

## ग्रामीण कार्य विभाग



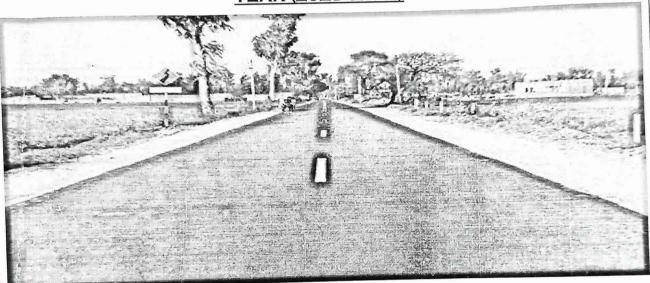
Rural Works Department, Govt of Bihar

#### BIHAR RURAL ROADS PROJECT

Bihar Rural Road Development Agency (BRRDA)

#### DETAILED PROJECT REPORT

YEAR (2023-2024)



## TEMPORARY RESTORATION (FDR)

STATE

**BIHAR** 

DISTRICT

Lakhisarai

**BLOCK** 

Suryagarha

NAME OF ROAD

T02 To Ghogi korasi

TOTAL LENGTH OF ROAD

0.020 km

TOTAL COST OF CONSTRUCTION

(Inclusive of GST & LC)

Rs. 3.983 Lacs

COST OF ROAD CONSTRUCTION PER KM

:- Rs. 199.172 Lacs

#### SUBMITTED BY:

**EXECUTIVE ENGINEER** RWD (w) DIVISION, LAKHISARAI LAKHISARAI "

e of PIUs:- RWD. (W)	Dir. Laktisaron'
ne of Block/Road:- To 2	to glogi korasi
For Road	
Damage Location/Chainage:- 2	4 km
Damage Length:- 20 m	
Nature of Damage (Length Wise)	(i) Breach: 20 mlter
	(ii) Crust Damage :-
	(iii) Only Flank Damage:-
nether traffic fully/Partially obstruc	ted: Fully obstract
Details of Restoration:-	11 1 %
Material Being Used in Restoration	on: Earth, GSD, Here pipe
i) Equipment/Tools Being Used in	Restoration Works: -, J.C.D. Tracter,
iii) Restored Length	In open Area:-
	In habitation Area:-
iv) If Restoration work done in hab	itation Area give Reason:-
B. For Bridge (Size of Bridge/C	Culvert)
(1) Damage Location/Chainage:	
(2) No. of Span Damage:-	
(3) Length of Span:-	
(4) Nature of Damage (Pier/Abuttn	nenV
Wing Wall/Approach Road Damag	(c):-
(5) Details of Restoration :-	
(i) Material Being Used in Restora	tion :-
(ii) Equipment Tools Being Used i	n Restoration Works :-
(iii) Restored Length :-	

olexing of

Signature of Inspector

Rural Work, Department R.W.D. (W) Division Work, Div, Lakhisarai Jamui

## तकनी में मारवदन

Horary restoration.

Tax 14 al :- 2023-2024

710 210 :- 43 540 MIG

4195 - :- Y 516)

प्रस्त प्रामकला रूपल निरीद्वाण प्रस्तात विभागीय निर्वेशानुसा पंपाद किया जापा है। यह पथ १-02 से स्वोजी के डाली कर्मण में 305 4 म. ८ अटल अनुरक्षण नी में अन्तरीत निर्वेत हैं तथा पंपाद की अनुरक्षणा की है। अनि श्वारित के द्वारण जन्म पथ हा क्याव हो जाने के द्वारण अग्रामा कर हो जापा। निस्से आम जनता को पर्वानी होने लागी। ब्यावागमा तलाल पालू करने हैं। क्षाकण्या रिप्तकला में व्यव स्वार्थ का क्षार्य निर्वेशानुस्म द्वामा जापा। सामकला में व्यव शिवन वाने क्षार्य निर्वेशानुस्म हे वारा विमा जापा है। समकला की व्यवनात स्वार्थ स्वीर्थ स्विह में क्षेत्रमा है।

