



# ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

## PLAN HEAD- FDR YEAR 2021-22

DISTRICT :- EAST CHAMPARAN  
BLOCK :- PATAHI

Estimate for Repair of Road breaches  
(Damaged by Flood) for Motorability in  
GAMHARIA To KHUTAUNA

LENGTH OF ROAD (in Km)- 4.072 KM

ESTIMATED COST - ~~11.417~~ Lacs  
10.744

SUBMITTED BY:  
EXECUTIVE ENGINEER,  
RWD WORKS DIVISION,  
PAKRIDAYAL

## तकनीकी प्रतिवेदन

पथ का नाम:- जम्हरिया से रवूरीना  
प्रखंड का नाम :- पहाडी  
पथ की लम्बाई :- 4.072 K.M  
शीर्ष:- F.D.R  
प्राक्कलित राशि:- 11.417 लाख  
योजना शीर्ष :- P.M. 654-III

उपरोक्त योजना का प्राक्कलन सचिव, ग्रामीण कार्य विभाग, बिहार पटना के पत्रांक 1937 दिनांक 07.07.2021 के द्वारा दिए गए निदेश के आलोक में एवं कार्यपालक अभियंता, ग्रामीण कार्य विभाग, कार्य प्रमंडल, पकड़ीदयाल के निदेशानुसार स्थल जॉचोपरान्त तैयार किया गया है। माह मई 2021 से अक्टुबर 2021 के बीच प्रलयकारी बाढ़ एवं अतिवृष्टि के कारण उक्त पथ में अनेक स्थानों पर कटाव हो गया था जिस कारण पथ से होकर आवागमन बाधित हो गया था। पथ से होकर तत्काल आवागमन चालू करने हेतु क्षतिग्रस्त भाग में तत्काल उपलब्ध हो सके सामग्री यथा-ईट टूकड़ा/स्थानीय बालू/ बॉस-बल्ला/ खाली सिमेंट बैग/ हयूम पाईप आदि आवश्यकतानुसार उपयोग करने का प्रावधान किया गया है। यह कार्य निदेशानुसार विभागीय रूप से करा दिया गया है।

यह प्राक्कलन अद्यतन अनुसूचित दर पर संवेदक लाभ रहित तैयार किया गया है। जनहित में इसकी स्वीकृति अपेक्षित है।

*S. Ales*  
26/11/21

कनीय अभियंता  
ग्रामीण कार्य विभाग,  
प्रशाखा, पहाडी

*[Signature]*  
26/11/21

सहायक अभियंता  
ग्रामीण कार्य विभाग,  
कार्य अवर प्रमंडल,.....

*[Signature]*  
23/11/21

कार्यपालक अभियंता  
ग्रामीण कार्य विभाग,  
कार्य प्रमंडल, पकड़ीदयाल।

## GENERAL ABSTRACT OF COST

### ESTIMATE FOR REPAIR OF ROAD BREACHES (DAMAGED BY FLOOD) FOR MOTORIBILITY IN GAMHARIA TO KHUTAUNA


DISTRICT - EAST CHAMPARAN


DIVISION - PAKRIDAYAL

BLOCK - PATAHI

LENGTH OF ROAD (in Km)- 4.072 KM

SL. No.	Item of Work	Amount
1	EARTH WORK :	0.000 Lacs
2	BRICK BATS :	9.620 Lacs
3	SAND BAGS :	0.000 Lacs
4	HUME PIPE :	0.000 Lacs
	COST OF RESTORATION :	9.620 Lacs
	ADD SEIGNIORAGE FEE @ 10% OF MATERIAL COST :	0.547 Lacs
	ADD LABOUR CESS @ 1% :	0.096 Lacs
	ADD GST @ 12% :	1.154 Lacs
	TOTAL COST OF RESTORATION OF ROAD :	11.417 Lacs

  
26/10/24  
Junior Engineer

  
20/10/24  
Asstt. Engineer

  
25/11/24  
Executive Engineer

Name of Work:-

Estimate for Repair of Road breaches (Damaged by Flood) for Motorability in GAMHARIA To KHUTAUNA

