

Lilapuri Pmcsy Road to Burka Diharama

# Schedule XLV-Form No. 134

HYDRO

DIVISION

MMCSY ( NDB )

HYDRO

SUB-DIVISION

RBA Construction

**MEASUREMENT BOOK**

1619

Name to work—

Situation of work—

Agency by which work is executed—

Date of measurement—

No. and date of agreement.

(These four lines should be repeated at the commencement of the measurements relating to each work.)

| Particulars          | Details of actual measurement |    |    |    | Contents of area |
|----------------------|-------------------------------|----|----|----|------------------|
|                      | No.                           | L. | B. | D. |                  |
|                      |                               |    |    |    | 10 AIC BII       |
| MW —                 | Lilabur Primary Road to       |    |    |    |                  |
|                      | Banka Dihinga,                |    |    |    |                  |
| Agency —             | R&A Constructors              |    |    |    |                  |
|                      | AJ —                          |    |    |    |                  |
| Agreement No —       | SBD-8 / 2023-24               |    |    |    |                  |
| Date of Start —      | 19.7.23                       |    |    |    |                  |
| Date of completion — | 18.7.24                       |    |    |    |                  |
| Accepted Rate —      | 100/- Bdtm                    |    |    |    |                  |

|               |              |                              |
|---------------|--------------|------------------------------|
| Length —      | 1.350 Km     | 1.080 Km - BT<br>0.260 Km CC |
| Ditch entry — | 30/12/23 Ave | 80 - cm                      |

Details of measurement —(1) Providing and fixing of works upbench mark / reference pillars.

|                               |       |
|-------------------------------|-------|
| Bench mark 1, NO 1 Km —       | 2 NOS |
| Reference Pillar 4 Nos 1 Km — | 5 NOS |

(2) clearing and working linesoil land (by manual means)

$$44730.0 \times 3.50 \text{ m} \times 2 = 9240 \text{ m}^2$$

Continuation

**Sch. XLV—Form No. 134**

| Particulars | Details of actual measurement |      |     |    | Contents of area     |
|-------------|-------------------------------|------|-----|----|----------------------|
|             | No.                           | L.   | B.  | D. |                      |
|             | 20.0                          | 3.50 | X 2 | =  | 140.0 m <sup>2</sup> |
|             |                               |      |     | -  | 7380 M <sup>2</sup>  |
|             |                               |      |     | =  | 0.74 Ha.             |

### (3) Excavation for roadway

in soil using manual means

~~for carrying of cut earth.~~

$$2 \times 30.0 \times 0.375 \times 0.150 \times 2 = 4.50 \text{ m}^3$$

#### (4) Constr. of Isobutane

and earthen shoulder

with aspd materials

with leaf up to 1000m

$$10 \times 30 \cdot 0 \times \frac{6 \cdot 02}{2} + 6 \cdot 02 \times 0 \cdot 302 \text{ m}$$

$$\frac{10 \times 30.0 \times 6.0 + 6.82}{1} \times 0.300m = 576.0 m^3$$

$$\cancel{10 \times 30.0 \times 5.80} + 7.70 \times 0.300 = 576.0$$

$$\begin{array}{r} \cancel{6 \times 30.4x} \\ \cancel{5.807100} \\ \hline 0.340 - 345.60 \end{array}$$

$$6 \times 30.0 \times 5.81 + 6.00 = 340.20$$

$$\cancel{10.0 \times 1.82310} \quad \times 0.300 = 18.961$$

232.70m<sup>3</sup>

~~dm~~ 30/12/22

~~(S) Consists of granular form  
base by providing well  
graded materials (coarse & fine materials)~~

