



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

ESTIMATE FOR FLOOD DAMAGED REPAIR

Bihar(बिहार)Map



Name of the Road :-

T0 10 Morma To Kachiana

DISTRICT	:	Lakhisarai	
DIVISION	:	Lakhisarai	
BLOCK	:	Lakhisarai	
TOTAL LENGTH OF ROAD	:	3.442 3.42	KM
TOTAL COST	:	13.347	Lac
AVERAGE COST PER KM	:	3.878	Lac
TOTAL COST OF PROJECT	:	13.347	Lac

Submitted By:

Executive Engineer

RWD WORKS DIVISION

Lakhisarai

ESTIMATE FOR FLOOD DAMAGED REPAIR

NAME OF ROAD : T0 10 Morma To Kachiana

DISTRICT Lakhisarai

BLOCK Lakhisarai

DIVISION Lakhisarai

LENGTH OF ROAD (in Km) 3.442 3.42

CD STRUCTURES 8

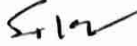
Sl. No.	DESCRIPTION	AMOUNT (LAKHS)
PART-A	RESTORATION COST	
1	EARTHWORK / SAND / MOORUM FILLING	5.920
2	Brick Bat Filling	0.000
3	GSB GR-II	5.623
	SUB TOTAL	11.543
	LABOUR CESS 1% of cost	0.115
	GST 12 % of cost	1.385
	SEIGNORAGE FEE @ 10 % on Minor Mines	0.303
	TOTAL	13.347
	TOTAL COST OF PROJECT IN LACS =	13.347

Deduct Contractor profit 9.1%.

- 1.214 lakh

Total = 12.133 lakh


10/11/2021
JE
RWD


10/11/2021
AE
RWD


10-11-2021
EE
RWD

T.S Amount

Construction Cost : Rs. 13.347 lakh
Deduct Contractor Profit 9.1% : Rs. - 1.214 lakh

Total: Rs. 12.133 lakh

Ref. E.E. Letter No. 548 dt. 18.4.2022
Technically Sanctioned for Rs. 12.133 lakh
(Rupees Twelve lakh Thirteen
thousand three hundred Only.
for construction work & 5 Years Maintenance

(Alp)
20/04/22
Superintendent Engineer
Rural Works Department
Works Circle, Munger
Asst
20/04/22

स्थल निरीक्षण प्रतिवेदन

वर्ष 2021-22 के बाढ़ में क्षतिग्रस्त पथों में कराये गए मोटरबुल कार्य की जाँच।

पथ का नाम :- T10 मोरमा- कछियाना

पथ की लम्बाई :- ^{3.42} 3.422 कि०मी०

प्राक्कलित राशि :- 13.347 / - लाख

अधीक्षण अभियंता, ग्रामीण कार्य विभाग, कार्य अंचल, मुंगेर के पत्रांक 1162 दिनांक 16.11.2021 द्वारा प्राप्त निदेश के अनुपालन में आज दिनांक 21.11.2021 को ग्रामीण कार्य विभाग, कार्य प्रमंडल, लखीसराय के अधीन बाढ़ से क्षतिग्रस्त पथ का निरीक्षण सहायक अभियंता श्री लौडिक प्रसाद राय के साथ वर्ष 2021-22 में बाढ़ में क्षतिग्रस्त पथ का कराये गए मोटरबुल कार्य का स्थल निरीक्षण किया। जाँच के समय कार्य प्रखंडल, लखीसराय के सहायक अभियंता श्री संदीप कुमार एवं श्री ब्रजेश कुमार सिंह, कनीय अभियंता श्री श्याम सुन्दर प्रसाद एवं श्री रंजीत कुमार उपस्थित रहे।

उक्त पथ के निरीक्षण के दौरान पाया गया कि पथ में बने बड़े गड्ढों में Moorum से भरकर उसके उपर G.S.B. (Gr.II) (जगह-जगह 200mm एवं 150mm मुटाई में) डालकर सम्पीडन का कार्य कराया गया है, जिसका शत प्रतिशत जाँच किया गया है, एवं उक्त पथ के प्राक्कलन एवं मापीपुस्त में दर्ज की गई मापी को कार्य स्थल के अनुसार पाया।


