GOVERNMENT OF ASSAM OFFICE OF THE CACHAR ZILLA PARISHAD CACHAR : SILCHAR

No. CZP/TASFC-619/pt-I/2010/47,

Date:17 10.2012

πo,

The Director, Finance (Economic Affairs) Department, Dispur, Guwahati – 06

Sub: - Submission of Model Plan & Estimate of Basic Grants under Thirteen Finance Commission – 2012-13 (1st Installment).

Ref: - Your W.T Message No. FEA(SFC)165/2010/Pt/82-A, dated Dispur, October 16, 2012.

Sir,

1)

With reference to the subject cited above, I am to furnish herewith the Model Plan & Estimate for construction of new market shed of Basic Grants under 13th Finance Commission - 2012-13 (1St Installment).

This is for information and necessary action.

Enclo: Plan & Estimate 1 No.

Yours faithfully,

Chief Executive Officer, Cachar Zilla Parishad, Silchar

Date: 17.10.2012

Memo No. CZP/TASFC-619/pt-I/2010/47, Copy to: -

1. The commissioner, Panchayat & Rural Development, Assam, Panjabari, Juripar, Guwahati – 37 for favour of kind information.

2. The Joint Secretary to the Govt. of Assam, Panchayat & Rural Development Deptt., Dispur Guwahati – 06 for information.

Chief Executive Officer, Cachar Zilla Parishad, Silchar



GOVT. OF ASSAM

OFFICE OF THE CHIEF EXECUTIVE OFFICER, CACHAR ZILLA PARISHAD :: SILCHAR

PLAN & ESTIMATE (MODEL)

Name of the work : Construction of New Market Shed in various

places of Cachar District under Cachar Zilla

Parishad, Silchar under 13th Finance

Commission Schemes for the year 2012-13

(1st Installment).

Name of District

Cachar (Assam)

Permissible Head

Building for accommodation market facility.

Name of Executing Agency :

Cachar Zilla Parishad, Silchar

ESTIMATED AMOUNT:

RS. 25,00,000.00

Name of work: Construction of Market Shed in various places of Cachar District under Cachar Zilla Parishad, Silchar under T.F.C. Scheme for the year 2012-13.

ABSTRACT OF COST

Item No. 1 : Cost for construction of open Market shed Plinth Area = 100.00 Sqm. = 3 Nos. @Rs.5,06,400.00/Each	0.00
Item No. 2 : Cost for construction of open Market shed Plinth Area = 50.00 Sqm. = 2 Nos. @Rs.2,84,700.00/Each	0.00
Item No.3: Cost of approach road with plinth protection, Drain for outlet etc	00.00
Total = Rs.24,50,40	

Add @2% for Contingency charges

& sign board etc. = (+) Rs. 49,008.00 Grand Total = Rs.24,99,408.00Say Rs.25,00,000.00

(Rupees Twenty five Lakhs) only.

Chief Executive Officer, Cachar Zilla Parishad, Silchar.

Chief Executive Officer Cachar Zilla Parishad

1. Name of District: Cachar, Silchar.

2. Name of Implementing Agency: Cachar Zilla Parishad, Silchar.

3.Name of work: Construction of Market Shed in various places of Cachar District under Cachar Zilla Parishad, Silchar under T.F.C. Scheme for the year 2012-13.

Estimated Amount: Rs.25,00,000.00

::::: <u>REPORT</u> ::::::

This working estimate amounting to Rs.25.00 Lakhs (Rupees Twenty five Lakhs) only has been framed to show the probable cost of the above mentioned work.

The estimate is framed to make a Market Shed in Assam Type semi-R.C.C., Building in various places of Cachar District as it is urgently needed to perform any kind of social functions and this will be very fruitful to facilitate programme time to time as need for. The Construction of permanent structure in place of existing temporary shed for providing good foundatuion to the busisness man which they required.

