



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

2021-22

FLOOD DAMAGED REPORT



T04 to Yadav Tola

DISTRICT	:-	Samastipur	
DIVISION	:-	Dalsingh Sarai	
BLOCK	:-	Mowa	
TOTAL LENGTH OF ROAD	:-	0.102	KM
TOTAL COST OF PROJECT	:-	2.28	Lac

Site Photograph

Name of Road: T04 to Yadav tola

Block-Morwa



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2/11/21
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A.E.

SUMMARY OF COST ESTIMAT FOR THE PROJECT

OF ROAD :- T04 to Yadav Tola

SAMASTIPUR

Morwa

DESCRIPTION	AMOUNT LAKH
BAMBOO WORK	8806.698615
BRICK BATS	192567.544
SUB TOTAL:-	201374.242
12% GST on Total Amount:-	24164.909
1% lab cess	2013.742
Total Cost (including GST and Labour Cess	227552.894

Senior Engineer

Assistant Engineer

Executive Engineer

FDR
YEAR (2021-2022)
GENERAL ABSTRACT OF COST

BLOCK :-

Morwa

DISTRICT :- SAMASTIPUR

NAME OF ROAD :- T04 to Yadav Tola

S.NO	ITEM OF WORK						AMOUNT	
A								
	TOTAL COST OF CONSTRUCTION					:-	Rs.	227553
					SUB TOTAL	:-	Rs.	227553


2/11/21

Junior Engineer

RWD (W) Section, Morwa


2/11/21

Assistant Engineer

RWD (W) Sub Division,
Morwa

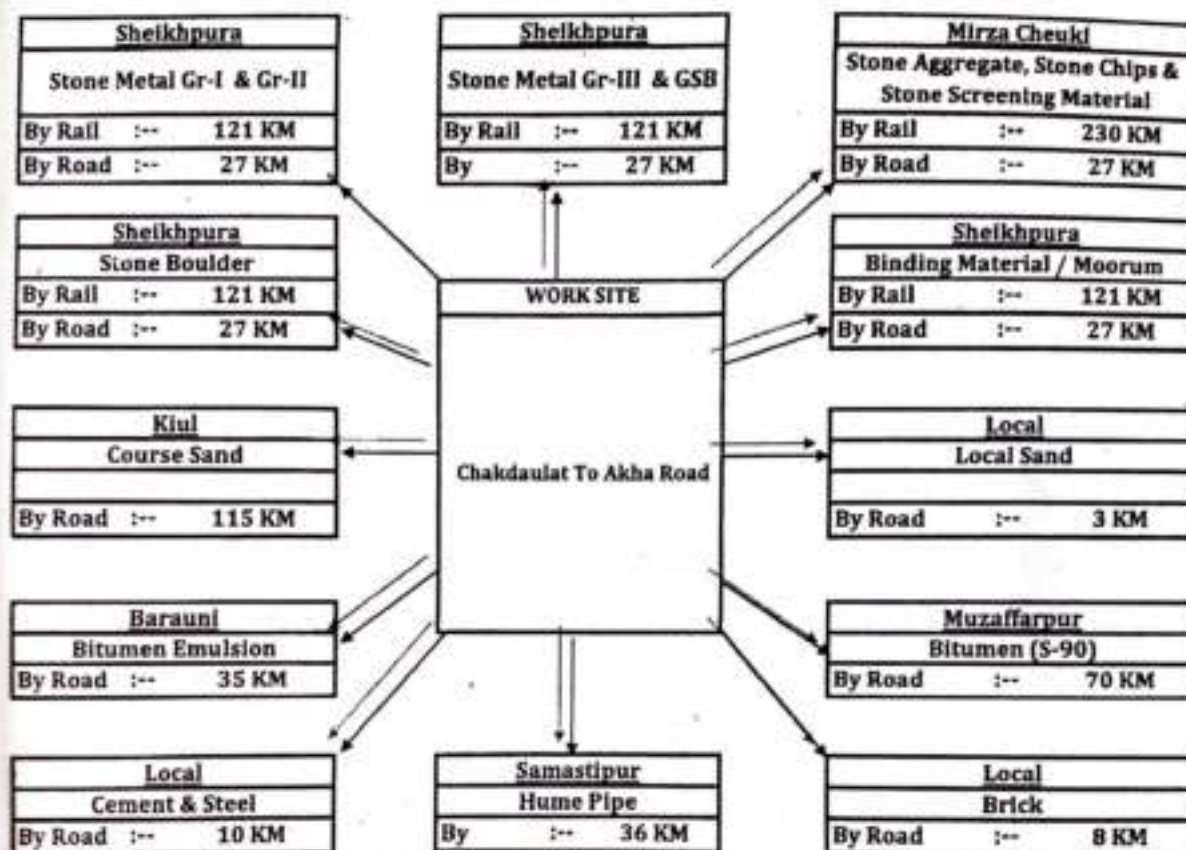
Executive Engineer
RWD, Works Division,
Dalsinghsarai

