

(9)

Inspection Report of Flood Damage work

Name of PIUs:- RWD Works Division, Benipur

Name of Block/Road:- Bempur / Deepa tal to Katwas 9

A. For Road

1. Damage Location Chainage:- 0.900km to 1.000km, 1.000km to 1.800km
2. Damage Length :- 205 m
3. Nature of Damage :- Road crust, plank
4. Details of Restoration Works
 - i. Material being used in Restoration works:- Brick bats bamboo, sand bag.
 - ii. Equipment's /Tools being used in Restoration works:- Tractor
 - iii. Procedure taken up in Restoration works:- manually
 - iv. Restored Length:- 205 m

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. Equipment's /Tools being used in Restoration works:-
 - iii. Procedure taken up in Restoration works:-
 - iv. Restored Length:-
- N/A
- "work found satisfactory"

Signature of JE/AE/EE

Signature
(Name of Inspection)

तकनीकी प्रतिवेदन

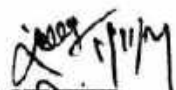
पथ का नाम	:- दीपा टोल से कटबाशा
पथ की लंबाई	:- २.०९ कि०मी०
प्राक्कलित राशि	:- Rs. 6,78,114-00
प्रमण्डल का नाम	:- बेनीपुर
अंचल का नाम	:- दशभंगार
योजना शीर्ष	:-
योजना वर्ष	:- २०२१-२२

प्रस्तुत प्राक्कलन विभागीय पत्रांक- मु.अ.-५-५२१५५३१ दिनांक-२२.१०.२१ के आदेशानुसार पथ में कराये गये यातायात पुर्नस्थापना कार्य के निमित्त तैयार की गयी है।

यह प्राक्कलन दीपा टोल से कटबाशा कार्य के लिए तैयार की गई है। वर्ष २०२१ में आयी प्रलयंकार बाढ़/अतिवृष्टि के कारण पथ कई जगहों पर क्षतिग्रस्त हो गया था। जिसके कारण आवागमन अवरुद्ध हो गई थी जिसमें अस्थाई यातायात पुर्नस्थापन कार्य किया गया है।

प्रस्तुत प्राक्कलन संपादित कार्य के समय लागू अनुसूचित दर पर, जो संवेदक लाभांश को छोड़कर था, उसे प्रावधान करते हुए तैयार किया गया है।

अतः किये गये कार्यों के भुगतान हेतु प्राक्कलन की प्रशासनिक स्वीकृति अपेक्षित है।


कनीय अभियंता,
ग्रामीण कार्य विभाग,
कार्य प्रशाखा बेनीपुर


सहायक अभियंता,
ग्रामीण कार्य विभाग,
कार्य अवर प्रमण्डल बेनीपुर


कार्यपालक अभियंता
ग्रामीण कार्य विभाग,
कार्य प्रमण्डल बेनीपुर।

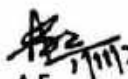
Abstract of cost.

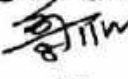
Name of Road:- L030-L34 Deepa tol to Katwasa (VR30)

No	Particulars of Item	Quantity (In M ³)	Rate	Amount
1	Providing and laying Filling in ditches with brick bats including loading, unloading and light ramming all complete job. As per specification & Direction of E/I	259.02	2004.96	519325
2	Supply of Bamboo- 6m to 8m do.....all complete job as per specification and direction of E/I.	266	166.5	44289
3	Labour for cutting 62mm to 75mm dia bamboo pile size and making shoes and driving ect.....all complete job as per specification and direction of E/I.	269	31.2	8393
4	Labour for cutting 62mm to 75mm dia bamboo runner in position at every vertice pileall complete job as per specification and direction of E/I.	807	5.5	4439
		Total	=	576445
		Add 12% GST	=	69173
		1% L.C	=	5764
		(S.Fee)- B/Bat(259.02*1032* 0.1)=26731	=	26731
		Grand Total=		678114

Say Rupees = 678110/-00


J.E.
RWD, Benipur


A.E.
RWD, Benipur


E.E.
RWD, Benipur

Technically Submission for Rs = 678110/-00 (Rupees Six Lakh, Seventy Eight Thousand one Hundred Ten) only


Superintending Engineer
RWD, Works Circle, Darbhanga

Flood Estimate

Name of Road:- L030-L34 Deepa tol to Katwasa (VR30)

