



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

2021-22

FLOOD DAMAGED REPORT



NH 103 Halai Bazar to Malpur Chowk tak

DISTRICT	:-	Samastipur	
DIVISION	:-	Dalsingh Sarai	
BLOCK	:-	Mowa	
TOTAL LENGTH OF ROAD	:-	0.200	KM
TOTAL COST OF PROJECT	:-	2.37	Lac

Site Photograph

me of Road:-NH 103 Halai Bazar to Malpur Chowk tak

Block-Morwa



Spand
21/11/21
J.E.

21/11/21
A8

SUMMARY OF COST ESTIMAT FOR THE PROJECT

NAME OF ROAD :- Repair of Road NH 103 Halai Bazar to Malpur Chowk tak

DISTRICT

SAMASTIPUR

BLOCK

Morwa

S.NO	DESCRIPTION	AMOUNT LAKH
1	BRICK BAT	209665.000
	SUB TOTAL:-	209665.000
	12% GST on Total Amount:-	25159.800
	SUB TOTAL:-	2096.650
	Total Cost (including GST and Labour Cess	236921.000


21/11/21
Junior Engineer


21/11/21
Assistant Engineer

Executive Engineer

RWD, Works Division, Dalsinghsarai

FDR
YEAR (2021-2022)
GENERAL ABSTRACT OF COST

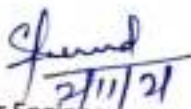
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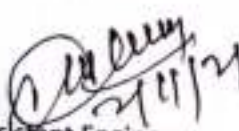
Morwa

DISTRICT :- SAMASTIPUR

NAME OF ROAD :- Repair of Road NH 103 Halai Bazar to Malpur Chowk tak

NO	ITEM OF WORK							AMOUNT	
A									
	TOTAL COST OF CONSTRUCTION						:-	Rs.	236921
						SUB TOTAL	:-	Rs.	236921


Junior Engineer


Assistant Engineer

Executive Engineer
RWD, Works Division,
Dalsinghsarai

NAME OF ROAD :- Repair of Road NH 103 Halai Bazar to Malpur Chowk tal

SL.NO	SDB SL.NO	MORD Ref. No	Description	Unit						Quantity	Rate	Amount
1			BrickBats									
			Laying Brick Bats on Prepared Soil Surface as per specifications and direction of E/L									
				cum	90.00	1.60	0.200			28.80		
				cum	40.00	3.75	0.200			30.00		
				cum	25.00	1.60	0.170			6.80		
				cum	25.00	1.75	0.150			6.56		
				cum	20.00	1.00	0.200			4.00		
				cum	5.00	1.50	1.800	0.175		2.36		
				cum	6.00	1.40	1.600	0.175		2.35		
				cum	9.00	1.55	1.680	0.175		4.10		
				cum	5.00	1.20	1.500	0.175		1.58		
				cum	3.00	2.00	1.450	0.175		1.52		
				cum	11.00	3.00	0.900	0.160		4.75		
				cum	13.00	2.35	0.850	0.125		3.25		
				cum	8.00	2.00	1.250	0.150		3.00		
				cum	10.00	1.85	1.600	0.150		4.44		
				cum	17.00	1.90	1.450	0.150		7.03		
										110.54	1896.75	209665.00
										SUB TOTAL=		209665.00
										TOTAL COST OF WORK IN RS		209665.00

