

H.L.R.C. Bridge over Falgu Nala at ghoshi Ichampus  
path to madhopur path in Chushi.

**Schedule XLV-Form No. 134**

EE. Kuo D (g) Jehnabag **DIVISION**

A.F. Kus (g) Chushi. **SUB-DIVISION**

2622

**MEASUREMENT BOOK**

Sch. XLV—Form No. 134

EE, Ravi (u) Jehumali DIVISION

A. E. Ravi (u) Ghosh. SUB-DIVISION

**Measurement Book**

No.

2622

Name of Officer

Date of first entry

Date of last entry

प्रमाणित किया जाता है कि इस मापी  
पुस्तिका में मन्तीत का आकृत कुल 100  
(100) पृष्ठ हैं। इसी तालिका के  
यों पर सहायक विभाग के  
की निरीक्षण किया जाता है।

Schedule PLV-Form No. 134

### NOTES

REFERENCE TO P. W. A. CODE, CHPT. VII  
Para 35 & 61

- In recording detailed measurements the following general instructions should be carefully observed:-
- (a) Subject to such subsidiary orders as may be laid down by the local Government, detailed measurements should be recorded only by Executive or Assistant Engineer or by Executive subordinates in-charge of work to whom measurement books have been supplied by the Executive Engineer for the purpose.
  - (b) All measurements should be bear taken down in a measurement book Form 23, issued for the purpose, no where else.
  - (c) Each set of measurement should commence with entries starting-
    - (i) In the case of bills for work done :-
      - (a) Full name of work as given in estimate
      - (b) Situation of work (c) Name of contractor.
      - (d) Number and date of his agreement and
      - (e) Date of measurement
    - (i) "Stock", (ii) "Purchase" for direct issue to (here enter full name of work as given in estimate)
    - (ii) "Purchase" for (here enter full name of work as given in estimate) issued to contractor ..... on ..... and
    - (d) Date of measurements and should end with the Paid initials of the officer marking the measurement, see also paragraph 24, A suitable abstract should than

be prepared which / should collect in the case of measurement for work done, the total quantities of each distinct item of work relating to each sanctioned sub-head.

- (d) As all payments for work supplies are based on the quantities recorded in the measurement books it is incumbent upon the person taking the measurement to record the quantities clearly and accurately. If the measurements are taken in connection with a running contract account on which work has been previously measured he is further responsible (1) that reference to the last set of measurements is recorded and (2) that if the entire job or contract has been completed the fact is recorded prominently just above his initials.
- (e) Entries should be record continuously in the measurement book No blank pages may be left and no page be turn out. Any page left in adveltenly must be cancelled by diagonal nes. The cancellation being attested. See also paragraph or the Public Work Department Code.
- (f) No entry may be erased, of a mistake is made it should be correct (and dated) by the responsible officer in the manner prescribed in paragraph 335 of the Public Works Department Code. When any measurements are cancelled, the cancellation, must be supported by the dated initials of the officer ordering the cancellation or by refrence to his orders initialled by the officer who made the measurements in either case the reason for cancellation should be provided with an index which should be kept up to date.

# 2nd A/c Bill

23

Sch. XLV—Form No. 134

| Particulars                 | Details of actual measurement |    |    |    | Contents of area |
|-----------------------------|-------------------------------|----|----|----|------------------|
|                             | No.                           | L. | B. | D. |                  |
| Name of work—               |                               |    |    |    |                  |
| Construction of high        |                               |    |    |    |                  |
| Level R.C.C. Bridge over    |                               |    |    |    |                  |
| Falgu Nala at Ghoski Islam- |                               |    |    |    |                  |
| pur path to Madhopur        |                               |    |    |    |                  |
| path in Ghoski Block        |                               |    |    |    |                  |
| under NABARD.               |                               |    |    |    |                  |
| Name of Agency—             |                               |    |    |    |                  |
| Shailendra Singh            |                               |    |    |    |                  |
| Lakshibag, Mofassil, Manpur |                               |    |    |    |                  |
| Crete.                      |                               |    |    |    |                  |
| Date of Commencement—       |                               |    |    |    |                  |
| 30/11/2019                  |                               |    |    |    |                  |
| Date of Completion—         |                               |    |    |    |                  |
| 29/05/2021                  |                               |    |    |    |                  |
| Agreement No—               |                               |    |    |    |                  |
| 07/SBD/2019-20              |                               |    |    |    |                  |
| Date of measurement—        |                               |    |    |    |                  |
| 11/05/21                    |                               |    |    |    |                  |

(1/1) Earth work in Excavation

at foundation at structure

as per drawing etc

for Abutment (A)

$$8.9m \times 5.3m \times 1.8m = 84.90 m^3$$

(2/4) P/v & Laying of PCC

Mix Levelling Course 100mm

Thick below the foundation.

for Abutment (A)

$$8.90m \times 5.30m \times 0.100m = 4.72 m^3$$

Deduction for pile.

$$6 nos \times 1.13 \times 0.10 = (-) 0.68 m^3$$

$$4.04 m^3$$

(3/8) Dismantling of

Continuation

| Particulars                          | Details of actual measurement |    |    |    | Contents of area      |
|--------------------------------------|-------------------------------|----|----|----|-----------------------|
|                                      | No.                           | L. | B. | D. |                       |
| Existing structure pile              |                               |    |    |    |                       |
| e.t.c                                |                               |    |    |    |                       |
| For Abutment A <sub>1</sub>          |                               |    |    |    |                       |
| 66 Nos x 1.13 x 0.6 m                |                               |    |    |    | = 4.06 m <sup>3</sup> |
| (4/6) Supplying Filling              |                               |    |    |    |                       |
| and Placing uncoated                 |                               |    |    |    |                       |
| HYSD Bar -- etc                      |                               |    |    |    |                       |
| In pile cap at ABT (A <sub>1</sub> ) |                               |    |    |    |                       |
| e <sub>1</sub> - 20 mm $\phi$ Bar    |                               |    |    |    |                       |
| 88 Nos x 7.28 m                      |                               |    |    |    | = 640.64 m            |
| e <sub>3</sub> - 20 mm $\phi$ Bar    |                               |    |    |    |                       |
| 52 Nos x 10.87 m                     |                               |    |    |    | = 565.24 m            |
|                                      |                               |    |    |    | 1205.88 m             |

|                                   |  |  |  |             |
|-----------------------------------|--|--|--|-------------|
| @ 2.47 kg/m                       |  |  |  | 2979.0 kg   |
| e <sub>2</sub> - 16 mm $\phi$ Bar |  |  |  |             |
| 88 Nos x 7.28 m                   |  |  |  | = 640.64 m  |
| e <sub>4</sub> - 16 mm $\phi$ Bar |  |  |  |             |
| 52 Nos x 10.87 m                  |  |  |  | = 565.24 m  |
|                                   |  |  |  | 1205.88 m   |
| @ 1.58 kg/m                       |  |  |  | 1905.0 kg   |
| e <sub>5</sub> - 16 mm $\phi$ Bar |  |  |  |             |
| 04 Nos x 26.84 m                  |  |  |  | = 107.36 m  |
| @ 1.58 kg/m                       |  |  |  | 170.0 kg    |
| e <sub>8</sub> - 10 mm $\phi$ Bar |  |  |  |             |
| 803 Nos x 2.16 m                  |  |  |  | = 1734.48 m |
| @ 0.62 kg/m                       |  |  |  | 1075.0 kg   |
| For M.S Reinforcement for pile    |  |  |  |             |
| Chairs used under pile cap        |  |  |  |             |
| 20 mm $\phi$ Bar                  |  |  |  |             |
| 6 x 26 Nos x 1.55                 |  |  |  | = 241.8 m   |
| @ 2.47 kg/m                       |  |  |  | 597.0 kg    |

