

RURAL WORKS GOVT OF DEPARTMENT



Name of road -Maharani ashthan to bagmati bandh

BLOCK

Runnisaidpur

FDR

Rs. 1155548.00

Year - 2019-20

NAME OF CIRCLE - R.W.D., WORKS CIRCLE, SITAMARHI

NAME OF DIVISION - R.W.D., (W) DIVISION, BELSAND

प्रतिवेदन

पथ का नाम:- महाराणी रूपायन रे, को वातामनी बॉय पथ
सालान प्राक्कलन 2020 के जुलाई माह में वनकी लेट्टर प्रखंड
में आई भविष्य

बाह से क्षतिग्रस्त महाराणी रूपायन रे, वातामनी बॉय

पथ में बाढ़ से क्षतिग्रस्त मरम्मत मद से यातायात चालू करने हेतु तैयार किया गया है,

पथ की प्राक्कलित राशि Rs. 1155 548-00 (उभारें मात्र पन्चपन
हजार पाँच सौ अड़तालीस रुपये) है।

पथ के क्षतिग्रस्त भाग में आवश्यकता अनुसार Brick Bats, Rabbish भरकर यातायात
चालू करने का प्रावधान किया गया है।

प्राक्कलन वर्तमान अनुसूचित दर पर बनाया गया है।


विकास अभियंता
ग्रामीण कार्य विभाग, बेलसंड


सहायक अभियंता
ग्रामीण कार्य विभाग, बेलसंड


कार्यपालक अभियंता
ग्रामीण कार्य विभाग, बेलसंड

DETAILED ESTIMATE FOR F.D.R.

General Abstract of Cost

Name of Road : Name of road -Maharani ashthan to bagmati bandh
 Length of Road : 1.500 km
 Block : Runnisaidpur
 DISTRICT : SITAMARHI

S.No.	Particulars	Total Cost (in Thousands)
1	Total Cost for Motorable Roads	1022609.00
2	Labour cess @1%	10226.09
3	GST @12%	122713.08
	Total Cost of Road Repair	1155548.17
	Say	1155548.00

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Technically approved for Rs 1155548.00 (Rupees eleven lacs fifty-five thousand five hundred forty eight) only.

E. B. Shekhar श्री जी-ए
 योजनार्थ 214/17/2/21
 सुपारी परान्त आंक 09/5/21
 को उपलब्ध है।

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 10/5/21

INPUT DATA

DISTRICT

SITAMARHI

HABITATION CODE

BLOCK

Runnisaipur

ROAD DETAILS

From (Chainage)

To (Chainage)

Flush Drain(Cum)

Road Connecting To

Brick Soling for Dismantling

CC Road for Dismantling

BT road for Dismantling

Name of road -Maharani ashthan to bagmati bandh

Prepared By

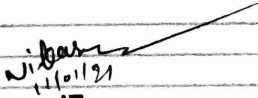
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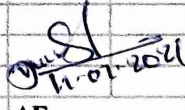
Works Division, Belsand

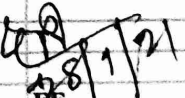
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<u>Schedule of Quantity</u>	
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Name of road -Maharani ashthan to bagmati bandh		Block	Runnisaaidpur	
S.No	DESCRIPTION OF ITEMS	UNIT	RATE	AMOUNT
1	Sand Filling in Foundation Trenches as per Drawing & Technical Specification.	583.81 Cum	401.00	234106.61
2	Providing and laying of Brick bat obtained from chimney with machanical means with all spreading, grading to required slope and compacted at OMC to acheive required density with all complete as per the direction of engineer in charge.			
	80% of brick bats	455.39 Cum	1546.00	704028.30
3	Single bamboo palasiding / walling of whole 2nd class bamboo (Jati or Bethua) 75mm dia and closely packed & driven including fitting fixing with half bamboo karnis horizontally in three rows with cane or tying with wire complete and struts 1.5 m apart longitudinally and providing brush wood as per drawing and technical specifications Clause 1302.5	0.00 m	172.62	0.00
4	Providing ,laying and placing empty cement bag filled with local sand including stiching with sutali etc. ----- do ----- do-----all complete job as per specification and direction of E/ I.(Including Royalty and all Taxes)	0.00 no.	23.12	0.00
5	Providing and Laying Reinforced Cement Concrete Pipe NP3 as per design in Single Row with old available pipe	0.00 m	3158.69	0.00
6	Providing Quarry Material Rabbish for filling the voids in bricks bats -----do----- all complete job as per specification and direction of E/I.			
	Taking 20% of rubbish only	113.85 Cum	742.00	84473.73
			Total	1022608.64
			Say	1022609.00


