

Rural Works Department, Govt of Bihar

BIHAR RURAL ROADS PROJECT

Bihar Rural Road Development Agency (BRRDA)

YEAR (2020 - 2021)

FDR

STATE

BIHAR

DISTRICT

Samastipur

BLOCK

Mohiudinagar

NAME OF ROAD

Detailed Estimate For Repair of Flood

Damaged in Approach Road To Bhasingpur

TOTAL COST OF CONSTRUCTION

OF PROJECT: Rs. 3.982 Lacs 3.90 Leller Cross thereof 4m art - Rs 3,95,048 200 TOTAL COST OF PROJECT

SUBMITTED BY:

EXECUTIVE ENGINEER RWD (w) DIVISION, PATORI

SAMASTIPUR

FDR

YEAR (2020 - 2021)

GENERAL ABSTRACT OF COST

Block:--Mohiudinagar

District:--Samastipur

Name of Road:--

Detailed Estimate For Repair of Flood Damaged in Approach Road To Bhasingpur

SL. No.	Item of Work			Amount
A TOTAL COST	OF CONSTRUCTION	3.9	10	3.982 Lacs
		Sub Total= (A)	3.90	3.982 Lacs
TOTAL CO	ost of project			3.982 Lacs
TOTALCO	ost of project			3.90

Junior Engineer

RWD (w)Section, Mohiudinagar

RWD (w)Sub Division, Mohiudinagar

Executive Engineer RWD (w) Division, Patori

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SUMMARY OF COST ESTIMATE FOR THE PROJECT

NAME OF ROAD:

Detailed Estimate For Repair of Flood Damaged in Approach Road

To Bhasingpur

DISTRICT **BLOCK**

Samastipur Mohiudinagar

1 BRICK BAT 2 GSB GRADE II		
2 GSB GRADE II		2.079
2		0,8230.870
3 WBM GRADE III		0.547
	SUB TOTAL OF PAVEMENT COST IN LACS =	3.496
		3-45
	Sub Total`:	3.496
	12% GST on Total Amount :	0.414 0.420
	1% Lab Cess :	0 - 0 35,0.035
Total	Construction Cost (including GSt and Labour Cess) (A) :	3.982

Junior Engineer

RWD (w)Section, Mohiudinagar

RWD (w)Sub Division, Mohiudinagar

Executive Engineer

RWD (w)

Cost Estimate for Road Work

l. No.	SDB SL.NO	MORD Ref.No	Description	Unit	NOS	LENGTH	WIDTH	HEIGHT	QUANTITY	RATE	AMOUNT (in Rs.)
			SUB HEAD : Brick Bat Filling					103 737			
1			Brick Rats			1			1		
			Laying Brick Bats on Prepared Soil Surface as per specifica	itions ar	nd direct	ion of E/L				/	
			Damaged Side Strech	cum	1.00	55.0	3.750	0.60 avg.	123.75 123.75	1,680.02	2,07,902.48
		L						S	UB TOTAL O	F CRUST =	2,07,902.48
			Sub Head : PAVEMENT LAYERS - GSB & WBM ITEMS								
2	4.1 (A)	(ii)	Granular Sub-base with Well Graded Material (Table 4 (By mix in place method) For Grading II Material Construction of granular sub-base by providing well grad tractor mounted grader arrangement on prepared surrotavator at OMC, and compacting with smooth wheel ras per Technical Specification Clause 401.	led mate	ixing by	mix in p	d density	, complete			
			Damaged Portion Net GSB Qty. Required form Grading II Material		1.00	55.00	4.050	0.175	38.98 38.98	2,231.83	86,997.00
3	4.7 (3-A)		WBM Grading 3 (By Mechanical Means) Providing, laying, spreading and compacting stone as macadam specification including spreading in uniform wheel roller 80-100 kN in stages to proper grade and cat to fill-up the interstices of coarse aggregate, watering and as per Technical Specification Clause 405.	mber, a	ss, nand oplying a	and broom	ing, stone	screening	g	2107	821)
	-	-	Damaged Portion	Cum	1.00	55.00	3.750	0.075	15.4	1 /	/
			Net WBM -3 Qty							7 3,537.74	54,728.84
						15 15 100		C)	SUB TOTAL	OF CRUST =	1,41,725.84
19.00							7	OTAL CO	ST OF PAVE	MENT IN RS.	3,49,628.3

Drams 15.102

Junior Engineer RWD (w)Section , Mohiudinagar Assistant Engineer
RWD (w)Sub Division , Mohiudinagar

