


## RATE of Civil Works FOR 2017-18


### PART-A

| S. No. | Particulars  | Unit   | Rate(Rs.)  |
|--------|--|--------|------------|
| 1      | Providing & fixing of precast RCC post (1:2:4) size of bottom section 125x125 mm and top section of 100x100 mm 1.85m long with metal of maximum size 12.5 mm placed at 2.0 m centre to centre, corner and every 10th post be strainer post and strutted with struts of 1.95 m length embedded in CC 1:5:8, 30x30x60 cm and strainer post in CC 1:5:8, 40x40x60 cm the bottom of the foundation to be 10 cm below the post embedded in CC 1:5:8 of 60x60x45 cm including excavation and providing 6 horizontal rows and 2 diagonal rows of barbed wire complete as per the direction of engineer-in-charge.   | 100 RM | 42000/-    |
| 2      | Providing, fabricating & fixing iron gate 3.26x1.8m (weight approx 300 kg) in RCC column of size 40x40 cm with suitable reinforcement. The iron gate shall consist of MS plate & MS bars as per standard drawing framed by Engineer-in-charge including welding of MS channel 100x50 mm for rollers to be fixed for opening of p gate 2 no. 50 mm dia shall be provided with gate including 03 coats of painting etc. complete as per direction of Engineer-in-charge.   | Each   | 42000/-    |
| 3      | Supply & fixing un climbable galvanized steel chain link mesh fencing conforming to lasted relevant IS code opening size 75x75 mm, 2.4m height made of 8 SWG GI wire fixed to MS angle post of size 65x65x6 mm, 2.85 m above GL/Yard level, embedded 700 mm in CC 1:3:6 (400x400) mm below GL at 2.5 m centre to centre and 20 cm thick (200 mm height above GL and 200 below GL) brick masonry in plinth & foundation with cement mortar 1:6 including diagonal struts at corner and at every 7th post of angle 65x65x6 mm and horizontal bracing of MS angle of 45x45x6 mm at top and bottom between each vertical post including painting with Aluminum painting with 2 coats on post struts and chain link mesh 75x75x8 SWG mm size complete & providing and fixing 3 rows of barded wire minimum weight 9.38 kg per 100 RM etc. complete, as per direction of Engineer-in-charge. | 100 RM | 3,30,000/- |
| 4      | Providing and placing in position M-20 (1:1.5:3 RCC) excluding cost of reinforcement form work but including vibration, finishing, curing and cleaning etc. complete with graded metal of maximum size 20mm.   | Cum    | 4400/-     |
| 5      | External service viz. providing 150mm dia 70 m-100m deep well with suitable pump and concrete platform with drainage facility. Construction of approach road to control room & staff quarters (3.75m wide WBM road) and 100m long road side culverts along with drains for control room & staff Qtrs. 33/11 KV yard etc.   |        |            |
|        | (a) Bore well with submersible pump over head tank with staging if required, pipeline to earthing pit.   | Each   | 2,25,000/- |

|              |  |                                |                             |
|--------------|--|--------------------------------|-----------------------------|
|              | (b) Cement concrete road 4m wide.  | 100M                           | 4,20,000/-                  |
|              | (c) Open surface drain of size 250x300 (Average internal) with 20cm brick wall<br>100 mm thick CC 1:3:6 CC on bed and 1:2:4 coping and cement plaster etc. complete. | 100 RM                         | 70,000/-                    |
|              | (d) Hume pipe culvert 600 mm   | Each                           | 33,600/-                    |
|              | (e) Leveling & Moorum filling.   | Per Cum                        | 455/-                       |
|              | (f) Yard metalling with 40mm crusher broken metal.   | Per Cum                        | 1400/-                      |
|              | (g) Brick masonry retaining wall 1 M height  | RM                             | 2160/-                      |
|              | <b>Part-B</b>  |                                |                             |
|              | <b>Particulars</b>   |                                |                             |
| <b>S.No.</b> |  | <b>Plinth Area<br/>(in m2)</b> | <b>Amount (in<br/>lacs)</b> |
| 1            | 33/11 KV Control room (A-1 type)   | 61.32                          | 9.00                        |
| 2            | DC building urban type   | 130.88                         | 25.00                       |
| 3            | DC building rural type   | 72.32                          | 12.00                       |
|              |  |                                |                             |

  
 Superintending Engineer (Civil) Circle  
 O/o Chief Engineer (Civil-Dist.) C.S.P.D.C.L.

Raipur


  
 (90291491)



RATE ANALYSIS OF 8.0 M/ 140 KG P.C.C. POLES w.e.f. 16/01/2017

| S.NO. | Particulars  | Unit  | Qty.<br>reqd.for<br>100 Poles | Rate     | Amount            |
|-------|--|-------|-------------------------------|----------|-------------------|
| 1     | H.T. Wire 4 mm dia.  | M.T.  | 0.85                          | 55182.00 | 46904.70          |
| 2     | Cement O.P.C.  | Bag   | 175.00                        | 240.00   | 42000.00          |
| 3     | B.T.metal 100 mm size  | Cu.m. | 12.50                         | 880.00   | 11000.00          |
| 4     | Clean river sand   | Cu.m. | 6.30                          | 660.00   | 4158.00           |
| 5     | G.I.wire 8 S.W.G.  | Kg.   | 77.00                         | 45.00    | 3465.00           |
| 6     | Cement mould releasing oil (oil & water 1:5)                           | Litre | 30.00                         | 30.00    | 900.00            |
| 7     | Anchor barrels   | Each  | 8.00                          | 10.00    | 80.00             |
| 8     | Anchor Grips   | Each  | 35.00                         | 10.00    | 350.00            |
| 9     | Nut & Bolts  | Kg.   | 7.00                          | 80.00    | 560.00            |
| 10    | Cutting/ welding electrode   | Kg.   | 3.00                          | 90.00    | 270.00            |
|       | Total Cost of raw materials for 100 poles                              |       |                               |          | 109687.7          |
| 11    | <b>Total Cost of raw materials per pole</b>                            |       |                               |          | <b>1096.88</b>    |
| 12    | Electricity and water charges  |       |                               |          | 30.00             |
| 13    | Repair & Maintenance charges   |       |                               |          | 36.00             |
| 14    | Supervision Charges  |       |                               |          | 6.00              |
| 15    | Labour Charges   |       |                               |          | 200.00            |
| 16    | <b>Sub-Total(Sr.NO. 11 to 15)</b>                                      |       |                               |          | <b>1368.88</b>    |
| 17    | Breakages @ 2% of S.No. 16   |       |                               |          | 27.38             |
| 18    | Provision for EPF, Bonus etc. @ 0.3810 of labour charges on S.No. 15   |       |                               |          | 76.2              |
| 19    | Overhead charges@2% on S.No. 16  |       |                               |          | 27.37754          |
| 20    | Profit@10% excluding breakages,overhead & provision for EPF of S.No.16 |       |                               |          | 136.89            |
| 21    | Lease Rent ( Rs. 1.00)   |       |                               |          | 1                 |
|       | <b>Grand Total (S.No. 16 to 21)</b>                                    |       |                               |          | <b>1637.72</b>    |
|       | <b>Ex factory price per pole Say Rs.</b>                               |       |                               |          | <b>1638/-only</b> |