3/1/223

भारतीय अभिनेता

3/11/19

Executive Engineer Rural Work, Department Work, Div, Lakhisarai

-				
	SUMMARY	OF COST ESTIMATE FOR THE PRO		
OF	ROAD:	OF COST ESTIMATE FOR THE	CI	
ICT	KOND,	TO2 To Ghogi korasi	JEO	
7		Lakhisarai		
<b>X</b>		Suryagarha		
TH O	FROAD (in Km)			
	F BT PAVEMENT	0.020		
		20		
	F CC PAVEMENT TURES	0		1
IKUC	TUKES			11
			AMOUNT	
No.		DESCRIPTION	(LAKHS)	1
		TION	0.000	11
1	PREPARATORY WOL	RKS,SITE CLEARANCE, DISMANTLING	0.000	11
2	EARTHWORK	did, SITE CLEARANCE, DISMANTLING	2 2 632 3.243	
3	GSB	2.63	1426 0.473	
4	CC PAVEMENT	0.40	0.000	1
5				1
3	ROAD FURNITURES	, KM STONES , TRAFFIC & DIRECTION SIGN, PMGSY LOGO	2 16 63.822	П
6		SUBTITIAL OF DAVIDAGES	3.140	
1	CROSS DRAINAGE S	TRUCTURES	0.000	
II	HUME PIPE RCC		0.000	
III			0.000	
IV	BOX			
V	Utility Pipe (300 mm	Dia)	0.000	
V	DISMANTLING OF CI			
		SUB TOTAL OF CD STRUCTURES COST IN LACS =	11.	2 091
		Total Constriction Cost (In Lacs) :	<del>4.3</del> 3.253,940	300
		GST @ 18% and Labour (In Lacs) :	0.602 0.721	0-590
		Labour Cess @ 1% (In Lacs) :		0,3
A		Add Seigniorage Fee @ 10% (In Lacs) :	0.657 ~0.057	0.00
A	Te	otal Constriction Cost (Including GST & LC) (In Lacs) ?-	9494.354 4.763	484
		Total Cost Of Contingency 1%	/	4-3
	1/		3.944	
	100	Total Project Cost (A+B) (In Lacs) :	3.983 4.810	4.04
	6/11/1	VIII VIII	1010	200
	Junior Engineer	3 (11/2)	Daniela	1
		Assistant Engineer	Executive Engineer	4.33
(w) Di	vision, Lakhisarai	RWD (w) Division, Lakhisarai	RWD (w) Division,	/
		(", Division, Laknisarai	Lakhisarai	

SE

Ref. E.E. Letter No... 609 Technically Sanctioned for Rs. (Rupees Three for construction work & 5 Years Maintenance

> Superintending Engineer Rural Works Department Works Circle, Mungar

## PAVEMENT COMPOSITION DETAILS

NAME OF ROAD: :-- TO2 To Ghogi korasi

BLOCK :-- Suryagarha

LENGTH OF ROAD :-- 0.020 Km

S.L.		Chain	ages	Total Length	Existing	Condition	Type of Pavement	Type of Existing Area	
No.	From		To	in Meter	Pavement		Proposed		
1	0	-	20	20	Earthen	Damaged	Flexible(Tempor ary Restoration)		
	Total Leng	th		20					

Total Length	20
Total BT	0
Total PCC	0
Total Brick Soling	0
Total Earthen	20

Proposed Flexible Pave	ement
On BES Portion/for widening	0
On Earthen Portion	20
On BT Portion - (after Deduct Cross Drainage Length)	0
On PCC Portion	0
Total Flexible Pavement	20

Proposed Rigid Par	vement
On BES Portion/for widening	
On Earthen Portion	0
On BT Portion	0
On PCC Portion	0
Total Rigid Pavement	0

