

# RURAL WORKS DEPARTMENT



GOVERNMENT OF BIHAR

CIRCLE – R.W.D. works Circle, Kishanganj

DIVISION – R.W.D. works Division , Kishanganj-1

Name of Work - Haldi Khora Bank Tola to T03

Block - Kochadhaman

Estimated cost - Rs 530741.00

Year : 2020-21



Inspection Report for flood damage work

Date:

1. Name of PIUs- Kishanganj-2

2. Name of Block/Road- Haldikhora Bank tola 40 to 403

**A. For Road**

1. Damage Location/Chainage :

2. Damage Length : 170 m.

3. Nature of Damage :

4. Details of Restoration :

i Material being used in Restoration

ii Equipment/Tools being used in Restoration works:

iii Procedure taken up in Restoration works

iv Restored Length

Damage and deep side cutting

: bamboo, brick bats,

Tractor, sand, c-bags

: manual

: 170 m

**B. For Bridge**

1. Damage Location/Chainage :

2. Damage Length :

3. Nature of Damage :

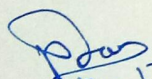
4. Details of Restoration :

i Material being used in Restoration


ii Equipment/Tools being used in Restoration works:


iii Procedure taken up in Restoration works

iv Restored Length

  
14-12-20

Signature of JE/AF/EE

  
14/12/20  
AE

  
14/12/20

Signature

कार्यपालक अभियन्ता  
(Name of Inspector)  
प्रमाण कार्य विभाग  
कार्य प्रमण्डल, अररिया



**Detailed Estimate**

Name of work :-

**Haldi Khora Bank Tola to T03**

SI No	Item	No	Length	Width	Height	Qty	Unit	Rate	Amount
1	Providing and cutting of 62 mm to 75 mm dia bamboo piles to size and making shoes, all complete job ---E/I	164	1.60	-	-	262.40			
					Total	262.40	sqm	50.20	13172.00
2	Providing, fitting and fixing 62 mm 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.	8	170.00	-	-	1360.00			
					Total	1360.00	sqm	28.53	38801.00
3	Providing and filling empty cement bags with local sand, stitching the bags and placing including supply of sutli etc. all complete job ---E/I	1	170.00	0.65	1.50	165.75			
					Total	165.75	cum		
		=	5853.46 cft		Say	4878.00	Nos	38.14	186047.00
4	Providing laying and spreading brick bats in Road ditches all complete as per approved design, specifications and direction of E/I	1	120.00	1.50	0.60	108.00			
					Total	108.00	cum	2145.02	231662.00
<b>TOTAL</b>									<b>469682.00</b>
Add 12 % GST									Rs 56362.00
Add 1 % L. Ces									Rs 4697.00
<b>Total Cost</b>									<b>Rs 530741.00</b>

Say. RS. 530800/-

*[Signature]*  
15-12-20

J.E  
RWD  
Kishanganj-1

*[Signature]*  
10/12/20

A.E  
R.W.D  
Kishanganj-1

*[Signature]*  
14/12/20

E.E  
R.W.D  
Kishanganj - I

Technically approved for Rs. 530800/-

(Rs. Five Lacs Thirty thousand and Eight

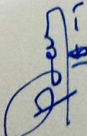
Hundred only)


*[Signature]*  
23/12  
अधीक्षण अभियन्ता  
ग्रामीण कार्य विभाग  
कार्य अंचल, किशनगंज




# LEAD CHART

S.L. No.	Name of material	Source	Mode of transport	From	To	Lead in K.M		Loading	Unloading	Total Loading + Unloading
						Surface Road	Katcha Road			
1	2		3	4	5	6	7	8	9	10
1	Bricks	Local Kiln	By road	Local Kiln	Site	7	1	203.05	203.05	406.10
2	Fine sand	Local source	By road	Local	Site	2	1	59.43	37.10	96.53
3	Coarse Sand	Chopra	By road	Chopra	Site	80	0	59.43	37.10	96.53
4	Boulder	Siliguri	By road	Siliguri	Site	120	0	118.86	59.43	178.29
6	Stone metal for GSB	Siliguri	By road	Siliguri	Site	120	0	118.86	59.43	178.29
7	Seel	Local	By road	Local	Site	5	0	118.86	59.43	178.29
8	Hume pipe (1000 mm	Purnia	By road	Purnia	Site	90	0	41.62	28.00	69.62
9	Hume pipe (600 mm	Purnia	By road	Purnia	Site	90	0	17.84	12.00	29.84
10	Bamboo 62 to 75 mm	Local	By road	Local	Site	5	5	1,112.00	1,112.00	2,224.00

