

RURAL WORKS DEPARTMENT GOVT OF BIHAR



ESTIMATE FOR REPAIRING / RESTORATION/ MAKING MOTORABLE ROADS DAMAGED DURING FLOOD

NAME OF WORKS :- Dagmara Road To Raipur Mandal Tola

BLOCK :- Nirmali

FDR

17,43,494

YEAR(2024-25)

R.W.D., WORKS CIRCLE, MADHEPURA

R.W.D., WORKS DIVISION. SUPAUL

पथ का नाम :- ^{प्रतिवेदन} Dagmare Road to Raipur Mandal to 9
कार्य का नाम :-

में बाढ़ से क्षतिग्रस्त भाग में यातायात चालू करने का कार्य।

संलग्न प्राक्कलन 2024 को प्रखण्ड में आयी भीषण बाढ़ से क्षतिग्रस्त 4th Dagmare Road to Raipur Mandal to 9 में बाढ़ क्षतिग्रस्त मरम्मति मद से यातायात चालू करने हेतु तैयार किया गया है जिसकी

प्राक्कलित लागत 17,43,494:00 है। उक्त पथ

का निर्माण CTSN Y योनान्तर्गत हुआ है एवं योजना अनुरक्षण अवधि में नी.ई.

पथ के कटे (क्षतिग्रस्त) भाग में आवश्यकता अनुसार Hume Pipe, Bamboo, लोकल बालू एवं Brick Bats देने के बाद यातायात चालू कराया गया है। पथ के विभिन्न हिस्से में कराये गये कार्य का विवरणी स्पष्ट रूप से प्राक्कलन में दर्शाया गया है।

प्राक्कलन मदों का दर वर्तमान अनुसूचित दर के अनुरूप है।

Amar Raj
13/11/24

कनीय अभियंता,
ग्रामीण कार्य विभाग
कार्य प्रशाखा निर्मल

13/11/24

सहायक अभियंता,
ग्रामीण कार्य विभाग,
कार्य अवर प्रमण्डल निर्मल

13/11/24

कार्यपालक अभियंता,
ग्रामीण कार्य विभाग,
कार्य प्रमण्डल, मु.पौ.ल

INSPECTION REPORT FOR MOTORABLE WORK

Name of PIUs :- R.W.D W.O Subaul.

Name of Block/Road :- Nirmali, Degmari Road to Kairbue mandal 78a

A. For Road

1. Damage Location/Chainage :- 0380, 0-650 etc

2. Damage Length :- 53.10 m

3. Nature of Damage (Length Wise) (i) Breach :-
(ii) Crust Damage :- yes
(iii) Only Flank Damage :-

whether traffic fully/Partialiy obstructed :- obstructed

4. Details of Restoration :-

(i) Material Being Used in Restoration :- Bamboo, brickbatr, Ec bags, etc

(ii) Equipment/Tools Being Used in Restoration Works :- tractor, J.C.B etc.

(iii) Restored Length 53.10 m In open Area :- 53.10 m
In habitation Area :-

(iv) If Restoration work done in habitation Area give Reason :-

B. For Bridge (Size of Bridge/Culvert)

(1) Damage Location/Chainage :-

(2) No. of Span Damage :-

(3) Length of Span :-

(4) Nature of Damage (Pier/Abuttment/
Wing Wall/Approach Road Damage) :-

(5) Details of Restoration :-

(i) Material Being Used in Restoration :-

(ii) Equipment/Tools Being Used in Restoration Works :-

(iii) Restored Length :-

Overall Grade of Restoration work (Satisfactory/Unsatisfactory) :- Satisfactory

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BE

Signature of Inspector
(Official Seal) Executive Engineer
Rural Works Department
Works Division Udakishungani

SUMMARY OF COST ESTIMATE FOR THE PROJECT		
NAME OF ROAD :-	Dagmara Road To Raipur Mandal Tola	
DISTRICT :-	Supaul	
BLOCK :-	Nirmali	
Length of Road:-	1.00KM	
Length of Cutting in mtr :-	53.100	
Sl. No.	DESCRIPTION	AMOUNT (LAKHS)
1	Filling of local sand	0.00
2	Labour for cutting 62mm to 75mm dia bamboo	36552.39
3	Labour for fitting 62mm to 75mm dia bamboo	18107.31
5	Supplying of EC bag.of local sand	249994.97
6	Supply and Carriage of brick bats	1021431.26
7	Supply laying and carriage of 1000 mm HPC	0.00
8	Drone videography Three times	15000.00
	SUB TOTAL COST =	1341085.93
	ADD GST @18% =	241395.47
	Add Labour cess @ 1%=	13410.86
	Seigniorage Fees @10% =	147601.32
	TOTAL (RS.) =	17,43,494