Continuation

= 241.8 m

| Particulars                                  | Details of actual measurement |   |    |          | Contents of area |
|----------------------------------------------|-------------------------------|---|----|----------|------------------|
|                                              | No.                           | L | B. | D.       |                  |
| ✓ 18 Nos x 2.47 m = 44.46 m                  |                               |   |    |          |                  |
| @ 2.47 Kg/m                                  |                               |   |    |          | 110.0 Kg         |
| (5/5) <del>Supplying &amp; filling</del>     |                               |   |    |          | 6836.0 Kg        |
| (5/5) Supplying & filling                    |                               |   |    |          |                  |
| Placing HYSO Bar in                          |                               |   |    |          |                  |
| Sub-structure --- etc                        |                               |   |    |          |                  |
| 3m abutment shaft (A1)                       |                               |   |    |          |                  |
| b1 - 20 mm $\phi$ Bar                        |                               |   |    |          |                  |
| 68 Nos x 6.38 m = 433.84 m                   |                               |   |    |          |                  |
| @ 2.47 Kg/m                                  |                               |   |    |          | 1071.0 Kg        |
| b2 - 12 mm $\phi$ Bar                        |                               |   |    |          |                  |
| 68 Nos x 6.38 m = 433.84 m                   |                               |   |    |          |                  |
| @ 0.89 Kg/m                                  |                               |   |    |          | 386.0 Kg         |
| b3 - 12 mm $\phi$ Bar                        |                               |   |    |          |                  |
| 2 x 8 Nos x 6.38 m = 102.08 m                |                               |   |    |          |                  |
| @ 0.89 Kg/m                                  |                               |   |    |          | 91.00 Kg         |
| <del>change to 10 mm <math>\phi</math></del> |                               |   |    |          |                  |
| Vertical Bar in R/W                          |                               |   |    |          |                  |
| b12 - 12 mm $\phi$ Bar                       |                               |   |    |          |                  |
| 2 x 21 Nos x 7.53 m = 316.26 m               |                               |   |    |          |                  |
| b13 - 12 mm $\phi$ Bar                       |                               |   |    |          |                  |
| 2 x 21 Nos x 7.53 m = 316.26 m               |                               |   |    |          |                  |
|                                              |                               |   |    | 632.52 m |                  |
| @ 0.89 Kg/m                                  |                               |   |    |          | 563.0 Kg         |
| Amount to J.E                                |                               |   |    |          | 211.0 Kg         |
| (6/5) Cement concrete for                    |                               |   |    |          |                  |
| Reinforced concrete in                       |                               |   |    |          |                  |
| Pile cap --- etc                             |                               |   |    |          |                  |

Continuation

| Particulars                             | Details of actual measurement |    |    |    | Contents of area      |
|-----------------------------------------|-------------------------------|----|----|----|-----------------------|
|                                         | No.                           | L. | B. | D. |                       |
| 9m abutment (A1).                       |                               |    |    |    |                       |
| 8.70 m x 5.10 m x 1.2 m =               |                               |    |    |    | 79.86 m <sup>3</sup>  |
| Any                                     |                               |    |    |    |                       |
| 12/11/20                                |                               |    |    |    |                       |
| J.E                                     |                               |    |    |    |                       |
| Date of measurement -                   |                               |    |    |    |                       |
| (11) Earth work in excavation           |                               |    |    |    |                       |
| at Foundation at structure              |                               |    |    |    |                       |
| as per drawing - - etc.                 |                               |    |    |    |                       |
| For Pier cap (P1)                       |                               |    |    |    |                       |
| 5.50 m x 5.50 m x 1.80 m =              |                               |    |    |    | 54.45 m <sup>3</sup>  |
| (2/4) Plv & laying at                   |                               |    |    |    |                       |
| per m/s Levelling course                |                               |    |    |    |                       |
| 100 mm Thick below the                  |                               |    |    |    |                       |
| foundation.                             |                               |    |    |    |                       |
| For Pier (P1)                           |                               |    |    |    |                       |
| 5.30 m x 5.30 m x 0.10 m =              |                               |    |    |    | 2.80 m <sup>3</sup>   |
| Deduction for pile                      |                               |    |    |    |                       |
| 4 Nos x 1.13 x 0.1                      |                               |    |    |    | = 0.50 m <sup>3</sup> |
|                                         |                               |    |    |    | 2.35 m <sup>3</sup>   |
| (3/8) Dismantling at                    |                               |    |    |    |                       |
| Existing structure Pile                 |                               |    |    |    |                       |
| etc.                                    |                               |    |    |    |                       |
| for Pier (P1).                          |                               |    |    |    |                       |
| 04 Nos x 1.13 m <sup>2</sup> x 0.60 m = |                               |    |    |    | 2.71 m <sup>3</sup>   |
| Any                                     |                               |    |    |    |                       |
| 14/11/20                                |                               |    |    |    |                       |
| J.E                                     |                               |    |    |    |                       |

Continuation

| Particulars                                                | Details of actual measurement |    |    |    | Contents of area |
|------------------------------------------------------------|-------------------------------|----|----|----|------------------|
|                                                            | No.                           | L. | B. | D. |                  |
| Date of measurement -                                      |                               |    |    |    |                  |
| (1/6) Supplying Fitting and placing uncoated HYSD Bars etc |                               |    |    |    |                  |
| in pile cap at pier (P1).                                  |                               |    |    |    |                  |
| e8 - 20 mm $\phi$ Bar                                      |                               |    |    |    |                  |
| 51 Nos x 7.35 m =                                          |                               |    |    |    | 374.85 m         |
| e16 - 20 mm $\phi$ Bar                                     |                               |    |    |    |                  |
| 51 Nos x 7.35 m =                                          |                               |    |    |    | 374.85 m         |
| Chair - 20 mm $\phi$ Bar                                   |                               |    |    |    |                  |
| 13 Nos x 4.91 m =                                          |                               |    |    |    | 63.83 m          |
|                                                            |                               |    |    |    | 813.53 m         |

|                                               |  |  |  |  |            |
|-----------------------------------------------|--|--|--|--|------------|
| @ 2.47 kg/m                                   |  |  |  |  | 2009.0 Kg  |
| e9 - 16 mm $\phi$ Bar                         |  |  |  |  |            |
| 51 Nos x 7.32 m =                             |  |  |  |  | 373.32 m   |
| e11 - 16 mm $\phi$ Bar                        |  |  |  |  |            |
| 51 Nos x 7.15 m =                             |  |  |  |  | 364.65 m   |
| e12 - 16 mm $\phi$ Bar                        |  |  |  |  |            |
| 04 Nos x 20.31 m =                            |  |  |  |  | 81.24 m    |
| Choke                                         |  |  |  |  | 819.21 m   |
| @ 1.58 kg/m                                   |  |  |  |  | 1294.0 kg. |
| e13 - Link Bar 12 mm $\phi$ Bar               |  |  |  |  |            |
| 588 Nos x 1.99 m =                            |  |  |  |  | 1170.12 m  |
| @ 0.89 kg/m                                   |  |  |  |  | 1041.0 kg. |
|                                               |  |  |  |  | 4344.0 kg  |
| (2/14) Supplying Fitting and placing HYSD Bar |  |  |  |  |            |

Continuation

| Particulars                         | Details of actual measurement |    |    |    | Contents of area    |
|-------------------------------------|-------------------------------|----|----|----|---------------------|
|                                     | No.                           | L. | B. | D. |                     |
| reinforcement in Sub -              |                               |    |    |    |                     |
| Structure concrete as               |                               |    |    |    |                     |
| per drawing — etc.                  |                               |    |    |    |                     |
| 9m shaft at Pier (P <sub>1</sub> ). |                               |    |    |    |                     |
| d <sub>1</sub> - 20 mm $\phi$ Bar   |                               |    |    |    |                     |
| 24 NOS x 7.915 m = 189.96 m         |                               |    |    |    |                     |
| d <sub>2</sub> - 20 mm $\phi$ Bar   |                               |    |    |    |                     |
| 24 NOS x 7.915 m = 189.96 m         |                               |    |    |    |                     |
| d <sub>3</sub> - 20 mm $\phi$ Bar   |                               |    |    |    |                     |
| 2 x 9 NOS x 7.915 m = 142.47 m      |                               |    |    |    |                     |
| <del>check</del><br>522.39 m        |                               |    |    |    |                     |
| @ 2.42 kg/m                         |                               |    |    |    | 1290.0<br>825.0 kg. |

|                                                 |  |  |  |  |  |
|-------------------------------------------------|--|--|--|--|--|
| Align                                           |  |  |  |  |  |
| 2/11/20                                         |  |  |  |  |  |
| J.E                                             |  |  |  |  |  |
| Date of measurement -                           |  |  |  |  |  |
| (1/5) cement concrete for                       |  |  |  |  |  |
| Reinforced concrete in                          |  |  |  |  |  |
| Pile cap — etc                                  |  |  |  |  |  |
| 9m Pier (P <sub>1</sub> ).                      |  |  |  |  |  |
| 5.10 m x 5.10 m x 1.80 m = 46.81 m <sup>3</sup> |  |  |  |  |  |
| (2/14) Supplying fitting &                      |  |  |  |  |  |
| placing HVS D Bar reinforcement                 |  |  |  |  |  |
| in Sub structure                                |  |  |  |  |  |
| etc                                             |  |  |  |  |  |
| 9m shaft at Abutment (A <sub>1</sub> )          |  |  |  |  |  |

