



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

BIHAR RURAL ROADS PROJECT

Bihar Rural Development Agency (BRRDA)

Head :- F.D.R.

YEAR (2023-24)

STATE
DICTRICT
BLOCK
DIVISION

BIHAR
SAHARSA
SIMRI BAKHTIYARPUR
SIMRI BAKHTIYARPUR

DETAILED ESTIMATE FOR TEMPRORY RESTORATION OF ROAD FROM X-ROAD L071 TO RAMNAGAR

Flood affected Length of Road	=	0.130 Km
TOTAL COST OF PAVEMENT	Rs	45,53,216.11 4553212.00 4375145.83
TOTAL PROJECT COST	Rs	45,53,216.11 4553212.00 Rs. 4375145.83

Submitted By:
Executive Engineer
RWD (W) Division, Simri Bakhtiyarpur

Prepared By:
Executive Engineer
RWD (W) Division, Simri Bakhtiyarpur

Index of Road

NAME OF ROAD :- DETAILED ESTIMATE FOR TEMPORARY RESTORATION OF ROAD FROM X-ROAD L071 TO RAMNAGAR

DISTRICT :- SAHARSA

BLOCK :- SIMRI BAKHTIYARPUR

Head :- F.D.R.

Year :- 2023-24

Flood Affected Length of Road :- 0.130 Km

TOTAL COST OF PAVEMENT :- ₹ ~~45,53,216.11~~ 45,53,212.00 ₹ 4345145.83

Sr. No.	Description	Page No.
1	Prativedan	
2	MIS Report	
3	Executive Engineer's Report	
4	Summary of Road	
5	Estimate of Road	
6	Carriage of Road	
7	Basic Rate of Labour, Material & Machinery	
8	Analysis of Rate	
9	Photographs of Pre & Post Cuttings /Ditches	

प्रतिवेदन

प्रस्तुत प्रतिवेदन ग्रामीण कार्य विभाग कार्य प्रमंडल सिमरी बख्तियारपुर अंतर्गत सिमरी बख्तियारपुर प्रखण्ड के पथ X- रोड L071 से रामनगर में वित्तीय वर्ष 2023-24 में आये बाढ़ से क्षतिग्रस्त पथ के अस्थायी पुनर्स्थापन हेतु मुख्य अभियंता 04 के पत्रांक FDR-2245-09-02/2022.... 3724 दिनांक 18/07/2023 के आलोक में तैयार किया गया है जिसकी प्राक्कलित राशि 45.53212 लाख रुपये है।

ग्रामीण कार्य विभाग कार्य प्रमंडल सिमरी बख्तियारपुर का अधिकांश भाग कोशी नदी किनारे अवस्थित है। कोशी नदी बिहार का शोक नदी माना जाता है और वर्षा उपरान्त कोशी नदी अपनी सहायक नदियों यथा कमला नदी के साथ हमेशा यहाँ बाढ़ लाती है। बाढ़ के प्रकोप से सिमरी बख्तियारपुर अंतर्गत ग्रामीण पथें अक्सर क्षतिग्रस्त होती रहती हैं। बाढ़ प्रभावित क्षेत्र होने के कारण X- रोड L071 से रामनगर पथ में वित्तीय वर्ष 2023-24 में 130 मी० लंबाई में कटाव हो गया था। पथ के अस्थायी पुनर्स्थापन हेतु उपलब्ध सामग्री ईंट के टुकड़े का प्रयोग पथ में किया गया है।

प्रस्तुत प्राक्कलन वर्तमान अनुसूचित दर पर तैयार किया गया है।

विश्वासभाजन

21/7/23

कार्यपालक अभियंता

ग्रामीण कार्य विभाग

कार्य प्र० सिमरी बख्तियारपुर

INSPECTION REPORT FOR MOTORABLE WORK

Name of PIUs :- Akhilesh Kumar (Executive Engineer Gogri)

Name of Block/Road :- Block- Simri Bakhtiyarpur

Name of Road :- X- Road L071 To Ramnagar

A. For Road

1. Damage Location/Chainage :- 4500 m, 4600 m

2. Damage Length :- 119 m m

3. Nature of Damage (Length Wise) (i) Breach :- 130 m
(ii) Crust Damage :-
(iii) Only Flank Damage :-

whether traffic fully/Partially obstructed :- fully obstructed

4. Details of Restoration :-

(i) Material Being Used in Restoration :- Brick Bat

(ii) Equipment/Tools Being Used in Restoration Works :- Tractor, JCB Machine, Roller

