

# RURAL WORKS DEPARTMENT



## GOVERNMENT OF BIHAR

NAME OF ROAD:- GHORAGHAT TO CHIKNI PATH

DIVISION:- R.W.D, WORKS DIVISION, FORBESGANJ

CIRCLE:- R.W.D, WORK CIRCLE, KISHANGANJ

BLOCK:- FORBESGANJ

### ESTIMATED COST

402390.00

## प्रतिवेदन

पथ का नाम :- Chhunaghat to Chikni Road

कार्य का नाम :- P.D.R/2024-25

में बाढ़ से क्षतिग्रस्त भाग में यातायात चालू करने का कार्य।

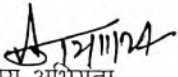
संलग्न प्राक्कलन 2024 को प्रखण्ड में आयी भीषण बाढ़ से क्षतिग्रस्त Chhunaghat to Chikni Road  
..... में बाढ़ क्षतिग्रस्त मरम्मति मद से यातायात चालू करने हेतु तैयार किया गया है जिसकी

प्राक्कलित लागत 402390/- है। उक्त पथ

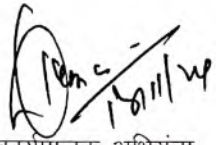
का निर्माण primary योनान्तर्गत हुआ है एवं योजना अनुरक्षण अवधि में octal munitance

पथ के कटे (क्षतिग्रस्त) भाग में आवश्यकता अनुसार Hume Pipe, Bamboo, लोकल बालू एवं  
Brick Bats देने के बाद यातायात चालू कराया गया है। पथ के विभिन्न हिस्से में कराये गये कार्य  
का विवरणी स्पष्ट रूप से प्राक्कलन में दर्शाया गया है।

प्राक्कलन मदों का दर वर्तमान अनुसूचित दर के अनुरूप है।

  
कनीय अभियंता,  
ग्रामीण कार्य विभाग,  
कार्य प्रशाखा, Forbesganj

  
सहायक अभियंता,  
ग्रामीण कार्य विभाग,  
कार्य अवर प्रमण्डल, Forbesganj

  
कार्यपालक अभियंता,  
ग्रामीण कार्य विभाग,  
कार्य प्रमण्डल, Forbesganj

## Inspection Report for Flood Damage Work

Date:-.....

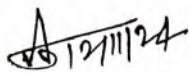
1. Name of PIUs:- RWD Forbesganj (EE)  
2. Name of Block:- Forbesganj  
3. Name of Road:- Chhota Chhota Road

### A. For Road

1. Damage Location/Chainage :- E H - 5.00 km  
2. Damage Length :- 21.50 m  
3. Nature of Damage :- Wash out  
4. Details of Restoration Works:-  
(i.) Material being used in Restoration Works:-  
(ii.) Equipments/Tools being used in Restoration works:-  
(iii.) Procedure taken up in Restoration works:-  
(iv.) Restored Length :- 21.50 m

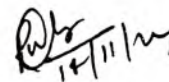
### B. For Bridge

1. Damage Location/Chainage:-  
2. Damage Length :-  
3. Nature of Damage :-  
4. Details of Restoration Works:-  
(i.) Material being used in Restoration Works:-  
(ii.) Equipments/Tools being used in Restoration works:-  
(iii.) Procedure taken up in Restoration works:-  
(iv.) Restored Length :-

 12/11/24

Signature of JE/AE/EE

 12/11/24  
AE

 12/11/24

Signature

(Name of Inspector)

 12/11/24

# Abstract of Cost

**Scope of Work :** Estimate for Repairing/Restoration/Making Motorable Roads  
Damaged during flood in 2024 in ARARIA District

of Road:

## GHORAGHAT TO CHIKNI PATH

Location: FORBESGANJ

District: ARARIA

Division : RWD, Works Division, FORBESGANJ

Circle: RWD, Work Circle, KISHANGANJ

| No. | Description                                                                                                                                                                                                                                               | Unit | Quantity<br>(m3) | Rate<br>(Rs) | Amount<br>(Rs) |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------|--------------|----------------|
|     | Filling of local sand obtained from river bed, watering & ramming, all complete job as per specification & direction of Engineer-in-charge.                                                                                                               |      |                  |              |                |
|     |                                                                                                                                                                                                                                                           | Cum  | 131.26           | 1287.25      | 168961.22      |
| 2   | Labour for cutting 62mm 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.                                                                          |      |                  |              |                |
|     |                                                                                                                                                                                                                                                           | Mtr. | 252.00           | 72.518       | 18274.54       |
| 3   | Labour for fitting & fixing 62mm to 75mm 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. |      |                  |              |                |
|     |                                                                                                                                                                                                                                                           | Mtr. | 63.00            | 36.179       | 2279.28        |

|   |                                                                                                                           |          |         |          |           |
|---|---------------------------------------------------------------------------------------------------------------------------|----------|---------|----------|-----------|
| 4 | Supplying of EC bag, filling of local sand, stitching and placing in position as per the direction of Engineer-in-charge. |          |         |          |           |
|   |                                                                                                                           |          |         |          |           |
|   |                                                                                                                           | Per Bags | 2138.68 | 55.882   | 119513.51 |
| 5 | Supply and Carriage of brick bats upto 8 km breach and placing in breaches and lying of bats, all complete job.           |          |         |          |           |
|   |                                                                                                                           |          |         |          |           |
|   |                                                                                                                           | Cum      | 28.06   | 2792.877 | 78361.15  |
| 6 | Providing of drone service and drone surveying as per I/E                                                                 |          |         |          |           |
|   |                                                                                                                           | PER TRIP | 3.00    | 5000.000 | 15000.00  |
|   |                                                                                                                           |          |         |          |           |
|   |                                                                                                                           |          |         |          |           |
|   |                                                                                                                           |          |         |          |           |
|   | TOTAL AMOUNT =                                                                                                            |          |         |          | 402389.69 |
|   | SAY TOTAL AMOUNT =                                                                                                        |          |         |          | 402389.69 |
|   |                                                                                                                           |          |         |          | 402390.00 |

*[Signature]*  
JE

RWD SUB DIVISION-FORBESGANJ

*[Signature]*  
12/11/24  
AE

RWD SUB DIV.  
FORBESGANJ

*[Signature]*  
14/11/24  
EE

RWD WORKS DIV. FORBESGANJ

*Technically Approved for Rs 4,02,390/- (Rupees Four lakh. two thousand three hundred and ninety) only*

*[Signature]*  
16/11/24  
Superintending Engineer  
Rural Works Department  
Works Circle, Kishanganj  
E.O.

## Detailed Estimate

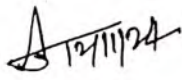
ame of Road:

### GHORAGHAT TO CHIKNI PATH

| No. | Items of Works                                                                                                                                                                                                                                            | Nos. | L<br>(m) | B<br>(m)      | D<br>(m) IN (Av.)  | Quantity (m <sup>3</sup> ) |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|---------------|--------------------|----------------------------|
| 1   | Filling of local sand obtained from river bed, watering & ramming, all complete job as per specification & direction of Engineer-in-charge.                                                                                                               |      |          |               |                    |                            |
|     | CH-2.100 KM                                                                                                                                                                                                                                               | 1    | 21.50    | (1.30+2.00)/2 | (3.50+4.00+3.60)/3 | 131.26                     |
|     |                                                                                                                                                                                                                                                           |      |          |               | TOTAL=             | 131.26                     |
|     |                                                                                                                                                                                                                                                           |      |          |               | Total Qty =        | 131.26                     |
| 2   | Labour for cutting 62mm 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.                                                                          |      |          |               |                    |                            |
|     |                                                                                                                                                                                                                                                           | 1    | 21.00    | 3.00          | 4.00               | 252.00                     |
|     |                                                                                                                                                                                                                                                           |      |          |               |                    |                            |
|     |                                                                                                                                                                                                                                                           |      |          |               | Total Qty =        | 252.00                     |
| 3   | Labour for fitting & fixing 62mm to 75mm 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. |      |          |               |                    |                            |
|     |                                                                                                                                                                                                                                                           | 1    | 21.00    | 3.00          |                    | 63.00                      |
|     |                                                                                                                                                                                                                                                           |      |          |               |                    |                            |
|     |                                                                                                                                                                                                                                                           |      |          |               | Total Qty =        | 63.00                      |
| 4   | Supplying of EC bag, filling of local sand, stitching and placing in position as per the direction of Engineer-in-charge.                                                                                                                                 |      |          |               |                    |                            |
|     |                                                                                                                                                                                                                                                           | 1    | 21.50    | 1.20          | (2.00+3.40+1.60)/3 | 60.20                      |



