

RURAL WORKS DEPARTMENT



GOVERNMENT OF BIHAR

CIRCLE – R.W.D. works Circle, Chapra

DIVISION – R.W.D. works Division , Marhaura

Name of Work - Motrable of Road from Repura to Dumariya

Block - Amnaur

Estimated cost - Rs 939708.00

Year : 2020-21

Inspection Report for Flood damage work

Date:

1. Name of PIUs- E. E. R. W. D. (W) Madhaura.

2. Name of Block/Road- Amarsar - Motorable of Road from Ropar to dhamiya.

A. For Road

1. Damage Location/Chainage : - 1.20 + 1.40 + 1.90 + 2.10 + 2.40 + 2.75.

2. Damage Length : 181 M.

3. Nature of Damage : Road cutting due to flood.

4. Details of Restoration :

i Material being used in Restoration

: Bonebet, local soft fly.

ii Equipment/Tools being used in Restoration works:

: Roller, Tolly, D.C.B. Tractor

iii Procedure taken up in Restoration works

: Bonebet, local soft fly dumping

iv Restored Length

: Using Rolling axle.

B. For Bridge

1. Damage Location/Chainage :

2. Damage Length :

3. Nature of Damage :

4. Details of Restoration :

i Material being used in Restoration :

ii Equipment/Tools being used in Restoration works:

iii Procedure taken up in Restoration works :

iv Restored Length :

Signature of JE/AF/EE

Signature

AKHILESH KUMAR
(Name of Inspector)

E.E. R.W.D.

(W) DIVISION - SONEPUR

प्रतिवेदन

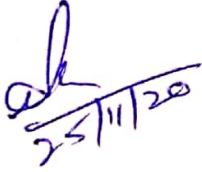
कार्य का नाम :- खुदरा-खेड़मालिया पथ का मालाति कार्य,
शीर्ष :- FDR
प्राक्कलित राशि:- 9,39,708 =
प्रखण्ड का नाम:- अमनौर

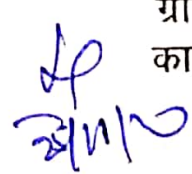
जिला-सारण।

प्रस्तुत प्राक्कलन शीर्ष PMGSY/MMGSY/GTSNY/NABARD/MR-3054 अर्तगत निर्मित/निर्माणाधीन पथ के गत महीने में इस जिला में आये बाढ़/अतिवृष्टि के कारण क्षतिग्रस्त हुए पथों को चलने लायक (Motarable) बनाने हेतु विभागीय दिशा-निर्देशानुसार कार्यपालक अभियंता, ग्रा0का0वि0, कार्य प्रमंडल मढ़ौरा के दिशा-निर्देशन में कुल रु0 9,39,708 = के लिए तैयार किया गया है।

आवश्यकतानुसार तत्काल प्रभाव से पथों को चलने लायक बनाने हेतु प्राक्कलन में Bricks Bats, Sand Bag, Hume-Pipe इत्यादी का प्रावधान आवश्यक लम्बाई, चौड़ाई एवं मोटाई में प्राक्कलन के अनुसार प्रावधान किया गया है।

योजना एवं कार्य की महत्ता के साथ-साथ जनहित के लिए अतिउपयोगी प्राक्कलन को कार्यहित में स्वीकृति हेतु प्रस्तुत किया जा रहा है।


25/11/20

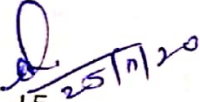

कार्यपालक अभियंता,
ग्रामीण कार्य विभाग,
कार्य प्रमंडल, मढ़ौरा।

25/11/20

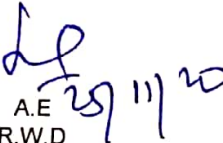
ABSTRACT OF COST

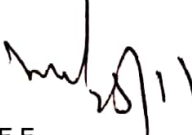
Name of Work - Motrable of Road from Repura to Dumariya

Block - Amnaur

S.L No.	Particulars	Amount (In Rs.)
A	Cost of Restoration work	Rs 831600.00
B	Add 12 % GST on (A)	Rs 99792.00
C	Add 1 % L. Cess on (A)	Rs 8316.00
	Total Cost	Rs 939708.00

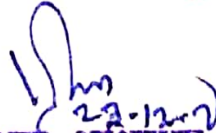

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RWD
Amnaur


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R.W.D
Amnaur


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Marhaura

Rs. 9,39,708 = 00

T/A for Rs 9,39,708 = 00 (Rupees nine lac thirty nine-thousand Seven hundred-eight) only.

