

Inspection Report For Flood Damage Work

Date:

1. Name of PIUs: R.W.D, Works division, Gopalganj-2
2. Name of Block/Road: Barauli / Salong to Baterdel.

A For Road

1. Damage Location/ Chainage : 468, 622, 716, 839, 940, 9240
2. Damage Length : 282.60 M
3. Nature of Damage : Flood Damage
4. Details of Restoration Works :

- i. Material being used in Restoration Works : Soil & Brick Bats
- ii. Equipments / Tools being used in Restoration Works : Tractor, JCB, Labour etc
- iii. Procedure taken up in Restoration Works : As per S.O.P
- iv. Restored Length : 282.60 M

B For Bridge

1. Damage Location / Chainage : N.A
  2. Damage Length : N.A
  3. Nature of Damage : N.A
  4. Details of Restoration Works : N.A
- i. Material being used in Restoration Works : N.A
  - ii. Equipments / Tools being used in Restoration Works : N.A
  - iii. Procedure taken up in Restoration Works :
  - iv. Restored Length :

*Sanjit Singh*  
10/11/20  
JE

AE

*10/11/20*  
EE

*14/01/21*  
Signature  
Executive Engineer  
R.W.D. W.D.  
Hathua



# ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

## **FLOOD DAMAGED REPAIR (FDR) DETAILED ESTIMATE**

DISTRICT :- GOPALGANJ  
BLOCK :- BARAULI

MOTORABLE WORK OF SALONA TO  
BATERDEH

ESTIMATED COST	Rs.- 3115300.00
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SUBMITTED BY:  
EXECUTIVE ENGINEER,  
RWD WORKS DIVISION,  
GOPALGANJ-2

REPORT

NAME OF WORK :- MOTORABLE WORK OF SALONA TO BATERDEH  
ESTIMATED COST (Rs.) :- 3115300.00 DISTRICT :- GOPALGANJ  
BLOCK :- BARAULI DIVISION :- GOPALGANJ-2

The Present estimate has been framed under the supervision of Assistant Engineer in accordance with the order of Executive Engineer, RWD, Works Division Gopalganj-2, letter no.- 1574 dated 18-08-2020. The part of above mentioned road has been damaged due to heavy rain/flood and due to this damaged the transportation has been obstructed. The immediate motorable work is necessary in public interest. Villagers will be benefitted by the completion of this motorable work.

In the estimate there has been a provision of repairing the damaged part of the road & making it motorable by filling Earth and Brickbats.

In this estimate the rate of raw materials and labour wages has been prepared after the analysis of new rate. This Estimate is as per the specification. The estimate is devoted to technical and administrative acceptance.

*Sawit Singh*  
10/11/2020  
Junior Engineer

Assistant Engineer

*[Signature]*  
10/11/20  
Executive Engineer,

## GENERAL ABSTRACT OF COST

### MOTORABLE WORK OF SALONA TO BATERDEH

DISTRICT - GOPALGANJ  
BLOCK - BARAULI

DIVISION - GOPALGANJ-2

SL. No.	Item of Work	Amount (Rs.)
1	EARTH WORK :	Rs. - 148930.00
2	BRICK BATS :	Rs. - 2966370.00
3	SAND BAGS :	Rs. - 0.00
4	HUME PIPE :	Rs. - 0.00
	<b>COST OF RESTORATION</b> :	<b>Rs. - 3115300.00</b>

Rs. 316485320  
1st Conty - 3164920  
Rs. 319650220  
Rs. 31.965 Lacs

*Savit Singh*  
10/11/20

Junior Engineer

Asstt. Engineer

*10/11/20*  
Executive Engineer

Technically Approved for Rs 31.965 Lacs (Rupees Thirty one Lacs Ninety six Thousand & Five Hundred) only

*21/01/21*  
Superintending Engineer  
RWD Works Circle, Siwan  
*R. Kumar*  
21/01/21

