 maxumum size of aggregate.				
		Total quantity	3935.11	4728.00	cum	18605176.44
			5555.11	., 20.00		
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				

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
		Brick work with well burnt chimney bricks in				
		bulls patent trench kiln manifactured by ghol				
7		process,crushing strength not less than 40kg				
'		/sqcm and water absorption not more than 15%				
	6.1 Vol II	in foundation and plinth.				
		Cement mortar 1:6 (1 cement : 6 coarse				
		sand) <b>Total quantity</b>	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:				
	13.2 40111	1:5 (1 cement: 5 fine sand) <b>Total quantity</b>	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**

S No.	UADD SOR	LENGIH - 1051 METERS			_		
	ITEM NO	Descriptions of Item	Quantity	Unit	Rate	Amount	
	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					
1		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	
		Supplying and filling in plinth under floors					
2		including, watering, ramming consolidating and					
	2.27.1 Vol II	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 / Reinorced cement					
		concrete (mixed in concrete mixture) RCC					
		Grade					
		M 15 with 20mm maxumum size of aggregate.					
		Total quantity	208.16	cum	4154.00	864696.64	
	5.1.1 Vol II						
		Providing and laying in position specified grade of					
4		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
		Reinforcement for R.C.C. work including				
5		straightening, cutting, bending, placing in position				
	5.20.6 Vol II	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 :				
		Foundations, footings, bases of columns, etc. For				
	20.1.1	mass concrete.				
		Total quantity	2943	138	Sqm	406106.40
		TOTAL				9252991.31

#### **ESTIMATE OF PEDESTRIAN PATH**

S No.	UADD SOR	Descriptions of Item		Rate	Unit	Amount
	ITEM NO		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				
		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				

_		_		-		1
		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
	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				
6		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	Kerb Stone				
	69					
		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

		ROAD STRECH FROM BLOOM CHOWK TO MADAN M.	AHAL POLIC	E STATIC	N	
		LENGTH - 1051 METERS				
S No.	UADD SOR	Descriptions of Item	Measurem	Rate	Unit	Amount
	ITEM NO	, , , , , , , , , , , , , , , , , , ,	ent Quantity			
	Item 8.10		Qualitity			
1	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	567450.0
	Item 8.8	Painting lines, dashes, arrows etc				
2	Vol III					
		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.C67 including cost		70.00		20750
		of paint etc. complete.	425.00	70.00	Sqm	29750.0
3	Item No 8.3	Signages				
<u> </u>	Vol III					
		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			18575.0
		80 cm x 60 cm rectangular	10.00	4537.00	Nos	45370.0
		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				
4		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				
	0.13.Val.III	the drawings as per relevant clauses of section-800 of specifications.				
	8.12 Vol III	specifications.	40.00	292.00	each	11680.0
		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,				
5		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				
	8.20 Vol III	bituminous grout or epoxy mortar, all as per BS 873 part 4:1973)				
		,	40.00	292.00	each	11680.0
	1					

Γ		Non Sor					
	6		Seating Bench- Provision along footpath mininimum 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	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				
		Vol III	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				
31 140.	iletti bescripiloti	(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