| Particulars  | Details of actual measurement |    |    |    | Contents of area           |
|--|-------------------------------|----|----|----|----------------------------|
|  | No.                           | L. | B. | D. |                            |
| (i) Culverts (6 m mm dia)  |                               |    |    |    |                            |
| (i) Excavation for foundation  |                               |    |    |    |                            |
| H.W. $2 \times 3.90 \times 1.150 \times 1.500 \times 3 = 40.365 \text{ m}^3$           |                               |    |    |    |                            |
| $1 \times 5.350 \times 1.130 \times 0.365 \times 3 = 6.620 \text{ "}$                  |                               |    |    |    |                            |
|  |                               |    |    |    | $46.985 \text{ m}^3$       |
| (ii) Pounding Pier m/s as levelling course in foundation.                              |                               |    |    |    |                            |
| $2 \times 3.90 \times 1.150 \times 0.50 \times 3 = 4.037 \text{ m}^3$                  |                               |    |    |    |                            |
| $1 \times 5.311 \times 1.130 \times 0.250 \times 3 = 4.150 \text{ "}$                  |                               |    |    |    |                            |
|  |                               |    |    |    | $8.537 \text{ m}^3$        |
| (iii) Pounding Pier m/s in sub structure   |                               |    |    |    |                            |
| H.W. $2 \times 3.600 \times 1.00 + 0.400 \times 2.780 \times 3 = 42.034 \text{ m}^3$   |                               |    |    |    |                            |
| Less for H.P. $2 \times 3.14 \times (0.830) \times 0.530 \times 3 = 1.719 \text{ m}^3$ |                               |    |    |    |                            |
|  |                               |    |    |    | $40.315 \text{ m}^3$       |
| Net area —   |                               |    |    |    |                            |
| (iv) Pounding and levelling Pier like N.P. for culverts.                               |                               |    |    |    |                            |
| $3 \times 2.50 \text{ m} = 7.50 \times 3 \text{ nos}$                                  |                               |    |    |    |                            |
|  |                               |    |    |    | $\approx 22.50 \text{ m.}$ |

Ans  
10/1/21  
S.P.

Continuation

| Particulars                         | Details of actual measurement  |          |      |  | Contents of area      |
|-------------------------------------|--|----------|------|--|-----------------------|
|                                     | No.  | L.       | B.   | D.   |                       |
| <u>A. Content of granular parts</u> |  |          |      |  |                       |
| <u>base of embankment well</u>      |  |          |      |  |                       |
| <u>gravel materials</u>             |  |          |      |  |                       |
| <u>B.T. Portion</u>                 |  |          |      |  |                       |
|                                     | 10   | $\times$ | 30.0 | $\times$ 4.05 $\times$ 0.202 m = 243.0 m <sup>3</sup>  |                       |
|                                     | 10   | $\times$ | 30.0 | $\times$ 4.05 $\times$ 0.202 m = 243.0 "               |                       |
|                                     | 10   | $\times$ | 30.0 | $\times$ 4.05 $\times$ 0.202 m = 243.0 "               |                       |
|                                     | 10   | $\times$ | 5.0  | $\times$ 30.0 $\times$ 4.05 $\times$ 0.202 m = 121.5 " |                       |
|                                     | 1  | $\times$ | 20.0 | $\times$ 4.05 $\times$ 0.202 = 16.20 "                 |                       |
|                                     |  |          |      |  | 866.70 m <sup>3</sup> |
| <u>C.C. Portion</u>                 |  |          |      |  |                       |
| <u>depth correction.</u>            |  |          |      |  |                       |
|                                     | 2  | $\times$ | 30.0 | $\times$ 2.0 $\times$ 0.100 m = 1.20 m <sup>3</sup>    |                       |
|                                     | 2  | $\times$ | 30.0 | $\times$ 1.50 $\times$ 0.100 m = 0.90 "                |                       |
|                                     |  |          |      |  | 2.10 m <sup>3</sup>   |
| <u>Box Box</u>                      |  |          |      |  |                       |
|                                     | (2 $\times$ 30.0) $\times$ 0.375 $\times$ 0.100 $\times$ 2   |          |      |  |                       |
|                                     |  |          |      |  | = 4.50 m <sup>3</sup> |
| <u>overland - earthen portion</u>   |  |          |      |  |                       |
|                                     | (6 $\times$ 30.0) $\times$ 3.75 m $\times$ 0.100 = 67.50 m <sup>3</sup>                              |          |      |  |                       |
|                                     | 1 $\times$ 20.0 $\times$ 3.75 $\times$ 0.100 = 7.50 "  |          |      |  |                       |
|                                     |  |          |      |  | 75.00 m <sup>3</sup>  |
| <u>Extra at curves.</u>             |  |          |      |  |                       |
|                                     | 2 $\times$ 10.0 $\times$ $\frac{4.50 + 3.75}{2}$ $\times$ 3.75 $\times$ 0.100 = 0.750 m <sup>3</sup> |          |      |  |                       |
|                                     | 1 $\times$ 10.0 $\times$ $\frac{3.70 + 5.20}{2}$ $\times$ 3.75 $\times$ 0.100 = 0.700 "              |          |      |  |                       |