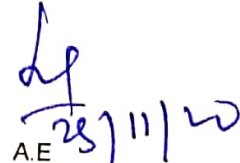

अधीक्षण अभियंता
ग्रामीण कार्य विभाग
कार्य प्रमंडल, छपरा

Detailed Estimate

Moltrable of Road from Repura to Dumariya

SI No	Item	No	Length	Width	Avg.H/D	Qty	Unit	Rate	Amount
1	Providing laying and spreading brick bats in Road ditches all complete as per approved design, specifications and direction of E/I	1	6	4.50	0.60	16.20			
		1	25	4.50	0.62	69.75			
		2	27	4.00	0.50	108.00			
		1	19	3.75	0.62	44.18			
		1	12	3.80	0.54	24.62			
		1	30	4.50	0.51	68.85			
		1	16	4.40	0.63	44.35			
		1	19	4.10	0.52	40.51			
		Total					416.46	cum	1909.87
2	Filling and spreading local sand over brick bats as per drawing and technical specification Clause 305.3.9	1	6.00	4.50	0.10	2.70			
		1	25.00	4.50	0.10	11.25			
		2	27.00	4.00	0.10	21.60			
		1	19.00	3.75	0.10	7.13			
		1	12.00	3.80	0.10	4.56			
		1	30.00	4.50	0.10	13.50			
		1	16.00	4.40	0.10	7.04			
		1	19.00	4.10	0.10	7.79			
		Total					75.57	cum	479.27
TOTAL								831600.00	


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ANALYSIS FOR CARRIAGE OF MATERIAL

(A) Name of the Work :- Restoration/Mottrable of Road from Amnaur talab REO road to Nasing Bhanpur

(B) Haulage Charge By 8 T Capacity Truck

- (i) For Surface Road :- Rs. 7.52 Per t per K.M
- (ii) For Unsurface Toad :- Rs. 9.04 Per t per K.M
- (iii) For Kutcha Road :- Rs. 18.19 Per t per K.M

1 CARRIAGE COST OF BAMBOO 62 MM TO 75 MM OF 6 To 8 M LONG

Lead as per Quarry Chart :- 5 P + 5 K

$$\text{Haulage Cost} = \frac{8}{3.00} \times [(7.52 \times 5.00) + (18.19 \times 5.00)] = 206.09$$

Loading & Unloading =

$$\begin{aligned} &= \frac{2224.00}{2430.09} \\ \text{Total per \% Nos} &= 3.47 \\ \text{Total per m} &= \end{aligned}$$

2 CARRIAGE COST OF STONE BOULDER

Lead as per Quarry Chart :- 180 P + 0 K

$$\text{Haulage Cost} = \frac{8}{4.80} \times [(7.52 \times 180.00) + (18.19 \times 0.00)] = 2256.00$$

Loading & Unloading =

$$\begin{aligned} &= 196.13 \\ \text{Total per M}^3 &= 2452.13 \end{aligned}$$

3 CARRIAGE COST OF GSB Material

Lead as per Quarry Chart :- 180 P + 0 K

$$\text{Haulage Cost} = \frac{8}{4.99} \times [(7.52 \times 180.00) + (18.19 \times 0.00)] = 2170.10$$

Loading & Unloading =

$$\begin{aligned} &= 196.13 \\ \text{Total per M}^3 &= 2366.23 \end{aligned}$$

4 CARRIAGE COST OF HUME PIPE (1000 MM DIA)

Lead as per Quarry Chart :- 55 P + 0 K

$$\text{Haulage Cost} = \frac{8}{22.5} \times [(7.52 \times 55.00) + (18.19 \times 0.00)] = 330.88$$

Loading & Unloading =

$$\begin{aligned} &= \frac{76.58}{407.46} \\ \text{Total per M} &= \end{aligned}$$

5 CARRIAGE COST OF HUME PIPE (600 MM DIA)

Lead as per Quarry Chart :- 55 P + 0 K

$$\text{Haulage Cost} = \frac{8}{52.50} \times [(7.52 \times 55.00) + (18.19 \times 0.00)] = 63.02$$

Loading & Unloading =

$$\begin{aligned} &= \frac{32.82}{95.84} \\ \text{Total per M} &= \end{aligned}$$

(C) Haulage Charge By 3.60 t Tractor capacity

- (i) For Surface Road :- Rs. 18.70 Per t per K M
(ii) For Unsurface Toad :- Rs. 23.30 Per t per K.M
(iii) For Kutcha Road :- Rs. 29.20 Per t per K.M

