



# ग्रामीण कार्य विभाग



Rural Works Department, Govt. of Bihar

DETAILED PROJECT REPORT FOR REPAIRING OF ROAD

F.D.R PART-A(2020-21)

## DETAILED ESTIMATE FOR F.D.R. RESTORATION WORK

|            |           |         |        |
|------------|-----------|---------|--------|
| DISTRICT : | BHAGALPUR | BLOCK : | KHARIK |
|------------|-----------|---------|--------|

|                |                                                  |
|----------------|--------------------------------------------------|
| NAME OF ROAD : | RCD ROAD NO.14 TO URDU CHOWK VIA P.H.C<br>KHARIK |
|----------------|--------------------------------------------------|

|                                |   |       |      |  |
|--------------------------------|---|-------|------|--|
| Total Length of Road           | : | 0.770 | KMS  |  |
| Total Cost of FDR "Part -A"    | : | 6.012 | LACS |  |
| Add GST @ 12 %                 | : | 0.721 | LACS |  |
| Add labour cess @ 1%           | : | 0.060 | LACS |  |
| Add SF @10 %                   | : | 0.372 | LACS |  |
| Total cost of restoration work | : | 7.165 | LACS |  |

SUBMITTED BY

Executive Engineer  
Works Division, Navgachhia

## GENERAL ABSTRACT OF COST

Name of Road : RCD Road No. 14 Urdu Chowk via P.H.C. Kharik

District : BHAGALPUR

Length : 0.770 KM

Block : KHARIK

| Sl. No | Particulars                    |   | Details  | Total Cost (in Rs.)   |
|--------|--------------------------------|---|----------|-----------------------|
| 1      | Cost of Road Restoration work  | : | 0.770 KM | 601155.00             |
| 2      | Add GST @ 12 %                 | : |          | 72139                 |
| 3      | ADD L.C @ 1 %                  | : |          | 6012                  |
| 4      | S.F. @ 10%                     | : |          | 37186                 |
|        | Total Cost of Restoration work | : |          | 716492                |
|        |                                |   | Say      | 7,16,500.00<br>716492 |

*[Signature]*  
A.E.

*[Signature]*  
21-10-2020  
A.E.

*[Signature]*  
16/12/20  
Executive Engineer  
RWD(W) Division  
Nagachhia

Technically approved at Rs 7,16,500.00 (Rupees seven lac sixteen thousand five hundred only).

*[Signature]*  
12/01/2021  
Superintending Engineer  
Rural Works Department  
Works Circle, Bhagalpur

# ESTIMATE FOR ROAD RESTORATION WORK

Name of Road : RCD Road No. 14 Urdu Chowk via P.H.C. Kharik

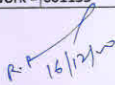
Length : 0.770 KM

Block : Kharik

District : Bhagalpur

| No                                           | Description                                                                                                                                                                                                                                                                                                     | No | Length<br>(m) | Width<br>(m) | H/D<br>(m) | Qty    | Unit | Rates<br>(in Rs.) | Amount (in<br>Rs) |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---------------|--------------|------------|--------|------|-------------------|-------------------|
| 45                                           | Providing brick bats including spreading laying hand packing and compacting with C.I Hammer in layers not exceeding 75 mm thick including cost of light, barriers, danger signals, chowkidar, taxes, royalty etc. all complete job as per specification and direction of E/I excluding carriage cost of bricks. |    |               |              |            |        |      |                   |                   |
|                                              | As per attached "Annexure - A"                                                                                                                                                                                                                                                                                  |    |               |              |            | 349.82 |      |                   |                   |
|                                              |                                                                                                                                                                                                                                                                                                                 |    |               |              |            | 349.82 | cum  | 1718.47           | 601155.18         |
| Total Cost of Flood Protective work = 601155 |                                                                                                                                                                                                                                                                                                                 |    |               |              |            |        |      |                   |                   |

  
21-10-2020  
A.E.