7. Priority, laying & spreading  
and compacting fine aggregates

of W. Berry Co. & T. K. Ladd

~~B.T. Portion~~

$$(10 \times 30.0) \times 3.75 \times 0.075 \text{ m}^3 = 84.375 \text{ m}^3$$

$$(10 \times 30.0) \times 37.5 \times 0.075m = 84.375 \text{ m}^3$$

$$(10 \times 300) \times 375 \times 0.075m = 84375$$

$$(5 + 30) \times 3.25 \times 0.075m = 42.1875$$

$$14.20.0 \times 3.75 \times 0.075m = 5.625 \text{ m}^3$$

300.937 m<sup>3</sup>

## Section

$$8 \times 30.0 \times 3.75 \times 0.100 = -67.50 \text{ m}^3$$

$$X_2 = \sqrt{3.75} \times 0.075 \text{ m} = 5.625 \text{ m}$$

2 - Instruction

73·PS m3

## B. Constn of cr-sinj forced

C.C. Pavement m. 30 other

prefixed) form base.

- de-all complete as per

## tech. Specification

From. 14 1080.0 m - 1340.0 m.

$$2 \times 15.0 \times 3.75 \times 0.160 m^3 = 18.00 m^3$$

$$2 \times 15.0 \times 3.72 \times 0.160 = 17.86$$

$$2 \times 15.0 \times 3.75 \times 0.160 \text{ m}^3 = 18.00 \text{ m}^3$$

$$2 \times 15.0 \times 3.25 \times 0.60m = 18.00^2$$

$$8 \times 1.5 \times 2.75 \times 0.160 \text{ m} = 18.02 \text{ m}$$

$$1 \times 20.0 \times 3.75 \times 0.160 \text{ m} = 12.00 \text{ L}$$

$$1 \times 10^{-6} \times 375 + 4.50 = 0.160 = 6.60$$

$$\therefore 10 \times 4.50 + 3.75 \times 1.160m = 6.600$$

**Sch. XLV—Form No. 134**

| Particulars                                   | Details of actual measurement |  |   |    | Contents of area      |
|---|-------------------------------|--|---|----|-----------------------|
|   | No.                           | L.   | B.  | D. |                       |
|   | $1 \times 20.0$               | $0 \times 3.75 \text{ m} \times 0.160 \text{ m}$           |   |    | $= 12.00 \text{ m}^3$ |
|   | $2 \times 15.0$               | $0 \times 3.75 \text{ m} \times 0.160 = 12.00 \text{ m}^3$ |   |    |                       |
|   | $1 \times 10.0$               | $0 \times 3.75 + 5.20$                                     | $\times 0.160 \text{ m} = 7.12 \text{ m}^3$ |    |                       |
|   | $1 \times 10.0$               | $0 \times 5.20 + 3.75$                                     | $\times 0.160 \text{ m}$                    |    | $= 7.16 \text{ m}^3$  |
|   |                               |  |   |    | $159.10 \text{ m}^3$  |
| g. Fixing / fixing typical memory information |                               |  |   |    |                       |
| standard with logo                            |                               |  |   |    |                       |
|   |                               |  |   |    | $2 \text{ Nos.}$      |

