ग्रामीण कार्य विभाग

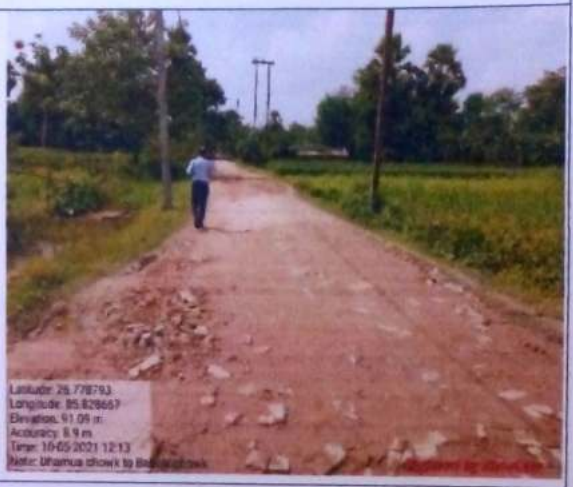
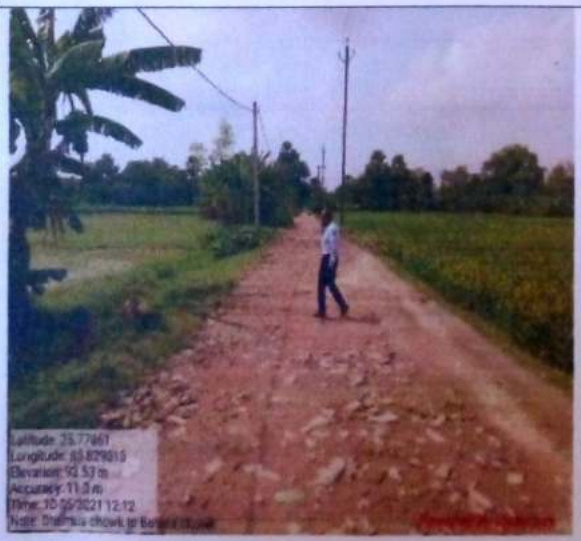
Rural Works Department, Govt of Bihar

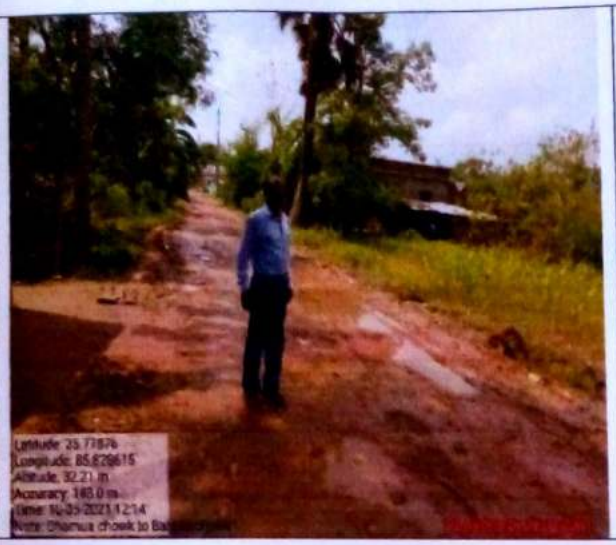
2021-22

FLOOD DAMAGED REPORT

Maheshpatti Babulal Chowk To Dhamua Road Under Ujiyarpur

DISTRICT	:-	Samastipur	
DIVISION	:-	Dalsingh Sarai	
BLOCK	:-	Ujiarpur	
TOTAL LENGTH OF ROAD	:-	3.400	KM
TOTAL COST OF SURFACE RENEUAL	:-	16.184	Lac
TOTAL COST OF PROJECT	:-	16.184	Lac

2.3	**Site Photographs**		
	NAME OF ROAD :- Dhamua Chowk To Babulal Chowk		
	BLOCK ;-- Ujiyarpur	DISTRICT : Samastipur	
1		2	
3		4	
5		6	

7		8	

25/10/2021

25/10/21
AE

FLOOD DAMAGED REPORT

GENERAL ABSTRACT OF COST

Block:-- Ujiarpur **District:- Samastipur**

Length of Road:-- 3.400 KM

Name of Road:-- Maheshpatti Babulal Chowk To Dhamua Road Under Ujiyarpur

SL. No.	Item of Work		Amount
A	TOTAL COST OF CONSTRUCTION	:	16.184 Lacs
	TOTAL	:	**16.184 Lacs**

25/10/21

Junior Engineer

25/10/21

Asstt. Engineer

Executive Engineer

SE
RWD

GENERAL ABSTRACT OF COST FOR MAINTENANCE OF ROAD

NAME OF ROAD : Maheshpatti Babulal Chowk To Dhamua Road Under Ujiyarpur
DISTRICT Samastipur
BLOCK Ujiarpur
DIVISION Dalsingh Sarai
LENGTH OF ROAD (in Km) 3.400

Sl. No.	DESCRIPTION	Amount	1 % Labour Cess	12 % GST	1% Labour Cess & 12% GST AMOUNT (LAKHS)
PART-A	INITIAL RECTIFICATION INCLUDING SURFACE RENEWAL				
1	Brick Bats	14.322	0.143	1.719	16.184
2	Embankment	0.000	0.000	0.000	0.000
3	GSB	0.000	0.000	0.000	0.000
4	RCC pipe NP-3	0.000	0.000	0.000	0.000
	SUB TOTAL OF SURFACE RENEWAL	**14.322**	**0.143**	**1.719**	**16.184**
	TOTAL COST OF PROJECT IN LACS =	**14.322**	**0.143**	**1.719**	**16.184**