Item No.1	Providing and laying Filling in ditches with brick bats including loading, unloading and light ramming all complete job. As per specification & Direction of E/I				
	Chainage (In M)	Length (In M)	Average Width (In M)	Average Height (In M)	Qty in cum
	In 1st km	25.00 ✓	$(1+.9+.4)/3$	$(.6+.9+.1.2)/3$	24.75 ✓
		6.00 ✓	$(1.1+1.9)/2$	$(1.5+1+.9)/3$	10.20 ✓
	In 2nd km	22.00 ✓	$(1.6+1.4+1.2+1.8)/4$	$(.6+.9+.1)/3$	27.50 ✓
		37.00 ✓	$(1.6+2+1.5)/3$	$(.7+.9+1.1)/3$	56.61 ✓
		25.00 ✓	$(2+3+2.5+1.2)/4$	$(1.5+1.2+1+.9)/4$	62.53 ✓
		6.00 ✓	$(1+.8)/2$	$(.6+.7)/2$	3.51 ✓
		84.00 ✓	$(1.5+1+.8)/3$	$(.6+.8+1)/3$	73.92 ✓
			Total =		259.02 ✓

Item No.2	Supply of Bamboo- 6m to 8m do.....all complete job as per specification and direction of E/I.				
	for pile	225 ✓	3		675 ✓
		44 ✓	2.5		110 ✓
	for runner	44 ✓	3		132 ✓
		225	3		675
				=	1592
	Number of Bamboo	1592/6			266

Item No.3	Labour for cutting 62mm to 75mm dia bamboo pile size and making shoes and driving ect.....all complete job as per specification and direction of E/I.				
		225	1		225
		44	1		44
					269

Item No 4	Labour for cutting 62mm to 75mm dia bamboo runner in position at every vertice pileall complete job as per specification and direction of E/I.				
		225	3		675
		44	3		132
					807

J.E
RWD, Benipur

A.E
RWD, Benipur

E.E
RWD, Benipur

Checked & Verified

24.12.2021
2

375
14/12/21
EP

1	6.8.1 WRD Bihar	Labour for laying dry graded Jhama Khos 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 = 2.832 Cum				
	a) Labour					
		Mazdoor (Unskilled)	Nos.	3.00	304.00	912.00
	b) Over Heads @ 12% on (a)					109.44
		Cost for 2.832 cum				1,021.44
		Rate per cum (Rs)				360.68
1.4	RCD	Cost of Haulage Excluding Loading and Unloading				
		Haulage of materials by Tractor excluding cost of loading, unloading and stacking				
		Unit = t.Km				
		Taking output = 3.60 tonnes load and lead 10 km=36.0 t.km				
		(i) Surface Road				
		Speed with Load:15 km/hour				
		Speed while Returning empty:25km/hour.				
	a) Machinery					
		Tractor 3.6 tonne capacity				
		Time taken for onward haulage with load	hour	0.667	612.00	408.20
		Time taken for empty return trip.	hour	0.400	612.00	244.80
	b) Over Heads @ 12% on (a)					78.36
		Cost for 36 t Km=a+b				731.36
		Rate per t.km=(a+b)/36				20.32
		(ii) Unsurfaced Graveled Road				
		Speed with Load:12 km/hour				
		Speed while Returning empty:20km/hour.				
	a) Machinery					
		Tractor 3.6 tonne capacity				
		Time taken for onward haulage with load	hour	0.833	612.00	509.80
		Time taken for empty return trip.	hour	0.500	612.00	306.00
	b) Over Heads @ 12% on (a)					97.90
		Cost for 36 t Km=a+b				913.69
		Rate per t.km=(a+b)/36				25.38
		(iii) Katcha Track and Track in River Bed/Nallah Bed and Choe Bed				
		Speed with Load:10 km/hour				
		Speed while Returning empty:15km/hour.				
	a) Machinery					
		Tractor 3.6 tonne capacity				
		Time taken for onward haulage with load	hour	1.000	612.00	612.00
		Time taken for empty return trip.	hour	0.667	612.00	408.20
	b) Over Heads @ 12% on (a)					122.42
		Cost for 36 t Km=a+b				1,142.63
		Rate per t.km=(a+b)/36				31.74

