



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

ESTIMATE FOR FLOOD DAMAGED REPAIR

Bihar(बिहार)Map



Name of the Road :-

Toi Sahjadpur Laxmipur
Lakshmipur To Sahjadpur

DISTRICT	:	Lakhisarai	
DIVISION	:	Lakhisarai	
BLOCK	:	Barahiya	
TOTAL LENGTH OF ROAD	:	0.600 0.580	KM
PART-A TOTAL COST OF RESTORATION	:	22.311	Lac
AVERAGE COST PER KM	:	37.185	Lac
TOTAL COST OF PROJECT	:	22.311	Lac

Submitted By:
Executive Engineer
RWD WORKS DIVISION
Lakhisarai

स्थल निरीक्षण प्रतिवेदन

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

पथ का नाम :- T01 शहजादपुर लक्ष्मीपुर

पथ की लम्बाई :- ^{0.58}0.600 कि०मी०

प्राक्कलित राशि :-22.311/- 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 मोटरेबुल 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

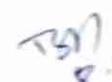
पथ का नाम :- T01 शहजादपुर लक्ष्मीपुर

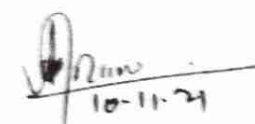
पथ की लम्बाई :- ~~0.600~~ 0.580 कि०मी०

प्रकल्पित राशि :- 22.311 / - 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 बड़हिया 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 द एवं सामग्रियों के औसत लीड के आधार पर बनाया गया है। पथ में बने बड़े गड्ढों को Brick Bats 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।


कनीय अभियंता
8.11.21


सहायक अभियंता
8.11.21


कार्यपालक अभियंता
ग्रामीण कार्य विभाग,
कार्य प्रमंडल, लखीसराय।
10.11.21

ESTIMATE FOR FLOOD DAMAGED REPAIR

NAME OF ROAD :

To, Sahjadpur Laxminipur
Lakshmipur To Sahjadpur

DISTRICT

Lakhisarai

BLOCK

Barahiya

DIVISION

Lakhisarai

LENGTH OF ROAD (in Km)

0.600 - 0.580

CD STRUCTURES

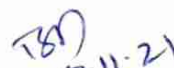
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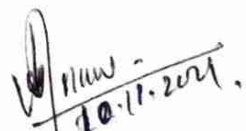
Sl. No.	DESCRIPTION	AMOUNT (LAKHS)
PART-A	RESTORATION COST	
1	Type B (First Class) Bedding	8.624
2	Brick Bat Filling	9.826
3	GSB GR-II	0.582
	SUB TOTAL OF Restoration	19.032
	LABOUR CESS 1% of cost	0.190
	GST 12 % of cost	2.284
	SEIGNORAGE FEE @ 10 % on Minor Mines	0.805
	TOTAL OF Restoration	22.311
	TOTAL COST OF PROJECT IN LACS =	22.311

Deduct Contractor Profit 9.1.1. = - 2.030 Lakh

Total = 20.281 Lakh


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T.S Amount

Construction Cost: Rs. 22.311 Lakh

Deduct Contractor profit 9.1% = Rs. 2.030 Lakh

Total = Rs. 20.281 Lakh

D.F.E. Letter No. 548 dt. 18.4.2022

Technically Sanctioned for Rs. 20.281 Lakh

(Rupees Twenty Lakh twenty
eight thousand one hundred only)

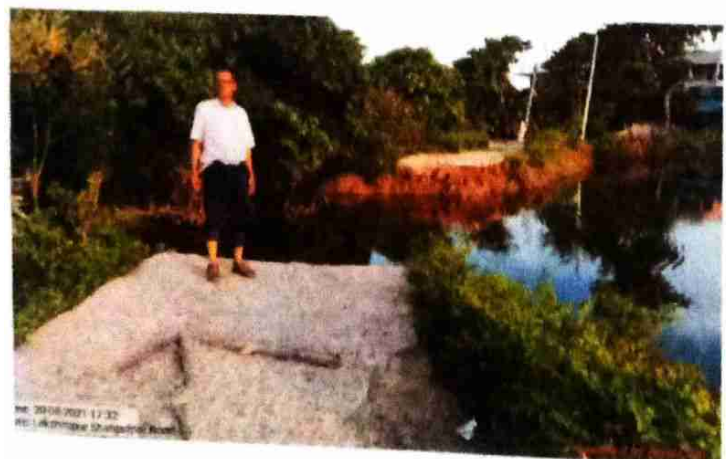
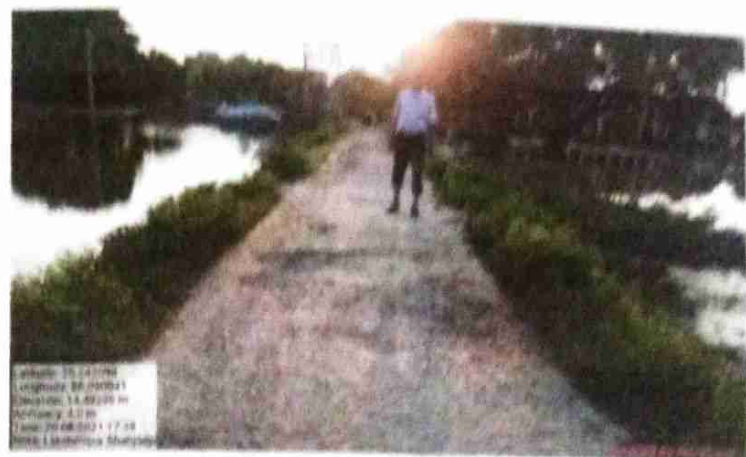
for construction work & 5 Years Maintenance

