



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

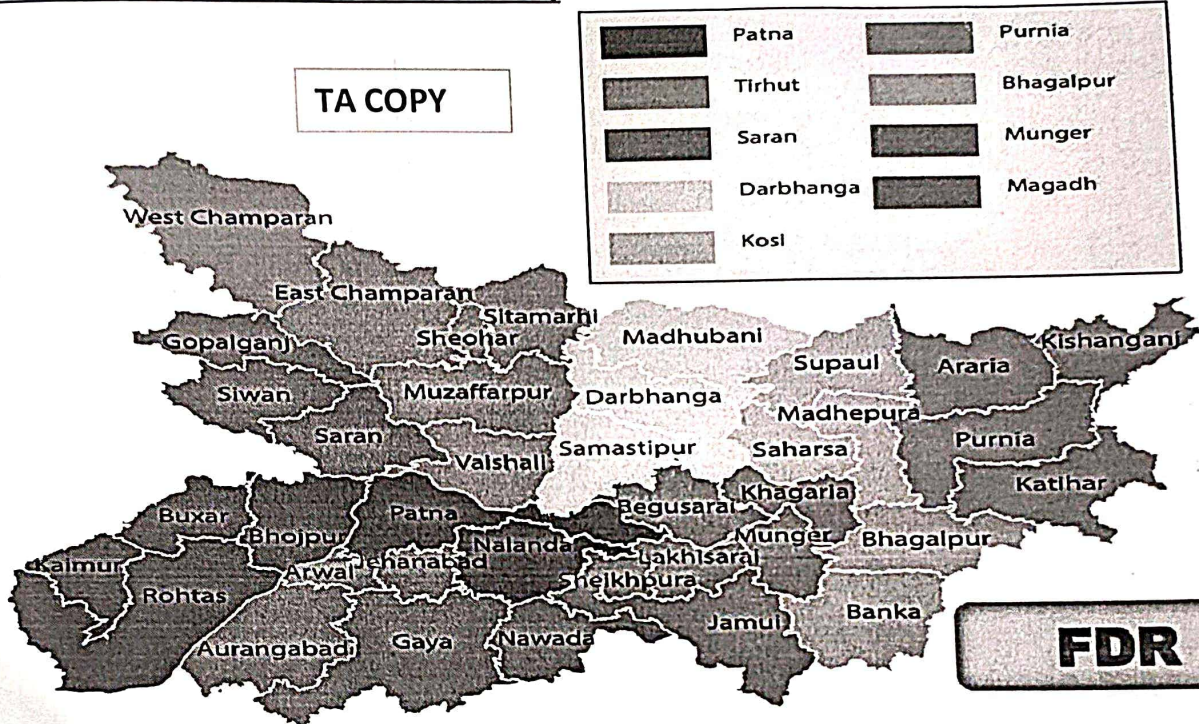
BIHAR RURAL ROADS PROJECT

Bihar Rural Road Development Agency (BRRDA)

ESTIMATE FOR MOTORABILITY OF ~~APPROACH~~ ROAD BREACHES DAMAGED DURING FLOOD IN 2024

FDR 2024-25 (TEMPORARY RESTORATION)

TA COPY



DISTRICT :

BEGUSARAI

BLOCK :

BACHHWARA

NAME OF ROAD :

NH28 SE JHAMATIYA GOPALPUR

LENGTH OF ROAD

:

11.810

KM

TOTAL COST FOR MOTORABLE OF DAMAGED
ROAD

:

2.86375
4.934

Lakhs

Submitted By:

Executive Engineer

RWD (w) Division, TEGHRA

BEGUSARAI

प्रतिवेदन

पथ का नाम - NH JHAMATIA GHAT - GOPALPUR.

