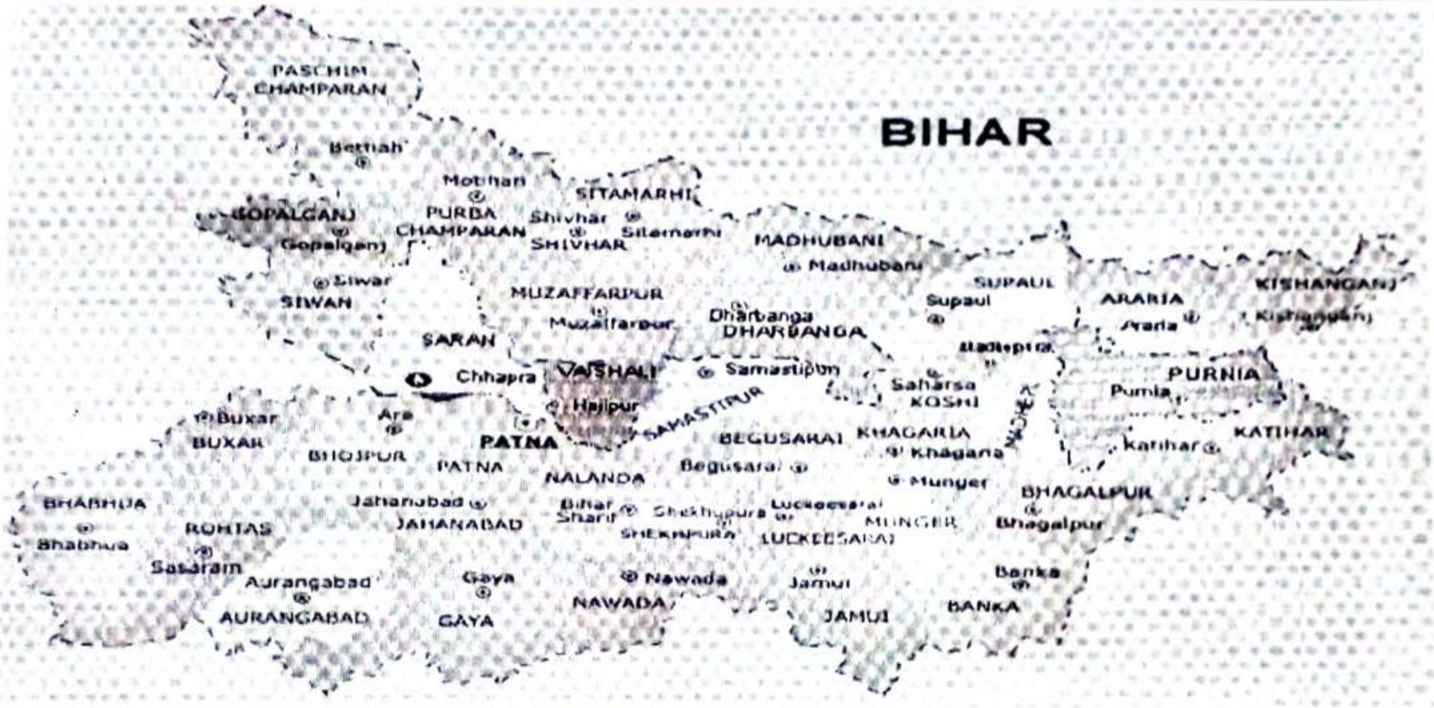
ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

2021-22

FLOOD DAMAGED REPORT



Samartha Chand surari to Surali

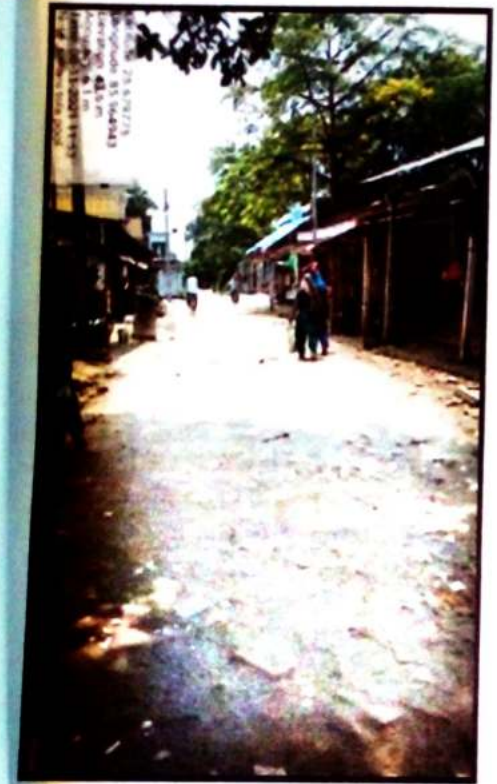
DISTRICT	:-	**Samastipur**	
DIVISION	:-	**Dalsingh Sarai**	
BLOCK	:-	Bibhutipur	
TOTAL LENGTH OF ROAD	:-	10.00	**KM**
TOTAL COST OF PROJECT	:-	21.89	Lac