सहायक अभियंता
ग्रा०का०वि०, कार्य प्रमं०
खड़गपुर-तारापुर


30/11/2021
कार्यपालक अभियंता
ग्रा०का०वि०, कार्य प्रमं०
खड़गपुर-तारापुर

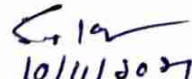
पथ का नाम :- T10 मोरमा- कछियाना

पथ की लम्बाई :- ^{3.92}~~3.422~~ कि०मी०

प्राक्कलित राशि :- 13.347 / - लाख

उपर्युक्त पथ को मोटरेबुल करने हेतु मरम्मत का प्राक्कलन, माह अगस्त 2021 में हुई भारी बारिश एवं बाढ़ से पथ कई दिनों तक पथ पानी में डूबा हुआ था एवं बाढ़ का पानी बहाव होने से बड़े-बड़े आकार का Pot holes बन गया था, एवं पथ में कटाव भी हो गया था। उक्त पथ लखीसराय जिला के लखीसराय प्रखण्ड में पड़ता है। बाढ़ आने के कारण पूरा प्रखण्ड जलमग्न हो गया था, जिस कारण इस पथ काफी क्षतिग्रस्त हुआ। सचिव महोदय, ग्रामीण कार्य विभाग, बिहार, पटना का पत्रांक- मु०अ०-4(मु०) विविध कार्य-23-60/2020-1937 दिनांक 07.07.2021 द्वारा प्राप्त निदेश के अनुसार क्षतिग्रस्त पथांश का फोटोग्राफ State MIS पर अपलोड करने के पश्चात् पथ का मोटरेबुल कार्य पूर्ण कराकर निदेशानुसार फोटोग्राफ State MIS पर अपलोड करने के उपरान्त कराये गए कार्यों को मापी पुस्त में दर्ज कराकर प्राक्कलन तैयार किया गया है। प्रस्तुत प्राक्कलन अद्यतन अनुसूचित दर एवं सामग्रियों के औसत लीड के आधार पर बनाया गया है। पथ में बने बड़े गड्ढों को Moorum से भरकर उसके उपर G.S.B. (Gr.II) (जगह-जगह 150mm - 200mm की मुटाई में) भरकर सम्पीडन किया गया एवं पथ को मोटरेबुल कराया गया, जिसका तकनीकी अनुमोदन अपेक्षित है।


10/11/2021
कनीय अभियंता


10/11/2021
सहायक अभियंता


10/11/2021
कार्यपालक अभियंता
ग्रामीण कार्य विभाग,
कार्य प्रमंडल, लखीसराय।

T010 Morma To Kachiana



T010 Morma To Kachiana



Name of Road:- T0 10 Morma To Kachiana

Sl. No.	SDB SL.NO	MORD Ref.No	Description	Unit	NOS	LENGTH	WIDTH	HEIGHT	QUANTITY	RATE	AMOUNT (in Rs.)
1		1100	Type B (First Class) Bedding								
			Laying (First Class) bedding on well compacted sand, moorum or approved granular material as per Clause 1105 (ii)								
			Qty as per Measurement	cum					571.65		
			Net Qty						571.65	1,035.53	5,91,960.00
2	4.1	401	Granular Sub-base with Well Graded Material (Table 400.1)								
		(ii)	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.								
			Qty as per Measurement	Cum					381.12		
			Net GSB Qty						381.12	1,475.49	5,62,339.00
										TOTAL =	11,54,299.00