  
Assistant Engineer  
Civil Maintenance Division  
C.S.P.D.C.L., Raipur

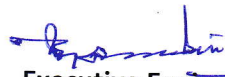
  
Executive Engineer  
Civil Maintenance Division  
C.S.P.D.C.L., Raipur


CS  
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S.E. (Civil) Dist.  
C.S.P.D.C.L., Gudhiyari, Raipur

RATE ANALYSIS OF 8.0 M/ 200 KG P.C.C. POLES w.e.f. 16/01/2017

| S.NO. | Particulars  | Unit  | Qty. reqd.for 100 Poles | Rate     | Amount     |
|-------|--|-------|-------------------------|----------|------------|
| 1     | H.T. Wire 4 mm dia.  | M.T.  | 1.03                    | 55182.00 | 56561.55   |
| 2     | Cement O.P.C.  | Bag   | 181.00                  | 240.00   | 43440.00   |
| 3     | B.T.metal 100 mm size  | Cu.m. | 12.10                   | 880.00   | 10648.00   |
| 4     | Clean river sand   | Cu.m. | 6.00                    | 660.00   | 3960.00    |
| 5     | G.I.wire 8 S.W.G.  | Kg.   | 77.00                   | 45.00    | 3465.00    |
| 6     | Cement mould releasing oil (oil & water 1:5)                           | Litre | 30.00                   | 30.00    | 900.00     |
| 7     | Anchor barrels   | Each  | 8.00                    | 10.00    | 80.00      |
| 8     | Anchor Grips   | Each  | 35.00                   | 10.00    | 350.00     |
| 9     | Nut & Bolts  | Kg.   | 7.00                    | 80.00    | 560.00     |
| 10    | Cutting/ welding electrode   | Kg.   | 3.00                    | 90.00    | 270.00     |
|       | Total Cost of raw materials for 100 poles                              |       |                         |          | 120234.55  |
| 11    | Total Cost of raw materials per pole                                   |       |                         |          | 1202.35    |
| 12    | Electricity and water charges  |       |                         |          | 30         |
| 13    | Repair & Maintenance charges   |       |                         |          | 36         |
| 14    | Supervision Charges  |       |                         |          | 6          |
| 15    | Labour Charges   |       |                         |          | 200        |
| 16    | Sub-Total(Sr.NO. 11 to 15)   |       |                         |          | 1474.35    |
| 17    | Breakages @ 2% of S.No. 16   |       |                         |          | 29.49      |
| 18    | Provision for EPF, Bonus etc. @ 0.3810 of labour charges on S.No. 15   |       |                         |          | 76.2       |
| 19    | Overhead charges@2% on S.No. 16  |       |                         |          | 29.48691   |
| 20    | Profit@10% excluding breakages,overhead & provision for EPF of S.No.16 |       |                         |          | 147.43     |
| 21    | Lease Rent ( Rs. 1.00)   |       |                         |          | 1          |
|       | Grand Total (S.No. 16 to 21)   |       |                         |          | 1757.95    |
|       | Ex factory price per pole Say Rs.                                      |       |                         |          | 1758/-only |

  
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S.E. (Civil) Dist.  
C.S.P.D.C.L., Gudhiyari, Raipur





RATE ANALYSIS OF 9.0 M/ 200 KG P.C.C. POLES w.e.f. 16/01/2017

| S.NO. | Particulars  | Unit  | Qty. reqd. for 100 Poles | Rate     | Amount     |
|-------|--|-------|--------------------------|----------|------------|
| 1     | H.T. Wire 4 mm dia.  | M.T.  | 1.15                     | 55182.00 | 63680.03   |
| 2     | Cement O.P.C.  | Bag   | 234.00                   | 240.00   | 56160.00   |
| 3     | B.T.metal 100 mm size  | Cu.m. | 15.63                    | 880.00   | 13754.40   |
| 4     | Clean river sand   | Cu.m. | 7.80                     | 660.00   | 5148.00    |
| 5     | G.I.wire 8 S.W.G.  | Kg.   | 89.00                    | 45.00    | 4005.00    |
| 6     | Cement mould releasing oil (oil & water 1:5)                           | Litre | 60.00                    | 30.00    | 1800.00    |
| 7     | Anchor barrels   | Each  | 15.00                    | 10.00    | 150.00     |
| 8     | Anchor Grips   | Each  | 68.00                    | 10.00    | 680.00     |
| 9     | Nut & Bolts  | Kg.   | 8.00                     | 80.00    | 640.00     |
| 10    | Cutting/ welding electrode   | Kg.   | 5.00                     | 90.00    | 450.00     |
|       | Total Cost of raw materials for 100 poles                              |       |                          |          | 146467.43  |
| 11    | Total Cost of raw materials per pole                                   |       |                          |          | 1464.67    |
| 12    | Electricity and water charges  |       |                          |          | 25.00      |
| 13    | Repair & Maintenance charges   |       |                          |          | 32.00      |
| 14    | Supervision Charges  |       |                          |          | 5.00       |
| 15    | Labour Charges   |       |                          |          | 280.00     |
| 16    | Sub-Total(Sr.NO. 11 to 15)   |       |                          |          | 1806.67    |
| 17    | Breakages @ 2% of S.No. 16   |       |                          |          | 36.13      |
| 18    | Provision for EPF, Bonus etc. @ 0.3810 of labour charges on S.No. 15   |       |                          |          | 106.68     |
| 19    | Overhead charges@2% on S.No. 16  |       |                          |          | 36.13      |
| 20    | Profit@10% excluding breakages,overhead & provision for EPF of S.No.16 |       |                          |          | 180.67     |
| 21    | Lease Rent ( Rs. 1.00)   |       |                          |          | 1.00       |
|       | Grand Total (S.No. 16 to 21)   |       |                          |          | 2167.29    |
|       | Ex factory price per pole Say Rs.                                      |       |                          |          | 2167/-only |

  
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C.S.P.D.C.L., Gudhlyari, Raipur