SORS No.	Description (m)	Unit	Quantity	Rate	Amount
1.1RCD	Loading and Unloading of Stone Boulder/Stone aggregates/Sand/Kanker/Moorum				
	Placing Tractor at Loading point, loading with front loader, dumping turning for return trip, excluding for haulage and return trip				
	Unit = Cum				
	Taking output = 2.25 Cum				
	Time Required for				
	i) Positioning of Tractor at loading point	1 Min			
	ii) Loading by Front end loader 1 Cum Bucket Capacity @ 25 Cum per hour	5 Min			
	iii) Maneuvering, reversing, dumping and turning for return	0 Min			
	iv) Waiting time, unforeseen contingencies etc	0 Min			
	Total	6 Min			
	a) Labour	day	0.03	321.00	9.63
	Mate	day	0.72	304.00	218.88
	Mazdoor for loading and unloading				
	b) Machinery	hour	0.1	612.00	61.20
	Tractor 3.6 tonne capacity	hour	0.083	1594.00	132.30
	Front end-loader 1 cum bucket capacity @25 cum/hour				50.64
	c) Over Heads @ 12% on (a+b)				472.65
	Cost for 2.25 cum=(a+b+c)				210.07
	Rate per cum (Rs)				
Note:-	Unloading will be done manually				
	1 Supplying for Brick Bats (with OH)	Per Cum		1032.00	1032.00
	A. Basic Rate of Brick Bats		12%		123.84
	Add overhead charges				1155.84
	Total				
	Surface Lead	KM	7		
	Katcha Track and Track in River Bed/Nallah Bed and Choe Bed	KM	1		
	Factor(3.6/2.25)	Cum	1.6		
	B. Carriage(with OH)				488.438
	((1.6*7*20.32)+(1.6*1*31.74)+(210.07))				
	C. Cost of Labour for Pitching and Light Ramming as per WRD SOR 6.6.1(with OH)				360.68
	Total (A+B+C)				2004.96
					2004.96
	For (7km.p+1kmk)= without (GST+LC+SF)				1972.45
	For (6km.p+1kmk)= without (GST+LC+SF)				1939.93
	For (5km.p+1kmk)= without (GST+LC+SF)				1907.42
	For (4km.p+1kmk)= without (GST+LC+SF)				1874.91
	For (3km.p+1kmk)= without (GST+LC+SF)				

Q.	SOR Sl. No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
	5.7.7 WRD SOR	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				
		Taking Out put:- 30.50 Mtr				
		(Assuming 20 nos. pile sunk 1.525 mtr deep)				
		Total depth sunk 30.50 meter				
		Labour				
		Carpenter Gr II	Nos	0.25	364	91.00
		Unskilled mazdoor for pilling	Nos	2.5	304	760.00
		Add Overhead charge 12 %				102.12
						953.12
		Rate	M			31.25
		Say Rs	M			31.20
	5.7.8 WRD SOR	Labour for fitting and fixing split bamboo woven chachari in position with 20 swg G.I. wire or 75 mm to 100 mm long nails alternatively including cost of G.I. wire or nails complete job as per specification and direction of E / I.				
		Unit :- Per M2				
		Taking Out put:- 9.30 Sqm				
		(Assuming strip of 3.05x3.05 = 9.30 sqm)				
		Materials				
		75 mm to 100 mm long nails (BCD)	Kg	0.25	58	14.50
		Labour				
		Carpenter Gr II	Nos	1	364	364.00
		Unskilled mazdoor	Nos	1	304	304.00
		Add Overhead charge 12 %				81.90
						764.40
		Rate	M			82.19
		Say Rs	M			82.20
3	5.7.9 WRD SOR	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.				
		Unit :- Per M				
		Taking Out put:- 30.50 Mtr				
		Materials				
		75 mm to 100 mm long nails (BCD)	Kg	0.5	58	29.00

