



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

DETAILED PROJECT REPORT FOR FDR



Name of the Road :- Restoration work of the road from house of Nand Kishor Sah to house of Rajdev Sah

DISTRICT - Vaishali

DIVISION - Hajipur

BLOCK - Bhagwanpur

TOTAL LENGTH OF ROAD	:	0.155	KM
CONSTRUCTION COST	:	2.273	Lac

Submitted By :-
Executive Engineer
RWD Work Division

बिहार * सरकार

ग्रामीण कार्य विभाग

अंचल - ग्रामीण कार्य विभाग, कार्य अंचल
भुजफरपुर ।

प्रमंडल - ग्रामीण कार्य विभाग, कार्य प्रमंडल,
हाजीपुर ।

अवर प्रमंडल - ग्रामीण कार्य विभाग, कार्य अवर
प्रमंडल, मगवानपुर ।

प्रवारा - ग्रामीण कार्य विभाग, कार्य प्रवारा
मगवानपुर ।

कार्य का नाम - नन्दकिशोर साह के घर से राजदेव
साह के घर तक पथ में क्षतिग्रस्त
पथोन्नति का मरम्मत कार्य ।

क्षतिग्रस्त पथोन्नति की लम्बाई - 30 मीटर

2,27,298
प्राक्कलित राशि - ₹ 3,66,800.00

Name of work - Restoration work of the road
from house of Nand Kishore Sah to
house of Rajdev Sah under F.D.R.

- ① Providing, laying, spreading and
compacting of Thane metal - do -
job.

$$30 \times 4.50 \times \frac{1.20 + 0.60}{2} = 121.50 \text{ m}^3$$

less 10% for voids $\rightarrow 12.15 \text{ m}^3$

$$\text{Net Qty} = 109.35 \text{ m}^3$$

$$@ \text{Rs } 2033.34 / \text{m}^3$$

$$\text{Rs } 2,22,346/-$$

- ② Providing and laying of R.C.C pipe
duct of 300 mm dia - do - job.

$$2 \times 2.5 \text{ m} = 5 \text{ m} @ \text{Rs } 990.32 / \text{m} = \text{Rs } 4952/-$$

Total Rs 2,27,298 = 00
Say Rs 2,27,300
(Including 12% G.S.T &
1% L.C)

[Signature]
6.10.20

J.E

R.W.D

Bhagwanpur

[Signature]
6/10/20
A.E

R.W.D

(w) Sub-Div

Bhagwanpur

[Signature]
E.E

R.W.D

(w) Division

Hayipur.

Technically approved for Rs 2,27,300 = 00 (Rupees
two lakh twenty seven thousand three hundred) only.

[Signature]
S.E

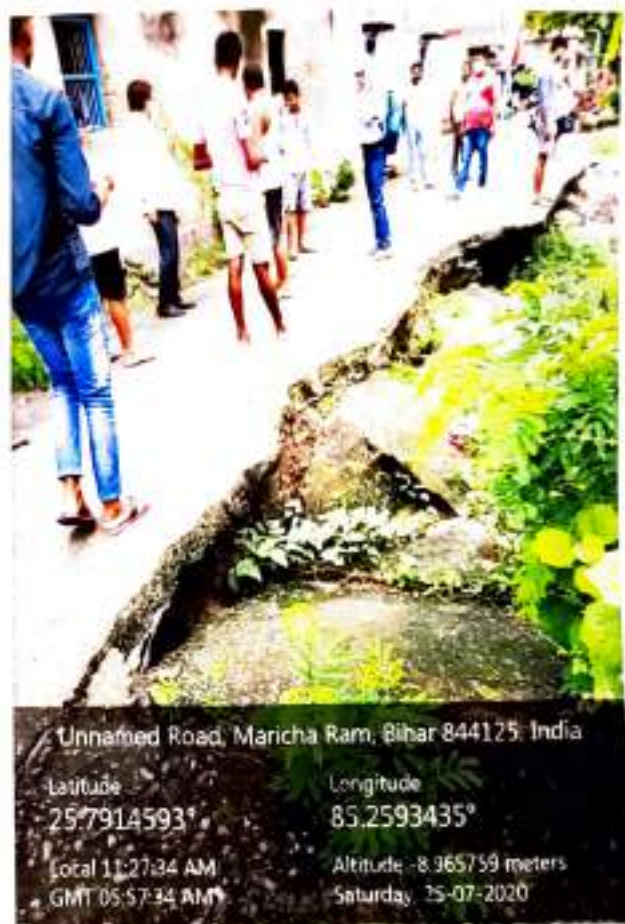
R.W.D

(w) Circle Muzaffar

Name of work: - Restoration work of the road
from house of Nand Kishor Sah to
house of Rajdeo Sah.