25/10/2024
JE
RWD

25/10/24
AE
RWD

EE
RWD

SL No.	SDB SL .NO	MORD Ref.No	Description	Unit	NOS	LENGTH	WIDTH	HEIGHT	QUANTITY	RATE	AMOUNT (in Rs.)
1	3.2	301.4	**Brick Bats**								
			Providing brick bats including spreading laying hand packing and compacting with C.I. Hammer in layers not exceeding 75 mm thick including cost of light barriers, danger signals,chowkidar,taxes,royality etc.all complete job as per specification and direction of E/I including carriage cost of bricks.								
				20	x	3.50	x	0.2	10.50		
				18	x	3.00	x	0.2	10.80		
				10	x	2.50	x	0.2	3.75		
				30	x	3.50	x	0.2	21.00		
				30	x	2.50	x	0.2	11.25		
				15	x	3.50	x	0.2	10.50		
				18	x	2.75	x	0.2	7.43		
				30	x	3.50	x	0.2	15.75		
				12	x	3.50	x	0.2	8.40		
				30	x	2.10	x	0.2	12.60		
				30	x	3.75	x	0.2	16.88		
				10	x	1.80	x	0.2	2.70		
				20	x	2.00	x	0.2	8.00		
				30	x	3.50	x	0.2	15.75		
				30	x	3.50	x	0.2	15.75		
				30	x	3.50	x	0.2	15.75		
				8	x	1.80	x	0.2	2.16		
				12	x	2.00	x	0.2	3.60		
				30	x	3.50	x	0.2	21.00		
				18	x	1.50	x	0.2	4.05		
				11	x	2.50	x	0.2	4.13		
				30	x	3.75	x	0.2	16.88		
				30	x	3.50	x	0.20	21.00		
				7	x	2.00	x	0.2	2.10		
				2	x	1.50	x	0.2	0.45		
				60	x	3.50	x	0.2	31.50		
				20	x	2.10	x	0.2	6.30		
				2	x	1.00	x	0.2	0.30		
				18	x	1.80	x	0.2	4.86		
				14	x	1.50	x	0.2	3.15		
				19	x	4.00	x	0.2	15.20		
				5	x	3.50	x	0.2	3.50		
				7	x	2.00	x	0.2	2.80		
				12	x	2.00	x	0.2	4.80		

Sl. No.	SDB SL.NO	MORD Ref.No	Description	Unit	NOS	LENGTH	WIDTH	HEIGHT	QUANTITY	RATE	AMOUNT (in Rs.)
				4	x	3.00	x	0.2	2.40		
				3	x	3.00	x	0.2	1.80		
				6	x	3.00	x	0.2	2.70		
				4	x	2.00	x	0.2	1.20		
				8	x	1.20	x	0.2	1.44		
				19	x	2.50	x	0.2	7.13		
				30	x	3.75	x	0.2	16.88		
				7	x	3.50	x	0.2	3.68		
				5	x	2.00	x	0.2	1.50		
				22	x	0.90	x	0.2	2.97		
				18	x	0.60	x	0.2	1.62		
				9	x	1.20	x	0.2	1.62		
				11	x	0.60	x	0.2	0.99		
				12	x	2.00	x	0.2	3.60		
				2	x	3.75	x	0.2	1.13		
				5	x	2.50	x	0.2	1.88		
				7	x	3.50	x	0.2	3.68		
				8	x	3.50	x	0.2	4.20		
				90	x	3.50	x	0.2	63.00		
				7	x	3.00	x	0.2	3.15		
				5	x	2.00	x	0.2	1.50		
				4	x	3.00	x	0.2	1.80		
				15	x	3.50	x	0.2	7.88		
				10	x	1.50	x	0.2	2.25		
				12	x	3.00	x	0.2	5.40		
				9	x	1.50	x	0.2	2.03		
				12	x	2.00	x	0.2	3.60		
				30	x	4.50	x	0.8	101.25		
				30	x	4.25	x	0.6	76.50		
				25	x	5.50	x	0.8	103.13		
									766.44	1,868.70	14,32,237.00
									A) SUB TOTAL OF CRUST =		14,32,237.00