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V1730

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		1000000			0		DOAD	3								
			ESTIMATE FOR	CONS	TRUC	TION OF	ROAD	)								
NAM	E OF RO	DAD:	T02 To Ghogi korasi				asureme									
			Production of the second second second				Length of			20.00	mt.					
lock	:- Sury	agarha	District :- Lakhisarai				inal Leng			20.00	mt.					
37.552		8	biotite. Bannsarat			ength of nev			20.00	mt.						
					L	ength of ne	w Propos	ed CC Por	tion	0.00	mt.					
l. No.	SDB SL.NO	MORD Ref.No	Description	Unit	NOS	LENGTH	WIDTH	HEIGHT	QUANTITY	RATE		AMOUNT (in Rs.)				
	77		SUB HEAD : PREPARATORY WORKS SITE CLI	ARAN	CF DI	SMANTLI	NG	4-14-2								
1	3.14	303.1	SUB HEAD: PREPARATORY WORKS, SITE CLEARANCE, DISMANTLING 03.1 Construction of Subgrade and Earthen Shoulders													
			with all lifts and leads, transporting to site, spreading meet requirement of Table 300.2 with lead upto 1000 r 303.1. (Including Royality & Labour Cess).			r Technical S										
			A) For New Construction (BT ROAD)			Length =		20.0								
			i) Construction of subgrade	Cum	1.00	Avg Breadth	=(5+15)/2	10.000								
						Depth =		3.500	700.00							
			A) For New Construction (BT ROAD)			Length =		20.0								
			i) Construction of subgrade	Cum	1.00	Avg Breadth	ı =(6+15)/2	10.500								
						Depth =		2.500	525.00							
		1	For 1000 m lead @ 100 %					Total=	1,225.00	214.9	1	2,63,262.0				
-						National Control		B)	SUB TOTAL			2,63,262.0				
0.00000.0			Company of the Compan		North Association (Inc.)			1				2,00,202.0				
Page 1			Sub Head: PAVEMENT LAYERS - GSB & WB			September 14 September 15 Septe	ACCOUNTS NOT ANY									
2	4.1	401		le 400.	1)			_								
			( By mix in place method )													
		(i)		<u></u>												
			Construction of granular sub-base by providing well a motor grader on prepared surface, mixing by mix compacting with smooth wheel roller to achieve Specification Clause 401.	in pla	ce meth	od with ro	tavator a	t OMC, ar	nd							

SI. No.	SDB SL.NO	MORD Ref.No	Description	Unit	NOS	LENGTH	WIDTH	HEIGHT	QUANTITY	RATE	AMOUNT (in Rs.)			
			GSB in Earthen Portion	Cum	1.00	20.00	4.050	0.200	16.20	2478.89	40 155.00			
			Net GSB Qty. Required form Grading I Material						16.20	22,917.17	<del>47,258.00</del>			
								C) S	SUB TOTAL (	OF CRUST =	40155.00 47,258.00			
			SUB HEAD: ROAD FURNITURES, KM STONE	S, PM	GSY LO	GO					42580			
3	10.16	1700	Ol (I)Providing and Fixing 'Logo' of Project  Providing and fixing of typical MMGSUY informatory sign board with Logo as per MORD specifications											
	-	25mm x 5m size on back on edges. The lower plate will be welded with MS angle iron frame of 25mm x 25mm x 5mm. The angle iron frame of the lower most plate and flat iron frame of middle plate will be welded to 2 nos. 75mm x 75 mm of 12 SWG sheet tubes posts duly embedded in cement concrete M-15 grade blocks of 450mm x 450mm x 600mm, 600mm below ground level. The top most diamond plate will be welded to middle plate by 47mm x 47mm of 12 SWG steel plate tube. All M.S. will be stove enameled on both sides. Lettering and printing arrows, border etc. will be painted with ready mixed synthetic enamel paint of superior quality in required shade and colour. All sections of framed posts and steel tube will be painted with primer and two coats of epoxy paint as per drawing Clause 1701 and Annexure 1700.1												
			Providing and Fixing 'Logo' of Project As per Drawing	No. Total=	1.00 1.00				1.00	10.620.62	10.700			
					2.00		G) SUR	TOTAL OF	ROAD FUR	10,629.62				
				EVEL THE SE							10,630.0			
				1	TOTAL (	COST OF P	AVEME	NT IN RS	6. (A+B+C+	D+E+F)=	3.82.227			

