



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

2021-22

FLOOD DAMAGED REPORT



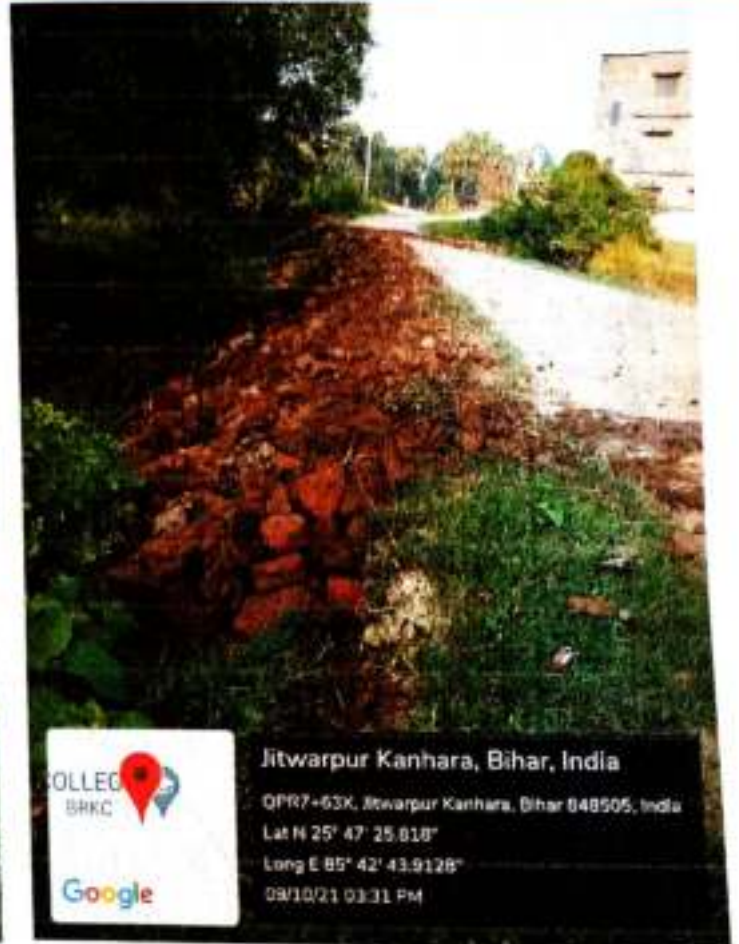
Repair of L052 to Jitwarpur

DISTRICT	:-	Samastipur	
DIVISION	:-	Dalsingh Sarai	
BLOCK	:-	Sardar Sarai	
TOTAL LENGTH OF ROAD	:-	0.81 KM	
TOTAL COST OF PROJECT	:-	2.60	Lac

Site Photograph

me of Road:- L052 NH to Jitwarpur

Block-Sarairanjan



Handwritten signature and date: 20/10/21

Handwritten signature and date: 30/10/21

SUMMARY OF COST ESTIMAT FOR THE PROJECT

ME OF ROAD :- Repair of L052 to Jitwarpur

RICT

SAMASTIPUR

CK

30/10/21

S.NO	DESCRIPTION	AMOUNT LAKH
1	E/W	70381.000
2	BRICK BAT	160181.000
	SUB TOTAL:-	230562.000
	12% GST on Total Amount:-	27667.440
	SUB TOTAL:-	2305.620
	Total Cost (including GST and Labour Cess	260535.000

30/10/2021
Junior Engineer

30/10/21
Assistant Engineer

Executive Engineer

RWD, Works Division, Dalsinghsarai

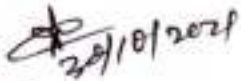
FDR
YEAR (2021-2022)
GENERAL ABSTRACT OF COST