(iii) Restored Length
In open Area :- 130 m
In habitation Area :- 0.00 m

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

B. For Bridge (Size of Bridge/Culvert) N/A

(1) Damage Location/Chainage :- N/A

(2) No. of Span Damage :- N/A

(3) Length of Span :- N/A

(4) Nature of Damage (Pier/Abutment/
Wing Wall/Approach Road Damage) :- N/A

(5) Details of Restoration :-

(i) Material Being Used in Restoration :- N/A

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

(iii) Restored Length :- N/A

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

A. Kumar

Akshay
Signature of Inspector
(Official Seal)
Executive Engineer
R.W.D. Works Div.
Gogri

मुख्य अभियंता-2 का कार्यालय
ग्रामीण कार्य विभाग, पटना।

पत्रांक- 471 म३०
प्रेषक,

/पटना, दिनांक- 03.02.24

ई० श्रीप्रकाश,
मुख्य अभियंता-2
सेवा में,

कार्यपालक अभियंता,
ग्रामीण कार्य विभाग, कार्य प्रमंडल, सिमरी बख्तियारपुर।

विषय: कार्य प्रमंडल, सिमरी बख्तियारपुर के अधीन FDR अंतर्गत वर्ष 2023 में आई बाढ़/अतिवृष्टि से क्षतिग्रस्त पथ का अस्थायी पुनर्स्थापन कार्य हेतु तकनीकी स्वीकृति के संबंध में।

प्रसंग-आपका पत्रांक-86 अनु०, दिनांक 15.01.2024
महाशय,

उपर्युक्त विषयक प्रासंगिक पत्र द्वारा कार्य प्रमंडल, सिमरी बख्तियारपुर के अधीन FDR अंतर्गत वर्ष 2023 में आई बाढ़/अतिवृष्टि से क्षतिग्रस्त पथ का अस्थायी पुनर्स्थापन कार्य का डी०पी०आर० घटनोत्तर (Post Facto) तकनीकी स्वीकृति हेतु प्राप्त हुआ है, जिसकी विवरणी निम्नवत् है:-

Sl no.	Name of Scheme	Damaged Length (in k.m)	Amount
1	2	3	4
1	X Road L071 to Ramagar	0.130	43.451
2	Khap Tola to Chikania	0.195	81.102
3	Lagma Panchayat Sima se Khojraha Path	0.198	52.838
4	X Road L086 to Kanariya	0.066	23.019
5	L071-T03 to Khara Mushari	0.020	7.642
6	Dhanpura Panchayat ke Kabaiya to Nepal Road	0.192	24.410
7	Ghoghsam Koshi Bandh Nadi ke Kinare to Paschim Tola	0.124	40.297
8	Belbara Nepal to Hasuliya	0.049	23.883
	Total=	0.974	296.642

उक्त कार्य के प्राक्कलन पर घटनोत्तर (Post Facto) तकनीकी स्वीकृति प्रदान कर आवश्यक अग्रेतर कार्रवाई हेतु लौटाया जा रहा है।
अनु०-यथोक्त।

विश्वासमाजन
03/02/24
मुख्य अभियंता-2

Details of T.S
x

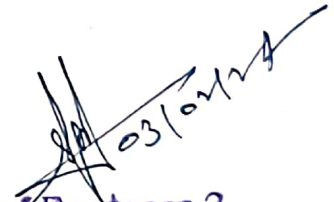
For Temporary Restoration work - Rs. 4345145.83

Total Rs. = ₹ 4345145.83

Inspection has been done by E.E, R.W.Ds, Gogri on 12/01/2024.

Post facto Technically sanctioned for Rs 43.45145 lacs (Forty three lacs forty five thousand one hundred forty five rupees only)

for temporary Restoration work. Technical sanction is being accorded in expectation to Administrative Approval by Department.


Chief Engineer-2
Rural Works Department
Patna
Babu
03/02/24

SUMMARY OF COST ESTIMATE FOR THE PROJECT

NAME OF ROAD :- DETAILED ESTIMATE FOR TEMPORARY
RESTORATION OF ROAD FROM X-ROAD L071 TO
RAMNAGAR

DIVISION :- SIMRI BAKHTIYARPUR

BLOCK :- SIMRI BAKHTIYARPUR

Flood Affected Length of Road :- 0.130 Km

Sr. No.	Description	Amount (In Rs.)
1	Total Cost of Restoration=	36,68,587.70
2	Add:-Labour Cess @1% amt. =	36,685.88
3	Add:GST@18% on amt. =	6,60,345.79
4	Add:S.F.@ 10% on Material =	1,87,596.74
TOTAL RESTORATION COST OF THE PROJECT IN LACS		45,53,216.11