Continuation

Sch. XLV—Form No. 134

| Particulars                                           | Details of actual measurement |          |          |    | Contents of area     |
|-------------------------------------------------------|-------------------------------|----------|----------|----|----------------------|
|                                                       | No.                           | L.       | B.       | D. |                      |
| 12 mm $\phi$ Bar                                      |                               |          |          |    |                      |
| b <sub>5</sub> - 21 Nos x 8.95 m =                    |                               | 187.95 m |          |    |                      |
| b <sub>6</sub> - 21 Nos x 8.95 m =                    |                               | 187.95 m |          |    |                      |
| b <sub>4</sub> - 395 Nos x 1.18 m =                   |                               | 466.10 m |          |    |                      |
|                                                       |                               |          | 842.00 m |    |                      |
| @ 0.89 Kg/m                                           |                               |          |          |    | 749.0 Kg             |
| 9m Return wall                                        |                               |          |          |    |                      |
| 16 mm $\phi$ Bar                                      |                               |          |          |    |                      |
| b <sub>14</sub> - 3 Nos x 4.40 m =                    |                               | 13.20 m  |          |    |                      |
| b <sub>15</sub> - 38 Nos x 3.0 m =                    |                               | 114.0 m  |          |    |                      |
|                                                       |                               |          | 127.2 m  |    |                      |
| @ 1.58 Kg/m                                           |                               |          |          |    | 201.0 Kg             |
| 12 mm $\phi$ Bar                                      |                               |          |          |    |                      |
| d <sub>16</sub> - 38 Nos x 3.0 m =                    |                               | 114.0 m  |          |    |                      |
| @ 0.89 Kg/m                                           |                               |          |          |    | 101.0 Kg             |
| (3/1) Earth tal.                                      |                               |          |          |    | 1051.0 Kg            |
| (3/1) Earth work in Excavation                        |                               |          |          |    |                      |
| at Foundation structure as per drawing --- etc        |                               |          |          |    |                      |
| In Abutment cap (A <sub>2</sub> ).                    |                               |          |          |    |                      |
| 8.90 m x 5.30 m x 1.80 m =                            |                               |          |          |    | 84.90 m <sup>3</sup> |
| (4/4) Plv & laying of PCC                             |                               |          |          |    |                      |
| 15 levelling course 100 mm thick below the foundation |                               |          |          |    |                      |
| In Abutment cap (A <sub>2</sub> ).                    |                               |          |          |    |                      |
| 8.90 m x 5.30 m x 0.10 m =                            |                               |          |          |    | 4.71 m <sup>3</sup>  |

Continuation

| Particulars                                                                                                           | Details of actual measurement |    |    |    | Contents of area   |
|-----------------------------------------------------------------------------------------------------------------------|-------------------------------|----|----|----|--------------------|
|                                                                                                                       | No.                           | L. | B. | D. |                    |
| Deduction for pile                                                                                                    |                               |    |    |    |                    |
| 06 Nos x $1.13 \text{ m}^2 \times 0.10 \text{ m} =$                                                                   |                               |    |    |    | 0.67 $\text{m}^3$  |
|                                                                                                                       |                               |    |    |    | 4.03 $\text{m}^3$  |
| Aring<br>22/11/20                                                                                                     |                               |    |    |    |                    |
| J.E                                                                                                                   |                               |    |    |    |                    |
| Date of measurement—                                                                                                  |                               |    |    |    |                    |
| (1/14) supplying, fitting &<br>placing HYSD Bar Reinforcement<br>in sub structure complete<br>as per drawing --- etc. |                               |    |    |    |                    |
| 9m shaft at Pier (P1).                                                                                                |                               |    |    |    |                    |
| 16 mm $\phi$ Bar                                                                                                      |                               |    |    |    |                    |
| ds - $2 \times 31 \text{ Nos} \times 3.17 \text{ m} =$                                                                |                               |    |    |    | 196.54 m           |
| dg - $1 \times 31 \text{ Nos} \times 9.11 \text{ m} =$                                                                |                               |    |    |    | 282.41 m           |
| dy - $782 \text{ Nos} \times 1.312 \text{ m} =$                                                                       |                               |    |    |    | 1025.98 m          |
| check<br>23.11.2020<br>J.E                                                                                            |                               |    |    |    | 1505.0 m           |
| @ 1.58 kg/m                                                                                                           |                               |    |    |    | 2378.0 kg          |
| (2/8) Dismantling at<br>Existing structure<br>etc                                                                     |                               |    |    |    |                    |
| 9m Abutment (A2).                                                                                                     |                               |    |    |    |                    |
| Dismantling at pile.                                                                                                  |                               |    |    |    |                    |
| $6 \times 1.13 \text{ m}^2 \times 0.6 \text{ m} =$                                                                    |                               |    |    |    | 4.068 $\text{m}^3$ |
| Aring                                                                                                                 |                               |    |    |    |                    |
| J.E                                                                                                                   |                               |    |    |    |                    |

Continuation

| Particulars                                                                              | Details of actual measurement |    |           |    | Contents of area |
|------------------------------------------------------------------------------------------|-------------------------------|----|-----------|----|------------------|
|                                                                                          | No.                           | L. | B.        | D. |                  |
| Date of Measurement - 23.11.20                                                           |                               |    |           |    |                  |
| (1/6) Supplying, Fitting and placing uncoated HSD Bar Reinforcement in Foundation - etc. |                               |    |           |    |                  |
| in pile cap at ABT (A2).                                                                 |                               |    |           |    |                  |
| e <sub>1</sub> - 20 mm $\phi$ Bar                                                        |                               |    |           |    |                  |
| 88 Nos $\times$ 7.28 m = 640.64 m                                                        |                               |    |           |    |                  |
| e <sub>3</sub> - 20 mm $\phi$ Bar                                                        |                               |    |           |    |                  |
| 52 Nos $\times$ 10.87 m = 565.24 m                                                       |                               |    |           |    |                  |
|                                                                                          |                               |    | 1205.88 m |    |                  |
| @ 2.47 Kg/m                                                                              |                               |    |           |    | 2979.0 Kg        |
| e <sub>2</sub> - 16 mm $\phi$ Bar                                                        |                               |    |           |    |                  |
| 88 Nos $\times$ 7.28 m = 640.64 m                                                        |                               |    |           |    |                  |
| e <sub>4</sub> - 16 mm $\phi$ Bar                                                        |                               |    |           |    |                  |
| 52 Nos $\times$ 10.87 m = 565.24 m                                                       |                               |    |           |    |                  |
| checked 23.11.20                                                                         |                               |    | 1205.88 m |    |                  |
| @ 1.58 Kg/m                                                                              |                               |    |           |    | 1905.0 Kg        |
| e <sub>5</sub> - 16 mm $\phi$ Bar                                                        |                               |    |           |    |                  |
| 04 Nos $\times$ 26.84 m = 107.36 m                                                       |                               |    |           |    |                  |
| @ 1.58 Kg/m                                                                              |                               |    |           |    | 170.0 Kg.        |
| e <sub>8</sub> - 10 mm $\phi$ Link Bar                                                   |                               |    |           |    |                  |
| 805 Nos $\times$ 2.16 m = 1734.48 m                                                      |                               |    |           |    |                  |
| @ 0.62 Kg/m                                                                              |                               |    |           |    | 1075.0 Kg.       |
| chair - 20 mm $\phi$ Bar                                                                 |                               |    |           |    |                  |
| 18 Nos $\times$ 2.47 m = 44.46 m                                                         |                               |    |           |    |                  |
| @ 2.47 Kg/m                                                                              |                               |    |           |    | 110.0 Kg.        |