Executive Engineer RWD (w) Division, Patori

Analysis for Carriage by Road & Rail

Name of Road:--

Detailed Estimate For Repair of Flood Damaged in Approach Road To Bhasingpur

District:-

Block: Mohiudinagar Samastipur

tal Gr-II / GSB		Source Up to Sheikhpura	8.00 × 7.60	ucka / Surface		0.00	Katcha		Cost	by Rail Head	
		Sheikhpura	8.00 × 7.00 × 67.00 km = Rs 887.49 8.00 × 18.50 × 0.00 km = Rs								
	Cum			A 07.00 Kill	= Rs 887.49		0 x 0.00 Km	= Rs 0.00	83.64	952.23	Rs. 1923.3
tai di iii / doo	Lum	Sheikhpura	8.00 x 7.60	x 67.00 Km	= Rs 816.35	8.00 x 18.5	0 x 0.00 Km	= Rs 0.00	83.64	896.90	Rs. 1796.9
gregate / Chips	Cum	Sheikhpura	4.99 8.00 x 7.60	x 67.00 Km	= Rs 816.35	8.00 x 18.5	0 x 0.00 Km	= Rs 0.00	83.64	896.90	Rs. 1796.9
gregate / Chips	Cum	Mirzachowki	4.99 8.00 x 7.60	x 67.00 Km	= Rs 816.35	0.00	4 x 0.00 Km	= Rs 0.00	83.64	1282.63	Rs. 2182.6
		Sheikhpura	4.99 8.00 x 7.60	x 67.00 Km	= Rs 848.67	8.00 x 18.5	0 x 0.00 Km	= Rs 0.00	83.64	922.04	Rs. 1854.3
			8.00	x 121.00 Km	= Rs 1324.94	8.00 x 16.5	4 x 0.00 Km	= Rs 0.00	96.53		Rs. 1421.4
and			4.99		= Rs 21.90	8.00 x 16.	54 x 1.00 Km	= Rs 26.52	96.53		Rs. 144.9
nd	Cum	Local	4.99	A 5.00			54 x 1.00 Km	= Rs 66.16	406.10		Rs. 663.5
ar		cum Cum	dd Cum Kuil	Cum Kuil 8.00 x 6.83 Cum Local 8.00 4.99 x 6.83	Cum Kuil 8.00 x 6.83 x 121.00 Km Cum Local 8.00 x 6.83 x 2.00 Km 1000 No. Local 8.00 x 6.83 x 7.00 Km	Cum Kuil 8.00 x 6.83 x 121.00 Km = Rs 1324.94 Cum Local 8.00 x 6.83 x 2.00 Km = Rs 21.90 1000 No. Local 8.00 x 6.83 x 7.00 Km = Rs 191.24	Cum Sheikhpura 4.80 x 7.50 x 6.750 km 1 ks 6450 4.80 4.80 4.80 4.80 4.80 4.80 4.80 4.99 x 6.83 x 121.00 km 2 ks 1324.94 4.80 4.99 x 16.5 4.90 4.99 x 16.5 4.90 4.99 x 16.5 4.90 4.99 x 16.5 4.90 4.90 x 16.5 4.90 x 16.5	Cum Sheikhpura	Cum Sheikhpura 4.80 x 7.60 x 67.00 km = Rs 37.00 4.80	Cum Sheikhpura 4.80 x 7.80 x 6.80 x 6.80 x 121.00 Km = Rs 1324.94 4.80 x 16.54 x 0.00 Km = Rs 0.00 96.53	Cum Kuil

Cost of Haulage Excluding Loading & Unloading as per SOR

Per Ton. Km by Per Ton. Km by Tipper Type of Road Truck 6.83 For Surface Road Unsurface Gravel Road Kachha Road

18.50

* Subjected to Verification of Lead

Analysis for Carriage by Road

Name of Road:--

Detailed Estimate For Repair of Flood Damaged in Approach Road To Bhasingpur

Samastipur Block: Mohiudinagar

	District:-					-	(arriage Cost &	Lead in K	m			Loading & Unloading		Total`
SI No	Item with Source	Unit	Source Up to		P	ucka	/ Surface				Katcha		Cost	Cost by Rail Head	Total
1	Stone Metal Gr-1 & Gr-11	Cum	Sheikhpura	8.00	x 7.60	x	163.00 Km	= Rs 2159.13	8.00 4.59	x 18.50	x 0.00 Km	= Rs 0.00	83.64		Rs. 2242.77
2	Stone Metal Gr-III / GSB	Cum	Sheikhpura	8.00	x 7.60	x	163.00 Km	= Rs 1986.05	8.00 4.99	x 18.50	x 0.00 Km	= Rs 0.00	83.64		Rs. 2069.69
3	Stone Aggregate / Chips	Cum	Sheikhpura	8.00	x 7.60	х	163.00 Km	= Rs 1986.05	4.99	x 18.50	x 0.00 Km	= Rs 0.00	83.64		Rs. 2069.69
4	Stone Aggregate / Chips	Cum	Mirzachowki	8.00 4.99	x 7.60	х	208.00 Km	= Rs 2534.35	4.99	x 18.50	x 0.00 Km	= Rs 0.00	83.64		Rs. 2617.99
5	Stone Boulder	Cum	Sheikhpura	8.00 4.80	x 7.60	х	163.00 Km	= Rs 2064.67	4.00	x 18.50	x 0.00 Km	= Rs 0.00	83.64	-	Rs. 2148.31
6	Course Sand	Cum	Kuil	8.00 4.99	x 6.83	x	121.00 Km	= Rs 1324.94	4.99	x 16.54	x 0.00 Km	= Rs 0.00	96.53	-	Rs. 1421.47
7	Local Sand	Cum	Local	8.00	x 6.83	x	2.00 Km	= Rs 21.90	8.00 4.99	x 16.54	x 1.00 Km	= Rs 26.52	96.53		Rs. 144.9
Q	Brick	1000 Nos	Local	8.00	x 6.83	x	7.00 Km	= Rs 191.24	2.00	x 16.54	x 1.00 Km	= Rs 66.16	406.10		Rs. 663.5

Cost of Haulage Excluding Loading & Unloading as per SOR

* Subjected to Verification of Lead

Type of Road	Per Ton. Km by	Per Ton. Km by
For Surface Road	7.60	6.83
Unsurface Gravel Road	9.20	8.22
Kachba Road	18.50	16.54

FDR

YEAR (2020 - 2021)

Analysis for Carriage by Road & Rail

Name of Road:--

Detailed Estimate For Repair of Flood Damaged in Approach Road To

Bhasingpur

Block :-District:- Mohiudinagar Samastipur

0.190 KM.

SI No	Item	Unit	Carriage Cost By Road (Per cum)	Carriage Cost By Road & Rail (Per cum)	Minimum Carriage Cos (Addopted in DPR)
1	Stone Metal Gr-I & Gr-II	Cum	2242.77	1923.36	1923.36
2	Stone Metal Gr-III / GSB	Cum	2069.69	1796.90	1796.90
3	Stone Aggregate / Chips (seikhpura)	Cum	2069.69	1796.90	1796.90
4	Stone Aggregate / Chips	Cum	2617.99	2182.63	2182.63
5	Stone Boulder	Cum	2148.31	1854.35	1854.35
6	Course Sand	Cum	1421.47	1421.47	1421.47
7	Local Sand	Cum	144.95	144.95	144.95
8	Brick	1000 Nos	663.50	663.50	663.50
9	Cement	МТ	617.16	617.16	617.16
10	Steel	MT	617.16	617.16	617.16
11	Bitumen Emulsion (Ulberia)	MT	978.35	978.35	978.35
12	Bitumine (Barauni)	МГ	848.58	848.58	848.58
13	Hume Pipe (1000 mm)	Pipe	353.75	353.75	353.75