RATE ANALYSIS OF 9.1 M/ 280 KG P.C.C. POLES w.e.f. 16/01/2017

| S.NO. | Particulars  | Unit  | Qty. reqd. for 100 Poles | Rate  | Amount            |
|-------|--|-------|--------------------------|-------|-------------------|
| 1     | H.T. Wire 4 mm dia.  | M.T.  | 1.521                    | 55182 | 83931.82          |
| 2     | Cement O.P.C.  | Bag   | 385                      | 240   | 92400.00          |
| 3     | B.T.metal 100 mm size  | Cu.m. | 26                       | 880   | 22880.00          |
| 4     | Clean river sand   | Cu.m. | 13                       | 660   | 8580.00           |
| 5     | G.I.wire 8 S.W.G.  | Kg.   | 87                       | 45    | 3915.00           |
| 6     | Cement mould releasing oil (oil & water 1:5)                           | Litre | 60                       | 30    | 1800.00           |
| 7     | Anchor barrels   | Each  | 15                       | 10    | 150.00            |
| 8     | Anchor Grips   | Each  | 68                       | 10    | 680.00            |
| 9     | Nut & Bolts  | Kg.   | 8                        | 80    | 640.00            |
| 10    | Cutting/ welding electrode   | Kg.   | 5                        | 90    | 450.00            |
|       | Total Cost of raw materials for 100 poles                              |       |                          |       | 215426.82         |
| 11    | <b>Total Cost of raw materials per pole</b>                            |       |                          |       | <b>2154.27</b>    |
| 12    | Electricity and water charges  |       |                          |       | 25.00             |
| 13    | Repair & Maintenance charges   |       |                          |       | 32.00             |
| 14    | Supervision Charges  |       |                          |       | 5.00              |
| 15    | Labour Charges   |       |                          |       | 280.00            |
| 16    | <b>Sub-Total(Sr.NO. 11 to 15)</b>                                      |       |                          |       | <b>2496.27</b>    |
| 17    | Breakages @ 2% of S.No. 16   |       |                          |       | 49.93             |
| 18    | Provision for EPF, Bonus etc. @ 0.3810 of labour charges on S.No. 15   |       |                          |       | 106.68            |
| 19    | Overhead charges@2% on S.No. 16  |       |                          |       | 49.93             |
| 20    | Profit@10% excluding breakages,overhead & provision for EPF of S.No.16 |       |                          |       | 249.63            |
| 21    | Lease Rent ( Rs. 1.00)   |       |                          |       | 1.00              |
|       | <b>Grand Total (S.No. 16 to 21)</b>                                    |       |                          |       | <b>2953.43</b>    |
|       | <b>Ex factory price per pole Say Rs.</b>                               |       |                          |       | <b>2953/-only</b> |

  
Assistant Engineer  
Civil Maintenance Division  
C.S.P.D.C.L., Raipur

  
Executive Engineer  
Civil Maintenance Division  
C.S.P.D.C.L., Raipur

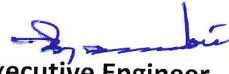
  
  
**S.E. (Civil) Dist.**  
**C.S.P.D.C.L., Gudhiyar, Raipur**




RATE ANALYSIS OF 11 M/ 365 KG P.C.C. POLES w.e.f. 16/01/2017

| S.NO. | Particulars  | Unit  | Qty. reqd. for 100 Poles | Rate     | Amount     |
|-------|--|-------|--------------------------|----------|------------|
| 1     | H.T. Wire 4 mm dia.  | M.T.  | 3.10                     | 55182.00 | 171064.20  |
| 2     | Cement O.P.C.  | Bag   | 460.00                   | 240.00   | 110400.00  |
| 3     | B.T.metal 100 mm size  | Cu.m. | 36.00                    | 880.00   | 31680.00   |
| 4     | Clean river sand   | Cu.m. | 18.00                    | 660.00   | 11880.00   |
| 5     | G.I.wire 8 S.W.G.  | Kg.   | 92.00                    | 45.00    | 4140.00    |
| 6     | Cement mould releasing oil (oil & water 1:5)                           | Litre | 90.00                    | 30.00    | 2700.00    |
| 7     | Anchor barrels   | Each  | 56.00                    | 10.00    | 560.00     |
| 8     | Anchor Grips   | Set   | 112.00                   | 10.00    | 1120.00    |
| 9     | Nut & Bolts  | Kg.   | 10.00                    | 80.00    | 800.00     |
| 10    | Cutting/ welding electrode   | Kg.   | 15.00                    | 90.00    | 1350.00    |
|       | Total Cost of raw materials for 100 poles                              |       |                          |          | 335694.20  |
| 11    | Total Cost of raw materials per pole                                   |       |                          |          | 3356.94    |
| 12    | Electricity and water charges  |       |                          |          | 33.00      |
| 13    | Repair & Maintenance charges   |       |                          |          | 40.00      |
| 14    | Supervision Charges  |       |                          |          | 8.00       |
| 15    | Labour Charges   |       |                          |          | 351.00     |
| 16    | Sub-Total(Sr.NO. 11 to 15)   |       |                          |          | 3788.94    |
| 17    | Breakages @ 2% of S.No. 16   |       |                          |          | 75.78      |
| 18    | Provision for EPF, Bonus etc. @ 0.3810 of labour charges on S.No. 15   |       |                          |          | 133.73     |
| 19    | Overhead charges@2% on S.No. 16  |       |                          |          | 75.78      |
| 20    | Profit@10% excluding breakages,overhead & provision for EPF of S.No.16 |       |                          |          | 378.89     |
| 21    | Lease Rent ( Rs. 1.00)   |       |                          |          | 1.00       |
|       | Grand Total (S.No. 16 to 21)   |       |                          |          | 4454.12    |
|       | Ex factory price per pole Say Rs.                                      |       |                          |          | 4454/-only |

  
Assistant Engineer  
Civil Maintenance Division  
C.S.P.D.C.L., Raipur


  
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S.E. (Civil) Dist.  
C.S.P.D.C.L., Gudhlyar, Raipur

**RATES OF INGREDIENTS FOR PCC POLES IN JANUARY 2017**

| <b>S.NO.</b> | <b>PARTICULARS</b>     | <b>RATES</b>      | <b>REFERENCE</b>  |
|--------------|------------------------|-------------------|---|
| 1            | H.T. Wire 4 mm         | 55182 /- Per MT   | Rate obtained by quotation  |
| 2            | Cement                 | 240/- Per Bag     | Rate obtained by quotation  |
| 3            | Metal                  | 880/- per Cum     | Rate obtained by quotation  |
| 4            | Sand                   | 660/- per Cum     | Rate obtained by quotation  |
| 5            | GI Wire 8 SWG          | 45.00/- per kg    | Rate obtained from verbal discussion with concerned market agencies |
| 6            | Mould releasing oil    | 30.00/- per litre | Rate obtained from verbal discussion with concerned market agencies |
| 7            | Barrels                | 10.00/- each      | Rate obtained from verbal discussion with concerned market agencies |
| 8            | Wedges                 | 10.00/- each      | Rate obtained from verbal discussion with concerned market agencies |
| 9            | Nut Bolts              | 80.00/- kg        | Rate obtained from verbal discussion with concerned market agencies |
| 10           | Cutting / Welding rods | 90.00/- kg        | Rate obtained from verbal discussion with concerned market agencies |