~~RR~~
10/11/2021
JE
RWD

AE RWD
10/11/10

EE
RWD

Pot Measurement Moorum

Name of Road:- T0 10 Morma To Kachiana

Nos.	Length (m)	Width (m)	Thickness (m)	Qty. (Cum.)
1st Km.				
3	3	1.5	0.3	4.05
5	2.4	1.4	0.3	5.04
8	2.2	1.4	0.3	7.39
16	3.4	2	0.3	32.64
10	2	1.3	0.3	7.8
12	3.4	2.1	0.3	25.7
8	4.8	1.6	0.3	18.43
20	3.4	1.8	0.3	36.72
5	2.4	2	0.3	7.2
8	2.2	1.4	0.3	7.39
16	3.1	2.1	0.3	31.25
10	2.2	1.3	0.3	8.58
12	3.4	2.1	0.3	25.7
8	2	1.6	0.3	7.68
20	2.2	1.8	0.3	23.76
5	2.1	2.4	0.3	7.56
8	1.9	1.9	0.3	8.66
16	2	2.1	0.3	20.16
1	8	2.2	0.3	5.28
18	2.4	2.6	0.3	33.7
16	2.6	2	0.3	24.96
3rd Km.				
12	3	2	0.3	21.6
8	6	2	0.3	28.8
4	5	2.5	0.3	15
5	6	2	0.3	18
8	5	2	0.3	24
4th Km.				
5	10	2	0.3	30
4	12	1.5	0.3	21.6
8	9	1.75	0.3	37.8
6	7	2	0.3	25.2
Total				571.65

RV
10/11/2021
JE

Sir
10/11/2021
AE

W. Nuv.
10.11.2021

Pot Measurement GSB Gr-II

Name of Road:- T0 10 Morma To Kachiana

Nos.	Length (m)	Width (m)	Thickness (m)	Qty. (Cum.)
1st Km.				
3	3	1.5	0.2	2.7
5	2.4	1.4	0.2	3.36
8	2.2	1.4	0.2	4.93
16	3.4	2	0.2	21.76
10	2	1.3	0.2	5.2
12	3.4	2.1	0.2	17.14
8	4.8	1.6	0.2	12.29
20	3.4	1.8	0.2	24.48
5	2.4	2	0.2	4.8
8	2.2	1.4	0.2	4.93
16	3.1	2.1	0.2	20.83
10	2.2	1.3	0.2	5.72
12	3.4	2.1	0.2	17.14
8	2	1.6	0.2	5.12
20	2.2	1.8	0.2	15.84
5	2.1	2.4	0.2	5.04
8	1.9	1.9	0.2	5.78
16	2	2.1	0.2	13.44
1	8	2.2	0.2	3.52
18	2.4	2.6	0.2	22.46
16	2.6	2	0.2	16.64
3rd Km.				
12	3	2	0.2	14.4
8	6	2	0.2	19.2
4	5	2.5	0.2	10
5	6	2	0.2	12
8	5	2	0.2	16
4th Km.				
5	10	2	0.2	20
4	12	1.5	0.2	14.4
8	9	1.75	0.2	25.2
6	7	2	0.2	16.8
Total				381.12

Re
10/11/2021
J.E

Sir
10/11/2021
AE

Wnm
10.11.2021

Name of Road :-

T0 10 Morma To Kachiana

SEIGNIORAGE FEE

Material	Unit	Quantity	Basic rate	Amount	Seigniorage fee
Earth	m3	0.00	34.82	0.00	0.00
GSB 26.5-9.5	m3	170.74	604.91	103283.40	10328.34
GSB 9.5-2.36	m3	121.96	514.58	62757.35	6275.74
Local sand	m3	195.13	141.85	27679.68	2767.97
Agg-63-45 G2	m3	0.00	480.64	0.00	0.00
Screening B	m3	0.00	397.73	0.00	0.00
Moorum	m3	0.00	159.97	0.00	0.00
Coarse sand/ Moorum	m3	685.98	159.97	109736.22	10973.62
Brick Bats	m3	0.00	1032.00	0.00	0.00
				303456.65	30345.67