Continuation

M.S Reinforcement for pile  
used under pile cap  
pier cap & ABT cap A2

20 mm Bar  
@ (4/6)  $\times$  26 Nos  $\times$  1.55 = 403 m  
2.47 Kg/m

995.0 Kg

7234 Kg

| Particulars                                                                         | Details of actual measurement |    |    |    | Contents of area |
|-------------------------------------------------------------------------------------|-------------------------------|----|----|----|------------------|
|                                                                                     | No.                           | L. | B. | D. |                  |
| (2/14) Supplying, fitting and placing HYSD Bar reinforcement in sub-structure — etc |                               |    |    |    |                  |
| in Abutment shaft (A <sub>2</sub> )                                                 |                               |    |    |    |                  |
| b <sub>1</sub> - 20 mm $\phi$ Bar                                                   |                               |    |    |    |                  |
| 68 Nos x 6.38 m = 433.84 m                                                          |                               |    |    |    |                  |
| @ 2.47 Kg/m                                                                         |                               |    |    |    | 1072.0 Kg        |
| b <sub>2</sub> - 12 mm $\phi$ Bar                                                   |                               |    |    |    |                  |
| 68 Nos x 6.38 m = 433.84 m                                                          |                               |    |    |    |                  |
| @ 0.89 Kg/m                                                                         |                               |    |    |    | 386.0 Kg         |
| b <sub>3</sub> - 12 mm $\phi$ Bar                                                   |                               |    |    |    |                  |
| 2 x 8 Nos x 6.38 m = 102.08 m                                                       |                               |    |    |    |                  |
| @ 0.89 Kg/m                                                                         |                               |    |    |    | 91.0 Kg          |
| Vertical Bar in Return/wall                                                         |                               |    |    |    |                  |
| b <sub>12</sub> - 12 mm $\phi$ Bar                                                  |                               |    |    |    |                  |
| 2 x 21 Nos x 7.53 m = 316.26 m                                                      |                               |    |    |    |                  |
| b <sub>13</sub> - 12 mm $\phi$ Bar                                                  |                               |    |    |    |                  |
| 2 x 21 Nos x 7.53 m = 316.26 m                                                      |                               |    |    |    |                  |
|                                                                                     |                               |    |    |    | 632.52 m         |
| @ 0.89 Kg/m                                                                         |                               |    |    |    | 563.0 Kg         |
| As per 23/11/20                                                                     |                               |    |    |    | 2112.0 Kg        |
| (3/5) Cement concrete for Reinforced concrete in pile cap — etc                     |                               |    |    |    |                  |
| in Abutment cap (A <sub>2</sub> )                                                   |                               |    |    |    |                  |
| 8.70 m x 5.10 m x 1.80 m = 79.88 m <sup>3</sup>                                     |                               |    |    |    |                  |

Continuation

As per 28/11/20  
J.E

| Particulars                                                                             | Details of actual measurement |    |    |            | Contents of area |
|-----------------------------------------------------------------------------------------|-------------------------------|----|----|------------|------------------|
|                                                                                         | No.                           | L. | B. | D.         |                  |
| Date of measurement —                                                                   | 01/12/20                      |    |    |            |                  |
| (114) Supplying, Fitting and placing HYSD Bar reinforcement in Sub-structure — — — etc. |                               |    |    |            |                  |
| 9m shaft of ABT (A <sub>2</sub> ).                                                      |                               |    |    |            |                  |
| 12 mm $\phi$ Bar                                                                        |                               |    |    |            |                  |
| b <sub>5</sub> — 21 Nos $\times$ 8.95 m                                                 |                               |    |    | = 187.95 m |                  |
| b <sub>6</sub> — 21 Nos $\times$ 8.95 m                                                 |                               |    |    | = 187.95 m |                  |
| b <sub>4</sub> — 395 Nos $\times$ 1.18 m                                                |                               |    |    | = 466.10 m |                  |
|                                                                                         |                               |    |    | 842.00 m   |                  |
| @ 0.89 Kg/m                                                                             |                               |    |    |            | 749.0 Kg         |

|                                         |  |  |  |           |           |
|-----------------------------------------|--|--|--|-----------|-----------|
| 9m Return Wall                          |  |  |  |           |           |
| 16 mm $\phi$ Bar                        |  |  |  |           |           |
| b <sub>14</sub> — 3 Nos $\times$ 4.40 m |  |  |  | = 13.20 m |           |
| b <sub>15</sub> — 38 Nos $\times$ 3.0 m |  |  |  | = 114.0 m |           |
|                                         |  |  |  | 127.2 m   |           |
| @ 1.58 Kg/m                             |  |  |  |           | 201.0 Kg  |
| 12 mm $\phi$ Bar                        |  |  |  |           |           |
| d <sub>16</sub> — 38 Nos $\times$ 3.0 m |  |  |  | = 114.0 m |           |
| @ 0.89 Kg/m                             |  |  |  |           | 101.0 Kg  |
|                                         |  |  |  |           | 1051.0 Kg |

Drawn  
01/12/20

Continuation

Sch. XLV—Form No. 134

| Particulars                                     | Details of actual measurement |    |    |    | Contents of area       |
|-------------------------------------------------|-------------------------------|----|----|----|------------------------|
|                                                 | No.                           | L. | B. | D. |                        |
| Date of measurement - 03/12/20                  |                               |    |    |    |                        |
| (119) RCC in substructure                       |                               |    |    |    |                        |
| with Concrete --- etc.                          |                               |    |    |    |                        |
| Shaft at Abutment shaft (A <sub>1</sub> )       |                               |    |    |    |                        |
| 8.45 m x 0.90 m x 3.105 m                       |                               |    |    |    | = 23.61 m <sup>3</sup> |
| Return Wall                                     |                               |    |    |    |                        |
| P/S - 2 x 4.26 m x 2.15 m x 0.60 m              |                               |    |    |    | = 10.99 m <sup>3</sup> |
| T/S - 2 x 2.83 x 0.60 m x 0.60 m                |                               |    |    |    | = 2.03 m <sup>3</sup>  |
| Abutment Bracket - 1 x 8.45 m x 0.4 x 0.3 m     |                               |    |    |    | = 1.01 m <sup>3</sup>  |
| Triangular Section 1 x 8.45 x 0.3 x 0.3 m       |                               |    |    |    | = 0.76 m <sup>3</sup>  |
| Pier Shaft (P <sub>1</sub> )                    |                               |    |    |    |                        |
| R (Portion) - 3.60 x 0.90 x 4.50 m              |                               |    |    |    | = 14.58 m <sup>3</sup> |
| C (Portion) 0.785 x (0.90) <sup>2</sup> x 4.5 m |                               |    |    |    | = 2.86 m <sup>3</sup>  |

|                                     |  |  |  |  |                        |
|-------------------------------------|--|--|--|--|------------------------|
| Shaft at Abutment (A <sub>2</sub> ) |  |  |  |  |                        |
| 8.45 m x 0.90 m x 3.105 m           |  |  |  |  | = 23.61 m <sup>3</sup> |
| Return Wall                         |  |  |  |  |                        |
| Rect. section                       |  |  |  |  |                        |
| 2 x 4.26 m x 2.15 m x 0.60 m        |  |  |  |  | = 10.99 m <sup>3</sup> |
| Nose 2 x 2 x 3.50 m x 0.60 x 0.60 m |  |  |  |  | = 5.04 m <sup>3</sup>  |
| Triangular section                  |  |  |  |  |                        |
| 2 x 2.83 x 0.60 m x 0.60 m          |  |  |  |  | = 2.03 m <sup>3</sup>  |
| Abutment Bracket                    |  |  |  |  |                        |
| 1 x 8.45 x 0.4 x 0.3 m              |  |  |  |  | = 1.01 m <sup>3</sup>  |
| Triangular section                  |  |  |  |  |                        |
| 1 x 8.45 x 0.3 x 0.3 m              |  |  |  |  | = 0.76 m <sup>3</sup>  |
|                                     |  |  |  |  |                        |
|                                     |  |  |  |  | 99.28 m <sup>3</sup>   |
| Am'ty<br>03/12/20<br>J.E            |  |  |  |  |                        |