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20/04/22

Superintending Engineer
Rural Works Department
Works Circle, Munger

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20/04/2022

Lakshimpur To Sahjadpur



Lakshimipur To Sahjadpur



Name of Road:- Lakshmipur To Sahjadpur

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 & 800	Laying (First Class) bedding on well compacted sand, moorum or approved granular material as per Clause 1105 (ii)								
			E/W In Flank								
				Cum	1.00	6.00	2.000	0.60	7.20		
					1.00	6.00	2.000	0.70	8.40		
					1.00	8.00	2.500	0.70	14.00		
					4.00	2.00	2.000	0.45	7.20		
					1.00	5.00	3.000	0.45	6.75		
					5.00	3.00	1.500	0.45	10.13		
				Cum	1.00	11.00	2.000	1.10	24.20		
				Cum	1.00	20.000	12.750	3.00	765.00		
			Net Qty						842.88	1,023.18	8,62,416.00
A) SUB TOTAL OF CRUST = 8,62,416.00											
Sub Head : PAVEMENT LAYERS - GSB & WBM ITEMS											
2			Brick BAT Filling								
			Emergent Repair by Filling Brick Bats in Flood damaged Stretch of the Road for making it Motorable								
			as per S/D of E/I								
			Qty as per Measurement	cum					469.60		
			Net Qty						469.60	2,092.45	9,82,616.00

Sl. No.	SDB SL NO	MORD Ref.No	Description	Unit	NOS	LENGTH	WIDTH	HEIGHT	QUANTITY	RATE	AMOUNT (in Rs.)
3	4.1	401 (ii)	Granular Sub-base with Well Graded Material (Table 400.1) 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					38.90		
			Net GSB Qty						38.90	1,495.04	58,157.00
TOTAL =										10,40,773.00	
TOTAL COST OF PAVEMENT IN RS. (A+B+C+D+E+F)=										19,03,189.00	

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Pot Measurement GSB Gr-II

Name of Road:- Lakshmipur To Sahjadpur

Nos.	Length (m)	Width (m)	Thickness (m)	Qty. (Cum.)
1st Km.				
1	20	3.75	0.2	15
1	6	2	0.2	2.4
1	8	2.5	0.2	4
1	6	2	0.2	2.4
1	11	2	0.2	4.4
4	2	2	0.2	3.2
1	5	3	0.2	3
5	3	1.5	0.2	4.5
Total				38.90

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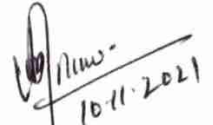
Pot Measurement Brick Bats

Name of Road:- Lakshmipur To Sahjadpur

Nos.	Length (m)	Width (m)	Thickness (m)	Qty. (Cum.)
1	20	3.75	6	450
1	6	2	0.7	8.4
1	8	2	0.7	11.2
Total				469.60


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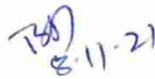
Name of Road :-

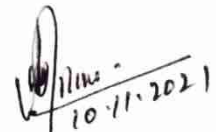
Lakshmipur To Sahjadpur

SEIGNIORAGE FEE

Material	Unit	Quantity	Basic rate	Amount	Seigniorage fee
GSB 26.5-9.5	m3	17.43	604.91	10541.89	1054.19
GSB 9.5-2.36	m3	12.45	514.58	6405.49	640.55
Local sand	m3	19.92	141.85	2825.20	282.52
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	m3	1011.45	200.80	203099.16	20309.92
Brick Bats	m3	564.00	1032.00	582048.00	58204.80
				804919.74	80491.97


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Name of Road

Lakshmiipur To Sahjadpur

Sl. No.	Description	Unit	Quantity	Material Analysis (Minor Mines)																		
				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 spalls	Coarse sand	cement
1	Brick Bat filling	m3	469.60																			564.00
2	GSB Grading II	m3	38.90			17.427	12.45	19.92														
3	Levelling course in foundation	m3	842.88																	1011.5		
				0.00	0.00	17.43	12.45	19.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1011.45	0.00	564.00