|                                      |                                                                                                                 |     |       |               |                 |         |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----|-------|---------------|-----------------|---------|
|                                      |                                                                                                                 | 1   | 1.20  | 0.60          | 0.50            | 0.36    |
|                                      |                                                                                                                 |     |       |               | TOTAL=          | 60.56   |
| Total No. of EC Bags =(60.56X35.315) |                                                                                                                 |     |       |               |                 | 2138.68 |
|                                      |                                                                                                                 |     |       |               | SAY NO OF BAGE= | 2139    |
| 5                                    | Supply and Carriage of brick bats upto 8 km breach and placing in breaches and lying of bats, all complete job. |     |       |               |                 |         |
|                                      |                                                                                                                 | 1   | 21.50 | (4.70+4.00)/2 | 0.30            | 28.06   |
|                                      |                                                                                                                 |     |       |               | Total Qty. =    | 28.06   |
| 6                                    | Providing of drone service and drone surving as per I/E                                                         |     |       |               |                 |         |
|                                      |                                                                                                                 | 1.0 | 3.0   |               |                 | 3.00    |
|                                      |                                                                                                                 |     |       |               |                 |         |
|                                      |                                                                                                                 |     |       |               | TOTAL=          | 3.00    |

  
JE

RWD SUB DIV- FORBESGANJ

  
AE

RWD SUB DIV. FORBESGANJ RWD WORKS DIV. FORBESGANJ

EE

# FINAL RATE UNDER WORKS CIRCLE KISHANGANJ

| S.No | Discription of Item                  | Unit         | Final Rate (Excluding GST, Seigniorage & L.Cess) | Final Rate (Including GST, Seigniorage & L.Cess) |
|------|--------------------------------------|--------------|--------------------------------------------------|--------------------------------------------------|
| 1    | EARTH WORK                           | CUM          | 459.003                                          | 549.740                                          |
| 2    | BRICK BAT                            | CUM          | 2209.578                                         | 2759.115                                         |
| 3    | G.S.B                                | CUM          | 4328.501                                         | 5172.300                                         |
| 4    | SAND BAG (Cement Bag)                | Each         | 46.550                                           | 55.880                                           |
| 5    | BAMBOO PILE                          | Per Mtr.     | 58.140                                           | 69.186                                           |
| 6    | BAMBOO CHACHRI                       | Per Mtr.     | 302.258                                          | 359.690                                          |
| 7    | BAMBOO RUNNER                        | Per Mtr.     | 30.210                                           | 35.950                                           |
| 8    | HUME PIPE (1000 mm Div)              | Per Mtr.     | 6206.598                                         | 7385.850                                         |
| 9    | HUME PIPE (600 mm Div)               | Per Mtr.     | 2492.260                                         | 2965.790                                         |
| 10   | STEEL DRUM SHEET                     | Per Sqr.Mtr. | 215.352                                          | 256.270                                          |
| 11   | GEO BAG WITH SAND                    | EACH         | 967.490                                          | 1152.320                                         |
| 12   | EACH N.C. BAG WITH SAND (Cement Bag) | Each E.C     | 967.490                                          | 1151.800                                         |
| 13   | LOCAL SAND                           | CUM          | 721.110                                          | 1272.780                                         |

Executive Engineer  
RWD, Works Division  
Kishanganj-1

Executive Engineer  
RWD, Works Division  
Araria

Executive Engineer  
RWD, Works Division  
Kishanganj-2

Executive Engineer  
RWD, Works Division  
Forbesganj

Superintending Engineer  
Rural Works Department  
Works Circle Kishanganj

### SUMMARY OF CARRIGE COST

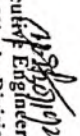
| Sl. No. | Item                    | Unit     | Amount<br>(Rs.) |
|---------|-------------------------|----------|-----------------|
| 1       | Earth Work              | Cum      | 274.42          |
| 2       | Brick Bats              | Cum      | 521.97          |
| 3       | Bamboo                  | 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 PIPE 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          |

**BASIC RATES**  
(A) Labour

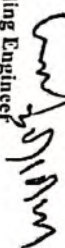
| Sl. No. | Description of Labour          | Unit | Rate (Rs.) |
|---------|--------------------------------|------|------------|
| L-01    | Bhisti                         | day  | 373        |
| L-02    | Bhramen Sproyer (semi skilled) | day  | 393        |
| L-03    | Blacksmith, special            | day  | 503        |
| L-04    | Blaster, 2nd class             | day  | 619        |
| L-05    | Carpenter 1st Class            | day  | 503        |
| L-06    | Chips spreader, semi-skilled   | day  | 449        |
| L-07    | Chiseller (Skilled)            | day  | 577        |
| L-08    | Dresser (Skilled)              | day  | 472        |
| L-09    | Driller, 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  | 434        |
| L-15    | Mazdoor (Unskilled)            | day  | 410        |
| 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    | While Washer                   | day  | 476        |
| L-22    | Head blacksmith                | day  | 503        |
| L-23    | Welder 1st Class               | day  | 577        |
|         | Carpenter Head                 | day  | 503        |
|         | Night Guard                    | day  | 415        |

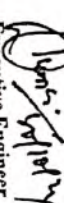
(Basic Rates Taken From SOR, Seventeenth Edition, Road Construction Department, Govt. of Bihar effective from 01/07/2024)

  
Executive Engineer  
RWD, Works Division  
Kishanganj-1

  
Executive Engineer  
RWD, Works Division  
Araria

  
Executive Engineer  
RWD, Works Division  
Kishanganj-2

  
Superintending Engineer  
Rural Works Department  
Works Circle Kishanganj

  
Executive Engineer  
RWD, Works Division  
Forbesganj

| BASIC RATES<br>(B) Material |                                                                                                      |      |                          |             |                            |
|-----------------------------|------------------------------------------------------------------------------------------------------|------|--------------------------|-------------|----------------------------|
| Sl. No.                     | Description                                                                                          | Unit | Basic Rate as per<br>SOR | Add Royalty | Final Rate With<br>Royalty |
| M-001                       | Bamboo (1st Class) 100 mm - 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 - 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 - 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 - 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 - 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 Bais                                                                                           | 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                       | Soil (Brown)                                                                                         | k.F. | 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                                                                                                | k.F. | 108.00                   |             | 108.00                     |
| M-014                       | RCC Pipe NP3 (1000 mm dia)                                                                           | m    | 5787.23                  |             | 5787.23                    |
| M-014                       | 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                                                                                                | kj   | 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 01/07/2024.)

