



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

NAME OF WORK

:- RESTORATION OF FLOOD DAMAGE PORTION OF
Karup to Bhopatpur via Nawada Itahariya Road

Block

:- Karakat

Estimated Cost.

2.88681
:- ~~2.89639~~ lakh


Executive Engineer
RWD Works Division, Sasaram-2

तकनीकी प्रतिवेदन

पथ का नाम

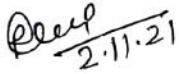
:- करूप से भोपतपुर भाया नावादा इटढियां पथ के नजदीक पथ में बाढ़ से क्षतिग्रस्त भाग में Restoration कार्य

प्राक्कलित राशि

2.88681
:- ~~2.88639~~ लाख

यह प्राक्कलन जिसकी प्राक्कलित राशि ^{2.88681}~~2.88639~~ लाख रुपये का है जो करूप से भोपतपुर भाया नावादा इटढियां पथ में यातायात चालु रखने हेतु Restoration कार्य तैयार किया गया है। अतिवृष्टि के कारण पथ में 11 मीटर की लम्बाई में कटाव हो गया था। जिसमें बास बल्ली लगाकर खाली सिमेन्ट बोरी में बालु भरकर नीचे भाग में मिट्टी एवं ईट का टुकड़ा डालकर कार्य कराया गया है जिससे यातायात चालु हो गया है।

इस कार्य का प्राक्कलन तैयारकर घटनोत्तर स्वीकृति हेतु समर्पित किया जा रहा है। प्राक्कलन के मदों का दर वर्तमान अनुसूची दर पर तैयार किया गया है।


2.11.21

कनीय अभियंता
ग्रामीण कार्य विभाग.
कार्य प्रमंडल, सासाराम-2

सहायक अभियंता
ग्रामीण कार्य विभाग.
कार्य प्रमंडल, सासाराम-2


22/11/21

कार्यपालक अभियंता
ग्रामीण कार्य विभाग.
कार्यप्रमंडल, सासाराम-2

**ABSTRACT OF COST FOR RESTORATION OF FLOOD DAMAGE PORTION OF
Karup to Bhopatpur via Nawada Itahari Road**

SL. No	Items of Works	Quantity	Unit	Rate	Amount
1	Labour for cutting 62mm to 75mm dia sal bamboo piles to size and making shoes and driving etc. complete job as per specification and direction of E/I.	60.000 80	m	30.3	1818.00 2666.4
2	labour for fitting and fixing 62mm to 75 mm dia bamboo runners in portion at every vertical pile with 150 mm long nails or 38 swg G.I. wire including cost G.I wire of nails complete as per specification and direction of E/I.	88	m	5.4	475.2
3	Supply of bamboo 75mm dia 6m to 7m long	24	Nos	141.5	3396.00
4	labour for filling empty cement bags with local sand stitching the bags and placing including supply of sutli etc. all complete and direction of E/I.	2912	% Nos	1661.7	48388.704
5	Supply of empty cement bages	2912	Nos	2.92	8503.04
6	Providing and laying spreading of Brick Bats etc. do all complete job.	40.95	m ³	2602.7	106580.57
7	Earth work in bed clearance or filling in Road embankment all lead and lift all complete as per specification of E/I.	297	m ³	290.6	86308.20
7	GST @12%				30656.37 30758.00
8	LWC @1%				2554.70 2563.00
					289639.11
					288680.78

Deep
2-11-21

Junior Engineer
Karakat

Assistant Engineer
Karakat

Executive Engineer
RWD Works Division, Sasaram-2

Say 2,88,681/-
28/11/21

Checked.
22/11/21
EE
RWD, Bikanernagar

Technically approved
for Rs 2.88681 Lacs
(Rs 2.88681 Lacs)
for the work
on 28/11/21

DETAILED ESTIMATE FOR RESTORATION OF FLOOD DAMAGE PORTION OF
Karup to Bhopatpur via Nawada Itahariya Road

SL.
No

Items of Works

- 1 Labour for cutting 62mm to 75mm dia sal bamboo piles to size and making shoes and driving etc. complete job as per specification and direction of E/I.

 $11/0.45+1=25.00$ Nos
 $25\text{nos} \times 2\text{row} \times 1.20=60.00\text{m}$
- 2 labour for fitting and fixing 62mm to 75 mm dia bamboo runners in portion at every vertical pile with 150 mm long nails or 38 swg G.I. wire including cost G.I wire of nails complete as per specification and direction of E/I.

 $2 \times 4 \text{ rows} \times 11.00=88\text{m}$
- 3 Supply of bamboo 75mm dia 6m to 7m long

for piles $2 \times 25 \text{ nos} \times 2.40=120.00\text{m}$
for runners $88/2=44.00$
 164.00m
no of bamboo $164/6=24.00$ nos
- 4 labour for filling empty cement bags with local sand stitching the bags and placing including supply of sutli etc. all complete and direction of E/I.

 $\frac{1}{2}(4+2) \times 3 \times 11/0.034=2912$
- 5 Supply of empty cement bags

2912
- 6 Providing and laying spreading of Brick Bats etc. do all complete job.

in bed $13 \times 7 \times 0.45 \times =40.95 \text{ m}^3$
- 7 Earth work in bed clearance or filling in Road embankment all lead and lift all complete as per specification of E/I.