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Name of work— Maharani ashtan to Bagmati bandh

	Length	Width	Height	Quantity
Brick bats-----	30.00	2.250	0.900	60.750
	11.00	1.800	0.950	18.810
	6.600	3.750	0.600	14.850
	93.00	3.25	0.950	287.137
	10.00	2.250	0.850	19.125
	5.100	3.050	0.600	9.333
	7.800	3.050	0.900	21.411
	14.600	3.450	0.900	41.793
	5.00	1.130	0.600	3.390
	7.600	2.200	0.600	10.032
	4.400	3.800	0.600	9.504
	5.00	0.900	0.900	4.050
	4.900	0.600	0.600	1.764
	9.00	3.700	0.900	29.970
	4.400	1.650	0.900	6.534
	9.00	3.800	0.900	30.780
				569.233m3
Loca sand	93.00	4.65(av.)	1.35(av.)	583.807m3

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BASIC RATES AS PER LATEST SOR AS ON 28/07/2016

(A) Labour

Sl. No.	Description of Labour	Unit	Rate (Rs.)
L-01	Bhisti	day	242
L-02	Bitumen Sprayer(semi skilled)	day	261
L-03	Blacksmith,special	day	295
L-04	Blaster, 2nd class	day	408
L-05	Carpenter 1st Class	day	330
L-06	Chips spreader, semi-skilled	day	295
L-07	Chiseller	day	309
L-08	Dresser (Skilled)	day	309
L-09	Driller, 2nd class	day	295
L-10	Electrician,skilled	day	312
L-11	Fitter, skilled	day	336
L-12	Mason (1st class)	day	342
L-13	Mason (2nd Class)	day	295
L-14	Mate, Semi skilled	day	284
L-15	Mazdoor (Unskilled)	day	268
L-16	Mazdoor (Semi skilled)	day	268
L-17	Mazdoor (Skilled)	day	340
L-18	Painter (1st class)	day	312
L-19	Plumber, Special	day	312
L-20	Surveyor	day	298
L-21	White Washer	day	312