Executive Engineer  
RWD, Works Division  
Kishanganj-1

Executive Engineer  
RWD, Works Division  
Ara

Executive Engineer  
RWD, Works Division  
Kishanganj-2

Executive Engineer  
RWD, Works Division  
Ferozganj

Superintending Engineer  
Rural Works Department  
Works Circle Kishanganj

**BASIC RATES  
(C) USAGE RATES OF PLANT & MACHINERY**

| Sr. No. | Sor Code | Description of                                         |                                    | Output of Machine |          | Usage Rates in Rs. |           |
|---------|----------|--------------------------------------------------------|------------------------------------|-------------------|----------|--------------------|-----------|
|         |          | Machine                                                | Activity                           | Unit              | Output   | Unit               | Rate      |
| PM-009  | P&M-012  | Crane upto 80 T                                        | Lifting of materials               | cum/h             | 260.00   | per hour           | 15,513.00 |
| PM-010  | P&M-015  | Doser D 80 - A12 Dozer D 50 - A15                      | Dozing cutting                     | cum/h             | 120.00   | per hour           | 5,997.00  |
| PM-011  |          |                                                        |                                    | cum/h             | 45.00    | per hour           | 2,676.00  |
| PM-014  | P&M-017  | Front end-loader 1 cum bucket capacity (6) 45 cum hour | Loading Aggregates                 | cum/h             | 100.00   | per hour           | 2,722.00  |
| PM-017  | P&M-026  | Hydraulic Excavator of 1 cum bucket                    | Excavation                         | cum/h             | 80/70    | per hour           | 1,493.00  |
| PM-031  | P&M-044  | Three wheel 80-100 kN Static Roller                    | Compaction Rolling                 | cum/h             | 10.00    | per hour           | 593.00    |
| PM-032  |          |                                                        | Earth - Embankment or sub-grade    | cum/h             | 8.00     | per hour           | 593.00    |
| PM-033  |          |                                                        | Sub-base G-I                       | cum/h             | 16.00    | per hour           | 593.00    |
| PM-034  |          |                                                        | Sub-base G-II G-III                | cum/h             | 12.00    | per hour           | 593.00    |
| PM-035  |          |                                                        | WBM                                | cum/h             | 250.00   | per hour           | 1,393.00  |
| PM-037  |          |                                                        | BUSG                               | cum/h             | 500.00   | per hour           | 2,722.00  |
| PM-038  |          |                                                        | BM 50-75 mm                        | cum/h             | 400.00   | per hour           | 2,093.00  |
| PM-039  |          |                                                        | Prebit 20 mm                       | sqm/h             | 500.00   | per hour           | 2,722.00  |
| PM-040  |          |                                                        | Seal Coat                          | sqm/h             | 400.00   | per hour           | 2,093.00  |
| PM-041  |          |                                                        | Surface Dressing 1st Coat          | sqm/h             | 500.00   | per hour           | 2,722.00  |
| PM-042  | P&M-018  | Tipper 5.5 cum/10 t                                    | Surface Dressing 2nd Coat          | sqm/h             | 5.50     | per hour           | 1,393.00  |
| PM-043  | P&M-053  | Tractor with Disc Harrows                              | Carriage                           | cum/trip          | 80.00    | per hour           | 2,093.00  |
| PM-044  | P&M-055  | Tractor with ripper 14, 60 cum per hour                | Pulverisation of soil              | cum/h             | 60.00    | per hour           | 2,093.00  |
| PM-045  | P&M-053  | Tractor with trolley with Grading equipment            | Ripping Pavements, uprooting trees | cum/h             | 3 to 5   | per hour           | 600.00    |
| PM-046  | P&M-054  | Tractor with Rotavator                                 | Transportation of materials        | trip              | 25.00    | per hour           | 593.00    |
| PM-047  | P&M-057  | Truck 10 t capacity                                    | Scarifier                          | cum/trip          | 5.50     | per hour           | 1,393.00  |
| PM-048  | P&M-059  | Vibratory roller 80-100 kN                             | Carriage                           | cum/trip          | 100.00   | per hour           | 2,093.00  |
| PM-049  |          |                                                        | Compaction of soil WBM             | cum/h             | 60.00    | per hour           | 2,093.00  |
| PM-050  | P&M-060  | Water tanker 6 kl capacity (Truck Mounted)             | Compaction of BM                   | cum/h             | 12000.00 | per hour           | 25,000.00 |
| PM-063  | P&M-060  | generator 3KVA                                         | Carriage of water                  | litre/h           | per hour | per hour           | 27,600.00 |
| PM-064  | P&M-060  | stitching machine                                      | stitching                          | per hour          | per hour | per hour           | 500.00    |
|         |          |                                                        | stitching                          | day               | day      | day                | 500.00    |

(Basic Rates Taken From SOR, Seventeenth Edition, Road Construction Department, Govt. of Bihar effective from 01/07/2024.

Executive Engineer  
RWD, Works  
Division  
Kishanganj-1

Executive Engineer  
RWD, Works Division  
Kishanganj-2

Executive Engineer  
RWD, Works Division  
Araria

Executive Engineer  
RWD, Works Division  
Forbesganj

Superintending Engineer  
Rural Works Department  
Works Circle Kishanganj

### Carriage Cost & Lead in Km

Cost of Haulage Excluding Loading & Unloading as per

### Kishanganj-1

**Kishangangaj-4**

## Araria

Forbes.com

WORKS CITED

| SDB Sl. No. | MORD Ref No. | DESCRIPTION                                                                                                                                                           | Unit | QTY   | Rate     | Amount In Rs |
|-------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|----------|--------------|
| 1           |              | <b>Carriage Of Material (By Tractor)</b>                                                                                                                              |      |       |          |              |
| 4.4         |              | <b>Loading and unloading of stone Boulder /stone aggregates sand/ kankar/ moorum</b>                                                                                  |      |       |          |              |
|             |              | Placing tractor at loading point loading with front end loader dumpoing ,turning for return trip exluding time for haulage and return trip                            |      |       |          |              |
|             |              | Unit = cum                                                                                                                                                            |      |       |          |              |
|             |              | Taking output = 2.25 cum                                                                                                                                              |      |       |          |              |
|             |              | Time required for                                                                                                                                                     |      |       |          |              |
|             | i)           | positioning of tractor at loading point                                                                                                                               | min  | 1 min |          |              |
|             | ii)          | Loading by front end loader 1 cum bucket capacity @ 25 cum                                                                                                            | min  | 5 min |          |              |
|             |              | Total                                                                                                                                                                 |      | 6 min |          |              |
|             | a)           | Labour                                                                                                                                                                |      |       |          |              |
|             |              | Mate                                                                                                                                                                  | day  | 0.030 | 434.00   | 13.02        |
|             |              | Mazdoor (Unskilled)                                                                                                                                                   | day  | 0.720 | 410.00   | 295.20       |
|             | b)           | Machinery                                                                                                                                                             |      |       |          |              |
|             |              | Tractor 3.60 Tonnes Capacity                                                                                                                                          | hour | 0.100 | 676.00   | 67.60        |
|             |              | Front end loader 1 cum bucket capacity @ 25 Cum/hour                                                                                                                  | hour | 0.083 | 1,419.00 | 117.78       |
|             |              | Cost for 2.25 cum = a+b+c                                                                                                                                             |      |       |          | 493.60       |
|             |              | Rate per cum = (a+b+c)/2.25                                                                                                                                           | cum  |       |          | 219.378      |
|             |              | Total per cum                                                                                                                                                         |      |       |          | 219.378      |
| 1.10        |              | <b>Haulage excluding Loading &amp; Unloading</b>                                                                                                                      |      |       |          |              |
|             |              | 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                                                                                                                                           |      |       |          |              |
|             |              | Haulage with load                                                                                                                                                     | hour | 0.667 | 676.00   | 450.89       |
|             |              | Empty return trip                                                                                                                                                     | hour | 0.400 | 676.00   | 270.40       |
|             |              | Cost for 36t/km = a+b+c                                                                                                                                               |      |       |          | 721.29       |
|             |              | Cost for 1 t km = a+b/36                                                                                                                                              |      |       |          | 20.040       |
|             |              | Total per t per km                                                                                                                                                    |      |       |          | 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                                                                                                                           |      |       |          |              |
|             | a)           | Machinery                                                                                                                                                             |      |       |          |              |
|             |              | Tractor 3.6 tonnes Capacity                                                                                                                                           |      |       |          |              |
|             |              | Haulage with load                                                                                                                                                     | hour | 1.00  | 676.00   | 676.00       |
|             |              | Empty return trip                                                                                                                                                     | hour | 0.667 | 676.00   | 450.89       |
|             |              | Cost for 36t/km = a+b+c                                                                                                                                               |      |       |          | 1126.89      |
|             |              | Cost for 1 t km = a+b/36                                                                                                                                              |      |       |          | 31.300       |
|             |              | Total per t per km                                                                                                                                                    |      |       |          | 31.300       |
| 2           |              | <b>Carriage Of Material (By Tipper)</b>                                                                                                                               |      |       |          |              |
| 1.1         |              | <b>Loading and Unloading Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Bullding Rubbish, Crushed Slag, Stone for Masonry Work by Manual Means</b>          |      |       |          |              |
|             | (1)          | Loading of lime, Aggregates, Stone boulder, Brick aggregate, Kankar, Building Rubbish, Crushed Slag Stone for masonary work by manual means including a lead upto 30m |      |       |          |              |
|             |              | Unit = cum                                                                                                                                                            |      |       |          |              |
|             |              | Taking output = 5.5 cum                                                                                                                                               |      |       |          |              |
|             |              | Time required for                                                                                                                                                     |      |       |          |              |
|             | (i)          | Position of tipper at loading point                                                                                                                                   |      |       |          |              |
|             | (ii)         | loading by front end loader 1 cum bucket capacity @25                                                                                                                 |      | 1Min  |          |              |
|             | (iii)        | maneuvering, reversing, dumping and turning for return                                                                                                                |      | 13Min |          |              |
|             | (iv)         | Waiting time unforeseen contingencies etc.                                                                                                                            |      | 2Min  |          |              |
|             |              | Total                                                                                                                                                                 |      | 4Min  |          |              |
|             | b)           | Machinery                                                                                                                                                             |      | 20Min |          |              |
|             |              | Tipper 5.5 Tonnes Capacity                                                                                                                                            |      |       |          |              |
|             |              | Front end loader 1 cum bucket capacity @ 25 Cum/hour                                                                                                                  | hour | 0.330 | 1,426.00 | 470.58       |
|             |              | Cost for 5.5 cum = a+b+c                                                                                                                                              | hour | 0.330 | 1,419.00 | 468.27       |
|             |              |                                                                                                                                                                       |      |       |          | 938.85       |