3493738.52
~~3668584.00~~
34937.38
~~660345.00~~ 628872.33
187597.00
~~4553212.00~~
Rs. 4345145.83

M. S. N. G. J. K.
30/12/2023

Junior Engineer
RWD (W)
Division, Simri Bakhtiyarpur

Assistant Engineer
RWD (W)
Division, Simri Bakhtiyarpur

S. D.
30/12/23
Executive Engineer
RWD (W)
Division, Simri Bakhtiyarpur

Details of Measurement							
कार्य का ब्यौरा Detail of Work	संख्या No.	Measurement					मैत्र Quantity
		लम्बाई in m.		चौड़ाई In m.		In m.	
NAME OF ROAD :- DETAILED ESTIMATE FOR TEMPORARY RESTORATION OF ROAD FROM X-ROAD L071 TO RAMNAGAR							
Item No. 1	Sand filling in Foundation Trenches as per Drawing & Technical Specification						
CH:-in	1.00	0.00		1.00		1.00	0.00
	Total (in Cum)						0.000
Item No. 2 :	Providing and laying of Brick bat obtained from chimney with machanical means with all spreading, grading to required slope and compacted at OMC to acheive required density with all complete as per the direction of engineer in charge.						
Ch in 4.500 Km.	2	10.00	$(6.5+8.5)/2$	7.50		2.50	375.000
	1	10.00	$(6.8+8.5)/2$	7.65		3.10	237.150
	1	10.00	$(5.5+8.5)/2$	7.00		2.50	175.000
	1	11.00	$(5.6+6.2)/2$	5.90	$(1.8+2.2)/2$	2.00	129.800
	1	13.00		5.00	$(0.8+1.5)/2$	1.15	74.750
At Bridge	1	10.00		5.00		1.60	80.000
	1	30.00		4.60	$(2.3+2.5)/2$	2.40	331.200
	1	9.00		3.50		2.50	78.750
	1	10.00		3.50		3.00	105.000
	1	17.00		3.50		2.50	148.750
		130.00					1735.400
	Total (in Cum)						1735.400

Manwanjan
30/12/2023
J.E.

(Handwritten signature)

Schedule of Quantity

NAME OF ROAD :-

DETAILED ESTIMATE FOR TEMPORARY RESTORATION OF
ROAD FROM X-ROAD L071 TO RAMNAGAR

BLOCK :- SIMRI BAKHTIYARPUR

S.No	SOR NO	DESCRIPTION OF ITEMS	QTY	UNIT	RATE	AMOUNT
1	301.5	Sand filling in Foundation Trenches as per Drawing & Technical Specification	0.00	Cum	614.62	0.00
2	A/R	Providing and laying of Brick bat obtained from chimney with machanical means with all spreading, grading to required slope and compacted at OMC to acheive required density with all complete as per the direction of engineer in charge.	1735.40	Cum	2443.97 2013.218	3668584.09 3668587.70 3493738.52
		Total			Rs.	3668587.70 3668584.09

M. G. V. J. S.
30/12/2023

JE

AE

Sy
30/12/23
EE

Rs. 3493738.52

Calculation of Seigniorage Fees

DETAILED ESTIMATE FOR TEMPORARY RESTORATION OF ROAD FROM X-ROAD L071 TO

NAME OF ROAD :- RAMNAGAR
BLOCK :- SIMRI BAKHTIYARPUR

S.No	SOR NO	DESCRIPTION OF ITEMS	QTY	UNIT	RATE	AMOUNT	Add Seigniorage Fee 10%
11	12.3	Construction of embankment with approved material obtained from borrow pits with lift upto 1.5 m, transporting to site, spreading, grading to required slope and compacting to meet requirement of Tables 300.1 and 300.2 with a lead upto 1000 m as per Technical Specification Clause 301.5	0.00	Cum	143.32	0.00	0
22	A.R.	Providing & laying Brick Bat....					
		Providing and laying of Brick bat obtained from chimney with machanical means with all spreading, grading to required slope and compacted at OMC to acheive required density with all complete as per the direction of engineer in charge.				1875967.00	187597.00
		Brick Bats	1735.40	Cum	1081.00	1875967.40	187596.74
37	5.7.40.1	Labour filling empty cement bags with loocal sand, stitching the bags and placing including supply of sutli and EC bag etc. all complete as per approved desing, specification and direction of E/I	0.00	Cum	143.32	0.00	0.00
		Sand					
48	5.7.40.2	Providing,laying and filling Geo bags of size 1m X 0.7 m(Type A 300 GSM nonwoven) weight of bags 420g volume of filled bag 0.07m3. weight of filled Geo bags 126 Kg with local sand including stitching in four lines by approved nylon thread with stitching machine and generator stacking and placing after loading unloading and carriage with help of trolley within 150m lead all complete as per specifications and direction of E/I (including Carriage of Local sand lead 0.5 km)	0.00	Cum	143.32	0.00	0.00
		Sand					
		Seigniorage Fees @10% of Basic Amount				Total Rs. =	<u>187596.74</u>