Amar Raj
13/11/24

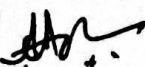
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Technically approved 
Sanctioned for Rs = 17,43,494 200 (Seventeen lakh
fourty three thousand four hundred Ninety four only)

S.E

14.11.24

Superintending Engineer
Rural Works Department
Works Circle Madhepura

Bill of Quantity

NAME OF ROAD :-		Dagmara Road To Raipur Mandal Tola			
DISTRICT :-		Supaul			
BLOCK :-		Nirmali			
Sl. No.	DESCRIPTION OF ITEMS	QUANTITY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
1	Filling of local sand obtained from river bed, watering & ramming all complete job as per specification & direction of Engineer-in-charge	0.00	CUM	580.07	0.00
3	Labour for cutting 62 mm to 75mm dia bamboo piles to size and making shoes & driving by jet machine etc. all complete job as per specification & direction of Engineer- in -charge.	687.33	MTR	53.18	36552.39
4	Labour for fitting & 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 etc all complete job as per specification & direction of Engineer-in-charge.	188.50	MTR	96.06	18107.31
5	Labour for filling empty cement bags with local sand, stitching the bags and placing in Nylon crate of size (1 m X 1 m X 1 m)with lead of 150 M including supply of sutli etc. at site in dry portion all complete as per approved design, specification and direction of E/I	0.00	Each	0.00	0.00
6	Providing laying & filling Geo bags of size 1m X 0.700m (Type A) 300 GSM nonwoven) weight 420 gm volume of filled bag 0.070 cum Weight of filled Geo bag 126 kg with local sand including stitching in four lines by approved Nylon thread with Staching machine and generator, stacking and placing after loading, Unloading and carriage with the help of Trolly within 150 mtr. lead and all complete as per specification and direction of E/I.	6679.00	Each	37.43	249994.97
	Supplying of EC bag, filling of local sand stitching and placing in position as the direction of Engineer-in-charge	6679.00	Each	37.43	249994.97

8	Supply and Carriage of brick bats upto 8 km breach and placing in breaches and lying of bats. all complete job.	498.35	CUM	2049.64	1021431.26
9	Supplaying and carriage of hume pipe 1000 mm dia . all complete job.	0.00	RM	3669.12	0.00
10	Granular Sub-base with Well Graded Material (Table 400.1)	0.00	CUM	2,564.86	0.00
A) SUB TOTAL =					1576080.90
TOTAL COST =					1576081

Amar Raj
18/11/24
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ESTIMATE FOR REPAIRING / RESTORATION/ MAKING MOTORABLE ROADS DAMAGED DURING FLOOD

NAME OF ROAD :-		Dagmara Road To Raipur Mandal Tola							
DISTRICT :-		Supaul							
BLOCK :-		Nirmali							
Length of Cutting:-		53.10 mtr							
Sl. No.	DESCRIPTION OF ITEMS	Unit	Nos.	L(m)	B(m)	D(m)	QUANTITY	RATE (Rs.)	AMOUNT (Rs.)
1	Filling of local sand obtained from river bed, watering & ramming, all complete job as per specification & direction of Engineer-in-charge								
	At ch-920 to 1128 M	cum	0	208.00	4.58	1.02	0.00		
	At ch-1128 to 1380 M	cum	0	252.00	4.58	0.68	0.00		
	At ch-1380 to 1530 M	cum	0	0.79	1.52	7.50	0.00		
		cum		total qty :-			0.000	580.07	0.00
2	Labour for cutting 62 mm to 75mm dia bamboo piles to size and making shoes & driving by jet machine etc. all complete job as per specification & direction of Engineer-in-charge.								
	At ch-380M		1	13.3/0.3	6.00		266.00		
	At ch-650M		1	10/0.3	4.00		133.33		
	At ch-650M		1	5/0.2	4.00		100.00		
	At ch-650M		1	9.4/0.2	4.00		188.00		
		Mtr.		total qty:-			687.33	53.18	36,552.39
3	Labour for fitting & fixing 62 mm to 75 mm dia bamboo chachri in position at every vertical pile with 150 mm long nails or 20 swg G.I wire including cost of G.I wire or nails etc all complete job as per specification & direction of Engineer-in-charge.								
	At ch-380M		1	13.30	2.5/0.5		66.50		
	At ch-650M		1	10.00	2.5/0.5		50.00		
	At ch-650M		1	5.00	2.5/0.5		25.00		
	At ch-650M		1	9.40	2.5/0.5		47.00		