Continuation

| Particulars                                                                          | Details of actual measurement |    |    |          | Contents of area |
|--------------------------------------------------------------------------------------|-------------------------------|----|----|----------|------------------|
|                                                                                      | No.                           | L. | B. | D.       |                  |
| Date of measurement                                                                  |                               |    |    |          | 05/12/20         |
| (1114) Supplying, fitting & placing HYSD Bar reinforcement in Sub structure --- etc. |                               |    |    |          |                  |
| Abutment Cap at AB T(A1).                                                            |                               |    |    |          |                  |
| 16 mm $\phi$ Bar                                                                     |                               |    |    |          |                  |
| $C_1 = 68 \text{ NOS} \times 4.31 \text{ m} =$                                       |                               |    |    | 293.08 m |                  |
| $C_3 = 68 \text{ NOS} \times 4.55 \text{ m} =$                                       |                               |    |    | 309.40 m |                  |
|                                                                                      |                               |    |    | 602.48 m |                  |
| @ 1.58 kg/m                                                                          |                               |    |    |          | 952.0 kg         |
| 12 mm $\phi$ Bar                                                                     |                               |    |    |          |                  |
| $C_2 = 26 \text{ NOS} \times 8.95 \text{ m} =$                                       |                               |    |    | 232.70 m |                  |
| @ 0.89 kg/m                                                                          |                               |    |    |          | 207.0 kg         |
| 12 mm $\phi$ Bar                                                                     |                               |    |    |          |                  |
| $d_1 = 54 \text{ NOS} \times 2.46 \text{ m} =$                                       |                               |    |    | 132.84 m |                  |
| $d_2 = 54 \text{ NOS} \times 3.50 \text{ m} =$                                       |                               |    |    | 189.00 m |                  |
| $d_3 = 22 \text{ NOS} \times 8.35 \text{ m} =$                                       |                               |    |    | 183.70 m |                  |
|                                                                                      |                               |    |    | 505.54 m |                  |
| @ 0.89 kg/m                                                                          |                               |    |    |          | 449.0 kg         |
| Dir. Wall                                                                            |                               |    |    |          |                  |
| bar-1 = 12 mm $\phi$ Bar                                                             |                               |    |    |          |                  |
| $80 \text{ NOS} \times 2.08 \text{ m} =$                                             |                               |    |    | 166.40 m |                  |
| bar-2 = 12 mm $\phi$ Bar                                                             |                               |    |    |          |                  |
| $2 \text{ NOS} \times 8.35 \text{ m} =$                                              |                               |    |    | 16.70 m  |                  |
|                                                                                      |                               |    |    | 183.10 m |                  |
| @ 0.89 kg/m                                                                          |                               |    |    |          | 163.0 kg         |
| bar-3 = 10 mm $\phi$ Bar                                                             |                               |    |    |          |                  |

Continuation

| Particulars                | Details of actual measurement |    |          |    | Contents of area |
|----------------------------|-------------------------------|----|----------|----|------------------|
|                            | No.                           | L. | B.       | D. |                  |
| 20 NOS X 2.12 m =          |                               |    | 42.4 m   |    |                  |
| @ 0.62 Kg/m                |                               |    |          |    | 26.0 Kg          |
| Longitudinal seismic Block |                               |    |          |    |                  |
| d20 - 25 mm $\phi$ Bar     |                               |    |          |    |                  |
| 2 X 6 NOS X 1.94 m =       |                               |    | 23.28 m  |    |                  |
| d21 - 25 mm $\phi$ Bar     |                               |    |          |    |                  |
| 2 X 7 NOS X 1.84 m =       |                               |    | 25.76 m  |    |                  |
|                            |                               |    | 49.04 m  |    |                  |
| @ 3.85 Kg/m                |                               |    |          |    | 189.0 Kg         |
| d22 - 10 mm $\phi$ Bar     |                               |    |          |    |                  |
| 2 X 4 NOS X 1.89 m =       |                               |    | 15.12 m  |    |                  |
| @ 0.62 Kg/m                |                               |    |          |    | 9.0 Kg           |
| d23 - 14 mm $\phi$ Bar     |                               |    |          |    |                  |
| 2 X 8 NOS X 2.03 m =       |                               |    | 46.88 m  |    |                  |
| @ 1.58 Kg/m                |                               |    |          |    | 74.0 Kg          |
| Transverse seismic Block   |                               |    |          |    |                  |
| d17 - 25 mm $\phi$ Bar     |                               |    |          |    |                  |
| 2 X 10 NOS X 2.03 m =      |                               |    | 40.6 m   |    |                  |
| d18 - 25 mm $\phi$ Bar     |                               |    |          |    |                  |
| 2 X 10 NOS X 1.63 m =      |                               |    | 32.6 m   |    |                  |
|                            |                               |    | 73.2 m   |    |                  |
| @ 3.85 Kg/m                |                               |    |          |    | 282.0 Kg         |
| d19 - 12 mm $\phi$ Bar     |                               |    |          |    |                  |
| 2 X 6 NOS X 5.65 m =       |                               |    | 67.80 m  |    |                  |
| d20 - 12 mm $\phi$ Bar     |                               |    |          |    |                  |
| 2 X 8 NOS X 4.33 m =       |                               |    | 69.28 m  |    |                  |
|                            |                               |    | 137.08 m |    |                  |

Continuation

Sch. XLV—Form No. 134

| Particulars                                                                                                       | Details of actual measurement |    |    |         | Contents of area |
|-------------------------------------------------------------------------------------------------------------------|-------------------------------|----|----|---------|------------------|
|                                                                                                                   | No.                           | L. | B. | D.      |                  |
| @ 0.89 kg/m                                                                                                       |                               |    |    |         | 122.0 Kg         |
| for Pedestal                                                                                                      |                               |    |    |         |                  |
| 32 mm $\phi$ Bar                                                                                                  |                               |    |    |         |                  |
| 3 x 1 Nos x 2.06 m                                                                                                |                               |    |    |         | = 6.18 m         |
| 3 x 6 Nos x 1.32 m                                                                                                |                               |    |    |         | = 23.76 m        |
| 3 x 4 Nos x 1.32 m                                                                                                |                               |    |    |         | = 15.84 m        |
|                                                                                                                   |                               |    |    | 45.78 m |                  |
| @ 0.89 kg/m                                                                                                       |                               |    |    |         | 41.0 Kg          |
|                                                                                                                   |                               |    |    |         | 2514.0 Kg.       |
| (2/14) $\phi$ Supplying, fitting & placing HYSD Bar reinforcement in Substructure --- etc pier cap (Hammes Head). |                               |    |    |         |                  |
| d7 - 25 mm $\phi$ Bar                                                                                             |                               |    |    |         |                  |
| 76 Nos x 2.95 m x 3.85                                                                                            |                               |    |    |         | = 863.0 Kg       |
| d13 - 16 mm $\phi$ Bar                                                                                            |                               |    |    |         |                  |
| 09 Nos x 8.7 m x 1.58                                                                                             |                               |    |    |         | = 124.0 Kg.      |
| d8 - 20 mm $\phi$ Bar                                                                                             |                               |    |    |         |                  |
| 33 Nos x 3.27 m x 2.47                                                                                            |                               |    |    |         | = 267.0 Kg       |
| d10 - 25 mm $\phi$ Bar                                                                                            |                               |    |    |         |                  |
| 22 Nos x 8.5 m x 3.85                                                                                             |                               |    |    |         | = 720.0 Kg       |
| d14 - 12 mm $\phi$ Bar                                                                                            |                               |    |    |         |                  |
| 44 Nos x 7.08 m x 0.89                                                                                            |                               |    |    |         | = 272.0 Kg       |
| d15 - 12 mm $\phi$ Bar                                                                                            |                               |    |    |         |                  |
| 51 Nos x 3.48 m x 0.89                                                                                            |                               |    |    |         | = 158.0 Kg       |
| d16 - 12 mm $\phi$ Bar                                                                                            |                               |    |    |         |                  |
| 51 Nos x 2.68 m x 0.89                                                                                            |                               |    |    |         | = 121.0 Kg.      |