Pr
10/11/2021
JE

S. L.
10/11/2021
AE

[Signature]
10.11.2021
EE

Name of Road

T0 10 Morma To Kachiana

Sl. No.	Description	Unit	Quantity	Material Analysis (Minor Mines)																Brick Bats	
				Earth	GSB 53-9.5	GSB 26.5-9.5	GSB 9.5-2.36	Local sand	Agg-63-45 G2	Screening B	Moorum	53-22.4 G3	Agg 13.2 mm	agg 9.5-4.75	agg 4.75 below	agg 40	agg 20	agg 10	Stone Agg		Stone spall
1	Brick Bat filling	m3	0.00																		0.00
2	GSB Grading II	m3	381.12			170.74	122	195.13													
3	Type B (First Class) Bedding	m3	571.65																	685.98	
				0.00	0.00	170.74	121.96	195.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	685.98	0.00	0.00

[Signature]
J.E

[Signature]
A.E

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E.E

Analysis for Carriage by Road & Rail

Name of Road:-- T0 10 Morma To Kachiana

District:- Lakhisarai

Block :- Lakhisarai

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	Stone Metal Gr-I & Gr-II	Cum	Sheikhpura	$\frac{8.00}{4.59} \times 7.94$	$\times 43.00 \text{ Km} = \text{Rs } 595.07$	$\frac{8.00}{4.59} \times 19.23$	$\times 0.00 \text{ Km} = \text{Rs } 0.00$			210.23		Rs. 805.30
2	Stone Metal Gr-III / GSB	Cum	Sheikhpura	$\frac{8.00}{4.99} \times 7.94$	$\times 43.00 \text{ Km} = \text{Rs } 547.37$	$\frac{8.00}{4.99} \times 19.23$	$\times 0.00 \text{ Km} = \text{Rs } 0.00$			210.23		Rs. 757.60
3	Stone Aggregate / Chips	Cum	Sheikhpura	$\frac{8.00}{4.99} \times 7.94$	$\times 13.00 \text{ Km} = \text{Rs } 165.48$	$\frac{8.00}{4.99} \times 19.23$	$\times 0.00 \text{ Km} = \text{Rs } 0.00$			210.23	1358.11	Rs. 1733.82
4	Stone Boulder	Cum	Sheikhpura	$\frac{8.00}{4.80} \times 7.94$	$\times 43.00 \text{ Km} = \text{Rs } 569.03$	$\frac{8.00}{4.80} \times 19.23$	$\times 0.00 \text{ Km} = \text{Rs } 0.00$			210.23		Rs. 779.26
5	Coarse Sand	Cum	Kiul River	$\frac{8.00}{4.99} \times 7.94$	$\times 38.00 \text{ Km} = \text{Rs } 483.72$	$\frac{8.00}{4.99} \times 19.23$	$\times 1.00 \text{ Km} = \text{Rs } 30.83$			113.70		Rs. 628.25
6	Binding Material/Moorum	Cum	Sheikhpura	$\frac{8.00}{6.00} \times 7.94$	$\times 43.00 \text{ Km} = \text{Rs } 455.23$	$\frac{8.00}{6.00} \times 19.23$	$\times 0.00 \text{ Km} = \text{Rs } 0.00$			113.70		Rs. 568.93
7	Local Sand	Cum	Local	$\frac{8.00}{4.99} \times 7.94$	$\times 2.00 \text{ Km} = \text{Rs } 25.46$	$\frac{8.00}{4.99} \times 19.23$	$\times 1.00 \text{ Km} = \text{Rs } 30.83$			113.70		Rs. 169.99
8	Brick	1000 Nos	Local	$\frac{8.00}{2.00} \times 7.94$	$\times 7.00 \text{ Km} = \text{Rs } 222.32$	$\frac{8.00}{2.00} \times 19.23$	$\times 1.00 \text{ Km} = \text{Rs } 76.92$			477.52		Rs. 776.76
9	Brick Bat	Cum	Local									Rs. 1032.00

Cost of Haulage Excluding Loading & Unloading as per SOR

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	9.56
Kachha Road	24.30	19.23

