

RURAL WORKS DEPARTMENT GOVT OF BIHAR



NAME OF WORKS :- Khuti Gate PWD Harijan Tola To Palasi Sima
Via Kawa

BLOCK :- Jokihat

FDR

19,82,793

YEAR(2024-25)

R.W.D., WORKS CIRCLE, KISHANGANJ

R.W.D., WORKS DIVISION, ARARIA

प्रतिवेदन

एल का नाम :-

Khoul Gate PWD Harizan To Palaei Bina Via K.own

कार्य का नाम :-

Khoul Gate PWD Harizan To Palaei Bina Via K.own

मे बाक से क्षतिग्रस्त भाग में यातायात चालू करने का कार्य।

सालान प्राकलन 2024 को प्रमण्ड में आयी भीषण बाढ़ से क्षतिग्रस्त पर

मे बाक क्षतिग्रस्त भस्मभूति मंद से यातायात चालू करने हेतु तैयार किया गया है जिसकी प्रकृतित लागत 19,82,793 (Nineteen lakhs Eighty-two thousand Seven hundred and Ninety-three) का निर्माण MM/65 योजनागत हुआ है एवं योजना अनुसूचक अवधि में नहीं है।

एल के कटे (क्षतिग्रस्त) भाग में आवश्यकता अनुसार Hume Pipe, Bamboo, लोकल बालू एवं छिन्क छिन्क देने के बाद यातायात चालू कराया गया है। एल के विभिन्न हिस्से में कराये गये कार्य का शिखरणी स्पष्ट रूप से प्राकलन में दर्शाया गया है।

प्राकलन मंदी का दर वर्तमान अनुसूचित दर के अनुरूप है।

20/11/24

कनीय अभियंता,

सहायक अभियंता,

ग्रामीण कार्य विभाग,

ग्रामीण कार्य विभाग,

कार्य प्रशाखा, 15/11/24

कार्य अवर प्रमण्डल,

20/11/24

कार्यपालक अभियंता,

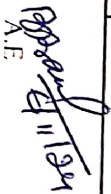
ग्रामीण कार्य विभाग,

कार्य प्रमण्डल,

20/11/24

SUMMARY OF COST ESTIMATE FOR THE PROJECT		
NAME OF ROAD :-	Khul Gate PWD Harjan Tola To Palasi Sima Via Kawa	
DISTRICT :-	ARARIA	
BLOCK :-	Jokihat	
Length of Road:-	0.00KM	
Length of Cutting in mtr :-	76.100	
Sl. No.	DESCRIPTION	AMOUNT (LAKHS)
1	Filling of local sand	967213.42
2	Labour for cutting 62mm to 75mm dia bamboo	140290.60
3	Labour for filling 62mm to 75mm dia bamboo	16177.60
4	Labour for filling empty cement bags with local sand Nylon crate	0.00
5	Supplying of EC bag, of local sand	244307.36
6	Supply and Carriage of brick bats	674804.13
7	Supply, laying and carriage of 1000 mm HPC	0.00
8	Drone Videography Chair Three times	15000.00
	SUB TOTAL COST =	1982793.01
	TOTAL (RS.) =	19,82,793

J.E

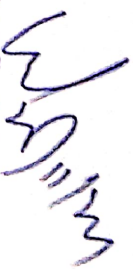




S.E

S.E

Approved
Technically ~~Sanctioned~~ for 2,19,82,793=00
1 Rupees Nineteen Lakhs, Eighty-two thousand
Seven hundred Ninety-three only

Superintending Engineer
RWD Work Circle
Kishanganj



Bill of Quantity

NAME OF ROAD :-		Khutl Gate PWD Harijan Tola To Palasi Sima Via Kawa			
DISTRICT :-		ARARIA			
BLOCK :-		Jokihat			
Sl. No.	DESCRIPTION OF ITEMS	QUANTITY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
1	Filling of local sand obtained from river bed, watering & ramming all complete job as per specification & direction of Engineer-in-charge	778.64	CUM	1272.78	987213.42
2	Construction of embankment with approved materials obtained from excavation for road way in soil using manual means for carrying of cut earth to embankment size 1.5 mt and lead upto 50 m, graded and compacted to meet requirement of table SOO.1, SOO.2 with lift up to	0.00	CUM	549.74	0.00
3	Labour for cutting 62 mm to 75mm dia bamboo piles to size and making shoes & driving by jet machine etc. all complete job as per specification & direction of Engineer-in-charge	2100.00	MTR	69.19	145290.60
4	Labour for fitting & fixing 62 mm to 75 mm dia bamboo runners in position at every vertical pile with 150 mm long nails or 3/8 swg G.I wire including cost of G.I wire or nails etc all complete job as per specification & direction of Engineer-in-charge.	450.00	MTR	35.95	16177.50
5	Labour for fitting empty cement bags with local sand, stitching the bags and placing in Nylon crate of size (1 m X 1 m X 1 m)with lead of 150 M including supply of sutli etc. at site in dry portion all complete as per approved design, specification and direction of E/I	0.00	Each	1151.80	0.00
6	Supplying of EC bag, filling of local sand stitching and placing in position as the direction of Engineer-in-charge.	4372.00	Each	55.88	244307.36
7	Supply and Carriage of brick bats upto 8 km breach and placing in breaches and lying of bats, all complete job	208.33	CUM	2759.12	574804.13
8	Supplying and carriage of hume pipe 1000 mm dia . all complete job.	0.00	RM	5172.30	0.00
A) SUB TOTAL =					1967793.01