		LENGIH 1132 MEI	EKS			
	UADD					
S.No.	SOR	Descriptions of Item		Rate	Unit	Amount in Rs.
	ITEM NO					
			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
		Dismantling of cement concrete pavement i/c				
		breaking to pieces not exceeding 0.02 cum in				
		volume and stock piling at designated				
2		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				
	2.5 vol III	section-200.	2.98	716.00	cum	2130.82
		Dismantling kerb stone by manual means and				
3		disposal of dismantled material with all lifts				
3		and up to a lead upto 1000 meter and as per				
	2.7 vol II	relevant clauses of section-200.	326.00	6.00	m	1956.00
	2.7 VOI II	relevant clauses of section 200.	320.00	0.00		1550.00
		Removal of telephone / Electric poles				
		including excavation and dismantling of				
		foundation concrete and lines under the				
4		supervision of concerned department,				
		disposal with all lifts and up to a lead of 1000				
		meter and stacking the serviceable and				
	2.12 vol II	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 then 75 ½ call lead & lifts ½ cexcavation, 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) 1 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 33 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						l	
7 4.8(a) 1 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 subbase/Base) For 53 mm maximum size Total quantity 527.94 833.00 cum 439774.02  8 4.5 Vol III WMIM 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 subbase / 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			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				
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 subbase/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 subbase / 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  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  540.0 Sqm  45754.80			Total quantity	879.90	272.00	cum	239332.80
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 subbase/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 subbase / 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  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  540.0 Sqm  45754.80							
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  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  549.00  540.00  547.40  549.75  540.00	7	4.8(a) I	Crusher Run Macadam				
Total quantity  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 subbase / 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  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  439774.02  A399774.02  A399774.02  A399774.02			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-				
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 subbase / 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  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			For 53 mm maximum size				
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 subbase / 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			Total quantity	527.94	833.00	cum	439774.02
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 subbase / 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							
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 subbase / 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	8	4.5 Vol III	WMM				
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			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 subbase / base course on well prepared surface and compacting with vibratory roller to achieve the desired density and as per relevant clauses of section - 400.				
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			Total quantity	439.95	951.00	cum	418392.45
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							
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	9	5.1 Vol III	Primer Coat				
	1		Providing and applying primer coat with				
10   5.2 (i) Vol   Tack Coat			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				
10  5.2 (i) Vol  Tack Coat			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.		26.00	Sqm	45754.80
			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		26.00	Sqm	45754.80

		T				
		Providing and applying tack cost with hituman				
		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)	19724 40	9.00	Cam	168609.60
		Total quantity  @0.30 kg per sqm (dry & hungry bituminous	18734.40	9.00	Sqm	108003.00
		surfaces/granular surfaces treated with				
		primer)	24441 00	11 00	cam	270050 00
		Total quantity	34441.80	11.00	sqm	378859.80
11	F 6 (:) Val	Dense Bituminous Macadam				
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)	244			4-4444
		Total quantity	2117.58	7161.00	cum	15163990.38
12	F 0 (i)	Pituminaus Consusts				
12	5.8 (iv)	Bituminous Concrete				
		Duranishing and landon his main and a second second				
		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
1	I					

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						26554186.14

### **ESTIMATE OF ELECTRICAL DUCT**

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

	LENGIH 1132 WEIERS								
S No.	UADD SOR ITEM NO	Descriptions of Item		Rate	Unit	Amount			
			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.							
		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 manifactured 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

		LEINGTH 1132 IVIE	ILINO			
S No.	UADD SOR	Descriptions of Item		Unit	Rate	Amount
	ITEM NO	Descriptions of item	Quantity	Oilit	Nate	Amount
	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				
1		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
		Supplying and filling in plinth under floors				
2	2.27.1 Vol	including, watering, ramming consolidating and				
	II	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
	5.1.1 Vol II					
		Providing and laying in position specified grade				
4		of reinforced cement concrete excluding the cost				
		of centering, shuttering, finishing and				
		reinforcement - All work up to plinth level :				

		S				
		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
		Reinforcement for R.C.C. work including				
5		straightening, cutting, bending, placing in				
	5.20.6 Vol II	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 :				
		Foundations, footings, bases of columns, etc. For				
	20.1.1	mass concrete.				
		Total quantity	3170	138	Sqm	437404.80
		TOTAL				8426709.42

	ROAD ST	TRECH FROM MADAN MAHAL POLICE STA	TION TO RAI	NITAAL JUI	NCTION	
		LENGTH 1132 METER	S			
S No.	UADD SOR	Descriptions of Item	1easuremei	Rate	Unit	Amount
	ITEM NO		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				
		upto1000 metres and as per relevant				
		clauses of section-300				
		Total	3142.50	98.00	cum	307965.0
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.				
		clause 305.6.				
		Total	1698.00	272.00	cum	461856.0
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	3326022.0
		1				
	5.1. Vol II					
		Providing and laying in position specified				
4		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)		Ī		
		with 20 mm maximum size of stone				
	1	aggregate.	<u> </u>			<u></u>
			55.80	4728.00	Sqm	263822.4