Junior Engineer

RWD (w) Division, Patori

Asstt. Engineer

RWD (w) Division, Patori

Executive Engineer RWD (w) Division, Patori

Sheikhpura to Karpoorigram

Material -Stone Metal Gr-I & Gr-II

Carriage Cost & Lead Pucka / Surface	in Kı	n Katcha		Loading & Unloading			Total
$\frac{3.00}{0.59}$ x 7.60 x 2.00 Km = Rs 26.49 + $\frac{8.00}{4.59}$	х	18.50 x 0.00 Km = Rs 0.00 +	· F	s 83.64 :	=		Rs 110.13
UnSurface 8.00 4.59	x	9.20 x 1.00 Km			=		Rs 16.03
			1	otal "A"			Rs 126,16
Sheikhpura Railway Yard to Karpoorigram	Rai	Iway Yard = 122.00 Km					
i) Loading Cost from Railway Yard to Railway Wegon	=	For 1 cum	=	Rs 118.86		=	Rs 118.86
Total	=	For 1 cum		"B"		=	Rs 118.86
iii) Railway freight charge from Sheikhpura Railway	=	For 1 MT 122.00 Km =	2	Rs 231.30		=	Rs 231.30
Busy Seasion charge 12% of Railway freight charge	æ	For 1 MT	=	12%	=		Rs 27.76
Railway Development Charge to 5% of Railway freight Charge		For 1 MT	=	5%	=		Rs 11.57
Terminal charge @Rs.40.00 per Terminal per MT		For 1 MT 2	X	Rs 40.00	#		Rs 80.00
Total	=	For 1 MT For 1 cum		"C"		= " = "	Rs 350.63 Rs 611.11
		Add 6% Overhead Charge	=	6.0%	=		Rs 36.67
		Add 10% Contractor Profit	=	10%	=		Rs 0.00
		Total Railway Freight for 1 cum		"C"			Rs 647.78
Cost for Stacking the Materials from Unloding dump to lead 30 m. Total "I		For 1 cum	=	Rs 59.43		=	Rs 59.43
Carriage Cost from Quarry to Karpoorigram Railway Yard		For 1 Cum		A+B+C+D		=	Rs 952.23

Sheikhpura to Karpoorigram

Material -Stone Metal Gr-III & GSB

Carriage Cost & Lead Pucka / Surface	in Kn	n	Katcha		Loading & Unloading			Total
\times x 7.60 x 2.00 Km = Rs 24.37 + $\frac{8.00}{4.99}$	х	18.50		+ F	Rs 83.64	=		Rs 108.01
UnSurface 8.00 4.99	x	9.20	x 1.00 Km			=		Rs 14.75
				1	fotal "A"	=		Rs 122.76
ikhpura Railway Yard to Karpoorigram	Rai	lway Ya	ard = 122.00 Km					
Loading Cost from Railway Yard to Railway Wegon	=		For 1 cum	=	Rs 118.86		=	Rs 118.86
Total	=		For 1 cum		"B"	58	= 0.0	Rs 118.8
Railway freight charge from Sheikhpura Railway station to Karpoorigram Railway station	=	For 1 M	T 122.00 Km	=	Rs 231.30		=	Rs 231.3
Busy Seasion charge 12% of railway freight charge	=		For 1 MT	Ξ	12%	=		Rs 27.7
Railway Development Charge to 5% of Railway Fright Charge			For 1 MT	=	5%	=		Rs 11.5
Terminal charge @Rs.40.00 per Terminal per MT			For 1 MT 2	x	Rs 40.00	=		Rs 80.0
Total	=		For 1 MT				=	Rs 350.6
			For 1 CUM		"C"		=	Rs 562.1
			Add 6% Overhead Charge	=	6.0%	=		Rs 33.7
		А	dd 10% Contractor Profit	=	10%	=		Rs 0.0
		1	Total Railway Freight for 1 cum		"C"		276	Rs 595.8
Cost for Stacking the Materials from Unloding dump to lead 30 m.	upto							
Total "D)" =		For 1 cum	=	Rs 59.43		=	Rs 59.4
Carriage Cost from Quarry to Karpoorigram							111	Rs 896.9

Sheikhpura to Karpoorigram

Material -Stone Aggregate / Chips

Carriage Cost & Lead Pucka / Surface	in K		tcha		Loading & Unloading			Total
$\frac{0}{9}$ x 7.60 x 2.00 Km = Rs 24.37 + $\frac{8.00}{4.99}$	х	18.50	x 0.00 Km = Rs 0.00) +	Rs 83.64	=		Rs 108.01
UnSurface 8.00 4.99	х	9.20	x 1.00 Km			=		Rs 14.75
					Total "A"	=		Rs 122.76
eikhpura Railway Yard to Karpoorigram	Rai	ilway Yard	= 122.00 Km					
i) Loading Cost from Railway Yard to Railway Wegon	=		For 1 cum	=	Rs 118.86		=	Rs 118.86
Total	=		For 1 Cum		"B"		=	Rs 118.86
ii) Railway freight charge from Sheikhpura Railway station to Karpoorigram Railway station	=	For 1 MT	122.00 Km	=	Rs 231.30		=	Rs 231.30
Busy Seasion charge 12% of Railway freight charge	=	F	or 1 MT	=	12%	=		Rs 27.7
Railway Development Charge to 5% of Railway Fright Charge		F	or 1 MT	=	5%	=		Rs 11.5
Terminal charge @Rs.40.00 per Terminal per MT		F	or 1 MT 2	x	Rs 40.00	=		Rs 80.0
Total	=		For 1 MT				=	Rs 350.6
			For 1 CUM		"C"		=	Rs 562.1
		Add	6% Overhead Charge		6%			Rs 33.7
*		Add	10% Contractor Profit	=	10%	=		Rs 0.0
		Total F	tailway Freight for 1 cum	1	"C"		=	Rs 595.8
Cost for Stacking the Materials from Unloding dump \boldsymbol{u} lead 30 m.	ipto							
Total "D)" =		For 1 CUM	=	Rs 59.43	3	=	Rs 59.4
Carriage Cost from Quarry to Karpoorigram Railway Yard	=		For 1 Cum		A+B+C+D			Rs 896.9