Under the above circumstances this estimate is prepared to face the growthful demand of the people of various places of Cachar District in Market places and vast area people.

Keeping the mind the following provision have been made in the

estimate.

1. Assam Type Building.

2. Platform/Approach road.

The rate has been quoted on the basis of the schedule of rates for P.W.D Building (Civil works) of 2010-11 for all Division under Assam P.W.D. (Building) .

All works will be carried out as per A.P.W.D. general specification

current in the State.

Chief Executive Officer, Cachar Zilla Parishad, Silchar.

Chief Executive Officer Cachar Zilla Parishad

Cachar Zilla Parishad, Silchar.

ESTIMATE

Name of work: Construction of Market Shed in various places of Cachar District under Cachar Zilla Parishad, Silchar under T.F.C. Scheme for the year 2012-13.

Item of work: As per Schedule of rates for P.W.D. Building (Civil works) for all Divisions under Assam P.W.D. 2010-11 which is current in the State of Assam.

Item No.1/1.1: Earth work in excavation for foundation trenches of walls, retaining walls, footings of column, steps, septic tank etc. including refilling (return filling) etc. removal of surplus earth with all leads and lift as directed and specified etc. including bailing out water where necessary as directed and specified.

(A) Up to a depth of 2.00M. below the existing ground level.

(a) In ordinary soil.

Column: $1 \times 13 \times 0.90 \times 0.60 \times 0.90 = 6.318$ Cum.

Item No.2/4.1.1: Providing brick soling in foundation and under floor with stone/ best quality picked jhama brick, sand packed and laid to level and panel after preparing the sub-grade as directed including all labour and materials and if necessary dewatering, complete.

(a)Brick on flat soling.

Column :1 x 13 x 0.90 x 0.60 = 7.02 Sqm.

Tie Beam / Floor:

1 x 10.00 x <u>5.00</u> = 50.00 Sqm.Total = 57.02 Sqm.

@Rs.286.37/Sqm.....Rs.16,329.00

Item No.3/2.1.1: Plain cement concrete works with coarse aggregate of sizes 13mm to 32mm in foundation bed for footing steps, walls, bricks works etc. as directed and specified including dewatering if necessary and curing complete (Shuttering where necessary shall be measured and paid separately). (b)In prop.1:4:8.

Column: $1 \times 13 \times 0.90 \times 0.60 \times 0.10 = 0.702$ Cum.