	Mtr.	total qty :-					188.50	96.06	18107.31
4	Supplying of EC bag, filling of local sand stitching and placing in position as the direction of Engineer-in-charge.								
	At ch-380M	cum	1	13.30	$(1.25+0.95+0.95)/3$	$(8+7.5)/2$	108.23		
	At ch-650M	cum	1	10.00	$(0.9+1.25+0.95)/3$	$(1.5+1.35)/2$	14.73		
	At ch-650M	cum	1	5.00	$(1.25+1.5)/2$	$(2.45+2.45+1.55)/3$	14.78		
	At ch-650M	cum	1	5.00	$(1.25+1.5)/2$	$(2.45+2.45+1.55)/3$	14.78		
	At ch-650M	cum	1	10.40	$(0.9+1.25+0.95)/3$	$(3.45+3.45+2.55)/3$	33.85		
	At ch-650M	cum	1	9.40	$(1.25+1.5)/2$	$(3.45+3.45+2.55)/3$	40.71		
	Total No of E C Bags(3 4cum=100Bags) =			227.08	/	0.034	6679.00		
	Each				Say No of Bage :-		6679.00	37.43	249994.970
5	Supply and Carriage of brick bats upto 8 km breach and placing in breaches and lying of bats, all complete job.								
	At ch-380M	cum	1	13.30	$(3+3.25+3)/3$	$(8+7.5)/2$	317.81		
	At ch-650M	cum	1	10.00	$(2.25+2.5+2)/3$	$(1.5+1.35)/2$	32.06		
	At ch-650M	cum	1	5.00	$(3+3.25+3)/3$	$(2.45+2.45+1.55)/3$	33.15		
	At ch-650M	cum	1	5.00	$(2+2.05)/2$	$(2.45+2.45+1.55)/3$	21.77		
	At ch-650M	cum	1	10.40	$(1.5+1.5)/2$	$(3.45+3.45+2.55)/3$	49.14		
	At ch-650M	cum	1	9.40	$(1.5+1.5)/2$	$(3.45+3.45+2.55)/3$	44.42		
		cum			total qty :-		498.35	2,049.64	1021431.26

Calculation of Seigniorage Fees

NAME OF ROAD :- Dagmara Road To Raipur Mandal Tola

DISTRICT :- Supaul

BLOCK :- Nirmali

Sl. No.	DESCRIPTION OF ITEMS	QUANTITY	Unit	RATE (Rs.)	AMOUNT (Rs.)
1	Filling of local sand obtained from river bed, watering & ramming all complete job as per specification & direction of Engineer-in-charge	0.00	cum	143.32	0.00
2	Labour for fitting empty cement bags with loocal sand, stitching the bags and placing in Nylon crate of size (1 m X 1 m X 1 m) with lead of 150 M including supply of sutli etc. at site in dry portion all complete as per approved design, specification and direction of E/I	0.00	cum	143.32	0.00
3	Supplying of EC bag, filling of local sand stitching and placing in position as the direction of Engineer-in-charge.	6679.00	cum	143.32	957234.28
4	Supply and Carriage of brick bats upto 8 km breach and placing in breaches and lying of bats, all complete job	498.35	cum	1041.00	518778.88
A) SUB TOTAL =					1476013.16
Seigniorage Fees @10% of Basic Amount =					147601

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Analysis for Carriage by Road & Rail

Sl No	Item with Source	Unit	Source Up to	Carriage Cost & Lead in Km										Loading & Unloading Cost	Carriage Cost by Rail Head	Total
				Pucka / Surface					Katcha							
1	Local Sand	Cum	Local	8.00	x 7.47	x	2.00 Km	=	Rs 23.95	8.00	x 17.32	=	Rs 23.57	104.88	Rs 157.40	
				4.99						4.99						
2	Brick	1000 Nos	Local	8.00	x 7.94	x	7.00 Km	=	Rs 222.32	8.00	x 19.22	=	Rs 76.88	417.46	Rs 716.66	
				2.00						2.00						
3	Hume Pipe (1000 mm)	m	Karjain	8.00	x 7.94	x	106.00 Km	=	Rs 673.31	8.00	x 19.22	=	Rs 0.00	73.32	Rs 746.63	
				10.00						10.00						
4	Hume Pipe (600 mm)	m	Karjain	8.00	x 7.94	x	106.00 Km	=	Rs 269.32	8.00	x 19.22	=	Rs 0.00	31.42	Rs 309.74	
				25.00						25.00						
5	Hume Pipe (300 mm)	m	Karjain	8.00	x 7.94	x	106.00 Km	=	Rs 112.22	8.00	x 19.22	=	Rs 0.00	31.42	Rs 143.64	
				60.00						60.00						
6	Brick Bats	Nos.	Local	3.60	x 18.64	x	7.00 Km	=	Rs 208.80	3.60	x 66.03	=	Rs 211.30	227.60	Rs 647.70	
				2.25						2.25						

