# RURAL WORKS DEPARTMENT
# GOVT OF BIHAR

NAME OF WORKS :- Bhuna - Pachaili_Saidpur

BLOCK :- Jokihat

**FDR**

Phase-I

8,36,909

YEAR(2024-25)

R.W.D., WORKS CIRCLE, KISHANGANJ

R.W.D., WORKS DIVISION, ARARIA

# प्रतिवेदन

पथ का नाम :– Bhuna - Pachaili_Saidpur

कार्य का नाम :– Bhuna - Pachaili_Saidpur

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

संलग्न प्राक्कलन 2024 को प्रखण्ड में आयी भीषण बाढ़ से क्षतिग्रस्त ....पथ.... में बाढ़ क्षतिग्रस्त मरम्मति मद से यातायात चालू करने हेतु तैयार किया गया है जिसकी प्राक्कलित लागत ...836909 (Eight lakhs thirty-six thousand Nine hundred Nine)... है। उक्त पथ का निर्माण ....NMP.... योजनान्तर्गत हुआ है एवं योजना अनुरक्षण अवधि में ...है...। 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 मदो का दर वर्त्तमान अनुसुचित दर के अनुरूप है।

6/11/24

कनीय अभियंता,
ग्रामीण कार्य विभाग,
कार्य प्रशाखा, ..जाो॰दिल-01..।

6/11/24

सहायक अभियंता,
ग्रामीण कार्य विभाग,
कार्य अवर प्रमण्डल, ............।

6/11/24

कार्यपालक अभियंता,
ग्रामीण कार्य विभाग,
कार्य प्रमण्डल, ........

## SUMMARY OF COST ESTIMATE FOR THE PROJECT

| | | |
|---|---|---|
| NAME OF ROAD :- | Bhuna - Pachalli_Saldpur | |
| DISTRICT :- | ARARIA | |
| BLOCK :- | Jokihat | |
| Length of Road:- | 0.00KM | |
| Length of Cutting in mtr :- | 37.000 | |
| Sl. No. | DESCRIPTION | AMOUNT (LAKHS) |
| 1 | Filling of local sand | 373214.45 |
| 2 | Labour for cutting 62mm to 75mm dia bamboo | 100146.74 |
| 3 | Labour for fitting 62mm to 75mm dia bamboo | 11144.50 |
| 4 | Labour for filling empty cement bags with local sand Nylon crate | 0.00 |
| 5 | Supplying of EC bag,of local sand | 134726.68 |
| 6 | Supply and Carriage of brick bats | 202676.16 |
| 7 | Supply,laying and carriage of 1000 mm HPC | 0.00 |
| 8 | Drone Videography Charj Three times | 15000.00 |
| | SUB TOTAL COST = | 836908.52 |
| | TOTAL (RS.) = | 8,36,909 |

6/11/24
J.E

6/11/24
A.E

6/11/24
E.E

S.E

Technically ~~sanctioned~~ approved for ₹ 8,36,909=00 (Rupees Eight Lakhs Thirty-six thousand Nine-hundred Nine) only

11/24

Superintending Engineer
RWD Work Circle
Kishanganj

## Bill of Quantity

| | | | | | |
|---|---|---|---|---|---|
| NAME OF ROAD :- | | Bhuna - Pachalli_Saidpur | | | |
| DISTRICT :- | | ARARIA | | | |
| BLOCK :- | | Jokihat | | | |
| Sl. No. | DESCRIPTION OF ITEMS | QUANTITY | UNIT | RATE (Rs.) | AMOUNT (Rs.) |
| 1 | Filling of local sand obtained from river bed, watering & ramming. all complete job as per specification & direction of Engineer-in-incharge | 293.23 | CUM | 1272.78 | 373214.45 |
| 3 | Labour for cutting 62 mm to 75mm dia bamboo piles to size and making shoes & driving by jet machine etc. all complete job as per specfication & direction of Engineer- in -charge. | 1447.50 | MTR | 69.19 | 100146.74 |
| 4 | Labour for fitting & fixing 62 mm to 75 mm dia bamboo runners in position at every vertical pile with 150 mm long nails or 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. | 310.00 | MTR | 35.95 | 11144.50 |
| 5 | Labour for fiting empty cement bags with loocal sand, stitching the bags and placing in Nylon crate of size (1 m X 1 m X 1 m )with lead of 150 M including supply of sutli etc. at site in dry portion all complete as per approved design, specification and direction of E/I | 0.00 | Each | 1151.80 | 0.00 |
| 6 | Supplying of EC bag, filling of local sand stitching and placing in position as the direction of Engineer-in-charge. | 2411.00 | Each | 55.88 | 134726.68 |
| 7 | Supply and Carriage of brick bats upto 8 km breach and placing in breaches and lying of bats, all complete job. | 73.46 | CUM | 2759.12 | 202676.16 |
| 8 | Supplaying and carriage of hume pipe 1000 mm dia , all complete job. | 0.00 | RM | 7385.85 | 0.00 |
| | | | A) SUB TOTAL = | | 821908.52 |
| | | | TOTAL COST = | | 821909 |