DETAILED ESTIMATE

Name of Work:- MOTORABLE WORK OF SALONA TO BATERDEH

FDR

DISTRICT - GOPALGANJ

C - BARAULI

DIVISION - GOPALGANJ-2

Name of Item	unit	No	Length	Width	Height	Qty.	Rate	Amount
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					1009.9	215.34 -147.47	217472 -148930.00
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					1221.910	2412.11 -2427.65	2947391 -2966370.00
Providing, Filling Sand Bag, Stitching and Placing etc. all complete as per specification and direction of E/I.	Nos.					0.000	29741 -31.04	0.00
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					0.000	2744.80 -3949.77	0.00
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					0.000	2058.38 -2257.91	0.00
TOTAL (in Re.)							3115300.00	

*Savit Singh*  
10/11/20  
Junior Engineer

Assistant Engineer

*10/11/20*  
Executive Engineer,

TOTAL (in Re.) 3115300.00  
 31648532  
 1. Contingency Rs. 3164920  
 3196502  
 31.96502

Name of Work:-

## MOTORABLE WORK OF SALONA TO BATERDEH

## Appendix - II

Appendix - II								
Measurement for surfacing the Breach with Brick Bats								
Sl. No.	From Chainage	To Chainage	Nos	Length (M)	width (M)	Av. Width (M)	Thickness (M)	Quantity (cum)
1	CH:- 468.80 M	CH:- 481.10 M	1	12.30	$(4.1+3.4)/2 =$	3.750 Av.	1.20 Av.	55.35
2	CH:- 622.00 M	CH:- 647.40 M	1	25.40	$(4.05+3.5)/2 =$	3.775 Av.	1.60 Av.	153.42
3	CH:- 716.20 M	CH:- 754.10 M	1	37.90	$(4+3.4)/2 =$	3.700 Av.	1.90 Av.	266.44
4	CH:- 839.70 M	CH:- 881.90 M	1	42.20	$(4.1+3.6)/2 =$	3.850 Av.	2.10 Av.	341.19
5	CH:- 940.00 M	CH:- 979.80 M	1	39.80	$(4+3.5)/2 =$	3.750 Av.	2.10 Av.	313.43
6	CH:- 3240.00 M	CH:- 3365.00 M	1	125.00	$(3.3+3.5)/2 =$	3.400 Av.	0.217 Av.	92.08
				Total				1221.91
Deduction for 0Nos 1000 mm HP at 0 m $(3.142*0.36*0)$								0.00
Deduction for 0Nos 600 mm HP at 0 m $(3.142*0.22*0)$								0.00
Net Quantity of Brick Bats								1221.91

*Sumit Singh*  
10/11/2020

Junior Engineer

Assistant Engineer

*20/11/20*

Executive Engineer

Name of Work:-

## MOTORABLE WORK OF SALONA TO BATERDEH

## Appendix - I

Appendix - I								
Measurement for surfacing the Breach with EARTH WORK								
Sl. No.	From Chainage	To Chainage	Nos	Length (M)	width (M)	Width (M)	Thickness (M)	Quantity (cum)
1	CH:- 468.80 M	CH:- 481.10 M	2	12.30	$(1.95+1.315)/2 =$	1.633 Av.	1.50 Av.	60.26
2	CH:- 622.00 M	CH:- 647.40 M	2	25.40	$(1.95+1.315)/2 =$	1.633 Av.	1.80 Av.	149.32
3	CH:- 716.20 M	CH:- 754.10 M	2	37.90	$(1.915+1.31)/2 =$	1.613 Av.	2.00 Av.	244.53
4	CH:- 839.70 M	CH:- 881.90 M	2	42.20	$(1.875+1.225)/2 =$	1.550 Av.	2.10 Av.	274.72
5	CH:- 940.00 M	CH:- 979.80 M	2	39.80	$(1.895+1.315)/2 =$	1.605 Av.	2.20 Av.	281.07
Total								1009.90
Deduction for ONos 1000 mm HP at 0 m (3.142*0.36*0)								0.00
Deduction for ONos 600 mm HP at 0 m (3.142*0.22*0)								0.00
Net Quantity of Earth Work -								1009.90