  
 18-12-20  
 J.E  
 R.W.D  
 Kishanganj-1

  
 10/12/20  
 A.E  
 R.W.D  
 Kishanganj-1

  
 1-11-20  
 E.E  
 R.W.D  
 Kishanganj - I



## RATE ANALYSIS

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
1	302	(i)	<b>Excavation in cutting in soil by manual means with lead up to 50 m</b> Excavation for roadway in soil using manual means for carrying of cut earth to embankment site with a lift upto 1.5 m and lead upto 50 m as per technical specification clause 302.3 Unit = cum Taking output = 120 cum				
		a)	Labour				
			Mate	day	1.80	305.00	549.00
			Mazdoor (Unskilled)	day	45.00	287.00	12,915.00
		b)	Overheads @ 6 % on (a)				
		c)	Contractor's profit @ 0% on (a+b)				0.00
		c)	Cost for 120 cum = a+b+c				13,464.00
			Rate per cum = (a+b+c)/120				112.20
			<b>Total Cost</b>	<b>CUM</b>			<b>112.20</b>
2	303	301.5	<b>Construction of embankment with material obtained from road way cutting</b> Construction of embankment with approved materials deposited at site and obtained from roadway cutting and excavation from drain and foundation of other structures graded and compacted to meet requirement of Tables 300.1 and 300.2 as per Technical Specification Clause 301.5 Unit = cum Taking output = 100 cum				
		a)	Labour				
			Mate	day	0.02	305.00	6.10
			Mazdoor (Unskilled)	day	0.50	287.00	143.50
		b)	Machinery				
			Dozer D-50 for spreading @ 100 cum per hour	hour	0.50	3,337.90	1,668.95
			Tractor mounted grader arrangement for grading @ 100 cum per hour	hour	1.00	573.20	573.20
			Water tanker 6 kl capacity	hour	2.00	184.00	368.00
			Three wheel 80-100 KN Static Roller	hour	1.25	803.00	1,003.75
		c)	Material				
			Water	kl	12.00	40.00	480.00
			Compensation for earth	cum	100.00	34.81	3,481.00
		d)	Overheads @ 6 % on (a+b+c)				
		e)	Contractor's profit @ 10% on (a+b+c+d)				0.00
			Rate for 100 cum = a+b+c+d+e				7,724.50
			Rate per cum = (a+b+c+d+e)/100=				77.25
			<b>Total Cost</b>	<b>CUM</b>			<b>77.25</b>
			<b>Grand total = 112.2 + 77.25 =</b>	<b>CUM</b>			<b>189.45</b>
3	9.3	1100	<b>Providing and Laying Reinforced Cement Concrete Pipe NP3 as per design in Single Row</b> 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.				
		A.	<b>600 MM DIA</b> Unit = m Taking output = 7.5 m ( 3 pipes of 2.5 m length each )				
		a ) Material					
		i) Sand at site	cum			175.80	0.00
		ii ) Cement at site	ton			4850.80	0.00
		iii) RCC pipe NP 3 pipe including collar at site	m	7.50		2075.92	15569.40
		b ) Labour					
		Mate	day	0.04		305.00	12.20
		Mason ( 1st class )	day	0.12		388.00	46.56
		Mazdoor ( Unskilled )	day	0.96		287.00	275.52
		c)Overheads @ 6 % on (a+b)					
		d)Contractor's profit @ 0% on (a+b+c)					0.00
		e ) Carriage					
		i) Sand at site	cum	0		2107.51	0.00
		ii ) Cement at site	ton	0		5547.44	0.00
		iii) RCC pipe NP 3 pipe including collar at site	m	7.50		921.38	6910.35
		Cost for 7.5m = ( a+b+c)					22814.03
		Rate per m = (a+b+c)/7.5					3041.87
		Total					3041.87
			<b>Total Cost</b>	<b>M</b>			<b>3041.87</b>
4	9.3	1100	<b>Providing and Laying Reinforced Cement Concrete Pipe NP3 as per design in Single Row</b> 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.				
		B.	<b>1000 MM DIA</b>				



