



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

PLAN HEAD- FDR(2245) YEAR 2020-21

DISTRICT :- East Champaran

BLOCK :- Patahi

Estimate for Repair of Road breaches
(Damaged by Flood) for Motorability in JIHULI
TO SIKAH I TOLA.

ESTIMATED COST -

~~6.33~~
6.138

Lacs

SUBMITTED BY:
EXECUTIVE ENGINEER,
RWD WORKS DIVISION,
PAKRIDAYAL

Technical Report

F.D.R.(2020-21)

Name of Road:- Jihuli To Sikahi Tola.

Length of Road:- 2.500 K.M

Name of Block:- Patahi

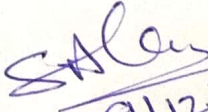
Project Head:- F.D.R (2245)


Package No:-

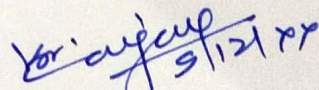
Estimated Cost:- 6.33 Lacs

This estimate has been prepared for temporary restoration of the above road damaged due to heavy rain/ Flood - 2020 under instruction of Rural Works Department vide letter no- 2789 dated. 21.08.2020. Brick Bats/ Local Sand Bag / Humepipe / Bamboo Pile / Soil has been provided as per need of the above damaged road. This road is under maintenance / ~~out of maintenance~~.

All items of this estimate has been taken from approved current schedule rate of works circle Motihari. This estimate is submitted for technical approval /Sanction.


9/12/20
J.E


9/12/20
A.E


9/12/20
E.B.
R.W.D.(w) Div. Pakridayal.

Name of Work:- Estimate for Repair of Road breaches (Damaged by Flood) for Motorability in JIHULI TO SIKAHU TOLA.

Head - 2245 Length- 2.500KM

| SI No. | Item No. | Name of Item | unit | No | Length | Width | Height | Qty. | Rate | Amount |
|----------------|----------|--|------|----|-------------------|-------|--------|---------|-------------------------------------|------------------------------------|
| 1 | | Labour for laying dry graded Jhama Khoa or stone filter under Brick Pitching or Boulder Pitching in slope or apron including light ramming etc. all complete as per approved design, specification and direction of E/I. | cum | | As Per Appendix I | | | 285.846 | 2216.20 2147=40 | 633491.905 613825=70 |
| TOTAL (in Re.) | | | | | | | | | 633000.00 6,13,800=00 | 613825=70 |

Say Re ~~633000.00~~

S. Alan
9/12/20

Junior Engineer,
Rural Works Department,
Works Section, Patahi

Abul
9/12/20

Assistant Engineer,
Rural Works Department,
Works Sub Division, Patahi

V. K. Singh
9/12/20

Executive Engineer,
Rural Works Department,
Works Division, Pakridayal

Post Facto TA ~~is~~ is accorded for Rs. 6,13,800 = 00
(..... Six lacs Thirteen thousand
Eight hundred) only.

Abul
25/12/20
S.E. (R.W.D.)
Works Section
Mothhari
29/12/20

Name of Work:-

Estimate for Repair of Road breaches (Damaged by Flood) for Motorability in JIHULI
TO SIKAHITOLA.

Appendix - I

Measurement for surfacing the Breach with Brick Bats

| Sl. No. | Chainage | Length (M) | Avg. Width In Meter | Avg. Depth In Meter | Quantity (Cum) |
|---------|---------------|------------|---------------------|---------------------|----------------|
| 1.00 | 0.000 - 0.600 | 5.000 | $5.50 + 3.75/2$ | 3.400 | 78.630 |
| 2.00 | 0.600 - 0.650 | 4.500 | $5.00 + 3.75/2$ | 2.950 | 58.080 |
| 3.00 | 0.650 - 0.700 | 14.800 | 3.200 | 2.100 | 99.456 |
| 4.00 | 0.700 - 1.700 | 8.000 | 2.700 | 2.300 | 49.680 |
| | | | | Total | 285.846 |

