

कार्यपालक अभियंता का कार्यालय
ग्रामीण कार्य विभाग, कार्य प्रमंडल, मधुबनी।

Email:-cerwdmadhubani@gmail.com Mob-8986915356

पत्रांक:- 598 अन्क दिनांक:- 12/03/2022

प्रेषक,

कार्यपालक अभियंता
ग्रामीण कार्य विभाग,
कार्य प्रमंडल, मधुबनी।

सेवा में,

कार्यपालक अभियंता
ग्रामीण कार्य विभाग,
कार्य प्रमंडल, दरभंगा-2

विषय:-

वर्ष 2021-22 में आयी बाढ़ के कारण क्षतिग्रस्त पथों में अस्थायी रूप से कराये गये कार्यों का प्राक्कलन जाँच हेतु समर्पित करने के संबंध में।

प्रसंग:-

आपका पत्रांक-263(A) दिनांक-24.02.2022 एवं 269(A) दिनांक-28.02.2022

महाशय,

उपर्युक्त विषयक प्रासंगिक पत्र के आलोक में जाले एवं केवटी प्रखंड अंतर्गत वर्ष 2021-22 में आयी बाढ़ के कारण क्षतिग्रस्त पथों में अस्थायी रूप से कराये गये कार्यों का प्राक्कलन जाँच कर आवश्यक कार्रवाई हेतु समर्पित की जाती है।

क्र०	क्षतिग्रस्त पथों का नाम	प्रखंड का नाम	Quantity (M ³)	अभ्युक्ति
1	L026-Muritha to Khajurwara	Jale	69.699	
2	L044-T03 to Katraul	Jale	185.922	
3	Darbhanga Jila antargat-Yogiyara PWD pat se dhariya mor se sahpur bhaya ramauli panihari tariyani meejopur massa ewn dhankaul pat (Madhubani Darbhanga Boader) tak	Jale	102.875	
4	Milki PMGSY Sadak to Muraittha Dakshin tol	Jale	127.693	
5	Naya tola Islampur to Kusumpatti	Jale	100.449	
6	Bachey Yadav house to Serha tola	Jale	7.69	
7	PMGSY Bihari village Mahendra Baitha to Gosaie tola	Jale	25.575	
8	Ahiyari Dakshine Sima to Chanua ramna gachhi	Jale	106.207	
9	Ahiyari South to chanua tol RWD road FDR	Jale	44.87	
10	Ahiyari got to Rahi tola	Jale	104.23	
11	Ahiyari got to Usra Rahi tola tak	Jale	59.87	
12	Brahmpur hat to Sotiya	Jale	178.175	
13	PMGSY Jahangir tola chowk se sahni tola	Jale	54.42	
14	NABARD Hajipur to Hazma tola	Keoti	10.74	
15	PWD road Phulkahi Apan chowk to Birkha Shankarpur chowk	Keoti	86.525	
16	L058-PMGSY Md Dani to Bajitpur (VR58)	Keoti	123.82	
17	L059-Jalwara to Kothia (VR42)	Keoti	327.603-E/W 111.544- Brick Bats 87 Nos- Bamboo 4853 Nos- EC Bags	
18	REO road Pindaruch to Kathiyaghat	Keoti	25.30	
19	PMGSY road se Sukhalapur	Keoti	38.449	

अनु०:-यथोक्त।

विश्वासभाज

कार्यपालक अभियंता

ग्रामीण कार्य विभाग, कार्य प्रमंडल, मधुबनी।



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

BIHAR RURAL ROADS PROJECT

Bihar Rural Development Agency (BRRDA)

PLAN HEAD :- F.D.R. 2245

A.A. COPY

T/S-copy

YEAR (2021-22)

State :- BIHAR

District :- Darbhanga

Block :- Jale

AMITYART

Haiyari Goat Se Usra Rahi Tola ✓

Actual Length of Road	=	2.100 Km
Flood affected Length of Road	=	0.104 Km
TOTAL COST OF PAVEMENT	Rs	1,245,776.00 <u>Rs 1.4182 lac</u>
TOTAL PROJECT COST	Rs	1,245,776.00 <u>do</u>