Block- Bhayanspur Dist- Varanasi

R.W.D (W) Division Hajipur



Unnamed Road, Maricha Ram, Bihar 844125, India

Latitude
25.7914593°

Longitude
85.2593435°

Total 11:27:34 AM
GMT 05:57:34 AM

Altitude: 8.365759 meters
Saturday, 25-07-2020

Sumit
6.10.20
J.S.

Ram
6/10/20
A.E

Sumit
6/10
E.E

Name of work - Restoration work of the road
from house of Nand Kishor Sah to
house of Rajdev Sah.

Block - Bhagwanpur , Dist - Varanasi

R.W.D. (W) Division Hajipur

3607



Unnamed Road, Maricha Ram, Bihar 844125, India

Latitude
25.7914829°

Longitude
85.2593114°

Local 06:44:30 PM
GMT 01:14:30 PM

Altitude -15.208771 meters
Sunday, 26-07-2020



Unnamed Road, Maricha Ram, Bihar 844125, India

Latitude
25.7914442°

Longitude
85.2593448°

Local 06:45:42 PM
GMT 01:15:42 PM

Altitude -10.744873 meters
Sunday, 26-07-2020

Man
6/10/20
JB

Ran
6/10/20
AE

Jan
6/10
E.E

Name of work - Restoration work of the road
from house of Mand Mishra Sahi to
house of Rajdwar Sahi.

Block - Bhagwanpur Dist. Muzaffarpur

R.W.D (10) Division Muzaffarpur.



Unnamed Road, Maricha Ram, Bihar 844125, India

Latitude 25.7914737° Longitude 85.2594299°
Local 05:10:45 PM Altitude -26.682739 meters
GMT 11:40:45 AM Tuesday, 28-07-2020



Unnamed Road, Maricha Ram, Bihar 844125, India

Latitude 25.7914693° Longitude 85.259425°
Local 03:57:59 PM Altitude -26.447174 meters
GMT 10:27:59 AM Wednesday, 29-07-2020

May
8.10.20
JE

Ranika
6/10/20
AE

Jan
6/10
F.F.

Name of work! - Restoration work of the road
from house of Nand Kishor Sah
to house of Rajdev Sah.

Block - Bhagwanpur, Dist - Vaishali

R.W.D(W) Division, Hajipur.



Unnamed Road, Maricha Ram, Bihar 844125, India

Latitude 25.7916111° Longitude 85.2595459°
Local 01:02:31 PM Altitude 25.974426 meters
GMT 07:32:31 AM Thursday, 30-07-2020



Unnamed Road, Maricha Ram, Bihar 844125, India

Latitude 25.7916111° Longitude 85.2594135°
Local 02:17:23 PM Altitude 7.577942 meters
GMT 08:47:23 AM Thursday, 30-07-2020

Σ Mm
6/10/20
JB

Ranika
6/10/20
AE

Σ Mm
6/10/20
F.F

Name of work! - Restoration work of the road
from house of Nandkishor Sah
to house of Rajdev Sah.

Block - Bhagwanpur, Dist - Vaishali
R/W D(10) Division, Hajipur.



Unnamed Road, Maricha Ram, Bihar 844125, India

Latitude 25.791487° Longitude 85.2593085°
Local 05:24:00 PM Altitude -19.050995 meters
GMT 11:54:00 AM Thursday, 30-07-2020



Unnamed Road, Maricha Ram, Bihar 844125, India

Latitude 25.7915982° Longitude 85.259383°
Local 06:24:22 PM Altitude -7.616638 meters
GMT 12:54:22 PM Thursday, 30-07-2020

Dis
6.10.20
JR

Rank 6/10/20
KE

9/10
4/10
E.E

Chapter 1 LOADING, UNLOADING, CARRIAGE CRUSHING OF MATERIALS AND SETTING OUT

Notes: 1. Rates are for self quantities after deduction of waste.
2. Part of the quantity 1 km will be payable for the 1st km.