6/11/24    6/11/24    6/11/24

J.E    A.E    E.E

# ESTIMATE FOR REPAIRING / RESTORATION/ MAKING MOTORABLE ROADS DAMAGED DURING FLOOD

| | |
|---|---|
| NAME OF ROAD :- | Bhuna - Pachaili_Saidpur |
| DISTRICT :- | ARARIA |
| BLOCK :- | Jokihat |
| Length of Cutting:- | 37.00 mtr |

| Sl. No. | DESCRIPTION OF ITEMS | Unit | Nos. | L(m) | B(m) | D(m) | QUANTITY | RATE (Rs.) | AMOUNT (Rs.) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Filling of local sand obtained from river bed, watering & ramming, all complete job as per specification & direction of Engineer-in-incharge | | | | | | | | |
| | At ch -0.900 km | cum | 1 | 25.00 | (6.75+6.5+3.5)/3 | (1.5+1.85+1.25)/3 | 214.03 | | |
| | At ch -1.100 km | cum | 1 | 12.00 | (6.75+6.25+3.5)/3 | (1.05+1.5+1.05)/3 | 79.20 | | |
| | Deductionfor H P 1000MM dia (1.23 x 1.23 )=1.52 | cum | 0 | 0.79 | 1.52 | 7.50 | 0.00 | | |
| | | cum | | | total qty :- | | 293.228 | 1,272.78 | 373214.45 |
| 2 | Labour for cutting 62 mm to 75mm dia bamboo piles to size and making shoes & driving by jet machine etc. all complete job as per specfication & direction of Engineer- In -charge. | | | | | | | | |
| | At ch -0.900 km | | 2 | 30/0.25 | 5.00 | | 1200.00 | | |
| | At ch -1.100 km | | 1 | 16.5/0.3 | 4.50 | | 247.50 | | |
| | | Mtr. | | | total qty:- | | 1447.50 | 69.19 | 1,00,146.74 |
| | | | | | | | | | |
| 3 | Labour for fitting & fixing 62 mm to 75 mm dia bamboo runners in position at every vertical pile with 150 mm long nails or 38 swg G.I wire including cost of G.I wire or nails etc all complete job as per specification & direction of Engineer-in-charge. | | | | | | | | |
| | At ch:-0.900 km | | 2 | 25.00 | 2.5/0.5 | | 250.00 | | |
| | At ch:-1.100 km | | 1 | 12.00 | 2.5/0.5 | | 60.00 | | |
| | | Mtr. | | | total qty :- | | 310.00 | 35.95 | 11144.50 |
| | | | | | | | | | |
| 4 | Supplying of EC bag, filling of local sand stitching and placing in position as the direction of Engineer-in-charge. | | | | | | | | |
| | At ch -0.900 km | cum | 2 | 25.00 | 0.90 | (1.5+1.85+1.25)/3 | 69.00 | | |
| | At ch:-1.100 km | cum | 1 | 12.00 | 0.90 | (1.05+1.5+1.05)/3 | 12.96 | | |
| | Total No of E C Bags(0.034cum=100Bags) | | | 81.96 | / | 0.034 | 2411.00 | | |
| | | Each | | | Say No of Bage :- | | 2411.00 | 55.88 | 134726.680 |
| 5 | Supply and Carriage of brick bats upto 8 km breach and placing in breaches and lying of bats, all complete job. | | | | | | | | |
| | At ch:-0.900 km | cum | 1 | 25.00 | 5.58 | 0.38 | 53.51 | | |
| | At ch:-1.100 km | cum | 1 | 12.00 | 5.25 | 0.32 | 19.95 | | |
| | | cum | | | total qty :- | | 73.46 | 2,759.12 | 202676.16 |
| | | | | | | | | | |
| | | | | | | | A) SUB TOTAL = | | 821908.52 |
| | | | | | | | TOTAL COST = | | 821908.52 |

6/11/24

Junior Engineer

4/11/24

Asstt. Engineer

6/11/24

Executive Engineer

S E
KISHANGANJ

## 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) | S.F. Per Cum / Per Bag BAG |
|---|---|---|---|---|---|
| 1 | EARTH WORK | CUM | 459.003 | 549.740 | 3.530 |
| 2 | BRICK BAT | CUM | 2209.576 | 2759.115 | 129.720 |
| 3 | G.S.B | CUM | 4328.501 | 5172.300 | 21.380 |
| 4 | SAND BAG (Cement Bag) | Each | 46.550 | 55.880 | 0.490 |
| 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 | 1.010 |
| 12 | EACH N.C. BAG WITH SAND (Cement Bag) | Each E.C | 967.490 | 1151.800 | 0.490 |
| 13 | LOCAL SAND | CUM | 721.110 | 1272.780 | 0.490 |

6/11/24
Junior Engineer

6/11/24
Assistant Engineer

6/11/24
Excutive Engineer

Superintending Engineer
Rural Works Department
Works Circle Kishanganj

## BASIC RATES
### (A) Labour

| Sl. No. | Description of Labour | Unit | Rate (Rs.) |
|---|---|---|---|
| L-01 | Bhisti | day | 373 |
| L-02 | Bitumen Sprayer(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 | 397 |
| L-15 | Mazdoor (Unskilled) | day | 373 |
| L-16 | Mazdoor (Semi skilled) | day | 388 |
| L-17 | Mazdoor (Skilled) | day | 472 |
| L-18 | Painter (1st class) | day | 476 |
| L-19 | Plumber, Special | day | 476 |
| L-20 | Surveyor | day | 454 |
| L-21 | White Washer | day | 476 |
| L-22 | Head blacksmith | day | 531 |
| L-23 | Welder 1 St Class | day | 584 |
| | Carpenter Head | day | 531 |
| | Night Gurad | day | 415 |