3	Labour for fitting & 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 etc all complete job as per specification & direction of Engineer-in-charge.										
	At ch:-0.050 km		1	14.00	2.5/0.5			70.00			
	At ch:-0.400 km		1	14.00	2.5/0.5			70.00			
	At ch:-0.650 km		2	11.00	2.5/0.5			110.00			
	At ch:-0.820 km		2	9.00	2.5/0.5			90.00			
	At ch:-0.950 km		2	11.00	2.5/0.5			110.00			
	Mtr.	total qty :-					450.00	35.95	15177.50		
	4	Supplying of EC bag, filling of local sand stitching and placing in position as the direction of Engineer-in-charge.									
	At ch:-0.050 km	cum	1	14.00	0.60	(1.5+1.85+1.25)/3		12.88			
At ch:-0.400 km	cum	1	14.00	0.90	(1.5+0.95+0.95)/3		14.28				
At ch:-0.650 km	cum	2	11.00	0.90	(2.85+2.5+1.75)/3		46.86				
At ch:-0.820 km	cum	2	9.00	0.90	(2.85+2.5+1.75)/3		38.34				
At ch:-0.950 km	cum	2	11.00	0.90	(1.5+2.25+1.75)/3		36.30				
Total No of E C Bags(0.034cum=100Bags)		148.66		/		0.034	4372.00				
	Each	Say No of Bage :-					4372.00	55.88	244307.350		
5	Providing laying & filling Geo bags of size 1m X 0.700m (Type A) 300 GSM nonwoven) weight 420 gm volume of filled bag 0.070 cum Weight of filled Geo bag 126 kg with local sand including stitching in four lines by approved Nylon thread with Staching machine and generator, stacking and placing after loading, Unloading and carriage with the help of Trolley within 150 mtr. lead and all complete as per specification and direction of E.A.										
	At ch:-23500 m	cum	0	6.00	4.50	2.73		0.00			
	(0.07m ³ =1 no. of Geo Bags)			0.00	/		0.07	0.00			
	Each						0.00	332.74	0.000		

6	Supply and Carriage of brick bats upto 8 km breach and placing in breaches and lying of bats, all complete job.									
	At ch:-0.050 km	cum	1	21.00	(5.5+5.25+5.25)/3	(0.75+0.65+0.5)/3	70.93			
	At ch:-0.400 km	cum	2	14.00	(3.5+3.25+3.25)/3	(0.45+0.65+0.55)/3	51.33			
	At ch:-0.650 km	cum	1	15.00	(4.5+4)/2	(0.45+0.45+0.55)/3	30.81			
	At ch:-0.820 km	cum	1	20.00	(1.5+1.5)/2	(0.45+0.65+0.55)/3	16.50			
	At ch:-0.950 km	cum	1	20.00	(3+4.5)/2	(0.45+0.55+0.55)/3	38.75			
		cum	total qty :-				208.33	2,759.12	574804.13	
							A) SUB TOTAL =		1967793.01	
							TOTAL COST =		1967793.01	

[Signature]
6/11/24

Junior Engineer

[Signature]
6/11/24

Asstt. Engineer

[Signature]
6/11/24

Executive Engineer

S.E
KISHANGANJ

FINAL RATE UNDER WORKS CIRCLE KISHANGANJ

B. No	Description of Item	Unit	Final Rate (Excluding GST, Belphorago & L. Cons)	Final Rate (Including GST, Belphorago & L. Cons)	B.T. Per Cum / Per Bag / Per DAG
1	EARTH WORK	CUM	489.003	649.740	3.530
2	BRICK DAT	CUM	2200.676	2769.116	120.720
3	G.R.B	CUM	4320.601	6172.300	21.380
4	SAND DAG (Cement Bag)	Each	46.660	66.800	0.490
5	DAMBOO PILE	Per Mtr.	60.140	69.106	
6	DAMBOO CHACHIN	Per Mtr.	302.260	369.690	
7	DAMBOO RUNNER	Per Mtr.	30.210	35.950	
8	HUME PIPE (1000 mm Dia)	Per Mtr.	6206.598	7386.850	
9	HUME PIPE (600 mm Dia)	Per Mtr.	2402.260	2966.790	
10	STEEL DRUM SHEET	Per Sq. Mtr.	216.362	266.270	
11	GEO BAG WITH SAND	EACH	967.490	1152.320	1.010
12	EACH N.C. BAG WITH SAND (Cement Bag)	Each E.C	967.490	1151.800	0.490
13	LOCAL SAND	CUM	721.110	1272.780	0.490