*Sumit Singh*  
10/11/2020  
Junior Engineer

Assistant Engineer

*20/11/20*  
Executive Engineer



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	305.00
	Mazdoor for loading and unloading	day	0.72	287.00
	b) Machinery			
	Tractor 3.60 tonnes capacity	hour	0.1	549.10
	Front end-loader 1 cum bucket capacity @ 25 cum/hour	hour	0.083	1403.00
	c) Overhead charges @ 0.06 on (a+b)			23.23
	Cost for 2.25 cum = a+b+c+d			410.38
	Rate per cum = (a+b+c+d)/ 2.25			182.39
Note:-	Unloading will be done manually.			
1.	Supplying for Brick Bats (with OH )			
A.	Basic Rate of Brick Bats	Per Cum	1017.00	1017.00
	Add overhed Charges	6%		61.02
	Total -			1078.02
	Surface Lead	KM	7	
	Unsurface Lead	KM	1	
	Factor (3.6/2.25)	Cum	1.60	
B.	Carriage (with OH )			
	(1.6 x 7 x 17.25) + (1.6 x 1 x 21.55) + 182.39			410.07
C.	Cost of Labour for Pitching and Light Ramming as per WRD SOR 6.6.1 (with			383.15
	Total (A+B+C) (with 10% C.P.) -			2058.36
	Add 1% Labour Cess (A+B+C)			20.58
	Add 12% GST (A+B+C)			247.00
	Add 10% cost of Material for Selgniorage Fee	1	101.70	101.70
	Total Cost per Cum		Rs.-	2427.65



## BRICK BATS PITCHING MANUAL MEANS

6.6.1 WRD Bihar	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.			
	Unit :- Per Cum			
	Taking Output = 2.832 Cum			
	Unskilled Mazdoor	Nos.	3	287.00
	Add 6% Overhead Charges			51.66
	Rate for 2.832 Cum			912.66
	Rate per Cum (Rs.) -			383.15
1.4 RCD	Cost of Haulage Excluding Loading and Unloading			
	Haulage of materials by Tractor excluding cost of loading, unloading and stacking.			
	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	549.10
	Time taken for empty return trip.	hour	0.400	549.10
	b) Overhead charges @ 0.06 on (a)			35.15
	cost for 36 t km = a+b+c			621.04
	Rate per t.km = (a+b+c)/36			17.25
	Say Rs. -			17.25
	(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	549.10
	Time taken for empty return trip	hour	0.500	549.10
	b) Overhead charges @ 0.06 on (a)			43.92
	Cost for 36 t .km = a+b+c			775.87
	Rate per t.Km = (a+b+c)/36			21.55
	Say Rs. -			21.55

### Chapter 3

#### EARTHWORK

Sr. No.	Reference to MORD Specifications	Description	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
3.4	301.5	Construction of Embankment with Material Obtained from Borrow Pits				
		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				
		Unit = cum				
		Taking output = 100 cum				
		a) Labour				
		Mate	day	0.04	305.00	12.20
		Mazdoor (Unskilled)	day	1.00	267.00	267.00
		b) Machinery				
		Hydraulic Excavator 0.90 cum bucket capacity @ 60 cum per hour	hour	1.67	1,968.20	3,288.56
		Tipper 5.5 cum with 10 t capacity	hour	4.50	1,043.00	4,693.50
		Dozer D-60 for spreading @ 100 cum per hour	hour	0.00	3,337.90	0.00
		Tractor Mounted Grader for grading @ 200 cum per hour	hour	1.00	549.10	549.10
		Water tanker 6 kl capacity	hour	0.00	184.00	0.00
		Three wheel 80-100 kN Static Roller @ 80 cum per hour	hour	0.00	803.00	0.00
		c) Material				
		Water	kl	0.00	40.00	0.00
		Compensation for earth taken from private land	cum	100.00	34.81	3,481.00
		d) Overheads @ 6.0% on (a+b+c)				738.68
		Cost for 100 cum = a+b+c+d+e				13,050.04
		Rate per cum = (a+b+c+d+e)/100				130.50
		Add 1% Labour Cess				1.31
		Add 12% GST				15.66
		Final Rate in DPR				147.47

*Sanjit Singh*  
10/11/2018  
J.E