Inspection Report for Flood Damage Work

Date:

1. Name of PIUs – EE RWD MAHNAR
2. Name of Block/Road – Restoration of road from Satpura to Laxmanpur Hat

A. For Road

1. Damage Location/Chainage : 3.700km to 3.805 km
2. Damage Length : 105.00m
3. Nature of Damage : Farm flood.
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 :

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 :

13/11/20 JE
Signature of JE/AE/EE

13/11/20

13/11/20

Signature

(Name of Inspector)

EE
RWD Mahua

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ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

GOVERNMENT OF BIHAR

F.D.R Detailed Project Report

Year 2020-21

BIHAR RURAL ROADS DEVELOPMENT AGENCY
(GOVT. OF BIHAR)

DISTRICT :	**Vaishali**	**BLOCK :**	**Jandaha**
NAME OF ROAD :	**Restoration of Road from Sahpur To Laxmanpur Haat**		
DIVISION:	**R.W.D. Works Division, Mahanar**		

TOTAL CONSTRUCTION LENGTH	:	0.105	KMS	COST PER KM
COST OF PAVEMENT (Rs.)	:	4.67	LACS	44.48
TOTAL COST OF ROAD INCLUDING G.S.T + LABOUR CESS (Rs.)	:	5.30	LACS	50.480

Submitted By:

EXECUTIVE ENGINEER
R.W.D. Works Division, Mahanar

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प्रतिवेदन

पथ का नाम	:–	शाहपुर से लक्ष्मणपुर हाट
पथ की लम्बाई	:–	5.13 कि0 मी0
क्षतिग्रस्त भाग की लम्बाई	:–	105 मीटर
प्राक्कलित राशि	:–	5.30 लाख

पथ कन्ना नक्षत्र की जोरदार वारिस से बाया नदी का बांध टुटने से Flank तथा Subbase बुरी तरह से क्षतिग्रस्त हो गया है।

क्षतिग्रस्त भाग की मरम्मति के लिए प्राक्कलन में Bamboo Pilling, Bamboo Runners, Woven Chachari/ Drum sheet के बीच Filled E.C bags With Local Sand का प्रावधान किया गया है, Subbase की मरम्मति के लिए Bricks bats तथा GSB का प्रावधान किया गया है, Subbase क्षतिग्रस्त होने के कारण आवगमन बाधित हुआ है।

जनहित में प्राक्कलन की तकनीकी अनुमोदन एवं प्रशासनिक स्वीकृति अपेक्षित है। प्राक्कलन में लिया गया दर संवेदक लाभांश छोड़कर है।

स्वीकृति की प्रत्यक्षा में कार्य प्रारम्भ कर दिया गया है, तथा आवागमन चालु कर दिया गया है।