Shankar 6/11/24
Junior Engineer

Pooja 6/11/24
Assistant Engineer

Prashant 6/11/24
Executive Engineer

Superintending Engineer
Rural Works Department
Works Circle Kishanganj

BASIC RATES
(A) Labour

Sl. No.	Description of Labour	Unit	Rate (Rs.)
L-01	Blasht	day	373
L-02	Simanoni Special (Semi skilled)	day	393
L-03	Blacksmith special	day	503
L-04	Blasht 2nd class	day	619
L-05	Carpenter 1st Class	day	503
L-06	Chaps spreader, semi-skilled	day	449
L-07	Chiseller (Skilled)	day	577
L-08	Dresser (Skilled)	day	472
L-09	Drifter 2nd class	day	449
L-10	Electrician, skilled	day	476
L-11	Fitter, skilled	day	511
L-12	Mason (1st class)	day	503
L-13	Mason (2nd Class)	day	449
L-14	Mate, Semi skilled	day	397
L-15	Mazdoor (Unskilled)	day	373
L-16	Mazdoor (Semi skilled)	day	388
L-17	Mazdoor (Skilled)	day	472
L-18	Painter (1st class)	day	476
L-19	Plumber, Special	day	476
L-20	Surveyor	day	454
L-21	White Washer	day	476
L-22	Head blacksmith	day	531
L-23	Welder 1st Class	day	584
	Carpenter Head	day	531
	Angin Guard	day	415

(Basic Rates Taken From SOR, Seventeenth Edition, Road Construction Department, Govt. of Bihar
effective from 01/04/2023)

**BASIC RATES
(1b) Material**

Sl. No.	Description	Unit	Basic Rate as per SOR	Add Royalty	Final Rate With Royalty
M-001	Bamboo (1st Class) 100 mm x 100 mm dia. 6.0 m -8.0 m long (per mtr.- 23.52 Rs.)	No.	188.00		188.00
M-002	Bamboo (1st Class) 100 mm x 100 mm dia. 6.0 m -8.0 m long (per mtr.- 23.52 Rs.)	No.	188.00		188.00
M-003	Bamboo (1st Class) 50 mm x 100 mm dia. 6.0 m -8.0 m long (per mtr.- 14.71 Rs.)	No.	118.00		118.00
M-004	Bamboo (1st Class) 50 mm x 100 mm dia. 6.0 m -8.0 m long (per mtr.- 14.71 Rs.)	No.	118.00		118.00
M-005	Bamboo (2nd Class) 75mm dia. 1.8 m x 6.0 m -8.0 m long (per mtr.- 22.03 Rs.)	No.	176.00		176.00
M-006	Bamboo (2nd Class) 75mm dia. 6.0 m -8.0 m long (per mtr.- 22.03 Rs.)	No.	176.00		176.00
M-007	Brick Bats	cum	1063.00	18.00	1081.00
M-008	Selected earth (Including @ Rs. 33.00 per cum & compensation @ Rs. 2.25 Per Cum	cum	2.25	33.00	35.25
M-009	Empty Cement Bag IS 11652:2000	Nos.	11.11		11.11
M-010	Steel Drum 300 mm dia 1.2 m high / empty bitumen drum	Nos.	170.13		170.13
M-011	Sand bags (Cost of sand and Empty cement bag)	Nos.	7.31	2.59	9.90
M-012	Sutli (Brown)	kg	20.59		20.59
M-013	Granular material (Natural occurring, soil gravel mixture / quarry waste, kankar, laterite, dhandla	cum	84.03	83.00	167.03
M-014	Nails	kg	108.00		108.00
M-014	RCC Pipe NP3 (1000 mm dia)	m	5787.23		5787.23
M-015	RCC Pipe NP3 (600 mm dia)	m	2310.00		2310.00
M-015	Sand (Fine) at source	cum	69.75	75.00	144.75
M-016	Empty Steel Drum 300 mm dia 1.2 m height	Nos.	170.13		170.13
M-016	Water	kl	60.30		60.30
M-017	Geo Bags	Each	124.00		124.00
M-018	G.S.B.	cum	69.75	75.00	144.75

*(Basic Rates Taken From SOR, Seventeenth Edition, Road Construction Department, Govt. of Bihar
effective from 01/04/2023.*