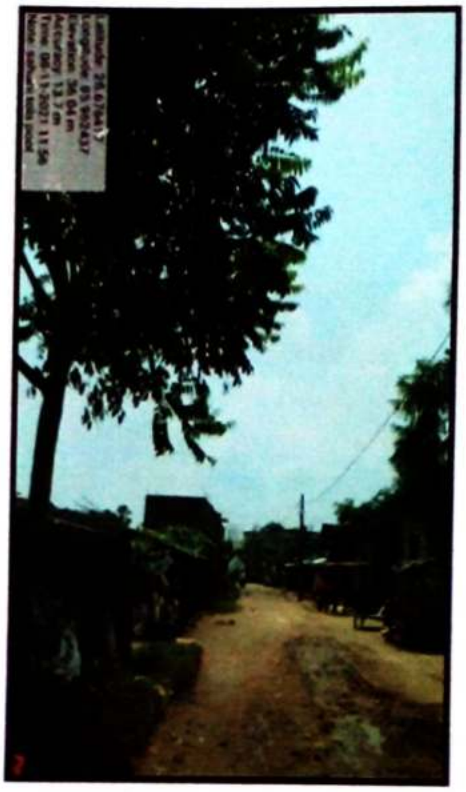
Site Photograph

Name of Bridge:- Samartha Chand to Surali

Block:- Bibhutipur

Distt- Samastipur





FDR
YEAR (2021-2022)
GNERAL ABSTRACT OF COST

BLOCK :- BIBHUTIPUR DISTRICT :- SAMASTIPUR

NAME OF ROAD :- Repair of Road in Samartha Chand surari to Surali

S.NO		ITEM OF WORK						AMOUNT	
A									
	TOTAL COST OF CONSTRUCTION						:-	Rs.	2189359
						SUB TOTAL	:-	Rs.	2189359

28.10.21

Junior Engineer
RWD (W) Section, Bibhutipur

28/10/21

Assistant Engineer
RWD (W)Sub Division,
Bibhutipur

Executive Engineer
RWD, Works Division,
Dalsinghsarai

SUMMARY OF COST ESTIMAT FOR THE PROJECT

NAME OF ROAD :- Repair of Road in Samartha Chand surari to Surali

DISTRICT SAMASTIPUR

BLOCK BIBHUTIPUR

S.NO	DESCRIPTION	AMOUNT LAKH
1	BRICK BAT	1937486.203
	SUB TOTAL:-	1937486.203
	12% GST on Total Amount:-	232498.344
	1% lab cess	19374.862
	Total Cost (including GST and Labour Cess	2189359.409

28.10.21

J.E

28/10/21

A.E

E.E

Cost Estimate for Road Work

FORMAT-6

SL.NO	SDB SL.NO	MORD Ref. No	Description	Unit					Quantity	Rate	Amount
4			**BrickBats**								
			Laying Brick Bats on Prepared Soil Surface as per specifications and direction of E/L								
				cum	1.00	3.00	2.000	0.25	1.50		
				cum	1.00	4.00	4.000	0.45	7.20		
				cum	1.00	16.00	4.000	0.30	19.20		
				cum	1.00	18.00	3.800	0.40	27.36		
				cum	1.00	26.04	4.000	0.30	31.25		
				cum	1.00	30.00	4.000	0.30	36.00		
				cum	1.00	18.00	3.600	0.30	19.44		
				cum	1.00	32.00	4.000	0.30	38.40		
				cum	1.00	42.00	4.000	0.40	67.20		
				cum	1.00	26.00	4.000	0.20	20.80		
				cum	1.00	32.00	4.000	0.20	25.60		
				cum	1.00	6.00	2.500	0.20	3.00		
				cum	1.00	4.00	3.600	0.20	2.88		
				cum	2.00	4.00	3.000	0.25	6.00		
				cum	1.00	8.50	3.800	0.30	9.69		
			Damaged Strech	cum	4.00	30.00	4.000	0.30	144.00		
				cum	2.00	30.00	4.000	0.30	72.00		
				cum	1.00	10.00	4.000	0.20	8.00		
				cum	1.00	40.00	2.000	0.25	20.00		
				cum	1.00	50.00	3.000	0.20	30.00		
				cum	4.00	30.00	3.600	0.25	108.00		
				cum	2.00	30.00	3.800	0.20	45.60		
				cum	1.00	20.00	3.800	0.25	19.00		
				cum	3.00	30.00	4.000	0.25	90.00		
				cum	2.00	30.00	3.000	0.20	36.00		
				cum	3.00	30.00	3.000	0.25	67.50		

				cum	1.00	28.00	2.000	0.20	11.20		
				cum	1.00	18.50	2.500	0.20	9.25		
				cum	1.00	24.00	2.000	0.25	12.00		
				cum	1.00	16.00	2.000	0.20	6.40		
				cum	1.00	18.50	2.600	0.25	12.03		
				cum	2.00	12.50	2.000	0.30	15.00		
									1021.49	1896.72	1937486.203
										SUB TOTAL=	1937486.20
										TOTAL COST OF WORK IN RS	1937486.20