Figure -3

Quarry Map

Name of Road :- Repair of Road T04 to Yadav Tola
 Block :- Morwa
 District :- Samastipur

Length of the Road:- 0.102 KM



* Subjected to Verification of Lead

Shamud
21/11/21
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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 x 10.10 x 30.00 Km = Rs 668.93 4.59	8.00 x 24.30 x 0.00 Km = Rs 0.00 4.59	105.12	1025.87	Rs. 1799.92	Rs. 1799.92
	Stone Metal Gr-I & Gr-II	Cum	Sheikhpura	8.00 x 7.94 x 137.00 Km = Rs 1895.91 4.59	8.00 x 19.22 x 0.00 Km = Rs 0.00 4.59	210.19		Rs. 2106.10	
2	Stone Metal Gr-III (Sheikhpura by Rail 121 Km)	Cum	Sheikhpura	8.00 x 10.10 x 30.00 Km = Rs 615.31 4.99	8.00 x 24.30 x 0.00 Km = Rs 0.00 4.99	105.12	1128.34	Rs. 1848.77	Rs. 1848.77
	Stone Metal Gr-III	Cum	Sheikhpura	8.00 x 7.94 x 137.00 Km = Rs 1743.94 4.99	8.00 x 19.22 x 0.00 Km = Rs 0.00 4.99	210.19	1128.34	Rs. 3082.47	
3	Stone Aggregate / Chips (Mirza Chowki by Rail 230 Km)	Cum	Sheikhpura	8.00 x 10.10 x 30.00 Km = Rs 615.31 4.99	8.00 x 24.30 x 0.00 Km = Rs 0.00 4.99	105.12	1588.15	Rs. 2308.58	Rs. 2308.58
	Stone Aggregate / Chips	Cum	Sheikhpura	8.00 x 7.94 x 137.00 Km = Rs 1743.94 4.99	8.00 x 19.22 x 0.00 Km = Rs 0.00 4.99	210.19	1588.15	Rs. 3542.28	
4	Stone Boulder (Sheikhpura by Rail 121 Km)	Cum	Sheikhpura	8.00 x 10.10 x 30.00 Km = Rs 639.67 4.80	8.00 x 24.30 x 0.00 Km = Rs 0.00 4.80	105.12	1159.81	Rs. 1904.60	Rs. 1904.60
	Stone Boulder	Cum	Sheikhpura	8.00 x 7.94 x 137.00 Km = Rs 1812.97 4.80	8.00 x 19.22 x 0.00 Km = Rs 0.00 4.80	210.19	1159.81	Rs. 3182.97	
5	Course Sand	Cum	Kidol	8.00 x 7.94 x 208.00 Km = Rs 2647.73 4.99	8.00 x 19.22 x 0.00 Km = Rs 0.00 4.99	113.67		Rs. 2761.40	Rs. 2761.40
	Blinding Material/Moorum (Sheikhpura by Rail 121 Km)	Cum	Sheikhpura	8.00 x 10.10 x 38.00 Km = Rs 511.73 6.00	8.00 x 24.30 x 0.00 Km = Rs 0.00 6.00	113.67	851.49	Rs. 1476.89	Rs. 1476.89
	Blinding Material/Moorum	Cum	Sheikhpura	8.00 x 7.94 x 137.00 Km = Rs 1450.37 6.00	8.00 x 19.22 x 0.00 Km = Rs 0.00 6.00	66.31	851.49	Rs. 2368.17	
7	Local Sand	Cum	Local	8.00 x 10.10 x 2.00 Km = Rs 32.38 4.99	8.00 x 24.30 x 1.00 Km = Rs 38.96 4.99	113.67		Rs. 185.01	Rs. 185.01
8	Brick	1000 Nos	Local	8.00 x 7.94 x 7.00 Km = Rs 222.32 2.00	8.00 x 19.22 x 1.00 Km = Rs 76.88 2.00	477.44		Rs. 776.64	Rs. 776.64
9	Cement	MT	Local	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 8.00	347.32		Rs. 426.72	Rs. 426.72
10	Steel	MT	Local	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 8.00	370.58		Rs. 449.98	Rs. 449.98
11	Bitumen Emulsion	MT	Baraut	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 8.00	396.98		Rs. 1048.06	Rs. 1048.06
12	Bitumen	MT	Muzaffarpur	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 8.00	396.98		Rs. 1119.52	Rs. 1119.52
13	Hume Pipe (1000 mm)	m	Samaastipur	8.00 x 7.94 x 36.00 Km = Rs 228.67 10.00	8.00 x 19.22 x 0.00 Km = Rs 0.00 10.00	70.84		Rs. 299.51	Rs. 299.51
14	Hume Pipe (600 mm)	m	Samaastipur	8.00 x 7.94 x 36.00 Km = Rs 91.47 25.00	8.00 x 19.22 x 0.00 Km = Rs 0.00 25.00	30.36		Rs. 121.83	Rs. 121.83
15	Hume Pipe (300 mm)	m	Samaastipur	8.00 x 7.94 x 36.00 Km = Rs 38.11 60.00	8.00 x 19.22 x 0.00 Km = Rs 0.00 60.00	30.36		Rs. 68.47	Rs. 68.47