BASIC RATES **FOR CHARGES RATES OF PLANT & MACHINERY**

Sl. No.	Use Code	Description of Machine	Unit	Output	Tender Bids in Rs.	
					Unit	Rate
001	P&M-001	Lifting of materials	1000 h	300.00	per hour	1,573.00
002	P&M-002	Excavation	1000 h	100.00	per hour	1,316.00
003	P&M-003	Grading	1000 h	15.00	per hour	1,319.00
004	P&M-004	Compaction	1000 h	100.00	per hour	1,317.00
005	P&M-005	Compaction of sub-grade	1000 h	50.00	per hour	1,314.00
006	P&M-006	Sub-base (1:1)	1000 h	10.00	per hour	1,314.00
007	P&M-007	Sub-base (1:1.5)	1000 h	10.00	per hour	1,314.00
008	P&M-008	Sub-base (1:2)	1000 h	10.00	per hour	1,314.00
009	P&M-009	Sub-base (1:2.5)	1000 h	10.00	per hour	1,314.00
010	P&M-010	Sub-base (1:3)	1000 h	10.00	per hour	1,314.00
011	P&M-011	Sub-base (1:4)	1000 h	10.00	per hour	1,314.00
012	P&M-012	Sub-base (1:5)	1000 h	10.00	per hour	1,314.00
013	P&M-013	Sub-base (1:6)	1000 h	10.00	per hour	1,314.00
014	P&M-014	Sub-base (1:7)	1000 h	10.00	per hour	1,314.00
015	P&M-015	Sub-base (1:8)	1000 h	10.00	per hour	1,314.00
016	P&M-016	Sub-base (1:9)	1000 h	10.00	per hour	1,314.00
017	P&M-017	Sub-base (1:10)	1000 h	10.00	per hour	1,314.00
018	P&M-018	Sub-base (1:11)	1000 h	10.00	per hour	1,314.00
019	P&M-019	Sub-base (1:12)	1000 h	10.00	per hour	1,314.00
020	P&M-020	Sub-base (1:13)	1000 h	10.00	per hour	1,314.00
021	P&M-021	Sub-base (1:14)	1000 h	10.00	per hour	1,314.00
022	P&M-022	Sub-base (1:15)	1000 h	10.00	per hour	1,314.00
023	P&M-023	Sub-base (1:16)	1000 h	10.00	per hour	1,314.00
024	P&M-024	Sub-base (1:17)	1000 h	10.00	per hour	1,314.00
025	P&M-025	Sub-base (1:18)	1000 h	10.00	per hour	1,314.00
026	P&M-026	Sub-base (1:19)	1000 h	10.00	per hour	1,314.00
027	P&M-027	Sub-base (1:20)	1000 h	10.00	per hour	1,314.00
028	P&M-028	Sub-base (1:21)	1000 h	10.00	per hour	1,314.00
029	P&M-029	Sub-base (1:22)	1000 h	10.00	per hour	1,314.00
030	P&M-030	Sub-base (1:23)	1000 h	10.00	per hour	1,314.00
031	P&M-031	Sub-base (1:24)	1000 h	10.00	per hour	1,314.00
032	P&M-032	Sub-base (1:25)	1000 h	10.00	per hour	1,314.00
033	P&M-033	Sub-base (1:26)	1000 h	10.00	per hour	1,314.00
034	P&M-034	Sub-base (1:27)	1000 h	10.00	per hour	1,314.00
035	P&M-035	Sub-base (1:28)	1000 h	10.00	per hour	1,314.00
036	P&M-036	Sub-base (1:29)	1000 h	10.00	per hour	1,314.00
037	P&M-037	Sub-base (1:30)	1000 h	10.00	per hour	1,314.00
038	P&M-038	Sub-base (1:31)	1000 h	10.00	per hour	1,314.00
039	P&M-039	Sub-base (1:32)	1000 h	10.00	per hour	1,314.00
040	P&M-040	Sub-base (1:33)	1000 h	10.00	per hour	1,314.00
041	P&M-041	Sub-base (1:34)	1000 h	10.00	per hour	1,314.00
042	P&M-042	Sub-base (1:35)	1000 h	10.00	per hour	1,314.00
043	P&M-043	Sub-base (1:36)	1000 h	10.00	per hour	1,314.00
044	P&M-044	Sub-base (1:37)	1000 h	10.00	per hour	1,314.00
045	P&M-045	Sub-base (1:38)	1000 h	10.00	per hour	1,314.00
046	P&M-046	Sub-base (1:39)	1000 h	10.00	per hour	1,314.00
047	P&M-047	Sub-base (1:40)	1000 h	10.00	per hour	1,314.00
048	P&M-048	Sub-base (1:41)	1000 h	10.00	per hour	1,314.00
049	P&M-049	Sub-base (1:42)	1000 h	10.00	per hour	1,314.00
050	P&M-050	Sub-base (1:43)	1000 h	10.00	per hour	1,314.00
051	P&M-051	Sub-base (1:44)	1000 h	10.00	per hour	1,314.00
052	P&M-052	Sub-base (1:45)	1000 h	10.00	per hour	1,314.00
053	P&M-053	Sub-base (1:46)	1000 h	10.00	per hour	1,314.00
054	P&M-054	Sub-base (1:47)	1000 h	10.00	per hour	1,314.00
055	P&M-055	Sub-base (1:48)	1000 h	10.00	per hour	1,314.00
056	P&M-056	Sub-base (1:49)	1000 h	10.00	per hour	1,314.00
057	P&M-057	Sub-base (1:50)	1000 h	10.00	per hour	1,314.00
058	P&M-058	Sub-base (1:51)	1000 h	10.00	per hour	1,314.00
059	P&M-059	Sub-base (1:52)	1000 h	10.00	per hour	1,314.00
060	P&M-060	Sub-base (1:53)	1000 h	10.00	per hour	1,314.00
061	P&M-061	Sub-base (1:54)	1000 h	10.00	per hour	1,314.00
062	P&M-062	Sub-base (1:55)	1000 h	10.00	per hour	1,314.00
063	P&M-063	Sub-base (1:56)	1000 h	10.00	per hour	1,314.00
064	P&M-064	Sub-base (1:57)	1000 h	10.00	per hour	1,314.00
065	P&M-065	Sub-base (1:58)	1000 h	10.00	per hour	1,314.00
066	P&M-066	Sub-base (1:59)	1000 h	10.00	per hour	1,314.00
067	P&M-067	Sub-base (1:60)	1000 h	10.00	per hour	1,314.00
068	P&M-068	Sub-base (1:61)	1000 h	10.00	per hour	1,314.00
069	P&M-069	Sub-base (1:62)	1000 h	10.00	per hour	1,314.00
070	P&M-070	Sub-base (1:63)	1000 h	10.00	per hour	1,314.00
071	P&M-071	Sub-base (1:64)	1000 h	10.00	per hour	1,314.00
072	P&M-072	Sub-base (1:65)	1000 h	10.00	per hour	1,314.00
073	P&M-073	Sub-base (1:66)	1000 h	10.00	per hour	1,314.00
074	P&M-074	Sub-base (1:67)	1000 h	10.00	per hour	1,314.00
075	P&M-075	Sub-base (1:68)	1000 h	10.00	per hour	1,314.00
076	P&M-076	Sub-base (1:69)	1000 h	10.00	per hour	1,314.00
077	P&M-077	Sub-base (1:70)	1000 h	10.00	per hour	1,314.00
078	P&M-078	Sub-base (1:71)	1000 h	10.00	per hour	1,314.00
079	P&M-079	Sub-base (1:72)	1000 h	10.00	per hour	1,314.00
080	P&M-080	Sub-base (1:73)	1000 h	10.00	per hour	1,314.00
081	P&M-081	Sub-base (1:74)	1000 h	10.00	per hour	1,314.00
082	P&M-082	Sub-base (1:75)	1000 h	10.00	per hour	1,314.00
083	P&M-083	Sub-base (1:76)	1000 h	10.00	per hour	1,314.00
084	P&M-084	Sub-base (1:77)	1000 h	10.00	per hour	1,314.00
085	P&M-085	Sub-base (1:78)	1000 h	10.00	per hour	1,314.00
086	P&M-086	Sub-base (1:79)	1000 h	10.00	per hour	1,314.00
087	P&M-087	Sub-base (1:80)	1000 h	10.00	per hour	1,314.00
088	P&M-088	Sub-base (1:81)	1000 h	10.00	per hour	1,314.00
089	P&M-089	Sub-base (1:82)	1000 h	10.00	per hour	1,314.00
090	P&M-090	Sub-base (1:83)	1000 h	10.00	per hour	1,314.00
091	P&M-091	Sub-base (1:84)	1000 h	10.00	per hour	1,314.00
092	P&M-092	Sub-base (1:85)	1000 h	10.00	per hour	1,314.00
093	P&M-093	Sub-base (1:86)	1000 h	10.00	per hour	1,314.00
094	P&M-094	Sub-base (1:87)	1000 h	10.00	per hour	1,314.00
095	P&M-095	Sub-base (1:88)	1000 h	10.00	per hour	1,314.00
096	P&M-096	Sub-base (1:89)	1000 h	10.00	per hour	1,314.00
097	P&M-097	Sub-base (1:90)	1000 h	10.00	per hour	1,314.00
098	P&M-098	Sub-base (1:91)	1000 h	10.00	per hour	1,314.00
099	P&M-099	Sub-base (1:92)	1000 h	10.00	per hour	1,314.00
100	P&M-100	Sub-base (1:93)	1000 h	10.00	per hour	1,314.00