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

## BASIC RATES
### (B) Material

| Sl. No. | Description | Unit | Basic Rate as per SOR | Add Royality | Final Rate With Royality |
|---|---|---|---|---|---|
| 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 Bats | cum | 1063.00 | 18.00 | 1081.00 |
| M-008 | Selected earth (Including @ Rs. 33.00 per cum & compensation @ Rs. 2.25 Per Cum | cum | 2.25 | 33.00 | 35.25 |
| M-009 | Empety Cement Bag IS 11652:2000 | Nos. | 11.11 | | 11.11 |
| M-010 | Steel Drum 300 mm dia 1.2 m high / empty bitumen drum | Nos. | 170.13 | | 170.13 |
| M-011 | Sand bags (Cost of sand and Empty cement bag) | Nos. | 7.31 | 2.59 | 9.90 |
| M-012 | Sutli (Brown) | kg | 20.59 | | 20.59 |
| M-013 | Granular material (Natural occuring, soil gravel mixture / quarry waste, kankar, laterite, dhandla | cum | 84.03 | 83.00 | 167.03 |
| M-014 | Nails | kg | 108.00 | | 108.00 |
| M-014 | RCC Pipe NP3 (1000 mm dia) | m | 5787.23 | | 5787.23 |
| M-015 | RCC Pipe NP3 (600 mm dia) | m | 2310.00 | | 2310.00 |
| M-015 | Sand (Fine) at source | cum | 69.75 | 75.00 | 144.75 |
| M-016 | Empety Steel Drum 300 mm dia 1.2 m height | Nos. | 170.13 | | 170.13 |
| M-016 | Water | kl | 60.30 | | 60.30 |
| M-017 | Geo Bags | Each | 124.00 | | 124.00 |
| M-018 | G.S.B. | cum | 69.75 | 75.00 | 144.75 |

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

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

| S. No. | sor Code | Description of Machine | Activity | Output of Machine Unit | Output of Machine Output | Usage Rates in Rs. Unit | Usage Rates in Rs. Rate |
|---|---|---|---|---|---|---|---|
| PM-009 | P&M-012 | Crane upto 80 T | Lifting of materials | | | per hour | 5,373.00 |
| PM-010 | P&M-015 | Dozer D 80 - A12 Dozer D 50 - A15 | Dozing cutting | cum/h | 260.00 | per hour | 2,997.00 |
| PM-011 | | | | cum/h | 120.00 | | 4,320.00 |
| PM-014 | P&M-017 | Front end-loader 1 cum bucket capacity @ 45 cum/hour | Loading Aggregates | cum/h | 45.00 | per hour | 1,419.00 |
| PM-017 | P&M-026 | Hydraulic Excavator of 1cum bucket | Excavation | cum/h | 100.00 | per hour | 2,272.00 |
| PM-031 | P&M-044 | Three wheel 80-100 kN Static Roller | Compaction Rolling | | | per hour | 1,593.00 |
| PM-032 | | | Earth:- Embankment or sub- grade | cum/h | 80.70 | | 1,593.00 |
| PM-033 | | | Sub-base G-I | cum/h | 10.00 | | 1,593.00 |
| PM-034 | | | Sub-base G-II G-III | cum/h | 8.00 | | 1,593.00 |
| PM-035 | | | WMM | cum/h | 16.00 | | 1,593.00 |
| PM-036 | | | BUSG | cum/h | 10.00 | | 1,593.00 |
| PM-037 | | | BM 50/75 mm | cum/h | 12.00 | | 1,593.00 |
| PM-038 | | | Premix 20 mm | sqm/h | 250.00 | | 1,593.00 |
| PM-039 | | | Seal Coat | sqm/h | 500.00 | | 1,593.00 |
| PM-040 | | | Surface Dressing 1st Coat | sqm/h | 400.00 | | 1,593.00 |
| PM-041 | | | Surface Dressing 2ndCoat | sqm/h | 500.00 | | 1,593.00 |
| PM-042 | P&M-048 | Tipper 5.5 cum/10 t | Carriage | cum/trip | 5.50 | per hour | 1,426.00 |
| PM-043 | P&M-053 | Tractor with Disc Harrows | Pulverisation of soil | cum/h | 80.00 | per hour | 693.00 |
| PM-044 | P&M-055 | Tractor with ripper @ 60 cum per hour | Ripping Pavements, uprooting trees | cum/h | 60.00 | per hour | 697.00 |
| PM-045 | P&M-053 | Tractor with trolley with Grading equipment | Transportation of materials | t/trip | 3 to 5 | per hour | 676.00 |
| PM-046 | P&M-054 | Tractor with Rotavator | Scarifier | cum/h | 25.00 | per hour | 693.00 |
| PM-047 | P&M-057 | Truck 10 t capacity | Carriage | cum/trip | 5.50 | per hour | 1,054.00 |
| PM-048 | P&M-059 | Vibratory roller 80-100 kN | Compaction of soil WMM | cum/h | 100.00 | per hour | 2,053.00 |
| PM-049 | | | Compaction of BM | cum/h | 60.00 | | 2,053.00 |
| PM-050 | P&M-060 | Water tanker 6 kl capacity (Truck Mounted) | Carriage of water | litre/h | 12000.00 | per hour | 752.00 |
| PM-063 | P&M-060 | generator 3KVA | stiching | per hour | | per hour | 74.00 |
| PM-064 | P&M-060 | stiching machine | stiching | day | | day | 50.00 |