Head - FDR

Sl No.	Item No.	Name of Item	unit	No	Length	Width	Height	Qty.	Rate	Amount
1		EARTH WORK - Construction of embankment with approved material obtained from borrow pits with a 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	cum		As Per Appendix I			0	183.70	0
2		Providing and Labour for laying dry graded Brick Bats including light ramming etc. all complete as per approved design, specification and direction of E/I.	cum		As Per Appendix II			554.140	1798.07 1938.89	961992.58 10,74,417.00
3		Providing, Filling Sand Bag, Stitching and Placing etc. all complete as per specification and direction of E/I.	Nos.					0.000	24.45	0.00
4		Providing and laying 1000 mm dia reinforced cement concrete pipe NP3 for culvert on first class bedding of granular material in single row excluding excavation, protection works, backfilling, concrete and masonry.	RM		0 Nos*2.5m			0.000	6086.50	0.00
5		Providing and laying 600 mm dia reinforced cement concrete pipe NP3 for culvert on first class bedding of granular material in single row excluding excavation, protection works, backfilling, concrete and masonry.	RM		0 Nos*2.5m			0.000	2545.18	0.00
TOTAL (In Rs.)									961992.58	

*SALON*  
26/10/021  
Junior Engineer,  
Rural Works Department,  
Works Section, PATAHI

*26/10/021*  
Assistant Engineer,  
Rural Works Department,  
Works Sub Division, PATAHI

*23/11/2001*  
Executive Engineer,  
Rural Works Department,  
Works Division, PAKRIDAYAL

Post fact TAMS is recorded for Rs. 10,74,400.00  
Ten seventy four thousand  
four hundred ( ) only.

*23/11/2001*  
S.E. (R.W.D.)  
works Circle  
Motihari



# SEIGNIORAGE FEE CALCULATION SHEET

Item description	unit	Quantity of Consuming Item	Materials Required/ Unit	Unit	Quantity/ Unit	Total Quantity Required	Rate	Amount	Seigniorage Fee (RS)	Final Amount (RS)
Earth Work	Cum	0.00	Earth	Cum	1.0	0.00	34.82	0.00	0.00	0.00
Brick bats	Cum	554.14	Brick bats	Cum	1.0	554.14	987.00	546936.18	54693.62	54693.62
Sand Bags	per bag	0.00	sand	Cum	0.034	0.00	141.85	0.00	0.00	0.00
1000 MM Dia	RM	0.00	Sand at site	Cum	0.04	0.00	175.80	0.00	0.00	0.00
600 MM Dia	RM	0.00	Sand at site	Cum	0.0032	0.00	175.80	0.00	0.00	0.00
Total Amount of seigniorage fee in construction (Rs)										54693.62

*S.A. Khan*  
26/10/021  
 J.E

*Q. J. Khan*  
26/10/021  
 A.E

*J. Khan*  
23/11  
 C.E

Name of Work:-

Estimate for Repair of Road breaches (Damaged by Flood) for Motorability in GAMHARIA To KHUTAUNA

Motorability in GAMHARIA To KHUTAUNA

Appendix - II					
Measurement for surfacing the Breach with Brick Bats					
Sl. No.	Chainage	Length (M)	Av. Width (M)	Thickness (M)	Quantity (cum)
1	1.500 To 2.000	25.000	3.750	0.900	84.375
2		4.000	3.000	0.800	9.600
3	3.200 To 3.700	5.000	2.500	1.200	15.000
4		6.000	2.000	1.800	21.600
5		30.000	4.500	2.50+1.40/2	263.250 .
6		95.000	3.750	0.450	160.313
		Total			554.14
	Deduction for 0Nos old 1000 mm HP at 0 m (3.142*0.36*0)				0.00
	Deduction for 0Nos old 600 mm HP at 0 m (3.142*0.22*0)				0.00
	Net Quantity of Brick Bats				554.14