पथ की लम्बाई - 11.81 KM

बाढ़ से क्षतिग्रस्त पथांश की लम्बाई - 2.00 KM

प्रखण्ड - Bachhwara

योजना शीर्ष - FDR 2024-25

अस्थायी कार्य का प्राक्कलित राशि - 2.86375 Lakh

प्रस्तुत प्राक्कलन FDR 2024-25 अन्तर्गत बेगूसराय जिलान्तर्गत बछवाड़ा प्रखण्ड में आई-2024 के बाढ़ के कारण पथ- NH JHAMATIA GHAT - GOPALPUR में क्षतिग्रस्त पथ का अस्थायी पुर्नस्थापन कार्य के तकनीकी अनुमोदन हेतु तैयार किया गया है जिसका प्राक्कलित राशि 4.934 Lakh मात्र है।

उपर्युक्त पथ वर्तमान में शीर्ष प्रधानमंत्री ग्राम सड़क योजना के तहत निर्मित है एवं पंचवर्षीय अनुरक्षण अवधि में है। माह सितंबर, 2024 के तीसरे सप्ताह से अक्टूबर, 2024 के प्रथम सप्ताह तक गंगा नदी का जलस्तर अचानक बढ़ने के कारण पथ का कुछ पथांश क्षतिग्रस्त हो गया, जिससे वहाँ के लगभग 57,000 आबादी का आवागमन ठप्प हो गया है।

अभियंता प्रमुख-सह-अपर-आयुक्त-सह विशेष सचिव, ग्रामीण कार्य विभाग, बिहार पटना के पत्रांक-मु०अ०-7 (नि० एवं गु०) FDR-09-03/2024-1999 पटना दिनांक -04.06.2024 के आलोक में पानी घटने पर यातायात बहाल करने हेतु क्षतिग्रस्त पथांश में Bricks Bat & Cement Bag with Local Sand से Filling करते हुए अस्थायी पुर्नस्थापन कार्य कराया गया।

प्रस्तुत प्राक्कलन में निहित दर कार्य कराने के समय के अनुसूचित दर के आधार पर सामग्री, यंत्र-संयंत्र एवं श्रम बल के दर का प्रावधान कर तैयार किया गया है।

कार्यहित एवं कार्य की महत्ता के मद्देनजर प्रस्तुत प्राक्कलन की तकनीकी अनुमोदन अपेक्षित है।


14/11/24
कनीय अभियंता
ग्रामीण कार्य विभाग,
कार्य प्रशाखा, बछवाड़ा।


14/11/24
सहायक अभियंता
ग्रामीण कार्य विभाग,
कार्य अवर प्रमण्डल, बछवाड़ा।


14/11/24
कार्यपालक अभियंता
ग्रामीण कार्य विभाग,
कार्य प्रमण्डल, तेघड़ा।

एकल निरीक्षण प्रतिवेदन

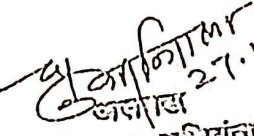
विभागीय पत्रांक-मु०आ०-८ (अनु० एवं उन्नयन) FDR-03.01.2024, 106 दिनांक-05.11.2024 में विवेक गैर निवेदन के आलोक में दिनांक-25.11.2024 एवं 27.11.2024 को ग्रामीण कार्य विभाग, कार्य प्रमण्डल, तैयार उन्नयन कार्य-2024-25 में बाढ़ से क्षतिग्रस्त निम्नांकित पथों एवं पहुँच पथ का अस्थायी पुर्नस्थापन कार्य का स्थल निरीक्षण क्षेत्रीय अभियंताओं के साथ किया गया एवं कार्य का प्राथमिक स्थल के अनुसूच पाया गया, किचे गये कार्य की वर्तमान स्थिति संतोषजनक है एवं पथ का क्षतिग्रस्त पर्याप्त मोटेरेवत है।