BOOK :- Dalsingh Sarai

DISTRICT :- SAMASTIPUR

NAME OF ROAD :- Repair of L052 to Jitwarpur

Sl. No.	ITEM OF WORK						AMOUNT	
	TOTAL COST OF CONSTRUCTION					:-	Rs.	260535
					SUB TOTAL	:-	Rs.	260535


29/10/2021

Junior Engineer


30/10/21

Assistant Engineer

Executive Engineer
RWD, Works Division,
Dalsinghsarai

Figure -3

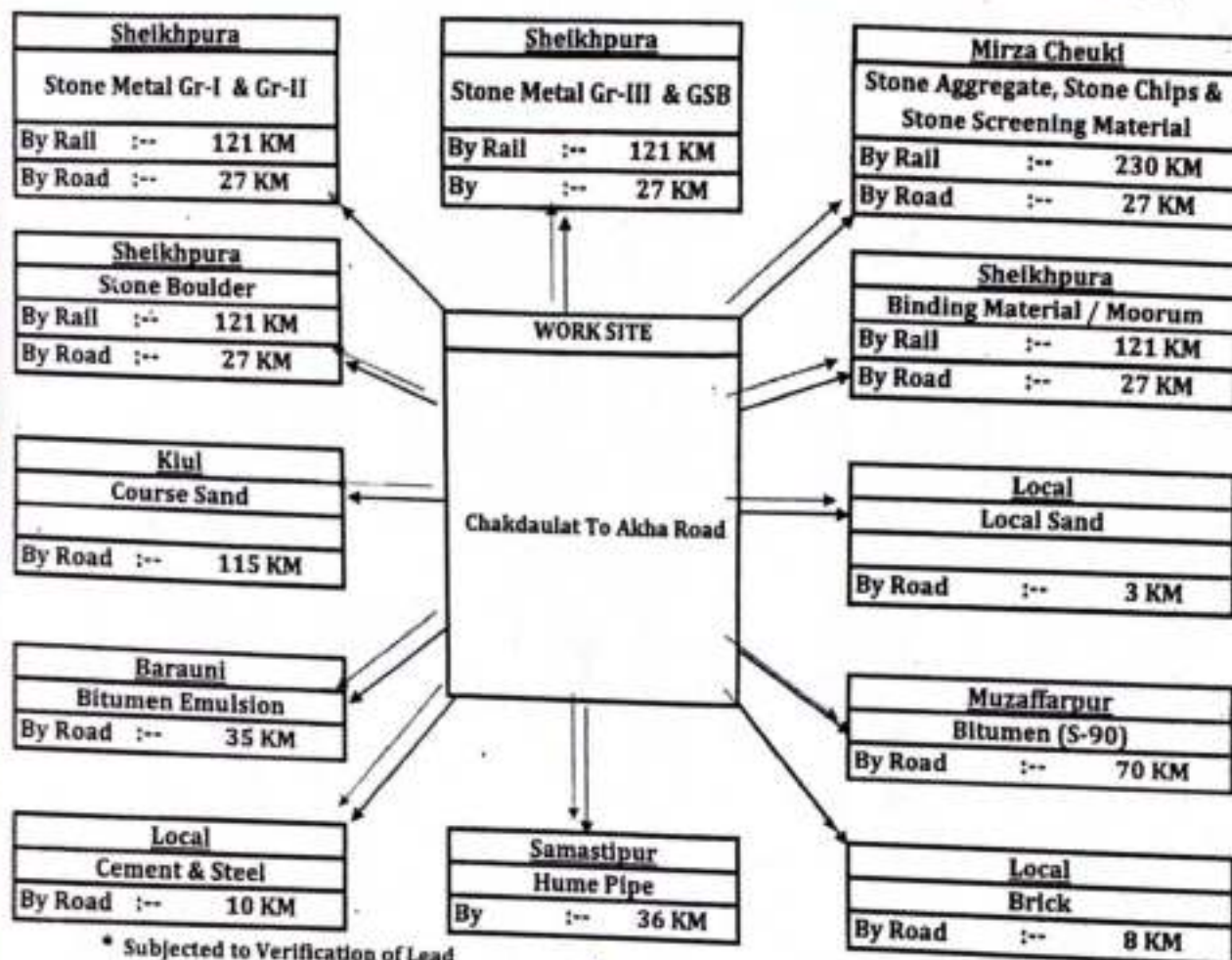
Quarry Map

Name of Road :- Repair of Bridge L052 to Jitwarpur

Block :-

District :- Samastipur

Length of the Road:- 0.061 KM



J.E

A.E

E.E

S.E.