(Basic Rates Taken From SOR, Seventeenth Edition, Road Construction Department, Govt. of Bihar
 effective from 01/04/2023.

SUMMARY OF CARRIGE COST

Sl. No.	Item	Unit	Amount (Rs.)
1	Earth Work	Cum	274.42
2	Brick Bats	Cum	521.97
3	Bamboo	Per Mtr.	3.00
4	G.S.B.	Cum	2960.13
5	Local Sand	Cum	345.14
6	HUME PIPE (1000 mm DIA)	Per Pipe	745.93
7	HUME PIPEP PIR METER	Per Mtr.	298.37
8	HUME PIPE (600 mm DIA)	Per Pipe	310.88
9	HUME PIPE (600 mm DIA)	Per Mtr.	124.35
10	Local Sand	Cum	345.10

Comparison of carriage cost of Material via Road from different sources

Comparison of carriage cost of Material via Road from different sources																
Sl No	Item	Unit	Source	Carriage Cost & Lead in Km										Loading & Unload	Carriage by Road	Total
				Pukka / Surface					Katcha							
1	By Tractor															
A	Earth Work Via Road	Cum	Local	3.60	x 20.04	x	0 Km	= Rs 0.00	3.60	x 31.30	x	1 Km	= Rs 55.24	219.18	274.42	274.420
				2.04					2.04							
B	Brick Bat Via Road	Cum	Local	3.60	x 20.04	x	7 Km	= Rs 247.55	3.60	x 31.30	x	1 Km	= Rs 55.24	219.18	521.97	521.970
				2.04					2.04							
B	Bamboo Via Road	pet mtr.	Local	3.60	x 20.04	x	2 Km	= Rs 1.15	3.60	x 31.30	x	1 Km	= Rs 0.89	0.96	3.00	3.000
				126.00					126.00							
D	Local Sand Via Road	Cum	Local	3.60	x 20.04	x	2 Km	= Rs 70.73	3.60	x 31.30	x	1 Km	= Rs 55.24	219.18	345.14	345.140
				2.04					2.04							
2	By Tipper															
A	GSB Via Road	Cum	Siliguri	8.00	x 9.83	x	177 Km	= Rs 2789.43	8.00	x 23.81	x	0 Km	= Rs 0.00	170.70	2960.13	2960.130
				4.99					4.99							
3	By Truck															
A	Hume Pipe (1000 mm) Via Rod	Mtr.	purnea	8.00	x 7.27	x	53 Km	= Rs 308.25	8.00	x 17.60	x	0 Km	= Rs 0.00	437.68	745.93	745.930
				10.00					10.00							
A1	Rate Per Mtr. Pipe	Mtr.	purnea							Rate per mtr				298.37	298.370	
B	Hume Pipe (600 mm) Via Road	Mtr.	purnea	8.00	x 7.27	x	53 Km	= Rs 123.30	8.00	x 17.60	x	0 Km	= Rs 0.00	187.58	310.88	310.880
				25.00					25.00							
B1	Rate Per Mtr. Pipe	Mtr.	purnea							Rate per mtr				124.35	124.350	