Sl No.	Block	Name of Road/Bridge	Length (in Km)
1	Bachhwara	Chamtha Chiddi Harpathouse Of Maheshwar Rai to Chakdi Road.	0.05
2	Bachhwara	MRL-13 - Chamtha Bajitpur old Bridge to Chiraiyan tola.	0.21
3	Bachhwara	T04 Kali Mandir to Bisanpur.	0.25
4	Bachhwara	T04 to Dadpur Bridge.	0.07
5	Bachhwara	NH JHAMATIA GHAT - GOPALPUR.	2.00
6	Bachhwara	T04 to Chamtha Chakdi.	0.34
7	Bachhwara	Pmgsyroad to Bandhpar Chamtha Tola.	0.15
8	Bachhwara	Shivjatan Rai to Lanka Tol.	0.512
9	Bachhwara	T04 To Gauspur Bhagwanpur Diyara.	0.43
10	Bachhwara	X Road - Chan Barikhat C. Ghat.	0.022


 27/11/24
 क्षेत्रीय अभियंता
 ग्रामीण कार्य विभाग,
 कार्य प्रशाखा, लखवाड़ा।


 27/11/24
 सहायक अभियंता
 ग्रामीण कार्य विभाग,
 कार्य अवर प्रमण्डल, लखवाड़ा।


 27/11/24
 कार्यपालक अभियंता
 ग्रामीण कार्य विभाग,
 कार्य प्रमण्डल, तैयार।


 27.11.2024
 कार्यपालक अभियंता
 ग्रामीण कार्य विभाग,
 कार्य प्रमण्डल, तैयार।

GENERAL ABSTRACT OF COST **RESTORATION OF DAMAGED ROAD**

Year 2024-25

NH28 Jhamatia to Gopalpur

Name of Road:--

District

Block

Length of Road

Begusarai

Bachharwara

11.81 KM

L. No.	Particulars	Total Cost (in Rs.)
1	Cost of FDR	23422-3=00 23422-84 475990.74
2	Drone Photography @5000/- per stage + Still Photography of Damaged and Restoration work. 2500/- = 15000+2500/- = 17500/- per site	L.Cost 1% = 23422-00 S.F = 6126=00 CST 18% = 47500.00 43684=00
	Total Cost of Restoration work	493490.74-286375=00
	Say, Rs. In Lakh	4.934 2.86375


JE
RWD


AE
RWD


EE
RWD

SE
RWD, Begusarai

Post-facto technically approved for Rs 286375=00 (Rupees Two lakh eighty six thousand three hundred seventy five) only.


SUPERINTENDING ENGINEER
RURAL WORK DEPARTMENT
WORKS CIRCLE-BEGUSARAI
24

DETAILED ESTIMATE

Sl. No.		Description	Unit	QUANTITY	RATE	AMOUNT (In Rs.)
1	4.5	Providing brick bats including ,spreading,laying, hand packing and Compacting with CI hammers in layers not exceeding 75mm thick including cost of light barriers, danger signals, choukidar, taxes, royalty etc all complete job as per specifications and direction of E/I including cost of bricks,.....all complete job				
		as per QTY sheet	M ³	33.67	1704.43 3,021.64	57388.16 1,01,738.62
2	10.7.40 WRD	Supplying of empty cement bag (sythetic should be old but in good condition) with local sand, carriage, labour cost of roll nylon for stiching of empty bag, laying, stacking properlyall complete job as per specifications and direction of E/I.				
		as per QTY sheet	No	5,533.000	31.96 67.64	1,76,834.68 3,74,252.12
TOTAL COST OF TEMPORARY RESTORATION IN RS.						4,75,990.74

2,34,222.84
say 234,223=00

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Measurment for items of Restoration /Motarable of Road damaged during Flood 2024

HEAD : FDR
 Division : Teghra
 Block : Bachhwara
 Name of Road : NH28 Jhamatia to Gopalpur
 Length of Road : 11.81 KM

