



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

DETAILED PROJECT REPORT FOR FDR



FDR

Road Name:- SH-74 To Puchhariya Tola

DISTRICT	:	East Champaran	
DIVISION	:	Areraj	
BLOCK	:	Sangrampur	
TOTAL LENGTH OF ROAD	:	1.240	
PART-A TOTAL COST OF INTIAL RECTIFICATION IN SURFACE RENEUAL (including 1%labour cess , 12% GST & 10% Seigniorage Fee)	:	23.662	Lac
TOTAL COST OF PROJECT	:	23.662	Lac

Submitted by :
Bihar Rural Road Development Agency
RWD (W) Division, Areraj

प्रतिवेदन

पथ का नाम :-	एस0एच0-74 से पुछरिया टोला।
प्राक्कलित राशि :-	23.662 लाख
पथ की लम्बाई :-	1.240 कि०मी०।
प्रखण्ड :-	संग्रामपुर।

प्रस्तुत प्राक्कलन माह जुलाई एवं अगस्त-2020 में आयी बाढ़ एवं चम्पारण तटबंध, संग्रामपुर प्रखण्ड में बांध टूटने के कारण पथ अनेक स्थलो पर क्षतिग्रस्त हो गया था। जिसमें यातायात बाधित हो गया था। विभागीय निदेश के आलोक में टूटे पथांशों में यातायात बहाल करने हेतु तत्काल ईट टुकड़ा एवं लोकल बालु भर कर यातायात पुर्नस्थापन का कार्य करा दिया गया एवं यातायात बहाल किया गया। यह पथ अनुरक्षण अवधि से बाहर है।

प्रस्तुत प्राक्कलन में ईट टुकड़ा भरने एवं लोकल बालू से लेबल करने का प्रावधान किया गया है।

प्राक्कलन वर्तमान अनुसूचित दर पर तैयार किया गया है। प्राक्कलन में संवेदक लाभांस सम्मिलित नहीं है।

प्राक्कलन का तकनीकी अनुमोदन प्रदान करने की कार्यवाई की जाए। *हेतु DPR समीक्षा किया जाता है।*

[Signature]
15.09.20

कनीय अभियंता
ग्रामीण कार्य विभाग,
कार्य प्रमण्डल, अरेराज।

[Signature]
सहायक अभियंता
ग्रामीण कार्य विभाग,
कार्य प्रमण्डल, अरेराज।

[Signature]
कार्यपालक अभियंता
ग्रामीण कार्य विभाग,
कार्य प्रमण्डल, अरेराज।

Inspection Report for Flood Damage Works

Date :-

1. Name of PIUs - Executive Engineer, RWD, Amroha

2. Name of Block - Sangrampur

Name of Road - SH 74 to Puchhariya Jola

(A) For Road

1. Damage Location/Chainage :- 0.300 to 0.400, 0.400 to 0.500, 0.500 to 0.600, 0.700 to 0.800, 1.000 to 1.100, 1.100 to 1.200, 1.200 to 1.240

2. Damage Length :- 265 M

3. Nature of Damage :- Road damage & flow

4. Details of Restoration Works:-

(i) Material being used in Restoration works:- Brick bat & local sand

(ii) Equipments/ Tools being used in Restoration works:- Tractor, JCB, Roller

(iii) Procedure taken up in Restoration works:- Road filling to brick bat by tractor, JCB & labourers. Local sand used for road leveling by rollers & labourers.