Sl No	Item with Source	Unit	Source Up to	Pukka / Surface		Kachha		Loading & Unloading Cost	Cartage Cost by Rail (Total)	Total ₹	Typical Minimum
1	Stone Metal Gr-I & Gr-II (Sheikhpura by Rail 121 Km)	Cum	Sheikhpura	8.00 x 10.10	Rs 640.93	8.00 x 24.30	Rs 0.00	105.12	1025.87	Rs. 1799.92	Rs. 1799.92
				4.59		4.59					
2	Stone Metal Gr-I & Gr-II (Sheikhpura by Rail 121 Km)	Cum	Sheikhpura	8.00 x 7.94	Rs 1895.91	8.00 x 19.22	Rs 0.00	210.19		Rs. 2106.10	
				4.59		4.59					
3	Stone Metal Gr-III (Mirza Chowki by Rail 230 Km)	Cum	Sheikhpura	8.00 x 10.10	Rs 615.31	8.00 x 24.30	Rs 0.00	105.12	1128.34	Rs. 1848.77	Rs. 1848.77
				4.99		4.99					
4	Stone Aggregate / Chips (Mirza Chowki by Rail 230 Km)	Cum	Sheikhpura	8.00 x 7.94	Rs 1743.94	8.00 x 19.22	Rs 0.00	210.19	1128.34	Rs. 3082.47	
				4.99		4.99					
5	Stone Aggregate / Chips (Sheikhpura by Rail 121 Km)	Cum	Sheikhpura	8.00 x 10.10	Rs 639.67	8.00 x 24.30	Rs 0.00	105.12	1588.15	Rs. 2308.58	Rs. 2308.58
				4.80		4.80					
6	Stone Boulder (Sheikhpura by Rail 121 Km)	Cum	Sheikhpura	8.00 x 7.94	Rs 1812.97	8.00 x 19.22	Rs 0.00	210.19	1159.81	Rs. 1904.60	Rs. 1904.60
				4.80		4.80					
7	Course Sand	Cum	Khal	8.00 x 7.94	Rs 2647.73	8.00 x 19.22	Rs 0.00	113.67		Rs. 2761.40	Rs. 2761.40
				4.99		4.99					
8	Binding Material/Moonrum (Sheikhpura by Rail 121 Km)	Cum	Sheikhpura	8.00 x 10.10	Rs 511.73	8.00 x 24.30	Rs 0.00	113.67	851.49	Rs. 1476.89	Rs. 1476.89
				6.00		6.00					
9	Binding Material/Moonrum	Cum	Sheikhpura	8.00 x 7.94	Rs 1450.37	8.00 x 19.22	Rs 0.00	66.31	851.49	Rs. 2368.17	
				4.00		4.00					
10	Local Sand	Cum	Local	8.00 x 10.10	Rs 32.38	8.00 x 24.30	Rs 0.00	113.67		Rs. 185.01	Rs. 185.01
				4.99		4.99					
11	Brick	1000 Nos	Local	8.00 x 7.94	Rs 222.32	8.00 x 19.22	Rs 0.00	477.44		Rs. 776.64	Rs. 776.64
				2.00		2.00					
12	Cement	MT	Local	8.00 x 7.94	Rs 79.40	8.00 x 19.22	Rs 0.00	347.32		Rs. 426.72	Rs. 426.72
				8.00		8.00					
13	Steel	MT	Local	8.00 x 7.94	Rs 79.40	8.00 x 19.22	Rs 0.00	370.58		Rs. 449.98	Rs. 449.98
				8.00		8.00					
14	Bitumen Emulsion	MT	Barani	8.00 x 7.94	Rs 651.08	8.00 x 19.22	Rs 0.00	396.98		Rs. 1048.06	Rs. 1048.06
				8.00		8.00					
15	Bitumen	MT	Muzaffarpur	8.00 x 7.94	Rs 722.54	8.00 x 19.22	Rs 0.00	396.98		Rs. 1119.52	Rs. 1119.52
				8.00		8.00					
16	Hume Pipe (1000 mm)	m	Samastipur	8.00 x 7.94	Rs 228.67	8.00 x 19.22	Rs 0.00	70.84		Rs. 299.51	Rs. 299.51
				10.00		10.00					
17	Hume Pipe (600 mm)	m	Samastipur	8.00 x 7.94	Rs 91.47	8.00 x 19.22	Rs 0.00	30.36		Rs. 121.83	Rs. 121.83
				25.00		25.00					
18	Hume Pipe (300 mm)	m	Samastipur	8.00 x 7.94	Rs 38.11	8.00 x 19.22	Rs 0.00	30.36		Rs. 68.47	Rs. 68.47
				60.00		60.00					