		1				
		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
		Total Weight of steel KG-	2020.10	00	кg	137630.80
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 At Junction	1480.00	532.00	Sqm	787360.00
	11.30.1	Red sand stone	250.00	513.00	Sqm	128250.00
	11.30.1	White sand stone	250.00	532.00	Sqm	133000.00
	11.50.2	White sand stone	250.00	332.00	Jqiii	133000.00
	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				
6		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
	8.1, Vol III, pg	Kerb Stone				
7	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 lunction	1500.00			
		at Junction at Junction	1580.00 250.00			
	_1	at sanction	1830.00	187.00	meter	342210.00
		TOTAL	1030.00	107.00	meter	372210.00

### **ESTIMATE OF ROAD MARKING, STREET FURNITURES & PLANTATION**

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

		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	Painting lines, dashes, arrows etc				
	Vol III					
		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.C67 including cost of				
		paint etc. complete.	522.50	70.00	Sqm	36575.00
		a:				
3	Item No 8.3	Signages				
	Vol III					
		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

		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				
4		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				
	8.12 Vol III	specifications.	40.00	292.00	ooch	11680.00
			40.00	292.00	eacn	11000.00
		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,				
5		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				
	8.20 Vol III	bituminous grout or epoxy mortar, all as per BS 873 part 4:1973)				
	8.20 VOI III	4.1373)	40.00	292.00	each	11680.00
	Non Sor					
		Seating Bench- Provision along footpath mininimum				
		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				
6		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
		Planting Permanent Hedges including Digging of Trenches				
		(Planting permanent hedges including digging of trenches,				
7		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				
	Vol III	plants at 30 cm apart)	1200.00	230.00	Meter	276000.00
		Planting of Trees and their Maintenance for one Year				
		(Planting of trees by the road side (Avenue trees) in 0.60 m				
8		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)  TOTAL	90.00	488.00	Nos	43920.00 1169310.00

# ROAD STRECH FROM RANITAAL JUNCTION TO BALDEOBAGH LENGTH 860 METERS

	SUMMARY SHEET	
Sr No.	Item Description	Amount
31 140.	item bescription	(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

-		LENGTH 860 ME	TERS			
	UADD SOR					
S.No.	Vol II & III,	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	260.85	234.00	cum	61038.90
		Dismantling of cement concrete				
		pavement i/c breaking to pieces not				
		exceeding 0.02 cum in volume and stock				
2		piling at designated locations and disposal				
		ofdismantled materials up to a lead upto				
		1000 meter, stacking serviceable and				
		unserviceable materials separately and as				
	2.5 vol III	per relevant clauses of section-200.	81.68	716.00	cum	58479.30
		Dismantling kerb stone by manual means				
		and disposal of dismantled material with				
3		all lifts and up to a lead upto 1000 meter				
		and as per relevant clauses of section-				
	2.7 vol II	200.				
			168.00	6.00	m	1008.00
		Removal of telephone / Electric poles				
		including excavation and dismantling of				
4		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				
	2.12 vol II	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				
		upto1000 metres and as per relevant clauses of section-300				
		Total	6585.60	98.00	cum	6683.60
		1 ocui	0303.00	36.00	cum	0005.00
6	3.11, Vol III	Earthwork				
	, ••• 111			1	1	