DETAILS OF MEASUREMENT OF CEMENT BAG FILLED WITH LOCAL SAND

Chainage (in KM)	No.	Length	Width		Avg width	Depth		Avg Depth	Qty (M ³)
0.420	1	10.00	1.90	1.20	1.55	0.50	0.00	0.50	7.75
	1	7.50	2.50	0.00	2.50	0.45	0.00	0.45	8.44
1.300	1	6.00	2.00	0.00	2.00	3.00	1.5 + 1.00	1.83	22.00
	1	4.00	2.50	0.00	2.50	2.00	0.00	2.00	20.00
	1	1.00	1.00	0.00	1.00	0.40	0.00	0.40	0.40
1.400	1	2.00	1.00	0.00	1.00	0.45	0.00	0.45	0.90
1.640	1	15.00	5.00	0.00	5.00	1.20	0.60	0.90	67.50
3.650	1	10.00	2.00	1.20	1.60	1.40	0.00	1.40	22.40
	1	5.00	1.20	0.00	1.20	0.60	0.00	0.60	3.60
4.050	1	12.00	2.00	0.00	2.00	1.20	0.90	1.05	25.20
	1	8.00	1.50	0.00	1.50	1.20	0.90	1.05	12.60
Total Qty									190.79
Total length		80.50	No. of Bag = 190.79 x 29 = 5532.91 nos.						
			Say 5533 nos						

DETAILS OF MEASUREMENT OF DITCHES FILLED BY BRICK BAT AND RABBISH

Chainage (in KM)	No.	Length	Width		Avg width	Depth		Avg Depth	Qty (M ³)
6.400	1	5.70	5.70	3.75	4.73	1.25	0.00	1.25	33.67
Total Qty									33.67
Total length		5.70							


 AE
 RWD


 AE
 RWD


 EE
 RWD

Rate Analysis

SI No.	SDB Sl. No.	DESCRIPTION	Unit	QTY	Rate	Amount in Rs
1		Supply of Bamboos (75 mm Dia 6m to 8m Long)	No.			39.30
2	5.7.9	Labour for fitting and fixing 75 mm dia bamboo runners in position at every verticle pile with 150 mm long nails or 38 swg G. I. wire including cost of G.I. or nails complete job as per specification and direction of E/I				
		Unit = Per mt.				
		Taking Out Put = 30.50 m				
	(i)	Materials	Kg	0.50	61.74	30.87
		Cost of 150 mm long nails				
	(ii)	Labour	No.	0.125	474	59.25
		Carpenter Gr -II	No.	0.25	395	98.75
		Unskilled Labour				188.87
		Rate for 30.5 m				6.19
		Rate for 1 m			Say.	7.40
		Total Cost	M			
3	5.7.7	Labour for cutting 75 mm dia bamboo piles in size and making shoes, driving and sinking etc. complete bob as per specification and direction E/I.				
		Unit = Per m				
		Taking Out Put (Sink depth) = 30.50 m				
		Assurning				
		20 no pile sunk 1.525 m deeps				
		Total depth sunk 30.50 m				
		Labour	No.	0.25	474	118.50
		Carpenter Gr -II	No.	0.65	395	256.75
		Unskilled Labour for piling				375.3
		Rate for 30.5 m				12.30
		Rate for 1 m			Say.	12.30
		Rate per m	M			
4	10.7.40 WRD	Supplying of empty cement bag (sythetic should be old but in good condition) with local sand, carriage, labour cost of roll nylon for stiching of empty bag, laying, stacking properly.....all complete job as per specifications and direction of E/I.				
		Qty= 100Nos				
	A	Materials	No	100	5.50	550.00
		Supply Empty cement Bag	M ³	3.40	145.87	495.96
		Local sand			Total (A)	1045.96
	B	Labour	No	4.67	395.00	1844.65
		Unskilled Labour for filling, stiching, staking, carrying and Placing at work site			Total (B)	1,844.65
		Total per 100 bag				305.21
	C	Carriage Cost of Local sand	Bag	1	305.21	3,195.82
		Total cost of (A+B+C) =	Bag			31.96
		Rate per Bag				