Mirzachowki to Karpoorigram

Material -Stone Aggregate / Chips

Quarry Site to Mirzachowki Railway Yard (By Road)

Carriage Cost & Lead Pucka / Surface	in K		tcha			Loading & Unloading			Total
$\frac{10}{19}$ x 7.60 x 2.00 Km = Rs 24.37 + $\frac{8.00}{4.99}$	х	18.50	x 0.00 Km = 1	Rs 0.00	+ 1	Rs 83.64	=		Rs 108.01
UnSurface 8.00 4.99	x	9.20	x 1.00 Km				=		Rs 14.75
						Total "A"	=		Rs 122.76
irzachowki Railway Yard to Karpoorigram	Ra	ilway Yard	= 230.00 Km						
i) Loading Cost from Railway Yard to Railway Wegon	=		For 1 cum		=	Rs 118.86		=	Rs 118.86
Total	=		For 1 Cum			"B"		=	Rs 118.86
iii) Railway freight charge from Mirzachowki Railway station to Karpoorigram Railway station	=	For 1 MT	230.00 Km		E	Rs 425.30		=	Rs 425.30
Busy Seasion charge 12% of Railway freight charge	=	F	or 1 MT		=	12%	=		Rs 51.04
Railway Development Charge to 5% of Railway Fright Charge		F	or 1 MT		=	5%	=		Rs 21.27
Terminal charge @Rs.40.00 per Terminal per MT		F	or 1 MT	2	X	Rs 40.00	=		Rs 80.00
Total	=		For 1 MT					=	Rs 577.6
			For 1 CUM			"C"		=	Rs 926.02
		Add	l 6% Overhead Cha	rge	=	6.0%	=		Rs 55.56
		Add	10% Contractor P	rofit	=	10%	=		Rs 0.00
		Total I	Railway Freight for	1 cum		"C"		-	Rs 981.58
Cost for Stacking the Materials from Unloding dump lead 30 m. $$	upto							,	
Total "	D" =		For 1 CUM		=	Rs 59.43	1	=	Rs 59.4
Carriage Cost from Quarry to Karpoorigram Railway Yard			For 1 Cum			A+B+C+D		-	Rs 1282.6

Sheikhpura to Karpoorigram

Material -Stone Boulder

Carriage Cost & Lead Pucka / Surface	in K		tcha			Loading & Unloading			Total
$\frac{3.00}{4.80}$ x 7.60 x 2.00 Km = Rs 25.33 + $\frac{8.00}{4.80}$	х	18.50	x 0.00 Km	= Rs 0.00	+ 1	Rs 83.64	=		Rs 108.98
UnSurface 8.00 4.80	х	9.20	x 1.00 Km				=		Rs 15.33
						Total "A"	=		Rs 124.31
Sheikhpura Railway Yard to Karpoorigram	Rai	ilway Yard	= 122.00 Km	1					
i) Loading Cost from Railway Yard to Railway Wegon	=		For 1 cum		=	Rs 118.86		=	Rs 118.86
Total	=		For 1 CUM	A CHARL		"B"		=	Rs 118.86
iii) Railway freight charge from Sheikhpura Railway station to Karpoorigram Railway station	=	For 1 MT	122.00 Ki	m	=	Rs 231.30		=	Rs 231.30
Busy Seasion charge 12% of Railway freight charge	=	F	or 1 MT		=	12%	=		Rs 27.76
Railway Development Charge to 5% of Railway Fright Charge		F	or 1 MT		=	5%	z		Rs 11.57
Terminal charge @Rs.40.00 per Terminal per MT		F	or 1 MT	2	x	Rs 40.00	=		Rs 80.00
Total	=		For 1 MT					=	Rs 350.63
			For 1 CUM			"C"		=	Rs 584.38
		Add	16% Overhead	Charge	=	6.0%	=		Rs 35.06
		Add	10% Contracto	or Profit	=	10.0%	=		Rs 0.00
		Total I	Railway Freight	for 1 cum		"C"		=	Rs 619.44
Cost for Stacking the Materials from Unloding dump lead 30 m.						m me 12			D= 50 42
Total "I)" =		For 1 CUN	Λ	=	Rs 59.43	5	#	Rs 59.43
Carriage Cost from Quarry to Karpoorigram Railway Yard	-		For 1 Cum			=A+B+C+D		=	Rs 922.04

Analysis of Rates (FORMAT F8) Amount in Rs DESCRIPTION Quantity Rate Ref No **Haulage BY TIPPER** Haulage excluding Loading & Unloading 1.10 Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = t.km Taking output 10 t load and lead 10 km = 100 t.km Case-I : Surfaced Road Speed with load: 25 km per hour Speed while returning empty: 35 km per hour Machinery a) Tipper 10 t capacity 417.20 0.40 1043.00 hour Haulage with load 302.47 0.29 1043.00 Empty return trip hour 43.18 Overheads @ 6 % on (a) b) 0.00 Contractor's profit @ 10% on (a+b) 762.85 Cost for 100 t-km = a+b 7.63 Rate per cum = (a+b)/100Rate Per Km. Cum 7.60 1.10 Haulage excluding Loading & Unloading 2 Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = t.km Taking output 10 t load and lead 10 km = 100 t.km Case-II: Unsurfaced Gravel Road. Speed with load: 20 km/hour Speed for empty return trip: 30 km/hour Machinery Tipper 10 t capacity 1043.00 521.50 0.50 hour Haulage with load 0.33 1043.00 344.19 hour Empty return trip 51.94 Overheads @ 6 % on (a) b) 0.00 Contractor's profit @ 10% on (a+b) 917.63 Cost for 100 t-km = a+b 9.18 Rate per cum = (a+b)/100Rate Per Km. Cum 9.20 Haulage excluding Loading & Unloading 3 1.10 Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = t.km Taking output 10 t load and lead 10 km = 100 t.km Case-III: Katcha Track and Track in River Bed/Nallah Bed and Choe Bed. Speed with load: 10 km per hour Speed while returning empty: 15 km per hour Machinery Tipper 10 t capacity 1.00 1043.00 1043.00 hour Haulage with load 0.67 1043.00 698.81 hour Empty return trip 104.51 Overheads @ 6 % on (a) b) 0.00 Contractor's profit @ 10% on (a+b) (c) 1846.32 Cost for 100 t-km = a+b+c 18.46 Rate per cum = (a+b+c)/100