  
**Assistant Engineer**  
**Civil Maintenance Division**  
**C.S.P.D.C.L., Raipur**

  
**Executive Engineer**  
**Civil Maintenance Division**  
**C.S.P.D.C.L., Raipur**



**S.E. (Civil) Dist.**  
**C.S.P.D.C.L., Gudhiyar, Raipur**



## Rate Analysis for concrete mix proportion 1:1.5:3

Dtd. 07.02.2017

| Details of Cost for 1.00 Cum     | Rate         | Unit    | Qty.         | Amount (Rs.)   |
|----------------------------------|--------------|---------|--------------|----------------|
| <b>MATERIAL</b>                  |              |         |              |                |
| Portland Cement                  | Rs. 240.00   | Per Bag | 8.15         | 1956.00        |
| Sand                             | Rs. 660.00   | Cum     | 0.41         | 270.60         |
| Coarse Aggregate                 |              |         |              |                |
| 40mm size                        | Rs. 1,110.00 | Cum     | 0.60         | 666.00         |
| 20mm size                        | Rs. 1,200.00 | Cum     | 0.22         | 264.00         |
| <b>LABOUR</b>                    |              |         |              |                |
| Mason                            | Rs. 275.00   | Day     | 0.12         | 33.00          |
| Beldar                           | Rs. 250.00   | Day     | 1.68         | 420.00         |
|                                  |              |         | <b>Total</b> | <b>3609.60</b> |
| Add. 10% for contractor's profit |              |         |              | <b>360.96</b>  |
| Cost per 1.00 Cum                |              |         |              | <b>3970.56</b> |

Say Rs. 3971/- per Cum



J.E. (Civil)  
O/o S. E. (Civil- Dist.) Circle  
C.S.P.D.C.L. Raipur



E.E. (Civil)  
O/o S. E. (Civil- Dist.) Circle  
C.S.P.D.C.L. Raipur



S. E. (Civil- Dist.) Circle  
C.S.P.D.C.L. Raipur

## Rate Analysis for concrete mix proportion 1:2:4

Dtd. 07.02.2017

| Details of Cost for 1.00 Cum     | Rate         | Unit    | Qty.         | Amount (Rs.)   |
|----------------------------------|--------------|---------|--------------|----------------|
| <b>MATERIAL</b>                  |              |         |              |                |
| Portland Cement                  | Rs. 240.00   | Per Bag | 6.34         | 1521.60        |
| Sand                             | Rs. 660.00   | Cum     | 0.43         | 283.80         |
| Coarse Aggregate                 |              |         |              |                |
| 40mm size                        | Rs. 1,110.00 | Cum     | 0.60         | 666.00         |
| 20mm size                        | Rs. 1,200.00 | Cum     | 0.25         | 300.00         |
| <b>LABOUR</b>                    |              |         |              |                |
| Mason                            | Rs. 275.00   | Day     | 0.12         | 33.00          |
| Beldar                           | Rs. 250.00   | Day     | 1.68         | 420.00         |
|                                  |              |         | <b>Total</b> | <b>3224.40</b> |
| Add. 10% for contractor's profit |              |         |              | <b>322.44</b>  |
| Cost per 1.00 Cum                |              |         |              | <b>3546.84</b> |

Say Rs. 3547/- per Cum



J.E. (Civil)  
O/o S. E. (Civil- Dist.) Circle  
C.S.P.D.C.L. Raipur



E.E. (Civil)  
O/o S. E. (Civil- Dist.) Circle  
C.S.P.D.C.L. Raipur



S. E. (Civil- Dist.) Circle  
C.S.P.D.C.L. Raipur



## Rate Analysis for concrete mix proportion 1:3:6

Dtd. 07.02.2017

| Details of Cost for 1.00 Cum     | Rate         | Unit    | Qty.         | Amount (Rs.)   |
|----------------------------------|--------------|---------|--------------|----------------|
| <b>MATERIAL</b>                  |              |         |              |                |
| Portland Cement                  | Rs. 240.00   | Per Bag | 4.40         | 1056.00        |
| Sand                             | Rs. 660.00   | Cum     | 0.47         | 310.20         |
| Coarse Aggregate                 |              |         |              |                |
| 40mm size                        | Rs. 1,110.00 | Cum     | 0.65         | 721.50         |
| 20mm size                        | Rs. 1,200.00 | Cum     | 0.24         | 288.00         |
| <b>LABOUR</b>                    |              |         |              |                |
| Mason                            | Rs. 275.00   | Day     | 0.12         | 33.00          |
| Beldar                           | Rs. 250.00   | Day     | 1.68         | 420.00         |
|                                  |              |         | <b>Total</b> | <b>2828.70</b> |
| Add. 10% for contractor's profit |              |         |              | <b>282.87</b>  |
| Cost per 1.00 Cum                |              |         |              | <b>3111.57</b> |

Say Rs. 3112/- per Cum



J.E. (Civil)

O/o S. E. (Civil- Dist.) Circle  
C.S.P.D.C.L. Raipur



E.E. (Civil)

O/o S. E. (Civil- Dist.) Circle  
C.S.P.D.C.L. Raipur



S. E. (Civil- Dist.) Circle  
C.S.P.D.C.L. Raipur

## DETAIL ESTIMATE

NAME OF WORK : Construction of brick masonry cable trench for 10.0 M length .

Schedule of rates : SOR of CGPWD Building works w.e.f. 01-01-2015

| S. No | SoR Ref. | Item Description   | No. | L      | B     | D/H   | Qty.   | Unit | Rate    | Amount  |
|-------|----------|--|-----|--------|-------|-------|--------|------|---------|---------|
| 1     | 1.1.1    | Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits. |     |        |       |       |        |      |         |         |
|       | 1.1      | In all types of soils.   |     |        |       |       |        |      |         |         |
|       |          |  | 1   | 10.000 | 0.800 | 0.400 | 3.200  | cum  | 185.00  | 592.00  |
| 2     | 3.1.2    | Providing and laying nominal mix plain cement concrete with crushed stone aggregate using concrete mixer in all works upto plinth level excluding cost of form work.   |     |        |       |       |        |      |         |         |
|       | 1.2      | 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size).   |     |        |       |       |        |      |         |         |
|       |          | for base   | 1   | 10.000 | 0.800 | 0.100 | 0.800  | cum  | 2659.00 | 2127.20 |
|       | 1.4      | 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40mm nominal size).   |     |        |       |       |        |      |         |         |
|       |          |  | 1   | 10.000 | 0.300 | 0.050 | 0.150  | cum  | 3552.00 | 532.80  |
| 3     | 7.5.4    | Brick work with modular fly-ash lime bricks (FaLG Bricks) confirming to IS:12894-2002 of class designation 4.0 in foundation and plinth in:  |     |        |       |       |        |      |         |         |
|       | 5.4      | Cement Mortar 1:4 (1 cement : 4 coarse sand)   |     |        |       |       |        |      |         |         |
|       |          | wall   | 2   | 10.000 | 0.200 | 0.400 | 1.600  | cum  | 3263.00 | 5220.80 |
| 4     | 3.13     | Providing and laying damp proof course (upto 50mm thick) with plain cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded crushed stone aggregate 20mm nominal size) including form work.   |     |        |       |       |        |      |         |         |
|       |          |  | 2   | 10.000 | 0.200 | 0.050 | 0.200  | cum  | 4237.00 | 847.40  |
| 5     | 9.1      | Structural steel work in single section including cutting, hoisting, fixing in position and applying priming coat of red oxide zinc chromate primer.   |     |        |       |       |        |      |         |         |
|       |          | flat patty 40x5  | 34  | 0.500  |       | 1.570 | 26.690 | Kg   | 61.50   | 1641.44 |
| 6     | 11.2.4   | Providing and making 12mm thick cement plaster of mix:   |     |        |       |       |        |      |         |         |
|       | 2.4      | In Cement Mortar 1:6 (1 cement : 6 fine sand)  |     |        |       |       |        |      |         |         |
|       |          | wall   | 2   | 10.000 |       | 0.450 | 9.000  | sqm  | 91.50   | 823.50  |