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

## SUMMARY OF CARRIGE COST

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

# Comparison of carriage cost of Material via Road from different sources

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

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

Naveen 6/11/24
Junior Engineer
R.W.D. Works Section

Asstt. Engineer
R.W.D. Works Sub - Division,

6/11/24
Executive Engineer
R.W.D. Works

| | SDB Sl. No. | MORD Ref No. | DESCRIPTION | Unit | QTY | Rate | Amount in Rs |
|---|---|---|---|---|---|---|---|
| 1 | | | **Carriage Of Material (By Tractor)** | | | | |
| | 4.4 | | **Loading and unloading of stone Boulder /stone aggregates sand/ kankar/ moorum** | | | | |
| | | | Placing tractor at loading point loading with front end loader dumpong ,turning for return trip exluding time for haulage and return tirp | | | | |
| | | | Unit = cum | | | | |
| | | | Taking output = 2.25 cum | | | | |
| | | | Time required for | | | | |
| | | i) | positioning of tractor at loading point | | | | |
| | | ii) | Loading by front end loader 1 cum bucket capacity @ 25 cum | min | 1 min | | |
| | | | **Total** | min | 5 min | | |
| | | | | | 6 min | | |
| | | a) | **Labour** | | | | |
| | | | Mate | | | | |
| | | | Mazdoor (Unskilled) | day | 0.030 | 397.00 | 11.91 |
| | | b) | **Machinery** | day | 0.720 | 373.00 | 268.56 |
| | | | Tractor 3.60 Tonnes Capcalty | | | | |
| | | | Front end loader 1 cum buckert capacity @ 25 Cum/hour | hour | 0.100 | 676.00 | 67.60 |
| | | | Cost for 2.25 cum = a+b+c | hour | 0.083 | 1,419.00 | 117.78 |
| | | | **Rate per cum = (a+b+c)/2.25** | | | | 465.85 |
| | | | **Total per cum** | cum | | | 207.044 |
| | 1.10 | | **Haulage excluding Loading & Unloading** | cum | | | **207.044** |
| | | | 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 | | | **Carriage Of Material (By Tipper)** | | | | |
| | 1.1 | | **Loading and Unloading Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by Manual Means** | | | | |
| | | (i) | 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 laoading point | | 1Min | | |
| | | (ii) | loading by front end loader 1 cum bucket capacity @25 | | 13Min | | |
| | | (iii) | maneuvering, reversing, dumping and turning for return | | 2Min | | |
| | | (iv) | Waiting time unforeseen contingnencies etc. | | 4Min | | |
| | | | **Total** | | **20Min** | | |
| | | b) | **Machinery** | | | | |
| | | | Tipper 5.5 Tonnes Capcaity | hour | 0.330 | 1,426.00 | 470.58 |
| | | | Front end loader 1 cum buckert capacity @ 25 Cum/hour | hour | 0.330 | 1,419.00 | 468.27 |
| | | | Cost for 5.5 cum = a+b+c | | | | 938.85 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | **Rate per cum = (a+b+c)/5.5** | cum | | | 170.70 |
| | | | **Total per cum** | cum | | | **170.700** |
| | 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 | | | | |
| | | | Haulage with load | hour | 0.40 | 1426.00 | 570.40 |
| | | | Empty return trip | hour | 0.29 | 1426.00 | 413.54 |
| | | | Cost for 100t km a+b+c | | | | 983.94 |
| | | | **Cost for 1 t_km = a+b/100** | | | | 9.830 |
| | | | **Total per t per km** | | | | **9.830** |
| | | | **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 | | | | |
| | | | Haulage with load | hour | 1.00 | 1426.00 | 1426.00 |
| | | | Empty return trip | hour | 0.67 | 1426.00 | 955.42 |
| | | | Cost for 100t km a+b | | | | 2381.42 |
| | | | **Cost for 1 t_km = a+b+c/100** | | | | 23.81 |
| | | | **Total per t per km** | | | | **23.810** |
| 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 | | | | |
| | | | Haulage with load | hour | 0.40 | 1054.00 | 421.60 |
| | | | Empty return trip | hour | 0.29 | 1054.00 | 305.66 |
| | | | Cost for 100t km a+b+c | | | | 727.26 |
| | | | **Cost for 1 t_km = a+b/100** | | | | 7.270 |
| | | | **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 | | | | |
| | | | Haulage with load | hour | 1.00 | 1054.00 | 1054.00 |
| | | | Empty return trip | hour | 0.67 | 1054.00 | 706.18 |
| | | | Cost for 100t km a+b | | | | 1760.18 |
| | | | **Cost for 1 t_km = a+b+c/100** | | | | 17.60 |
| | | | **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 | 397.00 | 7.94 |
| | | | Mazdoor (Unskilled) | day | 0.50 | 373.00 | 186.50 |
| | | b) | **Machinery** | | | | |
| | | | Truck | hour | 0.33 | 1054.00 | 347.82 |