CONTD. Rs.19,123.0

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Item No.4/18.1.1: Supplying, fitting and fixing in position
                     reinforcement bars conforming to relevant
                     I.S. Code for R.C.C. work/ R.B. walling
                    including straightening, cleaning, cutting etc
                    supports, chairs, spacers etc. complete.
                     (up to 1<sup>st</sup> floor level).
                     (b) ISI approved super ductile TMT
                     (i) TATA/ SAIL.
                     Column footing: 8mm dia on both way.
                      1 \times 13 \times 8 \times 0.65 = 67.60 \text{ Rm}.
                      1 \times 13 \times 6 \times 0.95 = 74.10 \text{ Rm}.
                                  Total = 141.70 \text{ Rm}.
                                      @0.39 Kg./Rm.... = 55.26 Kg.
                     Tie Beam 12mm dia for all around.
                     Tie Beam: (2 \times 10.00) + (3 \times 5.00) = 35.00 Rm.
                             4 x 35.00
                                          = 140.00 \text{ Rm}.
                      Column: 12mm dia = 4 Nos.
                           13 \times 4 \times 5.00 = 260.00 \text{ Rm}.
                                     \overline{\text{Total}} = 400.00 \text{ Rm}.
                                      @0.89 \text{ Kg./Rm.} = 356.00 \text{ Kg.}
                      Lintel 10mm dia for all around.
                        (2 \times 10.00) + (3 \times 5.00) = 35.00 \text{ Rm}.
                              1 \times 4 \times 35.00 = 110.40 \text{ Sqm}.
                                      @0.62 Kg./Rm..... = 68.45 Kg.
                       Lintel 10mm dia for top Lintel.
                        (2 \times 10.00) + (3 \times 5.00) = 35.00 \text{ Rm}.
                              1 \times 4 \times 35.00 = 110.40 \text{ Sqm}.
                                       @0.62 Kg./Rm.... = 68.45 Kg.
                                                                 Total = 548.16 \text{ Kg}.
                                                                    Say 5.482 Qtls.
                                                               @Rs.5290.41/Qtl......Rs.29,002.00
                         © ISI approved M.S Rod.
                          6mm dia <u>rod.@115cm</u> c/c
                      (i)Column: 1 \times 13 \times 41 \times 0.75 = 399.75 \text{ Rm}
                      (ii) Tie Beam : 1 \times 305 \times 0.75 = 228.75 \text{ Rm}.
                      (iii) Lintel: 1 \times 305 \times 0.55 = 167.75 \text{ Rm}.
                                        1 \times 305 \times 0.40 = 122.00 \text{ Rm}.
                                                     Total = 918.25 \text{ Rm}.
                                                   @0.22Kg./Rm.... = 202.02 Kg.
                                                                               Say 2.02 Qtls.
                                                            @Rs.5241.78/Qtl......Rs.10,588.00
    Item No.5/3.1.1: Providing form work of ordinary timber planking
                        so as to give a rough finish including centering,
                        shuttering etc. of the same for in-situ reinforced
                         concrete and plain concrete work in:
                         3.1.1.1 : Foundation, footings, bases of columns,
                         pile cap, raft and mass concrete works etc.
                                                                                                     CONTD.Rs.58,713.00
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(ii) Using 25mm thick plank
                  Column footings:
                                                 = 2.56 \text{ Sqm}.
                  8 x 2 x 0.80 x 0.20
                                                 = 2.24 \text{ Sqm}.
                  8 \times 2 \times 0.70 \times 0.20
                  8 \times 2 \times \frac{1}{2}(0.80 + 0.20) \times 0.35 = 2.80 \text{ Sqm}.
                  8 \times 2 \times \frac{1}{2}(0.70 + 0.25) \times 0.35 = 2.66Sqm.
                                           Total = 10.26 \text{ Sqm}
                                                @Rs.140.84/Sqm.....Rs. 1,445.00
                   3.1.1.2 : Sides of tie beams, plinth beams,
                      grade beams etc .at or below plinth level.
                       (ii) Using 25mm thick.