	Haulage excluding Loading & Unloading				
	Haulage of materials by tipper excluding cost of loading, unloading and stacking.				
	Unit = t.km				
	Taking output 3.6 t load and lead 10 km = 36 t.km				
	Case-I : Surfaced Road				
	Speed with load: 15 km per hour				
	Speed while returning empty: 25 km per hour				
	(a) Machinery				
	Tipper 3.6 t capacity				
	Time taken for Haulage with load	Hour	0.67	600.00	402.00
	Time taken for Empty return trip	Hour	0.4	600.00	240.00
	Total Cost for 36 t.km				642.00
	Rate per t.km				17.83
	Case-II : Katcha Track				
	Speed with load: 10 km per hour				
	Speed while returning empty: 15 km per hour				
	(a) Machinery				
	Tipper 3.6 t capacity				
	Time taken for Haulage with load	Hour	1	600.00	600.00
	Time taken for Empty return trip	Hour	0.67	600.00	402.00
	Total Cost for 36 t.km				1002.00
	Rate per t.km				27.83
6	Loading and Unloading Aggregate, Stone Boulder, Brick, Kankar, Building Rubbish, Stone, Sand, Moorum				
	Placing tractor at loading point, loading with front end loader, dumping, turning for return trip, excluding time for haulage and return trip.				
	Unit = cum				
	Taking output = 2.25 cum				
	Time required for				
	i) Positioning of tipper at loading point		1 Min		
	ii) Loading by front end loader 1 cum bucket capacity @ 45 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) Machinery	Hour	0.1	600.00	60.00
	Tractor 3.60 tonnes capacity (Output 2.25 Cum)	Hour	0.083	1400.00	116.20
	Front end-loader 1 Cum bucket capacity @ 25 Cum/hour				
	b) Labour	day	0.03	419.00	12.57
	Mate	day	0.72	395.00	284.40
	Mazdoor for loading and unloading				473.17
	Cost for 2.25 cum = a+b				210.30
	Rate per cum = (a+b)/2.25				
	Labour and Placing of Brick Bats with light raming				
7	Brick Bats	Cum	1.00	994.00	994.00
	Cost of labour for pitching and light ramming as per wrd sor	day	0.72	395.00	284.40
	a) Carriage	Puckka	Katcha	loading/unloading	
	(surface = 6km, katcha= 1km)				
		3.6/2.25	3.6/2.25		
		*6*17.83	*1*27.83		
		171.17	44.53	210.30	426.00
					1704.43
	Rate per cum = (a+b+c)				

1704.43

Analysis for Carriage by Road

District :-

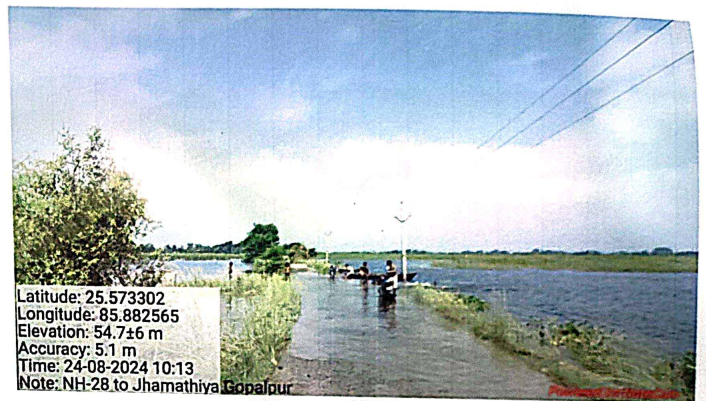
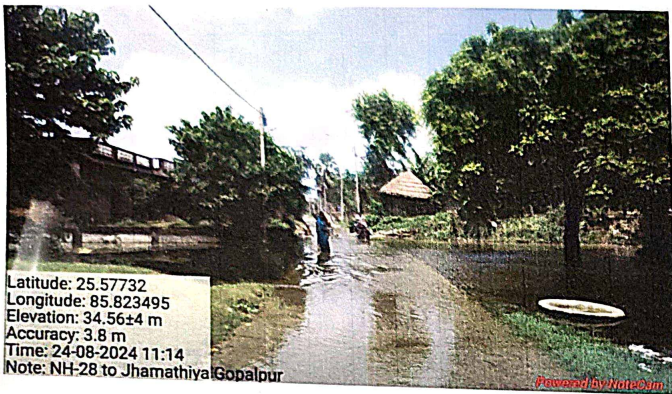
Begusarai