28.10.21
Junior Engineer
RWD (W) Section, Bibhutipur

28/10/21
Assistant Engineer
RWD (W)Sub Division, Bibhutipur

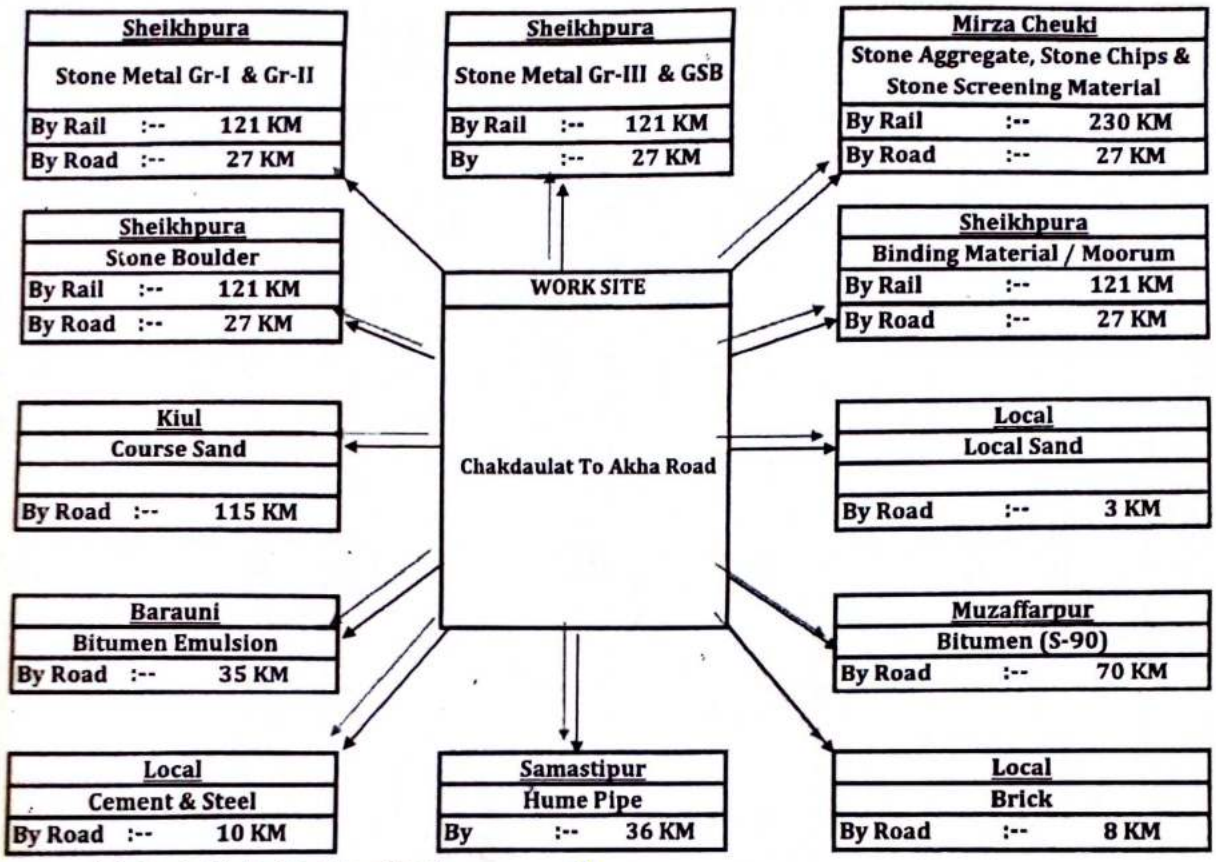
Executive Engineer
RWD, Works Division, Dalsinghsarai

Figure -3 :---

Quarry Map

Name of Road :-- Samartha Chand Surari to Surali
Block :-- Bibhutipur
District :-- Samastipur

Length of the Road:- 10.00 KM



* Subjected to Verification of Lead

28.10.21
J.E

A.E.

E.E

S.E.