* Subjected to Verification of Lead

10/11/2021
JE
RWD

10/11/2021
AE
RWD

10/11/2021
EE
RWD

Analysis for Carriage Through Railway from Quarry Site to Work Site

Mirzachawki to Kiul

Material -Stone Aggregate / Chips

Quarry Site to Mirzachawki Railway Yard (By Road)

$$\text{Pucka / Surface} = \frac{8.00}{4.99} \times 7.94 \times 4.00 \text{ Km} = \text{Rs } 50.92$$

$$\text{Unsurface Gravel Road} = \frac{8.00}{4.99} \times 9.56 \times 0.00 \text{ Km} = \text{Rs } 0.00$$

$$\text{Kachha Road} = \frac{8.00}{4.99} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$$

$$\text{Loading \& Unloading} = \text{Rs } 210.23$$

$$(i) \quad \text{Total "A"} = \text{Rs } 261.15$$

Mirzachawki Railway Yard to Kiul Railway Yard = 157.00 Km

$$\text{Railway freight charge from Mirzachawki Railway} = \text{For 1 MT } 157.00 \text{ Km} = \text{Rs } 316.10 = \text{Rs } 316.10$$

$$\text{Busy Season charge 12\% of Railway freight charge} = \text{For 1 MT} = 12\% = \text{Rs } 37.93$$

$$\text{Railway Development Charge to 5\% of Railway freight} = \text{For 1 MT} = 5\% = \text{Rs } 15.81$$

$$\text{Railway Terminal Charge Rs 40/- Per Tonne Per} = \text{For 1 MT } 2 \times \text{Rs } 40.00 = \text{Rs } 80.00$$

$$\text{Sub-Total} = \text{For 1 MT} = \text{Rs } 449.84$$

$$\text{Add GST 1\%} = \text{Rs } 0.00$$

$$\text{Total} = \text{For 1 MT} = \text{Rs } 449.84$$

$$\text{Rate for Railway freight Charge "B"} = \text{For 1 Cum} = \text{Rs } 449.84 \times 1.60 = \text{Rs } 719.75$$

$$\text{Add 12\% Overhead} = 12\% = \text{Rs } 86.37$$

$$\text{Add 10\% Contractor Profit} = 10\% = \text{Rs } 80.61$$

$$(ii) \quad \text{Gross Rate for Railway freight Charge} = \text{For 1 Cum} = \text{Rs } 886.73$$

$$(iii) \quad \text{Loading \& Unloading Cost} = \text{For 1 Cum} = \text{Rs } 210.23$$

$$\text{Carriage Cost from Quarry to Kiul Railway Yard} = \text{For 1 cum} = \text{Rs } 261.15 + \text{Rs } 886.73 + \text{Rs } 210.23 = 1358.11$$

Schedule XLV-Form No. 134

To Norma to Kachiana

City of Tetay

DIVISION

Lakhsanai

SUB-DIVISION

MEASUREMENT BOOK

688

No. and date of agreement.
(These four lines should be repeated at the commencement of
the measurements relating to each work.)

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
N/W:- Motorable Road					
To 10 Mm to Kachion					
Under Lakshman Block					
Agency:- Departmental					
Date:-					

(1) 26:- PLV measurement in
for Holes of road due to
flood damage.

	N	m	m	m	m
	3	3m	1.5	0.30	4.05
	5	2.4	1.4	0.30	5.04
	8	2.20	1.40	0.30	7.39
	16	3.40	2.20	0.30	32.64
	10	2.20	1.30	0.30	7.20
	12	3.40	2.10	0.30	25.70
	8	4.00	1.60	0.30	18.43
	20	3.40	1.80	0.30	36.72
	5	2.40	2.00	0.30	7.20
	8	2.20	1.40	0.30	7.39
	16	3.10	2.10	0.30	31.25
	10	2.20	1.30	0.30	8.58
	12	3.40	2.10	0.30	25.70
	8	2.40	1.60	0.30	7.68
	20	2.20	1.80	0.30	23.76
	5	2.40	2.40	0.30	7.56