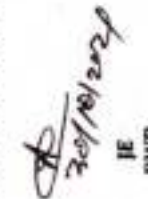
FORM F8

* 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



 30/10/21



 30/10/21

EE
RWDAE
PWDJE
RWD

Analysis of Rates (FORMAT F8)

Sl. No.	Particulars	Unit	Quantity	Rate	Amount
HAULAGE BY TIPPER					
1.10	(i) Haulage excluding Loading & Unloading Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = tkm Taking output 10 t load and lead 10 km = 100 tkm 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 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	hour hour	0.40 0.29	1183.00 1183.00	473.20 343.07 97.95 91.42 1005.64 10.06
	Rate Per Km	Cum			107.10
1.10	(ii) Haulage excluding Loading & Unloading Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = tkm Taking output 10 t load and lead 10 km = 100 tkm 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 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	hour hour	0.50 0.33	1183.00 1183.00	591.50 390.39 117.83 109.97 1209.69 12.10
	Rate Per Km	Cum			10.20
1.10	(iii) Haulage excluding Loading & Unloading Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = tkm Taking output 10 t load and lead 10 km = 100 tkm 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 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	hour hour	1.00 0.67	1183.00 1183.00	1183.00 792.61 237.07 221.27 2433.95 24.34
	Rate Per Km	Cum			24.30
HAULAGE BY TRUCK					
1.10	(i) Haulage excluding Loading & Unloading Haulage of materials by tipper excluding cost of loading, unloading and stacking.				

Analysis of Rates (FORMAT F8)

Sr. No.	DDMMYY	MOORE	DESCRIPTION	Unit	Quantity	Rate	Amount
			Unit = tkm Taking output 10 t load and lead 10 km = 100 tkm 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 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	hour hour	0.40 0.29	934.30 934.30	37 27 7 7 79
5	1.10	(II)	Haulage excluding Loading & Unloading Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = tkm Taking output 10 t load and lead 10 km = 100 tkm 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 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	hour hour	0.50 0.33	934.30 934.30	46 30 9 8 95
6	1.10	(III)	Haulage excluding Loading & Unloading Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = tkm Taking output 10 t load and lead 10 km = 100 tkm 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 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	hour hour	1.00 0.67	934.30 934.30	93 62 187 174 1922
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 ii) Loading by front end loader 1 cum bucket capacity @ 25 cum per hour iii) Maneuvering, reversing, dumping and turning for return iv) Waiting time, unforeseen contingencies etc Total a) Machinery Tipper 5.5 tonnes capacity Front end-loader 1 cum bucket capacity @ 25 cum/hour Overheads @ 12%	hour hour	0.33 0.93	1183.00 1403.00	89 44 10

Analysis of Rates (FORMAT F8)