|      |     |                                                                                 |      |      |         |
|------|-----|---------------------------------------------------------------------------------|------|------|---------|
|      |     | Rate per cum = (a+b+c)/5.5                                                      | cum  |      | 170.70  |
|      |     | Total per cum                                                                   |      |      | 170.70  |
| 1.10 |     | Haulage excluding Loading & Unloading                                           |      |      |         |
|      |     | Haulage of materials by truck excluding cost of Loading, Unloading and stacking |      |      |         |
|      |     | Unit = 1km                                                                      |      |      |         |
|      |     | Taking output 10t load and lead 10km = 100t km                                  |      |      |         |
|      |     | Case- I : Surfaced Road                                                         |      |      |         |
|      |     | Speed with load : 25km per hour                                                 |      |      |         |
|      |     | Speed while returning empty : 35km per hour                                     |      |      |         |
|      | a)  | Machinery                                                                       |      |      |         |
|      |     | Tipper                                                                          | hour | 0.40 | 1426.00 |
|      |     | Haulage with load                                                               | hour | 0.29 | 1426.00 |
|      |     | Empty return trip                                                               |      |      | 983.94  |
|      |     | Cost for 100t km = a+b+c                                                        |      |      | 9.830   |
|      |     | Cost for 1 t km = a+b/100                                                       |      |      |         |
|      |     | Total per t per km                                                              |      |      | 23.81   |
|      |     | Case - III 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                                     |      |      |         |
|      | a)  | Machinery                                                                       |      |      |         |
|      |     | Tipper                                                                          | hour | 1.00 | 1426.00 |
|      |     | Haulage with load                                                               | hour | 0.67 | 1426.00 |
|      |     | Empty return trip                                                               |      |      | 2381.42 |
|      |     | Cost for 100t km = a+b                                                          |      |      | 23.81   |
|      |     | Cost for 1 t km = a+b+c/100                                                     |      |      |         |
|      |     | Total per t per km                                                              |      |      | 23.81   |
| 3    |     | Carriage Of Material (By Truck)                                                 |      |      |         |
| 1.10 |     | Haulage excluding Loading & Unloading                                           |      |      |         |
|      |     | Haulage of materials by truck excluding cost of Loading, Unloading and stacking |      |      |         |
|      |     | Unit = 1km                                                                      |      |      |         |
|      |     | Taking output 10t load and lead 10km = 100t km                                  |      |      |         |
|      |     | Case- I : Surfaced Road                                                         |      |      |         |
|      |     | Speed with load : 25km per hour                                                 |      |      |         |
|      |     | Speed while returning empty : 35km per hour                                     |      |      |         |
|      | a)  | Machinery                                                                       |      |      |         |
|      |     | Truck                                                                           | hour | 0.40 | 1054.00 |
|      |     | Haulage with load                                                               | hour | 0.29 | 1054.00 |
|      |     | Empty return trip                                                               |      |      | 727.26  |
|      |     | Cost for 100t km = a+b+c                                                        |      |      | 7.270   |
|      |     | Cost for 1 t km = a+b/100                                                       |      |      |         |
|      |     | Total per t per km                                                              |      |      | 7.270   |
|      |     | Case - III 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                                     |      |      |         |
|      | a)  | Machinery                                                                       |      |      |         |
|      |     | Truck                                                                           | hour | 1.00 | 1054.00 |
|      |     | Haulage with load                                                               | hour | 0.67 | 1054.00 |
|      |     | Empty return trip                                                               |      |      | 1760.18 |
|      |     | Cost for 100t km = a+b                                                          |      |      | 17.60   |
|      |     | Cost for 1 t km = a+b+c/100                                                     |      |      |         |
|      |     | Total per t per km                                                              |      |      | 17.600  |
| 1.9  |     | Loading and Unloading of Hume Pipes                                             |      |      |         |
|      | (i) | Loading of RCC Hume pipes by mechanical means including a lead upto 30 m        |      |      |         |
|      | A.  | 1000 / 1200 mm dia Hume pipe                                                    |      |      |         |
|      |     | Unit = per pipe                                                                 |      |      |         |
|      |     | Taking output = 9 pipes                                                         |      |      |         |
|      | a)  | Labour                                                                          |      |      |         |
|      |     | Mate                                                                            | day  | 0.02 | 434.00  |
|      |     | Mazdoor (Unskilled)                                                             | day  | 0.50 | 410.00  |
|      | b)  | Machinery                                                                       |      |      |         |
|      |     | Truck                                                                           | hour | 0.33 | 1054.00 |
|      |     | Crane                                                                           | hour | 0.33 | 5573.00 |
|      |     | Cost for 9 pipes = a+b+c+d                                                      |      |      | 2400.59 |