| | | | Crane | hour | 0.33 | 5573.00 | 1839.09 |
| | | | Cost for 9 pipes = a+b+c+d | | | | 2381.35 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | **Rate per pipe = (a+b+c)/9** | | | | |
| | | | **Total per pipe** | **per p** | | | 264.594 |
| | | | **600/450 mm dia Hume pipe** | | | | **264.594** |
| | | C. | *Unit = per pipe* | | | | |
| | | | *Taking output = 21 pipe* | | | | |
| | | a) | **Labour** | | | | |
| | | | *Mate* | day | 0.02 | 397.00 | 7.94 |
| | | | *Mazdoor (Unskilled)* | day | 0.50 | 373.00 | 186.50 |
| | | b) | **Machinery** | | | | |
| | | | *Tractor 3.60 Tonnes Capcaity* | hour | 0.33 | 1054.00 | 347.82 |
| | | | *Crane* | hour | 0.33 | 5573.00 | 1839.09 |
| | | | *Cost for 21 pipes = a+b+c+d* | | | | 2381.35 |
| | | | **Rate per pipe = (a+b+c)/21** | | | | |
| | | | **Total per pipe** | **per p** | | | 113.398 |
| | | | | | | | **113.398** |
| | | (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 | 397.00 | 7.94 |
| | | | *Mazdoor (Unskilled)* | day | 0.50 | 373.00 | 186.50 |
| | | b) | **Machinery** | | | | |
| | | | *Truick* | hour | 0.20 | 1054.00 | 210.80 |
| | | | *Crane* | hour | 0.20 | 5573.00 | 1114.60 |
| | | | *Cost for 9 pipes = a+b+c+d* | | | | 1519.84 |
| | | | **Rate per pipe = (a+b+c)/9** | **per p** | | | 168.871 |
| | | | **Total per pipe** | | | | **168.871** |
| | | C. | **600/450 mm dia Hume pipe** | | | | |
| | | | *Unit = per pipe* | | | | |
| | | | *Taking output = 21 pipes* | | | | |
| | | a) | **Labour** | | | | |
| | | | *Mate* | day | 0.020 | 397.00 | 7.94 |
| | | | *Mazdoor (Unskilled)* | day | 0.50 | 373.00 | 186.50 |
| | | b) | **Machinery** | | | | |
| | | | *Truick* | hour | 0.20 | 1054.00 | 210.80 |
| | | | *Crane* | hour | 0.20 | 5573.00 | 1114.60 |
| | | | *Cost for 21 pipes = a+b+c+d* | | | | 1519.84 |
| | | | **Rate per pipe = (a+b+c)/21** | **per p** | | | 72.373 |
| | | | **Total per pipe** | | | | **72.373** |
| | 1.9 | | **Loading and Unloading of Bamboo** | | | | |
| | | (i) | *Loading & unloading Bamboo* | | | | |
| | | | *Unit = per metre* | | | | |
| | | | *Taking output = per mtr.* | | | | |
| | | a) | **Material** | | | | |
| | | | *Bamboo =2016/300* | per pipe | | | 6.72 |
| | | | *Bamboo Per Mt.* | par mt | | | 0.96 |
| | | | **Total per m** | | | | **0.960** |
| 4 | 3.3 | 301.5 | **Construction of Embankment with material obtained from roadway cutting** | | | | |
| | | | *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 | 397.00 | 7.94 |
| | | | *Mazdoor (Unskilled)* | day | 0.50 | 373.00 | 186.50 |
| | | b) | **Machinery** | | | | |
| | | | *Dozer D -50 for spreading @200 cum per hour* | hour | 0.50 | 0.00 | 0.00 |
| | | | *Motor Grader for grading @200 Cum per hour* | hour | 2.00 | 697.00 | 1,394.00 |
| | | | *Water tanker 6 kl capacity* | hour | 2.00 | 752.00 | 1,504.00 |
| | | | *Three Wheel 80-100 kN Static Roller* | hour | 1.25 | 1593.00 | 1,991.25 |
| | | c) | **Material** | | | | |
| | | | *Water* | kl | 12.00 | 60.30 | 723.60 |
| | | | *Cost for 100 cum = a+b+c+d+e* | | | | 5807.29 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | Rate per cum = (a+b+c+d)/100 | cum | | | 58.073 |
| | | | **Total per cum** | cum | | | **58.073** |
| 5 | 3.5 | 301.5 | **Exaavation in soil with Dozer with lead upto 100 m** | | | | |
| | (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 | day | 0.08 | 397.00 | 31.60 |
| | | | Mazdoor (Unskilled) | day | 2.00 | 373.00 | 822.00 |
| | | b) | **Machinery** | | | | |
| | | | Dozer D -50 for spreading @200 cum per hour | hour | 3.60 | 4326.00 | 15,573.60 |
| | | | Cost for 100 cum = a+b+c+d+e | | | | 16427.20 |
| | | | Rate per cum = (a+b+c+d)/180 | cum | | | 91.262 |
| | | | **Total per cum** | cum | | | **91.260** |
| 6 | 3.3 | 301.5 | Construction of Embankment with approved material obtained from borrw pits with a lift upto 1.5 m transporting to site, spreding 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 | | | | |
| | | | Unit = cum | | | | |
| | | | **Rate item no. 3.3 Clause 301.5** | | | | 58.073 |
| | | | **Rate item no. 3.5(ii) Clause 301.5** | | | | 91.260 |
| | | | Royality Compensation for earth taken from private land | | | | 35.250 |
| | | | **Carriage of Earth by Tractor Lead 1 K.M.** | | | | 274.420 |
| | | | **Total Cost of 1 cum=** | | | | **459.003** |
| | | | **Labour Cess @ 1%** | | | | **4.590** |