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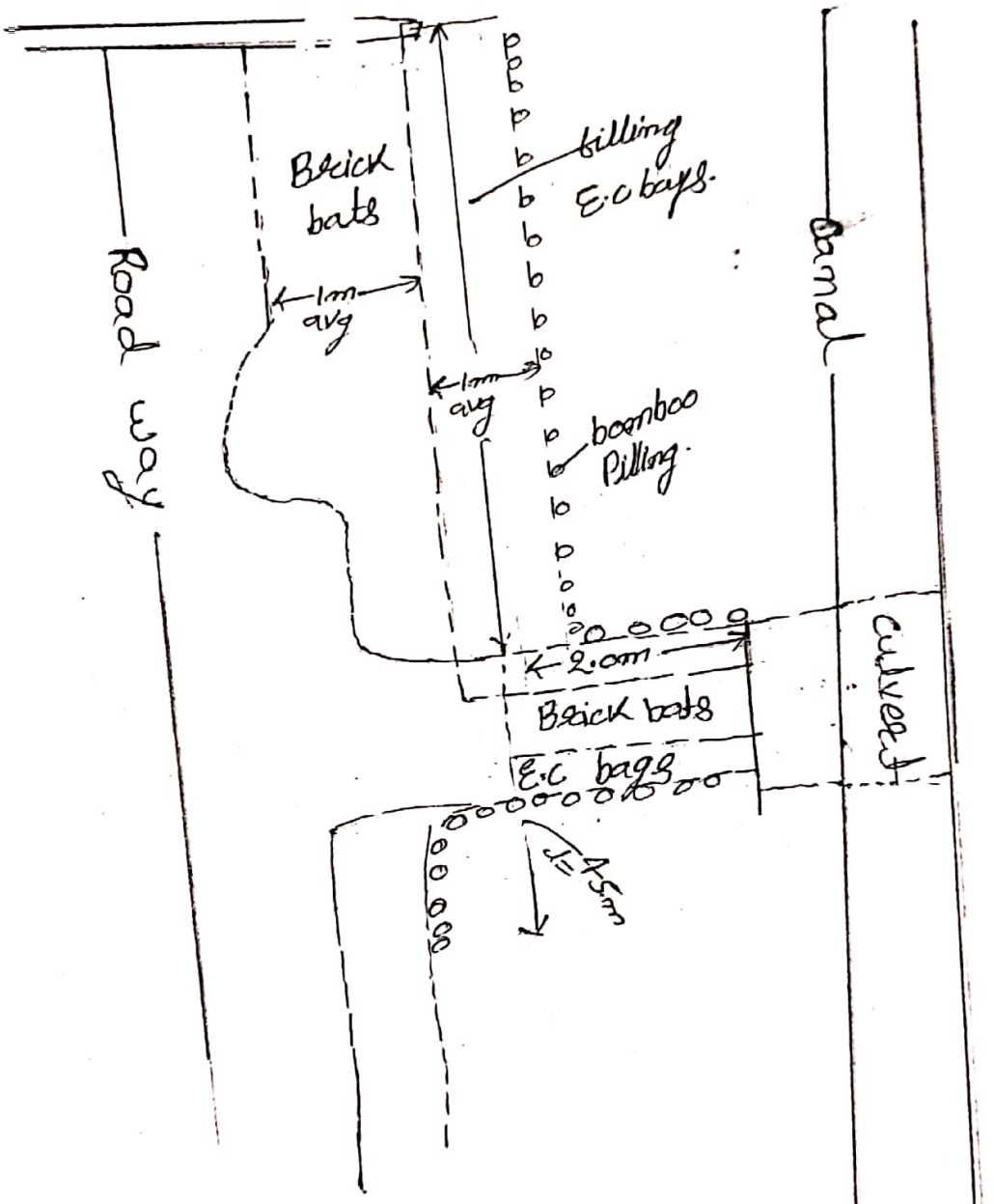
Section of flood damage road