|   |     |       |                                                                                                                                                                                                                                                                   |          |       |                |
|---|-----|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|----------------|
|   |     |       | Rate per pipe = (a+b+c)/9                                                                                                                                                                                                                                         | per p    |       | 266.732        |
|   |     |       | <b>Total per pipe</b>                                                                                                                                                                                                                                             |          |       | <b>266.732</b> |
|   |     | C     | 600/450 mm dia Hume pipe                                                                                                                                                                                                                                          |          |       |                |
|   |     |       | Unit = per pipe                                                                                                                                                                                                                                                   |          |       |                |
|   |     |       | Taking output = 21 pipe                                                                                                                                                                                                                                           |          |       |                |
|   |     | a)    | Labour                                                                                                                                                                                                                                                            |          |       |                |
|   |     |       | Mate                                                                                                                                                                                                                                                              | day      | 0.02  | 434.00         |
|   |     |       | Mazdoor (Unskilled)                                                                                                                                                                                                                                               | day      | 0.50  | 410.00         |
|   |     | b)    | Machinery                                                                                                                                                                                                                                                         |          |       |                |
|   |     |       | Tractor 3.60 Tonnes Capacity                                                                                                                                                                                                                                      | hour     | 0.33  | 1054.00        |
|   |     |       | Crane                                                                                                                                                                                                                                                             | hour     | 0.33  | 5573.00        |
|   |     |       | Cost for 21 pipes = a+b+c+d                                                                                                                                                                                                                                       |          |       | 2400.59        |
|   |     |       | Rate per pipe = (a+b+c)/21                                                                                                                                                                                                                                        | per p    |       | 114.314        |
|   |     |       | <b>Total per pipe</b>                                                                                                                                                                                                                                             |          |       | <b>114.314</b> |
|   |     | (III) | Unloading of RCC Hume pipe by Mechanical means Including a lead upto 30 m                                                                                                                                                                                         |          |       |                |
|   |     | A     | 1000/1200 mm dia RCC Hume pipes                                                                                                                                                                                                                                   |          |       |                |
|   |     |       | Unit = per pipe                                                                                                                                                                                                                                                   |          |       |                |
|   |     |       | Taking output = 9 pipes                                                                                                                                                                                                                                           |          |       |                |
|   |     | a)    | Labour                                                                                                                                                                                                                                                            |          |       |                |
|   |     |       | Mate                                                                                                                                                                                                                                                              | day      | 0.02  | 434.00         |
|   |     |       | Mazdoor (Unskilled)                                                                                                                                                                                                                                               | day      | 0.50  | 410.00         |
|   |     | b)    | Machinery                                                                                                                                                                                                                                                         |          |       |                |
|   |     |       | Truick                                                                                                                                                                                                                                                            | hour     | 0.20  | 1054.00        |
|   |     |       | Crane                                                                                                                                                                                                                                                             | hour     | 0.20  | 5573.00        |
|   |     |       | Cost for 9 pipes = a+b+c+d                                                                                                                                                                                                                                        |          |       | 1114.60        |
|   |     |       | Rate per pipe = (a+b+c)/9                                                                                                                                                                                                                                         | per p    |       | 1539.08        |
|   |     |       | <b>Total per pipe</b>                                                                                                                                                                                                                                             |          |       | <b>171.009</b> |
|   |     | C     | 600/450 mm dia Hume pipe                                                                                                                                                                                                                                          |          |       |                |
|   |     |       | Unit = per pipe                                                                                                                                                                                                                                                   |          |       |                |
|   |     |       | Taking output = 21 pipes                                                                                                                                                                                                                                          |          |       |                |
|   |     | a)    | Labour                                                                                                                                                                                                                                                            |          |       |                |
|   |     |       | Mate                                                                                                                                                                                                                                                              | day      | 0.020 | 434.00         |
|   |     |       | Mazdoor (Unskilled)                                                                                                                                                                                                                                               | day      | 0.50  | 410.00         |
|   |     | b)    | Machinery                                                                                                                                                                                                                                                         |          |       |                |
|   |     |       | Truick                                                                                                                                                                                                                                                            | hour     | 0.20  | 1054.00        |
|   |     |       | Crane                                                                                                                                                                                                                                                             | hour     | 0.20  | 5573.00        |
|   |     |       | Cost for 21 pipes = a+b+c+d                                                                                                                                                                                                                                       |          |       | 1114.60        |
|   |     |       | Rate per pipe = (a+b+c)/21                                                                                                                                                                                                                                        | per p    |       | 1539.08        |
|   |     |       | <b>Total per pipe</b>                                                                                                                                                                                                                                             |          |       | <b>73.290</b>  |
|   | 1.9 |       | <b>Loading and Unloading of Bamboo</b>                                                                                                                                                                                                                            |          |       | <b>73.290</b>  |
|   |     | (I)   | Loading & unloading Bamboo                                                                                                                                                                                                                                        |          |       |                |
|   |     |       | Unit = per metre                                                                                                                                                                                                                                                  |          |       |                |
|   |     |       | Taking output = per mtr.                                                                                                                                                                                                                                          |          |       |                |
|   |     | a)    | Material                                                                                                                                                                                                                                                          |          |       |                |
|   |     |       | Bamboo =2016/300                                                                                                                                                                                                                                                  |          |       |                |
|   |     |       | Bamboo Per Mt.                                                                                                                                                                                                                                                    | per pipe |       | 6.72           |
|   |     |       | <b>Total per m</b>                                                                                                                                                                                                                                                | par mt   |       | 0.96           |
| 4 | 3.3 | 301.5 | Construction of Embankment with material obtained from roadway cutting                                                                                                                                                                                            |          |       | 10.960         |
|   |     |       | 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                                                                                                                                                                                                                                                            |          |       |                |
|   |     |       | Mate                                                                                                                                                                                                                                                              | day      | 0.02  | 434.00         |
|   |     |       | Mazdoor (Unskilled)                                                                                                                                                                                                                                               | day      | 0.50  | 410.00         |
|   |     | b)    | Machinery                                                                                                                                                                                                                                                         |          |       |                |
|   |     |       | Dozer D-50 for spreading @200 cum per hour                                                                                                                                                                                                                        | hour     | 0.50  | 0.00           |
|   |     |       | Motor Grader for grading @200 Cum per hour                                                                                                                                                                                                                        | hour     | 2.00  | 697.00         |
|   |     |       | Water tanker 6 kl capacity                                                                                                                                                                                                                                        | hour     | 2.00  | 752.00         |
|   |     |       | Three Wheel 80-100 kN Static Roller                                                                                                                                                                                                                               | hour     | 1.25  | 1593.00        |
|   |     | c)    | Material                                                                                                                                                                                                                                                          |          |       |                |
|   |     |       | Water                                                                                                                                                                                                                                                             | kl       | 12.00 | 60.30          |
|   |     |       | Cost for 100 cum = a+b+c+d+e                                                                                                                                                                                                                                      |          |       | 723.60         |
|   |     |       | <b>Total per cum</b>                                                                                                                                                                                                                                              |          |       | <b>5826.53</b> |