25/10/2021

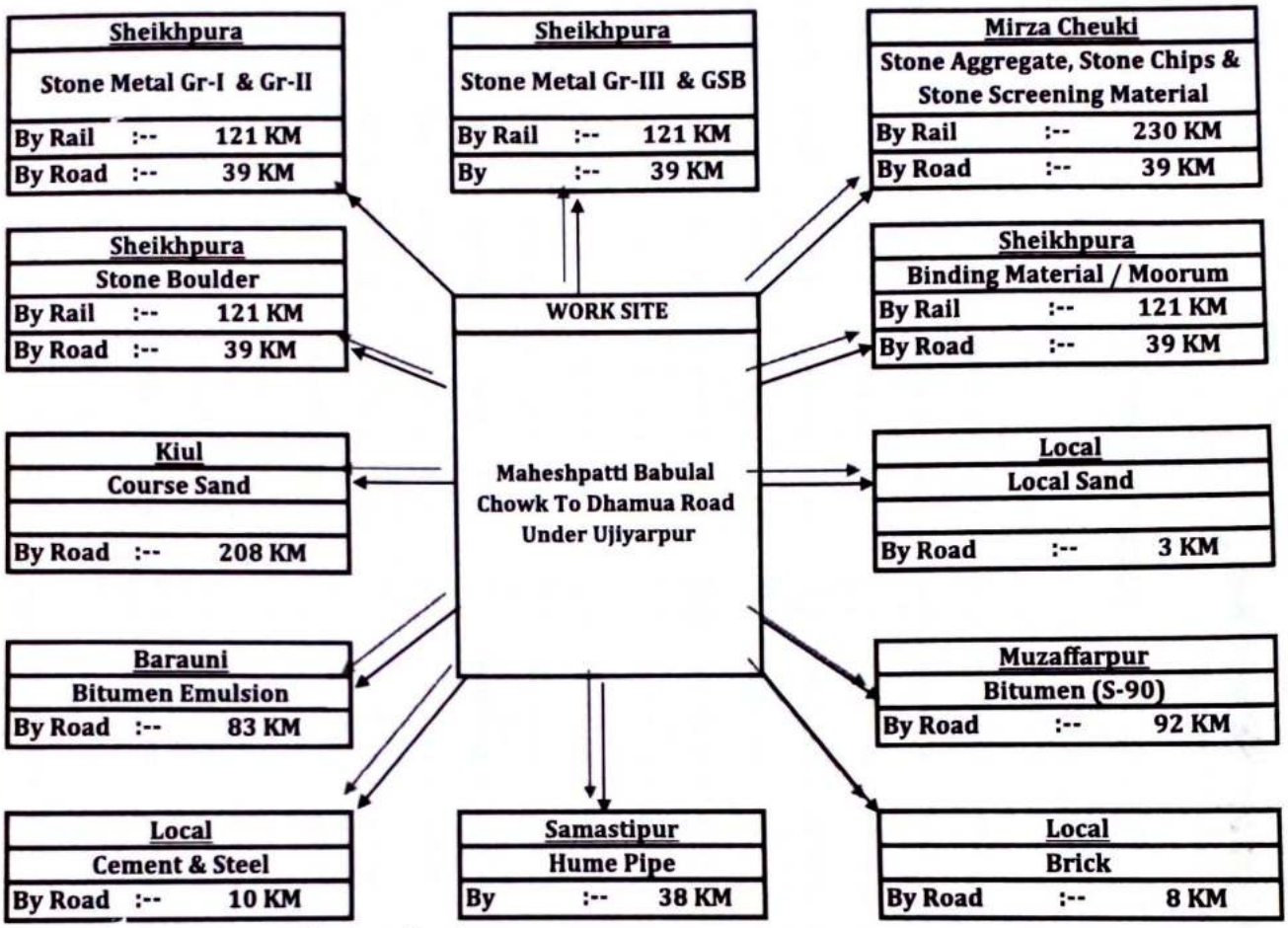
25/10/21

Figure -3 :---

Quarry Map

Name of Road :-- Maheshpatti Babulal Chowk To Dhamua Road Under Ujiyarpur
Block :-- Ujiarpur
District :-- Samastipur

Length of the Road:- 3.400 KM



* Subjected to Verification of Lead

25/10/2021

J.E

25/10/21

A.E.

E.E

S.E.

FORM F8

Analysis for Carriage by Road & Rail

Name of Road:-- Maheshpatti Babulal Chowk To Dhamua Road Under Ujiyarpur

District:- Samastipur **Block :-** Ujiarpur

Sl No	Item with Source	Unit	Source Up to	Carriage Cost & Lead in Km				Loading & Unloading Cost	Carriage Cost by Rail Head	Total ₹	Total ₹ Minimum
				Pucka / Surface		Katcha					
1	Stone Metal Gr-I & Gr-II (Sheikhpura by Rail 121 Km)	Cum	Sheikhpura	8.00/4.59	x 10.10 x 39.00 Km = Rs 686.54	8.00/4.59	x 24.30 x 0.00 Km = Rs 0.00	105.12	1025.87	Rs. 1817.53	Rs. 1817.53
	Stone Metal Gr-I & Gr-II	Cum	Sheikhpura	8.00/4.59	x 7.94 x 138.00 Km = Rs 1909.75	8.00/4.59	x 19.22 x 0.00 Km = Rs 0.00	210.19		Rs. 2119.94	
2	Stone Metal Gr-III (Sheikhpura by Rail 121 Km)	Cum	Sheikhpura	8.00/4.99	x 10.10 x 39.00 Km = Rs 631.50	8.00/4.99	x 24.30 x 0.00 Km = Rs 0.00	105.12	1128.34	Rs. 1864.96	Rs. 1864.96
	Stone Metal Gr-III	Cum	Sheikhpura	8.00/4.99	x 7.94 x 138.00 Km = Rs 1756.67	8.00/4.99	x 19.22 x 0.00 Km = Rs 0.00	210.19	1128.34	Rs. 3095.20	
3	Stone Aggregate / Chips (Mirza Chowki by Rail 230 Km)	Cum	Sheikhpura	8.00/4.99	x 10.10 x 39.00 Km = Rs 631.50	8.00/4.99	x 24.30 x 0.00 Km = Rs 0.00	105.12	1588.15	Rs. 2324.77	Rs. 2324.77
	Stone Aggregate / Chips	Cum	Sheikhpura	8.00/4.99	x 7.94 x 138.00 Km = Rs 1756.67	8.00/4.99	x 19.22 x 0.00 Km = Rs 0.00	210.19	1588.15	Rs. 3555.01	
4	Stone Boulder (Sheikhpura by Rail 121 Km)	Cum	Sheikhpura	8.00/4.80	x 10.10 x 39.00 Km = Rs 656.50	8.00/4.80	x 24.30 x 0.00 Km = Rs 0.00	105.12	1159.81	Rs. 1921.43	Rs. 1921.43
	Stone Boulder	Cum	Sheikhpura	8.00/4.80	x 7.94 x 138.00 Km = Rs 1826.20	8.00/4.80	x 19.22 x 0.00 Km = Rs 0.00	210.19	1159.81	Rs. 3196.20	
5	Course Sand	Cum	Kiul	8.00/4.99	x 7.94 x 208.00 Km = Rs 2647.73	8.00/4.99	x 19.22 x 0.00 Km = Rs 0.00	113.67		Rs. 2761.40	Rs. 2761.40
6	Binding Material/Moorum (Sheikhpura by Rail 121 Km)	Cum	Sheikhpura	8.00/6.00	x 10.10 x 39.00 Km = Rs 525.20	8.00/6.00	x 24.30 x 0.00 Km = Rs 0.00	113.67	851.49	Rs. 1490.36	Rs. 1490.36
	Binding Material/Moorum	Cum	Sheikhpura	8.00/6.00	x 7.94 x 138.00 Km = Rs 1460.96	8.00/6.00	x 19.22 x 0.00 Km = Rs 0.00	66.31	851.49	Rs. 2378.76	
7	Local Sand	Cum	Local	8.00/4.99	x 10.10 x 2.00 Km = Rs 32.38	8.00/4.99	x 24.30 x 1.00 Km = Rs 38.96	113.67		Rs. 185.01	Rs. 185.01
8	Brick	1000 Nos	Local	8.00/2.00	x 7.94 x 7.00 Km = Rs 222.32	8.00/2.00	x 19.22 x 1.00 Km = Rs 76.88	477.44		Rs. 776.64	Rs. 776.64
9	Cement	MT	Local	8.00/8.00	x 7.94 x 10.00 Km = Rs 79.40	8.00/8.00	x 19.22 x 0.00 Km = Rs 0.00	347.32		Rs. 426.72	Rs. 426.72
10	Steel	MT	Local	8.00/8.00	x 7.94 x 10.00 Km = Rs 79.40	8.00/8.00	x 19.22 0.00 Km = Rs 0.00	370.58		Rs. 449.98	Rs. 449.98
11	Bitumen Emulsion	MT	Barauni	8.00/8.00	x 7.94 x 83.00 Km = Rs 659.02	8.00/8.00	x 19.22 x 0.00 Km = Rs 0.00	396.98		Rs. 1056.00	Rs. 1056.00
12	Bitumen	MT	Muzaffarpur	8.00/8.00	x 7.94 x 92.00 Km = Rs 730.48	8.00/8.00	x 19.22 x 0.00 Km = Rs 0.00	396.98		Rs. 1127.46	Rs. 1127.46
13	Hume Pipe (1000 mm)	m	Samastipur	8.00/10.00	x 7.94 x 38.00 Km = Rs 241.38	8.00/10.00	x 19.22 x 0.00 Km = Rs 0.00	70.84		Rs. 312.22	Rs. 312.22
14	Hume Pipe (600 mm)	m	Samastipur	8.00/25.00	x 7.94 x 38.00 Km = Rs 96.55	8.00/25.00	x 19.22 x 0.00 Km = Rs 0.00	30.36		Rs. 126.91	Rs. 126.91
15	Hume Pipe (300 mm)	m	Samastipur	8.00/60.00	x 7.94 x 38.00 Km = Rs 40.23	8.00/60.00	x 19.22 x 0.00 Km = Rs 0.00	30.36		Rs. 70.59	Rs. 70.59