Sl. No.	SDB SL No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
			Haulage BY TRUCK				
4	1.10	(i) a) b) (c)	Haulage excluding Loading & Unloading Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = t.km Taking output 10 t load and lead 10 km = 100 t.km Case-I : Surfaced Road Speed with load: 25 km per hour Speed while returning empty: 35 km per hour Machinery Truck 10 t capacity Haulage with load Empty return trip Overheads @ 6 % on (a) Contractor's profit @ 10% on (a+b) Cost for 100 t-km = a+b+c	hour hour	0.40 0.29	934.30 934.30	373.72 270.95 38.66 0.00 683.35
MODELE ST			Rate per cum = (a+b+c) /100 Rate Per Km.	Cum			6.83
5	1.10	(ii) a) b) (c)	Haulage excluding Loading & Unloading Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = t.km Taking output 10 t load and lead 10 km = 100 t.km Case-II: Unsurfaced Gravel Road. Speed with load: 20 km/hour Speed for empty return trip: 30 km/hour Machinery Truck 10 t capacity Haulage with load Empty return trip Overheads @ 6 % on (a) Contractor's profit @ 10% on (a+b) Cost for 100 t-km = a+b+c Rate per cum = (a+b+c) /100	hour hour	0.50 0.33	934.30 934.30	467.15 308.32 46.5: 0.00 822.00 8.22
6	1.10	(iii) a) b) (c)	Haulage excluding Loading & Unloading Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = t.km Taking output 10 t load and lead 10 km = 100 t.km Case-III: Katcha Track and Track in River Bed/Nallah Bed and Choe Bed. Speed with load: 10 km per hour Speed while returning empty: 15 km per hour Machinery Truck 10 t capacity Haulage with load Empty return trip Overheads @ 6 % on (a) Contractor's profit @ 10% on (a+b) Cost for 100 t-km = a+b+c Rate per cum = (a+b+c) /100	hour hour	1.00 0.67	Cartal Carta	934.30

I. No.	SDB SI. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in F
7	1.1	RCD	Loading and Unloading of Stone Boulder/Stone				
			aggregates/Sand/Kanker/Moorum.		1		
			Placing tipper at loading point, loading with front end loader,		1		
		1	dumping, turning for return trip, excluding time for haulage and	1	1		
			Unit = cum				
			Taking output = 5.5 cum		1		
			Time required for		1		
			i) Positioning of tipper at loading point		1 Min		
			ii) Loading by front end loader 1 cum bucket capacity @ 25 cum	1	13 Min		
			per hour				
			iii) Maneuvering, reversing, dumping and turning for return		2 Min		
			iv) Waiting time, unforeseen contingencies etc		4 Min		
			Total		20 Min		
			a) Machinery				
			Tipper 5.5 tonnes capacity	hour	0.330	1043.00	344.1
		1	Front end-loader 1 cum bucket capacity @ 25 cum/hour	hour	0.330	1403.00	462.9
			(b) Overheads @ 6 % on (a)				48.4
			(c) Contractor's profit @ 10% on (a+b)				0.0
			Cost for 5.5 cum = a+b+c				855.0
			Rate per cum = $(a+b+c)/5.5$				155.
			Unloading will be by tipping.			say	156.0
3	1.2		Loading and Unloading Lime, Aggregate, Stone Boulder, Brick				
			Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for				
			Masonry Work by Mechanical Means				
	}						
		i	Loading of Lime, Aggregate, Stone Boulder, Brick Aggregate,				
			Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work				1
			by mechanical means including a lead upto 30 m				
			Placing tipper at loading point, loading with front end loader				
		1	excluding time for haulage and return trip.				
		1	Unit = cum				
		1	Taking output = 5.5 cum				
			Time required for				
		i	Positioning of tipper at loading point	Min	1.000		
		ii	Loading by front end loader 1 cum bucket capacity @ 45 cum per	Min	7.330		
		l	hour	Min	2 000		
		iii	Waiting time, unforeseen contingencies, etc.	Min	2.000 10.330		
		1 .	Total	Min	10.550		
		a)	Machinery	hour	0.172	1043.00	179.
		1	Tipper 10 t capacity Front end-loader 1 cum bucket capacity @ 45 cum per hour	hour	0.172	1403.00	171.
	1	Ь.		noui	0.122	1405.00	21.
		b)	Overheads @ 6.0 %				-
		1	Contractors Profit @ 10.0 %				371.
		1	Cost for 5.5 cum = a+b+C Rate per cum = (a+b)/5.5			la la	67.
		1	Unloading of Earth, Sand, Lime, Moorum, Aggregate, Stone				
	1		Boulder, Brick Aggregate, Kankar, Building Rubbish, Manure,				
			Crushed Slag, Flyash, Stone for Masonry Work by mechanical				
		1	means.				
		1	Unit = cum				
		1	Taking output = 5.5 cum				
			Placing tipper at unloading point excluding time for haulage and				
			return trip				-
	1		Time required for				
	1			Min	1.000		
	1	1	Positioning of tipper at loading point	Min	2.000		
		ii	Manoeuvering, reversing, dumping and turning for return		1		1
		iii	Waiting time, unforeseen contingencies, etc.	Min	2.000		
	1		Total	Min	5.000	1	
		a)	Machinery	hour	0.080	1043.00	83
	1	1	Tipper 10 t capacity	nour	0.000	1013.00	5
	1	b)	Overheads @ 6 % on (a)		1		0
		C	Contractors Profit @ 10.0 % on (b) Cost for 5.5 cum = a+b		1		88
	1		Rate per cum = $(a+b)/5.5$				16
			I DATE OF I CUIT - LATUR J.J.	The second second second second second			THE RESERVE AND ADDRESS OF THE PERSON NAMED IN