Cost of Haulage Excluding Loading & Unloading as per KCM 20

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

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Analysis of Rates (FORMAT F8)

Sl. No.	MOB	DESCRIPTION	Unit	TPP (Hrs)	TPP (Rs)	TPP (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 = 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	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		10.06
2	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	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 = 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	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		24.34
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)

Sl. No.	Item No.	Item Name	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 18 17 192
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 0.33	1183.00 1403.00	39 44 18

Analysis of Rates (FORMAT F8)

Sl. No.		Description		Unit	Quantity	Rate	Amount
		c) Contractor's profit @ 10% on (a+b)					95.58
		Cost for 5.5 cum = a+b+c					1051.36
		Rate per cum = (a+b+c) / 5.5					191.16
1.20	RCD	Loading and Unloading of Boulders by Manual Means					191.16
		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
		d) Contractor's profit @ 10% on (a+b+c)					128.86
		Cost for 5.5 cum = a+b+c+d					1417.49
		Rate per cum = (a+b+c+d) / 5.5					257.73
1.30	RCD	Loading and Unloading of Cement or Steel by Manual Means and					257.73
		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
		d) Contractor's profit @ 10% on (a+b+c)					280.26
		Cost for 10 tonnes = a+b+c+d					3082.81
		Rate per tonnes = (a+b+c+d) / 10					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					308.28
		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
	(II)	Loading of Earth, Sand, Moorum, Manure, Flyash by manual means including a lead upto 30 m.					140.13
		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
	(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					70.06
		Unit = cum					
		Taking output = 5.5 cum					
		a) Labour					
		Mate		day	0.01	321.00	3.21

Analysis of Rates (FORMAT F8)