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11/01/21

BASIC RATES AS PER LATEST SOR AS ON 28/07/2016
(B) USAGE RATES OF PLANT & MACHINERY

Sr. No.	Description of		Output of Machine		Usage Rates in Rs.	
	Machine	Activity	Unit	Output	Unit	Rate
PM-001	Air Compressor 210 cfm	Supplying compressed air	cfm	210.00	per hour	437.00
PM002	Batch mix HMP 40-60 TPH	BM, DBM, SDBC, IFW	t/h	50.00	per hour	21,633.00
PM003	Batch type HMP 30/40 TPH	BM, DBM, SDBC, IFW	t/h	35.00	per hour	2,775.00
PM004	Bitumen boiler oil fired 200 ltr 1000 ltr	Heating of bitumen	litre / h	400.00	per hour	270.00
			litre / h	2000.00	per hour	270.00
PM005	Bitumen emulsion pressure distributor	Applying bitumen tack coat	sqm/h	1750.00	per hour	1,463.00
PM006	Concrete mixer 0.28/0.4 cum	Mixing of ingredients	cum/h	2.50	per hour	80.00
PM007	Crane upto 3.5T	Lifting of material			per hour	1,163.00
PM-008	Dozer D 50	Dozing cutting CLEANING	cum/h	200.00	per hour	3,009.00
			cum/h	100.00	per hour	3,009.00
PM009	Electric generator set, 125 KVA	Electricity generation	KVA	100.00	per hour	2,502.00
PM010	Emulsion sprayer with tractor	Spraying of Emulsion	sqm/h		per hour	1,091.00
PDM011	Front end-loader 1 cum bucket capacity @ 45 cum/hour	Loading soil/Aggregates	cum/h	45	per hour	1,291.00
		Loading Soil	cum/h	100.00	per hour	1,291.00
PM012	Hydraulic broom with tractor	Surface cleaning	sqm/h	1250.00	per hour	522.00
PM013	Hydraulic Excavator 0.9cum	Excavation	cum/h	100.00	per hour	1,775.00
PM014	Hydraulic self propelled chip spreader	Surface Dressing	sqm/h	1500.00	per hour	3,594.00
	Jack Hammer with tractor	Pavement breaking & rock drilling	cum/h	05. to 1	per hour	1,163.00
PM016	Joint Cutting Machine with 2-3 blades	Cutting of Joints	h		per hour	317.00
PM017	Mixall 6-10 t capacity	Mixing of bituminous materials	t/h	8.00	per hour	1,547.50
PM018	Motor Grader 3.35m blade	Scarifier & levelling	cum/h	200.00	per hour	2,674.00
PM054	Tractor Mounted Grader			50.00	per hour	481.00
PM019	Needle vibrator	Vibrating cement concrete mix	cum/h	3.50	per hour	76.35
PM020	Paver finisher Hydrostatic with sensor control 100TPH	Laying/DBM/BM/SDBC/	t/h	75.00	per hour	1,318.00
PM021	Plate compactor	Compaction	cum/h		per hour	423.00
PM022	Plate vibrator	Compaction	cum/h		per hour	423.00
PM023	Screed vibrator	Compaction	cum/h		per hour	102.64
PM024	Smooth wheeled 80-100 kN tandem roller	Compaction of Sub-base/ Asphalt	cum/h	30.00	per hour	736.00
PM025	Stone crusher (Integrated) of 200 TPH	Crushing of Spalls	t/h	200.00	per hour	11,820.00
PM026	Three wheel 80-100 kN Static Roller	Compaction/ Rolling			per hour	736.00
		Earth:- Embankment or sub-grade	cum/h	80/70		736.00
		Sub-base G-I	cum/h	10.00		736.00
		Sub-base G-II/G-III	cum/h	8.00		736.00
		WMM	cum/h	16.00		736.00
		BUSG	cum/h	10.00		736.00
		BM 50/75 mm	cum/h	12.00		736.00
		Premix 20 mm	sqm/h	250.00		736.00
		Seal Coat	sqm/h	500.00		736.00
		Surface Dressing 1st Coat	sqm/h	400.00		736.00
		Surface Dressing 2nd Coat	sqm/h	500.00		736.00
PM027	Tipper 5.5 cum/10 t	Carriage	cum/trip	5.50	per hour	957.00
PM028	Tractor with Disc Harrows (Rotavator)	Pulverisation of soil	cum/h	80.00	per hour	495.00
PM029	Tractor with ripper @ 60 cum per hour	Ripping Pavements, uprooting trees	cum/h	60.00	per hour	533.00
PM030	Tractor with trolley	Transportation of materials	t/trip	3 to 5	per hour	495.00
PM031	Tractor with Rotavator	Scarifier	cum/h	25.00	per hour	517.00
PM032	Truck 10 t capacity	Carriage	cum/trip	5.50	per hour	929.00
PM033	Vibratory roller 80-100 kN	Compaction of soil WMM	cum/h	100.00	per hour	1,915.00
		Compaction of BM	cum/h	60.00	per hour	1,915.00
PM034	Water tanker 6 kl capacity (Truck Mounted)	Carriage of water	litre / h	12000.00	per hour	166.00
PM035	Wet mix plant (75TPH)	Wet Mix	cum/h	25.00	per hour	1,643.00
PM043	Road Marking Machine	Wet Mix	cum/h	100.00	per hour	128.00

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BASIC RATES

Sl. No.	SOR Code	Description	Unit	Basic Rate as per SOR	Deduct Tax/Royalty	Basic Rate Exclusive Royalty	after GST 5%	Rate Including GST	Final Rate Including GST+Royalty
M-001		Bamboo (2nd Class) 75mm dia, 1.8 m - 2.5 m long	No.	17.58	15.63	15.63	28%	20.00	20.00
M-002	M-063	Cost of sand and empty bag	No.	7.19	1.75	5.44	5%	5.71	7.460
M-003	M-007	Brick bat	cum	958.65	11.60	947.05	5%	994.40	1,006.00
M-004	M-072	Binding wire	kg	59.37	52.77	52.77	18%	62.27	62.27
M-005	M-006	Sand (Fine)	cum	113.67	50.00	63.67	5%	66.85	116.85
		Rabbish	cum						303.85
		Hume Pipe 1000mm dia	m						2744.5

Vikas
11/9/21

RATE ANALYSIS FOR CARRIAGE OF BASE MATERIAL												
		7.99	6.79									
Carriage Cost (Surfaced Road):		7.99	6.79									
Carriage Cost (Un Surfaced Road):		9.61	0.00									
Carriage Cost (Kacha Road):		19.34	16.45									
BLOCK		Runnisaipur			DISTRICT:- SITAMARHI							
S.NO.	Material	Railway Freight (Rs)	Lead Distance(Km)		Loading	Unloading	Unit	Carriage Cost Per Km		Total Cost with Carriage	SOURCE	
			Surface Road	Unsurfaced Road				Kaccha Road	Kaccha Road			
1	Fine Sand(Local Sand)	0	2	0	1	47.34	Cum	21.77	0.00	26.37	142.81	Local
2	Brick bat	0	7	0	1	199.50	1000 no	190.12	0.00	65.80	654.91	Local
3	Rabbish	0	7	0	1	47.34	Cum	76.20	0.00	26.37	197.24	Local
4	Hume Pipe	0	18	0	0	33.37	MT	97.78	0.00	0.00	164.52	Local