Continuation

Sch. XLV—Form No. 134

| Particulars                           | Details of actual measurement |    |    |    | Contents of area |
|---------------------------------------|-------------------------------|----|----|----|------------------|
|                                       | No.                           | L. | B. | D. |                  |
| d17 - 16mm $\phi$ Bar                 |                               |    |    |    |                  |
| 05 Nos $\times$ 19.81 m $\times$ 1.58 |                               |    |    |    | = 156.0 Kg       |
| Longitudinal seismic Block            |                               |    |    |    |                  |
| d25 - 25mm $\phi$ Bar                 |                               |    |    |    |                  |
| 4 $\times$ 6 Nos $\times$ 2.10 m      |                               |    |    |    | = 50.4 m         |
| d26 - 25mm $\phi$ Bar                 |                               |    |    |    |                  |
| 4 $\times$ 6 Nos $\times$ 1.47 m      |                               |    |    |    | = 35.28 m        |
|                                       |                               |    |    |    |                  |
|                                       |                               |    |    |    | 85.68 m          |
| @ 3.85 Kg/m                           |                               |    |    |    | 330.0 Kg         |
| d27 - 16mm $\phi$ Bar                 |                               |    |    |    |                  |
| 4 $\times$ 9 Nos $\times$ 3.18 m      |                               |    |    |    | = 144.48 m       |
| d28 - 16mm $\phi$ Bar                 |                               |    |    |    |                  |
| 4 $\times$ 4 Nos $\times$ 3.66 m      |                               |    |    |    | = 58.56 m        |
|                                       |                               |    |    |    |                  |
|                                       |                               |    |    |    | 203.04 m         |
| @ 1.58 Kg/m                           |                               |    |    |    | 321.0 Kg         |
| Transverse seismic Block              |                               |    |    |    |                  |
| d20 - 25mm $\phi$ Bar                 |                               |    |    |    |                  |
| 2 $\times$ 10 Nos $\times$ 1.83 m     |                               |    |    |    | = 36.6 m         |
| d21 - 25mm $\phi$ Bar                 |                               |    |    |    |                  |
| 2 $\times$ 10 Nos $\times$ 1.41 m     |                               |    |    |    | = 28.2 m         |
|                                       |                               |    |    |    |                  |
|                                       |                               |    |    |    | 64.8 m           |
| @ 3.85 Kg/m                           |                               |    |    |    | 249.0 Kg         |
| d22 - 16mm $\phi$ Bar                 |                               |    |    |    |                  |
| 2 $\times$ 8 Nos $\times$ 3.58 m      |                               |    |    |    | = 57.28 m        |
| d23 - 16mm $\phi$ Bar                 |                               |    |    |    |                  |
| 2 $\times$ 6 Nos $\times$ 4.64 m      |                               |    |    |    | = 55.68 m        |
|                                       |                               |    |    |    |                  |
|                                       |                               |    |    |    | 112.96 m         |

Continuation

Sch. XLV—Form No. 134

| Particulars                            | Details of actual measurement |    |    |    | Contents of area |
|----------------------------------------|-------------------------------|----|----|----|------------------|
|                                        | No.                           | L. | B. | D. |                  |
| 1.58 kg/m                              |                               |    |    |    | 178.0 kg.        |
| concrete Pedestal                      |                               |    |    |    |                  |
| 12 mm $\phi$ Bar                       |                               |    |    |    |                  |
| 6 x 4 Nos x 1.57 m                     |                               |    |    |    | = 37.68 m        |
| 6 x 4 Nos x 1.66 m                     |                               |    |    |    | = 39.84 m        |
| 6 x 7 Nos x 1.22 m                     |                               |    |    |    | = 51.24 m        |
|                                        |                               |    |    |    | 128.76 m         |
| @ 0.89 kg/m                            |                               |    |    |    | 115.0 kg         |
| MESH                                   |                               |    |    |    |                  |
| 8 mm $\phi$ Bar                        |                               |    |    |    |                  |
| No. of bars = 08<br>8 x 2 Nos x 5.55 m |                               |    |    |    | = 88.80 m        |
| @ 0.39 kg/m                            |                               |    |    |    | 34.00 kg         |
| MESH                                   |                               |    |    |    |                  |
| 8 mm $\phi$ Bar                        |                               |    |    |    | 783.84 m         |
| 6 x 4 Nos x 32.66 m                    |                               |    |    |    | = 136.64 m       |
| @ 0.39 kg/m                            |                               |    |    |    | 305.00 kg        |
|                                        |                               |    |    |    | 4218.0 kg.       |
| (3/14) supplying, fitting              |                               |    |    |    |                  |
| & placing HYSD Bar                     |                               |    |    |    |                  |
| reinforcement in substructure          |                               |    |    |    |                  |
| etc                                    |                               |    |    |    |                  |
| Abutment cap at ABT (A2)               |                               |    |    |    |                  |
| 16 mm $\phi$ Bar                       |                               |    |    |    |                  |
| C = 68 Nos x 4.31 m                    |                               |    |    |    | = 293.08 m       |
| S = 68 Nos x 4.55 m                    |                               |    |    |    | = 309.40 m       |
| checked by                             |                               |    |    |    | 602.48 m         |

Continuation

Sch. XLV—Form No. 134

| Particulars                                    | Details of actual measurement |                  |    |                     | Contents of area    |
|------------------------------------------------|-------------------------------|------------------|----|---------------------|---------------------|
|                                                | No.                           | L.               | B. | D.                  |                     |
| @ 1.58 Kg/m                                    |                               |                  |    |                     | 952.0 Kg            |
| 12 mm $\phi$ Bar                               |                               |                  |    |                     |                     |
| $G_2 =$                                        | 26 Nos                        | $8.95 \text{ m}$ |    |                     | $= 232.7 \text{ m}$ |
| 0.89 Kg/m                                      |                               |                  |    |                     | 207.0 Kg            |
| 12 mm $\phi$ Bar                               |                               |                  |    |                     |                     |
| $d_1 =$                                        | 54 Nos                        | $2.45 \text{ m}$ |    |                     | $= 132.3 \text{ m}$ |
| $d_2 =$                                        | 54 Nos                        | $3.50 \text{ m}$ |    |                     | $= 189.0 \text{ m}$ |
| $d_3 =$                                        | 22 Nos                        | $7.35 \text{ m}$ |    |                     | $= 163.7 \text{ m}$ |
|                                                |                               |                  |    | $= 505.0 \text{ m}$ |                     |
| @ 0.89 Kg/m                                    |                               |                  |    |                     | 449.0 Kg            |
| Dirt Wall                                      |                               |                  |    |                     |                     |
| bar-1 = 12 mm $\phi$ Bar                       |                               |                  |    |                     |                     |
| 80 Nos                                         |                               | $2.08 \text{ m}$ |    |                     | $= 166.4 \text{ m}$ |
| bar-2 = 12 mm $\phi$ Bar                       |                               |                  |    |                     |                     |
| 2 Nos                                          |                               | $8.35 \text{ m}$ |    |                     | $= 16.7 \text{ m}$  |
| checked $\frac{16.7 \times 2}{6.2 \times 202}$ |                               |                  |    |                     | $183.1 \text{ m}$   |
| @ 0.89 Kg/m                                    |                               |                  |    |                     | 163.0 Kg            |
| bar-3 = 10 mm $\phi$ Bar                       |                               |                  |    |                     |                     |
| 20 Nos                                         |                               | $2.12 \text{ m}$ |    |                     | $= 42.4 \text{ m}$  |
| 0.62 Kg/m                                      |                               |                  |    |                     | 26.0 Kg             |
| Longitudinal seismic block                     |                               |                  |    |                     |                     |
| $d_{20} =$                                     | 25 mm $\phi$ Bar              |                  |    |                     |                     |
| $2 \times 6$ Nos                               |                               | $1.94 \text{ m}$ |    |                     | $= 23.28 \text{ m}$ |
| $d_{21} =$                                     | 25 mm $\phi$ Bar              |                  |    |                     |                     |
| $2 \times 7$ Nos                               |                               | $1.84 \text{ m}$ |    |                     | $= 25.76 \text{ m}$ |
|                                                |                               |                  |    |                     | $49.04 \text{ m}$   |
| @ 3.85 Kg/m                                    |                               |                  |    |                     | 189.0 Kg            |

