



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

BIHAR RURAL ROADS PROJECT

Bihar Rural Development Agency (BRRDA)

Head :- F.D.R.

YEAR (2021-22)

STATE
DISTRICT
BLOCK
DIVISION

BIHAR
MADHEPURA
ALAMNAGAR
UDAKISHANGANJ

DETAILED ESTIMAE FOR TEMPORARY RESTORATION OF ROAD FROM ALAMNAGAR TO FULOUT

Actual Length of Road	=	8.900 Km
Flood affected Length of Road	=	0.072 Km
TOTAL COST OF PAVEMENT	Rs	602,269.45
TOTAL PROJECT COST	Rs	602,269.45

Submitted By:
Executive Engineer
RWD (W) Division, Udakishanganj

Prepared By:
Executive Engineer
RWD (W) Division, Udakishanganj

प्रतिवेदन

पथ का नाम :- Alamnagar to Bulout .

प्रखंड :- Alamnagar

जिला :- Madhepuri

पथ की कुल लंबाई :- 0.072/8.900 K.M

प्रस्तुत प्राकलन मो०-...6.02..... लाख का वर्ष 2021 में आयी बाढ़ एवं अतिवृष्टि से क्षतिग्रस्त पथों को मानक अवस्था में लाने हेतु विभागीय पत्रांक-मु०अ०-4(मु०) विविध (कार्य)-23-291/2019 4275 पटना, दिनांक-22.10.2021 एवं पत्रांक- मु०अ०-4(मु०) विविध (कार्य) 23-291/2019 4589 पटना, दिनांक-13.11.2021 के द्वारा दिये गये निर्देश का अनुपालन कर ग्रामीण कार्य विभाग, कार्य प्रमंडल, उदाकिशुनगंज के अधीन स्वीकृत प्राकलन के दर पर तैयार की गई है।


24/01/21
कनीय अभियंता,
ग्रामीण कार्य विभाग,

सहायक अभियंता,
ग्रामीण कार्य विभाग,
कार्य अवर प्रमंडल,


कार्यपालक अभियंता
ग्रामीण कार्य विभाग,
कार्य प्रमंडल, उदाकिशुनगंज।

आभयता प्रमुख का कार्यालय
ग्रामीण कार्य विभाग, बिहार, पटना।

पत्रांक:- गु0अ0-4(मु0)विविध(कार्य)23-291/2019-4849 दिनांक- 07/12/2021

प्रेषक:- अशोक कुमार मिश्रा,
अभियंता प्रमुख

सभी कार्यपालक अभियंता, कार्य प्रमंडल, ग्रामीण कार्य विभाग
सभी अधीक्षण अभियंता, कार्य अंचल, ग्रामीण कार्य विभाग

विषय:- वर्ष 2021-22 में बाढ़/अतिवृष्टि से क्षतिग्रस्त पथों के पुनर्स्थापन कार्य के संबंध में।

महोदय,
वर्ष 2020-21 में बाढ़/अतिवृष्टि से क्षतिग्रस्त पथों का पुनर्स्थापन कार्य युद्ध स्तर पर किया जाना है। इस संबंध में पूर्व निर्गत निदेशों का अनुपालन सुनिश्चित किया जाए। पुनर्स्थापन के संबंध में कार्य प्रक्रिया पुनः अंकित किए जा रहे हैं।

(A) अस्थायी पुनर्स्थापन (Motorable) कार्य:-

वर्ष 2021-22 में बाढ़/अतिवृष्टि से क्षतिग्रस्त पथों के अस्थायी पुनर्स्थापन कार्य की स्वीकृति एवं उनके भुगतान की प्रक्रिया विभागीय पत्रों एवं VC के माध्यम से अनेक बार स्पष्ट की जा चुकी है फिर भी कार्य प्रमंडल से प्राप्त प्राक्कलनों में कतिपय त्रुटियाँ दृष्टिगोचर हो रही हैं जिसके कारण उनकी स्वीकृति में विलंब हो रहा है। इस मामले में स्थिति पुनः स्पष्ट की जा रही है:-

(1) बाढ़/अतिवृष्टि से क्षतिग्रस्त सभी पथों की प्रारंभिक प्रविष्टि MIS के FDR module में की जानी है। बाढ़ अवधि समाप्त हो चुकी है और यह अपेक्षा की जाती है कि अब बाढ़/अतिवृष्टि से क्षतिग्रस्त कोई भी पथ प्रारंभिक प्रविष्टि हेतु शेष नहीं है।

(2) बाढ़ का प्रभाव खत्म होने पर उन पथों के क्षति का वास्तविक आकलन कर प्रारंभिक प्रविष्टि किए गए पथों का FDR module से पथों की क्षति की वास्तविक लम्बाई एवं संभावित व्यय की प्रविष्टि की जानी है।