Submitted By:
Executive Engineer
RWD (W) Division, Darbhanga-2

Prepared By:
Executive Engineer
RWD (W) Division, Darbhanga-2

तकनीकी अनुमोदन प्रतिवेदन

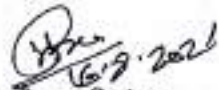
पथ का नाम :- अहियारी गोद से उसरा रही टोला तक मरम्मत कार्य (FDR)
पथ की लम्बाई :- 2.10 कि०मी०
प्राक्कलित राशि :- 12,45,776 लाख मात्र। 1.4182 लाख
प्रमण्डल का नाम :- ग्रामीण कार्य विभाग, कार्य प्रमण्डल, दरभंगा-2
अंचल का नाम :- ग्रामीण कार्य विभाग, कार्य अंचल, दरभंगा।
योजना शीर्ष :- FDR-2245
योजना वर्ष :- 2021-2022

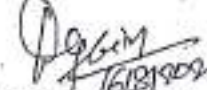
प्रस्तुत प्राक्कलन जाले प्रखंड अन्तर्गत अहियारी गोद से उसरा रही टोला पथ मरम्मत कार्य के लिए तैयार किया गया है, जो कि वर्ष 2021 में आयी भीषण बाढ़ एवं अतिवृष्टि के कारण उक्त पथ का पथांश कई स्थानों पर क्षतिग्रस्त हो गया था। जिसके कारण यातायात अवरुद्ध हो गई थी। यातायात को पुनः बहाल करने के लिए पथ को अस्थायी रूप से मोटरबुल (Motorable) किया गया। मोटरबुल (Motorable) कार्य करने हेतु आवश्यकतानुसार प्राक्कलन में (Brick Bats) ईंट के टुकड़ों से भरकर उसका सम्पीडन किये जाने का प्रावधान किया गया है।

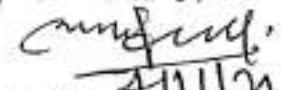
प्रस्तुत प्राक्कलन विभागीय पत्रांक-मु0अ0-4 (मु0) विविध (कार्य)-23-60/2020-1937, पटना दिनांक-07.07.2021 के अनुपालन में तैयार किया गया है।

प्रस्तुत प्राक्कलन वर्तमान अनुसूचित दर के आधार पर तैयार किया गया है। चूंकि यह कार्य विभागीय स्तर पर कराया गया है। प्रस्तुत प्राक्कलन में संवेदक लाभांश का प्रावधान नहीं किया गया है।

अतः यह प्राक्कलन की लोकहित एवं जनहित में तकनीकी अनुमोदन अपेक्षित है।


कनीय अभियंता,
ग्रामीण कार्य विभाग,
प्रशाखा, जाले


सहायक अभियंता
ग्रामीण कार्य विभाग,
कार्य अवर प्रमण्डल, जाले


कार्यपालक अभियंता
ग्रामीण कार्य विभागाध्यक्ष
कार्य प्र० दरभंगा-2

SUMMARY OF COST ESTIMATE FOR THE PROJECT

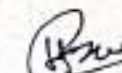
NAME OF ROAD :- Ahijadi
 DISTRICT :- Haiyari Goat Se Usra Rahi Tola
 BLOCK :- Darbhanga
 Actual Length of Road :- 2.100 Km
 Flood Affected Length of Road :- 0.104 Km

Sr. No.	Description	Lead in Km	7	+	1	Amount (In Rs.)
1	Brick bats	Total Qty. = 525.91		@ 2,004.96		1,054,427.00
2	Add GST @ 12% =					126,531.00
3	Add Labour Cess @ 1% =					10,544.00
4	S.F. @ 10% on material (Brick Bats) =					54,274.00
TOTAL RESTORATION COST OF THE PROJECT IN Rs.						1,245,776.00

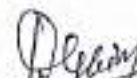
T.R. 1,41,820=00

कार्य्यामक अभियन्ता का ००० वि०, कार्य्यामक अभियन्ता
 पत्रांक: ५९४ अथवा दिनांक:- १२/०३/२०२२ के द्वारा स्वीकृत किया
 प्रतिवेदन है कार्य्यामक अभियन्ता
 T.R. for Rs. 1,41,820=00 (Rupees one
 lac forty one thousands eight hundred
 twenty) only.