| | | | **G.S.T. @ 18%** | | | | **82.621** |
| | | | **Add Seigniorage Fee @ 10 % of Materials** | cum | 1.00 | 35.25 | **3.53** |
| | | | **Total Cost of 1 cum 1% Cess & 18 % GST =** | | | | **549.743** |
| 7 | 4.5 | | **Providing and Laying of Brick Bats** | | | | |
| | | | Placing tractor at loading point loading with front end loader dumpong ,turning for return trip exluding time for haulage and return tirp | | | | |
| | | | Unit = cum | | | | |
| | | | Taking output = 2.83 cum | | | | |
| | | a) | **Labour** | | | | |
| | | | Mazdoor (Unskilled) | day | 2.170 | 373.00 | 809.41 |
| | | b) | **Materilas** | | | | |
| | | | Brick Bats | cum | 3.396 | 1,081.00 | 3671.08 |
| | | | **Total (a+b)=** | | | | 4480.49 |
| | | | **Total (a+b+c) =** | | | | 4480.49 |
| | | d ) | **Carriage** | | | | |
| | | | Brick Bats | cum | 3.396 | 521.97 | 1772.61 |
| | | | **TOTAL** | | | | 6253.10 |
| | | | **Rate per cum = (a+b+c+d)/2.83** | cum | | | 2209.576 |
| | | | **Total per cum** | cum | | | **2209.576** |
| | | | **Labour Cess @ 1%** | | | | **22.096** |
| | | | **G.S.T. @ 18%** | | | | **397.724** |
| | | | **Add Seigniorage Fee @ 10 % of Materials** | cum | 1.20 | 1,081.00 | **129.72** |
| | | | **Total Cost of 1 cum 1% Cess & 18 % GST =** | | | | **2,759.115** |
| 8 | 4.1 | 401 | PAVEMENT CRUST LAYERS | | | | |
| | | | **For Grading II Material** | | | | |
| | | | Construction of granular sub-base by providing well graded material, spreading in uniform layers with tractor mounted grader arrangement on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with smooth wheel roller to achieve the desired density, complete as per Technical Specification Clause 401. | | | | |
| | | (ii) | **For Grading II Material** | | | | |
| | | | Unit = cum | | | | |
| | | | Taking output = 300 cum | | | | |
| | | a) | **Labour** | | | | |
| | | | Mate | day | 0.48 | 397.00 | 190.56 |
| | | | Mazdoor (Skilled) | day | 2.00 | 472.00 | 944.00 |
| | | | Mazdoor (Unskilled) | day | 10.00 | 373.00 | 3730.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | b) | *Machinery* | | | | 4864.56 |
| | | | *Tractor mounted grader arrengement* | hour | 12.00 | 676.00 | 8112.00 |
| | | | *Three wheel 80-100 kN static roller @ 10 cum per hour* | hour | 30.00 | 1593.00 | 47790.00 |
| | | | *Tractor with Rotavator 25 cum per hour* | hour | 12.00 | 693.00 | 8316.00 |
| | | | *Water tanker 6 kl capacity* | hour | 5.00 | 752.00 | 3760.00 |
| | | c) | ***Material*** | | | | 67978.00 |
| | | | *Well graded granular sub-base material as per Table 400.1* | | | | |
| | | | *GSB* | cum | 1.28 | 167.03 | 213.80 |
| | | | *Cost of 300 cum without Carriage = (a+b+c+d+e)* | | | | 73056.36 |
| | | | ***A) Basic Cost per cum = (a+b+c+d+e)/300*** | cum | | | **243.521** |
| | | | **CARRIAGE** | | | | |
| | | | *G.S.B.* | Cum | 414.00 | 2960.13 | 1225493.82 |
| | | | *Carriage cost of 300 cum* | | | | 1225493.82 |
| | | | ***B) Carriage cost per cum*** | | | | **4084.98** |
| | | | ***Rate per cum = (A+B)*** | CUM | | | **4328.501** |
| | | | ***Total per cum*** | CUM | | | **4328.501** |
| | | | ***Labour Cess @ 1%*** | | | | **43.285** |
| | | | ***G.S.T. @ 18%*** | | | | **779.130** |
| | | | ***Add Seigniorage Fee @ 10 % of Materials*** | cum | 1.28 | 167.03 | **21.38** |
| | | | ***Total Cost of 1 cum 1% Cess & 18 % GST =*** | | | | **5,172.296** |
| 9 | 9.3 | 1100 | *Providing and laying reinforced cement concrete pipe NP3 for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets Clause 1106.* | | | | |
| | | B. | ***1000 MM DIA (Single Row)*** | | | | |
| | | a) | ***Material*** | | | | |
| | | | *RCC NP3 pipe including collar* | m | 7.50 | 5787.23 | 43404.23 |
| | | b) | ***Labour*** | | | | |
| | | | *Mate* | day | 0.09 | 397.00 | 35.73 |
| | | | *Mason ( 1st class )* | day | 0.25 | 503.00 | 125.75 |
| | | | *Mazdoor ( Unskilled )* | day | 2.00 | 373.00 | 746.00 |
| | | | *Cost for 7.5m = ( a+b+c)* | | | | **44311.71** |
| | | | ***A) Basic Cost per m = (a+b)/7.5*** | m | | | **5908.23** |
| | | | ***Rate per m of Pipe*** | | | | **5908.23** |
| | | (d) | **CARRIAGE COST** | | | | |
| | | | *NP3 Pipe* | m | 7.5 | 298.37 | 2237.78 |
| | | | *Carriage cost of 7.5 m* | | | | **2237.78** |
| | | | ***Carriage cost per m*** | m | | | **298.37** |
| | | | ***Rate per m with Carriage*** | m | | | **6,206.598** |