(3) तत्पश्चात मरम्मत कार्य पूर्ण कर वास्तविक व्यय के आधार पर प्राक्कलन तैयार किया जाना है जिसकी जाँच कार्य अंचल द्वारा निर्धारित असंबद्ध कार्य प्रमंडलों द्वारा की जानी है।

(4) जाँचित प्राक्कलनों को जाँच प्रतिवेदन, अधीक्षण अभियंता की तकनीकी स्वीकृति (TS) एवं MB की छायाप्रति के साथ प्रशासनिक अनुमोदन हेतु विभाग को समर्पित किया जाना है।

अधीक्षण अभियंता का कार्यालय,
ग्रामीण कार्य विभाग, कार्य अंचल, मधेपुरा।
पत्रांक.....१५६...../

प्रेषक,

ई० खलीफुज्जमा,
अधीक्षण अभियंता,

सेवा में,

कार्यपालक अभियंता,
ग्रामीण कार्य विभाग,
कार्य प्रमंडल, मधेपुरा/उदाकिशनगंज/सुपौल/वीरपुर/त्रिवेणीगंज।

मधेपुरा, दिनांक 13.11.21/

विषय :

वर्ष 2021 के बाढ़ एवं अतिवृष्टि से क्षतिग्रस्त पथों का निरीक्षण एवं जाँच के संबंध में।

प्रसंग :

सचिव, ग्रामीण कार्य विभाग, बिहार, पटना के पत्रांक-मु०अ०-4(मु०) विविध (कार्य)-23-40/2016-2789 पटना, दिनांक 21.08.2020 एवं विभागीय Whatsapp ग्रुप में प्राप्त निदेश।

महाराय,

निदेशानुसार उपर्युक्त विषय के संबंध में कहना है कि वर्ष 2021 में बाढ़ एवं अतिवृष्टि से क्षतिग्रस्त पथों का शत-प्रतिशत निरीक्षण एवं जाँच असम्बद्ध कार्यपालक अभियंता के स्तर से किया जाना है। इस संबंध में मधेपुरा अंचल अन्तर्गत विभिन्न प्रमंडलों के क्षतिग्रस्त पथों के निरीक्षण हेतु निम्नानुसार कार्यपालक अभियंताओं को प्राधिकृत किया जाता है।

क्रमांक	प्रमंडल का नाम	निरीक्षण एवं जाँच हेतु प्राधिकृत पदाधिकारी
1.	कार्य प्रमंडल, मधेपुरा।	कार्यपालक अभियंता, ग्रामीण कार्य विभाग, कार्य प्रमंडल, वीरपुर।
2.	कार्य प्रमंडल, उदाकिशनगंज।	कार्यपालक अभियंता, ग्रामीण कार्य विभाग, कार्य प्रमंडल, मधेपुरा।
3.	कार्य प्रमंडल, सुपौल।	कार्यपालक अभियंता, ग्रामीण कार्य विभाग, कार्य प्रमंडल, वीरपुर।
4.	कार्य प्रमंडल, त्रिवेणीगंज।	कार्यपालक अभियंता, ग्रामीण कार्य विभाग, कार्य प्रमंडल, उदाकिशनगंज।
5.	कार्य प्रमंडल, वीरपुर।	कार्यपालक अभियंता, ग्रामीण कार्य विभाग, कार्य प्रमंडल, उदाकिशनगंज।

तदनुसार निदेश दिया जाता है कि अपने-अपने आवंटित प्रमंडल के क्षतिग्रस्त पथों का निरीक्षण एवं विभागीय विहित प्रपत्र में दिनांक 25.11.2021 तक जाँच प्रतिवेदन तैयार कर विभाग को ससमय समर्पित करते हुए अधोहस्ताक्षरी को भी सूचित करेंगे।

सूचनार्थ प्रेषित।

विश्वासभाजन,

13/11/21

अधीक्षण अभियंता,
ग्रामीण कार्य विभाग, कार्य अंचल,
मधेपुरा।

Inspection Report for Flood Damage work

Date:-

- 1 Name of PIUS :- *Er. Ram Ratan Ram*
2 Name of Block :- *Alamnagar*
3 Name of Road :- *Alamnagar to Fulout.*

A. For Road

1 Damage Location/Chainage :-

2 Damage Length :- *0.072 K-M*

3 Nature of damage :- *cutting in flood.*

4 Details of Restoration Works :- *Filling in cutting*

i Material being used in Restoration works:- *Brick Bnt, 1-sand.*

ii Equipments/Tools being used in Restoration works :-

iii Procedure taken up in Restoration works :- *& Machinery, Manually.*

iv Restored Length :- *Manually*

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 Equipments/Tools being used in Restoration works :-

iii Procedure taken up in Restoration works :-

iv Restored Length :-

24/11/21

AE

25/11/21

EE

25/11/21
Signature
(Name of Inspector)

Index of Road

NAME OF ROAD :- DETAILED ESTIMAE FOR TEMPORARY RESTORATION
OF ROAD FROM ALAMNAGAR TO FULOUT

DISTRICT :- MADHEPURA

BLOCK :- ALAMNAGAR

Head :- F.D.R.