			Unit =m Taking output =7.5 m ( 3 pipes of 2.5 m length each ) <b>a ) Material</b> i) Sand at site ii ) Cement at site iii) RCC pipe NP 3 pipe including collar at site Jute <b>b ) Labour</b> Fitter Mason ( 1st class ) Mazdoor ( Unskilled ) c)Overheads @6 % on (a+b) d)Contractor's profit @ 0% on (a+b+c) <b>e ) Carriage</b> i) Sand at site ii ) Cement at site iii) RCC pipe NP 3 pipe including collar at site Cost for 7.5m = ( a+b+c+d) Rate per m =(a+b+c+d)/ 7.5 <b>Total</b>	cum ton m kg day day day cum ton m	7.50 7.50 1.00 2.00 21.00 0 0 7.50	175.80 4850.80 2758.22 33.66 395.00 388.00 287.00 2107.51 5547.44 1030.28	0.00 0.00 20686.65 252.45 395.00 776.00 6027.00 0.00 0.00 7727.10 35864.20 4781.89
			<b>Total Cost</b>	<b>m</b>			<b>4781.89</b>
5	9.5 ( C )	1100	Providing and Laying Reinforced Cement Concrete Pipe NP3 as per Design In Double Row Providing and laying reinforced cement concrete pipe NP3 for culverts on first class bedding of granular material in double row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets as per Clause 1106. 2 X 1000 MM DIA Unit =m Taking output =7.5 m (6 pipes of 2.5 m length each in two rows) <b>a ) Material</b> i) Sand at site ii ) Cement at site iii) RCC pipe NP 3 pipe including collar at site Jute <b>b ) Labour</b> Fitter Mason ( 1st class ) Mazdoor ( Unskilled ) c)Overheads @6 % on (a+b) d)Contractor's profit @ 0% on (a+b+c) <b>e ) Carriage</b> i) Sand at site ii ) Cement at site iii) RCC pipe NP 3 pipe including collar at site Cost for 7.5m = ( a+b+c) Rate per m =(a+b+c)/7.5 <b>Total</b>	cum ton m kg day day day cum ton m	15.00 15.00 2.00 4.00 42.00 0 0 15.00	175.80 4850.80 2758.22 33.66 395.00 388.00 287.00 2107.51 5547.44 1030.28	0.00 0.00 41373.30 504.90 790.00 1552.00 12054.00 0.00 0.00 15454.20 71728.40 9563.79 9563.79
			<b>Total Cost</b>	<b>M</b>			<b>9563.79</b>
6	WRD 5.7.40.1	M-159	Providing and Placing Sand bags including all material and 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 :- Taking Out put:- Cost of E.C. Bags Cost of Sand(100x1.2/35.3)(120Cft)  b) Overheads @ 0% on (a+b+c) c) Overheads @5 % d) Carriage of Sand e) For filling & stitching & stacking (Sub analysis below) f) For Placing (Sub Analysis below) Rate Per % Bags Final Rate Per % Bags	Per % nos 100 nos % cum cum Per % nos cum nos	100 3.40 3.40 3.40 2.00	8.46 141.05 306.27 287.00	846.00 482.20 1328.29 1041.32 583.88 861.00 Rs.3814.49 Rs.3814.50
			<b>Sub Analysis</b> A. For filling & stitching & stacking (a) Unskilled mazdoor for filling sand into bags and sewing	nos	2.00	287.00	574.00