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	1568.00 6272.00	951.00		1491168.00
5.1 Vol III	relevant clauses of section - 400.  Total quantity  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.				
5.1 Vol III	relevant clauses of section - 400.  Total quantity  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	1568.00	951.00	cum	1491168.00
5.1 Vol III	relevant clauses of section - 400.  Total quantity  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	1568.00	951.00	cum	1491168.00
5.1 Vol III	relevant clauses of section - 400.  Total quantity  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	1568.00	951.00	cum	1491168.00
5.1 Vol III	relevant clauses of section - 400.  Total quantity  Primer Coat  Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including clearing of road	1568.00	951.00	cum	1491168.00
5.1 Vol III	relevant clauses of section - 400.  Total quantity  Primer Coat  Providing and applying primer coat with bitumen emulsion on prepared surface of	1568.00	951.00	cum	1491168.00
5.1 Vol III	relevant clauses of section - 400.  Total quantity  Primer Coat  Providing and applying primer coat with	1568.00	951.00	cum	1491168.00
5.1 Vol III	relevant clauses of section - 400.  Total quantity  Primer Coat	1568.00	951.00	cum	1491168.00
5.1 Vol III	relevant clauses of section - 400.  Total quantity	1568.00	951.00	cum	1491168.00
	relevant clauses of section - 400.	1568.00	951.00	cum	1491168.00
	relevant clauses of section - 400.	1568.00	951.00	cum	1491168.00
					1
	uniform layers with paver in sub - base /				
	mixed Material by tipper to site, laying in				
	OMC in mechanical mix plant carriage of				
	premixing the Material with water at				
	, , ,				
	Description loving agent disc.				
4.5 Vol III	WMM				
	Total	1881.60	833.00	cum	1567372.80
	layer of sub-base/Base)				
	vibratory roller to clause 410 to form a				
	i, , , , , , , , , , , , , , , , , , ,				
	1				
	Cruchar Pun Macadam Paca (Providing				
4.8(a) I Vol	Crusher Kun Macadam				
4.0/=\:\:-	Crushay Burn Massada				
	Total	3136.00	272.00	cum	852992.00
	clause 305.6.				
	granular/bituminous road surface vide				
	excluding scarifying existing				
	305.3.7), finishing etc. complete but				
	305.3.6) shaping & dressing (clause				
	preventing ponding of water (clause				
	construction to ensure shedding &				
	and maintenance of surface during				
	approved materials/soil like morrum CBR				
	· · · · · · · · · · · · · · · · · · ·				
	_				
	Construction of Embankment/Sub grade/				
		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  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  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	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  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  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	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  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  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	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  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  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

		,				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.				
		@0.25 kg per sqm (normal bituminous				
		surfaces)	20384.00	9.00	Sqm	183456.00
			20304.00	3.00	Jqiii	183430.00
		@ 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)	1901.20	7161.00	cum	13614493.20
12	5.8 (IV) VOI	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				
	1					1
		Total quantity	950.60	8226.00	cum	7819635.60

	TOTAL					26736298.30
	2.27.1	Crusher Stone Dust	90.30	628.00	Cum	56708.40
	Vol II	consolidating and dressing complete.				
15	2.27	including,watering, ramming				
		Supplying and filling in plinth under floors				
	7.2.7	500.504.5	30.30	3333.00		32-020.30
	4.1.4	aggregate	90.30	3595.00	Cum	324628.50
		Mix) with 20 mm maximum size of stone				
	4.1 vol II	up to plinth level.  Cement concrete grade M-10 (Nominal				
	4.4	cost of centering and shuttering All work				
14		concrete of specified grade excluding the				
		Providing and laying in position cement				
			1720.00	189.00	meter	325080.00
	III	clause 408 of specifications.				
	8.1 (A) Vol	laid manually, all complete and as per				
		kerb laying machine, foundation concrete				
		laid with				
13		projection beyond kerb stone, kerb stone				
13		mm thick, foundation having 50 mm				
		grade PCC on M-10 grade foundation 150				
		mm respectively, 250 mm high in M 20				
		Construction of cement concrete kerb with top and bottom width 115 and 165				

### **ESTIMATE OF ELECTRICAL DUCT**

# ROAD STRECH FROM RANITAAL JUNCTION TO BALDEOBAGH LENGTH 860 METERS

S No.	UADD SOR	Descriptions of Item		Rate	Unit	Amount
3 140.	ITEM NO	bescriptions of item		Nate	Oilit	Amount
			Quantity			
1	2.9.1, Vol II	Everyation				
	2.3.1, VOI 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 27 1 Val					
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.				
		and shuttering All work up to plintin level.				
		M 15 with 20mm maxumum size of aggregate.				
			392.00	4154.00	cum	1628368.00
	5.1.1 Vol II	Providing and laying Plain / Reinorced cement				
4		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)	470740.00	60.00	1/2	10702422 62
		,	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
		Brick work with well burnt chimney bricks in				
		bulls patent trench kiln manifactured by ghol				
		process,crushing strength not less than 40kg				
		/sqcm and water absorption not more than 15%				
	6.1 Vol II	in foundation and plinth.				
		Cement mortar 1:6 (1 cement : 6 coarse sand)	15.64	4232.00	cum	66188.48
		15mm cement plaster on the rough side of single				
	13.2 Vol II	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