                      (2 \times 10.00) + (3 \times 5.00) = 35.00 \text{ Rm}.
                      Tie Beam = 2 \times 35.00 \times 0.30 = 21.00 Sqm.
                                                      @Rs.191.27/Sqm...... Rs. 4,017.00
                      3.1.1.3 : Columns, pillars, post & strut.
                      (a) Square, Rectangular, polygonal in plane
                          vertical face. (i) Using 25mm thick. .
                         Lintel = (2 \times 10.00) + (3 \times 5.00) = 35.00 \text{ Rm}.
                               2 \times 35.00 \times 0.20 = 14.00 \text{ Sqm}.
                         Column up to P.L:
                        1 \times 8 \times 2 \times 3.00 \times 0.20 = 9.60 \text{ Sqm}.
                        1 \times 8 \times 2 \times 3.00 \times 0.15 = 7.20 \text{ Sqm}
                                             Total = 30.80 \text{ Sqm}
                                                      @Rs.213.73/Sqm.....Rs.6,583.00
Item No.6/2.2.1:Providing and laying plain/reinforcement cement
                  concrete works in prop.1:2:4 including dewatering
                  if necessary and curing complete etc. for reinforcement
                  cement concrete work (Form work and reinforcement
                  will be measured and paid separately).
                 (I) Using mixture machine.
                  (a) In sub-structure upto plinth level.
                   Foundation, footing columns, with base tie and
                    plinth beam etc.other works not less than 100mm
                    thick up to P.L.
                   (a) M-15 or Prop.1:2:4.
                   Column: 13 x 0.80 x 0.60 x 0.15
                                                                = 0.936 Cum.
                     13 x ½{(0.80 x 0.60)+(0.25 x 0.20)} x 0.275
                                                                = 0.947 \text{ Cum}.
                                                                 = 0.748 Cum.
                              13 x 1.15 x 0.20 x 0.25
                    Tie Beam (2 \times 10.00) + (3 \times 5.00) = 35.00 \text{ Rm}.
                                                                = 2.625 Cum.
                               35.00 \times 0.30 \times 0.25
                    Less Column: 13 \times 0.30 \times 0.25 \times 0.20 = (-) 0.195 \text{ Cum}.
                                                            Total = 5.061 Cum.
                                                       @Rs.4734.15/Cum.....Rs.23,960.00
                      (b) In Super-structure from plinth level
                          up to 1st floor level.
                      (ii) Columns, pillars, posts, struts etc.
                         including preparing the top surface and
                         finishing of nosing.
                                                                                             CONTD. Rs.94,718.00
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(a)M-15 or Prop.1:2:4.
                    Column: 1 \times 13 \times 3.00 \times 0.20 \times 0.15 = 1.170 \text{ Cum}.
                    Lintel: (2 \times 10.00) + (3 \times 5.00) = 35.00 \text{ Rm}.
                             35.00 \times 0.15 \times 0.10
                                                    =0.525 Cum
                    Less Column:
                       13 \times 0.20 \times 0.15 \times 0.10 = (-) 0.039 Cum
                    Top Lintel: (2 \times 10.00) + (3 \times 5.00) = 35.00 \text{ Rm}.
                             35.00 \times 0.10 \times 0.10 = 0.350 \text{ Cum}
                    Less Column:
                       13 \times 0.20 \times 0.10 \times 0.10 = (-) 0.026 \text{ Cum}
                                               Total = 1.980 Cum
                                                  @Rs 4929.24/Cum.....Rs.9,760.00
Item No.7/4.1.4: Brick work in cement mortar with 1st class brick
                   including racking out joints, and dewatering if
                   necessary and curing complete as directed in
                   sub-structure up to plinth level.
                  (b) In prop.1:4.
                   Wall above Tie Beam:
                    (2 \times 10.00) + (2 \times 5.00) = 30.00 \text{ Rm}.
                      1 \times 30.00 \times 0.60 \times 0.224 = 4.032 Cum
                Less Column:
                   13 \times 0.60 \times 0.20 \times 0.224 = (-) 0.349 \text{ Cum}.
