

M. M. G. S. Y. (G. N.)

22.5.20/2019-2020

236/19-20

Schedule XLV Form No.-134

M. General

BIHAR P.W.D.

Mathiya Puskab tola to Birta Mathiya giri  
tola

(Acreage)

DIVISION

(Sangram Pur)

SUB-DIVISION

Gen. Name: Virendra Singh

# MEASUREMENT BOOK

24/05-24/05/11, 24/05-24/05/12

236/19-20

मीमाहे-दु-कुमार

प्रमाणित किया जाता है कि इसकापी  
पुस्तिका में मशीन के द्वारा कुल 100  
पृष्ठ ओपन हैं। यह कापी पुस्तिका  
मीमाहे-दु-कुमार, राहाडा का मे 0 का  
निर्गत किया जाता है।

Executive Engineer  
Rural Works Department  
Works Division, Arera

29/8/19

236/19-20

Schedule XLV Form No.-134

अरराज

DIVISION

संग्रामपुर

SUB-DIVISION

## MEASUREMENT BOOK

Name of officer

मीमाहे-दु-कुमार

Date of first entry

Date of last entry

# IIIa on A/C Bill and

Final Bill

Sch. XLV-Form No.134

16

| Particulars                           | Details of actual measurement |    |    |    | Contents of area |
|---------------------------------------|-------------------------------|----|----|----|------------------|
|                                       | No.                           | L. | B. | D. |                  |
| Name of Road $\pm$ Mathiya Purab Tola |                               |    |    |    |                  |
| to Baita Mathiya Gosi Tola            |                               |    |    |    | 1=0.71 Km        |
| Agency $\pm$ Viswamdas Singh          |                               |    |    |    |                  |
| Agg. No. $\pm$ 22 SBD/2019-2020       |                               |    |    |    |                  |
| Head $\pm$ MMSX                       |                               |    |    |    |                  |
| Date of start $\pm$ 27/8/019          |                               |    |    |    |                  |
| Date of Completion $\pm$ 25/5/020     |                               |    |    |    |                  |
| Date of Ending $\pm$                  |                               |    |    |    |                  |

## Measurement

① Provisioning & applying Primer  
12 Cont with bitumen emulsion  
etc do do cell etc

|                                             |    |      |      |       |                         |
|---------------------------------------------|----|------|------|-------|-------------------------|
|                                             | 10 | 30.0 | 3.75 | -     | = 1125.0 m <sup>2</sup> |
|                                             | 1  | 10.0 | 3.75 | -     | = 37.50 "               |
| Extra work<br>not forming<br>channel<br>A.E | 2  | 13.0 | 0.45 | -     | = 11.70 "               |
|                                             |    |      |      | Total | 1174.20 m <sup>2</sup>  |

②  
13 Applying top coat  
with bitumen emulsion  
etc do do do etc

|                       |    |      |      |       |                         |
|-----------------------|----|------|------|-------|-------------------------|
|                       | 10 | 30.0 | 3.75 | -     | = 1125.0 m <sup>2</sup> |
|                       | 1  | 10.0 | 3.75 | -     | = 37.50 "               |
| Extra work<br>forming | 2  | 13.0 | 0.45 | -     | = 11.70 "               |
|                       |    |      |      | Total | 1174.20 m <sup>2</sup>  |

③  
14 Laying mix sand surf  
Cing with slate gravel

Continuation

| Particulars                       | Details of actual measurement |      |      |    | Contents of area         |
|-----------------------------------|-------------------------------|------|------|----|--------------------------|
|                                   | No.                           | L.   | B.   | D. |                          |
| <del>Primaries etc do do do</del> |                               |      |      |    |                          |
| <del>General</del>                | 10                            | 30.0 | 2.75 | -  | = 1125.0 m <sup>2</sup>  |
| <del>do</del>                     | 1                             | 10.0 | 3.75 | -  | = 37.50 m <sup>2</sup>   |
| <del>A.B</del>                    | 2                             | 13.0 | 0.45 | -  | = 11.70 m <sup>2</sup>   |
| Total <del>Qts</del>              |                               |      |      |    | = 1174.20 m <sup>2</sup> |