Block :- Bachhwara

Sl. No	Item with Source	Unit	Source Up to	Carriage Cost & Lead in KM		Loading & Unloading Cost	Total
				Pucka/ Surface	Katcha		
1	Local Sand (Local by Road 13 KM)	M ³	Local	$\frac{8.00}{4.99} \times 7.94 \times 12 \text{ KM} = 152.75$	$\frac{8.00}{4.99} \times 19.22 \times 1 \text{ KM} = 30.81$	121.65	305.21
2	Brick (Local By Road 12 KM)	1000 Nos	Local	$\frac{8.00}{2.00} \times 7.25 \times 7 \text{ KM} = 203$	$\frac{8.00}{2.00} \times 17.55 \times 1 \text{ KM} = 70.20$	506.68	779.88

Cost of Haulage Excluding Loading & Unloading as per SOR

Type of Road	Per Ton. Km by Tipper	Per Ton. Km by Truck
For Surface Road	12.10	7.94
Unsurface Gravel Road	14.60	9.55
Kachha Road	29.30	19.22



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DR
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JE

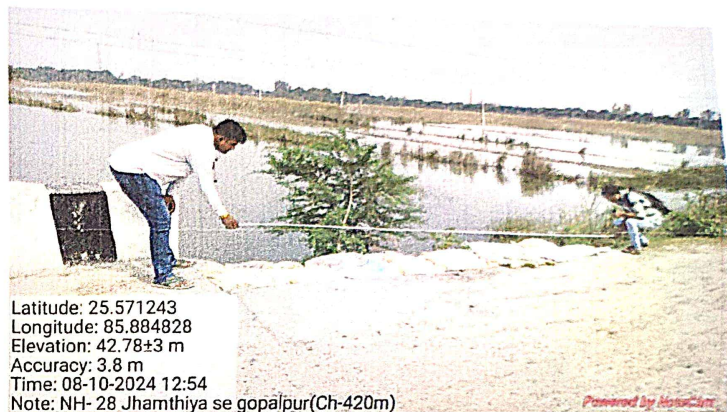
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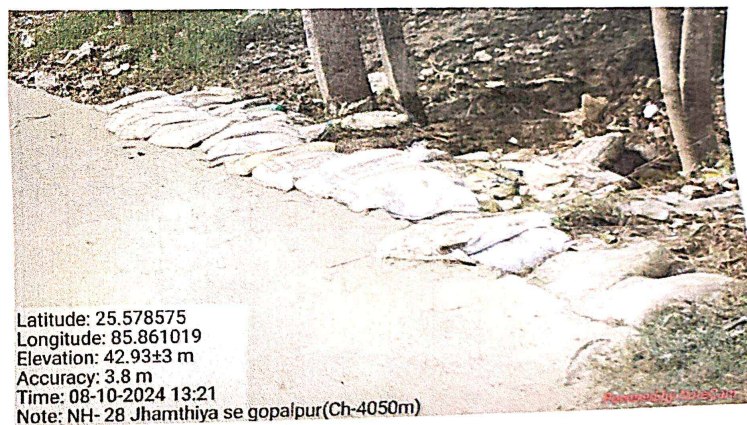
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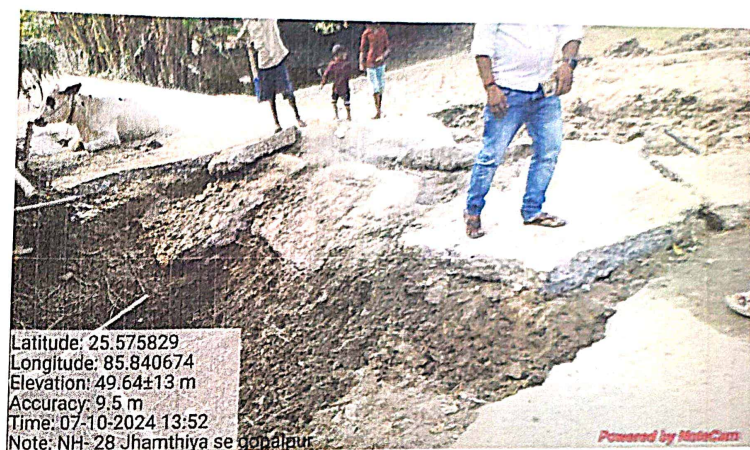
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 AE