Sl. No.	Spec. No.	Work	Unit	Quantity	Rate	
		b) Mazdoor (Unskilled)	day	0.25	304.00	76.00
		Machinery	hour	0.25	934.30	233.58
		c) Overheads @ 12%				27.52
		d) Contractor's profit @ 10% on (a+b+c)				35.00
		Cost for 5.5 cum = a+b+c+d				385.20
		Rate per cum = (a+b+c+d) / 5.5				70.04
		Total Cost	Cum			
		Total Loading & Unloading of Sand, Moorum, etc.	Cum			
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	38.00
		b) Mazdoor (Unskilled)				
		Machinery	hour	0.17	934.30	155.83
		c) Overheads @ 12%				23.34
		d) Contractor's profit @ 10% on (a+b+c)				21.81
		Cost for 5.5 cum = a+b+c+d				239.80
		Rate per cum = (a+b+c+d) / 5.5				43.60
		Total Cost	Cum			
		Total Loading & Unloading of Sand, Moorum, etc.	Cum			
14	1.3	(i) 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
		b) Mazdoor (Unskilled)				
		Machinery	hour	0.33	934.30	308.31
		c) Overheads @ 12%				46.59
		d) Contractor's profit @ 10% on (a+b+c)				43.40
		Cost for 2000 Nos. = a+b+c+d				477.51
		Rate for 1000 bricks = (a+b+c+d) / 2				238.76
		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	day	0.01	321.00	3.21
		Mate	day	0.25	304.00	76.00
		b) Mazdoor (Unskilled)				
		Machinery	hour	0.33	934.30	308.31
		c) Overheads @ 12%				46.59
		d) Contractor's profit @ 10% on (a+b+c)				43.40
		Cost for 2000 Nos. = a+b+c+d				477.51
		Rate for 1000 bricks = (a+b+c+d) / 2				238.76
		Total Cost	No.			
16		(i) 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	day	0.06	321.00	19.26
		Mate	day	1.50	304.00	456.00
		b) Mazdoor (Unskilled)				

Analysis of Rates (FORMAT F8)

Sl. No.	Particulars	Unit	Quantity	Rate	Amount
17	b) Machinery				
	c) Truck				
	d) Overheads @ 12%				
	Contractor's profit @ 10% on (a+b+c)				
	Cost for 10 t = a+b+c+d				
	Rate per tonnes = (a+b+c+d)/10				
18	(II) Unloading of Cement by manual means including a lead upto 30 m				
	Unit = t				
	Taking output = 10 t				
	a) Labour				
	Mate				
	Mazdoor (Unskilled)				
	b) Machinery				
	Truck				
	c) Overheads @ 12%				
	Contractor's profit @ 10% on (a+b+c)				
19	(I) Loading and Unloading of Structural Steel and Steel Bars by manual means				
	Unit = t				
	Taking output = 10 t				
	a) Labour				
	Mate				
	Mazdoor (Unskilled)				
	b) Machinery				
	Truck				
	c) Overheads @ 12%				
	Contractor's profit @ 10% on (a+b+c)				
20	(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				
	Mazdoor (Unskilled)				
	b) Machinery				
	Truck				
	c) Overheads @ 12%				
	Contractor's profit @ 10% on (a+b+c)				
20	(I) Loading and Unloading of Bitumen Drums by Manual Means				
	Unit = t				
	Taking output = 10 t				
	a) Labour				
	Mate				
	Mazdoor (Unskilled)				
	b) Machinery				
	Truck				
	c) Overheads @ 12%				
	Contractor's profit @ 10% on (a+b+c)				

Analysis of Rates (FORMAT F8)

Sl. No.	Q.No.	QTY	DESCRIPTION	Unit	Quantity	Rate	Amount
			Rate per tonnes = (a+b+c+d)/10	Total Cost			
21		(H)	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	
		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				
			Total Cost				
22	1.9	(I)	Loading and Unloading of Hume Pipes 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				
			Total Cost				
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				
			Total Cost				
24		(H)	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				
			Total Cost				
			Total Cost				
			Total Cost				