(4) ~~Laying brick edge~~

~~Soiling on brick paved slab~~

~~Gravel etc do do do~~

|                    |   |    |      |       |       |                                                    |
|--------------------|---|----|------|-------|-------|----------------------------------------------------|
| <del>General</del> | 2 | 10 | 30.0 | 0.375 | -     | = 225.0 m <sup>2</sup>                             |
| <del>m</del>       | 2 | 3  | 30.0 | 0.375 | -     | = <sup>67.50</sup> <del>40.25</del> m <sup>2</sup> |
| <del>A.B</del>     | 2 | 1  | 10.0 | 0.375 | -     | = 7.50 m <sup>2</sup>                              |
|                    |   |    |      |       | Total | = 300.0 m <sup>2</sup>                             |

(5) ~~E/W in roundabout~~

~~Shoulder etc do do do~~

~~E/W Bts on 1/4 C / 1/8 grade~~

~~Paving Qts.~~

~~Earth Work Bts Sheet~~

| SN | Ch. (m) | Dist. (m) | Area m <sup>2</sup> | Mean Area | Volume m <sup>3</sup> |
|----|---------|-----------|---------------------|-----------|-----------------------|
| 1  | 0       | 0         | 1.552               | -         | -                     |
| 2  | 50      | 50        | 3.155               | 2.354     | 117.675               |
| 3  | 100     | 50        | 3.501               | 3.328     | 166.40                |
| 4  | 150     | 50        | 2.687               | 3.094     | 154.700               |
| 5  | 200     | 50        | 4.482               | 3.585     | 179.225               |
| 6  | 250     | 50        | 3.26                | 3.271     | 193.55                |
| 7  | 300     | 50        | 2.808               | 3.034     | 151.70                |
| 8  | 350     | 50        | 2.633               | 3.221     | 161.025               |
| 9  | 400     | 50        | 3.318               | 3.476     | 173.775               |

Continuation

| Particulars                                    | Details of actual measurement |             |                           |                                   | Contents of area         |
|------------------------------------------------|-------------------------------|-------------|---------------------------|-----------------------------------|--------------------------|
|                                                | No.                           | L.          | B.                        | D.                                |                          |
| SX                                             | Ch<br>(m)                     | Dist<br>(m) | Area<br>(m <sup>2</sup> ) | Mean<br>Area<br>(m <sup>2</sup> ) | Volume<br>M <sup>3</sup> |
| 10                                             | 450                           | 50          | 3.621                     | 3.470                             | 173.475                  |
| 11                                             | 500                           | 50          | 3.962                     | 3.792                             | 189.575                  |
| 12                                             | 550                           | 50          | 2.474                     | 3.220                             | 161.00                   |
| 13                                             | 600                           | 50          | 2.965                     | 2.672                             | 133.575                  |
| 14                                             | 650                           | 50          | 3.551                     | 3.208                             | 160.40                   |
| 15                                             | 700                           | 50          | 2.345                     | 2.948                             | 147.40                   |
| 16                                             | 710                           | 10          | 2.173                     | 2.259                             | 22.59                    |
| Total Q <sub>1</sub> = 2286.065 m <sup>3</sup> |                               |             |                           |                                   |                          |

Deduction :-

(i) For G.C.B = 1202.87 m<sup>3</sup>(ii) Forly (B/C) = 1201.48 m<sup>3</sup>(iii) For C.C. Pavement = 242.91 m<sup>3</sup>(iv) For H/E/S = 300 × 20/114 = 74.20 m<sup>3</sup>Net Deduction = 1687.37 m<sup>3</sup>Net B/W Q<sub>1</sub> = (2286.065 - 1687.37) m<sup>3</sup>Net Q<sub>1</sub> = 1603.69 m<sup>3</sup>(5/5) B/W Q<sub>2</sub> for construction

of embankment with less

1000 m as per Agg Q<sub>2</sub>

=

318.55 m<sup>3</sup>(6/6) B/W Q<sub>2</sub> for embankment

with less = 100 m

Q<sub>2</sub> as per Agg= 743.29 m<sup>3</sup>(7/6) B/W Q<sub>2</sub> for subgrade