Analysis for Carriage by Road & Rail

Sl No	Item with Source	Unit	Source Up to	Carriage Cost & Lead in Km: Pucka / Surface	Carriage Cost & Lead in Km: Katcha	Loading & Unloading Cost	Carriage Cost by Rail Head	Total ₹	Total ₹ Minimum
1	Stone Metal Gr-I & Gr-II (Sheikhpura by Rail 121 Km)	Cum	Sheikhpura	8.00/4.59 x 10.10 x 38.00 Km = Rs 668.93	8.00/4.59 x 24.30 x 0.00 Km = Rs 0.00	105.12	1025.87	Rs. 1799.92	Rs. 1799.92
	Stone Metal Gr-I & Gr-II	Cum	Sheikhpura	8.00/4.59 x 7.94 x 137.00 Km = Rs 1895.91	8.00/4.59 x 19.22 x 0.00 Km = Rs 0.00	210.19		Rs. 2106.10	
2	Stone Metal Gr-III (Sheikhpura by Rail 121 Km)	Cum	Sheikhpura	8.00/4.99 x 10.10 x 38.00 Km = Rs 615.31	8.00/4.99 x 24.30 x 0.00 Km = Rs 0.00	105.12	1128.34	Rs. 1848.77	Rs. 1848.77
	Stone Metal Gr-III	Cum	Sheikhpura	8.00/4.99 x 7.94 x 137.00 Km = Rs 1743.94	8.00/4.99 x 19.22 x 0.00 Km = Rs 0.00	210.19	1128.34	Rs. 3082.47	
3	Stone Aggregate / Chips (Mirza Chowki by Rail 230 Km)	Cum	Sheikhpura	8.00/4.99 x 10.10 x 38.00 Km = Rs 615.31	8.00/4.99 x 24.30 x 0.00 Km = Rs 0.00	105.12	1588.15	Rs. 2308.58	Rs. 2308.58
	Stone Aggregate / Chips	Cum	Sheikhpura	8.00/4.99 x 7.94 x 137.00 Km = Rs 1743.94	8.00/4.99 x 19.22 x 0.00 Km = Rs 0.00	210.19	1588.15	Rs. 3542.28	
4	Stone Boulder (Sheikhpura by. Rail 121 Km)	Cum	Sheikhpura	8.00/4.80 x 10.10 x 38.00 Km = Rs 639.67	8.00/4.80 x 24.30 x 0.00 Km = Rs 0.00	105.12	1159.81	Rs. 1904.60	Rs. 1904.60
	Stone Boulder	Cum	Sheikhpura	8.00/4.80 x 7.94 x 137.00 Km = Rs 1812.97	8.00/4.80 x 19.22 x 0.00 Km = Rs 0.00	210.19	1159.81	Rs. 3182.97	
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 38.00 Km = Rs 511.73	8.00/6.00 x 24.30 x 0.00 Km = Rs 0.00	113.67	851.49	Rs. 1476.89	Rs. 1476.89
	Binding Material/Moorum	Cum	Sheikhpura	8.00/6.00 x 7.94 x 137.00 Km = Rs 1450.37	8.00/6.00 x 19.22 x 0.00 Km = Rs 0.00	66.31	851.49	Rs. 2368.17	
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 82.00 Km = Rs 651.08	8.00/8.00 x 19.22 x 0.00 Km = Rs 0.00	396.98		Rs. 1048.06	Rs. 1048.06
12	Bitumen	MT	Muzaffarpur	8.00/8.00 x 7.94 x 91.00 Km = Rs 722.54	8.00/8.00 x 19.22 x 0.00 Km = Rs 0.00	396.98		Rs. 1119.52	Rs. 1119.52
13	Hume Pipe (1000 mm)	m	Samastipur	8.00/10.00 x 7.94 x 36.00 Km = Rs 228.67	8.00/10.00 x 19.22 x 0.00 Km = Rs 0.00	70.84		Rs. 299.51	Rs. 299.51
14	Hume Pipe (600 mm)	m	Samastipur	8.00/25.00 x 7.94 x 36.00 Km = Rs 91.47	8.00/25.00 x 19.22 x 0.00 Km = Rs 0.00	30.36		Rs. 121.83	Rs. 121.83
15	Hume Pipe (300 mm)	m	Samastipur	8.00/60.00 x 7.94 x 36.00 Km = Rs 38.11	8.00/60.00 x 19.22 x 0.00 Km = Rs 0.00	30.36		Rs. 68.47	Rs. 68.47

Cost of Haulage Excluding Loading & Unloading as per SOR as

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

* Subjected to Verification of Lead

FORM F8

28/10/21
JE
RWD

28/10/21
AE
P.WD

EE
RWD

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 – Pucka / Surface						Katcha					Loading & Unloading		Total
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 Season 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 – Pucka / Surface						Katcha					Loading & Unloading		Total
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 Season 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 915.86
		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				
Loading & Unloading Cost by manual	=			=	Rs 19.40
				= 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 Season 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 Metal Gr-I & Gr-II

Quarry Site to Sheikhpura Railway Yard (By Road)

Carriage Cost & Lead in Km – Pucka / Surface					Katcha					Loading & Unloading		Total
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 Season 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 – Pucka / Surface					Katcha					Loading & Unloading		Total
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 Season 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 915.8[illegible]
		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 Season 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		Total
$\frac{8.00}{4.80}$ x 10.10 x 4.00 Km = Rs 67.33	+	$\frac{8.00}{4.80}$ x 24.30 x 0.00 Km = Rs 0.00	+	Rs 105.12	=	Rs 172.45
UnSurface		$\frac{8.00}{4.80}$ x 12.10 x 1.00 Km			=	Rs 20.17
Loading & Unloading Cost by manual	=		=	Rs 210.19	=	Rs 210.19
				Total	=	Rs 402.81
Less for O.H & C.P = Rs 402.81 / 1.166		= Rs 345.46		Total "A"	=	Rs 345.46

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 Season 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 = 1.667 x Rs 357.57		For 1 MT		"B"	=	Rs 595.94
Gross Cost for Railway freight charge "A" + "B"		For 1 MT				Rs [illegible]
		Add 12% Overhead Charge		= 12%	=	Rs 112.97
		Add 10% Contractor Profit		= 10%	=	Rs 105.44
Carriage Cost from Quarry to Karpurigram Railway Yard		For 1 Cum			=	Rs 1159.81