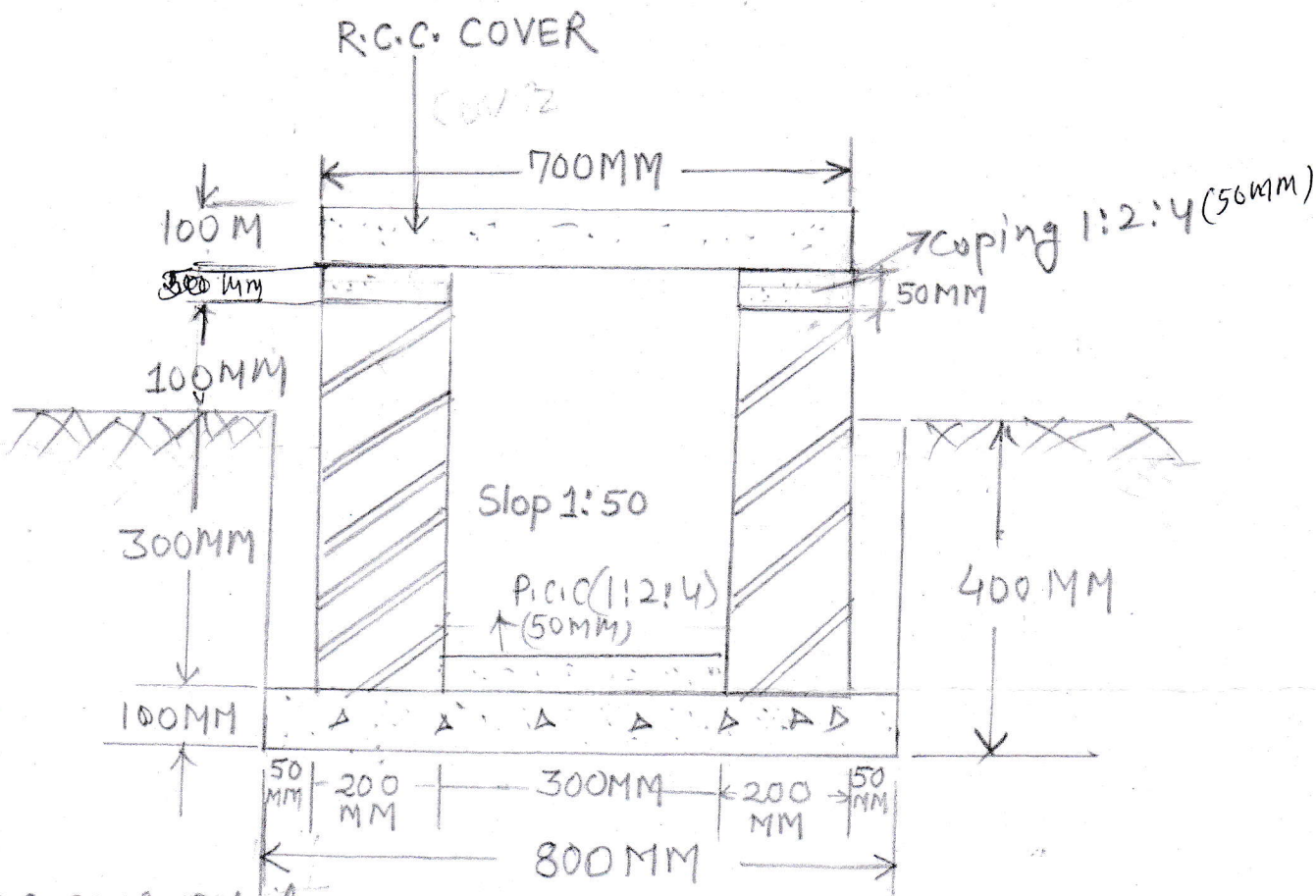


| S. No | SoR Ref. | Item Description   | No. | L      | B     | D/H   | Qty.    | Unit | Rate         | Amount          |
|-------|----------|--|-----|--------|-------|-------|---------|------|--------------|-----------------|
| 7     | 11.3.4   | Providing and making 15mm thick cement plaster on the rough side of single or half brick wall of mix:  |     |        |       |       |         |      |              |                 |
|       | 3.4      | In Cement Mortar 1:6 (1 cement : 6 fine sand)  |     |        |       |       |         |      |              |                 |
|       |          | qty. same as item no. 11.2.4   |     |        |       |       | 9.000   |      |              |                 |
|       |          | top  | 2   | 10.000 |       | 0.200 | 4.000   |      |              |                 |
|       |          |  |     |        |       |       | 13.000  | sqm  | 107.00       | 1391.00         |
| 8     | 3.12.2   | Providing and placing in position reinforcement for R.C.C. work including straightening, cutting, bending, binding etc. complete as per drawings including cost of binding wire in foundation and plinth all complete:   |     |        |       |       |         |      |              |                 |
|       | 12.2     | Thermo-Mechanically treated bars FE 500D   |     |        |       |       |         |      |              |                 |
|       |          | for cover main bar 8mm (10x10)L=0.65+2x0.05+0.65   | 100 | 1.400  |       | 0.395 | 55.300  |      |              |                 |
|       |          | jalli top & bottom bar 8mm (10x2x5)  | 100 | 0.950  |       | 0.395 | 37.525  |      |              |                 |
|       |          | cover L=0.2+0.2+0.2+0.2(10mm)  | 20  | 0.800  |       | 0.617 | 9.872   |      |              |                 |
|       |          |  |     |        |       | total | 102.697 | kg   | 54.50        | 5596.99         |
| 9     | 2.1.1    | Providing and fixing form work including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for:   |     |        |       |       |         |      |              |                 |
|       | 1.1      | Foundations, footings, bases of columns plinth beam, curtain wall in any shape and size and all type of wall below plinth level.   |     |        |       |       |         |      |              |                 |
|       |          | bottom   | 10  | 1.000  | 0.700 |       | 7.000   |      |              |                 |
|       |          | sides L=1.00+0.70( 10x2)   | 20  | 1.700  |       | 0.100 | 3.400   |      |              |                 |
|       |          |  |     |        |       | total | 10.400  | sqm  | 236.00       | 2454.40         |
| 10    | 3.2.1    | Providing and laying nominal mix reinforced cement concrete with crushed stone aggregate using concrete mixer in all works upto plinth level excluding cost of form work.<br>(Note :Excess/ less cement used as per design mix is payable/ recoverable separately) |     |        |       |       |         |      |              |                 |
|       | 2.1      | 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size).   |     |        |       |       |         |      |              |                 |
|       |          | for cover  | 10  | 1.000  | 0.700 | 0.100 | 0.070   | cum  | 4163.00      | 291.41          |
|       |          |  |     |        |       |       |         |      | <b>Total</b> | <b>21518.93</b> |

*(Signature)*  
वी.के. शर्मा

*(Signature)*  
JUNIOR ENGINEER

Name of work: - construction of brick masonry cable Trench for 10.0 M. length.