Cost of Haulage Excluding Loading & Unloading as per SO* Subjected to Verification of Lead

[Signature]
6/11/91
Junior Engineer
R.W.D. Works Section

[Signature]
6/11/91
Asstt. Engineer
R.W.D. Works Sub - Division,

[Signature]
6/11/91
Executive Engineer
R.W.D. Works

SDR Sl. No.	MORD Ref No.	DESCRIPTION	Unit	QTY	Rate	Amount in Rs
1	4.4	Carriage Of Material (By Tractor)				
		Loading and unloading of Stone Boulder /Stone aggregates sand/ kankar/ moorum				
		Placing tractor at loading point loading with front end loader dumping, turning for return trip excluding time for haulage and return trip				
		Unit = cum				
		Taking output = 2.25 cum				
		Time required for				
		positioning of tractor at loading point	min	1 min		
		loading by front end loader 1 cum bucket capacity @ 25 cum	min	5 min		
		Total		6 min		
		a) Labour				
		Mate	day	0.030	307.00	11.91
		b) Machinery	day	0.720	373.00	268.56
		Tractor 3.60 Tonnes Capacity	hour	0.100	676.00	67.60
		Front end loader 1 cum bucket capacity @ 25 Cum/hour	hour	0.003	1419.00	117.78
		Cost for 2.25 cum = a+b+c				465.85
		Rate per cum = (a+b+c)/2.25	cum			207.044
		Total per cum				207.044
1.10		Haulage excluding Loading & Unloading				
		Haulage of materials by truck excluding cost of loading, Unloading and stacking				
		Unit = 7km				
		Taking output 3.6t load and lead 10km = 36t/km				
		Case - I : Surfaced Road				
		Speed with load : 15km per hour				
		Speed while returning empty : 25km per hour				
		a) Machinery				
		Tractor 3.6 tonnes Capacity	hour	0.667	676.00	450.89
		Haulage with load	hour	0.400	676.00	270.40
		Empty return trip				721.29
		Cost for 36t/km = a+b+c				20.040
		Cost for 1 Cum = a+b/36				20.040
		Total per Cum				20.040
		Case - II Kutcha Track and Track in River Bed / Nallah Bed and Choe Bed				
		Speed with load : 10km per hour				
		Speed while returning empty : 15km per hour				
		Machinery				
		Tractor 3.6 tonnes Capacity	hour	1.00	676.00	676.00
		Haulage with load	hour	0.667	676.00	450.89
		Empty return trip				1126.89
		Cost for 36t/km = a+b+c				31.300
		Cost for 1 Cum = a+b/36				31.300
		Total per Cum				31.300
2		Carriage Of Material (By Tipper)				
1.1		Loading and Unloading Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by Manual Means				
	(1)	Loading of lime, Aggregates, Stone boulder, Brick aggregate, Kankar, Building Rubbish, Crushed Slag Stone for masonry work by manual means including u lead upto 30m				
		Unit = cum				
		Taking output = 5.5 cum				
		Time required for				
		Position of tipper at loading point		1Min		
	(i)	loading by front end loader 1 cum bucket capacity @25		13Min		
	(ii)	maneuvering, reversing, dumping and turning for return		2Min		
	(iv)	Waiting time unforeseen contingencies etc.		4Min		
		Total		20Min		
	b) Machinery					
		Tipper 5.5 Tonnes Capacity	hour	0.330	1,426.00	470.58
		Front end loader 1 cum bucket capacity @ 25 Cum/hour	hour	0.330	1,419.00	468.27
		Cost for 5.5 cum = u+b+c				938.85

[illegible]

	Rate per pipe = (a+b+c)/9	per m	264.594
	Per 100 m of 100 mm dia. HDPE pipe		264.594
c	Unit = per pipe Taking output = 21 pipes		
a)	Labour	day	0.02
	Material	day	0.50
b)	Machinery	hour	0.11
	Transport	hour	0.11
	Crane	hour	0.20
	Cost for 21 pipes = a+b+c/d		
	Rate per pipe = (a+b+c)/21	per p	113.930
	Total per pipe		113.930
(iii)	Unloading of RCC Home pipe by Mechanical means including of load upto 10.00		
A	1000/1200 mm dia RCC Home pipes		
	Unit = per pipe		
	Taking output = 9 pipes		
a)	Labour	day	0.02
	Material	day	0.50
b)	Machinery	hour	0.20
	Transport	hour	0.20
	Crane	hour	0.20
	Cost for 9 pipes = a+b+c/d		
	Rate per pipe = (a+b+c)/9	per p	168.871
	Total per pipe		168.871
C	600/450 mm dia Home pipe		
	Unit = per pipe		
	Taking output = 21 pipes		
a)	Labour	day	0.020
	Material	day	0.50
b)	Machinery	hour	0.20
	Transport	hour	0.20
	Crane	hour	0.20
	Cost for 21 pipes = a+b+c/d		
	Rate per pipe = (a+b+c)/21	per p	72.373
	Total per pipe		72.373
1.9	Loading and Unloading of Bamboo		
(i)	Loading & unloading Bamboo		
	Unit = per metre		
	Taking output = per mt.		
a)	Material	per pipes	6.72
	Bamboo = 2016/300	per mt	0.96
	Bamboo Per Mt.		0.960
	Total per m		0.960
4	Construction of Embankment with material obtained from roadway cutting		
3.3	301.5		
	Construction of Embankment with approved material deposit at site from roadway cutting and excavation from drain and foundation of other structure graded and compacted to meet requirement of Table 300.1 and 300.2 as per Technical Specification Clause 301.5		
	Unit = cum		
	Taking output = 100 cum		
a)	Labour	day	0.02
	Material	day	0.50
b)	Machinery	hour	0.50
	Drover D- 50 for spreading @200 cum per hour	hour	2.00
	Motor Grader for grading @200 Cum per hour	hour	2.00
	Water tanker 6 kl capacity	hour	1.25
	Three Wheel 80-100 kl Static Roller	kl	12.00
c)	Material		60.30
	Water		723.60
	Cost for 100 cum = a+b+c/d		5807.29