	LENGTH 800 IVIETERS							
S No.	UADD SOR	Descriptions of Item		Unit	Rate	Amount		
	ITEM NO	Descriptions of item	Quantity	O I II C	nate	7111104111		
	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						
1		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		
		Supplying and filling in plinth under floors						
2	2.27.1 Vol	including, watering, ramming consolidating and						
	II	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		
	5.1.1 Vol II							
		Providing and laying in position specified grade						
4		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
		Reinforcement for R.C.C. work including				
5		straightening, cutting, bending, placing in				
	5.20.6 Vol II	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 :				
	1	Foundations, footings, bases of columns, etc. For				
	20.1.1	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

	LENGTH 860 METERS						
S No.	UADD SOR	Descriptions of Item		Rate	Unit	Amount	
	ITEM NO	E	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					
		upto1000 metres and as per relevant clauses					
		of section-300					
	1	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					
		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.					
					<u></u>	<u>                                       </u>	
		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					
		aggregate	882.00	3528.00	Sqm	3111696.00	
				0020.00			
	5.1. Vol II						
		Providing and laying in position specified					
4		grade of reinforced cement concrete					
1		excluding the cost of centering, shuttering,					
		finishing and reinforcement - All work up to					
	1	plinth level :					
		Cement concrete grade M-20 (Nominal Mix)					
		with 20 mm maximum size of stone aggregate.					
	1	aggregate.	39.00	4728.00	Sqm	184392.00	
			33.00	4720.00	Jqiii	104332.00	
		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	
						1	
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					
	1	mortar 1:2 (1 cement : 2 stone dust)					
	1	admixed with pigment to match the shade of					
	1	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 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.	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				
<u> </u>	1	I	1540.00	187.00	meter	287980.00
1540.00 187.00 meter 2						

	ES	TIMATE OF ROAD MARKING, STREET FURNITU	RES & PI	LANTAT	ION	
		ROAD STRECH FROM RANITAAL JUNCTION TO B LENGTH 860 METERS	ALDEOBA	AGH		
S No.	UADD SOR ITEM NO	Descriptions of Item		Rate	Unit	Amount
	HEINING		Quantity			
1	Item 8.10	Road Marking				
•	Vol III	-				
		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  Applying Zebra Crossing	21.90 350.00			
		Арргупів Zebra Crossпів	590.90	900.00	Sqm	531810.00
2	Item 8.8	Painting lines, dashes, arrows etc				
_	Vol III					
		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.C67 including cost				
		of paint etc. complete.	365.00	70.00	C	35550.00
			365.00	70.00	Sqm	25550.00
3	Item No 8.3	Signages				
	Vol III					
	Vol III					
	Vol III	Providing and fixing of retro- reflectorised cautionary,				
	Vol III	Providing and fixing of retro- reflectorised cautionary, mandatory and informatory sign as per IRC :67 made of				
	Vol III	I				
	Vol III	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				
	Vol III	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				
	Vol III	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				
	Vol III	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				
	Vol III	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,				
	Vol III	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				
	Vol III	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.	300	2745.00	Nos	4445.00
	Vol III	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.	3.00	3715.00 4537.00		11145.00
	Vol III	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.	3.00 6.00	3715.00 4537.00		11145.00 27222.00
	Vol III	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.				
	Vol III	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 80 cm x 60 cm rectangular				
	Vol III	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 80 cm x 60 cm rectangular  Road Delineators (Supplying and installation of delineators (road way indicators, hazard markers, object markers), 80-				
4	Vol III	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 80 cm x 60 cm rectangular  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				
4	Vol III	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 80 cm x 60 cm rectangular  Road Delineators (Supplying and installation of delineators (road way indicators, hazard markers, object markers), 80-	6.00			
4	Vol III	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 80 cm x 60 cm rectangular  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	6.00			
4		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 80 cm x 60 cm rectangular  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	6.00			
4	8.12 Vol III	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 80 cm x 60 cm rectangular  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	6.00	4537.00	Nos	27222.00
4		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 80 cm x 60 cm rectangular  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	6.00		Nos	