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Single bamboo palasiding / walling of whole 2nd class bamboo (Jati or Bethua) 75mm dia and closely packed & driven including setting fixing with half bamboo karnis horizontally in three rows with cane or tying with wire complete and struts 1.5 m apart longitudinally and providing brush wood as per drawing and technical specifications Clause 1302.5

A)

Driven at least 600 mm below ground and 1200 mm above ground

Unit = Running metre

Taking Output = 3.00 metre

a) Materials		Materials			
1st Class Bamboo 65 mm to 75 mm dia, (1.2 m to 3.0 m)	nos.	9.00	15.00	135.00	
2nd Class Bamboo 65 mm to 75 mm dia, (1.2 m to 3.0 m)	nos.	1.50	20.00	30.00	
Binding Wire	kg	0.15	62.27	9.34	
Brush Wood (LS Rs. 10.00)	LS			10.00	
b) Labour		Labour			
Mate	day	0.04	305.00	12.20	
Mazdoor (Unskilled)	day	1.00	287.00	287.00	
Sundries (LS Rs. 5.00)	LS			5.00	
Overhead charges 6% on (a+b+c)				29.31	
Contractor's profit @ 10% on (a+b+c+d)				0.00	
Cost for 3 metre = a+b+c+d+e				517.85	
Rate per metre = (a+b+c+d+e) / 3.00				172.62	
Add Cess 1%				0.00	
Finished Rate / m				172.62	

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Providing, laying and spreading brick bat in ditches —do—do— all complete job as per specification and direction of E/I.

Assuming = 300 sqm

a) Material		Material			
Brick bat	cum	360.00	1021.23	367642.80	
b) Labour for placing and spreading		Labour for placing and spreading			
Mazdoor (skilled)	nos.	2.00	364.00	728.00	
Mazdoor (Unskilled)	nos.	8.00	287.00	2296.00	
mate	nos.	0.40	305.00	122.00	
Overhead charges 6% on (a+b)				22,247.33	
Contractor's profit @ 10% on (a+b+c)				0.00	
Total				393,036.13	
Rate per cum =				1,310.12	
e) Conversion of Bricks Bat into Brick		Carriage			
1.2/2.832*850/1000 = 0.360		Brick bat	cum	0.3602	654.91
		Total		1546.00	
Add Cess 1%				15.46	
Add GST 12%				185.52	
Finished Rate Per cum				1,746.98	

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Providing, laying and placing empty cement bag filled with local sand including stitching with sutali etc. — do — do — all complete job as per specification and direction of E/I. (Including Royalty and all Taxes)

a)	Material				
15.7.40.1	Cost of sand and empty cement bag	nos	1.00	7.46	7.46
b)	Labour for carriage & placing to work site				
	Mazdoor (Unskilled)	nos.	0.05	287.00	14.35
c)	Overhead charges 6% on (a+b)				1.31
d)	Contractor's profit @ 10% on (a+b+c)				0.00
	Total				23.12
	Add Cess 1%				0.00
	Finished Rate				23.12

4 1100 Providing and Laying Reinforced Cement Concrete Pipe NP3 as per design in Single Row with old available pipe

Providing and laying reinforced cement concrete pipe NP3 for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets Clause 1106. (With old available pipe)

Unit = m

Taking output = 7.5 m

(3 pipes of 2.5 m length each)

(B) 1000 mm dia

a)	Labour				
	Mate	day	0.09	305.00	27.45
	Mason (1st Class)	day	0.00	388.00	0.00
	Mazdoor (Unskilled)	day	2.00	287.00	574.00
b)	Material				
	Sand at site	cum	0.04	0.00	0.00
	Cement at site	t	0.03	0.00	0.00
	RCC pipe	m	7.50	2,744.50	20,583.75
c)	Overheads @ 6% (a+b)				1,271.11
d)	Contractor's profit @ 10% (a+b+c)				0.00
	Cost for 7.5 m = a+b+c+d				22,456.31
	Rate per m = (a+b+c+d)/7.5				2,994.17
e)	Carriage	m	1.00	164.52	164.52
	Total				3,158.69
	Add Cess 1%				0.00
	FINISHED RATE /M				3,158.69

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and Filling in Foundation Trenches as per Drawing & Technical Specification.

a)	Material				
	fine sand (assuming 20% void)	Cum.	1.20	106.23	127.48
b)	Labour				
	Mate	day	0.01	305.00	3.05
	Mazdoor (Unskilled)	day	0.30	287.00	86.10
c)	Overhead charges 6% on (a+b)				13.00
d)	Contractor's profit @ 10% on (a+b+c)				0.00
	carriage		1.20	142.81	171.38
	Total				401.00
	Add Cess 1%				0.00
	Finished Rate/cum				401.00

Providing Quarry Material Rabbish for filling the voids in bricks bats —do— all complete job as per specification and direction of E/I.