Analysis of Rates (FORMAT F8)

Sl. No.	MORD	Rate	Unit	Rate	Rate	Rate
25	C	600/450 mm dia Hume pipe Unit = per pipe Taking output = 21 pipes				
a)	Labour					
	Mate					
b)	Mazdoor (Unskilled)					
	Machinery					
	Truck	day	0.02	321.00	6.42	
	Crane	day	0.50	304.00	152.00	
c)	Overheads @ 12%					
d)	Contractor's profit @ 10% on (a+b+c)	hour	0.20	934.30	186.86	
	Cost for 21 pipes = a+b+c+d	hour	0.20	909.00	181.80	
	Rate per pipe = (a+b+c+d)/21				63.25	
					59.03	
					649.36	
					30.92	
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
			2. P.C.C. grade M 10	cum	0.10	6681.46
			3. Brick Masonry in CM 1:4	cum	0.48	6237.17
			4. Plastering with CM 1:4, 15 mm thick cement plaster on Brick work.	sqm	2.63	216.63
			Add 5 per cent cost of items No.1 to 4 for white washing.			215.46
			Sub Total	NO		4524.74
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
			2. P.C.C. grade M 10	cum	0.060	6681.46
			3. Brick Masonry in CM 1:4	cum	0.193	6237.17
			4. Plastering with CM 1:4, 15 mm thick cement plaster on Brick work.	sqm	1.50	216.63
			Add 5 per cent cost of items No.1 to 4 for white washing.			99.69
			Sub Total	NO		2093.54
28	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.			
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	
e)	Rate Per cum = (a+b+c+d)/2.832	cum			1635.60	
	CARRIAGE					
	Carriage for Brick (1 cum Bats = 300 nos Bricks)	nos	0.300	776.64	233.10	
	Rate per cum with carriage				1868.70	

Analysis of Rates (FORMAT F8)

Sl. No.	Particulars	DESCRIPTION	UNIT	QUANTITY	Rate	Total
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. b) Labor Carpenter Gril Unskilled Mazdoor c) Overheads @ 12% d) Contractor's profit @ 10% on (a+b+c+d) e) Rate Per cum=(a+b+c+d)/10	nos nos nos Per M	20.00 0.50 0.25	32.88 408.00 304.00	657.60 204.00 76.00 112.51 105.01 115.51
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/L. Unit = Per M Taking Out put = 30.50 M (Assuming 20 nos, Pile Sunk 1.525 Mtr Deep) b) Labor Carpenter Gril Unskilled Mazdoor c) Overheads @ 12% d) Contractor's profit @ 10% on (a+b+c+d) e) Rate Per cum=(a+b+c+d)/30.5	nos nos Per M	0.25 2.50	408.00 304.00	102.00 760.00 103.44 96.54 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/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 b) Labor Carpenter Gril Unskilled Mazdoor c) Overheads @ 12% d) Contractor's profit @ 10% on (a+b+c+d) e) Rate Per cum=(a+b+c+d)/9.30	Kg nos nos Per M	0.25 1.00 1.00	61.74 408.00 304.00	15.44 408.00 304.00 87.27 81.47 94.3
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 b) Labor Carpenter Gril Unskilled Mazdoor c) Overheads @ 12% d) Contractor's profit @ 10% on (a+b+c+d) e) Rate Per cum=(a+b+c+d)/30.5	Kg nos nos Per M	0.25 0.125 0.250	61.74 408.00 304.00	15.44 51.04 76.00 17.0 15.9 5.7

Analysis of Rates (FORMAT F8)

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. For Grading II Material Unit = cum Taking output = 300 cum				
a)	Labour				
	Mate				
	Mazdoor (Skilled)	day	0.48	321.00	154.08
	Mazdoor (Unskilled)	day	2.00	385.00	770.00
b)	Machinery	day	10.00	304.00	3040.00
	Tractor mounted grader arrangement for grading @ 100 cum per hour	hour	12.00	573.20	6078.40
	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

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