SI. No.	SDB SI.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
8	1.2	RCD	Loading and Unloading of Boulders by Manual Means Unit = cum Taking output = 5.5 cum		NETE TAIS ABSTRACE AND ABOUT		
			a) Labour				
			Mate	day	0.110	305.00	33.55
		1	Mazdoor for loading and unloading b) Machinery	day	0.750	287.00	215.25
			Tipper 5.5 tonne capacity	hour	0.750	1043.00	782.25
			c) Overheads @ 6 % on (a+b)			2010100	61.86
		1	(d) Contractor's profit @ 10% on (a+b+c)				0.00
			Cost for 5.5 cum = $a+b+c+d$				1092.91
			Rate per cum = (a+b+c+d)/5.5 Unloading will be by tipping.	of a Blanks of	I SELECTION OF STREET		198.71
9	1.3	RCD	Loading and Unloading of Cement or Steel by Manual Means			say	199.00
			Unit = tonne				
			Taking output = 10 tonnes				
		1	a) Labour	5		2000	
			Mate	day	0.080	305.00	24.40
			Mazdoor for loading and unloading b) Machinery	day	2.000	287.00	574.00
			Truck 10 tonne capacity	hour	2.000	934.30	1868.60
			c) Overheads 6 % on (a+b)				148.02
1			(d) Contractor's profit @ 10% on (a+b+c)				0.00
			Cost for 10 tonnes = a+b+c+d				2615.02
			Rate per tonnes = $(a+b+c+d)/10$	(Cale 1120 Cale			261.50 262.00
10	1.1	(i)	Loading of Lime, Aggregate, Stone Boulder, Brick Aggregate,			say	206.00
			Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work				
			by manual means including a lead upto 30 m				
			Unit = cum				
i		a)	Taking output = 5.5 cum				
		,	Mate	day	0.02	305.00	6.10
			Mazdoor (Unskilled)	day	0.50	287.00	143.50
		b)	Machinery	h	0.50	02420	46715
		c)	Truck Overheads 6 % on (a+b)	hour	0.50	934.30	467.15 37.01
		d)	Contractor's profit @ 10% on (a+b+c)				0.00
		-,	Cost for 5.5 cum = a+b+c+d				653.76
			Rate per cum = $(a+b+c+d)/5.5$				118.86
DESCRIPTION OF THE PERSON OF T	A WEST	B Sign	Total Cost	Cum	300 MARIE 18		118.86
11		(ii)	Loading of Earth, Sand, Moorum, Manure, Flyash by manual means				
	8		including a lead upto 30 m.				
		1	Unit = cum Taking output = 5.5 cum				
		a)	Lahour				
			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
		c)	Overheads 6 % on (a+b)	noui	0.23	752.50	18.50
		d)	Contractor's profit @ 10% on (a+b+c)				0.00
		"	Cost for $5.5 \text{ cum} = a+b+c+d$				326.88
			Rate per cum = $(a+b+c+d)/5.5$				59.43
			Total Cost	Cum			59.43

St. No.	SDB SL. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
12		(iii)	Unloading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work				
			by mechanical 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	02420	222.50
		(c)	Overheads 6 % on (a+b)	hour	0.25	934.30	233.58 18.50
		d)	Contractor's profit @ 10% on (a+b+c)				0.00
			Cost for 5.5 cum = a+b+c+d				326.88
			Rate per cum = (a+b+c+d) /5.5 Total Cost	Cum			59.43 59.43
			Total Loding & Unloading of Stone Aggregate	Cum	= 118.86 +	59.43 =	178.29
13		(iv)	Unloading of Earth, Sand, Moorum, Manure, Flyash by manual				
			means including a lead upto 30 m.				
		1	Unit = cum				
1		a)	Taking output = 5.5 cum				
		"	Mate	day	0.01	305.00	1.53
			Mazdoor (Unskilled)	day	0.13	287.00	35.88
		b)	Machinery				
		(c)	Truck Overheads 6 % on (a+b)	hour	0.166	934.30	155.09 11.55
		d)	Contractor's profit @ 10% on (a+b+c)				0.00
			Cost for 5.5 cum = a+b+c+d				204.04
			Rate per cum = (a+b+c+d) /5.5				37.10
			Total Cost	Cum	50.40	07.4	37.10
			Total Loding & Unloading of Sand / Moorum	Cum	= 59.43 +	37.1 =	96.53
14	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)	Mate	day	0.01	305.00	3.05
			Mazdoor (Unskilled)	day	0.01	287.00	71.75
		b)	Machinery	uay	0.25	207.00	71.73
		-,	Truck	hour	0.33	934.30	308.32
		c)	Overheads 6 % on (a+b)				22.99
		d)	Contractor's profit @ 10% on (a+b+c)				0.00
			Cost for 2000 Nos. = a+b+c+d				406.11
			Rate for 1000 bricks = (a+b+c+d)/2				203.05
15		(ii)	Unloading and Stacking of Bricks by manual means including a	no.			203.05
1		1	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
		c)	Overheads 6 % on (a+b)				22.99
		d)	Contractor's profit @ 10% on (a+b+c)				0.00
		1	Cost for 2000 Nos. = a+b+c+d				406.11
		-	Rate for 1000 bricks = (a+b+c+d)/2 Total Cost	- PC			203.05
		-	Total Loding & Unloading of Brick P	no.	= 203.05 +	202.05	203.05 406.10