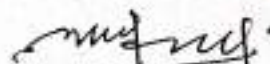
अधीक्षक अभियन्ता,
 ग्रामीण कार्य विभाग,
 कार्य्यामक, दरभंगा


 6.8.2021
 Junior Engineer

RWD (W) Division, Darbhanga-2


 16/03/2021
 Assistant Engineer

RWD (W) Division, Darbhanga-2


 04/11/21
 Executive Engineer

RWD (W) Division, Darbhanga-2

Estimate for Temporary Restoration of Flood affected Road

Name of Road:- Haiyari Goat Se Usra Rahi Tola

BLOCK :- Jale

District:- Darbhanga

SUB HEAD : BRICK BATS

Laying & Distribution of Brick bats on affected Road portion as per specification to meet the required slope and proper light Ramming from a specified lead as per direction of E/L

Sl No	Chainage	Unit	Nos.	Length (m)	Width (m)	Depth/ Thickness (m)	Quantity	Rate (In Rs.)	Amount (In Rs.)
	From	To							
	50	200	1.00	10.00	3.00	0.15	42.30	2804.96	90,223.0
			1.00	10.00	2.50	0.20	50.00	2,004.96	1,25,310.00
			1.00	5.00	3.00	0.10	15.00	2,004.96	60,149.0
			1.00	5.00	3.75	0.15	2.81	2,004.96	56,390.0
			1.00	10.00	3.00	0.10	30.00	2,004.96	90,223.0
			1.00	12.00	3.00	0.20	7.20	2,001.96	1,08,266.00
			1.00	15.00	3.00	0.10	4.50	2,004.96	76,690.0
			1.00	5.00	2.50	0.15	1.88	2,004.96	37,593.0
			1.00	3.00	2.00	0.10	0.50	2,504.96	10,225.0
			1.00	6.00	3.75	0.25	5.16	2,004.96	83,456.0
			2.00	4.00	3.50	0.25	7.30	2,004.96	81,208.0
			1.00	3.00	3.00	0.15	1.50	2,004.96	18,045.0
			2.00	4.00	3.50	0.20	5.60	2,004.96	57,522.0
			2.00	2.00	3.00	0.15	1.80	2,004.96	36,089.0
			1.00	3.00	3.00	0.20	3.00	2,004.96	60,149.0
			1.00	5.00	3.00	0.25	4.20	2,004.96	84,208.0
			1.00	10.00	3.00	0.15	15.00	2,004.96	10,225.0
							53.00	Total Amt.	10,51,427.00
							59.870 m		

Inspection Report for Flood Damage Work

Date:- 8/3/22

Name of PIUs:- Daubhanga-2

Name of Block/Road:- Jole / Akijari Ghat to Usra Paki Tola

(A) For Road:-

1 Damage Location/Chainage:- Ch. 50 to 200, 257 to 775, 810 to 900,

2 Damage Length:- 95 to 1712 m.
104.00 mtr.

3 Nature of Damage:- Road crust / Shoulder damage

4 Details of Restoration Works:-

(i) Material being used in Restoration Works:- Brickbats (59.87 m³)

(ii) Equipment's/Tools being used in Restoration works:-

(iii) Procedure taken up in Restoration Works:- Brickbats filling

(iv) Restored Length:- 104 mtr.

(B) For Bridge:-

1 Damage Location/Chainage:-

2 Damage Length:-

3 Nature of Damage:-

4 Details of Restoration Works:-

(i) Material being used in Restoration Works:-

(ii) Equipment's/Tools being used in Restoration works:-

(iii) Procedure taken up in Restoration Works:-

(iv) Restored Length:-

N.A.

Work found satisfactory

Signature of JE/AE/EE

Signature

(Name of Inspection)

8/3/22
AE

8/3/22

Sl No	Chainage		Unit	Nos.	Length (m)	Width (m)	Depth / Thickness (m)	Quantity	Rate (In Rs.)	Amount (In Rs.)
	From	To								
	<i>[Signature]</i> Junior Engineer RWD (W) Division, Darbhanga-2				<i>[Signature]</i> Assistant Engineer RWD (W) Division, Darbhanga-2			<i>[Signature]</i> Executive Engineer RWD (W) Division, Darbhanga-2		

Verified and corrected
as per bill (59.87m³)

$\frac{100 \times 8.13 \times 2}{2} = 813$
 $\frac{100 \times 10 \times 1}{2} = 500$
 $\frac{100 \times 10 \times 1}{2} = 500$

Q

Analysis for Carriage

Flood affected Length of the Road:- 0.104 KM
Actual Length of the Road:- 2.100 KM.