7

410 S11123

313988.00

Na	ame Of R	load : -	T02 To Ghogi korasi		Block : -		agarha (	Length Of Road : -		0.020 Km					
Sl. No.	SDB Sl.NO	MORD Ref.No	Description	Unit	Quantity	Rate	Amount (In Rs.)	Total Material Required	Material Amount	Add Seignoirage Fee 10%					
			EARTHWORK												
1	3.14	303.1	Construction of Subgrade and Earthen Shoulders  Construction of subgrade and earthen shoulders with approved material obtained from borrow pits with all lifts and leads, transporting to site, spreading, grading to required slope and compacted to meet requirement of Table 300.2 with lead upto 1000 m as per Technical Specification Clause 303.1.												
-			Unit = cum	303.1.											
			Taking output = 100 cum												
		a)	Material												
			Compensation For Earth Taken From Private Land	Cum	100	35.25	3,525.00								
_			Cost for 100 cum = a				3,525.00								
			Rate Per Cum = (a)/100=	Cum			35.25								
			Total Cost =	Cum			35.25	1,225.00	43,181.25	4,318.1					
Pare Dis			PAVEMENT LAYERS - GSB ,WBM-II & WBM-I	III		Any and a second		Hander of section const							
2	4.1	401	Granular Sub-base with Well Graded Material (Tab	le 400.1	.)										
			( By mix in place method )												
		(i)	For Grading I Material												
			Construction of granular sub-base by providing well g prepared surface, mixing by mix in place method with achieve the desired density, complete as per Technica	rotavat	or at OMC, an	d compactir	rm layers with ng with smooth	motor grader on wheel roller to							
			For Grading I Material												
			Unit = cum												
			Taking output = 300 cum												

 $b_{\rm p}$ 

Sl. No.	SDB Sl.NO	MORD Ref.No	Description	Unit	Quantity	Rate	Amount (In Rs.)	Total Material Required	Material Amount	Add Seignoirage Fee 10%
		a)	Material	2227		Annual Control of the		1		Harakan aya da ila ila ila ila ila ila ila ila ila il
			Well graded granular sub-base material as per Table 4	100.1						
			53 mm to 9.5 mm @ 50 per cent	Cum	180.00	931.75	1,67,715.00			1.
_			9.5 mm to 2.36 mm @ 20 per cent	Cum	72.00	429.97	30,957.840			
-			2.36 mm below @ 30 per cent (Course Sand)	Cum	108.00	502.80	54,302.400			
_			Cost for 300 cum = a				2,52,975.24			
			Rate Per Cum = (a)/300=	Cum			843.25			
			Total Cost =	Cum			843.25	16.20	13,660.66	1,366.0

Total Construction Cost (With 10% Seigniorage Fee) :-- 5,684.19

Total Construction + Maintenace Cost (With 10% Seigniorage Fee) :-- 5,684.19

### Estimate for Irrigation Conduit Pipe

Name of Road TO2 To Ghogi korasi

Block:

Suryagarha

District:

Lakhisarai

Sr. No.	Item No	Description of item	Qty	Unit	Rate (Rs)	Amount (Rs.)	
1	2	3	8	9	10	11	
1		Providing and laying of a reinforced cement concrete pipe duct,300 mm dia, across the road (new construction), extending from drain to drain in cuts and toe of slope to toe of slope in fills,constructing head walls at both ends, providing a minimum fill of granular material over top and sides of RCC pipe as per IRC:981997,bedded on a 0.3 m thick layer of granular material free of rock pieces, outer to outer distance of pipe at least half dia of pipe subject to minimum 450 mm in case of double and triple row ducts, joints to be made leak proof, invert level of duct to be above higher than ground level to prevent entry of water and dirt, all as per IRC: 98 - 1997 and approved drawings.					
		Single Row Cable Duct @ 4 no. Per Km (4 no. Pipe10.0	10.00	RM	1,172.99	11,730.00	
					Total	11,730.00	

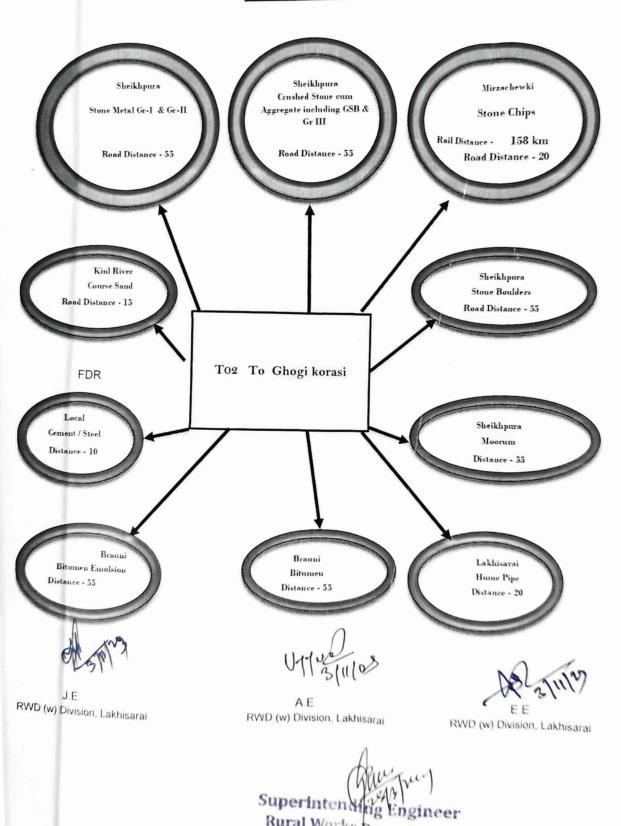
0 ( GOVT. OF INDIA) YEAR (2023- 2024)