ITEM NO.		DESCRIPTION	UNIT	MANPOWER	MATERIAL	MECHANICAL	RATE
		c) Contractor's profit @ 10% on (a+b) Cost for 5.5 cum = a+b+c Rate per cum = (a+b+c) / 5.5					95.58 1051.36 191.16
1.20	RCD	Unloading will be by tipper Loading and Unloading of Boulders by Manual Means Unit = cum Taking output = 5.5 cum a) Labour Mate Mazdoor for loading and unloading b) Machinery Tipper 5.5 tonne capacity 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	day day hour	0.11 0.75 0.75	321.00 304.00 1183.00		35.31 228.00 887.25 138.07 128.86 1417.49 257.73
1.30	RCD	Unloading will be by tipper Loading and Unloading of Cement or Steel by Manual Means and Unit = tonne Taking output = 10 tonnes a) Labour Mate Mazdoor for loading and unloading b) Machinery Truck 10 tonne capacity Overheads @ 12% d) Contractor's profit @ 10% on (a+b+c) Cost for 10 tonnes = a+b+c+d Rate per tonnes = (a+b+c+d) / 10	day day hour	0.08 2.00 2.00	321.00 304.00 934.30		25.68 608.00 1868.60 300.27 280.26 3082.81 308.28
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 Mazdoor (Unskilled) b) Machinery Truck 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	day day hour	0.02 0.50 0.50	321.00 304.00 934.30		6.42 152.00 467.15 75.07 70.06 770.70 140.13
	(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 Mazdoor (Unskilled) b) Machinery Truck 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	day day hour	0.01 0.25 0.25	321.00 304.00 934.30		3.21 76.00 233.58 37.53 35.03 385.35 70.06
	(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.	Particulars	Unit	Quantity	Rate	Amount
	Mazdoor (Unskilled)	day	0.25	304.00	76.00
	Machinery	hour	0.25	934.30	233.58
	Truck				37.50
	Overheads @ 12%				35.89
	Contractor's profit @ 10% on (a+b+c)				385.30
	Cost for 5.5 cum = a+b+c+d				70.00
	Rate per cum = (a+b+c+d) / 5.5				12.73
	Total Cost				12.73
	Rate per cum				12.73
	Grand Total				12.73
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	day	0.01	321.00	1.61
	Mate	day	0.13	304.00	39.52
	Mazdoor (Unskilled)				
	b) Machinery	hour	0.17	934.30	158.83
	Truck				23.30
	Overheads @ 12%				21.87
	Contractor's profit @ 10% on (a+b+c)				239.87
	Cost for 5.5 cum = a+b+c+d				43.60
	Rate per cum = (a+b+c+d) / 5.5				7.93
	Total Cost				7.93
	Rate per cum				7.93
	Grand Total				7.93
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	day	0.01	321.00	3.21
	Mate	day	0.25	304.00	76.00
	Mazdoor (Unskilled)				
	b) Machinery	hour	0.33	934.30	308.31
	Truck				46.50
	Overheads @ 12%				43.60
	Contractor's profit @ 10% on (a+b+c)				477.62
	Cost for 2000 Nos. = a+b+c+d				238.32
	Rate for 1000 bricks = (a+b+c+d) / 2				119.16
	Total Cost				119.16
	Rate per 1000 bricks				119.16
	Grand Total				119.16
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	day	0.01	321.00	3.21
	Mate	day	0.25	304.00	76.00
	Mazdoor (Unskilled)				
	b) Machinery	hour	0.33	934.30	308.31
	Truck				46.50
	Overheads @ 12%				43.60
	Contractor's profit @ 10% on (a+b+c)				477.62
	Cost for 2000 Nos. = a+b+c+d				238.32
	Rate for 1000 bricks = (a+b+c+d) / 2				119.16
	Total Cost				119.16
	Rate per 1000 bricks				119.16
	Grand Total				119.16
16	(i) Loading and Unloading of Cement by Manual Means Unit = t Taking output = 10 t				
	a) Labour	day	0.06	321.00	19.26
	Mate	day	1.50	304.00	456.00
	Mazdoor (Unskilled)				
	Total Cost				475.26
	Rate per 10 t				47.53
	Grand Total				47.53