Continuation

Sch. XLV—Form No. 134

| Particulars              | Details of actual measurement |    |    |          | Contents of area |
|--------------------------|-------------------------------|----|----|----------|------------------|
|                          | No.                           | L. | B. | D.       |                  |
| d22 -                    | 10 mm $\phi$ Bar              |    |    |          |                  |
| 2 x 4 Nos x              | 1.89 m                        |    |    | 15.12 m  |                  |
| @ 0.62                   | Kg/m                          |    |    |          | 9.0 Kg           |
| d23 -                    | 16 mm $\phi$ Bar              |    |    |          |                  |
| 2 x 8 Nos x              | 2.93 m                        |    |    | 46.88 m  |                  |
| @ 1.58                   | Kg/m                          |    |    |          | 74.0 Kg.         |
| Transverse seismic Block |                               |    |    |          |                  |
| d17 -                    | 25 mm $\phi$ Bar              |    |    |          |                  |
| 2 x 10 Nos x             | 2.03 m                        |    |    | 40.6 m   |                  |
| d18 -                    | 25 mm $\phi$ Bar              |    |    |          |                  |
| 2 x 16 Nos x             | 1.63 m                        |    |    | 32.6 m   |                  |
|                          |                               |    |    | 73.20 m  |                  |
| @ 3.85                   | Kg/m                          |    |    |          | 282.0 Kg         |
| d19 -                    | 12 mm $\phi$ Bar              |    |    |          |                  |
| 2 x 6 Nos x              | 5.65 m                        |    |    | 67.8 m   |                  |
| d20 -                    | 12 mm $\phi$ Bar              |    |    |          |                  |
| 2 x 8 Nos x              | 4.33 m                        |    |    | 69.28 m  |                  |
|                          |                               |    |    | 137.08 m |                  |
| 0.89                     | Kg/m                          |    |    |          | 122.0 Kg         |
| for Pedestal             |                               |    |    |          |                  |
| 12 mm $\phi$ Bar         |                               |    |    |          |                  |
| 3 x 1 Nos x              | 2.06 m                        |    |    | 6.18 m   |                  |
| 3 x 6 Nos x              | 1.32 m                        |    |    | 23.76 m  |                  |
| 3 x 4 Nos x              | 1.32 m                        |    |    | 15.78 m  |                  |
|                          |                               |    |    | 45.78 m  |                  |
| @ 0.89                   | Kg/m                          |    |    |          | 41.0 Kg          |
| MESH (for A1 & A2)       |                               |    |    |          |                  |
| 8 mm $\phi$ Bar          |                               |    |    |          |                  |

Continuation

Sch. XLV—Form No. 134

| Particulars                                 | Details of actual measurement |    |    |    | Contents of area |
|---------------------------------------------|-------------------------------|----|----|----|------------------|
|                                             | No.                           | L. | B. | D. |                  |
| (3+3) x 2 Nos x 5.55 = 66.6 m               |                               |    |    |    |                  |
| @ 0.39 kg/m                                 |                               |    |    |    | 26.0 Kg          |
| MESS (for A <sub>1</sub> & A <sub>2</sub> ) |                               |    |    |    |                  |
| 8 mm $\phi$ Bar                             |                               |    |    |    |                  |
| (3+3) x 4 Nos x 33.6 m = 806.4 m            |                               |    |    |    |                  |
| @ 0.39 kg/m                                 |                               |    |    |    | 314.0 Kg         |
|                                             |                               |    |    |    | 2854.0 Kg        |

(4/11) Plv Weep Hole in RCC

abutment Return wall  
with 100 mm dia A/c pipe etc

2 x 8.0 x 3.0 = 48 Nos.

A/cy  
05/12/20  
J.E

Date of measurement — 10/12/20

(1/9) RCC in Sub-Structure  
with concrete --- etcIn Abutment cap (A<sub>1</sub>)1 x 8.45 m x 1.25 m x 0.50 m = 5.28 m<sup>3</sup>1 x 8.45 m x 1.6 m x 0.50 m = 6.76 m<sup>3</sup>

Dirt wall

8.450 x 0.30 m x 1.335 m = 3.38 m<sup>3</sup>

Longitudinal seismic block

2 x 0.5 m x 1.0 m x 0.850 m = 0.85 m<sup>3</sup>

Transverse seismic block

2 x 0.8 m x 0.8 m x 1.4 m = 1.79 m<sup>3</sup>

Pedestal

3 x 0.960 x 0.520 x 0.150 m = 0.22 m<sup>3</sup>

(2/9) RCC in Sub-structure

18.28 m<sup>3</sup>

10/12/2020

Continuation

| Particulars                                                            | Details of actual measurement |    |    |    | Contents of area     |
|------------------------------------------------------------------------|-------------------------------|----|----|----|----------------------|
|                                                                        | No.                           | L. | B. | D. |                      |
| with concrete --- etc.                                                 |                               |    |    |    |                      |
| gn Pier cap (H.H) (P1)                                                 |                               |    |    |    |                      |
| 7.60 m x 2.25 m x 0.50 m =                                             |                               |    |    |    | 8.55 m <sup>3</sup>  |
| $\frac{7.6+4.7}{2} \times \frac{2.25+1.10}{2} \times 0.50 \text{ m} =$ |                               |    |    |    | 5.13 m <sup>3</sup>  |
| Longitudinal seismic Block                                             |                               |    |    |    |                      |
| 4 x 0.5 x 1.0 x 0.650 m =                                              |                               |    |    |    | 1.3 m <sup>3</sup>   |
| Transverse seismic Block                                               |                               |    |    |    |                      |
| 2 x 0.8 x 0.6 x 1.0 m =                                                |                               |    |    |    | 0.96 m <sup>3</sup>  |
| Pedestal                                                               |                               |    |    |    |                      |
| 6 x 0.960 x 0.520 m x 0.15 m =                                         |                               |    |    |    | 0.44 m <sup>3</sup>  |
|                                                                        |                               |    |    |    | 16.38 m <sup>3</sup> |

(3/g) RCC in sub-structure

with concrete --- etc

gn Abutment cap (A2)

$$1 \times 8.450 \times 1.250 \text{ m} \times 0.50 \text{ m} = 5.28 \text{ m}^3$$

$$1 \times 8.450 \times 1.6 \text{ m} \times 0.50 \text{ m} = 6.76 \text{ m}^3$$

Dirt Wall

$$8.450 \times 0.30 \times 1.335 \text{ m} = 3.38 \text{ m}^3$$

Longitudinal seismic Block

$$2 \times 0.5 \times 1.0 \text{ m} \times 0.850 \text{ m} = 0.85 \text{ m}^3$$

Transverse seismic Block

$$2 \times 0.8 \times 0.8 \times 1.0 \text{ m} = 1.29 \text{ m}^3$$

Pedestal

$$3 \times 0.96 \text{ m} \times 0.520 \text{ m} \times 0.150 \text{ m} = 0.22 \text{ m}^3$$