 $1/2 \times (11+5) \times 3 \times 11=297.00\text{m}^3$

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2.11.21

Junior Engineer
Karakat

Assistant Engineer
Karakat

Executive Engineer
RWD Works Division, Sasaram-2

5.7.7	Labour for cutting 62 mm to 75 mm dia bamboo piles to size and making shoes and driving etc. complete job as per specification and direction of E/I.								
		Unit :- Per M							
	(Assuming 20 nos. pile sunk 1.525 mtr deep)	Taking Out put =30.50M							
	Total depth sunk 30.50 meter								
	Labour								
	Carpenter Gr II	0.25	nos	345.00	86.25	{SI-17}			
	Unskilled mazdoor for piling	2.5	nos	287.00	717.50	{SI-1}			
	Add Overhead charge & C.P.@15%				803.75				
					120.56				
					924.31				
	Rate per M								
5.7.8	Labour for cutting and driving etc. complete job as per specification			30.31	Per M				30.31

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5.7.9	Rate per sqm	Unit :- Per M				
Labour for fitting and fixing 62mm to 75 mm dia bamboo runners in position at every vertical pile with 150 mm long nails or 38 swg G.I. wire including cost of G.I. wire or nails complete job as per specification and direction of E / I.		Taking Out put =30.50M				
Materials						
Cost of 150 mm long nails		0.5	Kg	58.00	29.00	(12)
Labour						
Carpenter Gr II		0.125	nos	345.00	43.13	(SI
Unskilled mazdoor		0.25	nos	287.00	71.75	(SI
Total					114.88	
					143.88	
Add Overhead charge & C.P@15%					21.58	
					165.46	
Rate per M					Per M	5.

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421	1190	DECUUO ULESS KAU WUUU III PIGUINS (W IS 400.00 / 10 UUUUU)						
222		Bamboo						
		i. 75 mm dia 6m long to 8m long	Each	141.50	-	141.50	WR	
		ii. 100 mm dia 6m long to 8m long	Each	151.00	-	151.00	WF	
		iii. 50 mm dia Hill Bamboo	Each	94.35	-	94.35	WF	
22		Sal Rallah Pnet						

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5.7.40.1	Labour for filling empty cement bags with local sand, stitching the bags and placing including supply of sutli etc. all complete as per approved design, specifications and direction of E/i	Unit :- Per % nos						
		Taking Out put = 100 nos						
	(a) For filling & stitching & stacking							
	Unskilled mazdoor for filling sand into bags and sewing	2	nos	287.00	574.00	{		
	Sutali	0.5	Kg	19.75	9.88	(M S		
					583.88			
	Add Overhead charge & C.P@15%				87.58			
					671.46			
	Rate per % nos	Say Rs		671.46	Per % nos			
	(b) Labour rate for carrying & placing filled E.C.Bags							
	Unskilled mazdoor for carrying filled bags and placing to work site	3	nos	287.00	861.00	{		
	Add Overhead charge & C.P@15%				129.15			
					990.15			
	Rate per % nos	Say Rs			Per % nos			
	Total (a+b)			1661.70	Per % nos			
5.7.40.2	Labour for filling empty cement bags with local sand, stitching the							