Analysis of Rates (FORMAT F8)

		b)	Machinery		
		c)	Truck		
		d)	Overheads @ 12%	hour	1.00
			Contractor's profit @ 10% on (a+b+c)		934.30
			Cost for 10 t = a+b+c+d		169.15
			Rate per tonnes = (a+b+c+d)/10		157.87
					1736.58
					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		
		b)	Mazdoor (Unskilled)	day	0.06
			Machinery	day	1.50
			Truck		321.00
		c)	Overheads @ 12%		304.00
		d)	Contractor's profit @ 10% on (a+b+c)	hour	1.00
			Cost for 10 t = a+b+c+d		934.30
			Rate per tonne = (a+b+c+d)/10		169.15
					157.87
					1736.58
					173.66
18	1.5		Total Loading & Unloading of Cement		173.66
		(i)	Loading and Unloading of Structural Steel and Steel Bars by manual means		
			Unit = t		
			Taking output = 10 t		
		a)	Labour		
			Mate		
		b)	Mazdoor (Unskilled)	day	0.07
			Machinery	day	1.80
			Truck		321.00
		c)	Overheads @ 12%		304.00
		d)	Contractor's profit @ 10% on (a+b+c)	hour	1.00
			Cost for 10 t = a+b+c+d		934.30
			Rate per tonnes = (a+b+c+d)/10		180.48
					168.44
					1852.89
					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		
		b)	Mazdoor (Unskilled)	day	0.07
			Machinery	day	1.80
			Truck		321.00
		c)	Overheads @ 12%		304.00
		d)	Contractor's profit @ 10% on (a+b+c)	hour	1.00
			Cost for 10 t = a+b+c+d		934.30
			Rate per t = (a+b+c+d)/10		180.48
					168.44
					1852.89
					185.29
			Total Loading & Unloading of Steel		185.29
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	day	0.06
			Mate	day	1.60
			Mazdoor (Unskilled)		321.00
		b)	Machinery		304.00
			Truck	hour	1.25
		c)	Overheads @ 12%		934.30
		d)	Contractor's profit @ 10% on (a+b+c)		1167.88
			Cost for 10 t = a+b+c+d		200.82
					187.44
					2061.80

Analysis of Rates (FORMAT F8)

Sl. No.	Particulars	Unit	Quantity	Rate	Total Cost
	Rate per tonnes = (a+b+c+d)/10				
21	(II) Unloading of Bitumen Drums by Manual Means including a lead upto 30 m Unit = t Taking output = 10 t				
	a) Labour	day	0.05	321.00	
	Mate	day	1.20	304.00	
	b) Machinery	hour	1.25	934.30	
	Truck				
	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				
	Note :- The rate is inclusive of the self weight of drum				
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	day	0.02	321.00	
	Mate	day	0.50	304.00	
	b) Machinery	hour	0.33	934.30	
	Truck	hour	0.33	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				
23	C. 600/450 mm dia Hume pipe Unit = per pipe Taking output = 21 pipe				
	a) Labour	day	0.02	321.00	
	Mate	day	0.50	304.00	
	b) Machinery	hour	0.33	934.30	
	Truck	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				
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	day	0.02	321.00	
	Mate	day	0.50	304.00	
	b) Machinery	hour	0.20	934.30	
	Truck	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				

Analysis of Rates (FORMAT F8)