Cost of Haulage including loading & Unloading as per SOR 23

* Subjected to Verification of Lead

Type of Road	₹ Per Ton. Km by Tipper	₹ Per Ton. Km by Truck
For Surface Road	10.10	7.94
Unsurface Gravel Road	12.10	9.55
Kachha Road	24.30	19.22

23/10/2024
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RWD

25/10/21
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RWD

FORM F8

Analysis for Carrige Through Railway from Quarry Site to Work Site

Sheikhpura to Karpurigram

Material -Stone Metal Gr-I & Gr-II

Quarry Site to Sheikhpura Railway Yard (By Road)

Carriage Cost & Lead in Km																Loading & Unloading		Total
Pucka / Surface								Katcha										
8.00 / 4.59	x	10.10	x	4.00 Km	=	Rs 70.41	+	8.00 / 4.59	x	24.30	x	0.00 Km	=	Rs 0.00	+	Rs 105.12	=	Rs 175.53
UnSurface								8.00 / 4.59	x	12.10	x	1.00 Km					=	Rs 21.09
Loading & Unloading Cost by manual								=								= Rs 210.19	=	Rs 210.19
																Total	=	Rs 406.81
Less for O.H & C.P				= Rs 406.81	/	1.166				= Rs 348.89						Total "A"	=	Rs 348.89

Sheikhpura Railway Yard to Karpurigram — **Railway Yard = 121.00 Km**

Railway freight charge from Sheikhpura Railway station to Karpurigram Railway station	=	For 1 MT	121.00 Km	=	Rs 231.30	= Rs 231.30
Busy Seasion charge 15% of Railway freight charge	=	For 1 MT		=	15%	= Rs 34.70
Railway Development Charge to 5% of Railway freight Charge		For 1 MT		=	5%	= Rs 11.57
Terminal charge @Rs.40.00 per Terminal per MT		For 1 MT		x	Rs 40.00	= Rs 0.00
GST 0 % "(4% included in Overhead Charges) =	Rs 277.57	x	0%			= Rs 0.00
Total	=	For 1 MT				= Rs 277.57
Rail Fright =	1.743 x Rs 277.57	For 1 MT			"B"	= Rs 483.80
Gross Cost for Railway freight charge "A" + "B"		For 1 MT				= Rs 832.69
			Add 12% Overhead Charge	=	12%	= Rs 99.92
			Add 10% Contractor Profit	=	10%	= Rs 93.26
Carriage Cost from Quarry to Karpurigram Railway Yard		For 1 Cum				= Rs 1025.87

Analysis for Carrige Through Railway from Quarry Site to Work Site

Sheikhpura to Karpurigram

Material -Stone Metal Gr-III / GSB

Quarry Site to Sheikhpura Railway Yard (By Road)

Carriage Cost & Lead in Km																Loading & Unloading		Total
Pucka / Surface								Katcha										
8.00 / 4.99	x	10.10	x	4.00 Km	=	Rs 64.77	+	8.00 / 4.99	x	24.30	x	0.00 Km	=	Rs 0.00	+	Rs 105.12	=	Rs 169.89
UnSurface								8.00 / 4.99	x	12.10	x	1.00 Km					=	Rs 19.40
Loading & Unloading Cost by manual																= Rs 210.19	=	Rs 210.19
																Total	=	Rs 399.48
Less for O.H & C.P				= Rs 399.48	/	1.166				= Rs 342.61						Total "A"	=	Rs 342.61

Sheikhpura	**Railway Yard to**	**Karpurigram**		**Railway Yard**	=	**121.00 Km**			
Railway freight charge from Sheikhpura Railway station to Karpurigram Railway station			=	For 1 MT	121.00 Km		=	Rs 231.30	= Rs 231.30
Busy Seasion charge 15% of Railway freight charge			=	For 1 MT			=	15%	= Rs 34.70
Railway Development Charge to 5% of Railway freight Charge				For 1 MT			=	5%	= Rs 11.57
Terminal charge @Rs.40.00 per Terminal per MT				For 1 MT		2 x	Rs 40.00	=	Rs 80.00
GST 0 % "(4% included in Overhead Charges) =		Rs 357.57 x	0%					=	Rs 0.00
Total			=	**For 1 MT**				=	**Rs 357.57**
Rail Fright =		**1.603 x Rs 357.57**		**For 1 MT**			**"B"**	=	**Rs 573.25**
Gross Cost for Railway freight charge "A" + "B"				**For 1 MT**				=	**Rs 930.82**
				Add 12% Overhead Charge	=	12%	=	**Rs 109.90**	
				Add 10% Contractor Profit	=	10%	=	**Rs 102.58**	
Carriage Cost from Quarry to Karpurigram Railway Yard				**For 1 Cum**				=	**Rs 1128.34**

Analysis for Carrige Through Railway from Quarry Site to Work Site

Mirza Chowki to Karpurigram

Material -Stone Aggregate / Chips

Quarry Site to Mirza Chowki Railway Yard (By Road)

	Carriage Cost & Lead in Km												
	Pucka / Surface					**Katcha**				**Loading & Unloading**		**Total**	
$\frac{8.00}{4.99}$ x	10.10 x	4.00 Km	= Rs 64.77	+	$\frac{8.00}{4.99}$ x	24.30 x	0.00 Km	= Rs 0.00	+	Rs 105.12	=	Rs 169.89	
	UnSurface				$\frac{8.00}{4.99}$ x	12.10 x	1.00 Km				=	Rs 19.40	
Loading & Unloading Cost by manual				=					=	Rs 210.19	=	Rs 210.19	
										Total	=	~~Rs 399.48~~	
Less for O.H & C.P	**=**	**Rs 399.48 /**	**1.166**			**=**	**Rs 342.61**			**Total "A"**	=	**Rs 342.61**	