Continuation

0.1.19

Particulars	Details of actual measurement				Content area
	No.	L	B	D	
					571.65 sq
		87	190	190	$\times 30 = 870$
		16	2	210	$\times 30 = 200$
		1	87	210	$\times 30 = 500$
		18	214	216	$\times 30 = 330$
		16	216	216	$\times 30 = 240$
320 / 100		12	370	210	$\times 30 = 210$
		12	600	21	$\times 30 = 280$
		4	500	215	$\times 30 = 150$
		5	600	200	$\times 30 = 180$
		8	500	200	$\times 30 = 240$
410		5	1100	200	$\times 30 = 300$
		4	1200	115	$\times 30 = 210$
		8	900	175	$\times 30 = 370$

$$6 \times 700 \times 200 \times 30 = 25200$$

$$571.65 \text{ sq}$$

plv 1047 sps 1000 674160
 1015 10 in 1015 1015 1015
 1015 1015 1015

N	m	m	m	40
3x	300	15	20	2170
5x	240	140	20	3136
8x	220	140	20	490
16x	340	20	20	24760
16x	220	140	20	5120
10	10	10	10	10

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
	8	4.10	1.60	20	12.29
	20	3.40	1.80	20	24.48
	5	2.4	2.0	20	4.80
	8	2.20	1.40	20	4.93
	16	3.10	2.10	20	20.83
	10	2.20	1.30	20	5.72
	12	3.40	2.10	20	17.14
	8	2	1.60	20	5.12
	20	2.20	1.80	20	15.84
	5	2.10	2.40	20	5.04
	8	1.90	1.90	20	5.78
	16	2.20	2.10	20	13.44
	10	8.00	2.20	20	3.52
	18	2.40	2.60	20	22.48
	16	2.6	2.0	20	16.64
20 ft	12	3m	2m	20	14.40
	8	6m	2m	20	19.20
	4	5m	2.5	20	10.0
	5	6m	2m	20	12.00
	8	5	2m	20	16.0
4/15	5	10m	2m	20	20.0
	4	12	1.5	20	14.40
	8	9m	1.75	20	25.20
	6	7m	2	20	16.80
					381.12

 (11) Continuation Σ 100

Particulars	Details of actual measurement				Contents area
	No.	L.	B.	D.	
Mat 4 313					
26.5 x 9.5 = 170.744					
9.5 x 2.38 = 121.964					
Local sum 195.133					
Moore 685.983					
Abstract of cert. for Moforale					
Flora Top Mins. Kachions					
Local Calculus in Block					

1) For Moore filipin					
Hole for ad					
$12 = 571.65 \text{ m}^3$					
$\text{C } 1035.53 / 571.960$					
2. For local spruce					
Q311 in pot Hole for ad					
Asp's specific					
P3. 381.12 m					
$\text{C } 1475.49 / 4 = 562339$					
$\text{B } 1154299 = 0$					
12. Local 11543 = 0					
12.457 4, 138 515 = 0					
$\text{B } 1304 357 = 0$					

Continuation

Inspection Report for Flood Damage Work

Date :- 30-11-2021

Name of PIU :- E.E.RWD Kherafwa Tarapur

Name of Block/ Road :- Lakhisarai / Ho morma - Kachhigana

A. For Road

1. Damage Location/ Chainage :- 0-90m, 1300m to 1624
2. Damage Length :- 1.221 Km
3. Nature of Damage :- crust damaged badly
4. Details of Restoration Works :- Fillup of morum, CSR Goli
(i) Material being in Restoration works :- morum, CSR Goli
(ii) Equipment's /Tools being used in Restoration works :- JCB, Tractor, Roller
(iii) Procedure take up in Restoration works :- Fillup of morum & CSR Goli
(iv) Restored Length :- 1.221 Km layer wise

B. For Bridge :-

1. Damage Location/ Chainage :-
2. Damage Length :-
3. Nature of Damage :-
4. Details of Restoration Works :-
(i) Material being in Restoration works :-
(ii) Equipment's /Tools being used in Restoration works :-
(iii) Procedure take up in Restoration works :-
(iv) Restored Length :-

आर्य संतोषजनक पात्रा ।

30/11/2021

Signature
(Name of Inspection)