Sl. No.	MORD	Description	Unit	Quantity	Rate	Amount
C		600/450 mm dia Hume pipe Unit = per pipe Taking output = 21 pipes				
a)		Labour				
		Mate				
b)		Mazdoor (Unskilled)	day	0.02	321.00	6.42
		Machinery	day	0.50	304.00	152.00
		Truck				
		Crane				
c)		Overheads @ 12%	hour	0.20	934.30	186.86
d)		Contractor's profit @ 10% on (a+b+c)	hour	0.20	909.00	181.80
		Cost for 21 pipes = a+b+c+d				63.25
		Rate per pipe = (a+b+c+d)/21				59.03
						649.36
						30.92
						10.92
						759.0
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 2. P.C.C. grade M 10 3. Brick Masonry in CM 1:4 4. Plastering with CM 1:4, 15 mm thick cement plaster on Brick work. Add 5 per cent cost of items No.1 to 4 for white washing.	cum cum cum sqm	0.33 0.10 0.48 2.63	334.58 6681.46 6237.17 216.63	108.74 668.15 2962.66 569.74
		Sub Total	NO			215.46
						4524.74
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 2. P.C.C. grade M 10 3. Brick Masonry in CM 1:4 4. Plastering with CM 1:4, 15 mm thick cement plaster on Brick work. Add 5 per cent cost of items No.1 to 4 for white washing.	cum cum cum sqm	0.192 0.060 0.193 1.50	334.58 6681.46 6237.17 216.63	64.24 400.89 1203.77 324.95
		Sub Total	NO			99.69
						2093.54
						1870.8
						3183.52
						3183.52
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,royalty etc.all complete job as per specification and direction of E/I including carriage cost of bricks.				
1.132	(100)	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
e)		Rate Per cum=(a+b+c+d)/2.832	cum			1635.60
		<u>CARRIAGE</u>				
		Carriage for Brick (1 cum Bats = 300 nos Bricks)	nos	0.300	776.64	233.10
		Rate per cum with carriage				1868.70
						1868.70

Analysis of Rates (FORMAT F8)

Sl. No.	Particulars	Unit	Quantity	Rate	Amount
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/L.			
		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 Gril	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)					115.51
		Rate Per cum=(a+b+c+d)/10 Per M			
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/L.			
		Unit = Per M			
		Taking Out put = 30.50 M			
		(Assuming 20 nos, Pile Sunk 1.525 Mtr Deep)			
b)	Laber				
	Carpenter Gril	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)					34.82
		Rate Per cum=(a+b+c+d)/30.5 Per M			
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/L.			
		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 Gril	nos	1.00	408.00	408.00
	Unskilled Mazdoor	nos	1.00	304.00	304.00
c)	Overheads @ 12%				87.25
d)	Contractor's profit @ 10% on (a+b+c+d)				81.47
e)					96.31
		Rate Per cum=(a+b+c+d)/9.30 Per M			
30	5.7.9	Labour for fitting and fixing 62 mm to 75 mm dia bamboo runners in position at every vertical 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/L.			
		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 Gril	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)					5.7
		Rate Per cum=(a+b+c+d)/30.5 Per M			

Analysis of Rates (FORMAT F8)

Granular Sub-base with Well Graded Material (Table 400.1) (By mix in place method) For Grading II Material on prepared surface, mixing by providing well graded material, spreading in uniform layers with motor grader roller to achieve the desired density, complete as per Technical Specification Clause 401.				
For Grading II Material				
Unit = cum				
Taking output = 300 cum				
Labour				
Mate				
Mazdoor (Skilled)				
Mazdoor (Unskilled)				
Machinery				
Tractor mounted grader arrangement for grading @ 100 cum per hour				
Three wheel 80-100 kN static roller @ 10' cum per hour	day	0.48	321.00	154.08
Tractor with Rotavator 25 cum per hour	day	2.00	385.00	770.00
Water tanker 6 kl capacity	day	10.00	304.00	3040.00
Material				
Well graded granular sub-base material as per Table 400.1	hour	12.00	573.20	6078.40
26.5 mm to 9.5 mm @ 35 per cent	hour	30.00	803.00	24090.00
9.5 mm to 2.36 mm @ 25 per cent	hour	12.00	629.00	7548.00
2.36 mm below @ 40 per cent - Local Sand	hour	5.00	907.00	4535.00
Water	cum	134.40	595.36	80016.38
Overheads @ 12%	cum	96.00	506.92	48664.32
Contractor's profit @ 10% on (a+b+c+d)	cum	153.60	141.85	21788.16
Cost of GSB for 300 cum	kl	30.00	40.00	1200.00
CARRIAGE				
A) Cost of GSB without carriage per cum				
Carriage for GSB material	cum			23842.12
Carriage for material below 2.36 mm (Local Sand)				22252.65
Rate per cum with carriage				244779.11
				815.93
	Cum	0.768	1670.65	1283.06
	Cum	0.512	185.01	94.73
				2193.71

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