Sl. No.	Reference to B.O.D Specifications	Description	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
1.2		Loading and unloading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work				
	(i)	Loading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by mechanical means including a load upto 20 m				
		Placing tipper at loading point, loading with front end loader including time for haulage and return trip				
		Unit = cum				
		Taking output = 5.5 cum				
		Time required for				
		(a) Positioning of tipper at loading point	Min	1.00		
		(b) Loading by front end loader 1 cum bucket capacity @ 45 cum per hour	Min	7.33		
		(c) Manoeuvring, reversing, dumping and turning for	Min	2.00		
		(d) Waiting time, unforeseen contingencies, etc.	Min	2.00		
		Total	Min	12.33		
	(a)	Machinery				
		(i) Tipper 10 t capacity	hour	0.218	1,560.00	177.37
		(ii) Front end loader 1 cum bucket capacity @ 45 CUM PER HOUR	hour	0.122	1,400.00	171.57
	(b)	Overheads @ 8.5% on (a)				20.31
	(c)	Contractor's Profit @ 18.5% on (a+b)				
		Cost for 5.5 cum = a+b+c				422.45
		Total				422.45
		Rate per cum = (a+b+c)/5.5				76.81
	(ii)	Unloading of Earth, Sand, lime, moorum, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Manure, Crushed Slag, Flyash, Stone for Masonry Work by mechanical means				
		Unit = cum				
		Placing tipper at loading point, loading with front end loader including time for haulage and return				
		Unit = cum				
		Taking output = 5.5 cum				
		Time required for				
		(a) Positioning of tipper at loading point	Min	1.00		
		(b) Loading by front end loader 1 cum bucket capacity @ 100 cum per hour	Min	2.00		
		(c) Waiting time, unforeseen contingencies, etc.	Min	2.00		
		Total	Min	5.00		
	(a)	Machinery				
		(i) Tipper 12 t capacity	hour	0.20	1,000.00	80.00
	(b)	Overheads @ 8.5% on (a)				6.80
		Cost for 5.5 cum = a+b+c				86.80
		Rate per cum = (a+b+c)/5.5				15.78

BRICK BATS PITCHING MANUAL MEANS

1.6.1
1100
1200

Labour for laying dry graded Jhama Khoo 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 = 1 Cum				
Unskilled Mazdoor				
Add 6% Overhead Charges	Nos.	0.7945	287.00	228.92
Rate for 1 Cum				13.68
Rate per Cum (Rs.) -				241.70
				241.70

1.6.2
1100
1200

Cost of 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

a) Machinery.

Tipper 10 t capacity

Haulage with load

Empty return trip

b) Overhead charges @ 0.06 on (a)

Cost for 100 t.km = a+b+c

Rate per t.km = (a+b+c)/100

Say Rs. -

Case-III: Katcha Track and Track in River Bed/Nallah Bed and Choe Bed

a) Machinery

Haulage with load

Haulage with load

Empty return trip

b) Overhead charges @ 0.06 on (a)

Cost for 100 t.km = a+b

Rate per t.km = (a+b)/100

Say Rs. -

hour	0.40	1043.00	417.20
hour	0.29	1043.00	302.47
			43.18
			762.85
			7.60
			7.60
hour	1.00	1043.00	1043.00
hour	0.67	1043.00	698.81
			104.51
			1846.32
			18.46
			18.46

Inspection Report for Flood Damage Work

Date

1. Name of P.W.D. E. F. R.W.D. Mysore
2. Name of Block/Road Bhagawanpur, House of Mand Kishor
A. For Road Sch to house of Rajalev Sch.

1. Damage Location/Chainage CH 0/120M to 0/150M
2. Damage Length 30 M
3. Nature of Damage Flood

4. Details of Restoration Works
i. Material being used in Restoration works Brick Bats.
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

Signature 6.10.20 6/10/20
Signature of JE/AE/EE

Signature 6/10
(Name of Inspector)

BRICK BATS PITCHING MANUAL MEANS

1.1 RCD Loading and Unloading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by Mechanical Means

Rate per cum = $(a+b+c)/5.5$

Note:- Unloading will be done manually.