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		Total
$\frac{8.00}{6.00}$ x 10.10 x 4.00 Km = Rs 53.87	+	$\frac{8.00}{6.00}$ x 24.30 x 0.00 Km = Rs 0.00	+	Rs 66.31	=	Rs 120.18
UnSurface		$\frac{8.00}{6.00}$ x 12.10 x 1.00 Km			=	Rs 16.13
Loading & Unloading Cost by manual	=		=	Rs 113.67	=	Rs 113.67
				Total	=	Rs 249.98
Less for O.H & C.P = Rs 249.98 / 1.166		= Rs 214.39		Total "A"	=	Rs 214.39

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 231.3
Busy Season charge 15% of Railway freight charge	=	For 1 MT		=	15%	= Rs 34.7
Railway Development Charge to 5% of Railway freight Charge		For 1 MT		=	5%	= Rs 11.5
Terminal charge @Rs.40.00 per Terminal per MT		For 1 MT	2	x	Rs 40.00	= Rs 80.0
GST 0 % *(4% included in Overhead Charges) = Rs 357.57 x		0%				= Rs 0.0
Total	=	For 1 MT				= Rs 357.5
Rail Fright = 1.333 x Rs 357.57		For 1 MT			"B"	= Rs 476
Gross Cost for Railway freight charge "A" + "B"		For 1 MT				
		Add 12% Overhead Charge		=	12%	= Rs 82.9
		Add 10% Contractor Profit		=	10%	= Rs 77.4
Carriage Cost from Quarry to Karpurigram Railway Yard		For 1 Cum				= Rs 85

Analysis of Rates (FORMAT F8)

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
			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	hour	0.40	1183.00	473.20
			Empty return trip	hour	0.29	1183.00	343.07
		b)	Overheads @ 12%				**97.95**
		c)	Contractor's profit @ 10% on (a+b)				**91.42**
			Cost for 100 t-km = a+b+c				1005.64
			Rate per cum = (a+b+c) /100				**10.06**
			Rate Per Km.	**Cum**			**10.10**
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	hour	0.50	1183.00	591.50
			Empty return trip	hour	0.33	1183.00	390.39
		b)	Overheads @ 12%				**117.83**
		c)	Contractor's profit @ 10% on (a+b)				**109.97**
			Cost for 100 t-km = a+b+c				1209.69
			Rate per cum = (a+b+c) /100				**12.10**
			Rate Per Km.	**Cum**			**12.10**
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	hour	1.00	1183.00	1183.00
			Empty return trip	hour	0.67	1183.00	792.61
		b)	Overheads @ 12%				**237.07**
		c)	Contractor's profit @ 10% on (a+b)				**221.27**
			Cost for 100 t-km = a+b+c				2433.95
			Rate per cum = (a+b+c) /100				**24.34**
			Rate Per Km.	**Cum**			**24.30**
			Haulage BY TRUCK				
4	1.10	(i)	**Haulage excluding Loading & Unloading**				
			Haulage of materials by tipper excluding cost of loading, unloading and stacking.				

Analysis of Rates (FORMAT F8)

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount
			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	hour	0.40	934.30	373.7
			Empty return trip	hour	0.29	934.30	270.9
		b)	Overheads @ 12%				77.3
		c)	Contractor's profit @ 10% on (a+b)				72.2
			Cost for 100 t-km = a+b+c				794.2
			Rate per cum = (a+b+c) /100				7.9
			Rate Per Km.	**Cum**			7.9
5	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**				
			Truck 10 t capacity				
			Haulage with load	hour	0.50	934.30	467
			Empty return trip	hour	0.33	934.30	308
		b)	Overheads @ 12%				93
		c)	Contractor's profit @ 10% on (a+b)				86
			Cost for 100 t-km = a+b+c				955
			Rate per cum = (a+b+c) /100				9
			Rate Per Km.	**Cum**			9
6	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**				
			Truck 10 t capacity				
			Haulage with load	hour	1.00	934.30	934
			Empty return trip	hour	0.67	934.30	625
		b)	Overheads @ 12%				187
		c)	Contractor's profit @ 10% on (a+b)				174
			Cost for 100 t-km = a+b+c				1922
			Rate per cum = (a+b+c) /100				19
			Rate Per Km.	**Cum**			19
7	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				
			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**		
			a) Machinery				
			Tipper 5.5 tonnes capacity	hour	0.33	1183.00	39
			Front end-loader 1 cum bucket capacity @ 25 cum/hour	hour	0.33	1403.00	46
			Overheads @ 12%				10

Analysis of Rates (FORMAT F8)