Junior Engineer

Asistant Engineer

Executive Engineer

**BRICK BATS PITCHING MANUAL MEANS**

<b>6.6.1 WRD Bihar</b>	<b>Labour for laying dry graded Jhama Khoa or stone filter under Brick Pitching or Boulder Pitching in slope or apron including light ramming etc. all complete as per approved design, specification and direction of E/I.</b>			
	Unit :- Per Cum			
	Taking Output = 2.832 Cum			
	Unskilled Mazdoor	Nos.	3	304.00
	Rate for 2.832 Cum			912.00
	Rate per Cum (Rs.) -			322.03
<b>1.4 RCD</b>	<b>Cost of Haulage Excluding Loading and Unloading</b>			
	<b>Haulage of materials by Tractor excluding cost of loading, unloading and stacking.</b>			
	Unit = t.km			
	Taking output 3.60 tonnes load and lead 10 km = 36.0 t.km			
	(i) Surfaced Road			
	Speed with load : 15 km / hour.			
	Speed while Returning empty :25 km / hour.			
	a) Machinery.			
	Tractor 3.6 tonne capacity			
	Time taken for onward haulage with load	hour	0.667	612.00
	Time taken for empty return trip.	hour	0.400	612.00
	cost for 36 t km = a+b+c			653.00
	Rate per t.km = (a+b+c)/36			18.14
	Say Rs. -			18.14
	(ii) Unsurfaced Graveled Road			
	Speed with load: 12 km / hour			
	Speed for empty return trip :20 km / hour			
	a) Machinery			
	Tractor 3.6 tonnes capacity			
	Time taken for onward haulage with load	hour	0.833	612.00
	Time taken for empty return trip hour 0.5	hour	0.500	612.00
	Cost for 36 t .km = a+b+c 840.34			815.80
	Rate per t.Km = (a+b+c)/36			22.66
	Say Rs. -			22.66

1.1 RCD	Loading and Unloading of Stone Boulder/ Stone aggregates/Brick Bats/Jhama Metal/Sand /Kanker/Moorum			
	Placing Tractor at loading point, loading with frontloader, dumping, turning for return trip, excluding for haulage and return trip			
	Unit = cum			
	Taking output = 2.25 cum			
	Time required for			
	i) Positioning of Tractor at loading point	1 Min		
	ii) Loading by front end loader 1 cum bucket capacity @ 25 cum per hour	5 Min		
	iii) Maneuvering, reversing, dumping and turning for return	0 Min		
	iv) Waiting time, unforeseen contingencies etc	0 Min		
	Total	6 Min		
	a) Labour			
	Mate	day	0.03	321.00
	Mazdoor for loading and unloading	day	0.72	304.00
	b) Machinery			
	Tractor 3.60 tonnes capacity	hour	0.1	612.00
	Front end-loader 1 cum bucket capacity @ 25 cum/hour	hour	0.083	1594.00
	Cost for 2.25 cum = a+b+c+d			422.01
	Rate per cum = (a+b+c+d)/ 2.25			187.56
Note:-	Unloading will be done manually.			
1.	Suplying for Brick Bats			
A.	Basic Rate of Brick Bats	Per Cum	987.00	987.00
	Total -			987.00
	Surface Lead	KM	7	
	Unsurface Lead	KM	1	
	Factor (3.6/2.25)	Cum	1.60	
B.	Carriage			
	$(1.6 \times 7 \times 18.14) + (1.6 \times 1 \times 22.66) + 187.56$			426.98
C.	Cost of Labour for Pitching and Light Ramming as per WRD SOR 6.6.1			322.03
	Total (A+B+C) -			1736.01
	Total Cost per Cum		Rs.-	1736.01

S. Aleis  
26/10/021  
S.E

Dep  
26/10/04  
A2

23/11  
C.R.




## Inspection Report For Flood Damage Work

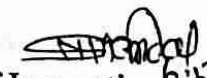
Date :-

1. Name of PIUs- Executive Engineer, RWD. (W.D), Pakridayal.
2. Name of Block – Patahi.
3. Name of Road – GAMHARIA TO KHUTAUNA.

### **(A) For Road**

1. Damage Location/Chainage :- 1.500 To 2.000 & 3.200 To 3.700
2. Damage Length :- 165.00 Meter.
3. Cause of Damage :- Due To Flood 2021/ Heavy Rain.
4. Nature of Damage :- Ditches/Breaches
5. Details of Restoration Work :-
  - (i) Material being used in restoration works :- Bricks Bat/Jhamma Metal/ Rabis/Hume Pipe.
  - (ii) Equipment/Tools being used in restoration Works :- J.C.B./Tractor/Trolley/Others
  - (iii) Procedure Taken up in restoration works :- Emergent Repair.
  - (iv) Restored Length :- 165.00 Meter.

  
06/11/2021  
A2

  
Signature of Inspecting officer  
(Executive Engineer)  
R.W.D. (W.D) Dhaka.