Mirza Chowki	**Railway Yard to**	**Karpurigram**		**Railway Yard**	=	**230.00 Km**			
Railway freight charge from Mirza Chowki Railway station to Karpurigram Railway station			=	For 1 MT	230.00 Km		=	Rs 425.30	= Rs 425.30
Busy Seasion charge 15% of Railway freight charge			=	For 1 MT			=	15%	= Rs 63.80
Railway Development Charge to 5% of Railway freight Charge				For 1 MT			=	5%	= Rs 21.27
Terminal charge @Rs.40.00 per Terminal per MT				For 1 MT		2 x	Rs 40.00	=	Rs 80.00
GST 0 % "(4% included in Overhead Charges) =		Rs 590.37 x	0%					=	Rs 0.00
Total			=	**For 1 MT**				=	**Rs 590.37**
Rail Fright =		**1.603 x Rs 590.37**		**For 1 MT**			**"B"**	=	**Rs 946.48**
Gross Cost for Railway freight charge "A" + "B"				**For 1 MT**				=	**Rs 1289.09**
				Add 12% Overhead Charge	=	12%	=	**Rs 154.69**	
				Add 10% Contractor Profit	=	10%	=	**Rs 144.38**	
Carriage Cost from Quarry to Karpurigram Railway Yard				**For 1 Cum**				=	**Rs 1588.15**

Analysis for Carrige Through Railway from Quarry Site to Work Site

Sheikhpura to Karpurigram

Material -Stone Boulder

Quarry Site to Sheikhpura Railway Yard (By Road)

Carriage Cost & Lead in Km												
Pucka / Surface					Katcha					Loading & Unloading		
8.00 / 4.80	x	10.10	x	4.00 Km	= Rs 67.33	+ 8.00 / 4.80	x	24.30	x 0.00 Km	= Rs 0.00	+ Rs 105.12	=
UnSurface						8.00 / 4.80	x	12.10	x 1.00 Km			=
Loading & Unloading Cost by manual						=					= Rs 210.19	=
											Total	=
Less for O.H & C.P	=	Rs 402.81	/	1.166	= Rs 345.46						Total "A"	=

Sheikhpura Railway Yard to Karpurigram **Railway Yard = 121.00 Km**

Railway freight charge from Sheikhpura Railway station to Karpurigram Railway station	=	For 1 MT	121.00 Km		=	Rs 231.30	=
Busy Seasion charge 15% of Railway freight charge	=	For 1 MT			=	15%	=
Railway Development Charge to 5% of Railway freight Charge		For 1 MT			=	5%	=
Terminal charge @Rs.40.00 per Terminal per MT		For 1 MT		2 x	Rs 40.00		=
GST 0 % *(4% included in Overhead Charges) =	Rs 357.57 x	0%					=
Total	=	For 1 MT					=
Rail Fright =	1.667 x Rs 357.57	For 1 MT				"B"	=
Gross Cost for Railway freight charge "A" + "B"		For 1 MT					=
Add 12% Overhead Charge	=	12%	=				
Add 10% Contractor Profit	=	10%	=				
Carriage Cost from Quarry to Karpurigram Railway Yard		For 1 Cum					=

Analysis for Carrige Through Railway from Quarry Site to Work Site

Sheikhpura to Karpurigram

Binding Material /Moorum

Quarry Site to Sheikhpura Railway Yard (By Road)

Carriage Cost & Lead in Km												
Pucka / Surface					Katcha					Loading & Unloading		
8.00 / 6.00	x	10.10	x	4.00 Km	= Rs 53.87	+ 8.00 / 6.00	x	24.30	x 0.00 Km	= Rs 0.00	+ Rs 66.31	=
UnSurface						8.00 / 6.00	x	12.10	x 1.00 Km			=
Loading & Unloading Cost by manual						=					= Rs 113.67	=
											Total	=
Less for O.H & C.P	=	Rs 249.98	/	1.166	= Rs 214.39						Total "A"	=

Sheikhpura Railway Yard to Karpurigram **Railway Yard = 121.00 Km**

Railway freight charge from Sheikhpura Railway station to Karpurigram Railway station	=	For 1 MT	121.00 Km		=	Rs 231.30	= Rs 231.30
Busy Seasion charge 15% of Railway freight charge	=	For 1 MT			=	15%	= Rs 34.70
Railway Development Charge to 5% of Railway freight Charge		For 1 MT			=	5%	= Rs 11.57
Terminal charge @Rs.40.00 per Terminal per MT		For 1 MT		2 x	Rs 40.00	=	Rs 80.00
GST 0 % *(4% included in Overhead Charges) =	Rs 357.57 x	0%				=	Rs 0.00
Total	=	For 1 MT				=	Rs 357.57
Rail Fright =	1.333 x Rs 357.57	For 1 MT				"B"	= Rs 476.75
Gross Cost for Railway freight charge "A" + "B"		For 1 MT					= Rs 691.14
Add 12% Overhead Charge	=	12%	= Rs 82.94				
Add 10% Contractor Profit	=	10%	= Rs 77.41				
Carriage Cost from Quarry to Karpurigram Railway Yard		For 1 Cum					= Rs 851.49

Analysis of Rates (FORMAT F8)