Amar Singh
13/11/24
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Type of Road	Per Ton. Km by Tipper	Per Ton. Km by Truck
For Surface Road	11.70	7.94
Unsurface Gravel Road	14.00	9.55
Kachha Road	23.20	19.22

Type of Road	Per Ton. Km by	Per Ton. Km by Tractor
For Surface Road		18.64
Unsurface Gravel Road		23.29
Kachha Road		66.03

Summary of Carriage Cost				
Sl No	Particulars	Unit	Amount	
1	c) Local sand	Cum	157.40	
2	d) Local Sand at Site	Cum	300.72	
3	Geo Bags	Nos.	238.20	
4	a) Hume Pipe NP 3 (600 MM DIA)	m	300.74	
5	b) Hume pte (600 dia) at site	m	2875.55	
6	a)Hume Pipe NP 3 (1000MM DIA)	m	746.63	
7	b)Hume Pipe NP 3 (1000MM DIA) at site	m	3504.85	
8	Brick	per 1000	716.66	
9	Brick Rats /Thama metal	Cum	647.70	

Anwar Rafiq
13/11/24
Junior Engineer

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13/11/24
Assistant Engineer

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13/11/24
Executive Engineer

BASIC RATES
(A) Labour

Sl. No.	Description of Labour	Unit	Rate (Rs.)
L-01	Bhisti	day	373.00
L-02	Bitumen Sprayer	day	393.00
L-03	Blacksmith	day	503.00
L-04	Blaster	day	619.00
L-05	Carpenter 1st Class	day	503.00
L-06	Carpenter 2nd Class	day	503.00
L-07	Chips spreader	day	449.00
L-08	Chiseller	day	577.00
L-09	Dresser (Skilled)	day	472.00
L-10	Driller	day	449.00
L-11	Electrician	day	503.00
L-12	Fitter	day	511.00
L-13	Mason (1st class)	day	503.00
L-14	Mason (2nd Class)	day	449.00
L-15	Mate	day	397.00
L-16	Mazdoor (Unskilled)	day	373.00
L-17	Mazdoor (Semi skilled)	day	388.00
L-18	Mazdoor (Skilled)	day	472.00
L-19	Painter (1st class)	day	476.00
L-20	Plumber	day	476.00
L-21	Surveyor	day	454.00
L-22	White Washer	day	476.00