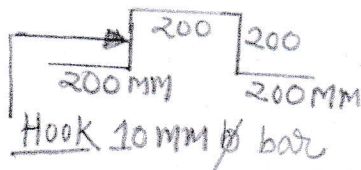
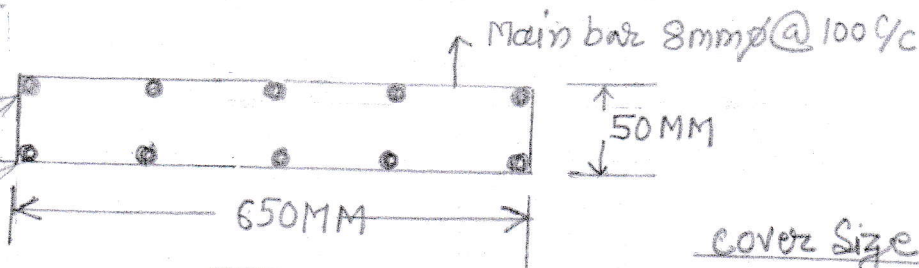


R.C.C. cover detail

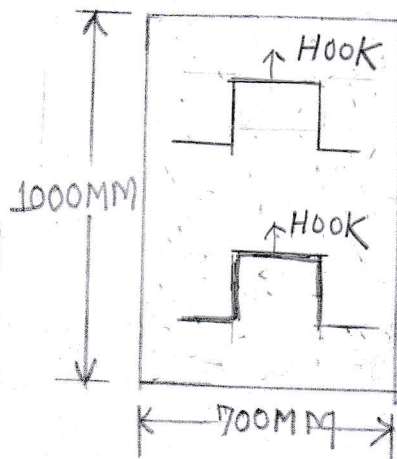
Size (1000x700)

steel detail

Distribution 8mm  $\phi$   
(5 No. Top & Bottom)  
L=950MM



cover size



Rajeev  
J.E (Civil)

(Civil) Dist.  
C.S.P.D.C.L., Gadhlyari, Raipur









Sub : Use of RCC blocks for all type of PCC poles and stay sets upto 11KV.

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1. There is a provision of concreting @ 0.05 CMT per pole for base padding of each PCC pole. However, erection of poles is not always done in presence of CSPDCL officers/officials.
2. Similarly for grouting of stay sets, there is a provision of 0.2 CMT per stay for LT and 11KV lines.
3. However, use of base pad and concreting of stay sets as per award can't be ensured after completion of the work.
4. Therefore, it is proposed that in place of concrete base pad for PCC poles and concreting of stay sets for 11KV and LT line, RCC blocks of size 450x450x75 mm may be used as below:
  - (a) For base pad – 01 no. RCC block of size 450x450x75 mm
  - (b) For stay sets - 2 no. RCC blocks of size 450x450x75 mm with 25 mm hole in centre of the block.
5. REC has already approved use of RCC blocks for base pad and concreting of stay sets. Copy of approved drawings of REC are placed on file.
6. If approved, necessary provision for the same in SoR shall be made and got incorporated in the SoR.

M.D; C.S.P.D.C.L; RAIPUR  
 U.O/RD No.: 2178  
 Date: 02/07/16  
 05-07-16

M.D.(CSPDCL)

E.D.(PROJECT)

*Necessary provision to be initiated for S/R.*

*14/5/16*

*[Signature]*

C.E. (Project)  
 CSPDCL, Raipur  
 DESPATCH  
 U.O.No. 2078  
 Date 11/7/16

C.E. (Project)  
 CSPDCL, Raipur  
 RECEIPT  
 U.O. 2392  
 01/07/16

*E.D. (Project)*

*Amramp*

*C.P. Das*

*[Signature]*

- 9. CE (Civil - DGM) Rajm vide his LM 3303/26<sup>12</sup>/16 has submitted his report alongwith specification of ~~stone~~ blocks which is addressed to GD (com) and copy enclosed to this office. The same is placed on file at page - 06 to 10/c
- 10. REC has approved use of 4 mm NT wire mesh blocks, as per drawing attached at page - 1104/C. The same has been incorporated in our DDVSS and RPRs letter also
- 11. Therefore, necessary guidelines are proposed to be issued in this behalf. (like incorporate RCC blocks in soil for inner & LT line)

ED (com), CSPDCL

~~SB (Mans)~~

~~LEW~~  
~~AREK~~

2  
21/17

for  
28/11  
AO  
30/12

Include in SOR - 17-18 / 16-17

Q  
31.12.16

ED (COM) CSPDCL RAIPUR  
UOIRD No. 190  
Date 30/12/2016

2506  
29/12/16

RAIPUR  
CSPDCL





## छत्तीसगढ़ राज्य विद्युत वितरण कंपनी मर्यादित

(छ.रा.वि.म. की एक उत्तरवर्ती कंपनी)

CIN:U40108CT2003SGC15822

कार्यालय अधीक्षण अभियंता (सिविल-वित.) वृत्त

पुराना सी-6 छ.रा.वि.वि.कं. मर्या., गुढ़ियारी, रायपुर (छ.ग.)

दूरभाष क्रमांक : 0771-2574637, फ़ैक्स क्रमांक 0771-2574637

क्रमांक. अधी.अभि./सि-वित./कय/ 1076

प्रति,

रायपुर दिनांक 18/11/2016

मुख्य अभियंता (सि.वित.),

छ.रा.वि.वि.कं. मर्या.

रायपुर

विषय :- Use of RCC block for all type of PCC poles and stay sets up to 11 Kv line.