1 CARRIAGE COST OF BRICK BAT

Lead as per Quarry Chart :- 7 P + 1 K

$$\text{Haulage Cost} = \frac{3.60}{2.25} \times [(18.70 \times 7.00) + (29.20 \times 1.00)] = 256.16$$

$$\text{Unloading} = \quad \quad \quad = \quad \quad \quad = \quad \quad \quad 65.38$$

$$\text{Total per 1000 Nos.} = \quad \quad \quad = \quad \quad \quad 321.54$$

2 CARRIAGE COST OF LOCAL SAND

Lead as per Quarry Chart :- 2 P + 1 K

$$\text{Haulage Cost} = \frac{3.60}{2.25} \times [(18.70 \times 2.00) + (29.20 \times 1.00)] = 106.56$$

$$\text{Unloading} = \quad \quad \quad = \quad \quad \quad = \quad \quad \quad 40.81$$

$$\text{Total per M}^3 = \quad \quad \quad = \quad \quad \quad 147.37$$

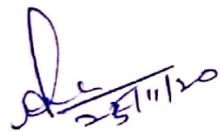
3 CARRIAGE COST OF STEEL

Lead as per Quarry Chart :- 5 P + 0 K

$$\text{Haulage Cost} = \frac{3.60}{3.60} \times [(18.70 \times 5.00) + (29.20 \times 0.00)] = 93.50$$

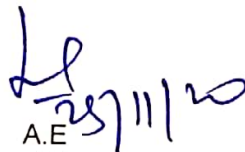
$$\text{Loading \& Unloading} = \quad \quad \quad = \quad \quad \quad = \quad \quad \quad 325.46$$

$$\text{Total per Mt} = \quad \quad \quad = \quad \quad \quad 418.96$$

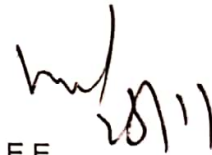

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SUMMARY OF CARRIAGE COST OF MATERIAL

Name of work :-

Restoration/Mottrable of Road from Amnaur talab REO road to Nasing Bhanpur

S.I No.	Name of material	Unit	Source	Mode of Transport	Carriage Charge by Road	Total Carriage up to site
1	2	3	4	5	7	8
1	Bricks Bats	per m ³	Local Kiln	By Road	321.54	321.54
2	Fine sand	per m ³	Local source	By Road	147.37	147.37
3	Steel	per mt	Local	By Road	418.96	418.96
4	Boulder	per m ³	Sheikhpura	By Road	2452.13	2452.13
5	Stone metal <50 mm	per m ³	Sheikhpura	By Road	2366.23	2366.23
6	Hume pipe (1000 mm dia)	Per metre	Hajipur	By Road	407.46	407.46
7	Hume pipe (600 mm dia)	Per metre	Hajipur	By Road	95.84	95.84
8	Bamboo of 62 to 75 mm dia	Per metre	Local	By Road	3.47	3.47

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FDR Analysis

Sr. No.	Description	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
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1.1 Loading and Unloading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by Manual Means

- (i) Loading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by manual means including a lead upto 30 m

Unit = cum

Taking output = 5.5 cum

a) Labour

Mate	day	0.02	305.00	6.10
Mazdoor (Unskilled)	day	0.50	287.00	143.50

b) Machinery

Truck	hour	0.50	934.30	467.15
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c) Overheads on (a+b) =@ 6% 37.01

d) Contractor's profit on (a+b+c) =@ 10% 65.38

Cost for 5.5 cum = a+b+c+d 719.13

Rate per cum = (a+b+c+d)/5.5 130.75

- (ii) Loading of Earth, Sand, Moorum, Manure, Flyash by manual means including a lead upto 30 m

Unit = cum

Taking output = 5.5 cum

a) Labour

Mate	day	0.01	305.00	3.05
Mazdoor (Unskilled)	day	0.25	287.00	71.75

b) Machinery

Truck	hour	0.25	934.30	233.58
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c) Overheads on (a+b) =@ 6% 18.50

d) Contractor's profit on (a+b+c) =@ 10% 32.69

Cost for 5.5 cum = a+b+c+d 359.57

Rate per cum = (a+b+c+d)/5.5 65.38

- (iii) Unloading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by manual means including a lead upto 30 m

Unit = cum

Taking output = 5.5 cum

a) Labour

Mate	day	0.01	305.00	3.05
Mazdoor (Unskilled)	day	0.25	287.00	71.75

b) Machinery

Truck	hour	0.25	934.30	233.58
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c) Overheads on (a+b) =@ 6% 18.50

d) Contractor's profit on (a+b+c) =@ 10% 32.69

Cost for 5.5 cum = a+b+c+d 359.57

Rate per cum = (a+b+c+d)/5.5 65.38

(iv) Unloading of Earth, Sand, Moorum, Manure, Flyash by manual means including a lead upto 30 m

Unit = cum

Taking output = 5.5 cum

a) Labour

Mate	day	0.005	305.00	1.53
Mazdoor (Unskilled)	day	0.125	287.00	35.88

b) Machinery

Truck	hour	0.166	934.30	155.09
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c) Overheads on (a+b) =@ 6% 11.55

d) Contractor's profit on (a+b+c) =@ 10% 20.40

Cost for 5.5 cum = a+b+c+d 224.45

Rate per cum = (a+b+c+d)/5.5 40.81

1.3 Loading, Unloading and Stacking of Bricks by Manual Means

(i) Loading of Bricks by manual means including a lead upto 30 m

Unit = 1000 Nos.