not to scale

section for 45mm damage flank & subbase

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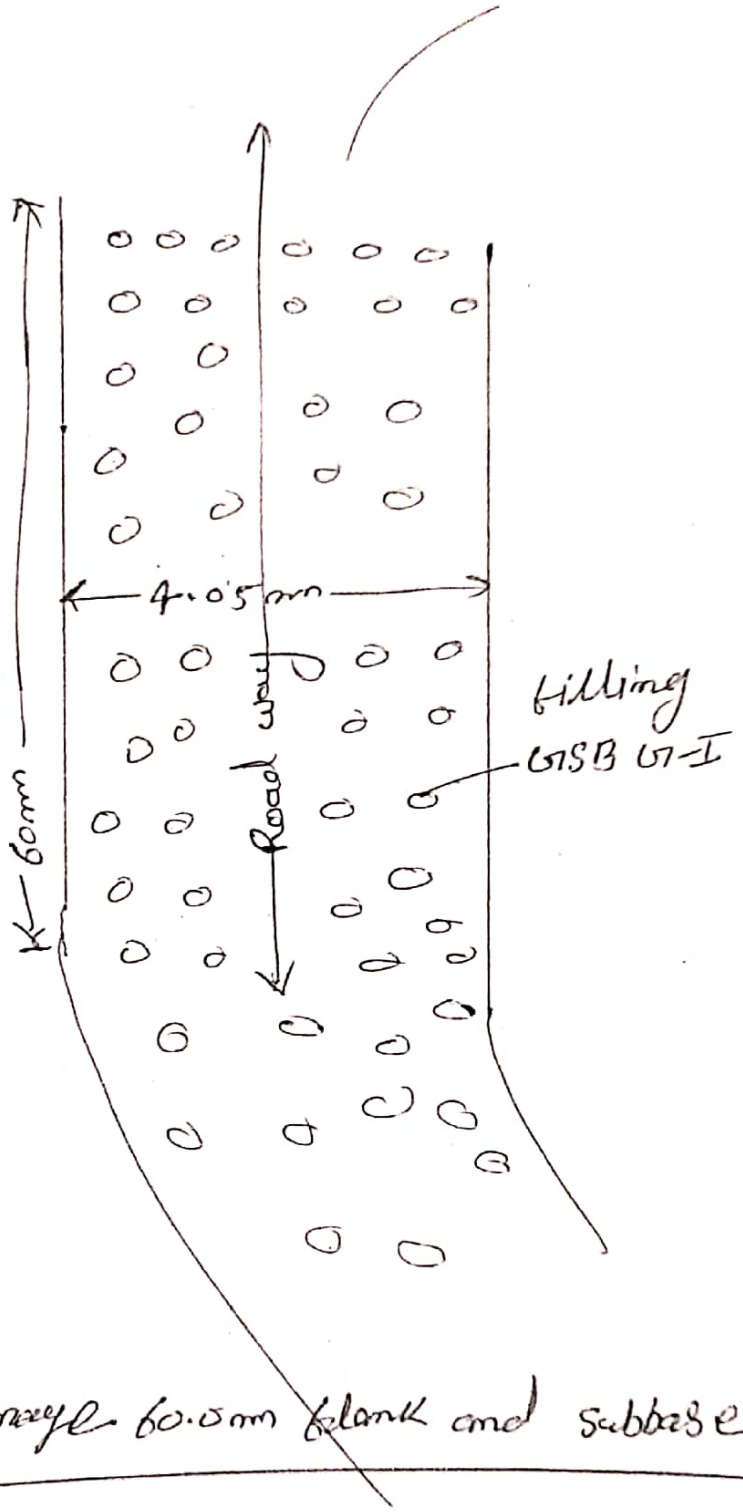
Section for flood damage road



damage 60.0mm blank and subbase

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GENERAL ABSTRACT OF COST

NAME OF ROAD : Restoration of Road from Sahpur To Laxmanpur Haat

DISTRICT Vaishali

BLOCK Jandaha

LENGTH OF ROAD (in Km) 0.105

Sl. No.	DESCRIPTION	AMOUNT (LAKHS)
1	SUPPLYING FILLING BRICK BAT COMPACTED MANUALLY	1.720
2	BAMBOO PILING	0.143
3	BAMBOO RUNNER	0.014
4	BAMBOO CHACHARI / BITUMEN EMPTY DRUM SHEET	0.383
5	PROVIDING CEMENT BAG WITH SAND	0.671
6	EARTH WORK	0.588
7	GRANULAR SUB-BASE WITH WELL GRADED I MATERIAL (TABLE 400.1)	1.152
	SUB TOTAL OF PAVEMENT COST IN LACS =	**4.670**
	TOTAL COST OF CONSTRUCTION IN LACS =	**4.670**

(A)	**Total Cost of Road Project**	**4.670**
	Add Seigniorage Fee	0.000
	Add GST @ 12% on (A)	0.584
	Add Cess @ 1% on (A)	0.047
	Grand Total	**5.300**

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Technically approved for Rs. 530000=00 (Rs. five lacs thirty thousand) only.

31.12.20
SE, RWD
Works circle Muzaffarpur

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Flood Damage Repair

COST ESTIMATE FOR CUT CLOSER

NAME Restoration of Road from Sahpur To Laxmanpur Haat
District Vaishali
Block Jandaha