Continuation

| Particulars                                              | Details of actual measurement |    |    |    | Contents of area |
|----------------------------------------------------------|-------------------------------|----|----|----|------------------|
|                                                          | No.                           | L. | B. | D. |                  |
| and eastern shoulder etc                                 |                               |    |    |    |                  |
| $Q_{15} = (No. of Q_{15} - (\frac{L}{5} + \frac{B}{4}))$ |                               |    |    |    |                  |
| $= [160.67 - (318.55 + 74329)]$                          |                               |    |    |    |                  |
| $= 546.85 m^3$                                           |                               |    |    |    |                  |
| Limit as per Agg.                                        |                               |    |    |    |                  |
| $Q_{15} = 455.68 m^3$                                    |                               |    |    |    |                  |
| (8/18) P/W R/F ordinary kerb                             |                               |    |    |    |                  |
| etc etc - etc - all - job                                |                               |    |    |    |                  |
| $Q_{15} = 1 No$                                          |                               |    |    |    |                  |
| (9/19) S/P R 200 mm kerb                                 |                               |    |    |    |                  |
| etc etc - etc - all - job                                |                               |    |    |    |                  |
| $Q_{15} = 3 No$                                          |                               |    |    |    |                  |
| (10/22) Painting on concrete surface                     |                               |    |    |    |                  |
| etc etc - etc - all - job                                |                               |    |    |    |                  |
| 23 20.0 0.10 -                                           |                               |    |    |    | $= 78.0 m^2$     |
| 21 10.0 0.10 -                                           |                               |    |    |    | $= 2.0 m^2$      |
|                                                          |                               |    |    |    | $80.0 m^2$       |
| (11/23) Road Marking with hot                            |                               |    |    |    |                  |
| applied thermoplastic compound                           |                               |    |    |    |                  |
| with reflective glass beads                              |                               |    |    |    |                  |
| etc etc - etc - all - job                                |                               |    |    |    |                  |
| For B.T. 210 30.0 0.10 -                                 |                               |    |    |    | $= 60.0 m^2$     |
| 1 21 10.0 0.10 -                                         |                               |    |    |    | $= 2.0 m^2$      |
| For C.C. 213 30.0 0.10 -                                 |                               |    |    |    | $= 78.0 m^2$     |
| should 21 10.0 0.10 -                                    |                               |    |    |    | $= 2.0 m^2$      |
| Continuation                                             |                               |    |    |    |                  |
| total                                                    |                               |    |    |    | $= 142.0 m^2$    |



| Particulars                                                                                                                                                 | Details of actual measurement |    |    |    | Contents of area |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|----|----|----|------------------|
|                                                                                                                                                             | No.                           | L. | B. | D. |                  |
| <u>ABSTRACT OF COST</u>                                                                                                                                     |                               |    |    |    |                  |
| 1) Construction of working bench<br>sharp filler etc do - do - job<br>Qty wide TMB P-12<br>0.7 Km @ R. 11071-82/Km R. 7861=00                               |                               |    |    |    |                  |
| 2) Construction of Reference Piller<br>etc do - do - all - complete job<br>Qty wide TMB P-12<br>0.71 Km @ R. 10262=20/Km R. 7286=00                         |                               |    |    |    |                  |
| 3) Clearing & Grubbing work<br>land etc do - do - all job<br>Qty wide TMB P-12<br>0.21 Ha of @ R. 49809=12/Ha of R. 10460=00                                |                               |    |    |    |                  |
| 4) Construction of embankment<br>with 1.5 m room etc do - do - job<br>Qty wide TMB P-18<br>318.55 M <sup>3</sup> @ R. 187=92/M <sup>3</sup> R. 59862=00     |                               |    |    |    |                  |
| 5) Construction of subgrade<br>earthen shoulder etc do - do - job<br>Qty wide TMB P-19<br>546.455-68 M <sup>3</sup> @ R. 189=20/M <sup>3</sup> R. 86,488=00 |                               |    |    |    |                  |