(iv) Restored Length:- 265 M

Jan 17/21
Signature of Inspecting officer
(Executive Engineer)

R.W.D, W.D. Chakriya

Scanned with CamScanner

GENERAL ABSTRACT OF COST FOR FDR OF ROAD

NAME OF ROAD : SH-74 To Puchhariya Tola

DISTRICT East Champaran
BLOCK Sangrampur
DIVISION Areraj
LENGTH OF ROAD (in Km) 1.240

Sl. No.	DESCRIPTION	AMOUNT (LAKHS)
PART-A	INITIAL RECTIFICATION INCLUDING SURFACE RENEWAL	
1	Sand Filling	0.884
2	Brick Bat	22.778
	SUB TOTAL OF INTIAL RECTIFICATION INDLUCDING SURFACE RENEWAL	23.662
	TOTAL COST OF CONSTRUCTION	23.662

JE
RWD (W) Division, Areraj

AE
RWD (W) Division, Areraj

EE
RWD (W) Division, Areraj

Post-facto D.T.A./TS is accorded for Rs. 23 66 200 /-
(.....crore Twenty three Sixty Six thousand
Two hundred) only

Certified copy

अध्यक्ष अभियन्ता
ग्रामीण कार्य विभाग
अचल-मोतिहारी

Sd/-
S.E. (R.W.D.)
works Circle
Motihari

DETAILED COST ESTIMATE

No.	SBS Sl. No	MORD Ref. No	Description	Unit	NOS	LENGTH	WIDTH	HEIGHT	QUANTITY	RATE	AMOUNT (in Rs.)
1	11.2		Local Sand Filling:- Filling in Foundation Trenches as per drawing and technical Specification Clause 305.3.9	cum	1	265.00	3.5	0.150	139,125	635.13	88363.09
2	with the help of WRD 5.7.40		Providing and Laying Spreading Brick Bats in Cut Portion as Required Do All C Job	cum		as per Calculation Sheet			1060.74	2147.40	2277836.63
A) SUB TOTAL =											2366199.72

15.09.20

JE

RWD (W) Division, Areraj

15.09.20

AE

RWD (W) Division, Areraj

15.09.20

EE

RWD (W) Division, Areraj

Measurment of Damaged Portion For Brick Bat

Road Name:- SH-74 To Puchhariya Tola

Length:- 1.240 KM

Sl.no	Chainage	Length		Width		Depth		Qty
1	Ch.300 to Ch.400	6.50	x	$(3.75+5.05)/2$	x	1.30	=	37.18
2	Ch.400 to Ch.500	4.70	x	$(3.75+4.85)/2$	x	1.10	=	22.23
3		30.00	x	$(3.75+4.75)/2$	x	0.50	=	63.75
4		30.00	x	$(3.75+4.85)/2$	x	0.60	=	77.40
5		8.00	x	$(3.75+5.95)/2$	x	1.10	=	42.68
6		22.50	x	$(2.5+3.1)/2$	x	0.60	=	37.80
7		Ch.500 to Ch.600	9.20	x	$(3.75+5.35)/2$	x	0.80	=
8	3.60		x	$(1.1+1.4)/2$	x	0.30	=	1.35
9	11.25		x	$(3.75+5.55)/2$	x	0.90	=	47.08
10	32.00		x	$(3.75+5.95)/2$	x	1.10	=	170.72
11	12.50		x	$(3.75+5.35)/2$	x	0.80	=	45.50
12	Ch.700 to Ch.800	9.00	x	$(0.9+1.2)/2$	x	0.30	=	2.84
13	Ch.1000 to Ch.1100	29.00	x	$(3.75+7.15)/2$	x	1.70	=	268.69
14		23.00	x	$(3.75+5.76)/2$	x	1.00	=	109.37
15	Ch.1100 to Ch.1200	21.00	x	$(3.75+4.95)/2$	x	0.60	=	54.81
16		8.50	x	$(3.75+5.75)/2$	x	1.00	=	40.38
17	Ch.1200 to Ch.1240	3.00	x	$(3.75+4.36)/2$	x	0.30	=	3.65
18		1.50	x	$(3.75+4.35)/2$	x	0.30	=	1.82
Cum =								1060.74

[Signature]
15-09-20
S.E.