Basis for estimate		1000	1000	1000
Basis for estimate		1000	1000	1000
4.1	2015	1000	1000	1000
4.2	2015	1000	1000	1000
4.3	2015	1000	1000	1000
4.4	2015	1000	1000	1000
4.5	2015	1000	1000	1000
4.6	2015	1000	1000	1000
4.7	2015	1000	1000	1000
4.8	2015	1000	1000	1000
4.9	2015	1000	1000	1000
4.10	2015	1000	1000	1000
4.11	2015	1000	1000	1000
4.12	2015	1000	1000	1000
4.13	2015	1000	1000	1000
4.14	2015	1000	1000	1000
4.15	2015	1000	1000	1000
4.16	2015	1000	1000	1000
4.17	2015	1000	1000	1000
4.18	2015	1000	1000	1000
4.19	2015	1000	1000	1000
4.20	2015	1000	1000	1000
4.21	2015	1000	1000	1000
4.22	2015	1000	1000	1000
4.23	2015	1000	1000	1000
4.24	2015	1000	1000	1000
4.25	2015	1000	1000	1000
4.26	2015	1000	1000	1000
4.27	2015	1000	1000	1000
4.28	2015	1000	1000	1000
4.29	2015	1000	1000	1000
4.30	2015	1000	1000	1000
4.31	2015	1000	1000	1000
4.32	2015	1000	1000	1000
4.33	2015	1000	1000	1000
4.34	2015	1000	1000	1000
4.35	2015	1000	1000	1000
4.36	2015	1000	1000	1000
4.37	2015	1000	1000	1000
4.38	2015	1000	1000	1000
4.39	2015	1000	1000	1000
4.40	2015	1000	1000	1000
4.41	2015	1000	1000	1000
4.42	2015	1000	1000	1000
4.43	2015	1000	1000	1000
4.44	2015	1000	1000	1000
4.45	2015	1000	1000	1000
4.46	2015	1000	1000	1000
4.47	2015	1000	1000	1000
4.48	2015	1000	1000	1000
4.49	2015	1000	1000	1000
4.50	2015	1000	1000	1000
4.51	2015	1000	1000	1000
4.52	2015	1000	1000	1000
4.53	2015	1000	1000	1000
4.54	2015	1000	1000	1000
4.55	2015	1000	1000	1000
4.56	2015	1000	1000	1000
4.57	2015	1000	1000	1000
4.58	2015	1000	1000	1000
4.59	2015	1000	1000	1000
4.60	2015	1000	1000	1000
4.61	2015	1000	1000	1000
4.62	2015	1000	1000	1000
4.63	2015	1000	1000	1000
4.64	2015	1000	1000	1000
4.65	2015	1000	1000	1000
4.66	2015	1000	1000	1000
4.67	2015	1000	1000	1000
4.68	2015	1000	1000	1000
4.69	2015	1000	1000	1000
4.70	2015	1000	1000	1000