H. S. N. W. S. J. S.
30/12/2023

JE

AE

S. D.
30/12/23

EE

187597.00



Analysis for Carriage by Road & Rail

Name of Road:-- DETAILED ESTIMATE FOR TEMPORARY RESTORATION OF ROAD FROM X-ROAD L071 TO RAMNAGAR

District:- SAHARSA

Block :- SIMRI BAKHTIYARPUR

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	$\frac{8.00}{4.59} \times 8.20 \times 35.00 \text{ Km} = \text{Rs } 500.22$	$8.00 \times 19.80 \times 0.00 \text{ Km} = \text{Rs } 0.00$	89.90	1243.54	Rs. 1833.66
2	Stone Metal Gr-III / GSB	Cum	Sheikhpura	$\frac{8.00}{4.99} \times 8.20 \times 35.00 \text{ Km} = \text{Rs } 460.12$	$8.00 \times 19.80 \times 0.00 \text{ Km} = \text{Rs } 0.00$	89.90	1166.59	Rs. 1716.61
3	Stone Aggregate / Chips	Cum	Mirzachowki	$\frac{8.00}{4.99} \times 8.20 \times 35.00 \text{ Km} = \text{Rs } 460.12$	$8.00 \times 19.80 \times 0.00 \text{ Km} = \text{Rs } 0.00$	89.90	1166.59	Rs. 1716.61
4	Stone Aggregate / Chips	Cum	Mirzachowki	$\frac{8.00}{4.99} \times 8.20 \times 35.00 \text{ Km} = \text{Rs } 460.12$	$8.00 \times 19.80 \times 0.00 \text{ Km} = \text{Rs } 0.00$	89.90	1248.39	Rs. 1798.41
4	Stone Boulder	Cum	Sheikhpura	$\frac{8.00}{4.80} \times 8.20 \times 35.00 \text{ Km} = \text{Rs } 478.33$	$8.00 \times 19.80 \times 0.00 \text{ Km} = \text{Rs } 0.00$	89.90	1201.54	Rs. 1769.77
5	Coarse Sand	Cum	Jagdshpur	$\frac{8.00}{4.99} \times 7.47 \times 225.00 \text{ Km} = \text{Rs } 2694.59$	$8.00 \times 18.09 \times 0.00 \text{ Km} = \text{Rs } 0.00$	104.88		Rs. 2799.47
6	Binding Material/Moorum	Cum	Sheikhpura	$\frac{8.00}{6.00} \times 7.47 \times 35.00 \text{ Km} = \text{Rs } 348.60$	$8.00 \times 19.80 \times 0.00 \text{ Km} = \text{Rs } 0.00$	104.88		Rs. 453.48
7	Local Sand	Cum	Local	$\frac{8.00}{4.99} \times 7.47 \times 2.00 \text{ Km} = \text{Rs } 23.95$	$8.00 \times 17.82 \times 1.00 \text{ Km} = \text{Rs } 28.57$	104.88		Rs. 157.40
8	Brick	1000 Nos	Local	$\frac{8.00}{2.00} \times 7.47 \times 7.00 \text{ Km} = \text{Rs } 209.16$	$8.00 \times 18.09 \times 1.00 \text{ Km} = \text{Rs } 72.36$	417.46		Rs. 698.98
9	Cement	MT	Local	$\frac{8.00}{8.00} \times 7.47 \times 35.00 \text{ Km} = \text{Rs } 261.45$	$8.00 \times 18.09 \times 0.00 \text{ Km} = \text{Rs } 0.00$	299.38		Rs. 560.83
10	Steel	MT	Local	$\frac{8.00}{8.00} \times 7.47 \times 35.00 \text{ Km} = \text{Rs } 261.45$	$8.00 \times 18.09 \times 0.00 \text{ Km} = \text{Rs } 0.00$	318.00		Rs. 579.45
11	Bitumen Emulsion	MT	Barauni	$\frac{8.00}{8.00} \times 7.47 \times 220.00 \text{ Km} = \text{Rs } 1643.40$	$8.00 \times 18.09 \times 0.00 \text{ Km} = \text{Rs } 0.00$	344.50		Rs. 1987.90
12	Bitumen	MT	Muzaffarpur	$\frac{8.00}{8.00} \times 7.47 \times 178.00 \text{ Km} = \text{Rs } 1329.66$	$8.00 \times 18.09 \times 0.00 \text{ Km} = \text{Rs } 0.00$	344.50		Rs. 1674.16
13	Hume Pipe (1000 mm)	m	Karjain	$\frac{8.00}{10.00} \times 7.47 \times 106.00 \text{ Km} = \text{Rs } 633.46$	$8.00 \times 18.09 \times 0.00 \text{ Km} = \text{Rs } 0.00$	73.32		Rs. 706.78
14	Hume Pipe (600 mm)	m	Karjain	$\frac{8.00}{25.00} \times 7.47 \times 106.00 \text{ Km} = \text{Rs } 253.38$	$8.00 \times 18.09 \times 0.00 \text{ Km} = \text{Rs } 0.00$	31.42		Rs. 284.80
15	Hume Pipe (300 mm)	m	Karjain	$\frac{8.00}{60.00} \times 7.47 \times 106.00 \text{ Km} = \text{Rs } 105.58$	$8.00 \times 18.09 \times 0.00 \text{ Km} = \text{Rs } 0.00$	31.42		Rs. 137.00
16	Brick Bats	Nos.	Local	$\frac{3.60}{2.25} \times 19.63 \times 7.00 \text{ Km} = \text{Rs } 219.86$	$3.60 \times 29.03 \times 2.00 \text{ Km} = \text{Rs } 92.90$	229.55		Rs. 542.31