l. No.	SDB SI. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs	
			PAVEMENT CRUST LAYERS					
15	4.1	401	Granular Sub-base with Well Graded Material (Table 400.1)					
	(A)		(By mix in place method)	1		۱		
- 1			Construction of granular sub-base by providing well graded material, spr	eading in u	niform layers v	vith tractor m	iounted grader	
			arrangement on prepared surface, mixing by mix in place method with rotate	rator at OM	C, and compacti	ng with smool	in wheel roller	
		1	to achieve the desired density, complete as per Technical Specification Claus	se 401.				
		(ii)	For Grading II Material					
		1	Unit = cum					
			Taking output = 300 cum				1	
		a)	Labour					
			Mate	day	0.48	305.00	146.40	
- 1			Mazdoor (Skilled)	day	2.00	364.00	728.00	
		1	Mazdoor (Unskilled)	day	10.00	287.00	2870.00	
		b)			"	23420	_	
		,	Machinery Motor Grader 110 HP @ 50 cum per hour Three wheel 80-100 kN static roller @ 10 cum per hour	hour	6.00	2786.00		43
			Three wheel 80-100 kN static roller @ 10 cum per hour	hour	30.00	803.00	24090.00	2
			Tractor with Rotavator 25 cum per hour	hour	12.00	573.20	6878.40	
		1	Water tanker 6 kl capacity	hour	5.00	184.00	920.00	
10		(c)	Material		l	011-01	00 10	en
		,	Well graded granular sub-base material as per Table 400.1			604=91	75 0 0 0	8
			26.5 mm to 9.5 mm @ 35%	cum	134.00	657.85	88151.90	
			9.5 mm to 2.36 mm @ 25%	cum	96.00	514.58	49399.68	
		1	2.36 mm below @ 40% (Local sand) /1 (29 = 40	cum	153.00	141.85		178
			26.5 mm to 9.5 mm @ 35% 9.5 mm to 2.36 mm @ 25% 2.36 mm below @ 40% (Local sand) Water 1.92, 15322	kl	30.00	40.00	1200.00	
		(b)	Overheads @ 6 % on (a+b+c) Tosel _ 2,04080	T			21280.34	
		(a)	Cost of GSB for 300 cum	son.	680:	20.	234083.77	
		1	A) Cost of GSB without carriage per cum	cum	1	1	780.28	
		n	CARRIAGE			1		
	1	1 ")	Carriage for GSB material	Cum	0.77	1796.90	1377.62	
			Carriage for material below 2.36 mm (With Local Sand)	Cum	0.51	144.95		9.6
	1	1	Rate per cum with carriage			97=60	2231.83	
			Rate per cum with carriage Total Cos	CUM		e interested	2,231.83	

Tom - 2107 = 56

SL No.	SDB SI. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
15	4.7	405	Water Bound Macadam with Stone Screening Type "B" Gr- III				
	(3-A)		WBM Grading 3				
			Providing, laying, spreading and compacting stone aggregates of specific sizes to wa	iter bound mad	adam specification	n including spr	eading in uniforn
1			thickness, hand packing, rolling with smooth wheel roller 80-100 kN in stages to pr				
			to fill-up the interstices of coarse aggregate, watering and compacting to the require	d density Grad	ling 3 as per Techi	nical Specificati	on Clause 405.
		(A)	By Mechanical Means				
			Unit = cum	1			
			Taking output = 360 cum	1			
		a)	Labour	1		1	}
			Mate	day	0.68	305.00	207.40
			Mazdoor (Skilled)	day	2.00	364.00	728.00
			Mazdoor (Unskilled)	day	15.00	287.00	4305.00
		b)	Machinery	1		1	
			Tractor Mounted grader for grading @ 100 cum per hour	hour	14.40	549.10	7907.04
		1	Three wheel 80-100 kN static roller @ 8 cum per hour	hour	45.00	803.00	36135.00
			Water tanker 6 kl capacity	hour	24.00	184.00	4416.00
		c)	Material (Refer Tables 400.7, 8, 9 and 10)				
			Aggregate				
		1	Grading 3 53 mm to 22.4 mm @ 0.91 cum per 10 sqm for	cum	435.60	511.44	222783.20
			compacted thickness of 75 mm	1		1	202700121
		1	Stone Screening	1		1	
		1	Type B 11.2 mm for Grading 3 @ 0.18 cum per 10 sqm	cum	86.40	397.73	34363.8
			Water	kl	144	40.00	5760.00
		d)	Overheads @ 6 % on (a+b+c)			1	18996.33
			Cost for 360 cum = $a+b+c+d+e$			1	335601.93
		1	Rate per cum = $(a+b+c+d+e)/360$		1	1	932.23
		n	CARRIAGE				01710
			Stone material Grading 3 53 mm to 22.4 mm	Cum	1.21	1796.90	2174.2
			Stone Screening	Cum	0.24	1796.90	431.20
		1	Rate per cum with carriage			1	3537.7
		I THE LEADING	Total Cost	cum	CHESOMESIA!	A COMMISSION	3,537.

16. WBM Grand 115 - Bischerate - 9332005.

Carrige for stom parengate 1-21+24

+ stom goree ng =1.45M3



कार्यपालक अभियंता का कार्यालय ग्रामीण कार्य विभाग Rural works Department, (W) Division, Rosera

पत्रांक- 2302 रोसडा, दिनांक- 01/12/2021

सेवा में,

कार्यपालक अभियंता, ग्रामीण कार्य विभाग, कार्य प्रमंडल-पटोरी।

विषय :-

FDR के तहत कराए गए कार्यों का निरीक्षण प्रतिवेदन समर्पित करने के संबंध में।

महाशय,

उपर्युक्त विषयक पत्र के आलोक में कहना है कि FDR के तहत आपके प्रमंडल द्वारा कराए गए कार्यों का अधोहस्ताक्षरी द्वारा निरीक्षणोपरांत जांच प्रतिवेदन इस पत्र के साथ संलग्न कर आवश्यक कार्रवाई हेतु समर्पित की जा रही है।

अनु०-यथोक्त।

विश्वासभाजन

कार्यपालक अभियंता ग्रामीण कार्य विभाग, कार्य प्रमंडल-रोसडा

कार्यपालक अभियंता, ग्रामीण कार्य विभाग, कार्य प्रमंडल, परोरी द्वारा कराए गए FDR पथों की जांच से संबधित प्रतिवेदन