  
16/12/20  
Executive Engineer  
RWD (W) Division  
Navgachhia

# BRICK BAT MEASUREMENT

Name of Road : RCD Road No. 34 Urdu Chowk via P.H.C. Khark  
Length : 0.770 Km

Block : Khark

| Sl. N | Chainage (m) | Nos. | Length (m) | Width (m) |      |  | Average width | Depth (m) |  |  | Average Depth | Quantity (cum) |
|-------|--------------|------|------------|-----------|------|--|---------------|-----------|--|--|---------------|----------------|
|       |              |      |            |           |      |  |               |           |  |  |               |                |
| 1     | 16-32        | 1    | 16.0       | 3.00      | 3.50 |  | 3.25          | 0.60      |  |  | 0.60          | 31.20          |
| 2     | 352-372      | 1    | 20.0       | 3.50      | 3.00 |  | 3.25          | 0.75      |  |  | 0.75          | 48.75          |
| 3     | 380-395      | 1    | 15.0       | 3.75      | 3.50 |  | 3.63          | 0.45      |  |  | 0.45          | 24.47          |
| 4     | 425-437      | 1    | 12.0       | 4.00      | 3.75 |  | 3.88          | 0.60      |  |  | 0.60          | 27.90          |
| 5     | 590-601      | 1    | 11.0       | 3.75      | 3.75 |  | 3.75          | 1.00      |  |  | 1.00          | 41.25          |
| 6     | 601-616      | 1    | 15.0       | 3.75      | 3.75 |  | 3.75          | 0.90      |  |  | 0.90          | 50.63          |
| 7     | 650-670      | 1    | 20.0       | 3.75      | 3.75 |  | 3.75          | 0.50      |  |  | 0.50          | 37.50          |
| 8     | 670-700      | 1    | 30.0       | 3.75      | 3.75 |  | 3.75          | 0.45      |  |  | 0.45          | 50.63          |
| 9     | 700-725      | 1    | 25.0       | 3.75      | 3.75 |  | 3.75          | 0.40      |  |  | 0.40          | 37.50          |
|       |              |      |            |           |      |  |               |           |  |  |               | 349.82         |

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E.E.

# Rate Analysis for Carriage of Materials

Name of Road : MID MUSTAKIN KE GHAR TO MURLIDHAR THAKUR KE GHAR TAK VIA MAHADEVI TOLA

| Sl No | Item                      | Unit | Source      | Carriage Cost & Lead in Km |                               |               |                   |          | Loading & Unloading Cost | Carriage Cost By Bullock Head | Total * (By Road) |
|-------|---------------------------|------|-------------|----------------------------|-------------------------------|---------------|-------------------|----------|--------------------------|-------------------------------|-------------------|
|       |                           |      |             | Pukka / Surface            |                               | Kacha         |                   |          |                          |                               |                   |
| 1     | Stone Metal Gr. III / GSB | Cum  | Mirjachandi | 8.00<br>4.99               | 16.32 x 80.00 Km = Rs 2093.21 | 8.00<br>4.99  | 25.47 x 0.00 Km = | Rs 0.00  | 172.07                   | 0                             | Rs. 2265.28       |
| 2     | Brick / Brick Bats        | Cum  | Local       | 3.60<br>1.91               | 16.32 x 7.00 Km = Rs 215.33   | 3.60<br>1.91  | 25.47 x 1.00 Km = | Rs 48.01 | 172.07                   | 0                             | Rs. 435.40        |
| 3     | Local Sand                | Cum  | Local       | 3.60<br>2.04               | 16.32 x 2.00 Km = Rs 57.60    | 3.60<br>2.04  | 25.47 x 1.00 Km = | Rs 44.95 | 172.07                   | 0                             | Rs. 274.62        |
| 4     | Earth                     | Cum  | Local       | 8.00<br>6.00               | 16.32 x 0.00 Km =             | 8.00*<br>6.00 | 25.47 x 1.00 Km = | Rs 33.96 | 172.07                   | 0                             | Rs. 206.03        |
| 5     | House Pipe (1000 mm )     | M    | Purnia      | 8.00<br>10.00              | 16.32 x 52.00 Km = Rs 678.93  | 8.00<br>10.00 | 25.47 x 0.00 Km = | Rs 0.00  | 164.19                   | 0                             | Rs. 843.12        |
| 6     | House Pipe (600 mm )      | M    | Purnia      | 8.00<br>25.00              | 16.32 x 52.00 Km = Rs 271.57  | 8.00<br>25.00 | 25.47 x 0.00 Km = | Rs 0.00  | 164.36                   | 0                             | Rs. 435.93        |