Basic Rate of Material

Sl. No.	Ref. Code No.	Description of Labour	Rate (Rs.)	Unit
1		Filling E.C. Bags	629.20	%nos.
2		Placing E.C Bags	911.00	%nos.
3		Filling E.C Bags and Placing	1553.80	%nos.
4		Filling Geo. Bags	26.40	each
5		Placing Geo Bags	34.30	each
6		Filling Geo Bags and Placing	81.00	each
7		Filling E.C Bags and Placing in N.C	388.50	each
8		Filling E.C Bags and Placing in B.A Wire Crates	1243.00	each
9		Filling Geo Bags and Placing in N.C	364.20	each
10		Filling Geo Bags and Placing in B.A.Wire Crates(Beggy)	1638.90	each
11		Filling Geo Bags and Placing in B.A.Wire Crates(Box))	2003.10	each
12		Filling Geo Bags and Placing in Gabbin 1.8x1.8x0.5	1092.60	each
13		Filling Geo Bags and Placing in Gabbin 1.8x1.8x0.6	728.40	each
14		Already Filled E.C Bags Placing in N.C	231.15	each
15		Already Filled E.C Bags Placing in B.A.Wire crates	739.68	each
16		Already Filled Geo Bags Placing in N.C	205.80	each
17		Already Filled Geo Bags Placing in B.A.Wire Crates(Beggy)	926.10	each
18		Already Filled Geo Bags Placing in B.A.Wire Crates(Box))	1131.90	each
19		Already Filled Geo Bags Placing in Gabbin 1.8x1.8x0.5	617.40	each
20		Already Filled Geo Bags Placing in Gabbin 1.8x1.8x0.6	411.60	each
21		Supply of bamboo 75mm dia	162.70	each
22		Carriage of bamboo 75mm dia lead 5km us	8.70	each
23		Supply of bamboo 100 mm dia	173.70	each
24		Carriage of bamboo 100 mm dia lead 5km us	9.30	each
25		Supply of binding wire	75.04	Kg
26		Laying of porcupine Without boat	834.80	each
27		Laying of porcupine with boat	877.90	each
28		Bamboo piling with jet pump	38.20	each
29		Tree spur	358.00	each
30	M-189	Water	56.20	KL
31	e(ii)	Brick Bats	1041.00	per cum
32	M-006	Local/Fine Sand	143.32	per cum
33		Nails	55.84	per kg
34	222(i)	Bamboo 75mm dia 6m to 8m long	117.65	each
35	232	Sutali	19.75	per kg
36	M-120	Coarse Sand	494.00	per cum
	M-121	Sand (Fine)	143.32	per cum
37	M-081	Cement	5850.40	per mt
38		HP 1000mm dia NP3	2758.22	per mt
39		HP 600mm dia NP3	2574.81	per mt
40	M-159	Sand Bags (Cost of sand and empty cement bag)	8.46	per nos..
41	275	Old empty cement bag(synthetic)(Annexure-I)	292.00	per %nos.
42	276	Nylon Crate of size 1mx1mx1m	39.85	Each
43	M-017	Aggregate 40 mm	494.15	Cum
44	M-016	Aggregate 20 mm	604.91	Cum
45	M-015	Aggregate 10 mm	668.8	Cum
46	M-047	Cement Primer	115.16	litre
47	M-103	Paint (Synthetic Enamel)	516.42	litre
48	M-150	Well Graded Material for Sub-Base - Grading I 53 mm to 9.5 mm	516.42	Cum
49	M-151	Well Graded Material for Sub-Base - Grading II 9.5 mm to 2.36 mm	411.33	Cum
50	M-152	Well Graded Material for Sub-Base - Grading III 2.36 mm below	185.94	Cum
51	M-105	Polymene sheet (125 micron)	14.35	Sqm
52		G.I. wire 15 mm dia	69.3	per kg
53		Compensation for earth taken from private land	34.81	Cum
54		Stitching Role	30	Nos.

BASIC RATES
(C) USAGE RATES OF PLANT & MACHINERY

Sr. No.	Description of		Output of Machine		Usage Rates in Rs.	
	Machine	Activity	Unit	Output	Unit	Rate
PM-008	Dozer - D 175 HP	Dozing cutting	cum/h	200.00	per hour	4,249.00
			cum/h	100.00		4,249.00
PM-013	Hydraulic Excavator 0.9 cum	Excavation	cum/h	100.00	per hour	2,272.00
	Hire Charge of stitching machine		Day	50.00	per Day	50.00
	Hire Charge of Manual Trolley		Day	50.00	per Day	50.00
	Hire Charge of 3kVA generator		Hour	74.00	per Hour	74.00
PM-017	Front end-loader 1 cum bucket capacity	Loading Aggregates	cum/h	25.00	per hour	2,033.00
		Loading Soil	cum/h	60.00		2,033.00
PM-032	Motor Grader	Scarifier & levelling	cum/h	200.00	per hour	4,403.00
	Tractor Mounted Grader			50.00		1,100.75
	Time taken for onward haulage with load		Hour	612.00	per Hour	612.00
	Time taken for empty return trip.		Hour	612.00	per Hour	612.00
M-033	Needle vibrator	Vibrating cement concrete mix	cum/h	3.50	per hour	386.00
M-035	Paver finisher	Laying/spreading	Cum/h	40.00	per hour	2,141.00
M-086	Plate compactor	Compaction	cum/h		per hour	469.70
M-087	Plate vibrator	Compaction	cum/h		per hour	469.70
M-088	Screed vibrator	Compaction	cum/h		per hour	102.64
M-044	Smooth wheeled 80-100 kN tandem roller	Compaction of Sub-base/ Asphalt	cum/h	30.00	per hour	1,978.00
M-045	Stone crusher (Integrated) of 200 TPH	Crushing of Spalls	t/h	200.00	per hour	27,581.30
M-046	Three wheel 80-100 kN Static Roller	Compaction/ Rolling			per hour	1,518.00
		Earth- Embankment or sub-grade	cum/h	80/70		1,518.00
		Sub-base G-I	cum/h	10.00		1,518.00
		Sub-base G-II/G-III	cum/h	8.00		1,518.00
		WMM	cum/h	16.00		1,518.00
M-047	Tipper 5.5 cum/10 t	Carriage	cum/trip	5.50	per hour	1,426.00
M-048	Tractor with Disc Harrows	Pulverisation of soil	cum/h	80.00	per hour	549.10
M-049	Tractor with ripper @ 60 cum per hour	Ripping Pavements, uprooting trees	cum/h	60.00	per hour	629.00
M-050	Tractor with trolley/with Grading equipment	Transportation of materials	t/trip	3 to 5	per hour	629.00
M-051	Tractor with Rotavator	Scarifier	cum/h	25.00	per hour	573.20
M-052	Truck 10 t capacity	Carriage	cum/trip	5.50	per hour	934.50
M-053	Vibratory roller 80-100 kN	Compaction of soil	cum/h	100.00	per hour	2,338.00
		WMM	cum/h	60.00		2,338.00
M-054	Water tanker 6 kl capacity (Truck Mounted)	Carriage of water	litre / h	12000.00	per hour	752.00
M-055	Wet mix plant (Pug Mill)	Wet Mix	cum/h	25.00	per hour	1,822.30