Name of Road:--

Block :-District:- T02 To Ghogi korasi

Suryagarha Lakhisarai

#### Quarry Map



Rural Works Department Works Circle, Munser

#### RATE ANALYSIS FOR CARRIAGE OF BASE MATERIAL

Carriage Cost (Surfaced Road): Carriage Cost (Un Surfaced Road): Carriage Cost (Kacha Road):

12.10 7.94

14.60 9.55 19.22 29.30

NAME OF ROAD

T02 To Ghogi korasi

DISTRICT:- Lakhisarai

	BLOCK		:	Suryag	garha							DI	Minimum	
			Railway		ad Distance(K	m)			Carri	age Cost Per	Km	Total	Applicable	SOURCE
S.NO.	Material	By Road/Rail	Frieght (Rs)	Surface Road	Unsurfaced Road	Kaccha Road	Loading Unloading	Unit	Surface Road	Unsurfaced Road	Kaccha Road	Carriage Cost	Carriage Cost	
		By Road		55	0	0	119.27	Cum	1159.91	0.00	0.00	1279.18	1036.24	Sheikhpura
1	Aggregate for WBM GrII & WBM Gr I	By Rail	1,316.44	12	0	0	119.27	Cum	253.07	0.00	0.00	1688.78	42/5.10	
	Crushed Stone cum	By Road	1,510.44	55	0	0	119.27		1066.93	0.00	0.00	1186.20	960.94	Sheikhpura
2	Aggregate including GSB & Grill	By Rail	1,318.52	12	0	0	119.27	Cum	232.79	0.00	0.00	1670.58		
		By Road		144	0	0	119.27	Cum	2793.43	0.00	0.00	2912.70	2066.62	Domchanch
3	Stone Chips	By Rail	1,559.37	20	0	0	119.27	Cum	387.98	0.00	0.00	2066.62	2337.2	Mirzachewki
		By Road		55	0	0	121.65	Cum	1070.67	0.00	0.00	1192.32	571174	Sheikhpura
4	Moorum	By Rail	1,119.99	12	0	0	121.65	Cum	193.60	0.00	0.00	1435.24	361.80	374.88
5	Cement	By Road		10	0	0	382.40	MT	79.40	0.00	0.00	461.80	461.80	LOCAL
6	Coarse Sand	By Road		15	0	0	121.65	Cum	290.98	0.00	0.00	412.63	253.8	Kiul River
7	Fine Sand(Local Sand)	By Road		2	0	1	121.65	Cum	25.46	0.00	30.81	177.92	144 43	LOCAL
ŝ	Steel Reinforcement	By Road		10	0	0	412.62	Tonne	79.40	0.00	0.00	492.02	399.4	LOCAL
9	RCC Pipe NP3 (1000 mm dia)	By Road		20	0	0	73.78	RM	127.04	0.00	0.00	200.82		Lakhisarai
10	RCC Pipe NP3 (600 mm dia)	By Road		20	0	0	31.62	RM	50.82	0.00	0.00	82.44	82.44	Lakhisara
-	(600 mm dia)	By Road		55	0	0	429.70	MT	436.70	0.00	0.00	866.40	866.40	Brauni
11	Bitumen Emulsion	By Rail	1,632.65	20	0	0	429.70	MT	292.00	0.00	0.00	2354.3		
		By Road		55	0	0	429.70	MT	436.70	0.00	0.00	866.40	763.53 -866.40	
12	Bitumen	By Rail	1,632.65	20	0	0	429.70	MT	292.00	0.00	0,00	2354.3		
13	Brick	By Road		7	0	1	506.68	1000 No	. 222.32	0.00	76.8	8 805.88	8 -805.88	LOCAL
1.5	Ditta	By Road		55	0	0	119.27	Cum	1109.17	7 0.00	0.00	1228.4	4 995.1	
14	Stone Boulders	By Rail	1,285.03	12	0	0	119.27	Cum	242.00	0.00	0.00	1646.3		Sheikiipui