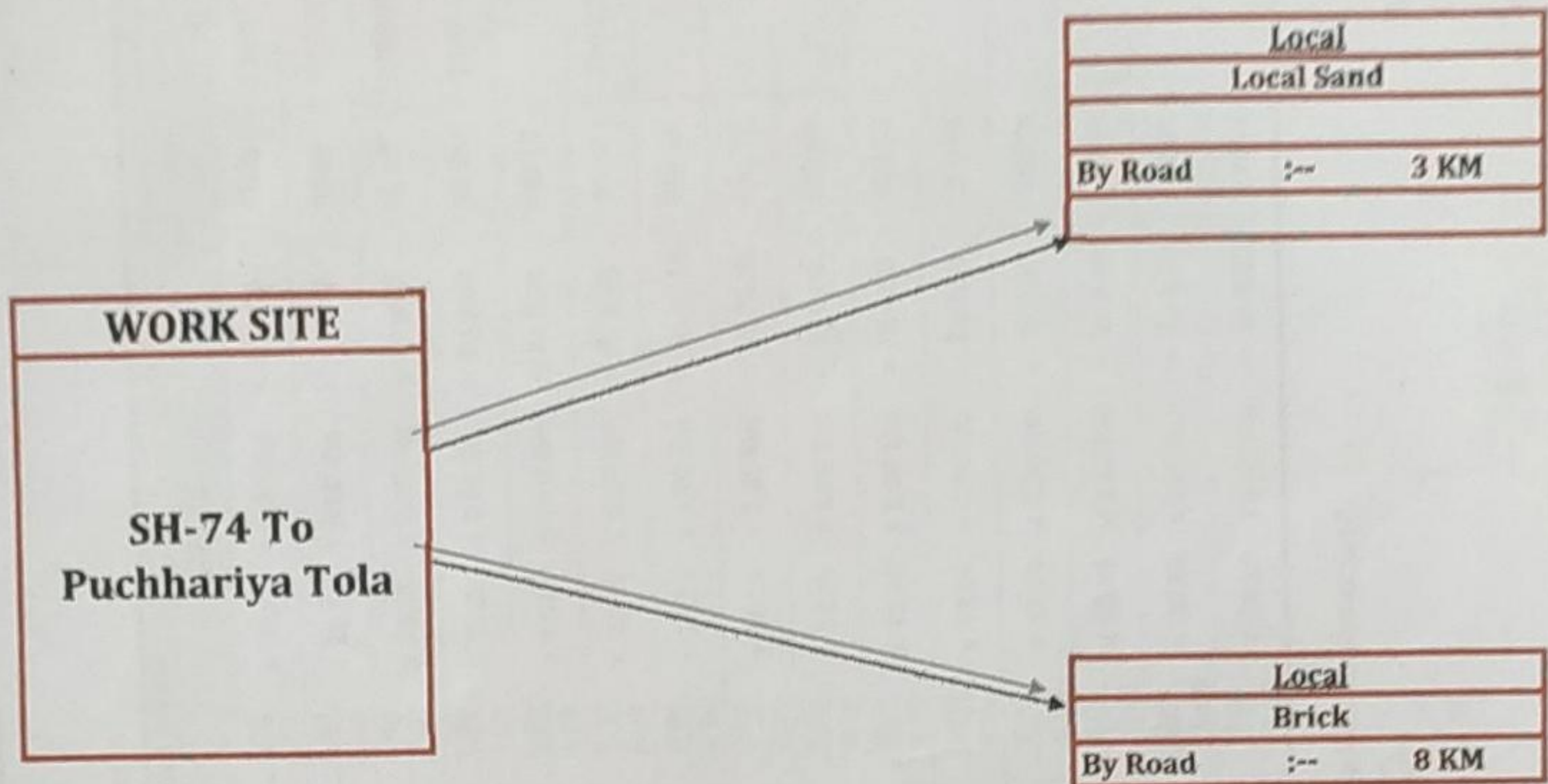
[Signature]
15-09-20
A.E.

[Signature]
15/09/2020
EXECUTIVE ENGINEER
R.W.D. (W.B.)
ARERA

Figure -3 Quarry Map

Name of Road :- SH-74 To Puchhariya Tola
Block :- Sangrampur
District :- East Champaran

Length of the Road:- 1.240 KM



* Subjected to Verification of Lead

[Signature]
15.09.20
J.E

[Signature]
15.09.20
A.E

S.E.