                                          Total = 3.683 Cum.
                                            @Rs.4,632.29/Cum......Rs.17,061.00
Item No.8/1.3. : Earth/ sand filling in plinth in layers not more than
                   150mm thick including necessary carriage, watering,
                   ramming etc. complete as directed and specified
                   including payment of land compensation, forest
                   royalty, sales tax and other duties and taxes as may
                   be necessary.
                  © With silt (predominantly non-plastic) by truck carriage
                      including loading and unloading.
                     Floor: 1 \times 9.75 \times 4.75 \times 0.60 = 27.79 \text{ Sqm}.
                                              @Rs.322.75/Cum.....Rs.8,969.00.
Item No.9/4.1.8:75mm thick 1st class brick nogged wall in cement mortar
                    including racking out joints, and curing complete as directed
                    in super-structure above plinth level up to 1st floor level
                   (Protruding rod) Tor steel of column to be embedded in
                   cement mortar and will be measured and paid separately).
                    (a)In prop.1:4.
                    Wall over Lintel & below top Lintel.
                    (2 \times 10.00) + (3 \times 5.00) = 35.00 \text{ Rm}.
                                        1 \times 35.00 \times 0.55 = 19.25 \text{ Sqm}.
                 G. Wall: 2 \times 2 \times 2.50 \times \frac{1}{2}(0.90+0.10) = 5.00 \text{ Sqm}.
             Less (i) Column: 13 \times 0.55 \times 0.20 = (-) 1.43 \text{ Sqm}
                                                   Total = 22.82 Sqm.
                                                     @Rs.357.54/Sqm.....Rs. 8,159.00
                                                                                                CO. Rs.1,38,667.00
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Item No.10/18.3.2: Providing welding, fitting, fixing, hoisting and
                   fixing of roof trusses with purlin, bottom runner
                   etc. fabricated out of a combination of two or all
                   of the following sections: (i) square hollow sections
                   (SHS/RHS) (ii) rectangular hollow section and
                   (iii) M.S. black tubes conforming to relevant I.S.
                   code 1161-1968 as per approved design and drawing
                   including M.S. cleats, base plate, bolts and nuts which
                   ever required, including that required for fixing the
                   ceiling and one coat of red oxide Zinc Chromate primer
                   to all steel surface etc. complete as directed as per specifications.
                    50mm M.S. Tube.
                    King Post: 1 \times 5 \times 1.00 = 5.00 \text{ Rm}.
                    Queen Post: 2 \times 5 \times 0.60 = 6.00 \text{ Rm}.
                              2 \times 5 \times 1.10 = 11.00 \text{ Rm}.
                    Strut
                              1 \times 5 \times 0.60 = 3.00 \text{ Rm.}
: 2 \times 5 \times 5.20 = 52.00 \text{ Rm.}
                    D/Tie
                    Rafter : 2 \times 5 \times 3.30 = 33.00 \text{ Rm}.
                                         Total = 110.00 \text{ Rm}.
                                              @3.87 Kg./Rm....= 425.70 Kg.
                    Purlin 40mm dia Tube:
                            2 x 5 x 11.40 = 114.00 Rm.
                                      @2.87 Kg./Rm....= 327.18 Kg.
                    M.S.base plate :2 \times 10 \times 3.00 Kg. = 60.00 Kg.
                                                                Total = 812.88 \text{ Kg}.
                                                                    Say 8.13 Qtls.
                                            @Rs.7,126.00/Qtl......Rs.57,934.00
  Item No.11/8.1.2: Providing corrugated galvd. Iron sheet roofing of
                    TATA SHAKTEE/SAIL, including fitting and fixing
                    necessary galvd. J or L hooks, bolts and nuts 8mm dia
                    with bitumen washer 25mm dia x 3mm thick and 1.6mm
                    thick limpet washer complete excluding cost of roof truss,
                    purlins etc. (Roof trusses and purlin etc. to be measured
                    and paid separately).
                     (e) 0.63mm thick.