Name of Road:- Haiyari Goat Se Usra Rahi Tola

Block :- Jute

District:- Darbhanga

Sl No	Item	Unit	Source	Pucka / Surface	Katcha surface	Loading & Unloading Cost	Carriage Cost by Rail Head	Total
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1	Brick Bats	800 Nos	Local	$\frac{3.60}{2.25} \times 20.32 \times 7.00 \text{ Km} = \text{Rs } 227.58$	$\frac{3.60}{2.25} \times 31.74 \times 1.00 \text{ Km} = \text{Rs } 50.78$	210.07		488.44
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* Subjected to Verification of Lead

Cost of Haulage Excluding Loading & Unloading as per SOR

Type of Road	Per Ton. Km by Tractor
For Surface Road	20.32
Unsurface Gravel Road	25.38
Kachha Road	31.74

[Signature]
Asstt. Engineer

RWD (W) Division, Darbhanga-2

[Signature]
Junior Engineer

RWD (W) Division, Darbhanga-2

[Signature]
Executive Engineer

RWD (W) Division, Darbhanga-2

Analysis of Rate

Sl No.	SOR No.	Description	Unit	Qty	Rate(Rs.)	Amount (Rs.)
Carriage of materials (By Tractor)						
1	1.4	Cost of Haulage excluding Loading & Unloading				
	RCD	Haulage of materials by Tractor excluding cost of loading, unloading and stacking.				
		Unit = t.km				
		Taking output 3.60 Tonne load and lead 10 km = 36.0 t.km				
		Case-I : Surfaced Road				
		Speed with load: 15 km per hour				
		Speed while returning empty: 25 km per hour				
		a) Machinery				
		Tractor 3.6 t capacity				
		Time taken for onwards haulage with load	hour	0.667	612.00	408.20
		Time taken for empty return trip	hour	0.400	612.00	244.80
						78.36
		b) Overheads @ 12% on (a)				731.36
		Cost for 36.0 t.km = a+b				20.32
		Rate per t.km = (a+b)/36.00				20.32
					Say	20.32
		Case-II: Unsurfaced Gravel Road				
		Speed with load: 12 km/hour				
		Speed for empty return trip: 20 km/hour				
		a) Machinery				
		Tractor 3.6 t capacity				
		Time taken for onwards haulage with load	hour	0.833	612.00	509.80
		Time taken for empty return trip	hour	0.500	612.00	306.00
						97.90
		b) Overheads @ 12% on (a)				913.69
		Cost for 36.0 t.km = a+b				25.38
		Rate per t.km = (a+b)/36.00				25.38
					Say	25.38
		Case-III: Katcha Road				
		Speed with load: 10 km/hour				
		Speed for empty return trip: 15 km/hour				
		a) Machinery				
		Tractor 3.6 t capacity				
		Time taken for onwards haulage with load	hour	1.000	612.00	612.00
		Time taken for empty return trip	hour	0.667	612.00	408.20
						122.42
		b) Overheads @ 12% on (a)				1,142.63
		Cost for 36.0 t.km = a+b				31.74
		Rate per t.km = (a+b)/36.00				31.74
					Say	31.74
2	6.6.1.	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 job as per approved design, specification and direction of E/I				
	WRD	Unit = Per Cum				
		Taking output= 2.832 Cum				
		a) Labour				

Sl No.	SOR No.	Description	Unit	Qty	Rate(Rs.)	Amount (Rs.)
		Mazdoor (Unskilled)	Nos	3.00	304.00	912.00
		b) Overheads @ 12% on (a)				109.44
		Rate for 2.832 Cum				1,021.44
		Rate Per Cum				360.68
3	1.1	Loading and Unloading of Stone Boulder, Stone aggregate, Sand, Kankar, Moorum, Brick Bats				
	RCD	Unit = Per Cum				
		Taking output= 2.25 Cum				
		Time required for				
		i) Positioning of tipper at unloading point	day	1 Min		
		ii) Loading by front end loader 1 cum bucket capacity @ 25 cum per hour	day	5Min		
		Total		6Min		
		a) Labour				
		Mate	day	0.03	321.00	9.63
		Mazdoor for Loading and unloading	day	0.72	304.00	218.88
		b) Machinery				
		Tractor 3.6 t capacity	Hour	0.10	612.00	61.20
		Front end loader 1 cum bucket capacity @ 25 cum per hour	Hour	0.083	1,594.00	132.30
		c) Overheads @ 12% on (a+b)				50.64
		Cost of 2.25 Cum = (a+b+c)=				472.65
		Rate per Cum=(a+b+c)/2.25				210.07
		Note:- Unloading will be done Manually.				
4		Supplying of Brick Bats (With OH)				
		a) Labour				
		Cost of Labour for Pitching and Light Ramming as per WRD SOR 6.6.1 (with OH)	Cum	1.00	360.68	360.68
		b) Materials				
		Bricks Bats -Basic Rate Taken From RCD S.O.R.	Cum	1	1032.00	1032.00
		c) Overheads @ 12% on (b)				123.84
		d) Carriage				
		Add: Carriage Charge for Brick bats	Cum	1	488.44	488.44
		Total = (a+b+c+d)=				2,004.96
		Total Cost Per Cum=				2,004.96