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
							95.58
			c) Contractor's profit @ 10% on (a+b)				1051.36
			Cost for 5.5 cum = a+b+c				191.16
			Rate per cum = (a+b+c)/ 5.5			say	191.20
			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	35.31
			Mazdoor for loading and unloading	day	0.75	304.00	228.00
			b) **Machinery**				
			Tipper 5.5 tonne capacity	hour	0.75	1183.00	887.25
			Overheads @ 12%				138.07
							128.86
			d) Contractor's profit @ 10% on (a+b+c)				1417.49
			Cost for5.5 cum = a+b+c+d				257.73
			Rate per cum = (a+b+c+d)/5.5			say	257.75
			Unloading will be by tipping.				
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	25.68
			Mazdoor for loading and unloading	day	2.00	304.00	608.00
			b) **Machinery**				
			Truck 10 tonne capacity	hour	2.00	934.30	1868.60
			Overheads @ 12%				300.27
							280.26
			d) Contractor's profit @ 10% on (a+b+c)				3082.81
			Cost for10 tonnes = a+b+c+d				308.28
			Rate per tonnes = (a+b+c+d)/10			say	308.30
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	6.42
			Mazdoor (Unskilled)	day	0.50	304.00	152.00
		b)	**Machinery**				
			Truck	hour	0.50	934.30	467.15
		c)	Overheads @ 12%				75.07
		d)	Contractor's profit @ 10% on (a+b+c)				70.06
			Cost for 5.5 cum = a+b+c+d				770.70
			Rate per cum = (a+b+c+d) /5.5				140.13
			Total Cost	Cum			140.13
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	3.21
			Mazdoor (Unskilled)	day	0.25	304.00	76.00
		b)	**Machinery**				
			Truck	hour	0.25	934.30	233.58
		c)	Overheads @ 12%				37.53
		d)	Contractor's profit @ 10% on (a+b+c)				35.03
			Cost for 5.5 cum = a+b+c+d				385.35
			Rate per cum = (a+b+c+d) /5.5				70.06
			Total Cost	Cum			70.06
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				
			Unit = cum				
			Taking output = 5.5 cum				
		a)	**Labour**				
			Mate	day	0.01	321.00	3.21

Analysis of Rates (FORMAT F8)

Sl. No.	SDB Sl. No.	MORD Ref. No.	DESCRIPTION	Unit	Quantity	Rate
			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		
			Total Loding & Unloading of Stone Aggregate	Cum	= 140.18 + 70.06 =	
13		(iv)	Unloading 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	0.13	304.00
		b)	**Machinery**			
			Truck	hour	0.17	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		
			Total Loding & Unloading of Sand / Moorum	Cum	= 70.06 + 43.61 =	
14	1.3		**Loading, Unloading and Stacking of Bricks by Manual Means**			
		(i)	Loading of Bricks by manual means including a lead upto 30 m			
			Unit = 1000 Nos.			
			Taking output = 2000 Nos.			
		a)	**Labour**			
			Mate	day	0.01	321.00
			Mazdoor (Unskilled)	day	0.25	304.00
		b)	**Machinery**			
			Truck	hour	0.33	934.30
		c)	Overheads @ 12%			
		d)	Contractor's profit @ 10% on (a+b+c)			
			Cost for 2000 Nos. = a+b+c+d			
			Rate for 1000 bricks = (a+b+c+d)/2			
			Total Cost	no.		
15		(ii)	Unloading and Stacking of Bricks by manual means including a lead upto 30 m			
			Unit = 1000 Nos.			
			Taking output = 2000 Nos.			
		a)	**Labour**			
			Mate	day	0.01	321.00
			Mazdoor (Unskilled)	day	0.25	304.00
		b)	**Machinery**			
			Truck	hour	0.33	934.30
		c)	Overheads @ 12%			
		d)	Contractor's profit @ 10% on (a+b+c)			
			Cost for 2000 Nos. = a+b+c+d			
			Rate for 1000 bricks = (a+b+c+d)/2			
			Total Cost	no.		
			Total Loding & Unloading of Brick Per 1000		= 238.72 + 238.72 =	
16			**Loading and Unloading of Cement by Manual Means**			
		(i)	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

Analysis of Rates (FORMAT F8)

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
		b)	**Machinery**				
			Truck	hour	1.00	934.30	934.30
		c)	Overheads @ 12%				**169.15**
		d)	Contractor's profit @ 10% on (a+b+c)				**157.87**
			Cost for 10 t = a+b+c+d				1736.58
			Rate per tonnes = (a+b+c+d)/10				**173.66**
			Total Cost Including	t			173.66
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	19.26
			Mazdoor (Unskilled)	day	1.50	304.00	456.00
		b)	**Machinery**				
			Truck	hour	1.00	934.30	934.30
		c)	Overheads @ 12%				**169.15**
		d)	Contractor's profit @ 10% on (a+b+c)				**157.87**
			Cost for 10 t = a+b+c+d				1736.58
			Rate per tonne = (a+b+c+d)/10				**173.66**
			Total Cost	t			173.66
			Total Loding & Unloading of Cement	t	= 173.66 + 173.66 =		347.32
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	22.47
			Mazdoor (Unskilled)	day	1.80	304.00	547.20
		b)	**Machinery**				
			Truck	hour	1.00	934.30	934.30
		c)	Overheads @ 12%				**180.48**
		d)	Contractor's profit @ 10% on (a+b+c)				**168.44**
			Cost for 10 t = a+b+c+d				1852.89
			Rate per tonnes = (a+b+c+d)/10				**185.29**
			Total Cost	t			185.29
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	22.47
			Mazdoor (Unskilled)	day	1.80	304.00	547.20
		b)	**Machinery**				
			Truck	hour	1.00	934.30	934.30
		c)	Overheads @ 12%				**180.48**
		d)	Contractor's profit @ 10% on (a+b+c)				**168.44**
			Cost for 10 t = a+b+c+d				1852.89
			Rate per t = (a+b+c+d)/10				**185.29**
			Total Cost	t			185.29
			Total Loding & Unloading of Steel	t	= 185.29 + 185.29 =		370.58
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