**Executive Engineer** 

# Analysis for Carrige Through Railway from Quarry Site to Work Site

#### Sheikhpura to kiul

### Crushed Stone cum Aggregate including GSB & GrIII

uarry Site to Sheikhpura Railway Yard (By Road)

rry Si	te to Sheikhpura Kanway Taru (by Koud)					Loading &		
	Carriage Cost & Lea	d in Km	Katcha			Unloading		Total
3.00 4.99	Pucka / Surface  x 12.10 x 5.00 Km = Rs 96.99 +	8.00 x 29	9.30 x 0.00 Km	= Rs 0.00	+	Rs 119.27	=	Rs 216.26
4.99		4.99	3.47 x 1.00 Km 5 MT @ 1.25 Nos	Labour	=	Rs 257.00 <b>Total "A"</b>		Rs 13.58 Rs 321.25 Rs 551.09
Sl	neikhpura Railway Yard to kiul	Railway	y Yard = 26.00 Km	i				
	Railway freight charge from Sheikhpura Railway station	on to = For	1 MT 26.00 K	ím	=	Rs 185.10	) =	Rs 185.10
	Busy Seasion charge 12% of Railway freight charge	=	For 1 MT		=	12%	Ξ	Rs 22.21
	Railway Development Charge to 5% of Railway freigh	t	For 1 MT		=	5%	=	Rs 9.26
	Terminal charge @Rs.40.00 per Terminal per MT		For 1 MT	2	х	Rs 40.00	) =	Rs 80.00
	Sub-Total Total	=	For 1 MT				=	Rs 296.57 Rs 296.57
	Rail Fright = 1.6 x R	s 296.57	For 1 M	Γ		"B"	=	Rs 474.52
			Add 12% Overhe	ead Charge	=	12%	=	Rs 56.94
	Gross Cost for Railway freight charge "A" + "B"		Add 10% Contrac For 1 cum	ctor Profit	=	10%	=	Rs 53.15 Rs 1135.69
	Loading & Unloading Cost		For 1 cum				=	Rs 182.83
	Carriage Cost from Quarry to kiul Railway Yard		For 1 Cum				=	Rs 1318.52

### YEAR (2023-2024)

### Analysis for Carriage by Road & Rail

Name of Road:--

T02 To Ghogi korasi

Block:-

Suryagarha

0.020 KM.

	District:-	Lakhisara	ai		0.020 KM.	
Sl No	Item	Unit	Carriage Cost By Road (Per cum)	Carriage Cost By Rail(Per cum)	Carriage Cost (Addopted in DPR)	
1	Stone Metal Gr-1 & Gr-11	Cum	1279.18 1036.24		<del>4279.18</del> 1036.	2
2	Stone Metal Gr-III / GSB	Cum	1186.20 96.94	1670.58	1186.20 960	94
3	Stone Aggregate / Chips	Cum	2359.25		<del>2912.70</del> <b>2</b> 35	9.
4	Stone Boulder	Cum	995.14		1228.44 995	
5	Course Sand	Cum	253.85		312.59 253	
6	Binding Material (Moorum)	Cum	<del>703.92</del> 571.74		<del>703.92</del> <b>5</b> 71	,7
6	Local Sand	Cum	177.92		<del>177.92</del> <b>144</b> ,	43
7	Brick	1000 Nos	654.26		805.88 654	2
8	Cement	MT	374.88	No.	461.80 374	
9	Steel	MT	399.42		<del>-492.02</del> 399	.4
10	Bitumen Emulsion	MT	<del>866.40</del> 763.53		866.40 703	
11	Bitumine	MT	866.40 703.53		·866.40 703·	5
12	Hume Pipe (1000 mm)	Pipe	201.90 [62·2]		201.90   62	:

Junior Engineer RWD (w) Division, Lakhisarai Asstt. Engineer RWD (w) Division, Lakhisarai Executive Engineer RWD (w) Division, Lakhisara

















Thousand S

183/11/2

