| | | | ***Total per m*** | m | | | **6,206.598** |
| | | | ***Labour Cess @ 1%*** | | | | **62.066** |
| | | | ***G.S.T. @ 18%*** | | | | **1,117.188** |
| | | | ***Total Cost of 1 mtr. 1% Cess & 18 % GST =*** | | | | **7,385.852** |
| 2 | | C. | ***600 MM DIA (Single Row)*** | | | | |
| | | a) | ***Material*** | | | | |
| | | | *RCC NP3 pipe including collar* | m | 7.50 | 2310.00 | 17325.00 |
| | | b) | ***Labour*** | | | | |
| | | | *Mate* | day | 0.04 | 397.00 | 15.88 |
| | | | *Mason ( 1st class )* | day | 0.12 | 503.00 | 60.36 |
| | | | *Mazdoor ( Unskilled )* | day | 0.96 | 373.00 | 358.08 |
| | | | *Cost of 7.5m = (a+b+c+d)* | | | | **17759.32** |
| | | | ***A) Basic Cost per m = (a+b)/7.5*** | m | | | **2367.91** |
| | | | ***Rate per m of Pipe*** | | | | **2367.91** |
| | | | **CARRIAGE COST** | | | | |
| | | | *NP3 Pipe* | m | 7.5 | 124.35 | 932.63 |
| | | | *Carriage cost of 7.5 m* | | | | **932.63** |
| | | | ***B) Carriage cost per m*** | m | | | **124.35** |
| | | | ***Rate per m with Carriage*** | m | | | **2,492.260** |
| | | | ***Total per m*** | m | | | **2,492.260** |
| | | | ***Labour Cess @ 1%*** | | | | **24.923** |
| | | | ***G.S.T. @ 18%*** | | | | **448.607** |
| | | | ***Total Cost of 1 mtr. 1% Cess & 18 % GST =*** | | | | **2,965.789** |
| 3 | 5.7.40.1 | | *Labour for filling empty cement bags with local sand, sitching the bags and placing including supply of sutti etc. all complete as per approved design, specificaiton and direction E/I.* | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | Unit = Per % Nos. | | | | |
| | | | (A) For Filling & Stitching & Stacking | | | | |
| | | | Labour | | | | |
| | | | Skilled Labour for filling sand into bags and sewing sutali | No. | 2.00 | 472.00 | 944.00 |
| | | | | 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 = | | | | |
| | | | Per % Nos. (B) = | | | | 2370.30 |
| | | | Rate per bag (A+B)= /100 | | | Say, | 2370.30 |
| | | | ( C) Cost of empty cement bag & cost of sand | | | | 23.70 |
| | | | (D) Carriage cost | each | | | 11.11 |
| | | | Tractor with trolly | cum | 0.034 | 345.14 | 11.73 |
| | | | (G )Totel =(A+B+C+D) = | | | | 46.55 |
| | | | Labour Cess @ 1% | | | | 0.465 |
| | | | G.S.T. @ 18% | | | | 8.379 |
| | | | Add Seigniorage 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 38 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 | 616.41 |
| | | | Nails | kg | 0.50 | 108.00 | 54.00 |
| | | (ii) | Labour | | | | |
| | | | Carpenter Gr -II | No. | 0.125 | 531.00 | 66.38 |
| | | | Unskilled Labour | No. | 0.25 | 373.00 | 93.25 |
| | | | Rate for 30.5 m | | | | 830.04 |
| | | | TOTAL = | | | | 830.04 |
| | | | Rate per mt | | | | 27.21 |
| | | (iii) | Carriage cost | | | | |
| | | | bamboo | mt | 1 | 3.00 | 3 |
| | | | Total Cost with Carriage | | | | 30.21 |
| | | | Labour Cess @ 1% | | | | 0.302 |
| | | | G.S.T. @ 18% | | | | 5.439 |
| | | | Total Cost of 1 mtr. 1% Cess & 18 % GST = | | | | 35.955 |
| 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 | | | | |
| | | | Bamboo | m | 30.50 | 20.21 | 616.41 |
| | | (i) | Labour | | | | |
| | | | Carpenter Gr -II | No. | 0.25 | 531.00 | 132.75 |
| | | | Unskilled Labour for piling | No. | 2.50 | 373.00 | 932.5 |
| | | | Rate for 30.5 m | | | | 1681.66 |
| | | | Total | | | | 1681.66 |
| | | | Rate for 1 m | | | | 55.14 |
| | | | Carriage Cost of Bamboo | per mtr. | | | 3.00 |
| | | | Total Cost with Carriage | | | | 58.14 |
| | | | Labour Cess @ 1% | | | | 0.581 |
| | | | G.S.T. @ 18% | | | | 10.465 |
| | | | Total Cost of 1 mtr. 1% Cess & 18 % GST = | | | | 69.182 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | **Labour for fitting and and fixing Steel Drum 300 mm dia 1.2 m high as per specification and direction** | | | | |
| | | **(Assuming Per Mtr. = 3.14x0.30= 0.942 mtr.)** | | | | |
| | | **Area of Assuming in one Drum = 0.942x1.20 = 1.130 Sqm** | | | | |
| | | **One Sqm sheet Cost = 127.80/1.130 = 113.12 Cost** | | | | |
| | | **Unit = per sqm** | | | | |
| | | **Taking Out = 100 sqm** | | | | |
| | a | **Labour** | | | | |
| | | Hammer man | No. | 4.00 | 531.00 | 2124.00 |
| | | Mazdoor (Unskilled) | No. | 4.00 | 373.00 | 1492.00 |
| | | Carpenter 1st Class | No. | 4.00 | 503.00 | 2012.00 |
| | b | **Materials** | | | | 5628.00 |
| | | Nails | kg | 5.00 | 170.13 | 850.65 |