			Labour				
			Carpenter Gr II	Nos	0.125	364	45.50
			Unskilled mazdoor	Nos	0.25	304	76.00
			Add Overhead charge 12 %				18.06
							168.56
			Rate	M			5.53
			Say Rs	M			5.50
			Supply Of Bamboo				
	A		Bamboo 6m to 8 m	Nos	1	141.5	141.5
			Gross Truck Capacity(Unit Per%)(280Per Trip)				
			Gross Tractor Capacity(Unit Per%)(183Per Trip)				
			Carriage Including Loading and Unloading				
1.4 RCD			Cost of Haulage Excluding Loading and Unloading				
			Haulage of materials by Tractor excluding cost of loading, unloading and stacking				
			Unit = t.Km				
			Taking output = 3.60 tonnes load and lead 10 km=36.0 t.km				
			(i) Surface Road				
			Speed with Load:15 km/hour				
			Speed while Returning empty:25km/hour.				
		a)	Machinery				
			Tractor 3.6 tonne capacity				
			Time taken for onward haulage with load	hour	0.667	612.00	408.20
			Time taken for empty return trip.	hour	0.400	612.00	244.80
			Cost for 36 t Km=a				653.00
			Rate per t.km=(a+b)/36				18.14
			Total Cost t.Km				18.14
			(ii) Unsurfaced Graveled Road				
			Speed with Load:12 km/hour				
			Speed while Returning empty:20km/hour.				
		a)	Machinery				
			Tractor 3.6 tonne capacity				
			Time taken for onward haulage with load	hour	0.833	612.00	509.80
			Time taken for empty return trip.	hour	0.500	612.00	306.00
			Cost for 36 t Km=a				815.80
			Rate per t.km=(a+b)/36				22.66
			Total Cost t.Km				22.66
			(iii) Katcha Track and Track in River Bed/Nallah Bed and Choe Bed				
			Speed with Load:10 km/hour				
			Speed while Returning empty:15km/hour.				
		a)	Machinery				
			Tractor 3.6 tonne capacity				
			Time taken for onward haulage with load	hour	1.000	612.00	612.00
			Time taken for empty return trip.	hour	0.667	612.00	408.20
			Cost for 36 t Km=a				1,020.20
			Rate per t.km=(a+b)/36				28.34
			Total Cost t.Km				28.34
4.3 WRD SOR			Loading and Unloading of Bamboo				

		Unit= Tonne				
		Taking Output = 3.6 tonnes				
	a	Labour				
		Mate	Nos	0.03	321	9.63
		Mazdoor for Loading and Unloading	Nos	0.72	304	218.88
	b	Machinery				
		Tractor 3.6 Tonne capacity	Hour	0.72	612.00	440.64
						669.15
		Rate	MT			185.88
		Surface Lead	KM	2		
		Katcha Track and Track in River Bed/Nallah Bed and Choe Bed	KM	1		
		Factor(8/280)	Nos	0.02857		
		Carriage(without OH)				
	B	((0.02857*2*18.14)+(0.02857*1*28.34)+(185.88*0.02857))				7.16
		A+B				148.66
		Add Overhead charge 12 %				17.84
		Rate	No			166.50
		Say Rs	No			166.50
Sr.No.27	5 WRD	Supply Of EC bags including Carriage				
SOR		Materials				
		Old Empty Cement Bags (Synthetic)(Annexure I)	Per 100 Nos			292
		Add Overhead charge 12 %				35.04
		Rate	No			327.04
		Say Rs	No			327.00
5.7.40.1	WRD	Labour for filling empty cement bags with local sand, stitching the bags and placing including supply of sutli and EC Bags etc. at site in dry portion all complete as per approved design, specifications and direction of E/I Including Cost and Carriage of Sand				
SOR		Unit=Per 100Nos				
		Taking Out put:- 100 nos				
	a	For filling & stitching & stacking				
		Unskilled mazdoor for filling sand into bags and sewing	Nos	2	304	608
		Sutali	Kg	0.5	19.75	9.875
	F					617.875
	b	Labour rates for carrying filled E.C Bags				
	G	Unskilled mazdoor for carrying filled bags and placing to work site	Nos	3	304	912