\* Subjected to Verification of Lead

Cost of Haulage Excluding Loading & Unloading as per SOR

| Type of Road         | Per Ton. Km by Tractor | Per Ton. Km by Tipper |
|----------------------|------------------------|-----------------------|
| For Surface Road     | 16.32                  |                       |
| Overturn Gravel Road | 0.00                   |                       |
| Kachha Road          | 25.47                  |                       |

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| SDB Sl. No. | DESCRIPTION                                                                                                                                | Unit | QTY   | Rate     | Amount in Rs |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------|------|-------|----------|--------------|
| 4.5         | <b>Providing and Laying of Brick Bats</b>                                                                                                  |      |       |          |              |
|             | Placing tractor at loading point loading with front end loader dumping, turning for return trip excluding time for haulage and return trip |      |       |          |              |
|             | Unit = cum                                                                                                                                 |      |       |          |              |
|             | Taking output = 2.832 cum                                                                                                                  |      |       |          |              |
| a)          | <b>Labour</b>                                                                                                                              | day  | 2.170 | 287.00   | 622.79       |
|             | Mazdoor (Unskilled)                                                                                                                        |      |       |          |              |
| b)          | <b>Material</b>                                                                                                                            |      |       |          |              |
|             | Brick Bats                                                                                                                                 | cum  | 2.830 | 1,063.00 | 3008.29      |
| c)          | <b>Carriage</b>                                                                                                                            |      |       |          |              |
|             |                                                                                                                                            | cum  | 2.830 | 435.40   | 1232.19      |
|             | Cost for 5.5 cum = a+b+c                                                                                                                   |      |       |          | 4863.27      |
|             | Rate per cum = (a+b+c+d)/2.83                                                                                                              | cum  |       |          | 1718.47      |
|             | Total per cum                                                                                                                              | cum  |       |          | 1,718.47     |
| 10.7.40 WRD | <b>Labour for filling Cement Bag, swing and laying materials</b>                                                                           |      |       |          |              |
|             | Unit = Per Bag                                                                                                                             |      |       |          |              |
| A           | <b>Supply Empty cement Bag with Sand</b>                                                                                                   | kg   | 1     | 7.460    | 7.46         |
|             |                                                                                                                                            |      |       |          | 7.46         |
| B           | Unskilled Mazdoor for filling sand into bag and swing                                                                                      | No   | 2     | 287.00   | 574.00       |
|             | Unskilled Mazdoor for filling sand Bag to work site                                                                                        | No   | 3     | 287.00   | 861.00       |
|             | Rate per 100 Nos.                                                                                                                          |      |       |          | 1,442.46     |
|             | Total per bag                                                                                                                              |      |       |          | 14.42        |
| C           | <b>Supply Local sand Cost of Fine Sand</b>                                                                                                 |      |       |          |              |
|             | <b>Supply Empty Cement Bag</b>                                                                                                             |      |       |          |              |
|             | Unit = No.                                                                                                                                 |      |       |          |              |
|             | Taking output = 1 No.                                                                                                                      |      |       |          |              |
|             | Labour                                                                                                                                     |      |       |          | 14.42        |
|             | Cost of cement bag with Sand                                                                                                               |      |       |          | 7.46         |
|             | Cost of Local Sand                                                                                                                         |      |       |          |              |
|             | 1.2 Cft = 0.034 m <sup>3</sup>                                                                                                             | cum  | 0.034 | 274.62   | 9.34         |
|             | Carriage                                                                                                                                   |      |       |          |              |
|             | Total per bag                                                                                                                              | Bag  |       |          | 31.22        |
|             | Total cost of (A + B+C) =                                                                                                                  |      |       |          | 31.22        |
| 5.7.52      | Supply of New bag and N.C with labour for filling item E.C. bag with local sand, stitching on two lines by approval (1mx1mx1m)             |      |       |          |              |
|             | Unit = Per N.C.                                                                                                                            |      |       |          |              |
|             | Taking output = 100 Nos filled new bags in 4 nos N.C.                                                                                      |      |       |          |              |
| A           | Supply Empty cement Bag with Sand                                                                                                          | No   | 100   | 14.30    | 1430.00      |
|             | Nylon crute (N.C.)                                                                                                                         | No   | 4     | 39.85    | 159.40       |
|             | Total =                                                                                                                                    |      |       |          | 1589.40      |
|             | Rate of Material for each N. C. (Total x 25/100)                                                                                           |      |       |          | 397.35       |
| B           | Labour for filling stitching and stacking in dry position                                                                                  | No   | 1.67  | 287      | 479.29       |
|             | Labour for carrying and placing at work site                                                                                               | No   | 3     | 287      | 861.00       |
|             | skilled Mazdoor for stitching                                                                                                              | No   | 0.33  | 364      | 120.12       |
|             | Stitching roll (Nylone)                                                                                                                    | No   | 2     | 30       | 60.00        |
|             | Hire charge of stitching Machine                                                                                                           | day  | 0.33  | 50       | 16.50        |
|             | Hire charge of Generator 3 KVA                                                                                                             | hrs  | 2.67  | 74       | 197.58       |
|             | Total =                                                                                                                                    |      |       |          | 1734.49      |
|             | Rate of Material for each N. C. (Total x 25/100)                                                                                           |      |       |          | 433.62       |
|             | Rate for each N. C. in dry portion (A + B) =                                                                                               |      |       |          | 830.97       |
| C           | <b>Carriage :</b>                                                                                                                          |      |       |          |              |
|             | Local sand                                                                                                                                 |      |       |          |              |
|             | 25 bags = 0.85 m <sup>3</sup>                                                                                                              | cum  | 0.85  | 274.62   | 233.43       |
|             | Carriage for each N. C.                                                                                                                    | No   |       |          | 233.43       |
|             | Total cost of (A + B+C) =                                                                                                                  | No   |       |          | 1064.40      |