| | | Steel Drum sheet | Nos. | 88.5 | 170.13 | 15056.51 |
| | | | | | | **21535.160** |
| | | **Rate Per m = (a+b+c)/100** | | | | **215.352** |
| | | **Labour Cess @ 1%** | | | | **2.154** |
| | | **G.S.T. @ 18%** | | | | **38.763** |
| | | **Total Cost of 1 mtr. 1% Cess & 18 % GST =** | | | | **256.268** |
| 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 3.05x3.05 = 9.30 sqm** | | | | |
| | | **Unit = per sqm** | | | | |
| | | **Taking Out = 9.30 sqm** | | | | |
| | a | **Labour** | | | | |
| | | Carpenter Gr -II | No. | 1.00 | 531.00 | 531.00 |
| | | Mazdoor (Unskilled) for pilling | No. | 1.00 | 373.00 | 373.00 |
| | b | **Materials** | | | | |
| | | Bamboo | Mtr. | 10.00 | 188.00 | 1880.00 |
| | | Nails | kg | 0.25 | 108.00 | 27.00 |
| | | | | | | **2811.000** |
| | | **Rate Per m = (a+b+c)/9.30** | | | | **302.258** |
| | | **Labour Cess @ 1%** | | | | **3.023** |
| | | **G.S.T. @ 18%** | | | | **54.406** |
| | | **Total Cost of 1 mtr. 1% Cess & 18 % GST =** | | | | **359.687** |
| 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 stiching in four lines by approved Ntlon thread with Staching machine and generator, stacking and placing after loading, Unloading and carriage with the help of Trolly within 150 mtr. lead and all complete as per specification and direction of E/I.* | | | | |
| | | **Unit = Each Bag** | | | | |
| | | **Taking Out = 40 Nso.** | | | | |
| | | **Labour** | nos | 2 | 373.00 | 746.00 |
| | | Unskilled Loading For filling stacking | nos | 0.33 | 472.00 | 155.76 |
| | | Skilled labour for stacking | nos | 4.00 | 373.00 | 1492.00 |
| | | Unskiild labour for carring and placing | nos | 0.25 | 397.00 | 99.25 |
| | | Mate | day | 0.33 | 50.00 | 16.50 |
| | | Stiching Machine | day | 1.00 | 676.00 | 676.00 |
| | | Tractor with trolley | hrs | 20.67 | 74.00 | 1529.58 |
| | | Generator 3KVA | | | | **4715.09** |
| | | **Total** | | | | **117.88** |
| | | Rate per bag (total/40) (A) | | | | |
| | (ii) | charge for placing & dumplng | nos | 16 | 373.00 | 6320.00 |
| | | unskilled labour for loading unloading & dumplng | nos | 1 | 397.00 | 419.00 |
| | | **Mate** | each | 4 | 676.00 | 2704.00 |
| | | Tractor with trolley | | | | **9,443.000** |
| | | **Total** | | | | **36.887** |
| | | **Rate per bag (Total/256) (B)** | | | | |
| | | **Matroials** | each | 1 | 124.00 | 124.00 |
| | | **cost of Geo Bag** | | | | **278.764** |
| | | **Total cost (a+b+c)** | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | Rate per bag | | | | 270.764 |
| | | Labour Cess @ 1% | | | | 2.788 |
| | | G.S.T. @ 18% | | | | 50.178 |
| | | Add Seigniorage Fee @ 10 % of Materials | cum | 0.070 | 144.75 | 1.01 |
| | | Total Cost of 1 Geo Bag 1% Cess & 18 % GST = | | | | 332.739 |
| 5.7.40.3 | | Labour for filling empty cement bags with local sand, sitching the bags and pitching in Nylon crate of size (1m x 1m x 1m) with a lead of 1.50 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 iled N/C with 30 m lead in water portion | | | | |
| | | Labour | | | | |
| | | Mate | No. | 0.37 | 397.00 | 146.89 |
| | | Labour(Skilled ) | No. | 1.00 | 472.00 | 472.00 |
| | | Labour(Unskilled ) | No. | 1.00 | 373.00 | 373.00 |
| | | | | | | 2013.89 |
| | | Hence, Total Labour for 100 Cft. | | | | 2013.89 |
| | | 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 [er mu;pm crate om 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 = | | | | 1,151.803 |
| (1) | 800 | local sand Fillling in foundation trenches as per drawing and technical specification<br>local sand Fillling in foundation trenches as per drawing and technical specification Clause 305.3.9 | | | | |
| | I. | Sand filling | | | | |
| | | Unit = cum | | | | |
| | a) | Labour | | | | |
| | | Mate | day | 0.01 | 397.00 | 3.97 |
| | | Mazdoor (Unskilled) | day | 0.30 | 373.00 | 111.90 |
| | b) | Material | | | | |
| | | Sand (assuming 20 per cent voids) | cum | 1.20 | 144.75 | 173.70 |
| | | Overheads @ 6 % on (a) | | | | 17.37 |
| | | | | | | 306.94 |
| | | CARRIAGE COST | | | | |
| | | sand | Cum | 1.2 | 345.14 | 414.17 |
| | | Rate per cum = a+b+c | | | | 721.11 |
| | | Total Cost including 1 % LABOUR CESS | | | | 7.21 |
| | | G.S.T. @ 18% | | | | 129.80 |
| | | Add Seigniorage Fee @ 10 % of Materials | | | | 0.49 |
| | | Total Cost of 1 E.C.1% Cess & 18 % GST = | | | | 1272.78 |