Sl No.	Reference to MORD	Brief Description of Item	No.	Measurements L (m)	B (m)	D (m)	Unit	Quantity	Rate (Rs)	Amount (Rs)
1		**Supplying Filling Brick Bat Compacted Manually**								
		Supplying Filling Brick Bat Compacted Manually by CI Hammer including all complete job.								
		Left Side - 45.0 M								
			1	45.0	1.0 Avg	2.5	cum	**112.50**		
		Total					cum	**112.50**	1528.75	171,984.60
2	5.7.7 WRD	**Bamboo Piling**								
		Supplying and fixing cuting 62mm to 75mm dia Bamboo piles to size and making shoes and driving etc. complete job and as per direction of E/I		=7/2						
		45.0 M Length & 0.50 m C/C = (Left Side)	90	3.5	0.0	0.0	RM	**315.00**		
		Total					RM	**315.00**	45.55	14,348.25
3	5.7.9 WRD	**Bamboo Runner**								
		Supplying fitting and fixing 62mm to 75mm dia Bamboo Runner in position at every verticle pile with 150 mm long nails or 20 SWG GI wire or 38 SWG GI wire including cost of GI wire or nail complete job and as per direction of E/I								
		45.0 M Length x 2.0 No. =	1	90.0	0.0	0.0	RM	**90.00**		
		Total					RM	**90.00**	15.66	1,409.40
4	5.7.8 WRD	**Bamboo Chachari / Bitumen empty drum sheet**								
		Supplying fitting and fixing split Bamboo woven Chahchari in postion with 20 SWG GI wire or 75 mm to 100 mm long nails alternatively including cost of GI wire or nail complete job and as per direction of E/I								
		Left Side	1	**45.0**	2.50 (av.)		Sqm	112.500		
		Total					Sqm	**112.500**	340.19	38,271.38
5	5.7.40 WRD	**Providing Cement Bag with Sand**								
		Providing Cement Bag with Sand and labour including carriage laying fitting all complete job.								
		Left Side	1	45	1	2.5	cum	**112.50**		
						Total	Cum	**112.50**		
		Total	@		35 bag	per cum	No	**3937.50**	17.03	67,074.64

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6	3.14	**Construction of Subgrade & Eartnen Shoulder**								
		Construction of subgrade & earthen shoulders with approved material obtained from borrow pits with all lifts and lead, transporting to site, spreading, grading to required slope and compacted to meet requirement of Tables 300.2 with lead upto 1000m as per Technical Specification Clause 301.4.1								
		Right Side	1	45	1.5 Avg	0.6	cum	**40.50**		
		Right Side	2	60	1.5 Avg	0.45	cum	**81.00**		
		Both Side	2	50	1.5 Avg	0.6	cum	**90.00**		
		Left Side	1	30	1.5 Avg	0.6	cum	**27.00**		
		Both Side	2	25	1.5 Avg	0.6	cum	**45.00**		
		Right Side	1	55	1.5 Avg	0.6	cum	**49.50**		
		Left Side	1	35	1.5 Avg	0.6	cum	**31.50**		
						Total	Cum	**364.50**	161.18	58,750.11
7	4.1(I)	**Granular Sub-base with Well Graded I Material (Table 400.1)**								
		Construction of granular sub-base by providing well graded material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with three wheel 80-100 kN static roller capacity to achieve the desired density, complete as per Technical Specification Clause 401 (For Grading I Material)								
			1	45	1.5 Avg	0.15	cum	**10.13**		
			1	60	3.75	0.15	cum	**33.75**		
						Total	Cum	**43.88**	2624.77	115,161.78
									TOTAL COST	**467,000.16**

13/11/20
Junior Engineer
R.W.D. Works Section, Mahnar

13/11/20
Asstt. Engineer
R.W.D. (W) Sub Division, Mahnar

Executive Engineer
R.W.D. Works Division, Mahnar

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QUARY CHART

RESTORATION OF ROAD FROM SAHPUR TO LAXMANPUR HAAT

Aggregate for WBM Gr II

Place :-	Shekhpura
By Rail :-	121.00 km
By Road (Surface) :-	39.00 km
By Road (Unsurfaced):-	0.00 km
By Road (Kachha):-	0.00 km
Total Distance :-	160.00 km

Stone Chips (For PMC , Seal Coat & PCC)

Place :-	Mirzachouki
By Rail :-	230.00 km
By Road (Surface) :-	39.00 km
By Road (Unsurfaced):-	0.00 km
By Road (Kachha):-	0.00 km
Total Distance :-	269.00 km

Crushed Stone cum Aggregate including Gr III

Place :-	Shekhpura
By Rail :-	121.00 km
By Road (Surface) :-	39.00 km
By Road (Unsurfaced):-	0.00 km
By Road (Kachha):-	0.00 km
Total Distance :-	160.00 km