Year :- 2021-22

Actual Length of Road :- 8.900 Km

Flood Affected Length of Road :- 0.072 Km

TOTAL COST OF PAVEMENT :- ₹ 602,269.45

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	

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24/9/21

SUMMARY OF COST ESTIMATE FOR THE PROJECT

NAME OF ROAD :- DETAILED ESTIMAE FOR TEMPORARY
RESTORATION OF ROAD FROM ALAMNAGAR
TO FULOUT

DIVISION :- UDAKISHANGANJ

BLOCK :- ALAMNAGAR

Actual Length of Road :- 8.900 Km

Flood Affected Length of Road :- 0.072 Km

Sr. No.	Description	Amount (In Rs.)
1	Total Cost of Restoration=	508,815.44
2	Add:-Labour Cess @1% amt. =	5,088.15
3	Add:GST@12% on amt. =	61,057.85
4	Add:S.F.@ 10% on Material (Brick Bats) =	27,308.01
TOTAL RESTORATION COST OF THE PROJECT IN LACS		602,269.45


Junior Engineer

RWD (W) Division, Udakishanganj

Assistant Engineer

RWD (W) Division, Udakishanganj


Executive Engineer

RWD (W) Division, Udakishanganj

पत्रांक मु.डा. 4 (क) वि.व. (क) 23-291/2019-4839
दिनांक - 2/12/2021

Technically sanctioned for Rs 602269.00
(Rs Six lac two thousand two hundred sixty
nine) only.

11/12/2021

Superintending Engineer
Rural Works Department
Works Circle, Madhepura

Schedule of Quantity

NAME OF ROAD :-

DETAILED ESTIMAE FOR TEMPORARY RESTORATION OF
ROAD FROM ALAMNAGAR TO FULOUT

BLOCK :-

ALAMNAGAR

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	582.71	Rs. 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.	264.61	Cum	1922.87	Rs. 508,815.44
		Total			Rs.	Rs. 508,815.44

JE

AE

EE

Details of Measurement

काम का विवरण Detail of Work		संख्या No.	ISekbZI Measurement				मात्रा Quantity
			लम्बाई in m.		चौड़ाई In m.		
DETAILED ESTIMAE FOR TEMPORARY RESTORATION OF ROAD FROM ALAMNAGAR TO FULOUT							
NAME OF ROAD :-							
Item No.	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.						
1 : Laying Brick		1	29.00		4.00		1.25
		1	22.00		4.00		1.20
		1	13.50		1.50		0.45
		1	7.00		2		0.35
	Less For Pipe	0					0.000
			71.50		Total (in Cum)		264.613
							0.00

24/11/24
JE

CC

Calculation of Seigniorage Fees

DETAILED ESTIMAE FOR TEMPORARY RESTORATION OF ROAD FROM ALAMNAGAR TO
NAME OF ROAD :- FULOUT
BLOCK :- ALAMNAGAR

S.No	SOR NO	DESCRIPTION OF ITEMS	QTY	UNIT	RATE	AMOUNT
17	12.3	Sand filling in Foundation Trenches as per Drawing & Technical Specification				
		EAV	0.00	Cum	141.85	0.00
27	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.				
		Brick Bats	264.61	Cum	1032.00	273080.10
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				
		Sand	0.00	Cum	141.85	0.00
47	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)				
		Sand	0.00	Cum	141.85	0.00
55	401	Construction of granular sub-base by providing well graded material, spreading in uniform layers with tractor mounted grader arrangement on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with smooth wheel roller to achieve the desired density, complete as per Technical Specification Clause 401.				
		For Grading I Material (with Coarse Sand Screening)				
		Unit = Cum				
		Taking output = 300 cum				
		Coarse graded granular sub-base material as per Table 400.2				
		53 mm to 9.5mm @ 50 percent	180.00	Cum	516.42	92955.60
		9.5 mm to 2.36 mm @ 20 percent	72.00	Cum	411.33	29615.76
		2.36 mm below @ 30 percent (coarse Sand Screening)	108.00	Cum	185.94	20081.52
		Cost for 300 cum = a				142652.88
		Rate per Cum = (a)/300		Cum		475.51
			0.00	Cum	475.51	0.00
		GSB Gr-I				0.00
					TOTAL	273080.10
		Seigniorage Fees @10% of Basic Amount			Say	27308.01