14/11/24
 E-E



CP
11/11/24



July
11/11/2024

11/11/24

Name of work -

Situation of work -

Agency by which work is executed -

Date of measurement -

No. and date of agreement.

(These four lines should be repeated at the commencement of the measurements relating to each work.)

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
C.H -	F.D.R	2024-25			
Name of work - Material of Road					
Form NH-28 Jhamaia to					
Gopalpur.					
Agency - Departmental through					
Authority - E.E., R.W.D. Teghra and S.F.					
Letter no. - 271, dt. 14-11-24					
Date -	14	11/24			
Road length -	11.810	km			
Damage length -					
Work -	(1) Providing and filling				
	Brick bats in ditches with				
	add complete job as per				
	specification and direction				
	of E.I				
Charge -					
640mm -	1x	5.70	$\times (5.70 + 3.75)$		
			$\times 1.25 =$	33.67	m ³
(1) Supplying of empty cement					
bag with carriage, labour cost					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
at roll nylon for stretching at empty bag through local sand, laying, stacking properly --- all complete job as per specification and direction of E.E.					
chainage					
420m	1x	10x	$(1.90 + 1.20)$		
			$\frac{2}{2}$	$\times 0.50 =$	7.75
	1x	7.50x	2.50x	0.45 =	8.44
1200m	1x	6.00x	2.00x		
			$(3.00 + 1.50 + 1.00)$	$\frac{3}{3} =$	22.00
	1x	4.00x	2.50x	2.00 =	20.00
	1x	1.00x	1.00x	0.40 =	0.40
1400m	1x	2.00x	1.00x	0.45 =	0.90
1640m	1x	15.00x	5.00x		
			$(1.20 + 0.60)$	$\frac{2}{2} =$	67.50
3650m	1x	10.00x	$(2.00 + 1.20)$	$\frac{2}{2} \times 1.40 =$	22.40
	1x	5.00x	1.20x	0.60 =	3.60
4050	1x	12.00x	2.00x		
			$(1.20 + 0.90)$	$\frac{2}{2} =$	25.20
	1x	8.00x	1.50x		
			$(1.20 + 0.90)$	$\frac{2}{2} =$	12.60
					190.79m ³
No. of Bags =	190.79x22				

Continuation

= 5532.91

say = 5533 bags

14/11/24
E.E.

14/11/24
E.E.

14/11/24
E.E.

Sch. XLV Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
17	Providing loose bats including, spreading, laying, hand packing and — do — do — all complete job.				
	Qty - 33.67 m ³				
	@ Rs. 1704.43/cum =				57388=10
127	Supplying etc empty cement bag with local sand, carriage labour cost — do —				

du - all
complete job
Qty - 5533.00 nos.
@ Rs. 31.96 / each = 1,76,835 = 00
2,34,223 = 00
L. Cost @ 1% = 2342 = 00
S. Fee = 6126 = 00
GST @ 18% = 43684 = 00
2,86,375 = 00

(R)
14/11/24
JE

Continuation
Giles
14/11/2024
PTE

11/11/24
14/11/24
EE