## 10 - Parity Layout of a reinforced

comet concrete pipe duct

~~of 300 mm diag~~

$$4 \text{ Nos} \times 3 \times 2.50 \text{ m} = 30.0 \text{ m.}$$

~~11~~  
~~290~~ 2124  
~~313~~

~~28.02.24  
A/S~~

| Particulars   | Details of actual measurement       |    |    |                        | Contents of area |
|---|-------------------------------------|----|----|------------------------|------------------|
|   | No.                                 | L. | B. | D.                     |                  |
|   | <u>Abstract</u>                     |    |    |                        |                  |
| 1. Preparing and fixing of working bench marks and reference pillars. |                                     |    |    |                        |                  |
| i) Bench mark   | 2 nos                               |    |    |                        | vide TMB P-1     |
|   | <del>(R) 4527=691</del>             |    |    | <del>R 9055=</del>     |                  |
|   |                                     |    |    |                        |                  |
| ii) Reference pillars   | 5 nos                               |    |    |                        | vide TMB P-1     |
|   | <del>(R) 2112=181</del>             |    |    | <del>R 10560=</del>    |                  |
|   |                                     |    |    |                        |                  |
| 2. clearing and grubbing the road land.                               | 0.44 ha                             |    |    |                        | vide TMB P-0     |
|   | <del>(R) 72697=86169</del>          |    |    | <del>R 68336=01</del>  |                  |
|   |                                     |    |    |                        |                  |
| 3. Excavation for roadway in soil (Box cutting)                       | 4.50 m <sup>3</sup>                 |    |    |                        | vide TMB P-2     |
|   | <del>(R) 103.85/m<sup>3</sup></del> |    |    |                        |                  |
|   |                                     |    |    |                        |                  |
| 4. cost of backgrade and common labour with load upto 1000 m.         | 2432.70 m <sup>3</sup>              |    |    |                        | vide TMB P-2     |
|   | <del>(R) 963=321</del>              |    |    | <del>R 840579=00</del> |                  |
|   |                                     |    |    |                        |                  |
|   | <del>(R) 12372.8997=</del>          |    |    |                        |                  |

| Particulars   | Details of actual measurement          |                       |    |    | Contents of area                            |
|---|--|-----------------------|----|----|---|
|   | No.                                    | L.                    | B. | D. |   |
| (5) Construction of <del>granular</del> base<br>base by spreading well<br>graded materials (grading I)                                    |  |                       |    |    |   |
| (i) B.T. Portion<br>$866.70 \text{ m}^3$ wide 7m R.P. 4   |  |                       |    |    |   |
| (ii) e.c. Portion. $83.775 \text{ m}^3$ , " " " P.5   |  |                       |    |    |   |
|   |  | $950.475 \text{ m}^3$ |    |    |   |
|   | $\text{C.R. } 348.3 = 3.6 \text{ m}^3$ |                       |    |    |   |
|   |  |                       |    |    | $\rightarrow \text{Rs } 3311293 = \text{m}$ |
| 6. Bounding spreading and<br>compacting stone aggregates<br>of w.B.m Cor III  |  |                       |    |    |   |
| (i) B.T. Portion +<br>$300.937 \text{ m}^3$ wide 10m R.P. 5   |  |                       |    |    |   |
| (ii) e.c. Portion.<br>$74.756 \text{ m}^3$ " " P.6  |  |                       |    |    |   |
|   | $275.693 \text{ m}^3$                  |                       |    |    |   |
|   | $\text{C.R. } 5440 = 0.3 \text{ m}^3$  |                       |    |    |   |
|   |  |                       |    |    | $\rightarrow \text{Rs } 2043781 = \text{m}$ |
| 6. Construction of un-surfaced<br>e.u. pavement m.30 over<br><del>gravel</del> sub-base -dr-<br>well compacted as per Tech. Specification |  |                       |    |    |   |
|   | $159.10 \text{ m}^3$ wide 7m R.P. 7    |                       |    |    |   |
|   | $\text{C.R. } 8866 = 6.9 \text{ m}^3$  |                       |    |    |   |
|   |  |                       |    |    | $\rightarrow \text{Rs } 1410690 = \text{m}$ |
| 7. Excavation of foundation<br>of Structure.  |  |                       |    |    |   |
|   | $46.925 \text{ m}^3$                   |                       |    |    |   |