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JE 24/01/24

AE

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20/01/24

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Sl. No.	REV. SL. No.	MOORE Ref. No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs.
1	3.4	301.5 (A)	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					
		Mazdoor (Unskilled)	day	0.04	105.00	12.20	
		b) Machinery	day	1.00	287.00	287.00	
		Hydraulic Excavator 0.9 cum bucket capacity @ 60 cum per hour	hour	1.67	1969.20	3288.56	
		Tipper 5.5 cum with 10 t capacity	hour	4.50	1043.00	4693.50	
		Add 10 % of the cost of carriage by tipper				469.35	
		Dumper D-50 for spreading @ 100 cum per hour	hour	0.50	3337.90	1668.95	
		Tractor mounted grader arrangement @ 200 cum per hour	hour	1.00	570.00	570.00	
		Water tanker 6 kl capacity	hour	2.00	183.00	366.00	
		Three wheel 80-100 kl Static Roller	hour	1.25	803.00	1003.75	
		c) Material					
		Water	kl	12.00	40.00	480.00	
		Compensation for earth taken from private land	cum	100.00	34.81	3481.00	
		d) Overheads @ 12 % on [above]				1958.44	
		Cost for 100 cum = [above]				10,270.75	
		Rate per cum = [above]/100				102.70	
		Total Cost	CUM				102.70
2	4.1	401	PAVEMENT CRUST LAYERS Granular sub-base with Well Graded Material (Table 400.1) By Mix in Place Method Construction of granular sub-base by spreading well graded material, spreading in uniform layers with tractor mounted grader arrangement on prepared surface, mixing by mix in place method with rotavator at 100%, and compacting with smooth wheel roller to achieve the desired density, vibration as per Technical Specification Clause 401 For Grading Material Unit = cum Taking output = 300 cum				
		a) Labour					
		Mate	day	0.48	105.00	146.40	
		Mazdoor (Unskilled)	day	2.00	164.00	728.00	
		Mazdoor (Unskilled)	day	10.00	287.00	2870.00	
		b) Machinery					
		Tractor Mounted Water Trailer 100 kl @ 10 cum per hour	hour	4.00	570.00	3420.00	
		Three wheel 80-100 kl static roller @ 10 cum per hour	hour	10.00	803.00	24090	
		Tractor with Rotavator 21 cum per hour	hour	12.00	573.20	6878.40	
		Water tanker 4 kl capacity	hour	5.00	183.00	915.00	
		c) Material					
		Coarse graded granular sub-base material as per Table 400.2					
		5.3 mm to 6.2 mm @ 50 per cum	cum	114.00	516.42	69,200.28	
		8.3 mm to 1.36 mm @ 20 per cum	cum	36.00	411.33	19,877.68	
		2.36 mm below @ 80 per cum (with local sand)	cum	151.00	185.94	28,448.82	
		Water	kl	10.00	40.00	1,200.00	
		d) Overheads @ 12 % on [above]				21,286.15	
		Cost for 300 cum = [above]				199,670.73	
		Rate per cum = [above]/300				662.24	
		Add for Carriage Cost					
		Carriage for GSE Material		0.77	1716.61	1321.7897	
		2.36 mm below @ 80 per cum (with local sand)		0.56	299.25	167.73	
		Total Cost per Cum	Total Cost	CUM			2,091.76
3	S.7.54 WRD SOR		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 0.47m³ weight of filled Geo-bags 120 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/A (including Carriage of Local sand lead 0.5 km) Unit = Each Bags Taking output = 40 Nos Bags				
		a) Labour	Nos	2.00	287.00	574.00	
		Mazdoor (Unskilled)	Nos	4.00	287.00	1148.00	
		Ordinary Labour	Nos	0.33	364.00	120.12	
		Mazdoor (Skilled)	Nos	0.25	305.00	76.25	
		Mate					
		b) Machinery	Day	0.33	50.00	16.50	
		Hire Charge of stitching machine	Day	1.00	50.00	50.00	
		Hire Charge of Manual Trolley	hour	2.67	74.00	197.58	
		c) Material					