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount
			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
22	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%				92.0[illegible]
		d)	Contractor's profit @ 10% on (a+b+c)				85.8[illegible]
			Cost for 9 pipes = a+b+c+d				944.5[illegible]
			Rate per pipe = (a+b+c+d)/9				104.9[illegible]
			Total Cost	per p			104.9[illegible]
23		C.	**600/450 mm dia Hume pipe**				
			Unit = per pipe				
			Taking output = 21 pipe				
		a)	**Labour**				
			Mate	day	0.02	321.00	
			Mazdoor (Unskilled)	day	0.50	304.00	
		b)	**Machinery**				
			Truck	hour	0.33	934.30	
			Crane	hour	0.33	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			
24		(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				
		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 =*		

Analysis of Rates (FORMAT F8)

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
25		C.	**600/450 mm dia Hume pipe**				
			Unit = per pipe				
			Taking output = 21 pipes				
		a)	**Labour**				
			Mate	day	0.02	321.00	6.42
			Mazdoor (Unskilled)	day	0.50	304.00	152.00
		b)	**Machinery**				
			Truck	hour	0.20	934.30	186.86
			Crane	hour	0.20	909.00	181.80
		c)	Overheads @ 12%				63.25
		d)	Contractor's profit @ 10% on (a+b+c)				59.03
			Cost for 21 pipes = a+b+c+d				649.36
			Rate per pipe = (a+b+c+d)/21				30.92
			Total Cost	per p			30.92
			Total Loding & Unloading of RCC Hume Pipe	per Pipe	= 44.98 + 30.92 =		75.90
			Total Loding & Unloading of RCC Hume Pipe	m	= 75.9 / 2.50 =		30.36
26	1.16	100	**Setting Out Pillars**				
			Unit = 1 No.				
			Analysis of rates per pillar shall account for following :				
			Typical Benchmark 1 no. as per Dwg no. 200.1				
			of MORD Data Book (Page 1-18)				
			The rate analysis for a typical benchmark as per dwg.				
			1. Excavation	cum	0.33	334.58	108.74
			2. P.C.C. grade M 10	cum	0.10	6681.46	668.15
			3. Brick Masonry in CM 1:4	cum	0.48	6237.17	2962.66
			4. Plastering with CM 1:4 , 15 mm thick cement plaster on Brick work.	sqm	2.63	216.63	569.74
			Add 5 per cent cost of items No.1 to 4 for white washing,				215.46
			Sub Total	NO			4524.74
			A Total 6 Nos. of Pillars required for 1 Km.	NO	6.00	4524.74	27148.44
27	1.16	100	**Setting Out Pillars**				
			Unit = 1 No.				
			Analysis of rates per pillar shall account for following :				
			Reference Pillar 1 no. as per Dwg no. 200.2				
			of MORD Data Book (Page 1-18)				
			The rate analysis for a typical benchmark as per dwg.				
			1. Excavation	cum	0.192	334.58	64.24
			2. P.C.C. grade M 10	cum	0.060	6681.46	400.89
			3. Brick Masonry in CM 1:4	cum	0.193	6237.17	1203.77
			4. Plastering with CM 1:4 , 15 mm thick cement plaster on Brick work.	sqm	1.50	216.63	324.95
			Add 5 per cent cost of items No.1 to 4 for white washing,				99.69
			Sub Total	NO			2093.54
			B Total 2 Nos. of reference pillars required for 1 Km.	NO	2.00	2093.54	4187.08
			Cost of Setting out	Km	A + B		31335.52
			Total Cost	Km			31335.52
26	OLD SOR		**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.**				
	8.1.3.2 (iii)		**Unit = cum**				
			Assuming- 2.832 Cum				
		a)	**Labour (Unskilled)**				
			i) Carrying,spreading,laying & Packing	nos	1.50	304.00	456.00
			ii) Compaction brick bats with C.I. Hammer.	nos	0.67	304.00	203.68
			iii) Brick Bat	Cum	2.83	1063.00	3010.42
			iv) Local Sand	Cum	0.63	141.85	89.65
			Over Heads @ 12 % on (a+b+c)				451.17
			C. Profit @ 10 % on (a+b+c+d)				421.09
		d)	**Cost for 2.832 cum = a+b+c+d**				4632.01
			Rate Per cum=(a+b+c+d)/2.832	cum			1635.60
		e)	***CARRIAGE***				
			Carriage for Brick (1 cum Bats = 300 nos Bricks)	nos	0.300	776.64	233.10
			Rate per cum with carriage				1868.70
			Total Cost	CUM			1,868.70

Analysis of Rates (FORMAT F8)