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate
			Haulage BY TIPPER			
1	1.10	(i)	**Haulage excluding Loading & Unloading** Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = t.km Taking output 10 t load and lead 10 km = 100 t.km **Case-I : Surfaced Road** Speed with load: 25 km per hour Speed while returning empty: 35 km per hour			
		a)	**Machinery** **Tipper 10 t capacity** Haulage with load Empty return trip	hour hour	0.40 0.29	1183.00 1183.00
		b)	Overheads @ 12%			
		c)	Contractor's profit @ 10% on (a+b)			
			Cost for 100 t-km = a+b+c			
			Rate per cum = (a+b+c) /100			
			Rate Per Km.	**Cum**		
2	1.10	(ii)	**Haulage excluding Loading & Unloading** Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = t.km Taking output 10 t load and lead 10 km = 100 t.km **Case-II: Unsurfaced Gravel Road.** Speed with load: 20 km/hour Speed for empty return trip: 30 km/hour			
		a)	**Machinery** **Tipper 10 t capacity** Haulage with load Empty return trip	hour hour	0.50 0.33	1183.00 1183.00
		b)	Overheads @ 12%			
		c)	Contractor's profit @ 10% on (a+b)			
			Cost for 100 t-km = a+b+c			
			Rate per cum = (a+b+c) /100			
			Rate Per Km.	**Cum**		
3	1.10	(iii)	**Haulage excluding Loading & Unloading** Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = t.km Taking output 10 t load and lead 10 km = 100 t.km **Case-III : Katcha Track and Track in River Bed/Nallah Bed and Choe Bed.** Speed with load: 10 km per hour Speed while returning empty: 15 km per hour			
		a)	**Machinery** **Tipper 10 t capacity** Haulage with load Empty return trip	hour hour	1.00 0.67	1183.00 1183.00
		b)	Overheads @ 12%			
		c)	Contractor's profit @ 10% on (a+b)			
			Cost for 100 t-km = a+b+c			
			Rate per cum = (a+b+c) /100			
			Rate Per Km.	**Cum**		

Analysis of Rates (FORMAT F8)

SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
		Haulage BY TRUCK				
1.10	(i)	**Haulage excluding Loading & Unloading** Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = t.km Taking output 10 t load and lead 10 km = 100 t.km **Case-I : Surfaced Road** Speed with load: 25 km per hour Speed while returning empty: 35 km per hour				
	a)	**Machinery** **Truck 10 t capacity** Haulage with load Empty return trip	hour	0.40	934.30	373.72
	b)	Overheads @ 12%	hour	0.29	934.30	270.95
	c)	Contractor's profit @ 10% on (a+b)				**77.36**
		Cost for 100 t-km = a+b+c				**72.20**
		Rate per cum = (a+b+c) /100				794.23
		Rate Per Km.	**Cum**			7.94
1.10	(ii)	**Haulage excluding Loading & Unloading**				**7.94**
		Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = t.km Taking output 10 t load and lead 10 km = 100 t.km **Case-II: Unsurfaced Gravel Road.** Speed with load: 20 km/hour Speed for empty return trip: 30 km/hour				
	a)	**Machinery** **Truck 10 t capacity** Haulage with load Empty return trip	hour	0.50	934.30	467.15
	b)	Overheads @ 12%	hour	0.33	934.30	308.32
	c)	Contractor's profit @ 10% on (a+b)				**93.06**
		Cost for 100 t-km = a+b+c				**86.85**
		Rate per cum = (a+b+c) /100				955.38
		Rate Per Km.	**Cum**			**9.55**
1.10	(iii)	**Haulage excluding Loading & Unloading**				**9.55**
		Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = t.km Taking output 10 t load and lead 10 km = 100 t.km **Case-III : Katcha Track and Track in River Bed/Nallah Bed and Choe Bed.** Speed with load: 10 km per hour Speed while returning empty: 15 km per hour				
	a)	**Machinery** **Truck 10 t capacity** Haulage with load Empty return trip	hour	1.00	934.30	934.30
	b)	Overheads @ 12%	hour	0.67	934.30	625.98
	c)	Contractor's profit @ 10% on (a+b)				**187.23**
		Cost for 100 t-km = a+b+c				**174.75**
		Rate per cum = (a+b+c) /100				1922.27
		Rate Per Km.	**Cum**			**19.22**
1.10	RCD	Loading and Unloading of Stone Boulder/Stone aggregates/Sand/Kanker/Moorum. Placing tipper at loading point, loading with front end loader, dumping, turning for return trip, excluding time for haulage and ***Unit = cum*** ***Taking output = 5.5 cum*** **Time required for**				**19.22**
		i) Positioning of tipper at loading point		1 Min		
		ii) Loading by front end loader 1 cum bucket capacity @ 25 cum per hour		13 Min		
		iii) Maneuvering, reversing, dumping and turning for return		2 Min		
		iv) Waiting time, unforeseen contingencies etc		4 Min		
		Total		**20 Min**		

Analysis of Rates (FORMAT F8)

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate
			a) Machinery			
			Tipper 5.5 tonnes capacity	hour	0.33	1183.00
			Front end-loader 1 cum bucket capacity @ 25 cum/hour	hour	0.33	1403.00
			Overheads @ 12%			
			c) Contractor's profit @ 10% on (a+b)			
			Cost for 5.5 cum = a+b+c			
			Rate per cum = (a+b+c)/ 5.5			*say*
			Unloading will be by tipping.			
8	1.20	RCD	**Loading and Unloading of Boulders by Manual Means**			
			Unit = cum			
			Taking output = 5.5 cum			
			a) Labour			
			Mate	day	0.11	321.00
			Mazdoor for loading and unloading	day	0.75	304.00
			b) Machinery			
			Tipper 5.5 tonne capacity	hour	0.75	1183.00
			Overheads @ 12%			
			d) Contractor's profit @ 10% on (a+b+c)			
			Cost for5.5 cum = a+b+c+d			
			Rate per cum = (a+b+c+d)/5.5			
			Unloading will be by tipping.			*say*
9	1.30	RCD	**Loading and Unloading of Cement or Steel by Manual Means and**			
			Unit = tonne			
			Taking output = 10 tonnes			
			a) Labour			
			Mate	day	0.08	321.00
			Mazdoor for loading and unloading	day	2.00	304.00
			b) Machinery			
			Truck 10 tonne capacity	hour	2.00	934.30
			Overheads @ 12%			
			d) Contractor's profit @ 10% on (a+b+c)			
			Cost for10 tonnes = a+b+c+d			
			Rate per tonnes = (a+b+c+d)/10			*say*
10	1.1	(i)	Loading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by manual means including a lead upto 30 m			
			Unit = cum			
			Taking output = 5.5 cum			
		a)	**Labour**			
			Mate	day	0.02	321.00
			Mazdoor (Unskilled)	day	0.50	304.00
		b)	**Machinery**			
			Truck	hour	0.50	934.30
		c)	Overheads @ 12%			
		d)	Contractor's profit @ 10% on (a+b+c)			
			Cost for 5.5 cum = a+b+c+d			
			Rate per cum = (a+b+c+d) /5.5			
			Total Cost	**Cum**		
11		(ii)	Loading of Earth, Sand, Moorum, Manure, Flyash by manual means including a lead upto 30 m.			
			Unit = cum			
			Taking output = 5.5 cum			
		a)	**Labour**			
			Mate	day	0.01	321.00
			Mazdoor (Unskilled)	day	0.25	304.00
		b)	**Machinery**			
			Truck	hour	0.25	934.30
		c)	Overheads @ 12%			
		d)	Contractor's profit @ 10% on (a+b+c)			
			Cost for 5.5 cum = a+b+c+d			
			Rate per cum = (a+b+c+d) /5.5			
			Total Cost	**Cum**		
12		(iii)	Unloading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by mechanical means including a lead upto 30 m			