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount In Rs
		d)	Cost of Geo Bags Stitching roll (nylon) Overheads @ 12 % on (a+b+c)	Nos Nos	40.00 2.00	81.00 30.00	3240.00 60.00 657.89 6140.34
			Rate	No			153.51
			Total Cost(A)	No			153.51
	1.4RCD		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 led 10 km=36.0 t.km				
		a)	(I) Surface Road				
			Speed with Load :15 km/hour				
			Speed while Returning empty:25/hour				
			Machinery				
			Tractor 3.6 tonne capacity	hour	0.667	612.00	408.20
			Time taken for onward haulage with load	hour	0.400	612.00	244.80
			Time taken for empty return trip.				653.00
			Cost for 36 t km=a				18.14
			Rate per t.km=(a+b)/36				18.14
			Total Cost	t.km			18.14
		a)	(II) Unsurfaced Graveled Road				
			Speed with Load :12 km/hour				
			Speed while Returning empty:20/hour				
			Machinery				
			Tractor 3.6 tonne capacity	hour	0.833	612.00	509.80
			Time taken for onward haulage with load	hour	0.500	612.00	306.00
			Time taken for empty return trip.				815.80
			Cost for 36 t km=a				22.66
			Rate per t.km=(a+b)/36				22.66
			Total Cost	t.km			22.66
		a)	(III) Katcha Track and Track in River Bed/Nallah Bed and Choe Bed				
			Speed with Load :10 km/hour				
			Speed while Returning empty:15/hour				
			Machinery				
			Tractor 3.6 tonne capacity	hour	1.000	612.00	612.00
			Time taken for onward haulage with load	hour	0.667	612.00	408.20
			Time taken for empty return trip.				1020.20
			Cost for 36 t km=a				28.34
			Rate per t.km=(a+b)/36				28.34
			Total Cost	cum			28.34
	1.1RCD		Loading and Unloading of Stone Boulder/Stone aggregates/Sand/Kamker/Moorum				
			Placing Tractor at Loading point, loading with front loader, 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	0 Min			
			iv) Waiting time, unforeseen contingencies etc	0 Min			
			Total	6 Min			
		a)	Labour				
			Mate	day	0.03	305.00	9.15
		b)	Machinery	day	0.72	287.00	206.64
			Tractor 3.6 tonne capacity	hour	0.10	612.00	61.20
			Front end loader 1 Cum Bucket Capacity @ 25 Cum per hour	hour	0.08	1403.00	116.45
			Cost for 2.25 cum = (a+b)				393.44
			Rate per cum = (a+b)/2.25				174.86
			Total Cost	cum			174.86
	Note:-		Unloading will be done manually				
			Surface Lead	KM	0.00		
			Katcha Track and Track in River Bed/Nallah Bed and choe Bed	KM	0.50		
			Factor (3.6/2.25)	cum	1.60		
			Carriage (without OH)				
			((1.6x0x18.14)+(1.6x0.5x28.34)+(174.86))				
			Cost of Carriage By Tractor per for 1no. Geo bag for 1 Geo Bags	cum	0.07	238.20	197.53
			0.07 cum Sand Required				16.67
			Overheads @ 12 %				
			Rate (B)	No	1.00		2.00
			Total(A+B)	No			18.67
			Total Cost	No			172.18
							172.18

Analysis of Rate							
Sl No.	SOR No.	Description	Unit	Qty	Rate(Rs.)	Amount (Rs.)	
1	1.4	Carriage of materials (By Tractor)					
	RCD	Cost of Haulage excluding Loading & Unloading					
		Haulage of materials by Tractor excluding cost of loading, unloading and stacking.					
		Unit = 1 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				
			hour	0.667	591.40		394.46
			hour	0.400	591.40		236.56
			Total				631.02
			Add OH@12%				75.72
							706.75
			Rate per Ton.km				19.63
		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				
			hour	0.833	591.40		492.64
			hour	0.500	591.40		295.70
			Total				788.34
			Add OH@12%				94.60
							882.94
			Rate per Ton.km				24.53
		(c)	Case-III: Katcha Track and Track in River Bed/ Nallah Bed and Choe Bed				
			Speed with load : 10 km / hour				
			Speed with returning empty : 15 km / hour				
		(a) Machinery					
			hour	1.000	591.40		591.40
			hour	0.667	591.40		394.46
			Total				985.86
			Add OH@12%				118.30
			Cost for 36.0 t.km =a+b				1,104.17
			Rate per Ton.km				30.67
2	6.6.1.	Labour for laying Brick bats /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				
			Nos	3.00	287.00		861.00
		b)	Overheads @ 12% on (a)				
							103.32
			Rate for 2.832 Cum				964.32
			Rate Per Cum				340.51
3	1.1	Loading and Unloading of Stone Boulder, Stone aggregate ,Sand, Kankar,Moorum , Brick Bats and Sand etc.					
	RCD	Unit = Per Cum					
		Taking output= 2.25 Cum					
		Time required for					
		i)	day	1 Min			
		ii)	day	5Min			
		iii)		0Min			
		iv)	hour	0Min			
		Total		6Min			
		a)	Labour				
			day	0.03	305.00		9.15
			day	0.72	287.00		206.64
		b)	Machinery				
			Hour	0.10	591.40		59.14
			Hour	0.08	1,403.00		116.45
							391.38
			Add OH@12%				46.97
							438.34
			Rate per Cum=(a+b+c)/2.25				194.82
		Note:-	Unloading will be done Manually.				