Stone Boulders

Place :-	Sheikhpura
By Rail :-	121.00 km
By Road (Surface) :-	39.00 km
By Road (Unsurfaced):-	0.00 km
By Road (Kachha):-	0.00 km
Total Distance :-	160.00 km

Coarse Sand

Place :-	Koilwer
By Rail :-	0.00 km
By Road (Surface) :-	104.00 km
By Road (Unsurfaced):-	0.00 km
By Road (Kachha):-	0.00 km
Total Distance :-	104.00 km

Moorum

Place :-	Jamui
By Rail :-	124.35 km
By Road (Surface) :-	39.00 km
By Road (Unsurfaced):-	0.00 km
By Road (Kachha):-	0.00 km
Total Distance :-	163.35 km

Cement

Place :-	Fatuha
By Rail :-	0.00 km
By Road (Surface) :-	10.00 km
By Road (Unsurfaced):-	0.00 km
By Road (Kachha):-	0.00 km
Total Distance :-	10.00 km

Fine Sand(Local Sand)

Place :-	Local
By Rail :-	0.00 km
By Road (Surface) :-	2.00 km
By Road (Unsurfaced):-	0.00 km
By Road (Kachha):-	1.00 km
Total Distance :-	3.00 km

Steel Reinforcement

Place :-	Fatuha
By Rail :-	0.00 km
By Road (Surface) :-	10.00 km
By Road (Unsurfaced):-	0.00 km
By Road (Kachha):-	0.00 km
Total Distance :-	10.00 km

RCC Pipe NP3 (1000 mm dia)

Place :-	Hajipur
By Rail :-	0.00 km
By Road (Surface) :-	41.00 km
By Road (Unsurfaced):-	0.00 km
By Road (Kachha):-	0.00 km
Total Distance :-	41.00 km

RCC Pipe NP3 (600 mm dia)-

Place :-	Hajipur
By Rail :-	0.00 km
By Road (Surface) :-	41.00 km
By Road (Unsurfaced):-	0.00 km
By Road (Kachha):-	0.00 km
Total Distance :-	41.00 km

Bitumen Emulsion

Place :-	Fathua
By Rail :-	0.00 km
By Road (Surface) :-	94.00 km
By Road (Unsurfaced):-	0.00 km
By Road (Kachha):-	0.00 km
Total Distance :-	94.00 km

Bitumen

Place :-	Barauni
By Rail :-	0.00 km
By Road (Surface) :-	94.00 km
By Road (Unsurfaced):-	0.00 km
By Road (Kachha):-	0.00 km
Total Distance :-	94.00 km

Brick

Place :-	Local
By Rail :-	0.00 km
By Road (Surface) :-	7.00 km
By Road (Unsurfaced):-	0.00 km
By Road (Kachha):-	1.00 km
Total Distance :-	8.00 km

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RATE ANALYSIS FOR CARRIAGE OF BASE MATERIAL (MINIMUM CARRIAGE)

NAME OF ROAD:- Restoration of Road from Sahpur To Laxmanpur Haat
DISTRICT:- Vaishali
BLOCK:- Jandaha

	Haulage Charge by Tipper	Haulage Charge by Truck
Carriage Cost (Surfaced Road):	Rs 8.71 Per Tonne Per Km	Rs 7.8 Per Tonne Per Km
Carriage Cost (Un Surfaced Road):	Rs 10.47 Per Tonne Per Km	Rs 9.38 Per Tonne Per Km
Carriage Cost (Kacha Road):	Rs 21.08 Per Tonne Per Km	Rs 18.88 Per Tonne Per Km