			b) Sotali	Kg	0.50	19.75	9.88
			c) Overheads @ 0% on (a+b+c)				
			d) Overheads @5 %				
			Cost for 100 nos = a+b+c+d				583.88
			Rate per % Nos =				583.88
			Final Rate For filling & stitching & stacking		Per % nos	(a)	Rs.583.88
5.7.40.1	1	WRD	Labour rate for filling of E.C.Bags with stitching and stacking				
			<b>B For Placing</b>				
			(a) Unskilled mazdoor for carrying filled bags and placing to work site	nos	3	287.00	861.00
			b) Overheads @0% on (a+b+c)				
			c) Overheads @5 %				861.00
			Cost for 100 nos = a+b+c				861.00
			Rate per % Nos =				
			Final Rate		Per%Nos	(b)	Rs.861.00
			Only Labour Charge		Per%Nos		Rs.1444.00
7	5.7.7	WRD	Providing bamboo piles including Labour for cutting 62 mm to 75 mm dia sal 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				
		(a)	Labour	nos	0.25	345.00	86.25
			Carpenter Gr II	nos	2.5	287.00	717.50
			Unskilled mazdoor for piling				
		(b)	Materials				
			Bamboo 75 mm to 62 mm dia	m	30.5	23.85	727.43
			Sub total				1531.19
		(c)	Overheads @5 %	%	15		
			Total for 30.5 Mtr Length				1531.19
			Rate Per M				50.20
			Say Rs	per M			50.20
8	5.7.9	WRD	Supplying 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, all material and Labour complete job as per specification and direction of E / I.				
			Unit :-	Per M			
			Taking Out put:-	30.50	Mtr		
		(a)	Materials				
			Cost of 150 mm long nails	Kg	0.5	55.84	27.92
			Bamboo 75 mm to 62 mm dia	m	30.5	23.85	727.43
		(b)	Labour				
			Carpenter Gr II	nos	0.125	345.00	43.13
			Unskilled mazdoor	nos	0.25	287.00	71.75
			Sub total				870.22
		(c)	Overheads @5 %		15 %		
			Total for 30.5 Mtr Length				870.22
			Rate Per M				28.53
			Say Rs	28.53	Per M		
9	5.7.8	WRD	Providing 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, bamboo Labour for complete job as per specification and direction of E / I.				
			Unit :-	Per M <sup>2</sup>			
			Taking Out put:-	9.30	Sqm		
			(Assuming strip of 3.05x3.05 = 9.30 sqm )				



		(A)	Materials				
			75 mm to 100 mm long nails	Kg	0.25	55.84	13.96
			Bamboo 75 mm to 62 mm dia				
			(Bamboo@75mm = 3050/75 = 40.67 say 41 nos, X 3.05 = 125.05m				
			Add for Lower Binder of Chachari 10 x 3.05 = 30.5 m				
			Runner ( @150mm C/C) 7 x 3.05 = 21.35m				
			(Total=143.35m, Hence, 176.9/6 = 30 Nos)	m	143.35	23.85	3418.90
		(B)	Labour				
			Carpenter Gr II	nos	1	345.00	345.00
			Unskilled mazdoor	nos	1	287.00	287.00
			Sub total				4064.86
		(c)	Overheads @5 %	15	%		
			Total for 9.30 SqM				4064.86
			Rate Per SqM				437.08
				Say Rs	Per M <sup>2</sup>		437.08
10	9.2 (1)	1100 & 800	Sand filling or Type B ( First Class ) Bedding				
			Laying (First Class) bedding on well compacted sand, moorum or approved granular material as per Clause 1105 (ii)				
			Filling in foundation trenches as per drawing and technical specification Clause 305.3.9				
		i.	Sand filling				
			Unit = cum				
		a)	Labour				
			Mate	day	0.01	305.00	3.05
			Mazdoor (Unskilled)	day	0.30	287.00	86.10
		b)	Material				
			Sand (assuming 20 per cent voids)	cum	1.20	141.85	170.22
		c)	Overheads @ 6 % on (a+b)				0.00
		d)	Overheads @5 %				
			CARRIAGE COST				
			sand	Cum	1.2	306.27	367.52
			Rate per cum = a+b+c				626.82
			Total Cost	CUM			626.89
11	WRD	5.7.40	Construction of granular sub base using Jhama metal/ Brick Bat vide WRD				
			Providing and laying dry graded jhama khoa? Brickbat or stone filter under brick pitching or boulder pitching in slope or apron including light ramming etc.all complete job as per specification and direction of E / I.				
			Unit = cum				
			Taking output = 2.832 cum				
		(a)	Labour				
			Mazdoor (Unskilled)	day	0.00	305.00	0.00
			Mazdoor (Unskilled)	day	3.00	287.00	861.00
			Sub total of Labour for 2.832 Cum				861.00
			Labour charge for 1.00 cum				304.03
		(b)	Material				
			Brick bat	cum	1.200	1,062.00	1,275.60
		(e)	Carriage				
			Brick bat	cum	1.200	471.16	565.39
			Cost for 1.00 cum = a+b+c+d+e				2,145.02
			Rate per cum = (a+b+c+d+e)				Rs.2145.02
			Final Rate				Rs.2145.07

C/11/12/12