Sl No.	SOR No.	Description	Unit	Qty	Rate(Rs.)	Amount (Rs.)
4	9.3	1100 Laying Reinforced Cement Concrete Pipe NP3 as per design in Single Row . Prpvding and Laying Reinforced cement concrete pipe NP3 for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets .				
		1000 mm dia Hume Pipe				
		Unit=m				
		Taking Out put=7.5 m (3 pipes of 2.5 m length, each)				
		a Material				
		Sand at site	cum	0.04	2,950.27	118.01
		Cement at site	ton	0.03	5,716.83	171.50
		RCC pipe NP3 pipe inclusing collar at site	m	7.50	3,481.28	26,109.60
		b Labour				
		Mate	day	0.09	305.00	27.45
		Mason (1 class)	day	0.25	388.00	97.00
		Mazdoor(Unskilled)	day	2.00	287.00	574.00
						27,097.57
		Add OH@12%				3,251.71
						30,349.27
		Cost for 7.50 m =				30,349.27
		Rate per M=				4,046.57
5		(Providing and laying of brick bats obtained from chimney with machnical means with all spreading gradding to required slope and compacted at OMC to achieve required density with all completed as per direction of E/I)				
		Taking out put=100 cum				
		a) Labour				
		Cost of Labour for Pitching and Light Ramming as per WRD SOR 6.6.1 (with OH)	day	1.00	322.27	322.27
		b) Materials				
		Bricks Bats -Basic Rate Taken From RCD S.O.R. Schedule-Mr11-5(ii) dL-25.02.2021	Cum	1	1032.00	1032.00
		Overheads @12%on (b)				123.84
		Add:Carriage Charge for Brick bats				444.76
		Total Cost				1,922.87
		NET TOTAL COST PER CUM				1,922.87
		SAY Rs				1,922.87
6	5.7.7	Labour for cutting 62 mm to 75 mm dia sal bamboo piles to size and making shoes and driving etc.complete job as per specification and direction of E / I.				
	WRD	Unit :- Per M				
		Taking Out put:- 30.50 Mtr				
		(Assuming 20 nos. pile sunk 1.525 mtr deep)				
		Total depth sunk 30.50 meter				
		(a) Labour				
		Carpenter Gr II	Nos	1.00	388.00	388.00
		Unskilled mazdoor for pilling	Nos	3.00	287.00	861.00
						1,249.00
		Overheads @ 12%				149.88
						1,398.88
		Rate Per M				1,398.88
						45.86
7	5.7.8	Providing fitting and fixing split bamboo woven chachari in position with 20 swg G.I. wire or 75 mm dia or 100 mm long nails alternatively including cost of G.I. wire 3.15 mm dia or nails complete job as per specification and direction of E / I.				
		Unit :- Per M2				
		Taking Out put:- 9.30 Sqm				
		(Assuming strip of 3.05x3.05 = 9.30 sqm)				
		a Material				
		1 75 mm to 100mm long nail	kg	0.25	55.84	13.96
		2 Bamboo -75mm dia to 62 mm dia				
		Bamboo @75mm = 3050/75 = 40.67				
		Say=41Nosx3.05=125.05M				
		Add for Lower Binder of chachari				
		10x3.75=30.50M				
		Runner @150mmc/c=7x3.05=21.35M				
		Total length of Bamboo=176.9M				
		Total No of Bamboo=176.9/6=30No	No	30	141.50	4245
		b Labour				
		Carpenter Gr II	Nos	1.00	345.00	345.00
		Unskilled mazdoor for pilling	Nos	1.00	287.00	287.00