|   |      |       |                                                                                                                                                                                                                                                                                                                                                |      |       |           |
|---|------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|-----------|
|   |      |       | Rate per cum = (a+b+c+d)/100                                                                                                                                                                                                                                                                                                                   | cum  |       | 58.265    |
| 5 | 3.5  | 301.5 | Exaavation In soil with Dozer with lead upto 100 m                                                                                                                                                                                                                                                                                             |      |       | 58.265    |
|   | (ii) | (ii)  | Excavation for roadway in soil by mechanical means including cutting and pushing the earth to site of embankment upto a distance of 100 m, including trimming bottom and side slopes in accordance with requirements of lines, grades and cross-sections.                                                                                      |      |       |           |
|   |      |       | Unit = cum                                                                                                                                                                                                                                                                                                                                     |      |       |           |
|   |      |       | Taking output = 100 cum                                                                                                                                                                                                                                                                                                                        |      |       |           |
|   |      | a)    | Labour                                                                                                                                                                                                                                                                                                                                         |      |       |           |
|   |      |       | Mate                                                                                                                                                                                                                                                                                                                                           |      |       |           |
|   |      |       | Mazdoor (Unskilled)                                                                                                                                                                                                                                                                                                                            | day  | 0.08  | 434.00    |
|   |      | b)    | Machinery                                                                                                                                                                                                                                                                                                                                      | day  | 2.00  | 410.00    |
|   |      |       | Dozer D-50 for spreading @200 cum per hour                                                                                                                                                                                                                                                                                                     | hour | 3.60  | 4326.00   |
|   |      |       | Cost for 100 cum = a+b+c+d+e                                                                                                                                                                                                                                                                                                                   |      |       | 15,573.60 |
|   |      |       | Rate per cum = (a+b+c+d)/180                                                                                                                                                                                                                                                                                                                   |      |       | 16427.20  |
|   |      |       | Total per cum                                                                                                                                                                                                                                                                                                                                  | cum  |       | 91.262    |
| 6 | 3.3  | 301.5 | Construction of Embankment with approved material obtained from borrow pits with a lift upto 1.5 m transporting to site, spreading grading to required slope and compacting to meet requirement of Table 300.1 and 300.2 with a lead of 1000 m as per Technical                                                                                |      |       | 91.260    |
|   |      |       | Unit = cum                                                                                                                                                                                                                                                                                                                                     |      |       |           |
|   |      |       | Rate item no. 3.3 Clause 301.5                                                                                                                                                                                                                                                                                                                 |      |       |           |
|   |      |       | Rate item no. 3.5(ii) Clause 301.5                                                                                                                                                                                                                                                                                                             |      |       | 58.265    |
|   |      |       | Royalty Compensation for earth taken from private land                                                                                                                                                                                                                                                                                         |      |       | 91.260    |
|   |      |       | Carriage of Earth by Tractor Lead 1 K.M.                                                                                                                                                                                                                                                                                                       |      |       | 35.250    |
|   |      |       | Total Cost of 1 cum =                                                                                                                                                                                                                                                                                                                          |      |       | 274.420   |
|   |      |       | Labour Cess @ 1%                                                                                                                                                                                                                                                                                                                               |      |       | 459.195   |
|   |      |       | G.S.T. @ 18%                                                                                                                                                                                                                                                                                                                                   |      |       | 4.590     |
|   |      |       | Add Seigniorage Fee @ 10 % of Materials                                                                                                                                                                                                                                                                                                        |      |       | 82.655    |
|   |      |       | Total Cost of 1 cum 1% Cess & 18% GST                                                                                                                                                                                                                                                                                                          | cum  | 1.00  | 35.25     |
| 7 | 4.5  |       | Providing and Laying of Brick Bats                                                                                                                                                                                                                                                                                                             |      |       | 3.53      |
|   |      |       | Placing tractor at loading point loading with front end loader dumpoing ,turning for return trip exluding time for haulage and return trip                                                                                                                                                                                                     |      |       | 649.970   |
|   |      |       | Unit = cum                                                                                                                                                                                                                                                                                                                                     |      |       |           |
|   |      |       | Taking output = 2.83 cum                                                                                                                                                                                                                                                                                                                       |      |       |           |
|   |      | a)    | Labour                                                                                                                                                                                                                                                                                                                                         |      |       |           |
|   |      |       | Mazdoor (Unskilled)                                                                                                                                                                                                                                                                                                                            |      |       |           |
|   |      | b)    | Materialas                                                                                                                                                                                                                                                                                                                                     | day  | 2.170 | 410.00    |
|   |      |       | Brick Bats                                                                                                                                                                                                                                                                                                                                     |      |       | 889.70    |
|   |      |       | Total (a+b)=                                                                                                                                                                                                                                                                                                                                   | cum  | 3.396 | 1,081.00  |
|   |      |       | Total (a+b+c) =                                                                                                                                                                                                                                                                                                                                |      |       | 3671.08   |
|   |      | d)    | Carriage                                                                                                                                                                                                                                                                                                                                       |      |       | 4560.78   |
|   |      |       | Brick Bats                                                                                                                                                                                                                                                                                                                                     |      |       | 4560.78   |
|   |      |       | TOTAL                                                                                                                                                                                                                                                                                                                                          | cum  | 3.396 | 521.97    |
|   |      |       | Rate per cum = (a+b+c+d)/2.83                                                                                                                                                                                                                                                                                                                  |      |       | 1772.61   |
|   |      |       | Total per cum                                                                                                                                                                                                                                                                                                                                  | cum  |       | 6333.39   |
|   |      |       | Labour Cess @ 1%                                                                                                                                                                                                                                                                                                                               | cum  |       | 2237.947  |
|   |      |       | G.S.T. @ 18%                                                                                                                                                                                                                                                                                                                                   |      |       | 2237.947  |
|   |      |       | Add Seigniorage Fee @ 10 % of Materials                                                                                                                                                                                                                                                                                                        |      |       | 22.379    |
|   |      |       | Total Cost of 1 cum 1% Cess & 18% GST                                                                                                                                                                                                                                                                                                          | cum  | 1.20  | 402.830   |
| 8 | 4.1  | 401   | PAVEMENT CRUST LAYERS                                                                                                                                                                                                                                                                                                                          |      |       | 129.72    |
|   |      |       | For Grading II Material                                                                                                                                                                                                                                                                                                                        |      |       | 2792.572  |
|   |      |       | 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. |      |       |           |
|   |      | (ii)  | For Grading II Material                                                                                                                                                                                                                                                                                                                        |      |       |           |
|   |      |       | Unit = cum                                                                                                                                                                                                                                                                                                                                     |      |       |           |
|   |      |       | Taking output = 300 cum                                                                                                                                                                                                                                                                                                                        |      |       |           |
|   |      | a)    | Labour                                                                                                                                                                                                                                                                                                                                         |      |       |           |
|   |      |       | Mate                                                                                                                                                                                                                                                                                                                                           |      |       |           |
|   |      |       | Mazdoor (Skilled)                                                                                                                                                                                                                                                                                                                              | day  | 0.48  | 434.00    |
|   |      |       | Mazdoor (Unskilled)                                                                                                                                                                                                                                                                                                                            | day  | 2.00  | 472.00    |
|   |      |       |                                                                                                                                                                                                                                                                                                                                                | day  | 10.00 | 410.00    |
|   |      |       |                                                                                                                                                                                                                                                                                                                                                |      |       | 208.32    |
|   |      |       |                                                                                                                                                                                                                                                                                                                                                |      |       | 944.00    |
|   |      |       |                                                                                                                                                                                                                                                                                                                                                |      |       | 4100.00   |