                        2 \times 11.50 \times 3.35 = 77.05 \text{ Sqm}.
                                      Item No.12/8.1.4: Providing galvd. Iron ridging of TATA SHAKTEE/SAIL
                      including supplying and fixing necessary galvd. Screw/
                      washers etc. complete as directed.
                     (e) 0.63mm thick (ii) 230mm lapping.
                       1 \times 11.50 = 11.50 \text{ Rm}.
                                         @Rs.148.88/Rm......Rs. 1,712.0
                                                                                       CON. Rs.2,31,066.0
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Item No.13/6.2.1: 10mm thick cement plaster in single coat on fair/rough
                  side of walls for interior plastering up to 1st floor level
                  including arises etc. including curing complete as directed.
                  (b) In prop.1:4.
                  Plinth wall: 2 \times 10.25 = 20.50 \text{ Rm}.
                               2 \times 5.25 = 10.50 \text{ Rm}.
                                  Total = 31.00 \text{ Rm. } \times 0.50 = 15.50 \text{ Sqm}
                   Column: 1 \times 13 \times (0.20+0.15) \times 2 \times 2.20 = 20.02 \text{ Sqm}.
                   Wall over Lintel & below top Lintel.
                   (2 \times 10.00) + (3 \times 5.00) = 35.00 \text{ Rm}.
                                    1 x 2 x 35.00 x 0.80
                                                           = 56.00 \text{ Sqm}.
                                                         = 10.00 \text{ Sqm}.
                G. Wall: 2 x 2 x 2 x 2.50x ½(0.90+0.10)
                                                     Total = 101.52 \text{ Sqm}.
                                             Item No.14/5.1.4 : 65mm thick cement concrete floor consisting of 50mm
                    under layer of cement in prop.1:3:6 and 15mm thick
                    wearing layer in cement concrete in prop.1:1:2 etc.
                    including curing etc. complete as directed.
                  Floor: 1 \times 10.00 \times 5.00 = 50.00 \text{ Sqm}
                                       @Rs.449.48/Sqm......Rs.22,474..0
  Item No.15/9.4.1: Providing barge board of size 200mm x 20mm
                     with 1st class local Hollock/ Bonsum timber
                    including fitting and fixing with necessary
                     wood screws etc. complete
                     1 \times (2 \times 11.40) + (2 \times 2 \times 3.30) = 36.00 \text{ Rm}.
                                                   Item No. 16 / 7.1.5 : Providing single layer bamboo mat ceiling with lattice
                    pattern jaffri or mesh size 40mm x 40mm made out of
                    bamboo slips of size 5mm x 2mm size at bottom stiffened
                    with bamboo slip of 25mm x 5mm size (Ceiling joist to
                    be measured and paid separately).
                   Ceiling: 1 \times 9.80 \times 4.80 = 47.04 \text{ Sqm}
                                        Item No.17/13.2.2 (f): Distempering with dry distemper of approved brand
                        and manufacture (Two coats) and required shade on
                        new wall surface to give an even shade over and
                         including a priming coat of white primer after
                         thoroughly brushing the surface including preparing
                         surface even and sand papered smooth.
                      Plinth wall: 2 \times 10.25 = 20.50 \text{ Rm}.
                                  2 \times 5.25 = 10.50 \text{ Rm}.
                                      Total = 31.00 \text{ Rm. } \times 0.50 = 15.50 \text{ Sqm}
                      Column: 1 x 13 x (0.20+0.15) x 2 x 2.20 = 20.02 Sqm.
                       Wall over Lintel & below top Lintel.
                      (2 \times 10.00) + (3 \times 5.00) = 35.00 \text{ Rm}.
                                        1 \times 2 \times 35.00 \times 0.80 = 56.00 \text{ Sqm}.
                   G. Wall: 2 \times 2 \times 2 \times 2 \times 2.50 \times \frac{1}{2}(0.90 + \underline{0.10}) = 10.00 \text{ Sqm}.
                                                        Total = 101.52 \text{ Sqm}.
                                                CON. Rs.2,82,801
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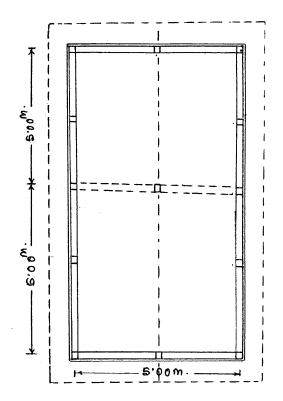
B.F. Rs.2,82,801.00