S.NO.	Material	Remarks	BY RAILWAY		BY ROAD		CARRIAGE COST BY RAILWAY	CARRIAGE COST BY ROAD	CARRIAGE BY	MINIMUM CARRIAGE	Haulage Charge by Tipper / Truck
			Lead (Km) Rail	Lead (Km) Road	Surface Road	Kaccha Road					
1	Aggregate for WBM Gr II	Shekhpura	121.00	39.00	121.00	-	1,683.31	1,848.50	RAILWAY	1683.31	Tipper
2	Stone Chips (For PMC , Seal Coat & PCC)	Mirzachouki	230.00	39.00	272.00	-	1,938.99	3,604.89	RAILWAY	1938.99	Tipper
3	Crushed Stone cum Aggregate including Gr III	Shekhpura	121.00	39.00	121.00	-	1,537.55	1,716.64	RAILWAY	1537.55	Tipper
4	GSB Material	Sheikhpura	121.00	39.00	121.00	-	1,537.55	1,785.13	RAILWAY	1537.55	Tipper
9	Fine Sand(Local Sand)	Local	-	3.00	2.00	1.00	121.16	121.16	ROAD	121.16	Tipper
15	Brick	Local	-	8.00	7.00	1.00	757.50	757.50	ROAD	757.50	Truck

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RATE ANALYSIS FOR CARRIAGE OF BASE MATERIAL

	By Truck		By Tipper	
Carriage Cost (Surfaced Road):	6.79	Rs 6.79 Per Tonne Per Km	7.40	Rs 7.4 Per Tonne Per Km
Carriage Cost (Un Surfaced Road):	8.17	Rs 8.17 Per Tonne Per Km	9.00	Rs 9 Per Tonne Per Km
Carriage Cost (Kacha Road):	16.45	Rs 16.45 Per Tonne Per Km	18.00	Rs 18 Per Tonne Per Km

NAME OF ROAD : **Restoration work of diversion over Baya River at Basudeopur village**

BLOCK : **Mahnar**

DISTRICT:- Vaishali

S.NO.	Material	Railway Frieght (Rs)	Lead Distance(Km)			Loading/ Unloading	Unit	M.F.	Carriage Cost Per Km			Total Carriage Cost
			Surface Road	Unsurfaced Road	Kaccha Road				Surface Road	Unsurfaced Road	Kaccha Road	
3	Brick Bats		7	0	1	399.00	Cum	8/4.59	82.84	0.00	28.67	510.51

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RATE ANALYSIS FOR CARRIAGE OF BASE MATERIAL (BY RAIL)

NAME OF ROAD:- Restoration of Road from Sahpur To Laxmanpur Haat
DISTRICT:- Vaishali
BLOCK:- Jandaha

Haulage Charge by Tipper

Carriage Cost (Surfaced Road): Rs 8.71 Per Tonne Per Km
Carriage Cost (Un Surfaced Road): Rs 10.47 Per Tonne Per Km
Carriage Cost (Kacha Road): Rs 21.08 Per Tonne Per Km

Haulage Charge by Truck

Carriage Cost (Surfaced Road): Rs 7.8 Per Tonne Per Km
Carriage Cost (Un Surfaced Road): Rs 9.38 Per Tonne Per Km
Carriage Cost (Kacha Road): Rs 18.88 Per Tonne Per Km

S.NO.	Material	Remarks	Lead Distance (Km) Rail	Lead Distance (Km)		Loading	Unloading	Unit	Carriage Cost Per Km		Railway Frieght (Rs)	Total Carriage Cost	Haulage Charge by Tipper / Truck
				Surface Road	Kaccha Road				Surface Road	Kaccha Road			
1	Aggregate for WBM Gr II	Shekhpura	121	39	0	77.13	18.36	Cum	592.05	0.00	995.77	1683.31	Tipper
2	Stone Chips (For PMC , Seal Coat & PCC)	Mirzachouki	230	39	0	77.13	18.36	Cum	544.59	0.00	1,298.91	1938.99	Tipper
3	Crushed Stone cum Aggregate including Gr III	Shekhpura	121	39	0	77.13	18.36	Cum	544.59	0.00	897.47	1537.55	Tipper
4	GSB Material	Sheikhpura	121	39	0	77.13	18.36	Cum	544.59	0.00	897.47	1537.55	Tipper
5	Stone Boulders	Sheikhpura	121	39	0	77.13	18.36	Cum	679.38	0.00	1,072.31	1847.18	Tipper
6	Coarse Sand	Koilwer	0	104	0	41.07	18.36	Cum	1452.25	0.00	-	1511.68	Tipper
7	Moorum	Jamui	124.35	117	0	41.07	18.36	Cum	1358.76	0.00	706.42	2124.61	Tipper
8	Cement	Fatuha		10	0	167.36	167.36	MT	78.00	0.00		412.72	Truck
9	Fine Sand(Local Sand)	Local		2	1	41.07	18.36	Cum	27.93	33.80		121.16	Tipper
10	Steel Reinforcement	Fatuha		10	0	178.14	178.14	Tonne	78.00	0.00		434.28	Truck
11	RCC Pipe NP3 (1000 mm dia)	Hajipur		41	0	47.51	31.96	RM	255.84	0.00		335.31	Truck
12	RCC Pipe NP3 (600 mm dia)-	Hajipur		41	0	20.36	13.70	RM	102.34	0.00		136.40	Truck
13	Bitumen Emulsion	Fathua	57	39	0	199.09	184.83	MT	304.20	0.00	914.99	1603.11	Truck
14	Bitumen	Barauni	57	39	0	199.09	184.83	MT	304.20	0.00	817.43	1505.55	Truck
15	Brick	Local		7	1	231.79	231.79	1000 No.	218.40	78.52		757.50	Truck