Sl No.	SOR No.	Description	Unit	Qty	Rate(Rs.)	Amount (Rs.)
		Overheads @ 12% on labour charge (345.00+287.00)				75.84
						4,966.80
		Rate Per M2				534.06
8	5.7.8	Labour for fitting and fixing split bamboo woven chachari in position with 20 swg G.I. wire or 75 mm to 100 mm long nails alternatively including cost of G.I. wire 3.15 mm dia or nails complete job as per specification and direction of E / I.				
	WRD	Unit :- Per M2				
		Taking Out put:- 9.30 Sqm				
		(Assuming strip of 3.05x3.05 = 9.30 sqm)				
		(a) Material				
		G.I. wire 3.15 mm dia	Kg	0.250	69.30	17.33
		(b) Labour				
		Carpenter Gr II	Nos	1.00	345.00	345.00
		Unskilled mazdoor for piling	Nos	1.00	287.00	287.00
						649.33
		Overheads @ 12%				77.92
						727.24
						727.24
		Rate Per M2				78.20
9	5.7.9	Labour for fitting and fixing 62mm to 75 mm dia bamboo runners in position at every vertical pile with 150 mm long nails or 38 swg G.I. wire including cost of G.I. wire or nails complete job as per specification and direction of E / I.				
	WRD	Unit :- Per M				
		Taking Out put:- 30.50 Mtr				
		(a) Materials				
		Cost of 150 mm long nails	Kg	0.50	55.84	27.92
		(b) Labour				
		Carpenter Gr II	Nos	0.13	345.00	44.85
		Unskilled mazdoor for piling	Nos	0.25	287.00	71.75
						144.52
		Overheads @ 12%				17.34
						161.86
						161.86
		Rate Per M				5.31
10		Supplying bamboo 75 mm dia 6 m to 8 m long at..... complete job as per specification and direction of E / I.				
		Taking Out put:- 115 nos				
		(a) Material				
		Supplying bamboo 75 mm dia 6 m to 8 m long (Cost of bamboo)	Nos	115	162.70	18,710.50
		Add: Carriage Charge for Bamboo				292.22
		Add: Labour for laying Bamboo				340.51
						19,343.23
		Overheads @ 12%				2,321.19
						21,664.42
						21,664.42
		Rate Per each Bamboo				188.39
11	5.7.40.1	Labour for filling empty cement bags with local sand, stitching the bags and placing including supply of sutli etc. all complete as per approved design, specifications and direction of E / I				
	WRD	Unit :- Per % nos				
		Taking Out put:- 100 nos				
		(a) Supplying of Sand bags (Cost of sand and Empty cement bag)	Nos	100	8.46	846.00
		Carriage cost for Local sand (100 no. of Bags=100x0.034m3)	cum	3.4	299.25	1017.45
					Total	1863.45
		(b) For filling & stitching & stacking				
		(a) Unskilled mazdoor for filling sand into bags and sewing	Nos	2	287	574.00
		(b) Sutli	Kg	0.5	19.75	9.88
					Total	583.88
		(c) Labour rate for Carrying & Placing to work site of E.C.Bags				
		(a) Unskilled mazdoor for carrying filled bags and placing to work site	Nos	3	287	861.00
						3308.33
		Total (A+B+C)=				

Sl No.	SOR No.	Description	Unit	Qty	Rate(Rs.)	Amount (Rs.)
		Add overhead chrage @12%				397.00
						3705.32
		Total Net Rs.				3705.32
		Rate per %				37.05
		Sand Each Bag			Say	Rs 37.05
12	5.7.40.2 WRD SOR Page 159	Labour for filling empty cement bags with loocal sand, stitching the bags and placing in Nylon crate of size (1 m x 1 m x 1 m) with lead of 150 M including supply of sutli etc. at site in dry portion all complete as per approved design, specification and direction of E/I				
		Unit :- Each N.C				
		Taking Out Put = 25 nos. filled E.C. Bags in each N/C				
		Cost of 25 nos of filled E.C.Bags (Vide item no. 5.7.40.1	Nos	25	37.05	926.33
		Rate each				926.33
13		Supply of Nylon Crate of size 1mx1mx1m			39.85	39.85
		Material				
	(a)	Nylon Crate				39.85
	(b)	Add Overhead charge @12%				4.78
		Total (a+b)				44.63
		Rate per nos.				44.63
14	11.2	Sand filling in Foundation Trenches as per Drawing & Technical Specification				
		Unit = Per Cum				
	a	Material				
		Sand(assuming 20 percent voids)	cum	1.20	141.85	170.22
	b	Labour				
		Mate	day	0.01	305.00	3.05
		Mazdoor(Unskilled)	day	0.3	287.00	86.10
						259.37
		Add overhead chrage @12%				31.1244
						290.494
		total=				290.49
		Carraige cost for Local sand				292.22
		Rate per cum				582.71

अधीक्षण अभियंता का कार्यालय,
ग्रामीण कार्य विभाग, कार्य अंचल, मधेपुरा।
पत्रांक.....483/अनु 0