[Signature]
15.09.20
E.E
EXECUTIVE ENGINEER
R.W.D. (W.D.)
ARERAJ

Analysis for Carriage by Road & Rail

Name of Road:-- SH-74 To Puchhariya Tola

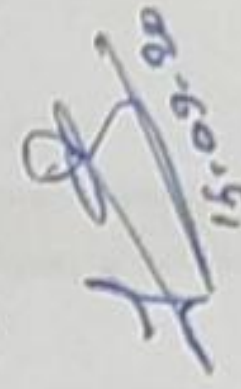
District:- East Champaran Block :- Sangrampur

Sl No	Item with Source	Unit	Source Up to	Carriage Cost & Lead in Km			Loading & Unloading Cost	Carriage Cost by Rail Head	Total *
				Pucka / Surface	Katcha				
1	Stone Metal Gr-I & Gr-II	Cum	Sheikhpur	$\frac{8.00}{4.59} \times 8.39$	$\times 41.00 \text{ Km} = \text{Rs } 599.55$	$\frac{8.00}{4.59} \times 20.31 \times 0.00 \text{ Km} = \text{Rs } 0.00$	92.01	1416.71	Rs. 2108.27
2	Stone Metal Gr-III / GSB	Cum	Sheikhpur	$\frac{8.00}{4.99} \times 8.39$	$\times 41.00 \text{ Km} = \text{Rs } 551.49$	$\frac{8.00}{4.99} \times 20.31 \times 0.00 \text{ Km} = \text{Rs } 0.00$	92.01	1317.69	Rs. 1961.19
3	Stone Aggregate / Chips	Cum	Mirjachowki	$\frac{8.00}{4.99} \times 8.39$	$\times 41.00 \text{ Km} = \text{Rs } 551.49$	$\frac{8.00}{4.99} \times 20.31 \times 0.00 \text{ Km} = \text{Rs } 0.00$	92.01	1706.09	Rs. 2349.59
4	Stone Boulder	Cum	Sheikhpur	$\frac{8.00}{4.80} \times 8.39$	$\times 41.00 \text{ Km} = \text{Rs } 573.32$	$\frac{8.00}{4.80} \times 20.31 \times 0.00 \text{ Km} = \text{Rs } 0.00$	92.01	1347.62	Rs. 2012.95
5	Course Sand	Cum	Koilwar	$\frac{8.00}{4.99} \times 7.52$	$\times 134.00 \text{ Km} = \text{Rs } 1615.52$	$\frac{8.00}{4.99} \times 18.19 \times 0.00 \text{ Km} = \text{Rs } 0.00$	106.19		Rs. 1721.71
6	Binding Material/Moorum	Cum	Sheikhpur	$\frac{8.00}{6.00} \times 8.39$	$\times 41.00 \text{ Km} = \text{Rs } 458.65$	$\frac{8.00}{6.00} \times 20.31 \times 0.00 \text{ Km} = \text{Rs } 0.00$	57.27	1057.27	Rs. 1573.19
7	Local Sand	Cum	Local	$\frac{8.00}{4.99} \times 7.52$	$\times 2.00 \text{ Km} = \text{Rs } 24.11$	$\frac{8.00}{4.99} \times 18.19 \times 1.00 \text{ Km} = \text{Rs } 29.16$	106.19		Rs. 159.46
8	Brick	1000 Nos	Local	$\frac{8.00}{2.00} \times 7.52$	$\times 7.00 \text{ Km} = \text{Rs } 210.56$	$\frac{8.00}{2.00} \times 18.19 \times 1.00 \text{ Km} = \text{Rs } 72.76$	446.72		Rs. 730.04
9	Cement	MT	Motihari	$\frac{8.00}{8.00} \times 7.52$	$\times 41.00 \text{ Km} = \text{Rs } 308.32$	$\frac{8.00}{8.00} \times 18.19 \times 0.00 \text{ Km} = \text{Rs } 0.00$	322.54		Rs. 630.86
10	Steel	MT	Motihari	$\frac{8.00}{8.00} \times 7.52$	$\times 41.00 \text{ Km} = \text{Rs } 308.32$	$\frac{8.00}{8.00} \times 18.19 \times 0.00 \text{ Km} = \text{Rs } 0.00$	343.32		Rs. 651.64
11	Bitumen Emulsion	MT	Muzzafarpur	$\frac{8.00}{8.00} \times 7.52$	$\times 160.00 \text{ Km} = \text{Rs } 1203.20$	$\frac{8.00}{8.00} \times 18.19 \times 0.00 \text{ Km} = \text{Rs } 0.00$	369.96		Rs. 1573.16
12	Bitumen	MT	Muzzafarpur	$\frac{8.00}{8.00} \times 7.52$	$\times 160.00 \text{ Km} = \text{Rs } 1203.20$	$\frac{8.00}{8.00} \times 18.19 \times 0.00 \text{ Km} = \text{Rs } 0.00$	369.96		Rs. 1573.16
13	Hume Pipe (1000 mm)	m	Motihari	$\frac{8.00}{10.00} \times 7.52$	$\times 41.00 \text{ Km} = \text{Rs } 246.66$	$\frac{8.00}{10.00} \times 18.19 \times 0.00 \text{ Km} = \text{Rs } 0.00$	76.58		Rs. 323.24
14	Hume Pipe (600 mm)	m	Motihari	$\frac{8.00}{25.00} \times 7.52$	$\times 41.00 \text{ Km} = \text{Rs } 98.66$	$\frac{8.00}{25.00} \times 18.19 \times 0.00 \text{ Km} = \text{Rs } 0.00$	32.82		Rs. 131.48
15	Hume Pipe (300 mm)	m	Motihari	$\frac{8.00}{60.00} \times 7.52$	$\times 41.00 \text{ Km} = \text{Rs } 41.11$	$\frac{8.00}{60.00} \times 18.19 \times 0.00 \text{ Km} = \text{Rs } 0.00$	32.82		Rs. 73.93