	पथ का नाम	क्षतिग्रस्त भाग (मीटर में)	कराए गए कार्य	कराए गए निर्माण कार्य की राशि (रू० में)	GST@12%	GST@12% L.Cess@1% S. Fee@10%	S. Fec@10%	Total	अभियुक्ति	
1	2	3	4	5	9	7	8	6	10	
_	Mastalipur Kasimachak hote huye to Khanua ghat	1200.00	Earth Work, Brick Bat	451100.00	54132.00	4511.00	0.00	509743.00	कार्य पूर्ण	
	Nawada to Yadav Tola	545.00	Earth Work, Brick Bat	359700.00	43164.00	3597.00	0.00	406461.00	कार्य पूर्ण	
	Sarari Madhopur To Imali Chwok	300.00	Brick Bat, GSB Gr-II, WBM Gr-III	509800.00	61176.00	5098.00	2900.00	578974.00	कार्य पूर्ण	
	L038-Approach Road to Dharampur	1500.00	Earth Work, Brick Bat	430400.00	51648.00	4304.00	0.00	486352.00	कार्य पूर्ण	
	Mahnar Mohaddin Nagar PWD Road Dashhara Sahendra Roy House To Sarhad siman via Ravidas Tola	400.00	Brick Bat, GSB, WBM Gr-III	705500.00	84660.00	7055.00	3200.00	800415.00	कार्य पूर्ण	
	PWD Road To Sarai Madhopur	1500.00	Brick Bat, GSB Gr-II, WBM Gr-III	540400.00	64848.00	5404.00	5800.00	616452.00	कार्य पूर्ण	
	Mohiuddin Nagar Bazar To Kursaha Nahar Tak	1500.00	Earth Work, Brick Bat, GSB	453600.00	54432.00	4536.00	6300.00	518868.00	कार्य पूर्ण	
	Mohanpur panchayat antargat Mohanpur Gate to khanjiva tak	1200.00	Earth Work, Brick Bat, GSB Gr-III II, WBM Gr-III	701100.00	84132.00	7011.00	9300.00	801543.00	कार्य पूर्ण	
i i	Bahadurchak to Nandni Dhala.	1200.00	Earth Work, Brick Bat, GSB Gr-II, WBM Gr-III	562500.00	67500.00	5625.00	12100.00	647725.00	कार्य पूर्ण	
	Bharat cinema Tetarpur to Rahepur	1200.00	Brick Bat, GSB Gr-II, WBM Gr-III	605100.00	72612.00	6051.00	5600.00	689363.00	कार्य पूर्ण	
- 1	Maa Sita Yashwant High school Nandini to Siura PWD Path tak	300.00	Earth Work, Brick Bat	316800.00	38016.00	3168.00	00.00	357984.00	कार्य पूर्ण	
	Mohaddin Nagar ke tanda goan hote hue Panchayat Bhawan tak path nirmaan.	1800.00	Brick Bat, GSB Gr-II	1023900.00	122868.00	10239.00	3400.00	1160407.00	कार्य पूर्ण	

कार्यपालक अभियंता, ग्रामीण कार्य विभाग, कार्य प्रमंडल, पटोरी द्वारा कराए गए FDR पथों की जांच से संबंधित प्रतिवेदन

I	पथ का नाम	क्षतिग्रस्त भाग (मीटर में)	कराए गए कार्य	कराए गए निर्माण कार्य की राशि (रू० में)	GST@12%	GST@12% L.Cess@1% S. Fee@10%	S. Fee@10%	Total	अभियुदित
	2	8	4	5	9	7	8	6	10
1	SH to Harail Part-2	1400.00	Brick Bat, GSB Gr-II, WBM Gr- III	522000.00	62640.00	5220.00	2400.00	592260.00	कार्य पूर्ण
	Kursaha to Dharampur Durga Mandir Bandh sadak	800.00	Earth Work, Brick Bat, GSB Gr-II. II, WBM Gr-III	436000.00	52320.00	4360.00	4100.00	496780.00	कार्य पूर्ण
	Shivaisingpur to Nawada	400.00	Earth Work, Brick Bat	192700.00	23124.00	1927.00	0.00	217751.00	कार्य पूर्ण
	Sivaisingpur to Gidarganj	125.00	Brick Bat & E/w	165100.00	19812.00	1651.00	0.00	186563.00	कार्य पूर्ण
	Shapur Undi PWD Road (East of Railway Gumati) to Chakarman	20:00	Brick Bat & E/w	81300.00	9756.00	813.00	400.00	92269.00	कार्य पूर्ण
	Saraswati Chauk to MMGSY	200.00	Brick Bat, GSB Gr-II, WBM Gr-III	1138000	136560.00	11380.00	16600.00	1302540.00	कार्य पूर्ण
	Kusho Chowk to Chakraj Ali	500.00	E/w, Brick Bat, GSB Gr-III	705500.00	84660.00	7055.00	8300.00	805515.00	कार्य पूर्ण.
	Approach Road - Bhasingpur	55.00	Brick Bat, GSB, WBM Gr-III	349600.00	41952.00	3496.00	0.00	395048.00	कार्य पूर्ण
	Ananad Golba To Rajaisi	400.00	Earth Work, Brick Bat	321100.00	38532.00	3211.00	0.00	362843.00	कार्य पूर्ण
	Thana Chauk Mihiuddin Nagar se kanhauli hote hue nawada hemanpur janewali PMGSY Road	900.006	Earth Work, Brick Bat	521600.00	62592.00	5216.00	00.00	589408.00	कार्य पूर्ण
	Tak MRL01-Rahepur more Tetarpur via Maniyar tola	3400.00	Brick Bat, Earth Work, GSB	1389900.00	166788.00	13899.00	21100.00	1591687.00	कार्य पूर्ण
_ 1	Moniuddinpur cnowk		OI-II, WDM OI-III						

उपरोक्त सभी पथों की जांच की गई जो संतोषप्रद है।

कार्यपालक अभियता

ग्रामीण कार्य विभाग, कार्य प्रमंडल, रोसड़ा