प्रेषक,

ई० खलीकुज्जमा,
अधीक्षण अभियंता,

सेवा में,

नोडल पदाधिकारी,
F.D.R., कोषांग,
ग्रामीण कार्य विभाग,
बिहार, पटना।

मधेपुरा, दिनांक 20/04/2022

विषय : ग्रामीण कार्य विभाग, कार्य प्रमंडल, उदाकिशुनगंज के अन्तर्गत शीर्ष **FDR** (वित्तीय वर्ष **2021-22**) योजना का बाढ़ से क्षतिग्रस्त पथांशों का अस्थाई पुनर्स्थापन कार्य का प्राक्कलन के प्रशासनिक अनुमोदन प्रदान करने के संबंध में।

प्रसंग : कार्यपालक अभियंता, ग्रामीण कार्य विभाग, कार्य प्रमंडल, उदाकिशुनगंज का पत्रांक **722** अनु०, दिनांक **12.04.2022** एवं अभियंता प्रमुख, ग्रामीण कार्य विभाग, बिहार, पटना का पत्रांक-मु०अ०-4(मु०)विविध(कार्य)23-291/2019-4849 पटना, दिनांक **07.12.2021**

महाशय,

उपर्युक्त विषयक प्रसांगिक पत्र द्वारा प्राप्त कार्य प्रमंडल, उदाकिशुनगंज अन्तर्गत शीर्ष **FDR** (वित्तीय वर्ष **2021-22**) योजना का बाढ़ से क्षतिग्रस्त पथांशों का अस्थाई पुनर्स्थापन कार्य का डी०पी०आर० एक-एक प्रति में तकनीकी स्वीकृति प्रदान कर प्रशासनिक अनुमोदन हेतु समर्पित की जाती है। जिसकी विवरणी निम्नवत है।

क्र०	प्रखंड	योजना का नाम	क्षतिग्रस्त भाग की लम्बाई (KM)	तकनीकी स्वीकृति की राशि (Lakh)
1.	Alamnagar	L025-T-05 SONAMUKHI to MURAUT (VR12)	0.050	20.23962
2.	Alamnagar	L034-T-05 CHUBATUA GANGAPUR TO HARJORAGHT (VR20)	0.097	28.17067
3.	Alamnagar	L035-T-05 BHARSO TOLA TO KACHAHARI TOLA (VR21)	0.210	17.67956
4.	Alamnagar	Construction of road from Alamnagar SonaMukhi kakpsila with five years maintainance with 2 no. H.L bridge.	0.300	34.63060
5.	Alamnagar	Construction of road from Alamnagar fullaut road with five year maintenance with 2 nos. of H.L bridges.	0.072	6.02269
6.	Bihariganj	S01school Ke Nikat Se to Vairaw Patti	0.087	7.01604

P.T.O.

क्र०	प्रखंड	योजना का नाम	क्षतिग्रस्त भाग की लम्बाई (KM)	तकनीकी स्वीकृति की राशि (Lakh)
7.	Chausa	Construction of road from Dhaneshpur to morsanda with five years maintenance.	0.082	5.27416
8.	Chausa	Adhik Mandal Parbatta Bsabitti Ke Nikat To Sripurbasa PCC via Parbatta	0.146	5.74302
9.	Chausa	Khoparia Tola Lowalagan To baba bishuraut Sthan	0.045	6.24997
10.	Chausa	L036-T01 TO SHABA TOLA (VR11)	0.733	20.33275
11.	Gwalpara	Resna PMGSY Path To Kamalpur	0.136	7.15886
12.	Gwalpara	Baliya Basa REO Road To Amauja	0.060	11.57017
13.	Gwalpara	L036-Gwalpara to biswari (VR7)	0.181	9.01073
14.	Chausa	Construction of H.L Bridge Over Bariyari Dhar Sapni Fulaut Pandahi Path.	0.075	7.41311
15.	Puraini	Durga PMGSY Path Paina via Durgapur Goth Chhoti Badhona	0.142	20.25279
16.	Puraini	Kherho paschim Tola PMGSY Path To Dhaneshpur Via Goth Kherho	0.020	2.94972
17.	Udakishanganj	Construction of road from Kishanganj to Biriranpal with five years maintenance	0.110	8.49447
18.	Udakishanganj	L044-T04NH106UDA TO TINTANGA (VR31)	0.024	5.66868
19.	Udakishanganj	NH106 hareli to ramesh yadav ke ghar hotehu wevidyanand jha ke ghar ke aage Rampur khorha PWD road tak	0.099	5.06052
20.	Udakishanganj	Laxmipur - Majaura	0.483	11.09571

अनु०:-प्राक्कलन एक-एक प्रति में।

विश्वासभाजन,

अधीक्षण अभियंता,
ग्रामीण कार्य विभाग, कार्य अंचल,
मधेपुरा।