5.3	1100	b)	Manhours	hour	12.00	676.00	4864.56
		Under proposed under overground					
		those which lay the HP3 roller @ 10 cm per hour	hour	30.00	1593.00	43790.00	
		roller with horizontal & cam per hour	hour	12.00	693.00	8316.00	
		Water tank & 4 capacity	hour	5.00	752.00	3760.00	
		Material				67978.00	
		As per product provided with bare material as per Table 400.1					
		As per	cum	1.20	167.01	211.00	
		Cost of filling with coarse Carriage & per m of				73076.36	
			A) Basic Cost per cum = (a+b+c+d)/300	cum			243.521
			CARRIAGE				
		As per	cum	414.00	2960.13	1225493.02	
		Carriage cost of 7.5 m				1225493.02	
		At Carriage cost per cum				4084.98	
		Rate per cum = (A+B)	cum			4328.501	
		Total per cum	cum			4328.501	
		Labour Cost @ 1%				43.285	
		G.S.T. @ 10%				779.130	
		Add Surplusage Fee @ 10 % of Materials	cum	1.20	167.01	21.10	
		Total Cost of 1 cum 1% Cost & 10 % GST =				5172.296	
			Providing and laying reinforced concrete pipe HP3 for culverts on first class bedding of granular material in single row including filling collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and piers per Clause 1106.				
		a)	1000 MM DIA (Single Row)				
			Material				
			HP3 Pipe including collar	m	7.50	5707.23	43404.23
			Labour				
		b)	Rate	day	0.09	397.00	35.73
			Mason (1st class)	day	0.25	503.00	125.35
			Mason (Unskilled)	day	2.00	373.00	746.00
			Cost for 7.5m = (a+b+c)				44311.71
			A) Basic Cost per m = (a+b)/7.5	m			5908.23
		d)	Rate per m of Pipe				5908.23
			CARRIAGE COST				
			HP3 Pipe	m	7.5	298.37	2237.78
			Carriage cost of 7.5 m				2237.78
			At Carriage cost per m	m			298.37
			Rate per m with Carriage	m			6,206.598
			Total per m	m			6,206.598
			Labour Cost @ 1%				62.066
			G.S.T. @ 10%				1,117.108
			Total Cost of 1 mtr. 1% Cost & 10 % GST =				7,385.052
		c.	600 MM DIA (Single Row)				
		a)	Material				
			HP3 Pipe including collar	m	7.50	2310.00	17325.00
			Labour				
		b)	Rate	day	0.04	397.00	15.88
			Mason (1st class)	day	0.12	503.00	60.36
			Mason (Unskilled)	day	0.96	373.00	358.08
			Cost of 7.5m = (a+b+c)				17759.32
			A) Basic Cost per m = (a+b)/7.5	m			2367.91
			Rate per m of Pipe				2367.91
			CARRIAGE COST				
			HP3 Pipe	m	7.5	124.35	932.63
			Carriage cost of 7.5 m				932.63
			At Carriage cost per m	m			124.35
			Rate per m with Carriage	m			2,492.260
			Total per m	m			2,492.260
			Labour Cost @ 1%				24.923
			G.S.T. @ 10%				448.607
			Total Cost of 1 mtr. 1% Cost & 10 % GST =				2,965.789
		3	5,740.1				

Labour for filling empty cement bags with local sand, stitching the bags and placing on bedding supply of sacks etc. all complete as per approved design, specification and direction I/I

[illegible]

Labour for piling and and fixing Steel Drum 300 mm dia 1.2 m high as per specification and direction						
(Assuming Per Mtr. = 3.14x0.30 = 0.942 mtr.)						
Area of Assuming in one Drum = 0.942x1.20 = 1.130 sqm						
One Sqn sheet Cost = 127.00/1.130 = 112.12 Cost						
Unit = per sqm						
Piling Out = 100 sqm						
a						
Labour						
Hammer man	No.	4.00	531.00	2124.00		
Mazdoor (Unskilled)	No.	4.00	373.00	1492.00		
Carpenter 1st class	No.	4.00	503.00	2012.00		
b						
Materials						
Nails	kg	5.00	170.13	850.65		
Steel Drum sheet	Nos.	80.5	170.13	15056.51		
Rate Per m = (a+b+c)/100						
Labour Cost @ 1%						
G.S.T. @ 18%						
Total Cost of 1 mtr. 1% Cess & 18 % GST =						
Labour for piling and and fixing split bamboo woven thachart in position with 20 swg G.I. wire of 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.						
5.7.11						
WRD						
(Assuming strip of 3.05x3.05 = 9.30 sqm						
Unit = per sqm						
Piling Out = 9.30 sqm						
a						
Labour						
Carpenter Gr-II	No.	1.00	531.00	531.00		
Mazdoor (Unskilled) for piling	No.	1.00	373.00	373.00		
b						
Materials						
Bamboo	Mtr.	10.00	188.00	1880.00		
Nails	kg	0.25	108.00	27.00		
Rate Per m = (a+b+c)/9.30						
Labour Cost @ 1%						
G.S.T. @ 18%						
Total Cost of 1 mtr. 1% Cess & 18 % GST =						
5.7.50						
Providing laying & piling Geo bags of size 1m X 0.700m (Type A) 300 GSM nonwoven) weight 420 gm volume of filled bag 0.070 cum Weight of filled Geo bag 126 kg with local sand including stitching in four lines by approved Nylon thread with Stitching machine and generator, stacking and placing after loading. Unloading and carriage with the help of Trolley within 150 mtr. lead and all complete as per specification and direction of E/I.						
Unit = Each Bag						
Piling Out = 40 Nos.						
Labour						
Unskilled Loading For piling stacking	nos	2	373.00	746.00		
Skilled labour for stacking	nos	0.33	472.00	155.76		
Unskilled labour for cutting and placing	nos	4.00	373.00	1492.00		
Mate	nos	0.25	397.00	99.25		
Stitching Machine	day	0.33	50.00	16.50		
Tractor with trolley	day	1.00	676.00	676.00		
Generator 3KVA	hrs	20.67	74.00	1529.58		
Total						
Rate per bag (total/40) (A)						
charge for placing & dumping						
(ii)						
unskilled labour for loading unloading & dumping	nos	16	373.00	6320.00		
Mate	nos	1	397.00	419.00		
Tractor with trolley	each	4	676.00	2704.00		
Total						
Rate per bag (Total/256) (B)						
Materials						
cost of Geo Bag	each	1	124.00	124.00		
Total cost (a+b+c)						
				278.764		

[illegible]