$$18.28 \text{ m}^3$$

Continuation

 Arjun  
16/12/20  
J.E

 05/01/2021  
A.E

# ABSTRACT OF COST

44

Sch. XLV—Form No. 134

| Particulars                                                                                       | Details of actual measurement |      |             |    | Contents of area |
|---------------------------------------------------------------------------------------------------|-------------------------------|------|-------------|----|------------------|
|                                                                                                   | No.                           | L.   | B.          | D. |                  |
| (1/7) Providing & construction temporary earth island location from one pier to another do - do - |                               |      |             |    |                  |
|                                                                                                   | Qty                           | vide | TMB         |    |                  |
| Page No - 19                                                                                      |                               |      | = 02 Nos.   |    |                  |
| @ 53 274.88 / No                                                                                  |                               |      |             |    | ₹ 106549.16      |
| (2/6) Supply, Fitting & placing unsheathed HYS D Bar Reinforcement in foundation. - - -           |                               |      |             |    |                  |
|                                                                                                   | Qty                           | vide | TMB         |    |                  |
| Page No - 20                                                                                      |                               |      | = 29080 KG  |    |                  |
| Page No - 25                                                                                      |                               |      | = 6836.0 KG |    |                  |
| Page No - 27                                                                                      |                               |      | = 4344.0 KG |    |                  |
| Page No - 31                                                                                      |                               |      | = 7234.0 KG |    |                  |
|                                                                                                   |                               |      | 47494.0 KG  |    |                  |
| Unit -                                                                                            |                               |      | 47.47 MT    |    |                  |
| @ 60953.09 / MT                                                                                   |                               |      |             |    | ₹ 2893443.00     |
| (3/2) Plv Steel Liners of mm thick for Steining ab Wall do - do -                                 |                               |      |             |    |                  |
|                                                                                                   | Qty                           | vide | TMB         |    |                  |
| Page No - 20                                                                                      |                               |      | = 8.52 MT   |    |                  |
| @ ₹ 77141.86 / MT                                                                                 |                               |      |             |    | ₹ 657248.64      |
| (4/3) Bone cast in-situ M35 grade R.C.C PIPE                                                      |                               |      |             |    |                  |

Continuation

Sch. XIV - Form No. 134

| Particulars                   | Details of actual measurement |    |                       |    | Contents of Bill |
|-------------------------------|-------------------------------|----|-----------------------|----|------------------|
|                               | No.                           | L. | B.                    | D. |                  |
| Extending Reinforcement       |                               |    |                       |    |                  |
| do do                         |                               |    |                       |    |                  |
| Qty vide Tmb                  |                               |    |                       |    |                  |
| page no - 21                  |                               |    | 245.60 m              |    |                  |
| @ 14919.52                    |                               |    |                       |    | ₹ 4914266.11     |
| (5/1) Earthwork in Excavation |                               |    |                       |    |                  |
| ab foundation ab structure    |                               |    |                       |    |                  |
| do do                         |                               |    |                       |    |                  |
| Qty vide Tmb                  |                               |    |                       |    |                  |
| page no - 23                  |                               |    | 24.90 m <sup>3</sup>  |    |                  |
| page no - 26                  |                               |    | 54.45 m <sup>3</sup>  |    |                  |
| page no - 29                  |                               |    | 24.90 m <sup>3</sup>  |    |                  |
|                               |                               |    | 204.39 m <sup>3</sup> |    |                  |

Limit - 206.55 m<sup>3</sup>@ 285.17/m<sup>3</sup> ₹ 58962.00

(6/4) MV &amp; laying ab pcc

M15 levelling course 100

mm Thick below the

foundation.

Qty vide Tmb

page no - 23 = 4.04 m<sup>3</sup>page no - 26 = 2.35 m<sup>3</sup>page no - 30 = 4.03 m<sup>3</sup>10.42 m<sup>3</sup>@ 4461.81/m<sup>3</sup> ₹ 45867.00

(7/2) Graveling ab existing

structure - - - etc

Continuation

| Particulars                | Details of actual measurement |      |                            |    | Contents of area |
|----------------------------|-------------------------------|------|----------------------------|----|------------------|
|                            | No.                           | L.   | B.                         | D. |                  |
|                            | Qty                           | vide | Tm B.                      |    |                  |
| Page No - 24               |                               |      | = 4.06 m <sup>3</sup>      |    |                  |
| Page No - 26               |                               |      | = 2.71 m <sup>3</sup>      |    |                  |
| Page No - 30               |                               |      | = 4.06 m <sup>3</sup>      |    |                  |
|                            |                               |      | <u>10.83 m<sup>3</sup></u> |    |                  |
| @ 1139.10 / m <sup>3</sup> |                               |      | — ₹                        |    | 12239.0          |
| (8/14) Supplying & Fitting |                               |      |                            |    |                  |
| Placing HYSD Bar in        |                               |      |                            |    |                  |
| Sub-structure --- etc      |                               |      |                            |    |                  |
|                            | Qty                           | vide | Tm B.                      |    |                  |
| Page No - 25               |                               |      | = 2111.0 Kg                |    |                  |
| Page No - 28               |                               |      | = 1290.0 Kg                |    |                  |
| Page No - 29               |                               |      | = 1051.0 Kg                |    |                  |
| Page No - 30               |                               |      | = 2378.0 Kg                |    |                  |
| Page No - 32               |                               |      | = 2112.0 Kg                |    |                  |
| Page No - 33               |                               |      | = 1051.0 Kg                |    |                  |
| Page No - 37               |                               |      | = 2514.0 Kg                |    |                  |
| Page No - 39               |                               |      | = 4218.0 Kg                |    |                  |
| Page No - 42               |                               |      | = 2854.0 Kg                |    |                  |
|                            |                               |      | <u>19579.0 Kg</u>          |    |                  |
|                            |                               |      | = 19.58 MT                 |    |                  |
| @ 6110 2.34 / MT           |                               |      | — ₹                        |    | 1196384.0        |
| (9/5) Cement Concrete      |                               |      |                            |    |                  |
| for Reinforcement          |                               |      |                            |    |                  |
| Concrete in pile cap       |                               |      |                            |    |                  |
| --- etc.                   |                               |      |                            |    |                  |
|                            | Qty                           | vide | Tm B.                      |    |                  |

Continuation

| Particulars                                                                         | Details of actual measurement |                       |    |    | Contents of area |
|-------------------------------------------------------------------------------------|-------------------------------|-----------------------|----|----|------------------|
|                                                                                     | No.                           | L.                    | B. | D. |                  |
| Page No - 26                                                                        | =                             | 79.86 m <sup>3</sup>  |    |    |                  |
| Page No - 28                                                                        | =                             | 46.81 m <sup>3</sup>  |    |    |                  |
| Page No -                                                                           | =                             | 29.86 m <sup>3</sup>  |    |    |                  |
|                                                                                     |                               | 206.53 m <sup>3</sup> |    |    |                  |
| @ 5501.78/m <sup>3</sup>                                                            |                               |                       |    |    | ₹ 1136289.0      |
| (10/9) Rcc in sub-structure with concrete (in abutment & pier slab) etc.            |                               |                       |    |    |                  |
| Qty vide TMB                                                                        |                               |                       |    |    |                  |
| Page No - 34                                                                        | =                             | 99.28 m <sup>3</sup>  |    |    |                  |
| Page No - 42                                                                        | =                             | 18.28 m <sup>3</sup>  |    |    |                  |
| Page No - 43                                                                        | =                             | 16.38 m <sup>3</sup>  |    |    |                  |
| Page No - 43                                                                        | =                             | 18.28 m <sup>3</sup>  |    |    |                  |
|                                                                                     |                               | 152.22 m <sup>3</sup> |    |    |                  |
| Limit -                                                                             |                               | 141.21 m <sup>3</sup> |    |    |                  |
| @ 5766.37/m <sup>3</sup>                                                            |                               |                       |    |    | ₹ 814269.0       |
| (11/11) P/V Weep Holes in RCC abutment, Return Wall with 100 mm dia Ac Pipe -- etc. |                               |                       |    |    |                  |
| Qty vide TMB                                                                        |                               |                       |    |    |                  |
| Page No - 42                                                                        | =                             | 48 Nos.               |    |    |                  |
| @ 118.63/No                                                                         |                               |                       |    |    | ₹ 5694.0         |
|                                                                                     |                               |                       |    |    | ₹ 11841143.0     |
| Less 10% as per agreement                                                           |                               |                       |    |    | ₹ 1184114.0      |
|                                                                                     |                               |                       |    |    | ₹ 10657029.0     |
| Add 1% Labours                                                                      |                               |                       |    |    | ₹ 118411.0       |
| Add 12% GST                                                                         |                               |                       |    |    | ₹ 1420937.0      |
| Below 10% as per Agg.                                                               |                               |                       |    |    |                  |
| Total                                                                               |                               |                       |    |    | ₹ 13380491.0     |
|                                                                                     |                               |                       |    |    | ₹ 1338049.0      |
|                                                                                     |                               |                       |    |    | ₹ 12042442.0     |

Continuation