संदर्भ :- 1. अधीक्षण अभियंता (कार्या.)कार्या कार्य. निर्दे. (परि.) छ.रा.वि.वि.कं. मर्या. रायपुर का पत्रांक 2376 दि.24.08.2016 एवं इस पर महोदय द्वारा निर्देश।

2. कार्य.निर्दे. (सं./सं.) छ.रा.वि.वि.कं. मर्या.रायपुर का पत्रांक 2154 दि.27.07.2016

\*\*\*\*\*

लेख है कि कं.1 पर संदर्भित पत्र एवं इस पर महोदय के निर्देशानुसार विषयान्तर्गत आर.सी. सी. ब्लाकस का, कं. 2 पर संदर्भित पत्र में संलग्न रेखाचित्र के आधार पर, 4 मि.मि.  $\phi$  व्यास एच.टी वायर एवं 6 मि. मि. व्यास बार (छड़ों) के उपयोग में लेने पर, अलग-अलग दर विश्लेषण तैयार करवा कर, कार्यपालन अभियंता (सि.) वित. रखरखाव. संभाग रायपुर द्वारा, प्रस्तुत किया गया है।

अतः संदर्भित पत्राचारों से चाहे गये के संदर्भ में, उपरोक्त दोनों दर विश्लेषण, दो प्रतियों में संलग्न कर अग्रिम आवश्यक कार्यवाही हेतु सादर प्रेषित है। (संलग्नक कं. 1 से 3)

साथ ही इस संबंध में यह भी अवगत हो कि इस संबंध में इस कार्यालय का अभिमत यह है कि, बिना प्रिस्ट्रेसड (पूर्व प्रतिबलित) तकनीक के उपयोग के ही, 4 मि.मि.  $\phi$  के एच.टी. वायर का उपयोग कर, आर सी.सी. से बनाये जाने पर उक्त आर.सी.सी.ब्लाक्स, विषयान्तर्गत चाहे गये उपयोग के लिए उपयुक्त नहीं होंगे, तथा इन ब्लाक्स को यदि आर.सी.सी. से ही बनाया जाना हो तो, इन्हे समान ड्राईंग के अनुसार ही, परंतु 4 मि.मी.  $\phi$  के एच.टी. वायर (4 m m  $\phi$  H.T.Wire) की बजाय, (6 m m  $\phi$  M.S.Bar) का उपयोग कर, बनाये गये आर.सी.सी.ब्लाक्स, (जिनका भी दर-विश्लेषण-पत्रक संलग्न है, (संलग्नक कं. 2) का, उपयोग किया जाना वैकल्पिक रूप से सही होगा।

संलग्न :- उक्तानुसार (कुल 3 पृष्ठ)

अधीक्षण अभियंता (सि-वित.)वृत्त  
छ.रा.वि.वि.कं. मर्या रायपुर  
आई.डी. नं. 90530601

प्रतिलिपि: कार्यपालन अभियंता (सि.)वित. रख. संभाग छ.रा.वि.वि.कं. मर्या रायपुर को सूचनार्थ।

2238  
18-11-16  
21-  
Bill

21/11  
21/11

अधीक्षण अभियंता (सि-वित.)वृत्त  
छ.रा.वि.वि.कं. मर्या रायपुर  
आई.डी. नं. 90530601

RATE ANALYSIS OF R.C.C. BASE PAD FOR PCC POLE  
(with 4mm HT Bars)

| S.NO. | Particulars  | Unit  | Qty. reqd. for 100 Pads | Rate     | Amount (In Rs.) |
|-------|--|-------|-------------------------|----------|-----------------|
| 1     | H.T. Wire 4 mm dia.  | M.T.  | 0.09                    | 56100.00 | 5049.00         |
| 2     | Cement O.P.C.  | Bag   | 9.63                    | 230.00   | 2214.90         |
| 3     | B.T.metal 100 mm size  | Cu.m. | 1.292                   | 880.00   | 1136.96         |
| 4     | Clean river sand   | Cu.m. | 0.653                   | 660.00   | 430.98          |
| 5     | Form Work (assuming one set of F/W to be reused for casting of 10 RCC Base pads) |       |                         |          |                 |
|       | Edges/RM   | m     | 18.00                   | 34.00    | 612.00          |
|       | Base   | Sqm   | 2.00                    | 139.00   | 278.00          |
| 6     | <b>Total Cost of raw materials for 100 pads</b>                                  |       |                         |          | 9721.84         |
| 7     | Electricity and water charges  |       |                         |          | 50.00           |
| 8     | Concrete Mixer & Vibrator charges  |       |                         |          | 450.00          |
| 9     | Labour wages i/c mason & Curator   |       |                         |          | 500.00          |
| 10    | <b>Sub-Total(Sr.NO. 6 to 9)</b>  |       |                         |          | 10721.84        |
| 11    | Breakages @ 2% of S.No. 10   |       |                         |          | 214.44          |
| 12    | Provision for EPF, Bonus etc. @ 0.3810 of labour charges on S.No. 9              |       |                         |          | 190.5           |
| 13    | Overhead charges@2% on S.No. 10  |       |                         |          | 214.44          |
| 14    | Profit@10% of S.No. 10 excluding breakages,overhead & provision for EPF          |       |                         |          | 1072.18         |
|       | <b>Grand Total (S.No. 10 to 14) For 100 Base Pads</b>                            |       |                         |          | 12413.40        |
|       | <b>Ex factory price per base pad Say Rs.</b>                                     |       |                         |          | 124.13          |

*Ravi*  
Ravi Chandrakar  
11510651  
A.E. (Civil) H.Q. Durg  
CSPDCL.Raipur

*E.E. (Civil)*

95  
*S.E. (Civil)*

7

सं. नं. २

RATE ANALYSIS OF R.C.C. BASE PAD FOR PCC POLE  
(with 6mm MS Bars)

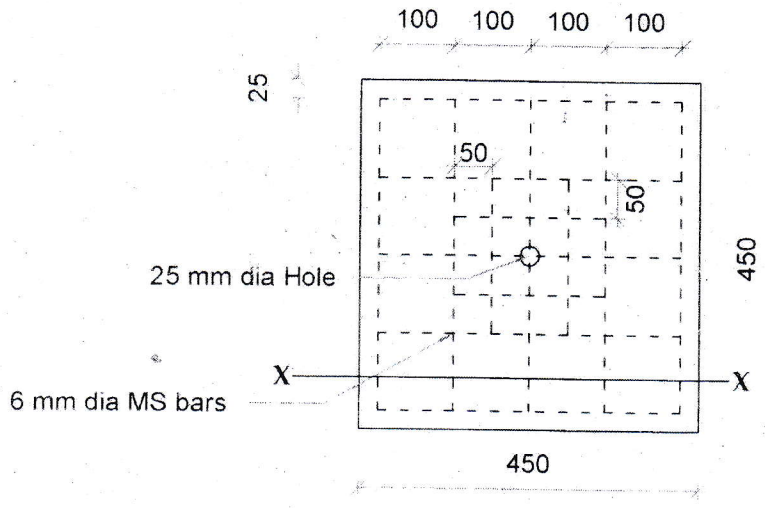
| S.NO. | Particulars   | Unit  | Qty. reqd. for 100 Pads | Rate     | Amount (In Rs.) |
|-------|---|-------|-------------------------|----------|-----------------|
| 1     | 6 mm MS bar dia.  | M.T.  | 0.20                    | 40000.00 | 8000.00         |
| 2     | Cement O.P.C.   | Bag   | 9.63                    | 230.00   | 2214.90         |
| 3     | B.T.metal 100 mm size   | Cu.m. | 1.292                   | 880.00   | 1136.96         |
| 4     | Clean river sand  | Cu.m. | 0.653                   | 660.00   | 430.98          |
| 5     | Form Work   |       |                         |          |                 |
|       | Edges/RM  | m     | 18.00                   | 34.00    | 612.00          |
|       | Base  | Sqm   | 2.00                    | 139.00   | 278.00          |
| 6     | <b>Total Cost of raw materials for 100 pads</b>                         |       |                         |          | 12672.84        |
| 7     | Electricity and water charges   |       |                         |          | 50              |
| 8     | Concrete Mixer & Vibrator charges                                       |       |                         |          | 450             |
| 9     | Labour wages i/c mason & Curator  |       |                         |          | 500             |
| 10    | <b>Sub-Total(Sr.NO. 6 to 9)</b>   |       |                         |          | 13672.84        |
| 11    | Breakages @ 2% of S.No. 10  |       |                         |          | 273.46          |
| 12    | Provision for EPF, Bonus etc. @ 0.3810 of labour charges on S.No. 9     |       |                         |          | 190.5           |
| 13    | Overhead charges@2% on S.No. 10   |       |                         |          | 273.46          |
| 14    | Profit@10% of S.No. 10 excluding breakages,overhead & provision for EPF |       |                         |          | 1367.28         |
|       | <b>Grand Total (S.No. 10 to 14) For 100 Base Pads</b>                   |       |                         |          | 15777.54        |
|       | <b>Ex factory price per base pad Say Rs.</b>                            |       |                         |          | 157.78          |