Cost of Haulage Excluding Loading & Unloading as per SO aa

Type of Road	Per Ton. Km by Tipper	Per Ton. Km by Truck
For Surface Road	8.39	7.52
Unsurface Gravel Road	10.09	9.04
Kachha Road	20.31	18.19

* Subjected to Verification of Lead



15.09.20

JE

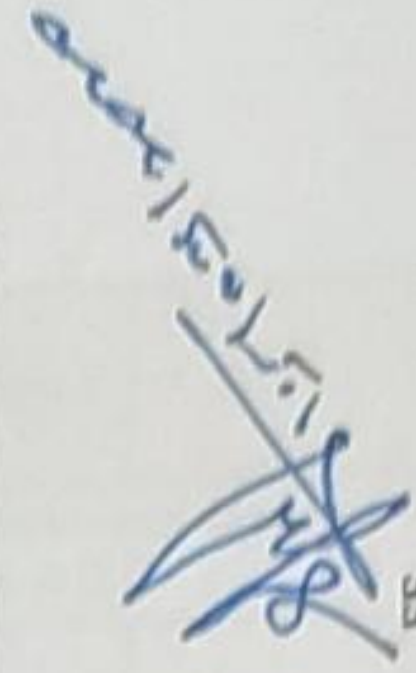
RWD (W) Division, Areraj



15.09.20

AE

RWD (W) Division, Areraj



15.09.20

EE

RWD (W) Division, Areraj

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs.
	6.6.1 WRD Bihar		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 as per approved design, specification and direction of E/I				
			Unit :- per cum Taking output = 2.832 cum Unskilled Mazdoor Add 6% overhead Charges Rate for 2.832 Cum	Nos.	3.00	287.00	861.00 51.66 912.66
			Rate per Cum (Rs.) =				322.27
	1.4	RCD	Cost of Haulage Excluding Loading and Unloading Haulage of Material by Tractor Excluding cost of Loading, Unloading and Stacking. Unit = t.km Taking output 3.60 tonnes load and lead 10 Km = 36.0 t.km				
		(i)	Surface Road Speed with Load : 15 km/hour Speed while Returnning empty : 25 km / Hour				
		a)	Machinery Tractor 3.6 tonne capacity Time taken for onward haulage with load	hour	0.667	549.1	366.25
			Time taken for empty return trip.	hour	0.400	549.1	219.64
		b)	Overhead charges @ 6% on (a) cost for 36 t km = a+b				35.15 621.04
			Rate per t.km = (a+b)/36				17.25
			Say Rs.				17.25
		(ii)	Unsurfaced Graveled Road Speed with load : 12 k, / hour Speed for empty return trip : 20 km / hour				
		a)	Machinery Tractor 3.6 tibbes caoacut Time taken for onward haulage with load	hour	0.833	549.1	457.40
			Time taken for empty return trip.	hour	0.500	549.1	274.55
		b)	Overhead charges @ 6% on (a) Cost for 36 t km = a+b 840.34				43.92 775.87
			Rate per t.km = (a+b)/36 23.34				21.55
			Say Rs.				21.55

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount In Rs