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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
				Pukka / Surface	Katcha					
1	Stone Metal Gr-I & Gr-II	Cum	Sheikhpura	$\frac{8.00}{4.59} \times 7.94 \times 45.00 \text{ Km} = \text{Rs } 622.75$	$\frac{8.00}{4.59} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$			210.23		Rs. 832.98
2	Stone Metal Gr-III / GSB	Cum	Sheikhpura	$\frac{8.00}{4.99} \times 7.94 \times 45.00 \text{ Km} = \text{Rs } 572.83$	$\frac{8.00}{4.99} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$			210.23		Rs. 783.06
3	Stone Aggregate / Chips	Cum	Sheikhpura	$\frac{8.00}{4.99} \times 7.94 \times 35.00 \text{ Km} = \text{Rs } 445.53$	$\frac{8.00}{4.99} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$			210.23	1358.11	Rs. 2013.87
4	Stone Boulder	Cum	Sheikhpura	$\frac{8.00}{4.80} \times 7.94 \times 45.00 \text{ Km} = \text{Rs } 595.50$	$\frac{8.00}{4.80} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$			210.23		Rs. 805.73
5	Coarse Sand	Cum	Ktul River	$\frac{8.00}{4.99} \times 7.94 \times 31.00 \text{ Km} = \text{Rs } 394.61$	$\frac{8.00}{4.99} \times 19.23 \times 1.00 \text{ Km} = \text{Rs } 30.83$			113.70		Rs. 539.14
6	Binding Material/Moorum	Cum	Sheikhpura	$\frac{8.00}{6.00} \times 7.94 \times 45.00 \text{ Km} = \text{Rs } 476.40$	$\frac{8.00}{6.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$			113.70		Rs. 590.10
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	Cement	MT	Local	$\frac{8.00}{8.00} \times 7.94 \times 20.00 \text{ Km} = \text{Rs } 158.80$	$\frac{8.00}{8.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$			316.10		Rs. 474.90
10	Steel	MT	Local	$\frac{8.00}{8.00} \times 7.94 \times 20.00 \text{ Km} = \text{Rs } 158.80$	$\frac{8.00}{8.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$			337.28		Rs. 496.08
11	Bitumen Emulsion	MT	Barauni	$\frac{8.00}{8.00} \times 7.94 \times 95.00 \text{ Km} = \text{Rs } 754.30$	$\frac{8.00}{8.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$			361.31		Rs. 1115.61
12	Bitumen	MT	Barauni	$\frac{8.00}{8.00} \times 7.94 \times 95.00 \text{ Km} = \text{Rs } 754.30$	$\frac{8.00}{8.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$			361.31		Rs. 1115.61
13	Hume Pipe (1000 mm)	m	Lakhisarai	$\frac{8.00}{10.00} \times 7.94 \times 30.00 \text{ Km} = \text{Rs } 190.56$	$\frac{8.00}{10.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$			81.88		Rs. 272.44
14	Hume Pipe (600 mm)	m	Lakhisarai	$\frac{8.00}{25.00} \times 7.94 \times 30.00 \text{ Km} = \text{Rs } 76.22$	$\frac{8.00}{25.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$			35.09		Rs. 111.31
15	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

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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)

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

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

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

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

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

Mirzachawki Railway Yard to Kiul Railway Yard = 157.00 Km

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

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

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

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

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

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

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

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

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

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

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

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

Carriage Cost from Quarry to Kiul Railway Yard

$$(i) + (ii) + (iii) = \text{For 1 cum} = \text{Rs } 261.15 + \text{Rs } 886.73 + \text{Rs } 210.23 = 1358.11$$

Inspection Report for Flood Damage Work

Date :- 30.11.2021

Name of PIU :- E.E. RWD Khargpur-Tarnapur

Name of Block/ Road :- Barahiya / motorable rd road from Laxmipur to Shahjapur under F.D.R.

A. For Road

1. Damage Location/ Chainage :- ch 300 m to 500 m
2. Damage Length :- 0.200 km
3. Nature of Damage :- Breaching in 50m length
4. Details of Restoration Works :- Brick Bats fill, and GSB Grit with moorum
- (i) Material being in Restoration works :- Brick Bats, GSB, Grit & moorum
- (ii) Equipment's /Tools being used in Restoration works :-
- (iii) Procedure take up in Restoration works :- JCB, Tractor, & Roller
- (iv) Restored Length :- 0.200 km → Filling of Breach with Brick Bats, moorum & GSB Grit compacted up to designed level.

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 :-



30/11/2021

Signature

(Name of Inspection)