Junior Engineer
Morwa

Assistant Engineer
Morwa

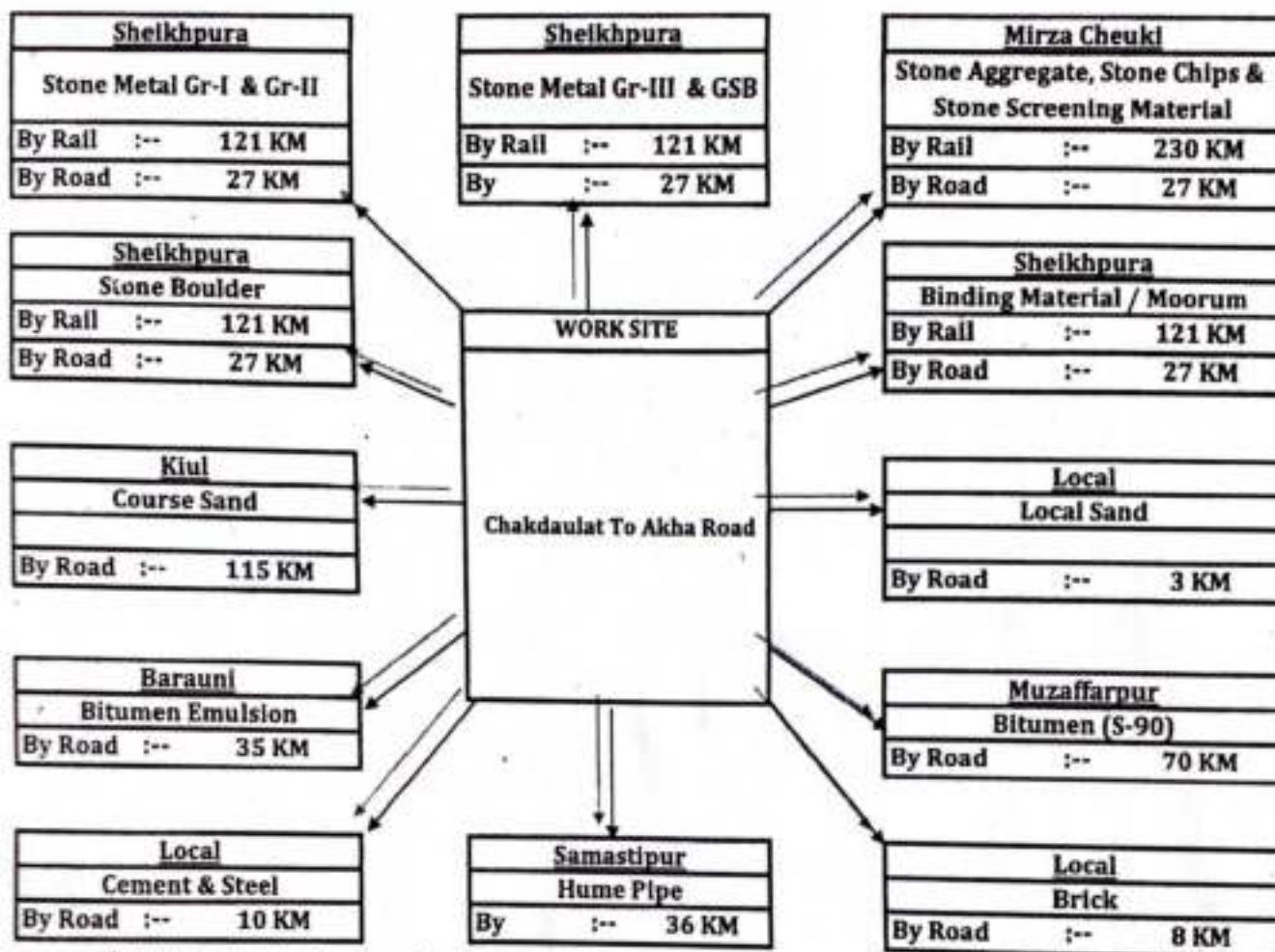
Executive Engineer
RWD, Works Division, Dalsinghsarai

Figure -3

Quarry Map

Name of Road :-- NH 103 Halai Bazar to Malpur Chowk tak
 Block :-- Morwa
 District :-- Samastipur

Length of the Road:- 0.200 KM



* Subjected to Verification of Lead

Sound
J.E. 21/1/21

Green
A.E. 21/1/21

E.E.

S.E.

Sl No	Item with Source	Unit	Source Up to	Pucca / Surface	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 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	Rs. 3082.47
3	Stone Aggregate / Chips (Mirza Chowki by Rail 230 Km)	Cum	Sheikhpura	8.00 x 10.10 x 38.00 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	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	Rs. 3182.97
5	Course Sand	Cum	Khal	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
6	Binding 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
	Binding 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	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	Barasni	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	Samastipur	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	Samastipur	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	Samastipur	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

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

found 21/11/21
JE
P.W.D.