| Sl. No. | DESCRIPTION                                                                                                                                | Unit | QTY   | Rate    | Amount in Rs | Total material Qty. required | Total Material Amount | Add 10% Seigniorage Fee |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------|------|-------|---------|--------------|------------------------------|-----------------------|-------------------------|
| 4.5     | Providing and Laying of Brick Bats                                                                                                         |      |       |         |              |                              |                       |                         |
|         | Placing tractor at loading point loading with front end loader dumping, turning for return trip excluding time for haulage and return trip |      |       |         |              |                              |                       |                         |
|         | Unit = cum                                                                                                                                 |      |       |         |              |                              |                       |                         |
|         | Taking output = 2.832 cum                                                                                                                  |      |       |         |              |                              |                       |                         |
|         | Materials                                                                                                                                  |      |       |         |              |                              |                       |                         |
|         | Brick Bats                                                                                                                                 | cum  | 2.83  | 1063.00 | 3008.29      |                              |                       |                         |
|         | Total per cum                                                                                                                              | cum  |       |         | 1063.00      | 349.82                       | 371858.66             | 37185.87                |
| 10.7.40 | Labour for filling Cement Bag, swing and laying materials                                                                                  |      |       |         |              |                              |                       |                         |
|         | Unit = Per Bag                                                                                                                             |      |       |         |              |                              |                       |                         |
|         | Supply Empty Cement Bag with Sand                                                                                                          |      |       |         |              |                              |                       |                         |
|         | Cost of Local sand                                                                                                                         |      |       |         |              |                              |                       |                         |
|         | 1.2 cft = 0.034 m³                                                                                                                         |      |       |         |              |                              |                       |                         |
|         | Total per bag                                                                                                                              | cum  | 0.034 | 141.85  | 4.82         |                              |                       |                         |
|         | Total cost of (A+B+C) =                                                                                                                    | Bag  |       |         | 4.82         | 0                            | 0                     | 0                       |
| 5.7.52  | Supply of New bag and N.C with labour for filling item E C bag with local sand, stitching on two lines by approval (1m x 1m x 1m)          |      |       |         |              |                              |                       |                         |
|         | Unit = per N.C                                                                                                                             |      |       |         |              |                              |                       |                         |
|         | Carriage                                                                                                                                   |      |       |         |              |                              |                       |                         |
|         | Local sand                                                                                                                                 |      |       |         |              |                              |                       |                         |
|         | 25 bags = 0.85 m³                                                                                                                          |      |       |         |              |                              |                       |                         |
|         | Carriage for each N.C                                                                                                                      | cum  | 0.85  | 141.85  | 120.57       |                              |                       |                         |
|         | Total cost of (A+B+C) =                                                                                                                    | No   |       |         | 120.57       | 0                            | 0                     | 0                       |
|         |                                                                                                                                            | No   |       |         | 120.57       | 0                            | 0                     | 0                       |
|         |                                                                                                                                            |      |       |         |              |                              | Total Amount =        | 37186                   |

  
 J.E.  
 21/10/2020

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