|   |       |                                                                                                                                                                                                                                       |          |       |         |
|---|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|---------|
|   |       | Unit = Per % Nos.                                                                                                                                                                                                                     |          |       |         |
|   |       | (A) For Filling & Stitching & Stacking                                                                                                                                                                                                |          |       |         |
|   |       | Labour                                                                                                                                                                                                                                |          |       |         |
|   |       | Skilled Labour for filling sand into bags and sewing                                                                                                                                                                                  | No.      | 2.00  | 472.00  |
|   |       | subali                                                                                                                                                                                                                                | kg       | 0.50  | 20.59   |
|   |       |                                                                                                                                                                                                                                       |          |       | 10.30   |
|   |       | (B) Labour Rate For Carrying & Placing filed E.C. Bags.                                                                                                                                                                               |          |       |         |
|   |       | Labour                                                                                                                                                                                                                                |          |       |         |
|   |       | Skilled Labour for Carrying filed bags and placing to work site                                                                                                                                                                       | No.      | 3.00  | 472.00  |
|   |       |                                                                                                                                                                                                                                       |          |       | 1416.00 |
|   |       | TOTAL =                                                                                                                                                                                                                               |          |       | 2370.30 |
|   |       | Per % Nos. (B) =                                                                                                                                                                                                                      |          | Say,  | 2370.30 |
|   |       | Rate per bag (A+B) = /100                                                                                                                                                                                                             |          |       | 23.70   |
|   |       | (C) Cost of empty cement bag & cost of sand                                                                                                                                                                                           | each     |       | 11.11   |
|   |       | (D) Carriage cost                                                                                                                                                                                                                     |          |       |         |
|   |       | Tractor with trolley                                                                                                                                                                                                                  | cum      | 0.034 | 345.14  |
|   |       | (G) Total = (A+B+C+D) =                                                                                                                                                                                                               |          |       | 46.55   |
|   |       | Labour Cess @ 1%                                                                                                                                                                                                                      |          |       | 0.465   |
|   |       | G.S.T. @ 18%                                                                                                                                                                                                                          |          |       | 8.379   |
|   |       | Add Selgniorage Fee @ 10 % of Materials                                                                                                                                                                                               | cum      | 0.034 | 144.75  |
|   |       |                                                                                                                                                                                                                                       |          |       | 0.49    |
|   |       | Total Cost of 1 E.C. Bag 1% Cess & 18% GST =                                                                                                                                                                                          |          |       | 55.882  |
| 4 | 5.7.9 | Supply Labour for fitting and fixing 62 mm to 75 mm dia bamboo runners in position at every verticle pile with 150 mm long nails or 3B swg G. I. wire including cost of G.I. or nails complete job as per specification and direction |          |       |         |
|   |       | Unit = Per mt.                                                                                                                                                                                                                        |          |       |         |
|   |       | Taking Out Put = 30.50 m                                                                                                                                                                                                              |          |       |         |
|   | (i)   | Materials                                                                                                                                                                                                                             |          |       |         |
|   |       | Bamboo                                                                                                                                                                                                                                | m        | 30.50 | 20.21   |
|   |       | Nails                                                                                                                                                                                                                                 | kg       | 0.50  | 108.00  |
|   |       |                                                                                                                                                                                                                                       |          |       | 54.00   |
|   | (ii)  | Labour                                                                                                                                                                                                                                |          |       |         |
|   |       | Carpenter Gr -II                                                                                                                                                                                                                      | No.      | 0.125 | 503.00  |
|   |       | Unskilled Labour                                                                                                                                                                                                                      | No.      | 0.25  | 410.00  |
|   |       | Rate for 30.5 m                                                                                                                                                                                                                       |          |       | 835.79  |
|   |       | TOTAL =                                                                                                                                                                                                                               |          |       | 835.79  |
|   |       | Rate per mt                                                                                                                                                                                                                           |          |       | 27.40   |
|   | (iii) | Carriage cost                                                                                                                                                                                                                         | mt       | 1     | 3.00    |
|   |       | bamboo                                                                                                                                                                                                                                |          |       | 30.40   |
|   |       | Total Cost with Carriage                                                                                                                                                                                                              |          |       | 0.304   |
|   |       | Labour Cess @ 1%                                                                                                                                                                                                                      |          |       | 5.473   |
|   |       | G.S.T. @ 18%                                                                                                                                                                                                                          |          |       | 86.179  |
|   |       | Total Cost of 1 mt 1% Cess & 18% GST =                                                                                                                                                                                                |          |       | 86.179  |
| 5 | 5.7.7 | Labour for cutting 62 mm to 75 mm dia bamboo piles in size and making shoes and driving etc. complete bob as per specification and direction E/I.                                                                                     |          |       |         |
|   |       | Unit = Per mt.                                                                                                                                                                                                                        |          |       |         |
|   |       | Taking Out Put = 30.50 m                                                                                                                                                                                                              |          |       |         |
|   |       | Assurning                                                                                                                                                                                                                             |          |       |         |
|   |       | 20 no pile sunk 1.525 m deeps                                                                                                                                                                                                         |          |       |         |
|   |       | Total depth sunk 30.50 m                                                                                                                                                                                                              |          |       |         |
|   | (i)   | Materials                                                                                                                                                                                                                             | m        | 30.50 | 20.21   |
|   |       | Bamboo                                                                                                                                                                                                                                |          |       | 616.41  |
|   | (i)   | Labour                                                                                                                                                                                                                                | No.      | 0.25  | 503.00  |
|   |       | Carpenter Gr -II                                                                                                                                                                                                                      | No.      | 2.50  | 410.00  |
|   |       | Unskilled Labour for piling                                                                                                                                                                                                           |          |       | 125.75  |
|   |       | Rate for 30.5 m                                                                                                                                                                                                                       |          |       | 1025.0  |
|   |       | Total                                                                                                                                                                                                                                 |          |       | 1767.16 |
|   |       | Rate for 1 m                                                                                                                                                                                                                          | per mtr. |       | 57.94   |
|   |       | Carriage Cost of Bamboo                                                                                                                                                                                                               |          |       | 3.00    |
|   |       | Total Cost with Carriage                                                                                                                                                                                                              |          |       | 60.94   |
|   |       | Labour Cess @ 1%                                                                                                                                                                                                                      |          |       | 0.609   |
|   |       | G.S.T. @ 18%                                                                                                                                                                                                                          |          |       | 10.969  |
|   |       | Total Cost of 1 mtr 1% Cess & 18% GST =                                                                                                                                                                                               |          |       | 12.518  |

|        |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |       |           |
|--------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|-----------|
|        |      | Labour for fitting and and fixing Steel Drum 300 mm dia 1.2 m high as per specification and direction                                                                                                                                                                                                                                                                                                                                               |      |       |           |
|        |      | (Assuming Per Mtr. = $3.14 \times 0.30 = 0.942$ mtr.)                                                                                                                                                                                                                                                                                                                                                                                               |      |       |           |
|        |      | Area of Assuming in one Drum = $0.942 \times 1.20 = 1.130$ Sqm                                                                                                                                                                                                                                                                                                                                                                                      |      |       |           |
|        |      | One Sqm sheet Cost = $127.80 / 1.130 = 113.12$ Cost                                                                                                                                                                                                                                                                                                                                                                                                 |      |       |           |
|        |      | Unit = per sqm                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |       |           |
|        |      | Taking Out = 100 sqm                                                                                                                                                                                                                                                                                                                                                                                                                                |      |       |           |
|        | a    | Labour                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |       |           |
|        |      | Hammer man                                                                                                                                                                                                                                                                                                                                                                                                                                          | No.  | 4.00  | 503.00    |
|        |      | Mazdoor (Unskilled)                                                                                                                                                                                                                                                                                                                                                                                                                                 | No.  | 4.00  | 410.00    |
|        |      | Carpenter 1st Class                                                                                                                                                                                                                                                                                                                                                                                                                                 | No.  | 4.00  | 503.00    |
|        | b    | Materials                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |       |           |
|        |      | Nails                                                                                                                                                                                                                                                                                                                                                                                                                                               | kg   | 5.00  | 170.13    |
|        |      | Steel Drum sheet                                                                                                                                                                                                                                                                                                                                                                                                                                    | Nos. | 88.5  | 170.13    |
|        |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |       | 21571.160 |
|        |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |       | 215.712   |
|        |      | Rate Per m = $(a+b+c)/100$                                                                                                                                                                                                                                                                                                                                                                                                                          |      |       |           |
|        |      | Labour Cess @ 1%                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |       |           |
|        |      | G.S.T. @ 18%                                                                                                                                                                                                                                                                                                                                                                                                                                        |      |       |           |
|        |      | Total Cost of Unit = 1% Cess & 18% GST                                                                                                                                                                                                                                                                                                                                                                                                              |      |       |           |
| 5.7.8  | WRD  | Labour for fitting and and fixing split bamboo woven chachari 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.                                                                                                                                                                                                            |      |       |           |
|        |      | (Assuming strip of $3.05 \times 3.05 = 9.30$ sqm                                                                                                                                                                                                                                                                                                                                                                                                    |      |       |           |
|        |      | Unit = per sqm                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |       |           |
|        |      | Taking Out = 9.30 sqm                                                                                                                                                                                                                                                                                                                                                                                                                               |      |       |           |
|        | a    | Labour                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |       |           |
|        |      | Carpenter Gr -II                                                                                                                                                                                                                                                                                                                                                                                                                                    | No.  | 1.00  | 531.00    |
|        |      | Mazdoor (Unskilled) for piling                                                                                                                                                                                                                                                                                                                                                                                                                      | No.  | 1.00  | 410.00    |
|        | b    | Materials                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |       |           |
|        |      | Bamboo                                                                                                                                                                                                                                                                                                                                                                                                                                              | Mtr. | 10.00 | 188.00    |
|        |      | Nails                                                                                                                                                                                                                                                                                                                                                                                                                                               | kg   | 0.25  | 108.00    |
|        |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |       | 2848.000  |
|        |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |       | 306.237   |
|        |      | Rate Per m = $(a+b+c)/9.30$                                                                                                                                                                                                                                                                                                                                                                                                                         |      |       |           |
|        |      | Labour Cess @ 1%                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |       |           |
|        |      | G.S.T. @ 18%                                                                                                                                                                                                                                                                                                                                                                                                                                        |      |       |           |
|        |      | Total Cost of Unit = 1% Cess & 18% GST                                                                                                                                                                                                                                                                                                                                                                                                              |      |       |           |
| 5.7.50 |      | 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/I. |      |       |           |
|        |      | Unit = Each Bag                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |       |           |
|        |      | Taking Out = 40 Nso.                                                                                                                                                                                                                                                                                                                                                                                                                                |      |       |           |
|        |      | Labour                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |       |           |
|        |      | Unskilled Loading For filling stacking                                                                                                                                                                                                                                                                                                                                                                                                              | nos  | 2     | 410.00    |
|        |      | Skilled labour for stacking                                                                                                                                                                                                                                                                                                                                                                                                                         | nos  | 0.33  | 472.00    |
|        |      | Unskild labour for carring and placing                                                                                                                                                                                                                                                                                                                                                                                                              | nos  | 4.00  | 410.00    |
|        |      | Mate                                                                                                                                                                                                                                                                                                                                                                                                                                                | nos  | 0.25  | 434.00    |
|        |      | Stiching Machine                                                                                                                                                                                                                                                                                                                                                                                                                                    | day  | 0.33  | 50.00     |
|        |      | Tractor with trolley                                                                                                                                                                                                                                                                                                                                                                                                                                | day  | 1.00  | 676.00    |
|        |      | Generator 3KVA                                                                                                                                                                                                                                                                                                                                                                                                                                      | hrs  | 20.67 | 74.00     |
|        |      | Total                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |       | 1529.58   |
|        |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |       | 4946.34   |
|        |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |       | 123.66    |
|        |      | Rate per bag (total/40) (A)                                                                                                                                                                                                                                                                                                                                                                                                                         |      |       |           |
|        | (ii) | charge for placing & dumping                                                                                                                                                                                                                                                                                                                                                                                                                        | nos  | 16    | 410.00    |
|        |      | unskilled labour for loading unloading & dumping                                                                                                                                                                                                                                                                                                                                                                                                    | nos  | 1     | 434.00    |
|        |      | Mate                                                                                                                                                                                                                                                                                                                                                                                                                                                | each | 4     | 676.00    |
|        |      | Tractor with trolley                                                                                                                                                                                                                                                                                                                                                                                                                                |      |       | 2704.00   |
|        |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |       | 9,443.000 |
|        |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |       | 36.887    |
|        |      | Rate per bag (Total/256) (B)                                                                                                                                                                                                                                                                                                                                                                                                                        |      |       |           |
|        |      | Matroials                                                                                                                                                                                                                                                                                                                                                                                                                                           | each | 1     | 124.00    |
|        |      | cast of Geo Bag                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |       | 124.00    |
|        |      | Total cost (a+b+c)                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |       | 284.545   |