Continuation

| Particulars  | Details of actual measurement   |    |    |    | Contents of area |
|--|---------------------------------|----|----|----|------------------|
|  | No.                             | L. | B. | D. |                  |
| 1. Excavation for masonry walls                                    | Q.R. 383 = 28 / m <sup>3</sup>  |    |    |    | R.P. 1800 8 = n  |
| (8) Excavation for masonry walls in foundation                     | as levelling course             |    |    |    |                  |
|  | 8.537 m <sup>3</sup>            |    |    |    | wide 700 mm P. 3 |
|  | Q.R. 7116 = 71 / m <sup>3</sup> |    |    |    | R.P. 60755 = n   |
| (9) Excavation for m. 20 in<br>foundation                          | as levelling course             |    |    |    |                  |
|  | all complete                    |    |    |    |                  |
|  | 40.315 m <sup>3</sup>           |    |    |    | wide 700 mm P. 3 |
|  | Q.R. 8171 = 55 /                |    |    |    | R.P. 329436 = n  |
| (10) Excavation and laying of R.C.C.<br>piping N.P. 3 (600 mm dia) |                                 |    |    |    |                  |
|  | 22.50 m                         |    |    |    | wide 700 mm P. 3 |
|  | Q.R. 3225 = 15 / m              |    |    |    | R.P. 72566 = n   |
| 11. Excavation & fixing typical<br>mm grey information             |                                 |    |    |    |                  |
|  | Sign board with L.P.O.          |    |    |    |                  |
|  | → 2 Nos                         |    |    |    | wide P. 3        |
|  | Q.R. 11458 = 87 /               |    |    |    | R.P. 22918 = n   |
| 12. Excavation / laying of R.C.C. pipe<br>dia of 300 mm dia        |                                 |    |    |    |                  |
|  | 300 mm                          |    |    |    | wide mm P. 3     |
|  | Q.R. 1035 = 93 / m              |    |    |    | R.P. 31078 = n   |
|  | Continuation                    |    |    |    | Rs 8029522 = n   |

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## Sch. XLV—Form No. 134

~~B+F~~

| Particulars                        | Details of actual measurement |     |            |     | Contents of area |
|------------------------------------|-------------------------------|-----|------------|-----|------------------|
|                                    | No.                           | L.  | B.         | D.  |                  |
|                                    |                               | B+F | Rs 8029522 | = n |                  |
| Adv GST @ 18%                      |                               |     | Rs 1445314 | = n |                  |
| Add L.C & 1%                       |                               | B   | 80295      | = n |                  |
| Add S.Fee @ 1.65%                  |                               | B   | 13248.7    | = n |                  |
|                                    |                               |     | Rs 9687618 | = n |                  |
| <hr/>                              |                               |     |            |     |                  |
| less 10% Below                     |                               |     |            |     |                  |
| As per aggregate C → Rs 968762 = n |                               |     |            |     |                  |
| <hr/>                              |                               |     |            |     |                  |
| Rs 8718.856 = n                    |                               |     |            |     |                  |
| <hr/>                              |                               |     |            |     |                  |
| <del>Done</del>                    |                               |     |            |     |                  |
| <del>28/2/29</del>                 |                               |     |            |     |                  |
| <del>25.02.29</del>                |                               |     |            |     |                  |
| <hr/>                              |                               |     |            |     |                  |
| SB AE                              |                               |     |            |     |                  |
| <hr/>                              |                               |     |            |     |                  |