Item No.18/14..3.3.: Applying two coats of wood preservative on wood and wood based surfaces including preparing the surface by thoroughly cleaning oil, grease dirt and other foreign matter, sand papering and knotting. (a) With kiricide oil.

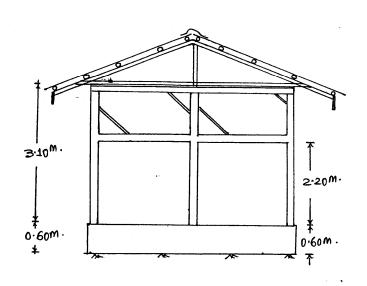
Ceiling: $1 \times 2 \times 9.80 \times 4.80 = 94.08 \text{ Sqm}$ @Rs.19.72/Sqm......Rs. 1,855.00

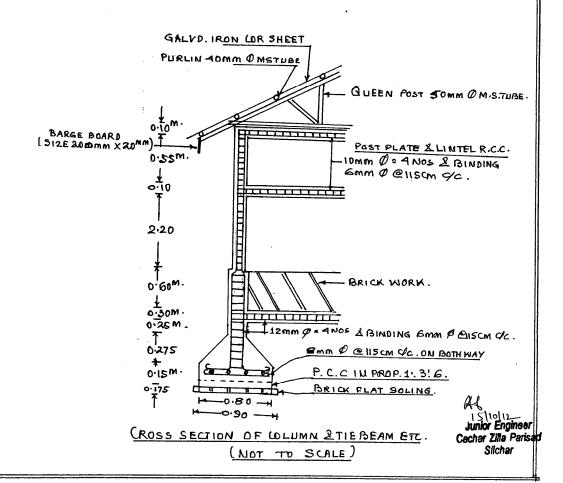
Total = Rs.2,84,656.00Say Rs.2,84,700.00 (Rupees Two Lakhs Eighty four thousand & Seven hundred) only.

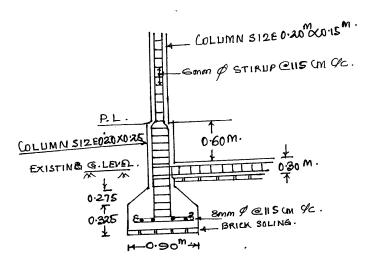
one of work: Construction of Magnet shed in various places of Cachaz District under Cachaz Zilla Parishad, Silchaz under T. F.C. Scheme for 2012-13.



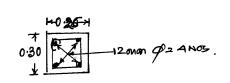
PLAN SCALE: 1CM = 1.00M.



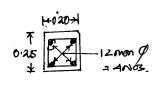




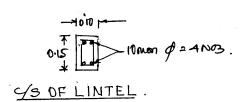
CROSS-SECTION OF COLUMN.



9'S OF TIE BEAM.



45 OF COLUMN.



Junior Engineer Cachar Zilla Parisad Sächer

ESTIMATE

Name of work: Construction of Market Shed in various places of Cachar District under Cachar Zilla Parishad, Silchar under T.F.C. Scheme for the year 2012-13. Item of work: As per Schedule of rates for P.W.D. Building (Civil works) for all Divisions under Assa P.W.D. 2010-11 which is current in the State of Assam. Item No.1/1.1: Earth work in excavation for foundation trenches of walls, retaining walls, footings of column, steps, septic tank etc. including refilling (return filling) etc. removal of surplus earth with all leads and lift as directed and specified etc. including bailing out water where necessary as directed and specified. (A) Up to a depth of 2.00M. below the existing ground level. (a) In ordinary soil. Column : $1 \times 21 \times 0.90 \times 0.60 \times 0.90 = 10.206$ Cum. @Rs.64.67/Cum......Rs. 660.00 Item No.2/4.1.1: Providing brick soling in foundation and under floor with stone/ best quality picked jhama brick, sand packed and laid to level and panel after preparing the sub-grade as directed including all labour and materials and if necessary dewatering, complete. (a)Brick on flat soling. Column : $1 \times 21 \times 0.90 \times 0.60 = 11.34 \text{ Sqm}$. Tie Beam / Floor: $1 \times 20.00 \times 5.00 = 100.00 \text{ Sqm}.$ Total = 111.34 Sqm. @Rs.286.37/Sqm......Rs.31,884.0 Item No.3/2.1.1: Plain cement concrete works with coarse aggregate of sizes 13mm to 32mm in foundation bed for footing steps, walls, bricks works etc. as directed and specified including dewatering if

necessary and curing complete (Shuttering where necessary shall be measured and paid separately).