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 mininimum 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 959045.00

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

	SUMMARY SHEET					
Sr No.	· (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		Rate	Unit	Amount in Rs.
			Quantity			
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		61038.90
		Dismantling of cement concrete pavement i/c breaking to	200.85	234.00	cum	61038.90
		pieces not exceeding 0.02 cum in volume and stock piling at				
		designated locations and disposal ofdismantled materials up				
2		to a lead upto 1000 meter, stacking serviceable and				
		unserviceable materials separately and as per relevant clauses				
	2.5 vol III	of section-200.	81.68	716.00	cum	58479.30
		0.0000001 2000	02.00	7 20.00		55.75.55
		Dismantling kerb stone by manual means and disposal of				
3		dismantled material with all lifts and up to a lead upto 1000				
	2.7 vol II	meter and as per relevant clauses of section-200.	168.00	6.00	m	1008.00
		Removal of telephone / Electric poles including excavation and				
		dismantling of foundation concrete and lines under the				
4		supervision of concerned department,				
		disposal with all lifts and up to a lead of 1000 meter and				
		stacking the serviceable and unserviceable material				
	2.12 vol II	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				
		upto1000 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		1		

	1		1		1	1
		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	Sam	137113.60
	1		32.3.00	_5.00		
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
-		(1 0 1 1 1 1 1				
		;@ 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				
	5.6 (I) VOI III	Dense Bituminous Macadam				
		Descriptions and leading places hit was a second and with high activities				
		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)				
	1	Total quantity	1598.56	7161.00	cum	11447288.16
	<u> </u>					
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
1				<u></u>	<u></u>	
	l .					

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
		Providing and laying in position cement concrete of specified				
14		grade excluding the cost of centering and shuttering All work				
	4.1 vol II	up to plinth level.				
		Cement concrete grade M-10 (Nominal Mix) with 20 mm				
	4.1.4	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

		LENG	GTH 824	IVIETERS						
S No.	UADD SOR ITEM NO	Descriptions of Item						Rate	Unit	Amount
			Measure	ment		1	ı			
			No.	L	В	Н	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					0207.20	202.00		1679054.40
		Total Excavation					8307.20	202.00	cum	1678054.40
2	2.27.1 Vol II	Filling								
_	2.27.1 70111	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.								
							377.60	4154.00	cum	1568550.40
	F 4 4 V-LU	Description and leading District / Description								
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 20 CV 1 II									
5	5.20.6 VOI 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)								
$\vdash$			uty of Co	ncrete x 0.	გ‰x 78 	50 	173137.83	60.00	Kg	10388270.03
6	20 1 1 Vol II	Form work for Duct								
	-0.1.1 VUIII	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
		Brick work with well burnt chimney bricks in bulls								
		patent trench kiln manifactured by ghol								
7		process,crushing strength not less than 40kg								
		/sqcm and water absorption not more than 15%								
	6.1 Vol II	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
igsqcut			<u> </u>	ļ	<u> </u>		<u> </u>			