|          |      |                                                                                                                                                                                                                                                                                                                          |     |       |        |          |
|----------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------|--------|----------|
|          |      | Rate per bag                                                                                                                                                                                                                                                                                                             |     |       |        | 284.545  |
|          |      | Labour Cess @ 1%                                                                                                                                                                                                                                                                                                         |     |       |        | 2.845    |
|          |      | G.S.T. @ 18%                                                                                                                                                                                                                                                                                                             |     |       |        | 51.218   |
|          |      | Add Seigniorage Fee @ 10 % of Materials                                                                                                                                                                                                                                                                                  | cum | 0.070 | 144.75 | 1.01     |
|          |      | Total Cost of 1 Bag @ 1% Cess & 18% GST                                                                                                                                                                                                                                                                                  |     |       |        | 339.619  |
| 5.7.40.3 |      | Labour for filling empty cement bags with local sand, stitching the bags and pitching in Nylon crate of size (1m x 1m x 1m) with a lead of 150 m including supply of suti etc. and placing the filed crates in water portion within a lead 30 m all complete as per approved design, specification and direction of E/I. |     |       |        |          |
|          |      | Unit = Each N.C.                                                                                                                                                                                                                                                                                                         |     |       |        |          |
|          | (i)  | (i) Labour Cost for filling bags in one Nylon crate in dry portion                                                                                                                                                                                                                                                       | No. | 1     | 472.00 | 411.00   |
|          | (ii) | (i) Labour Cost for filling bags in one Nylon crate in dry portion                                                                                                                                                                                                                                                       | No. | 1     | 472.00 | 611.00   |
|          |      | (II) Placing of filed N/C with 30 m lead in water portion                                                                                                                                                                                                                                                                |     |       |        |          |
|          |      | Labour                                                                                                                                                                                                                                                                                                                   |     |       |        |          |
|          |      | Mate                                                                                                                                                                                                                                                                                                                     | No. | 0.37  | 434.00 | 160.58   |
|          |      | Labour (Skilled)                                                                                                                                                                                                                                                                                                         | No. | 1.00  | 472.00 | 472.00   |
|          |      | Labour (Unskilled)                                                                                                                                                                                                                                                                                                       | No. | 1.00  | 410.00 | 410.00   |
|          |      |                                                                                                                                                                                                                                                                                                                          |     |       |        | 2064.58  |
|          |      | Hence, Total Labour for 100 Cft.                                                                                                                                                                                                                                                                                         |     |       |        | 2064.58  |
|          |      | Taking one E.C. Bags to contain 1.20 Cft. Of sand                                                                                                                                                                                                                                                                        |     |       |        |          |
|          | (ii) | Hence, labour rate for placing one filed N.C.                                                                                                                                                                                                                                                                            |     |       | 356.49 | 356.49   |
|          |      | Hence rate per cu. m crate on water portion (I+II)                                                                                                                                                                                                                                                                       |     |       | Say.   | 967.49   |
|          |      | Labour Cess @ 1%                                                                                                                                                                                                                                                                                                         |     |       |        | 9.675    |
|          |      | G.S.T. @ 18%                                                                                                                                                                                                                                                                                                             |     |       |        | 174.148  |
|          |      | Add Seigniorage Fee @ 10 % of Materials                                                                                                                                                                                                                                                                                  | cum | 0.034 | 144.75 | 0.49     |
|          |      | Total Cost of 1 E.C. 1% Cess & 18% GST                                                                                                                                                                                                                                                                                   |     |       |        | 1151.803 |
|          |      | Local sand filling in foundation trenches as per drawing and technical specification Clause 30.5.3.3                                                                                                                                                                                                                     |     |       |        |          |
|          |      | Local sand filling in foundation trenches as per drawing and technical specification Clause 30.5.3.3                                                                                                                                                                                                                     |     |       |        |          |
|          | I.   | Sand filling                                                                                                                                                                                                                                                                                                             |     |       |        |          |
|          |      | Unit = cum                                                                                                                                                                                                                                                                                                               |     |       |        |          |
|          | a)   | Labour                                                                                                                                                                                                                                                                                                                   |     |       |        |          |
|          |      | Mate                                                                                                                                                                                                                                                                                                                     | day | 0.01  | 434.00 | 4.34     |
|          |      | Mazdoor (Unskilled)                                                                                                                                                                                                                                                                                                      | day | 0.30  | 410.00 | 123.00   |
|          | b)   | Material                                                                                                                                                                                                                                                                                                                 |     |       |        |          |
|          |      | Sand (assuming 20 per cent voids)                                                                                                                                                                                                                                                                                        | cum | 1.20  | 144.75 | 173.70   |
|          |      | Overheads @ 6 % on (a)                                                                                                                                                                                                                                                                                                   |     |       |        | 18.06    |
|          |      |                                                                                                                                                                                                                                                                                                                          |     |       |        | 319.10   |
|          |      | CARRIAGE COST                                                                                                                                                                                                                                                                                                            |     |       |        |          |
|          |      | sand                                                                                                                                                                                                                                                                                                                     | Cum | 1.2   | 345.14 | 414.17   |
|          |      | Rate per cum = a+b+c                                                                                                                                                                                                                                                                                                     |     |       |        | 733.27   |
|          |      | Total Cost including 1 % LABOUR CESS                                                                                                                                                                                                                                                                                     |     |       |        | 7.33     |
|          |      | G.S.T. @ 18%                                                                                                                                                                                                                                                                                                             |     |       |        | 131.99   |
|          |      | Add Seigniorage Fee @ 10 % of Materials                                                                                                                                                                                                                                                                                  |     |       |        | 0.49     |
|          |      | Total Cost of 1 E.C. 1% Cess & 18% GST                                                                                                                                                                                                                                                                                   |     |       |        | 1287.25  |

Executive Engineer  
RWD, Works Division  
Kishanganj-1

Executive Engineer  
RWD, Works Division  
Kishanganj-2

Executive Engineer  
RWD, Works Division  
Forbesganj

Superintending Engineer  
Rural Works Department  
Works Circle Kishanganj



13/11/24  
 J.R.  
 13/11/24  
 R.C.

13/11/24  
 R.C.



13/11/24  
7E  
13/11/24  
DC

13/11/24  
DC