Continuation

D/R 171957-0

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| Particulars                                                                                                                                                                                 | Details of actual measurement |    |    |    | Contents of area |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|----|----|----|------------------|
|                                                                                                                                                                                             | No.                           | L. | B. | D. |                  |
| ( $\frac{6}{7}$ ) Construction of road embankment with level road etc<br>Qty wide TMBP-18<br>743.29 m <sup>3</sup> @ R 143.08/m <sup>3</sup> R 1,06,350.00                                  |                               |    |    |    |                  |
| ( $\frac{7}{8}$ ) Box cutting in road way etc do do all complete job<br>Qty wide TMBP-12<br>62.55 m <sup>3</sup> @ R 82.01/m <sup>3</sup> R 5,130.00                                        |                               |    |    |    |                  |
| ( $\frac{8}{9}$ ) P/V & laying bricks on edge hand shoulder etc do do all job<br>Qty wide TMBP-25<br>300.10 m <sup>3</sup> @ R 499.47/m <sup>3</sup> R 1,49,841.00                          |                               |    |    |    |                  |
| ( $\frac{9}{10}$ ) Construction of granules subbase with well graded material etc do do job<br>Qty wide TMBP-13<br>201.48 m <sup>3</sup> @ R 3720.56/m <sup>3</sup> R 7,55,298.00<br>203.01 |                               |    |    |    |                  |
| ( $\frac{10}{11}$ ) P/V & laying above existing 1/2 m of stone metal concrete etc do do job<br>Qty wide TMBP-13<br>201.48 m <sup>3</sup> @ R 4611.41/m <sup>3</sup> R 9,29,058.00           |                               |    |    |    |                  |

Continuation

O/P R 2117, 634-00

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| Particulars                                                                                                                                                                                                             | Details of actual measurement |    |    |    | Contents of area |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|----|----|----|------------------|
|                                                                                                                                                                                                                         | No.                           | L. | B. | D. |                  |
| (11/2) Paving along Pinner<br>Coast with bitumen emulsion<br>(SS.) etc etc etc<br>Qty wide TMB P-16<br>1174.20 m <sup>2</sup> unit 1174.13 m <sup>2</sup><br>1174.13 m <sup>2</sup> @ R 52=31/m <sup>2</sup> R 61419=00 |                               |    |    |    |                  |
| (12/13) P/V tapping tarpaulin<br>with emulsion etc<br>Qty wide TMB P-16<br>1174.20 m <sup>2</sup> unit 1174.13 m <sup>2</sup><br>1174.13 m <sup>2</sup> @ R 1895/m <sup>2</sup> R 22249=00                              |                               |    |    |    |                  |
| (13/14) P/V Chasing Mix seal<br>Surfacing etc etc etc<br>all complete job<br>Qty wide TMB P-17<br>1174.20 m <sup>2</sup> unit 1174.13 m <sup>2</sup><br>1174.13 m <sup>2</sup> @ R 261=50/m <sup>2</sup> R 307035=00    |                               |    |    |    |                  |
| (14/15) Construction of unrunner<br>Ced C-C. Pavement etc<br>Qty wide TMB P-14<br>242.40 m <sup>3</sup> @ R 8017=59/m <sup>3</sup> R 1943464=00                                                                         |                               |    |    |    |                  |
| (15/16) P/V R/F ordinary Km<br>Post etc etc etc<br>Qty wide TMB P-19                                                                                                                                                    |                               |    |    |    |                  |

Continuation

O/P R 2117, 634-00

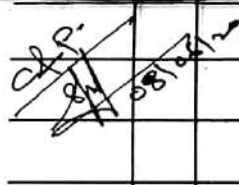
| Particulars                                                   | Details of actual measurement |    |    |    | Contents of area |
|---------------------------------------------------------------|-------------------------------|----|----|----|------------------|
|                                                               | No.                           | L. | B. | D. |                  |
| 91 No @ R 2775 = 26/No                                        |                               |    |    | R  | 2776 = 00        |
| (16/19) S/R 1 R 200m stone (Pneum)                            |                               |    |    |    |                  |
| etc do - do - all - 16                                        |                               |    |    |    |                  |
| Qty wide TMB P - 19                                           |                               |    |    |    |                  |
| 3 Nos @ R 736 = 24/No                                         |                               |    |    | R  | 2209 = 00        |
| (17/20) S/R 1 R Boundary like etc                             |                               |    |    |    |                  |
| do - do - all - complete job                                  |                               |    |    |    |                  |
| Qty wide TMB P - 15                                           |                               |    |    |    |                  |
| 14 Nos @ R 568 = 34/No                                        |                               |    |    | R  | 7956 = 00        |
| (18/21) Painting two coats on new surface etc                 |                               |    |    |    |                  |
| do - do - all - job                                           |                               |    |    |    |                  |
| Qty wide TMB P - 20                                           |                               |    |    |    |                  |
| 46.56m <sup>2</sup> @ R 108.79/m <sup>2</sup>                 |                               |    |    | R  | 5074 = 00        |
| (19/22) Painting on Concrete surface etc do - do - 16         |                               |    |    |    |                  |
| Qty wide TMB P - 19                                           |                               |    |    |    |                  |
| 80.0m <sup>2</sup> @ R 103.06/m <sup>2</sup>                  |                               |    |    | R  | 8245 = 00        |
| (20/23) Road Marking with hot applied thermoplastic paint etc |                               |    |    |    |                  |
| Qty wide TMB P - 19                                           |                               |    |    |    |                  |
| 142.10m <sup>2</sup> @ R 85.1280/m <sup>2</sup>               |                               |    |    | R  | 120955 = 00      |