	1.1	RCD	Loading and Unloading of Stone Boulder/ Stone aggregates/Sand /Kanker/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 Tractor at loading point ii) Loading by front end loader 1 cum bucket capacity @ 2.5 cum per hour iii) Maneuvering, reversing, dumping and turning for return iv) Waiting time, unforeseen Contingencies etc Total a) Labour Mate Mazdoor for loading and unloading b) Machinery Tractor 3.60 tonnes capacity Front end-loader 1 cum bucket capacity @ 25 cum/hour c) Overhead charges @ 6% on (a+b) Cost for 2.25 cum = a+b+c Rate per cum = (a+b+c)/2.25				
					1 Min		
					5 Min		
					0 Min		
					0 Min		
					6 Min		
				Day	0.03	305.00	9.15
				Day	0.72	287.00	206.64
				hour	0.1	549.10	54.91
				hour	0.083	1403.00	116.45
							23.23
							410.38
							182.39

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
1	11.2		Local Sand Filling:- Filling in Foundation Trenches as per drawing and technical Specification Clause 305.3.9				
		I	Sand Filling Unit = cum				
		a)	Labour	day	0.01	305.00	3.05
			Mate	day	0.30	287.00	86.10
			Mazdoor (Unskilled)				
		b)	Material	cum	1.20	141.85	170.22
			Find Sand (assuming 20 per cent)				15.56
		c)	Overheads @6 % on (a+b)				274.93
			Rate per cum = a+b+c				
			Surface Lead	Km	2		
			Unsurface Lead	Km	1		
			Factor (3.6/2.25)	cum	1.60		
			Carriage (with OH)				272.07
		d)	(1.6 x 2 x 17.25) + 1.6 x 1 x 21.55) + 182.39				547.00
			Total (A+B+C+D) =				5.47
			Add 1% Labour cess (A+B+C+D)				65.64
			Add 12% GST (A+B+C+D)				17.02
			Add 10% Cost of Material for Seigniorage Fee		10%	170.22	17.02
			Total Cost per Cum	Cum			635.13
2			Supplying for Brick Bats (with OH)				
		A)	Basic Rate of Brick Bats	Per Cum		1017.00	1017.00
			Add Overhead Charges		6%		61.02
			Total -				1078.02
			Surface Lead	Km	7		
			Unsurface Lead	Km	1		
			Factor (3.6/2.25)	cum	1.60		
		B)	Carriage (with OH)				410.07
			(1.6 x 7 x 17.25) + 1.6 x 1 x 21.55) + 182.39				322.27
		C)	Ramming as per WRD SOR 6.61 (With OH)				1810.36
			Total (A+B+C) =				18.10
			Add 1% Labour cess (A+B+C)				217.24
			Add 12% GST (A+B+C)				101.70
			Add 10% Cost of Material for Seigniorage Fee		10%	1017.00	101.70
			Total Cost per Cum	Cum			2147.40



[Signature]
 15.09.20
 G.E.