21/11/21
JE
P.W.D.

EE
RWD

Analysis of Rates (FORMAT F8)

ITEM No.	MOSBY P-206	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
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 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
						1010.00
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 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
						1622.00
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 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
						2558.87
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.	DDO Code	Work Item	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 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 = 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 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 = 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 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	1 Min 13 Min 2 Min 4 Min 20 Min 0.33 0.93	1183.00 1403.00	39 46 10

Analysis of Rates (FORMAT F8)

Sl. No.	Particulars	Unit	Quantity	Rate	Amount
	c) Contractor's profit @ 10% on (a+b) Cost for 5.5 cum = a+b+c Rate per cum = (a+b+c) / 5.5 Unloading will be by tipper				95.58 1051.36 191.16
1.20	RCD 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 Unloading will be by tipper	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 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	Rate	Quantity	Amount
	b) Mazdoor (Unskilled)	day	0.25	304.00	76.00
	Machinery				
	Truck	hour	0.25	934.30	233.58
	c) Overheads @ 12%				37.53
	d) Contractor's profit @ 10% on (a+b+c)				35.00
	Cost for 5.5 cum = a+b+c+d				385.30
	Rate per cum = (a+b+c+d) / 5.5				70.04
	Total for Loading & Unloading of Sand & Moorum				70.04
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	1.40
	Mazdoor (Unskilled)	day	0.13	304.00	38.52
	b) Machinery				
	Truck	hour	0.17	934.30	155.83
	c) Overheads @ 12%				23.34
	d) Contractor's profit @ 10% on (a+b+c)				21.87
	Cost for 5.5 cum = a+b+c+d				239.87
	Rate per cum = (a+b+c+d) / 5.5				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	3.21
	Mazdoor (Unskilled)	day	0.25	304.00	76.00
	b) Machinery				
	Truck	hour	0.33	934.30	308.32
	c) Overheads @ 12%				46.59
	d) Contractor's profit @ 10% on (a+b+c)				43.47
	Cost for 2000 Nos. = a+b+c+d				477.59
	Rate for 1000 bricks = (a+b+c+d)/2				238.79
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	3.21
	Mazdoor (Unskilled)	day	0.25	304.00	76.00
	b) Machinery				
	Truck	hour	0.33	934.30	308.32
	c) Overheads @ 12%				46.59
	d) Contractor's profit @ 10% on (a+b+c)				43.47
	Cost for 2000 Nos. = a+b+c+d				477.59
	Rate for 1000 bricks = (a+b+c+d)/2				238.79
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	19.26
	Mazdoor (Unskilled)	day	1.50	304.00	456.00

Analysis of Rates (FORMAT F8)

		UNIT	QUANTITY	UNIT PRICE	TOTAL
17	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
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)	day	0.06	321.00	19.26
	b) Machinery	day	1.50	304.00	456.00
	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
19	(I) Loading and Unloading of Structural Steel and Steel Bars by manual means				
	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	hour	1.00	934.30	934.30
	Truck				180.48
	c) Overheads @ 12%				168.44
20	d) Contractor's profit @ 10% on (a+b+c)				1852.89
	Cost for 10 t = a+b+c+d				185.29
	Rate per tonnes = (a+b+c+d)/10				
	(II) Unloading of Structural Steel, Steel Bars by manual means including a lead upto 30 m				
	Unit = t				
21	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	hour	1.00	934.30	934.30
	Truck				180.48
	c) Overheads @ 12%				168.44
	d) Contractor's profit @ 10% on (a+b+c)				1852.89
	Cost for 10 t = a+b+c+d				185.29
	Rate per t = (a+b+c+d)/10				
22	(I) Loading and Unloading of Bitumen Drums by Manual Means				
	Loading of Bitumen Drums 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	1.40	304.00	486.40
	Mazdoor (Unskilled)	hour	1.25	934.30	1167.88
	b) Machinery				200.82
	Truck				187.44
	c) Overheads @ 12%				2061.80
	d) Contractor's profit @ 10% on (a+b+c)				
	Cost for 10 t = a+b+c+d				