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	Descriptions of them		1114	D-4-	A +
	ITEM NO	Descriptions of Item	Quantity	Unit	Rate	Amount
	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				
1		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
		Supplying and filling in plinth under floors				
2		including, watering, ramming consolidating and				
	2.27.1 Vol II	dressing complete.				
		, and 0 and 1 and	163.84	cum	628.00	102891.52
					020.00	
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
	5.1.1 Vol II					
		Providing and laying in position specified grade of				
4		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
			7 00.02			
		Reinforcement for R.C.C. work including			†	
5		straightening, cutting, bending, placing in position				
	5.20.6 Vol II	and binding all complete.				
	5.20.6	Thermo-Mechanically Treated bars				
	5.20.0	Total Weight of steel KG-	41796.54	60	Kg	2507792.40
		Total troight of ottoer No	127000		8	
6	20.1.1 Vol II	Form work for Duct				
		Centering and shuttering including strutting,		_		
		propping etc.and removal of form for :				
		Foundations, footings, bases of columns, etc. For			1	
	20.1.1	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	Descriptions of Item		Rate	Unit	Amount
	ITEM NO		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				
		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.				
		diddie 303.0.				
		Total	1483.20	272.00	cum	403430.40
3	4.1.5 Vol II	Cement Concrete M - 10				
		Providing and laying in position cement				1
		concrete in foundation Up to plinth level.				
		Cement concrete grade M-10 (Nominal Mix)				
		with 40 mm maximum size of stone				
ĺ		aggregate				
			921.60	3528.00	Sqm	3251404.80
	5.1. Vol II					
ĺ	3.1. 70111	Providing and laying in position specified				
		grade of reinforced cement concrete				
4		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.	20.00	4720.00	Carre	194303.00
<u> </u>			39.00	4728.00	Sqm	184392.00
		Reinforcement for R C C work including				
		Reinforcement for R.C.C. work including				
		straightening, cutting, bending, placing in				
		straightening, cutting, bending, placing in position and binding all complete.				
		straightening, cutting, bending, placing in	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
	14.00					
	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
	11.20.5	At junction	030.00	010.00	34111	400400.00
		Dark shade using ordinary cement.	200.00	616.00	SqM	123200.00
		<u> </u>				
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

		MATE OF ROAD MARKING, STREET FURNITURES				
	1	FRECH FROM YATAYAT TIRAHA TO PRANJAPE CHOWK (		IAN MAN	DIR)	
S No.	UADD SOR ITEM NO	Descriptions of Item	Measur	Rate	Unit	Amount
	lham 0 10		Quantity			
1	Item 8.10 Vol III	Road Marking				
	VOLIN	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.				
		Calid Lines in White Calaur	164.00			
		Solid Lines in White Colour	164.80			
		Brocken Lines in White Colour Stop Lines in White Colour	82.40 41.20			
		Applying Zebra Crossing	700.00			
	<u> </u>	Applying Zebia Crossing	988.40	900.00	Sqm	889560.00
			303.40	303.00	24	555500.00
2	Item 8.8	Painting lines, dashes, arrows etc				
	Vol III					
		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.C67 including cost				
		of paint etc. complete.	412.00	70.00	Sqm	28840.00
		or paint etc. complete.	412.00	70.00	Jqm	20040.00
,	Item No 8.3	Signages				
3	Vol III					
		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.				
		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.	5.00			18575.00
		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.	5.00 10.00	3715.00 4537.00		
4		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.				18575.00 45370.00
4	8.12 Vol III	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 80 cm x 60 cm rectangular  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	10.00	4537.00	Nos	45370.00
4	8.12 Vol III	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 80 cm x 60 cm rectangular  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			Nos	
4		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 80 cm x 60 cm rectangular  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.  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	10.00	4537.00	Nos	45370.00
	8.12 Vol III  8.20 Vol III	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 80 cm x 60 cm rectangular  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.  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	10.00	4537.00	each	45370.00

	Non Sor					
		Seating Bench- Provision along footpath mininimum				
		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				
6		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
		Planting Permanent Hedges including Digging of Trenches				
		(Planting permanent hedges including digging of trenches,				
7		60 cm wide and 45 cm deep, refilling the excavated earth				
•		mixed with farmyard manure, supplied at the rate of 4.65				
	11.1	cum per 100 meters and supplying and planting hedge				
	Vol III	plants at 30 cm apart)	1120.00	230.00	Meter	257600.00
		Planting of Trees and their Maintenance for one Year				
		(Planting of trees by the road side (Avenue trees) in 0.60				
8		m dia holes, 1 m deep dug in the ground, mixing the soil				
Ü		with decayed farm yard/sludge mannure, planting the				
	11.2	saplings, backfilling the trench, watering, fixing the tree				
	Vol III	guard and maintaining the plants for one year)	80.00	488.00	Nos	39040.00
		5 1 7 7				