[Signature]
 15.09.20
 A.E.

[Signature]
 15.09.20
 EXECUTIVE ENGINEER
 H.W.B. (W.D.)
 ARERA



[Signature]
15-09-20
S.E.

[Signature]
15-09-20
A.E.

[Signature] 15/09/2020
EXECUTIVE ENG
R.W.D
AR...



15.09.20
S.E.

15.09.20
A.E.

15.09.20
EXECUTIVE ENGINEER
R.W.D. (M.D.)
ARERA



[Signature]
15.03.20

[Signature]
18.05.20
A.E

[Signature]
15/09/2020
EXECUTIVE ENGINEER
R.W.D. (W.D.)
ARERAJ



[Signature]
15.09.20

[Signature]
15.09.20
P.E.

[Signature] 15.9.20
EXECUTIVE ENGINEER
R.W.D. (W.D.)
ARERAJ



15.09.20
J-E

15.09.20
M.R.

15.09.20
R.W.D. (W.L.)
ARERAJ



15.09.20
S.E.

15.09.20
A.E.

RESIDENT ENGINEER
R.W.D. (W.D.)
ARERAJ



2020/09/05 11:07

[Signature]
15.09.20
S.E.

[Signature]
15.09.20
A.F.

[Signature] 15.09.20
EXECUTIVE
R.W.D.
ARERAJ

Latitude: 26.468301
Longitude: 84.69843
Elevation: 50.77 m
Accuracy: 6.8 m
Time: 29-08-2020 17:42
Note: SH 74 to puchariya tola

[Signature]
15-09-20
J.E.

[Signature]
15-09-20
A.E.

[Signature] 15/09/2020
EXECUTIVE ENGINEER
R.W.D. (W.D.)
ARERAJ



15-09-20
S-E

18-09-20
A.E

15-09-20
EXECUTIVE ENGINEER
R.W.D. (W.D.)
ARERAJ



Latitude: 26.4613
Longitude: 84.697702
Elevation: 86.51 m
Accuracy: 35.5 m
Time: 25-08-2020 07:44
Note: SH 74 to puchariya tola

15-09-20
S-E
18-09-20
A-E

15/09/20
EXECUTIVE ENGINEER
R.W.D. (W.D.)
ARERAJ

Sl No	District	Division	Road Name	Scheme	Road Status	Maintainance (Y/N)	Is Agreement (Y/N)	Length (in km)	Category of District	Actual Restoration Amount	Remarks	FDR Year	Start Latitude	Start Longitude	Mid Latitude	Mid Longitude	End Latitude	End Longitude	Block
1	East Champaran	Areraj	SH-74 To Puchria Tola	MMGS Y[Gen]	Completed	Yes	Yes	1.243	1.24	0	Cross water road	2020-21	26.469462	84.702654	26.468487	84.698545	26.461314	84.697807	Sangram pur
2	East Champaran	Areraj	Bhawanipur Bazar to Thikaha via Tola Charlipra	MMGS Y[SC]	Completed	No	No	2.87	0.6	0	RESTORATION DONE	2020-21	26.435994	84.732372	26.0431637	84.774148	26.44025	84.735928	Sangram pur
3	East Champaran	Areraj	Bhawanipur REO Road - Madhubani Dubey Tola Road	PMGS Y-NEA	On Going	No	Yes	6.5	0.2	0	RESTORATION DONE	2020-21	26.424374	84.736943	26.461393	84.71366	26.639616	84.903849	Sangram pur
4	East Champaran	Areraj	DHANGARHA CHOWK NH-28 TO BHAWANIPUR SH-74		On Going	No	Yes	4.2	0.5	0	RESTORATION WORK DONE	2020-21	26.059112	84.731067	26.472099	84.76436	26.468947	84.798938	Sangram pur