BASIC RATES
(A) Labour

Sl. No.	Description of Labour	Unit	Rate (Rs.)
L-01	Bhisti	day	287.00
L-02	Bitumen Sprayer	day	302.00
L-03	Blacksmith	day	388.00
L-04	Blaster	day	477.00
L-05	Carpenter 1st Class	day	388.00
L-06	Chips spreader	day	345.00
L-07	Chiseller	day	364.00
L-08	Dresser (Skilled)	day	364.00
L-09	Driller	day	345.00
L-10	Electrician	day	367.00
L-11	Fitter	day	395.00
L-12	Mason (1st class)	day	388.00
L-13	Mason (2nd Class)	day	345.00
L-14	Mate	day	321.00
L-15	Mazdoor (Unskilled)	day	304.00
L-16	Mazdoor (Semi skilled)	day	299.00
L-17	Mazdoor (Skilled)	day	364.00
L-18	Painter (1st class)	day	367.00
L-19	Plumber	day	367.00
L-20	Surveyor	day	349.00
L-21	White Washer	day	367.00

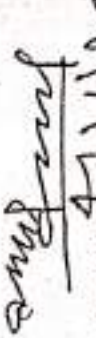
BASIC RATES
(C) USAGE RATES OF PLANT & MACHINERY

Sr. No.	Description of		Output of Machine		Usage Rates in Rs.	
	Machine	Activity	Unit	Output	Unit	Rate
PM-011	Front end-loader 1 cum bucket capacity @ 45 cum/hour	Loading Aggregates	cum/h	45.00	per hour	1,594.00
		Loading Soil	cum/h	100.00		1,594.00
				200.00		2,697.00
PM-018	Motor Grader	Scarifier & levelling	cum/h	50.00	per hour	570.00
	Tractor Mounted Grader					
PM-019	Needle vibrator	Vibrating cement concrete mix	cum/h	3.50	per hour	76.35
PM-020	Paver finisher	Laying/spreading	t/h	75.00	per hour	1,390.00
PM-021	Plate compactor	Compaction	cum/h		per hour	467.00
PM-022	Plate vibrator	Compaction	cum/h		per hour	467.00
PM-023	Screed vibrator	Compaction	cum/h		per hour	102.64
PM-024	Smooth wheeled 80-100 kN tandem roller	Compaction of Sub-base/ Asphalt	cum/h	30.00	per hour	1,722.00
PM-025	Stone crusher (Integrated) of 200 TPH	Crushing of Spalls	t/h	200.00	per hour	27,125.00
PM-026	Three wheel 80-100 kN Static Roller	Compaction/ Rolling				781.00
		Earth- Embankment or sub-grade	cum/h	80/70		781.00
		Sub-base G-I	cum/h	10.00	per hour	781.00
		Sub-base G-II/G-III	cum/h	8.00		781.00
		WMM	cum/h	16.00		781.00
PM-027	Tipper 5.5 cum/10 t	Carriage	cum/trip	5.50	per hour	1,211.00
PM-028	Tractor with Disc Harrows	Pulverisation of soil	cum/h	80.00	per hour	549.10
PM-029	Tractor with ripper @ 60 cum per hour	Ripping Pavements, uprooting trees	cum/h	60.00	per hour	549.10
PM-030	Tractor with trolley/with Grading equipment	Transportation of materials	t/trip	3 to 5	per hour	617.00
PM-031	Tractor with Rotavator	Scarifier	cum/h	25.00	per hour	570.00

Seigniorage Fee Calculation									
Name of Road:- Haiyari Goat Se Usra Rahi Tola									
Block:- Jale		District:- Darbhanga							
Sr. no.	Description	Unit	Qty.	Rate	Amount In Rs.	Total Material Qty. Required (Cum)	Total Amount	Add 10% Seigniorage Fee	
1	Bricks Bats - Basic Rate Taken From RCD	Cum	1	1032.00	1032.00	525.91	542739.12	54274.00	


 16.8.2024
 Junior Engineer
 RWD (W) Division, Darbhanga-2


 16/8/2024
 Assistant Engineer
 RWD (W) Division, Darbhanga-2


 17/8/24
 Executive Engineer
 RWD (W) Division, Darbhanga-2