Continuation

| Particulars                                                                                                                           | Details of actual measurement |    |    |    | Contents of area |
|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|----|----|----|------------------|
|                                                                                                                                       | No.                           | L. | B. | D. |                  |
| ( $\frac{21}{29}$ ) P.N.E. P.I.F. MM4CYS<br>board etc do - 1 job<br>Qty wide TMB P-13<br>2 Nos @ 11583=37/No 6 23167=00               |                               |    |    |    |                  |
| ( $\frac{22}{29}$ ) P.N.E. P.I.F. Maintenance<br>sign board etc do - 1 job<br>Qty wide TMB P-13, 20<br>2 Nos @ 11583=37/No 6 23167=00 |                               |    |    |    |                  |
| ( $\frac{23}{29}$ ) S/P I/F 600mm Regulator<br>triangle sign board etc<br>Qty wide TMB P-20<br>2 Nos @ 14038=8/No 6 32312=00          |                               |    |    |    |                  |
| ( $\frac{24}{29}$ ) S/P I/F 600mm Regulator<br>sign board etc do - 1 job<br>Qty wide TMB P-20<br>4 Nos @ 5416=70/No 6 5416=00         |                               |    |    |    |                  |
| ( $\frac{25}{30}$ ) S/P I/F 600mm x 415mm<br>rectangular sign board etc<br>Qty wide TMB P-20<br>2 Nos @ 4634=62/No 6 9269=00          |                               |    |    |    |                  |
| ( $\frac{26}{31}$ ) S/P I/F 900mm side cct sign<br>etc do - do - all - 5 jobs<br>Qty wide TMB P-20                                    |                               |    |    |    |                  |

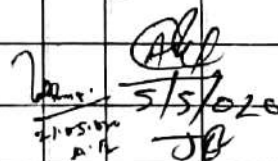
Continuation

| Particulars                    | Details of actual measurement |    |    |    | Contents of area |
|--------------------------------|-------------------------------|----|----|----|------------------|
|                                | No.                           | L. | B. | D. |                  |
| 08 No. 10 R 2782=30/No         |                               |    |    |    | L 17566=00       |
| (27/32) Priming & laying s/r/s |                               |    |    |    |                  |
| 30mm φ Flume Pipe etc          |                               |    |    |    |                  |
| Qty vid 7 MBP - 15             |                               |    |    |    |                  |
| 15.0M @ R 854=06/M             |                               |    |    |    | L 12811=00       |
|                                |                               |    |    |    | R 4722,724=11    |
| 10% Less for below Rate        |                               |    |    |    | R 472272=00      |
|                                |                               |    |    |    | R 4250,452=00    |
| Less for provision Payment     |                               |    |    |    |                  |
| Vid - MBP - 10, 15             |                               |    |    |    | R 3504210=00     |
| Net                            |                               |    |    |    | R 7,46,242=00    |
| Work Completed                 |                               |    |    |    |                  |


 21.05.00  
 A.E.  
 5/5/020  
 JB

### Material statement

- (i) Brack ÷ 14/40 m
- (ii) L/sand ÷ 9.13 M<sup>3</sup>
- (iii) Bitumen (S.G.) ÷ 2.231 mt
- (iv) Emulsion (S.G.) ÷ 0.998 MT
- (v) Emulsion (R.S.) ÷ 0.723 M.T.


 21.05.00  
 A.E.  
 5/5/020  
 JB

Continuation