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RATE ANALYSIS FOR CARRIAGE OF BASE MATERIAL (BY ROAD)

NAME OF ROAD:- Restoration of Road from Sahpur To Laxmanpur Haat
DISTRICT:- Vaishali
BLOCK:- Jandaha

Haulage Charge by Tipper		Haulage Charge by Truck	
Carriage Cost (Surfaced Road):	Rs 8.71 Per Tonne Per Km	Carriage Cost (Surfaced Road):	Rs 7.8 Per Tonne Per Km
Carriage Cost (Un Surfaced Road):	Rs 10.47 Per Tonne Per Km	Carriage Cost (Un Surfaced Road):	Rs 9.38 Per Tonne Per Km
Carriage Cost (Kacha Road):	Rs 21.08 Per Tonne Per Km	Carriage Cost (Kacha Road):	Rs 18.88 Per Tonne Per Km

S.NO.	Material	Remarks	Lead Distance (Km)		Loading	Unloading	Unit	Carriage Cost Per Km		Total Carriage Cost	Haulage Charge by Tipper / Truck
			Surface Road	Kaccha Road				Surface Road	Kaccha Road		
1	Aggregate for WBM Gr II	Shekhpura	121	0	135.69	67.84	Cum	1644.97	0.00	1848.50	Truck
2	Stone Chips (For PMC , Seal Coat & PCC)	Mirzachouki	272	0	135.69	67.84	Cum	3401.36	0.00	3604.89	Truck
3	Crushed Stone cum Aggregate including Gr III	Shekhpura	121	0	135.69	67.84	Cum	1513.11	0.00	1716.64	Truck
4	GSB Material	Sheikhpura	121	0	77.13	18.36	Cum	1689.64	0.00	1785.13	Tipper
5	Stone Boulders	Sheikhpura	121	0	77.13	18.36	Cum	1887.60	0.00	1983.09	Tipper
6	Coarse Sand	Koilwer	104	0	67.84	42.35	Cum	1300.52	0.00	1410.71	Truck
7	Moorum	Jamui	117	0	67.84	42.35	Cum	1216.80	0.00	1326.99	Truck
8	Cement	Fatuha	10	0	167.36	167.36	MT	78.00	0.00	412.72	Truck
9	Fine Sand(Local Sand)	Local	2	1	41.07	18.36	Cum	27.93	33.80	121.16	Tipper
10	Steel Reinforcement	Fatuha	10	0	178.14	178.14	Tonne	78.00	0.00	434.28	Truck
11	RCC Pipe NP3 (1000 mm dia)	Hajipur	41	0	47.51	31.96	RM	255.84	0.00	335.31	Truck
12	RCC Pipe NP3 (600 mm dia)-	Hajipur	41	0	20.36	13.70	RM	102.34	0.00	136.40	Truck
13	Bitumen Emulsion	Fathua	85	0	199.09	184.83	MT	663.00	0.00	1046.92	Truck
14	Bitumen	Barauni	94	0	199.09	184.83	MT	733.20	0.00	1117.12	Truck
15	Brick	Local	7	1	231.79	231.79	1000 No.	218.40	75.52	757.50	Truck

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