Analysis of Rates (FORMAT F8)

SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
		Unit = cum				
		Taking output = 5.5 cum				
	a)	**Labour**				
		Mate				
		Mazdoor (Unskilled)	day	0.01	321.00	3.21
	b)	**Machinery**	day	0.25	304.00	76.00
		Truck				
	c)	Overheads @ 12%	hour	0.25	934.30	233.58
	d)	Contractor's profit @ 10% on (a+b+c)				**37.53**
		Cost for 5.5 cum = a+b+c+d				**35.03**
		Rate per cum = (a+b+c+d) /5.5				385.35
		Total Cost	**Cum**			**70.06**
		Total Loding & Unloading of Stone Aggregate	***Cum***		***= 140.13 + 70.06 =***	**70.06**
13	(iv)	Unloading of Earth, Sand, Moorum, Manure, Flyash by manual means including a lead upto 30 m.				***210.19***
		Unit = cum				
		Taking output = 5.5 cum				
	a)	**Labour**				
		Mate				
		Mazdoor (Unskilled)	day	0.01	321.00	1.61
	b)	**Machinery**	day	0.13	304.00	38.00
		Truck				
	c)	Overheads @ 12%	hour	0.17	934.30	155.09
	d)	Contractor's profit @ 10% on (a+b+c)				**23.36**
		Cost for 5.5 cum = a+b+c+d				**21.81**
		Rate per cum = (a+b+c+d) /5.5				239.87
		Total Cost	**Cum**			**43.61**
		Total Loding & Unloading of Sand / Moorum	***Cum***		***= 70.06 + 43.61 =***	**43.61**
4	1.3	**Loading, Unloading and Stacking of Bricks by Manual Means**				***113.67***
	(i)	Loading of Bricks by manual means including a lead upto 30 m				
		Unit = 1000 Nos.				
		Taking output = 2000 Nos.				
	a)	**Labour**				
		Mate				
		Mazdoor (Unskilled)	day	0.01	321.00	3.21
	b)	**Machinery**	day	0.25	304.00	76.00
		Truck				
	c)	Overheads @ 12%	hour	0.33	934.30	308.32
	d)	Contractor's profit @ 10% on (a+b+c)				**46.50**
		Cost for 2000 Nos. = a+b+c+d				**43.40**
		Rate for 1000 bricks = (a+b+c+d)/2				477.44
		Total Cost	**no.**			**238.72**
5	(ii)	Unloading and Stacking of Bricks by manual means including a lead upto 30 m				**238.72**
		Unit = 1000 Nos.				
		Taking output = 2000 Nos.				
	a)	**Labour**				
		Mate	day	0.01	321.00	3.21
		Mazdoor (Unskilled)	day	0.25	304.00	76.00
	b)	**Machinery**				
		Truck	hour	0.33	934.30	308.32
	c)	Overheads @ 12%				**46.50**
	d)	Contractor's profit @ 10% on (a+b+c)				**43.40**
		Cost for 2000 Nos. = a+b+c+d				477.44
		Rate for 1000 bricks = (a+b+c+d)/2				**238.72**
		Total Cost	**no.**			**238.72**
		Total Loding & Unloading of Brick Per 1000			***= 238.72 + 238.72 =***	***477.44***

Analysis of Rates (FORMAT F8)

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	
16		(I)	**Loading and Unloading of Cement by Manual Means**				
			Loading of Cement by manual means including a lead upto 30 m				
			Unit = t				
			Taking output = 10 t				
		a)	**Labour**				
			Mate	day	0.06	321.00	
			Mazdoor (Unskilled)	day	1.50	304.00	
		b)	**Machinery**				
			Truck	hour	1.00	934.30	
		c)	Overheads @ 12%				
		d)	Contractor's profit @ 10% on (a+b+c)				
			Cost for 10 t = a+b+c+d				
			Rate per tonnes = (a+b+c+d)/10				
			Total Cost including	t			
17		(II)	Unloading of Cement by manual means including a lead upto 30 m				
			Unit = t				
			Taking output = 10 t				
		a)	**Labour**				
			Mate	day	0.06	321.00	
			Mazdoor (Unskilled)	day	1.50	304.00	
		b)	**Machinery**				
			Truck	hour	1.00	934.30	
		c)	Overheads @ 12%				
		d)	Contractor's profit @ 10% on (a+b+c)				
			Cost for 10 t = a+b+c+d				
			Rate per tonne = (a+b+c+d)/10				
			Total Cost	t			
			Total Loding & Unloading of Cement	*t*			*= 173.66 + 173.66 =*
18	1.5		**Loading and Unloading of Structural Steel and Steel Bars by manual means**				
		(I)	Loading of Structural Steel, Steel Bars by manual means including a lead upto 30 m				
			Unit = t				
			Taking output = 10 t				
		a)	**Labour**				
			Mate	day	0.07	321.00	
			Mazdoor (Unskilled)	day	1.80	304.00	
		b)	**Machinery**				
			Truck	hour	1.00	934.30	
		c)	Overheads @ 12%				
		d)	Contractor's profit @ 10% on (a+b+c)				
			Cost for 10 t = a+b+c+d				
			Rate per tonnes = (a+b+c+d)/10				
			Total Cost	t			
19		(II)	Unloading of Structural Steel, Steel Bars by manual means including a lead upto 30 m				
			Unit = t				
			Taking output = 10 t				
		a)	**Labour**				
			Mate	day	0.07	321.00	
			Mazdoor (Unskilled)	day	1.80	304.00	
		b)	**Machinery**				
			Truck	hour	1.00	934.30	
		c)	Overheads @ 12%				
		d)	Contractor's profit @ 10% on (a+b+c)				
			Cost for 10 t = a+b+c+d				
			Rate per t = (a+b+c+d)/10				
			Total Cost	t			
			Total Loding & Unloading of Steel	*t*			*= 185.29 + 185.29 =*