Analysis of Rate							
SOR No.	Description			Unit	Qty	Rate(Rs.)	Amount (Rs.)
Carriage of materials (By Tractor)							
1	1.4	Cost of Haulage excluding Loading & Unloading					
	RCD	Haulage of materials by Tractor excluding cost of loading, unloading and stacking.					
		Unit =					
		Taking output 3.60 Tonne load and lead 10 km = 36.0 t.km					
		Case-I: Surfaced					
		Speed with load: 15 km per hour					
		Speed while returning empty: 25 km per hour					
	a)	Machiner					
		Tractor 3.6 t capacity					
		Time taken for onwards haulage with load	hou	0.667	629.00	419.54	
		Time taken for empty return trip	hou	0.400	629.00	251.60	
		Total				671.14	
		Add OH@12%				-	
						671.14	
		Rate per Ton.km				18.64	
		Case-II: Unsurfaced					
		Speed with load: 12 km/hour					
		Speed for empty return trip: 20 km/hour					
	a)	Machiner					
		Tractor 3.6 t capacity					
		Time taken for onwards haulage with load	hou	0.833	629.00	523.96	
		Time taken for empty return trip	hou	0.500	629.00	314.50	
		Total				838.46	
		Add OH@12%				-	
						838.46	
		Rate per Ton.km				23.29	
	(c)	Case-III: Katcha Track and Track in River Bed / Nallah Bed and Choe Bed					
		Speed with load : 10 km / hour					
		Speed with returning empty : 15 km / hour					
	(a)	Machinery					
		Tipper 10 tonnes or 5.5 cum capacity	hour	1.000	1,426.00	1,426.00	
		Time taken for empty return trip	hour	0.667	1,426.00	951.14	
		Total				2,377.14	
		Add OH@12%				-	
		Cost for 36.0 t.km =a+b				2,377.14	
		Rate per Ton.km				66.03	
6.6.1.		Labour for laying Brick bats /dry graded jhama khoa or stone filter under Brick Pitching or Boulder pitching in slope or apron including light ramming etc. all complete job as per approved design, specification and direction of E/I					
WRD		Unit = Per Cum					
		Taking output= 2.832 Cum					
	a)	Labour					
		Mazdoor (Unskilled)	Nos	3.00	373.00	1,119.00	
	b)	Overheads @ 12% on (a)				0.00	
		Rate for 2.832 Cum				1,119.00	
		Rate Per Cum				395.13	

3	1.1	Loading and Unloading of Stone Boulder, Stone aggregate ,Sand, Kankar,Moorum , Brick Bats and Sand etc.				
	RCD	Unit = Per Cum				
		Taking output= 2.25 Cum				
		Time required for				
		i)	Positioning of tipper at unloading point	day	1 Min	
		ii)	Loading by front end loader 1 cum bucket capacity @ 25 cum per hour	day	5Min	
		iii)	Maneuvering, reversing, dumping and turning for return		0Min	
		iv)	Waiting time, unforeseen contingencies etc	hou r	0Min	
		Total			6Min	
		a)	Labour			
			Mate	day	0.03	397.00
			Mazdoor for Loading and unloading	day	0.72	373.00
		b)	Machinery			
			Tractor 3.6 t capacity	Hou	0.10	629.00
			Front end loader 1 cum bucket capacity @ 25 cum per	Hou r	0.08	2,033.00
						512.11
			Add OH@12%			-
						512.11
			Rate per Cum=(a+b+c)/2.25			227.60
		Note -	Unloading will be done Manually.			
4	9.3	1100	Laying Reinforced Cement Concrete Pipe NP3 as per design in Single Row .			
			1000 mm dia Hume Pipe			
			Unit=m			
			Taking Output=7.5 m			
		a	Material			
			Sand at site	cum	0.04	3,293.47
			Cement at site	ton	0.03	6,427.68
			RCC pipe NP3 pipe includsing collar at site	m	7.50	3,504.85
						26286.38
		b	Labour			
			Mate	day	0.09	397.00
			Mason (1 class)	day	0.25	503.00
			Mazdoor(Unskilled)	day	2.00	373.00
						27,518.42
			Add GH@12%			-
						27,518.42
			Cost for 7.50 m =			27,518.42
			Rate per M=			3,669.12
		{Providing and laying of brick bats obtained from chimney with machnical means wih all spreading gradding to required slope and compacted at OMC to achieve required density with all completed as per direction of E/I }				
			Taking out put=100 cum			
		a)	Labour			
			Cost of Labour for Pitching and Light	day	1.00	360.94
		b)	Materials			
			Bricks Bats -Basic Rate Taken From RCD	Cum	1	1041.00
			Add:Carriage Charge for Brick bats			647.70
			Total Cost			2,049.64
			NET TOTAL COST PER CUM			2,049.64
			SAY RS			2,049.64