	c	Cost of Sand & Carriage by Tractor			
	T	Cost of Sand	Cum	1	141.85
		Carriage Including Loading and Unloading			141.85
1.4 RCD		Cost of Haulage Excluding Loading and Unloading			
		Haulage of materials by Tractor excluding cost of loading, unloading and stacking			
		Unit = t.Km			
		Taking output = 3.60 tonnes load and lead 10 km=36.0 t.km			
		(i) Surface Road			
		Speed with Load:15 km/hour			
		Speed while Returning empty:25km/hour.			
	a)	Machinery			
		Tractor 3.6 tonne capacity			
		Time taken for onward haulage with load	hour	0.667	612.00
		Time taken for empty return trip.	hour	0.400	612.00
		Cost for 36 t Km=a			244.80
		Rate per t.km=(a+b)/36			653.00
		Total Cost tKm			18.14
		(ii) Unsurfaced Graveled Road			
		Speed with Load:12 km/hour			
		Speed while Returning empty:20km/hour.			
	a)	Machinery			
		Tractor 3.6 tonne capacity			
		Time taken for onward haulage with load	hour	0.833	612.00
		Time taken for empty return trip.	hour	0.500	612.00
		Cost for 36 t Km=a			308.00
		Rate per t.km=(a+b)/36			815.80
		Total Cost tKm			22.66
		(iii) Katcha Track and Track in River Bed/Nallah Bed and Choe Bed			
		Speed with Load:10 km/hour			
		Speed while Returning empty:15km/hour.			
	a)	Machinery			
		Tractor 3.6 tonne capacity			
		Time taken for onward haulage with load	hour	1.000	612.00
		Time taken for empty return trip.	hour	0.667	612.00
		Cost for 36 t Km=a			408.20
		Rate per t.km=(a+b)/36			1,020.20
		Total Cost tKm			28.34
1.1RCD		Loading and Unloading of Stone Boulder/Stone aggregates/Sand/Kanker/Moorum			
		Placing Tractor at Loading point, loading with front loader, dumping turning for return			
		Unit = Cum			
		Taking output = 2.25 Cum			
		Time Required for			
		i) Positioning of Tractor at loading point	1 Min		
		ii) Loading by Front end loader 1 Cum Bucket	5 Min		
		Capacity @ 25 Cum per hour			
		iii) Maneuvering, reversing, dumping and turning for	0 Min		
		iv) Waiting time, unforeseen contingencies etc	0 Min		
		Total	6 Min		
	a)	Labour			

		Mate	day	0.03	321.00	9.63
		Mazdoor for loading and unloading	day	0.72	304.00	218.88
		b) Machinery				
		Tractor 3.6 tonne capacity	hour	0.1	612.00	61.20
		Front end-loader 1 cum bucket capacity @25 cum/	hour	0.083	1594.00	132.30
		Cost for 2.25 cum=(a+b)				422.01
		Rate per cum (Rs)				187.56
Note:-		Unloading will be done manually				
		Surface Lead	KM	2		
		Katcha Track and Track in River Bed/Nallah Bed and Choe Bed	KM	1		
		Factor(3.6/2.25)	Cum	1.6		
		U Carriage(without OH)				
		((1.6*2*18.14)+(1.6*1*28.34)+(187.56))				290.952
	V	T+U				432.802
H	d	Cost of Sand & Carriage By Tractor per for 100nos bag				1,471.53
		For 100 Bags 3.4 Cum Sand Required				
I	e	Cost of EC Bag per 100nos				292
		Total(F+G+H+I)				3293.40
		Add Overhead charge 12 %				395.21
						3688.61
		Rate	No			36.8861
		Say Rs	No			36.90
		Supply of Sand Bag(without OH)				
	A	Basic Rate of Sand Bag	Nos	1	8.48	8.48
		1 No. Cement Bag Filled with 40 Kg/1.2 Cft Sand				
		Conversion Factor 1m ³ =35.3146667ft ³				
		1 Cubic Meter= Cubic Foot/35.3146667				
		2 Cubic Meter= 1.2/35.3146667				
		3 Cubic Meter= 0.034				
		Hence 1 Bo. Sand Bag Filled with 0.034 Cum sand				
		Tractor				
		Surface Lead	KM	2		
		Katcha Track and Track in River Bed/Nallah Bed and Choe Bed	KM	1		
		Factor(3.6/2.25)	Cum	1.6		
		B Carriage(without OH)				
		((1.6*2*18.14)+(1.6*1*28.34)+(187.56))				290.952
		Cost of Carriage of Sand in Filling of Sand Bag	No	1		9.89
12.9 RCD	C	Labour for filling empty cement bags with local sand, stitching the bags and placing including supply of sutli and EC Bags etc, as per specifications and direction of E/I				
		Unit=Per Bag				