Taking output = 2000 Nos.

a) Labour

Mate	day	0.01	305.00	3.05
Mazdoor (Unskilled)	day	0.25	287.00	71.75

b) Machinery

Truck	hour	0.33	934.30	308.32
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c) Overheads on (a+b) =@ 6% 22.99

d) Contractor's profit on (a+b+c) =@ 10% 40.61

Cost for 2000 Nos. = a+b+c+d 446.72

Rate for 1000 bricks = (a+b+c+d)/2 223.36

(ii) Unloading and Stacking of Bricks by manual means including a lead upto 30 m

Unit = 1000 Nos.

Taking output = 2000 Nos.

a) Labour

Mate	day	0.01	305.00	3.05
Mazdoor (Unskilled)	day	0.25	287.00	71.75

b) Machinery

Truck	hour	0.33	934.30	308.32
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c) Overheads on (a+b) =@ 6% 22.99

d) Contractor's profit on (a+b+c) =@ 10% 40.61

Cost for 2000 Nos. = a+b+c+d 446.72

Rate for 1000 bricks = (a+b+c+d)/2 223.36

1.5 Loading and Unloading of Structural Steel and Steel Bars by manual means

(i) Loading of Structural Steel, Steel Bars by manual means including a lead upto 30 m

Unit = t

Taking output = 10 t

a) Labour

Mate	day	0.07	305.00	21.35
Mazdoor (Unskilled)	day	1.80	287.00	516.60

b) Machinery

Truck	hour	1.00	934.30	934.30
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c) Overheads on (a+b) =@ 6% 88.34

d) Contractor's profit on (a+b+c) =@ 10% 156.06

Cost for 10 t = $a+b+c+d$

1716.64

Rate per tonnes = $(a+b+c+d)/10$

171.66

(ii) Unloading of Structural Steel, Steel Bars by manual means including a lead upto 30 m

Unit = t

Taking output = 10 t

a) Labour

Mate	day	0.07	305.00	21.35
Mazdoor (Unskilled)	day	1.80	287.00	516.60

b) Machinery

Truck	hour	1.00	934.30	934.30
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c) Overheads on (a+b)	=@	6%		88.34
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d) Contractor's profit on (a+b+c)	=@	10%		156.06
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Cost for 10 t = a+b+c+d 1716.64

Rate per t = (a+b+c+d)/10 171.66

1.9 Loading and Unloading of Hume Pipes

(i) Loading of RCC Hume pipes by mechanical means including a lead upto 30 m

A. 1000 / 1200 mm dia Hume pipe

Unit = per pipe

Taking output = 9 pipes

a) Labour

Mate	day	0.02	305.00	6.10
Mazdoor (Unskilled)	day	0.50	287.00	143.50

b) Machinery

Truck	hour	0.33	934.30	308.32
Crane	hour	0.33	1,289.30	425.47

c) Overheads on (a+b)	=@	6%		53.00
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d) Contractor's profit on (a+b+c)	=@	10%		93.64
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Cost for 9 pipes = a+b+c+d 1030.03

Rate per pipe = (a+b+c+d)/9 114.45

Rate per M = (a+b+c+d)/2.50 45.78

C. 600/450 mm dia Hume pipe

Unit = per pipe

Taking output = 21 pipe

a) Labour

Mate	day	0.02	305.00	6.10
Mazdoor (Unskilled)	day	0.50	287.00	143.50

b) Machinery

Truck	hour	0.33	934.30	308.32
Crane	hour	0.33	1,289.30	425.47

c) Overheads on (a+b)	=@	6%		53.00
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d) Contractor's profit on (a+b+c)	=@	10%		93.64
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Cost for 21 pipes = a+b+c+d 1030.03

Rate per pipe = (a+b+c+d)/21 49.05

Rate per M = (a+b+c+d)/2.5 19.62

FDR

Name of Road - motorable of Road from Repura to Sumariya
Block - Amnour



hp
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A

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RB A

- ²
FDR

Name of Road- Moterabale of Road from Repura to Durnariya
Block - Amnour



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FDR

Name of Road - Moterabale of Road from Repura to Dumeriya
Block - Amnour



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 Block - Amnour



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