6	5.7.7	Labour for cutting 62 mm to 75 mm dia sal bamboo piles to size and making shoes and driving etc. complete job as per specification and direction of E / I.					
	WRD	Unit :- Per M					
		Taking Out put:- 30.50 Mtr					
		(Assuming 20 nos. pile sunk 1.525 mtr deep)					
		(a)	Labour				
			Carpenter Gr II	Nos	1.00	503.00	503.00
			Unskilled mazdoor for piling	Nos	3.00	373.00	1,119.00
							1,622.00
			Overheads @ 12%				-
							1,622.00
							1,622.00
			Rate Per M				53.18
7	5.7.8	Providing fitting and fixing split bamboo woven chachari in position with 20 swg G.I. wire or 75 mm to 100 mm long nails alternatively including cost of G.I. wire 3.15 mm dia or nails complete job as per specification and direction of E / I.					
		Unit :- Per M2					
		Taking Out put:- 9.30 Sqm					
		(Assuming strip of 3.05x3.05 = 9.30 sqm)					
		a	Material				
		1	75 mm to 100mm long nail	kg	0.25	55.84	13.96
		2	Bamboo -75mm dia to 62 mm dia				
			Bamboo @75mm = 3050/75 = 40.67				
			Say=41Nosx3.05=125.05M				
			Add for Lower Binder of chachari				
			10x3.75=30.50M				
			Runner @150mm/c=7x3.05=21.35M				
			Total length of Bamboo=176.9M				
			Total No of Bamboo=176.9/6=30No	No	30	117.65	3529.5
		b	Labour				
			Carpenter Gr II	Nos	1.00	503.00	503.00
			Unskilled mazdoor for piling	Nos	1.00	373.00	373.00
			Overheads @ 12% on labour charge				-
							4,419.46
			Rate Per M2				475.21
8	5.7.8	Labour for fitting and fixing split bamboo woven chachari in position with 20 swg G.I. wire or 75 mm to 100 mm long nails alternatively including cost of G.I. wire 3.15 mm dia or nails complete job as per specification and direction of E / I.					
	WRD	Unit :- Per M2					
		Taking Out put:- 9.30 Sqm					
		(Assuming strip of 3.05x3.05 = 9.30 sqm)					
		(a)	Material				
			G.I. wire 3.15 mm dia	Kg	0.250	69.30	17.33
		(b)	Labour				
			Carpenter Gr II	Nos	1.00	503.00	503.00
			Unskilled mazdoor for piling	Nos	1.00	373.00	373.00
							893.33
			Overheads @ 12%				-
							893.33
							893.33
			Rate Per M2				96.06
9	5.7.9	Labour for fitting and fixing 62mm 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 / I.					
	WRD	Unit :- Per M					
		Taking Out put:- 30.50 Mtr					

	(a)	Materials					
		Cost of 150 mm long nails	Kg	0.50	55.84	27.92	
	(b)	Labour					
		Carpenter Gr II	Nos	0.13	503.00	65.39	
		Unskilled mazdoor for pilling	Nos	0.25	373.00	93.25	
						186.56	
		Overheads @ 12%				-	
						186.56	
						186.56	
		Rate Per M				6.12	

10 Supplying bamboo 75 mm dia 6 m to 8 m long at complete job as per specification and direction of E / I.

		Taking Out put:- 115 nos					
	(a)	Material					
		Supplying bamboo 75 mm dia 6 m to	Nos	115	162.70	18,710.50	
		Add:Carriage Charge for				292.22	
		Add Labour for laying				395.13	
						19,397.85	
		Overheads @ 12%				-	
						19,397.85	
						19,397.85	
		Rate Per each Bamboo				168.68	