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Analysis of Rates

DESCRIPTION		Unit	Quantity	Rate	Amount
e)	Contractor's profit @ 10% on (a+b+c+d)				1746.38
	Cost for 100 cum = a+b+c+d+e				19210.15
	Rate per cum = (a+b+c+d+e)/100				192.10
Total Cost		Sqm			192.10
303.1	Construction of Subgrade and Earthen Shoulders (Stabilised subgrade)				
	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				
	Taking output = 100 cum				
a)	Labour				
	Mate	day	0.04	310.00	12.40
	Mazdoor (Unskilled)	day	1.00	292.00	292.00
b)	Machinery				
	Hydraulic excavator 0.9 cum bucket capacity @ 100 cum per hour	hour	1.67	1969.20	3288.56
	Tractor with Disc Harrows	per hour	2.50	549.10	1372.75
	Dozer D-50 for spreading @ 200 cum per hour	hour	4.50	1043.00	4693.50
	Tractor Mounted grader for grading @ 100 cum per hour	cum			469.35
	Tipper 5.5 cum capacity, 4 trips per hour	hour	1.00	3337.90	3337.90
	Add 10 % of the cost of carriage to cover loading & unloading	hour	1.00	573.20	573.20
	Dozer D-50 for spreading @ 100 cum per hour	hour	2.00	184.00	368.00
	Tractor mounted grader arrangement for grading @ 100 cum per hour	hour	1.43	803.00	1148.29
c)	Material				
	Water	kl	12.00	40.00	480.00
	Compensation for earth taken from private land	cum	100.00	34.81	3481.00
	Add Sand @ 20%	cum	20.00	141.85	2837.00
d)	Overheads @ 6 % on (a+b+c)				1171.02
e)	Contractor's profit @ 10% on (a+b+c+d)				2352.50
F)	Add Haulage/Carriage Charge				
	Sand	cum	20.00	159.87	3197.40
	Cost for 100 cum = a+b+c+d+e				29074.87
	Rate per cum = (a+b+c+d+e)/100				290.75
Total Cost		Sqm			290.75
PAVEMENT CRUST LAYERS					
401	Granular Sub-base with Well Graded Material (Table 400.2)				
	(By mix in place method) For Grading I Material				
	Construction of granular sub-base by providing well graded material, spreading in uniform layers with tractor mounted grader arrangement on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with smooth wheel roller to achieve the desired density, complete as per Technical Specification Clause 401.				
(i)	For Grading I Material				
	Unit = cum				
	Taking output = 300 cum				
a)	Labour				
	Mate	day	0.40	310.00	124.00
	Mazdoor (Skilled)	day	2.00	370.00	740.00
	Mazdoor (Unskilled)	day	8.00	292.00	2336.00
b)	Machinery				
	Tractor mounted grader arrangement for grading @ 100 cum per	hour	6.00	573.20	3439.20
	Three wheel 80-100 kN static roller @ 10 cum per hour	hour	30.00	803.00	24090.00
	Tractor with Rotavator 25 cum per hour	hour	12.00	573.20	6878.40
	Water tanker 6 kl capacity	hour	5.00	184.00	920.00
c)	Material				
	For well graded granular sub-base material as per Table 400.2	cum	126.00	511.44	64441.44
	53 mm to 26.5 mm @ 35%	cum	162.00	553.36	89644.32
	26.5 mm to 4.75 mm @ 45%	cum	72.00	175.80	12657.60
	2.36 mm below @ 20% Course Sand	kl	30.00	40.00	1200.00
	Water				12388.26
d)	Overheads @ 6 % on (a+b+c)				

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List of Basic rates of construction material approved by state level schedule rate committee for the year 2020-21 for the preparation of schedule of rates only. Material should confirm to relevant BIS/ IRC/ MORTH/ AS Specification. The rates are exclusive of GST, CP & overhead charge.

Sl. No.	NAME OF MATERIALS	UNIT	Basic Rate	Royalty	Basic Rate for SOR 2020-21	Reference
2	(a) 100 mm long	4	5	6	7	8
	(b) 222mm long	Each	input	-	#VALUE!	
	MS Bends	Each	input	-	#VALUE!	
	Rubber seal	Per Kg	20.44	-	20.44	WRD
	Sheet Pile	Each	input	-	#VALUE!	
	Tree branches of dia 150 mm to 200 mm and 3 M to 4.5 M long with plankhi covering the space of 100 cft in volume	metre	input	-	#VALUE!	
10761	Fuel (wood) (Rs 500.00 per Quintal)	Per M.T	input	-	#VALUE!	
13326	Blasting fuse (Fuse Wire)	nos	input	-	#VALUE!	
	Cardium compound	Kg	5.00	-	5.00	BCD
	M.S. Bolt 20mm dia., 25 Cm long	each	15.00	-	15.00	BCD
3509	Special primer (C.W)	kg	input	-	#VALUE!	
4510	Metal Primer (U.G)	Each	32.88	-	32.88	WRD
4618	Linseed oil (double boiled)	Litre	140.00	-	140.00	BCD
	Electric Charge	Litre	90.00	-	90.00	BCD
	Slotted pins and wedges 10 mm dia and 60 mm long	Litre	200.00	-	200.00	BCD
	Tube and nuts 26 no. 25 mm dia and above	K.W.H	input	-	#VALUE!	
	M.S Electrodes	nos	input	-	#VALUE!	
71	Kerosene Oil	nos	input	-	#VALUE!	
	Gun metal in gate	nos	input	-	#VALUE!	
	Old empty cement bag (synthetic) (Annexure-I)	litre	50.00	-	50.00	BCD
	Nylon Crate of size 1mx1mx1m (As per Annex-II)	Kg	input	-	#VALUE!	
	Geo bag (non woven) size 1mx0.70m (As per Annex-III)	Per 100 nos	292.00	-	292.00	WRD
	Mega Geo Bag of size 2mx1.5m (As per Annex-IV)	Each	39.85	-	39.85	WRD
	P.P. Rope Gabion of size 1.80mx1.80mx0.5m (As per Annex-V)	nos	81.00	-	81.00	Based upon lowest rate by quotation approved by WRD SOR committee
	P.P. Rope Gabion of size 1.80mx1.20mx0.5m (As per Annex-VI)	nos	620.96	-	620.96	WRD
754	Gravel 5 mm to 10mm	Nos.	1780.00	-	1780.00	WRD
	Shallex Board (For use as per expansion Joint)	Nos.	1385.00	-	1385.00	WRD
	(a) 25mm thick	Cum	700.00	150	850.00	including of royalty BCD
	(b) 12mm thick	Per Sqm	input	-	input	
	(c) 18mm thick	Per Sqm	input	-	input	
	Shallex Primer	Per Sqm	input	-	input	
2	Bitumen grade PMB-40	Per litre	input	-	input	
		M.T	32200.00	-	32200.00	BCD

Recd

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