SALAI
9/12/20

Junior Engineer
Rural Works Department,
Works Section, Patahi

Asistant Engineer
9/12/20

Asistant Engineer
Rural Works Department,
Works Sub Division, Patahi

Executive Engineer
9/12/20

Executive Engineer,
Rural Works Department,
Works Division, Pakridayal

BRICK BATS PITCHING MANUAL MEANS

| | | | | | |
|--------------------------------|---|-----------|-------|--------|---------------|
| 6.6.1 WRD Bihar | Labour for laying dry graded Jhama Khoa or stone filter under Brick Pitching or Boulder Pitching in slope or apron including light ramming etc. all complete as per approved design, specification and direction of E/l. | | | | |
| | Unit :- Per Cum | | | | |
| | Taking Output = 2.832 Cum | | | | |
| | Unskilled Mazdoor | Nos. | 3 | 287.00 | 861.00 |
| | Add 6% Overhead Charges | | | | 51.66 |
| | Rate for 2.832 Cum | | | | 912.66 |
| | Rate per Cum (Rs.) - | | | | 383.15 |
| 1.4 RCD | Cost of Haulage Excluding Loading and Unloading | | | | |
| | Haulage of materials by Tractor excluding cost of loading, unloading and stacking. | | | | |
| | Unit = t.km | | | | |
| | Taking output 3.60 tonnes load and lead 10 km = 36.0 t.km | | | | |
| | (i) Surfaced Road | | | | |
| | Speed with load : 15 km / hour. | | | | |
| | Speed while Returning empty :25 km / hour. | | | | |
| | a) Machinery. | | | | |
| | Tractor 3.6 tonne capacity | | | | |
| | Time taken for onward haulage with load | hour | 0.667 | 549.10 | 366.25 |
| | Time taken for empty return trip. | hour | 0.400 | 549.10 | 219.64 |
| | b) Overhead charges @ 0.06 on (a) | | | | |
| | cost for 36 t km = a+b+c | | | | |
| | Rate per t.km = (a+b+c)/36 | | | | |
| | Say Rs. - | | | | |
| | (ii) Unsurfaced Graveled Road | | | | |
| | Speed with load: 12 km / hour | | | | |
| | Speed for empty return trip :20 km / hour | | | | |
| | a) Machinery | | | | |
| | Tractor 3.6 tonnes capacity | | | | |
| | Time taken for onward haulage with load | hour | 0.833 | 549.10 | 457.40 |
| | Time taken for empty return trip | hour 0.50 | 0.500 | 549.10 | 274.55 |
| | b) Overhead charges @ 0.06 on (a) | | | | |
| | Cost for 36 t .km = a+b+c 840.34 | | | | |
| | Rate per t.Km = (a+b+c)/36 23.34 | | | | |
| | Say Rs. - | | | | |

| | | | | |
|--------|---|---------|-------------|----------------|
| 1. CD | Loading and Unloading of Stone Boulder/ Stone aggregates/Sand /Kanker/Moorum | | | |
| | Placing Tractor at loading point, loading with frontloader, dumping, turning for return trip, excluding for haulage and return trip | | | |
| | Unit = cum | | | |
| | Taking output = 2.25 cum | | | |
| | Time required for | | | |
| | i) Positioning of Tractor at loading point | | 1 Min | |
| | ii) Loading by front end loader 1 cum bucket capacity @ 25 cum per hour | | 5 Min | |
| | iii) Maneuvering, reversing, dumping and turning for return | | 0 Min | |
| | iv) Waiting time, unforeseen contingencies etc | | 0 Min | |
| | Total | | 6 Min | |
| | a) Labour | | | |
| | Mate | day | 0.03 | 305.00 |
| | Mazdoor for loading and unloading | day | 0.72 | 287.00 |
| | b) Machinery | | | |
| | Tractor 3.60 tonnes capacity | hour | 0.1 | 549.10 |
| | Front end-loader 1 cum bucket capacity @ 25 cum/hour | hour | 0.083 | 1403.00 |
| | c) Overhead charges @ 0.06 on (a+b) | | | 23.23 |
| | Cost for 2.25 cum = a+b+c+d | | | 410.38 |
| | Rate per cum = (a+b+c+d)/ 2.25 | | | 182.39 |
| Note:- | Unloading will be done manually. | | | |
| 1. | Supplying for Brick Bats (with OH) | | | |
| A. | Basic Rate of Brick Bats | Per Cum | | 1017.00 |
| | Add overhed Charges | | 6% | 61.02 |
| | Total - | | | 1078.02 |
| | Surface Lead | KM | 7 | |
| | Unsurface Lead | KM | 1 | |
| | Factor (3.6/2.25) | Cum | 1.60 | |
| B. | Carriage (with OH) | | | |
| | (1.6 x 7 x 17.25) + (1.6 x 1 x 21.55) + 182.39 | | | 410.07 |
| C. | Cost of Labour for Pitching and Light Ramming as per WRD SOR 6.6.1 (with OH) | | | 383.15 |
| | Total (A+B+C) - | | | 1871.24 |
| | Add 1% Labour Cess (A+B+C) | | | 18.71 |
| | Add 12% GST (A+B+C) | | | 224.55 |
| | Add 10% cost of Material for Seigniorage Fee | | 1 | 101.70 |
| | Total Cost per Cum | | Rs.- | 2216.20 |