1 5.7.40.1 Labour for filling empty cement bags with local sand, stitching the bags and placing including supply of sutli etc. all complete as per approved design, specifications and direction of E/I

WRD	Unit :- Per % nos						
	Taking Out put:- 100 nos						
	(a)	Supplying of Sand bags	Nos	100	8.46	846.00	
		Carriage cost for local sand (100 no. of	cum	3.4	300.72	1022.45	
					Total	1868.45	
	(b)	For filling & stitching & stacking					
		(a) Unskilled mazdoor for filling sand into bags and sewing	Nos	2	373	746.00	
		(b) Sutali	Kg	0.5	19.75	9.88	
					Total	755.88	
	(c)	Labour rate for Carrying & Placing to work site of E.C.Bags					
		(a) Unskilled mazdoor for carrying filled bags and placing to work site	Nos	3	373	1119.00	
		Total (A+B+C)=				3743.32	
		Add overhead charge @12%				0.00	
						3743.32	
		Total Net Rs.				3743.32	
		Rate per %				37.43	
		Sand Each Bag			Say	Rs 37.43	

5.7.40.2 Labour for filling empty cement bags with local sand, stitching the bags and placing in Nylon crate of size (1 m x 1 m x 1 m) with lead of 150 M including supply of sutli etc. at site in dry portion all complete as per approved design, specification and direction of E/I

WRD SOR Page 159	Unit :- Each N.C						
	Taking Out Put = 25 nos. filled E.C. Bags in each N/C						
	Cost of 25 nos of filled E.C.Bags (Vide item no. 5.7.40.1	Nos	25	37.43	935.83		
	Rate each				935.83		
	Supply of Nylon Crate of size 1mx1mx1m				39.85	39.85	
	Material						
	(a) Nylon Crate					39.85	
	(b) Add Overhead charge @12%					0.00	
	Total (a+b)					39.85	
	Rate per nos.					39.85	

11.2	Sand filling in Foundation Trenches as per Drawing & Technical Specification							
	Unit = Per Cum							
a	Material							
	Sand(assuming 20 percent voids)				cum	1.20	143.32	171.98
b	Labour							
	Mate				day	0.01	397.00	3.97
	Mazdoor(Unskilled)				day	0.3	373.00	111.90
								287.85
	Add overhead chrage @12%							0
								287.854
	total=							287.85
	Carraige cost for Local sand							292.22
	Rate per cum							580.07



Latitude: 26.407607
Longitude: 86.721692
Elevation: 94.41±20 m
Accuracy: 1.8 m
Time: 27-10-2024 15:13
Note: dagmara road se rajpur mandal tola

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Latitude: 26.411824
Longitude: 86.723004
Elevation: 112.69±18 m
Accuracy: 1.4 m
Time: 27-10-2024 15:28
Note: dagmara road se rajpur mandal tola

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Arman Raj
18/11/24

13/11/24
AB

13/11/24

Executive Engineer
R.W.D. W.D., Supaul



Latitude: 26.407915
Longitude: 86.721608
Elevation: 99.41±19 m
Accuracy: 1.3 m
Time: 27-10-2024 15:15
Note: dagmara road se rajpur mandal tola

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Latitude: 26.407748
Longitude: 86.721643
Elevation: 99.11±22 m
Accuracy: 1.6 m
Time: 27-10-2024 15:15
Note: dagmara road se rajpur mandal tola

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Latitude: 26.407722
Longitude: 86.721603
Elevation: 99.71±21 m
Accuracy: 1.6 m
Time: 27-10-2024 15:14
Note: dagmara road se rajpur mandal tola

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Amar Raj
13/11/24

13/11/24

13/11/24
Executive Engineer
R.W.D. W.D., Supaul



Latitude: 26.411793
 Longitude: 86.72229
 Elevation: 129.79±20 m
 Accuracy: 1.7 m
 Time: 24-10-2024 10:52
 Note: dagmara road se rajpur mandal tola

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Latitude: 26.411797
 Longitude: 86.72308
 Elevation: 108.89±18 m
 Accuracy: 1.3 m
 Time: 24-10-2024 11:04
 Note: dagmara road se rajpur mandal tola

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Latitude: 26.411753
 Longitude: 86.722998
 Elevation: 110.59±17 m
 Accuracy: 1.4 m
 Time: 27-10-2024 08:42
 Note: dagmara road se rajpur mandal tola

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Aman Raj
 13/11/24

13/11/24
 AR

13/11/24
 Executive Engineer
 R.W.D. W.D., Supaul