M. G. N. V. J. K.
30/12/2023
J-2

30/12/23
CG

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	8.20	7.47
Unsurface Gravel Road	9.90	8.99
Kachha Road	19.80	18.09

* Subjected to Verification of Lead

Type of Road	Per Ton. Km by	Per Ton. Km by Truck
For Surface Road		19.63
Unsurface Gravel Road		24.53
Kachha Road		29.03

Summary of Carriage Cost

Sl. No.	Particulars	Unit	Amount
1	Gr-III, GSB	Cum	1716.61
2	Stone Metal Below 40 mm	Cum	1716.61
3	Stone Chips	Cum	1716.61
4	Screening Materials	Cum	1716.61
5	Gr-II	Cum	1033.66
6	Stone Metal above 40 mm	Cum	1033.66
7	Binding Material (Moorum)	Cum	453.48
8	a) Coarse Sand	Cum	2799.47
9	b) Coarse Sand at Site	Cum	3293.47
10	c) Local sand	Cum	157.40
11	d) Local Sand at Site	Cum	300.72
12	Boulder	Cum	1769.77
13	a) Cement	Ton	560.83
14	b) Cement at Site	Ton	6411.23
15	Geo Bags	Nos.	238.20
16	Bitumen (S-90) (FROM MUZAFFARPUR)	Ton	1674.16
17	Bitumen Emulsion SS & RS (FROM BARAUNI)	Ton	1987.90
18	a) Hume Pipe NP 3 (600 MM DIA)	m	284.80
19	b) Hume ple (600 dia) at site	m	2059.61
20	a) Hume Pipe NP 3 (1000MM DIA)	m	706.78
21	b) Hume Pipe NP 3 (1000MM DIA) at site	m	6032.68
22	Steel	Ton	579.45
23	Brick	per 1000	698.98
24	Brick Bats/Jhama metal	Cum	542.31

Manwanja
30/12/2023

Junior Engineer
RWD (W) Division, Simri Bakhtiyarpur

Asstt. Engineer
RWD (W) Division, Simri Bakhtiyarpur

SJ
30/12/23

Executive Engineer
RWD (W) Division, Simri Bakhtiyarpur





Latitude: 25.735312
Longitude: 86.427064
Elevation: 43.5±32 m
Accuracy: 7.8 m
Time: 28-11-2023 14:24
Note: lo96-x road To lo71 se ramnager



Latitude: 25.734809
Longitude: 86.427047
Elevation: 88.4±26 m
Accuracy: 10.0 m
Time: 27-11-2023 10:00
Note: lo96-x road To lo71 se ramnager

52