1.	Suplying for Brick Bats (with OH)				92.89
A.	Basic Rate of Brick Bats				
	Add overhed Charges				
	Total -	Per Cum			
	Surface Lead			1259.00	1259.00
	Unsurface Lead		6%		75.54
	Factor (10/5.5)	KM			1334.54
		KM	7		
B.	Carriage (with OH)	Cum	1		
	$(1.8182 \times 7 \times 7.6) + (1.8182 \times 1 \times 18.46) + 92.89$		1.8182		
C.					
	Cost of Labour for Pitching and Light Ramming as per WRD SOR 6.6.1 (with OH)				223.18
	Total (A+B+C) -				
	Total Cost per Cum				241.70
	Add GST 12% & LC 1%				1799.42
				Rs.-	1799.42
				Rs.-	233.92
					2033.34

Sl. No.	Item No.	Description	Unit	Quantity	Rate	Amount
		Cable Duct Across the Road				
		Providing and laying of a reinforced concrete pipe duct 300 mm dia. across the road (over construction) extending from drain to drain in cuts and rise of slope as rise of slope in this construction level while at both ends providing a minimum 60° triangular material over top and sides of R.C. pipe as per (B.I. 105) 1977 provided not less than 100 mm layer of granular material free of rock pieces, stone or other deleterious material and disposal upto a lead of 50 m. dressing of sides and bottom and backfilling in trenches with excavated suitable material.				
		minimum 450 mm in case of double and triple run ducts. joints to be made leak proof. in wet level of duct to be at least 100 mm				
		Taking output = 20 m				
		a) Labour				
		Mate				
		Mazdoor (skilled)	day	0.700	305.00	213.50
		Mazdoor (Unskilled)	day	0.250	287.00	71.75
		b) Material				
		Reinforced Cement Concrete pipe 300 mm dia	Rm	20.000	566.51	11330.20
		Local Sand for bedding and sides of pipe	Cum	7.200	141.85	1021.32
		Collar for joints 300 mm dia	Each	9.000	118.00	1062.00
		Cement mortar 1:2 for joints	Cum	0.020	4642.82	92.86
		c) Machinery				
		Tractor-trolley	Hour	0.500	549.10	274.55
		d) Overheads @ 6% on (a+b+c)				97.88
		e) Contractor's profit @ 0.1 on (a+b+c+d)				9.79
		(e) Contractor's profit @ 10% on (a+b+c+d)				15.17
		Cost for 20 Rm = a+b+c+d+e				12668.77
		Rate per Rm = a+b+c+d+e/20 Sub Total				633.44
		Carriage Cost				
		Local Sand				
		Rate per Rm = a+b+c+d+e/20 Final	Cum	0.36000	116.75	42.03
		SUB HEAD ANALYSIS OF CULVERT / MINOR BRIDGES ITEMS				
		Total Cost	Rm			876.37
		Add 12% (6% + 6%)				104.16
		1% L.C.S. - T = 990.32				990.32
11.1	300	Excavation for Structures				
		Earthwork in excavation for structures as per drawing and technical specifications Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50 m. dressing of sides and bottom and backfilling in trenches with excavated suitable material.				
		1. Ordinary soil				
		(i) Upto 3 m depth				
		Unit = cum				
		Taking output = 10 cum				
		a) Labour				
		Mate				
		Mazdoor (Unskilled)	day	0.32	305.00	97.60
		b) Overheads @ 6% on (a)	day	8.00	287.00	2296.00
		c) Contractor's profit @ 10% on (a+b)				11.11
		Cost for 10 cum = a+b+c				251.71
		Rate per cum = (a+b+c)/10	cum			25.17
		Rate per cum = (a+b+c)/10 =	cum			27.98
		NOTE:				
		I Cost of dewatering may be added, where required, up to 10 per cent of labour cost. Assessment for dewatering shall be made as per site conditions.				27.98
9.2	1100 & 800	Type B (First Class) Bedding				
		Laying (First Class) bedding on well compacted sand, moorum or approved granular material as per Clause 1105 (u)				
		Filling in foundation trenches as per drawing and technical specification Clause 305.3.9				
		1. Sand filling				
		Unit = cum				
		a) Labour				
		Mate				
		Mazdoor (Unskilled)	day	0.01	305.00	3.05
		b) Material	day	0.30	287.00	86.10
		Sand (assuming 20 per cent voids)	cum	1.20	141.85	170.22
		c) Overheads @ 6% on (a+b)				35.33
		d) Contractor's profit @ 10% on (a+b+c)				27.49
		CARRIAGE COST				
		sand				
		Rate per cum = a+b+c	Cum	1.2	116.75	140.10
		Total Cost	CUM			412.50
						442.50