*Ravi*  
 Ravi Chandrakar  
 11510651  
 A.E. (Civil) H.Q. Durg  
 CSPDCL, Raipur

*E.E. (Civil)*  
 E.E. (Civil)

*cls*  
*SE. (Civil)*  
 SE. (Civil)





**PLAN**

**SEC X-X**

PROPOSED DWG. FOR CONCRETE BASE PAD

ALL DIMENSIONS ARE IN mm.

*Signature*  
AECC

*Signature*  
EXECUTIVE ENGINEER,  
S.E. (Civil-Dist.) Circle,  
C.S.P.D.C.L. RAIPUR,  
Emp. No. 91453099

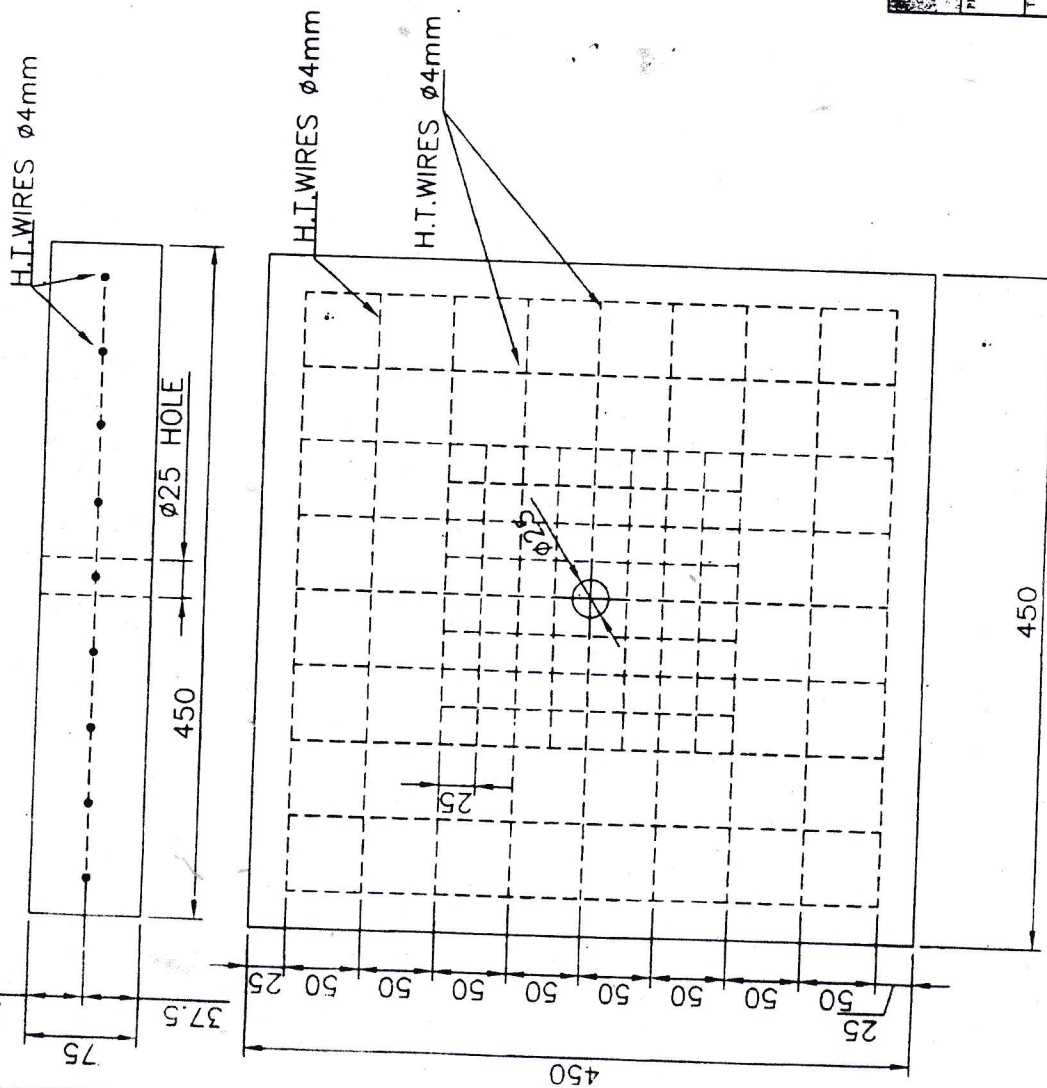
*Signature*  
S.E. (Civil) Dist.  
C.S.P.D.C.L., Gudhiyari, Raipur

21/05/23

**NOTES:-**

- 1) THE CONCRETE MIX SHALL BE OF M15 GRADE
- 2) BASE PLATE IS NOT NECESSARY FOR CONCRETE LOCATIONS
- 3) EQUIVALENT SIZE OF STONE PAD CAN BE USED AS BASE PLATE WHEREVER AVAILABLE ECONOMICALLY.
- 4) ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE MENTIONED.

FOR TENDER PURPOSE ONLY



|  |              |   |                     |
|--|--------------|---|---------------------|
|  |              | <b>Rural Electrification Corporation Ltd.</b> |                     |
| PROJECT<br>Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) |              | TITLE<br>RCC BASE PAD FOR PCC POLE            |                     |
| SIZE<br>A3   | SCALE<br>NTS | DRG. NO.<br>REC/DDUGJY/GEN/05A                | SHEET NO.<br>1 OF 1 |
|  |              | REV. NO.<br>0                                 |                     |

|          |          |         |          |      |         |
|----------|----------|---------|----------|------|---------|
| REV. NO. | PREPARED | CHECKED | APPROVED | DATE | PROJECT |
|          |          |         |          |      |         |

COMMON FOR ALL PROJECT