Analysis of Rates (FORMAT F8)

	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount Rs
20	1.6		**Loading and Unloading of Bitumen Drums by Manual Means**				
		(I)	Loading of Bitumen Drums by manual means including a lead upto 30 m				
			Unit = t				
			Taking output = 10 t				
		a)	**Labour**				
			Mate	day	0.06	321.00	19.26
			Mazdoor (Unskilled)	day	1.60	304.00	486.40
		b)	**Machinery**				
			Truck	hour	1.25	934.30	1167.88
		c)	Overheads @ 12%				**200.82**
		d)	Contractor's profit @ 10% on (a+b+c)				**187.44**
			Cost for 10 t = a+b+c+d				2061.80
			Rate per tonnes = (a+b+c+d)/10				**206.18**
			Total Cost	t			**206.18**
21		(II)	Unloading of Bitumen Drums by Manual Means including a lead upto 30 m				
			Unit = t				
			Taking output = 10 t				
		a)	**Labour**				
			Mate	day	0.05	321.00	16.05
			Mazdoor (Unskilled)	day	1.20	304.00	364.80
		b)	**Machinery**				
			Truck	hour	1.25	934.30	1167.88
		c)	Overheads @ 12%				**185.85**
		d)	Contractor's profit @ 10% on (a+b+c)				**173.46**
			Cost for 10 t = a+b+c+d				1908.03
			Rate per t = (a+b+c+d)/10				**190.80**
			Note :- The rate is inclusive of the self weight of drum				
			Total Cost	t			**190.80**
			Total Loding & Unloading of Bitumen Drums	*t*			*= 206.18 + 190.8 =* **396.98**
2	1.9		**Loading and Unloading of Hume Pipes**				
		(I)	Loading of RCC Hume pipes by mechanical means including a lead upto 30 m				
		A.	**1000 / 1200 mm dia Hume pipe**				
			Unit = per pipe				
			Taking output = 9 pipes				
		a)	**Labour**				
			Mate	day	0.02	321.00	6.42
			Mazdoor (Unskilled)	day	0.50	304.00	152.00
		b)	**Machinery**				
			Truck	hour	0.33	934.30	308.32
			Crane	hour	0.33	909.00	299.97
		c)	Overheads @ 12%				**92.01**
		d)	Contractor's profit @ 10% on (a+b+c)				**85.87**
			Cost for 9 pipes = a+b+c+d				944.59
			Rate per pipe = (a+b+c+d)/9				**104.95**
			Total Cost	per p			**104.95**
		C.	**600/450 mm dia Hume pipe**				
			Unit = per pipe				
			Taking output = 21 pipe				
		a)	**Labour**				
			Mate	day	0.02	321.00	6.42
			Mazdoor (Unskilled)	day	0.50	304.00	152.00
		b)	**Machinery**				
			Truck	hour	0.33	934.30	308.32
			Crane	hour	0.33	909.00	299.97
		c)	Overheads @ 12%				**92.01**
		d)	Contractor's profit @ 10% on (a+b+c)				**85.87**
			Cost for 21 pipes = a+b+c+d				944.59
			Rate per pipe = (a+b+c+d)/21				**44.98**
			Total Cost	per p			**44.98**
		(II)	Unloading of RCC Hume pipe by mechanical means including a lead upto 30 m				
		A.	**1000/1200 mm dia RCC Hume pipes**				
			Unit = per pipe				
			Taking output = 9 pipes				

Analysis of Rates (FORMAT F8)

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate
		a)	**Labour**			
			Mate	day	0.02	321.00
			Mazdoor (Unskilled)	day	0.50	304.00
		b)	**Machinery**			
			Truck	hour	0.20	934.30
			Crane	hour	0.20	909.00
		c)	Overheads @ 12%			
		d)	Contractor's profit @ 10% on (a+b+c)			
			Cost for 9 pipes = a+b+c+d			
			Rate per pipe = (a+b+c+d)/9			
			Total Cost	**per p**		
			Total Loding & Unloading of RCC Hume Pipe	***per Pipe***	***= 104.95 + 72.15 =***	
			Total Loding & Unloading of RCC Hume Pipe	***m***	***= 177.1 / 2.50 =***	
25		C.	**600/450 mm dia Hume pipe**			
			Unit = per pipe			
			Taking output = 21 pipes			
		a)	**Labour**			
			Mate	day	0.02	321.00
			Mazdoor (Unskilled)	day	0.50	304.00
		b)	**Machinery**			
			Truck	hour	0.20	934.30
			Crane	hour	0.20	909.00
		c)	Overheads @ 12%			
		d)	Contractor's profit @ 10% on (a+b+c)			
			Cost for 21 pipes = a+b+c+d			
			Rate per pipe = (a+b+c+d)/21			
			Total Cost	**per p**		
			Total Loding & Unloading of RCC Hume Pipe	***per Pipe***	***= 44.98 + 30.92 =***	
			Total Loding & Unloading of RCC Hume Pipe	***m***	***= 75.9 / 2.50 =***	
26	OLD SOR		**Providing brick bats including spreading laying hand packing and compacting with C.I. Hammer in layers n 75 mm thick including cost of light barriers, danger signals,chowkidar,taxes,royality etc.all complete specification and direction of E/I including carriage cost of bricks.**			
	8.1.3.2 (iii)		**Unit = cum**			
			Assuming- 2.832 Cum			
		a)	**Labour (Unskilled)**			
			i) Carrying,spreading,laying & Packing	**nos**	**1.50**	**304.00**
			ii) Compaction brick bats with C.I. Hammer.	**nos**	**0.67**	**304.00**
			iii) Brick Bat	**Cum**	**2.83**	**1063.00**
			iv) Local Sand	**Cum**	**0.63**	**141.85**
			Over Heads @ 12 % on (a+b+c)			
			C. Profit @ 10 % on (a+b+c+d)			
		d)	**Cost for 2.832 cum = a+b+c+d**			
		e)	**Rate Per cum=(a+b+c+d)/2.832**	**cum**		
			CARRIAGE			
			Carriage for Brick (1 cum Bats = 300 nos Bricks)	**nos**	**0.300**	**776.64**
			Rate per cum with carriage			
			Total Cost	**CUM**		