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
27	5.7.6		Labour for cutting 62 mm to 75 mm dia bamboo piles to size and making shoes and driving etc complete job as per specification and direction of E/I.				
			Unit = Per M				
			Taking Out put = 10 Joint				
			(Assuming 10 Joints)				
		a)	Materials				
			Nut And Bolts 16 mm Dia 225mm Long With Washer etc.	nos	20.00	32.88	657.60
		b)	Laber				
			Carpenter Grll	nos	0.50	408.00	204.00
			Unskilled Mazdoor	nos	0.25	304.00	76.00
		c)	Overheads @ 12%				112.51
		d)	Contractor's profit @ 10% on (a+b+c+d)				105.01
		e)	Rate Per cum=(a+b+c+d)/10	Per M			115.51
			Total Cost	Per M			115.51
28	5.7.7		Labour for cutting 62 mm to 75 mm dia bamboo piles to size and making shoes and driving etc complete job as per specification and direction of E/I.				
			Unit = Per M				
			Taking Out put = 30.50 M				
			(Assuming 20 nos, Pile Sunk 1.525 Mtr Deep)				
		b)	Laber				
			Carpenter Grll	nos	0.25	408.00	102.00
			Unskilled Mazdoor	nos	2.50	304.00	760.00
		c)	Overheads @ 12%				103.44
		d)	Contractor's profit @ 10% on (a+b+c+d)				96.54
		e)	Rate Per cum=(a+b+c+d)/30.5	Per M			34.82
			Total Cost	Per M			34.82
29	5.7.8		Labour for fitting and fixing split bamboo woven chachari inn position with 20 swg G.I. wire or 75 mm to 100 mm long nails alternatively including cost of G.I. wire or nails complete job as per specification and direction of E/I.				
			Unit = Per M				
			Taking Out put = 9.30 M				
			(Assuming 20 nos, Pile Sunk 1.525 Mtr Deep)				
		a)	Materials				
			75 mm To 100 mm Lon Nails	Kg	0.25	61.74	15.44
		b)	Laber				
			Carpenter Grll	nos	1.00	408.00	408.00
			Unskilled Mazdoor	nos	1.00	304.00	304.00
		c)	Overheads @ 12%				87.2
		d)	Contractor's profit @ 10% on (a+b+c+d)				81.4
		e)	Rate Per cum=(a+b+c+d)/9.30	Per M			96.3
			Total Cost	Per M			96.3
30	5.7.9		Labour for fitting and fixing 62 mm to 75 mm dia bamboo runers in position at every vertiacal pile with 150 mm long nails or 38 swg G.I wire including cost of G.I wire or nails complete job as per specification and direction of E/I.				
			Unit = Per M				
			Taking Out put = 30.50 M				
		a)	Materials				
			75mm To 100 mm Lon Nails	Kg	0.25	61.74	15.44
		b)	Laber				
			Carpenter Grll	nos	0.125	408.00	51.00
			Unskilled Mazdoor	nos	0.250	304.00	76.00
		c)	Overheads @ 12%				17.0
		d)	Contractor's profit @ 10% on (a+b+c+d)				15.9
		e)	Rate Per cum=(a+b+c+d)/30.5	Per M			5.
			Total Cost	Per M			[illegible]

Analysis of Rates (FORMAT F8)

Sl. No.	SDB Sl. No.	MORD Ref.No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
35	4.10	401	**Granular Sub-base with Well Graded Material (Table 400.1)**				
			(By mix in place method) For Grading II Material				
			Construction of granular sub-base by providing well graded material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with smooth wheel roller to achieve the desired density, complete as per Technical Specification Clause 401.				
		(ii)	**For Grading II Material**				
			Unit = cum				
			Taking output = 300 cum				
		a)	**Labour**				
			Mate	day	0.48	321.00	154.08
			Mazdoor (Skilled)	day	2.00	385.00	770.00
			Mazdoor (Unskilled)	day	10.00	304.00	3040.00
		b)	**Machinery**				
			Tractar mounted grader arrangement for grading @ 100 cum per hou	hour	12.00	573.20	6878.40
			Three wheel 80-100 kN static roller @ 10 cum per hour	hour	30.00	803.00	24090.00
			Tractor with Rotavator 25 cum per hour	hour	12.00	629.00	7548.00
			Water tanker 6 kl capacity	hour	5.00	907.00	4535.00
		c)	**Material**				
			Well graded granular sub-base material as per Table 400.1				
			26.5 mm to 9.5 mm @ 35 per cent	cum	134.40	595.36	80016.38
			9.5 mm to 2.36 mm @ 25 per cent	cum	96.00	506.92	48664.32
			2.36 mm below @ 40 per cent - Local Sand	cum	153.60	141.85	21788.16
			Water	kl	30.00	40.00	1200.00
		d)	Overheads @ 12%				23842.12
		e)	Contractor's profit @ 10% on (a+b+c+d)				22252.65
			Cost of GSB for 300 cum				**244779.11**
			A) Cost of GSB without carriage per cum	**cum**			**815.93**
		f)	***CARRIAGE***				
			Carriage for GSB material	Cum	0.768	1670.65	1283.06
			Carriage for material below 2.36 mm (Local Sand)	Cum	0.512	185.01	94.73
			Rate per cum with carriage				**2193.71**
			Total Cost	**CUM**			**2193.71**

28/10/21