S. No.	Q. No.	Q. No.	Description	Unit	Quantity	Rate
			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	(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
			Crane			
		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
			Crane			
		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
			Crane			
		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)

Schedule of Rates (FORMAT F8)				
Sl. No.	Description	Unit	Rate	Amount
C	600/450 mm dia Hume pipe Unit = per pipe Taking output = 21 pipes			
a)	Labour			
	Mate			
	Mazdoor (Unskilled)			
b)	Machinery			
	Truck	day	0.02	321.00
	Crane	day	0.50	304.00
c)	Overheads @ 12%			6.42
d)	Contractor's profit @ 10% on (a+b+c)			152.00
	Cost for 21 pipes = a+b+c+d	hour	0.20	934.30
	Rate per pipe = (a+b+c+d)/21	hour	0.20	909.00
				186.86
				181.80
				63.25
				59.03
				649.36
				30.92
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	0.33	334.58
		cum	0.10	6681.46
		cum	0.48	6237.17
		sqm	2.63	216.63
				108.74
				668.15
				2962.66
				569.74
				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	0.192	334.58
		cum	0.060	6681.46
		cum	0.193	6237.17
		sqm	1.50	216.63
				64.24
				400.89
				1203.77
				324.95
				99.69
				2093.54
1.1.3.1	100 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. Unit = cum Assuming- 2.832 Cum a) Labour (Unskilled) i) Carrying, spreading, laying & Packing ii) Compaction brick bats with C.I. Hammer. iii) Brick Bat iv) Local Sand 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 CARRIAGE Carriage for Brick (1 cum Bats = 300 nos Bricks) Rate per cum with carriage			
		nos	1.50	304.00
		nos	0.67	304.00
		Cum	2.83	1063.00
		Cum	0.63	141.85
				456.00
				203.68
				3010.42
				89.48
				451.17
				421.09
				4632.01
				1635.60
		cum		233.10
		nos	0.300	776.64
				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%				87.21
d)	Contractor's profit @ 10% on (a+b+c+d)				81.41
e)					94.31
		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 runers 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%				17.00
d)	Contractor's profit @ 10% on (a+b+c+d)				15.90
e)					5.34
		Rate Per cum = (a+b+c+d)/30.5 Per M			

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.			
(ii)	For Grading II Material	Unit = cum			
	Taking output = 300 cum				
a)	Labour				
	Mate				
	Mazdoor (Skilled)				
	Mazdoor (Unskilled)				
b)	Machinery				
	Tractor mounted grader arrangement for grading @ 100 cum per hour	day	0.48	321.00	154.00
	Three wheel 80-100 kN static roller @ 10'cum per hour	day	2.00	385.00	770.00
	Tractor with Rotavator 25 cum per hour	day	10.00	304.00	3040.00
	Water tanker 6 kl capacity	hour	12.00	573.20	6078.40
c)	Material	hour	30.00	803.00	24090.00
	Well graded granular sub-base material as per Table 400.1	hour	12.00	629.00	7548.00
	26.5 mm to 9.5 mm @ 35 per cent	hour	5.00	907.00	4535.00
	9.5 mm to 2.36 mm @ 25 per cent	cum	134.40	595.36	80016.38
	2.36 mm below @ 40 per cent - Local Sand	cum	96.00	506.92	48664.32
d)	Water	cum	153.60	141.85	21788.16
e)	Overheads @ 12%	kl	30.00	40.00	1200.00
	Contractor's profit @ 10% on (a+b+c+d)				23842.12
	Cost of GSB for 300 cum				22252.68
f)	<u>CARRIAGE</u>				244779.11
	A) Cost of GSB without carriage per cum	cum			815.93
	Carriage for GSB material				
	Carriage for material below 2.36 mm (Local Sand)	Cum	0.768	1670.65	1283.00
	Rate per cum with carriage	Cum	0.512	185.01	94.73
					2193.71


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