Assuming Rate per cum

a)	Material				
	Rabbish	cum	1.20	322.96	387.55
b)	Labour for placing and spreading				
	Mazdoor (Unskilled)	nos.	0.30	287.00	86.10
	mate	nos.	0.01	305.00	3.05
c)	Overhead charges 6% on (a+b)				28.60
d)	Contractor's profit @ 10% on (a+b+c)				0.00
	Total				505.30
e)	Carriage				
	Rabbish	cum	1.20	197.24	236.69
	Total				742.00

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कार्यपालक अभियंता का कार्यालय
ग्रामीण कार्य विभाग
कार्य प्रमंडल, शिवहर

सं. 214 अमरपुर
शिवहर

दिनांक- 12/02/2021

उपस्थित-

कार्यपालक अभियंता
ग्रामीण कार्य विभाग
कार्य प्रमंडल शिवहर।

सूचना में,

अधीक्षक अभियंता
ग्रामीण कार्य विभाग
कार्य अंचल सीतामढ़ी।

विषय:- कार्य प्रमंडल बेलसंड के अधीन वर्ष 2020 की भयंकर बाढ़ से क्षतिग्रस्त पथों में
यातायात के पुनर्स्थापन हेतु तैयार किए गए प्राक्कलन की जांच के संबंध में।

संदर्भ:- भवदीय पत्रांक-900 दिनांक-12.09.2020

सूचना में,

उपरोक्त विषय पर प्रासंगिक पत्र में दिए गए निर्देश के अनुपालन में कार्य प्रमंडल
बेलसंड के अधीन वर्ष 2020 की भयंकर बाढ़ से क्षतिग्रस्त पथों में यातायात पुनर्स्थापन हेतु
तैयार किए गए कार्यों का स्थल निरीक्षण किया गया। इस पत्र के साथ सलग्न सूची के 52 पथों पर
आवृत्ति जांचोपरान्त प्राक्कलन तकनीकी अनुमोदन हेतु समर्पित किया जा रहा है।

अनु-पथों की सूची (कुल 52 पथ) सलग्न।

विभागाध्यक्ष


कार्यपालक अभियंता
ग्रामीण कार्य विभाग
कार्य प्रमंडल शिवहर

कार्यपालक अभियंता का कार्यालय

ग्रामीण कार्य विभाग

कार्य प्रमंडल बेलसंड

बाढ़ से क्षतिग्रस्त पथों का प्राक्कलन की सूची।

Sl No	Division	Block	Name of Road	Total Cost (In Lakh)
1	Belsand	Runnisaidpur	Thumma To Belahi	12.26
2	Belsand	Runnisaidpur	Athari To Runni Via Kharka	14.91
3	Belsand	Runnisaidpur	Prem Nagar To Hanuman Nagar	4.72
4	Belsand	Runnisaidpur	NH-Gadha To Ptel Nagar	10.13
5	Belsand	Runnisaidpur	Bagari To Thumma	20.41
6	Belsand	Runnisaidpur	NH-77 Gadha To Dhanushi	6.34
7	Belsand	Runnisaidpur	Thumma To Khopi	6.21
8	Belsand	Runnisaidpur	Mahisar To Dilawarpur	2.88
9	Belsand	Runnisaidpur	Thumma To Athari	36.22
10	Belsand	Runnisaidpur	Balua To Bhulwariya	3.24
11	Belsand	Runnisaidpur	Maharami Sthan To Bagmati Bandh	11.59
12	Belsand	Runnisaidpur	Husainpur To Balan Tola	0.84
13	Belsand	Runnisaidpur	Kharua Ghat To Morang	3.52
14	Belsand	Runnisaidpur	Gidha To Phulwariya	3.01
15	Belsand	Runnisaidpur	Vinod Paswan House To Dhobahiya Tola	1.23
16	Belsand	Runnisaidpur	Ratan Jha To Bahrami Nagar	17.23
17	Belsand	Runnisaidpur	Runni To Raksiya Path	1.12
18	Belsand	Runnisaidpur	Janar To Ramnagar	6.99
			Total	158.85

[Signature]
12-2-21