Column: $1 \times 21 \times 0.90 \times 0.60 \times 0.10 = 1.134$ Cum.

(b)In prop.1:4:8.

CONTD. Rs.36,397

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Item No.4/18.1.1: Supplying, fitting and fixing in position
                    reinforcement bars conforming to relevant
                    I.S. Code for R.C.C. work/ R.B. walling
                    including straightening, cleaning, cutting etc
                    supports, chairs, spacers etc. complete.
                    (up to 1<sup>st</sup> floor level).
                    (b) ISI approved super ductile TMT
                    (i) TATA/ SAIL.
                    Column footing: 8mm dia on both way.
                      1 \times 21 \times 8 \times 0.65 = 109.20 \text{ Rm}.
                      1 \times 21 \times 6 \times 0.95 = 119.70 \text{ Rm}.
                                  Total = 228.90 Rm.
                                     @0.39 Kg./Rm.... = 89.271 Kg.
                    Tie Beam 12mm dia for all around.
                     Tie Beam: (2 \times 20.00) + (3 \times 5.00) = 55.00 Rm.
                            4 x 55.00
                                          = 220.00 \text{ Rm}.
                      Column: 12mm dia = 4 Nos.
                           21 \times 4 \times 5.\underline{00} = 420.00 \text{ Rm}.
                                     \overline{\text{Total} = 640.00 \text{ Rm}}.
                                     @0.89 Kg./Rm.... = 569.60 Kg.
                      Lintel 10mm dia for all around.
                        (2 \times 20.00) + (3 \times 5.00) = 55.00 \text{ Rm}.
                             1 \times 4 \times 55.00 = 220.00 \text{ Sqm}.
                                     @0.62 Kg./Rm..... = 136.40 Kg.
                      Lintel 10mm dia for top Lintel.
                        (2 \times 20.00) + (3 \times 5.00) = 55.00 \text{ Rm}.
                              1 \times 4 \times 55.00 = 220.00 \text{ Sqm}.
                                      @0.62 Kg./Rm..... . = 136.40 Kg.
                                                                 Total = 931.671 Kg.
                                                                   Say 9.32 Qtls.
                                                               @Rs.5290.41/Qtl......Rs.49,307
                        © ISI approved M.S Rod.
                          6mm dia <u>rod.@115cm</u> c/c
                     (i)Column : 1 \times 21 \times 41 \times 0.75 = 645.75 \text{ Rm}
                     (ii) Tie Beam : 1 \times 478 \times 0.75 = 358.50 \text{ Rm}.
                     (iii) Lintel: 1 \times 478 \times 0.55 = 262.90 \text{ Rm}.
                                       1 \times 478 \times 0.40 = 191.20 \text{ Rm}.
                                                    Total = 1458.35 \text{ Rm}.
                                                  @0.22Kg./Rm.... = 320.84 Kg.
                                                                              Say 3.21 Qtls.
                                                           @Rs.5241.78/Qtl......Rs.16,8
    Item No.5/3.1.1: Providing form work of ordinary timber planking
                        so as to give a rough finish including centering,
                        shuttering etc. of the same for in-situ reinforced
                        concrete and plain concrete work in:
                        3.1.1.1: Foundation, footings, bases of columns,
                         pile cap, raft and mass concrete works etc.
                                                                                                    CONTD.Rs.1,02
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(ii) Using 25mm thick plank
                     Column footings:
                    8 x 2 x 0.80 x 0.20
                                                    = 2.56 \text{ Sqm}.
                    8 x 2 x 0.70 x 0.20
                                                    = 2.24 \text{ Sqm}.
                    8 \times 2 \times \frac{1}{2}(0.80 + 0.20) \times 0.35 = 2.80 \text{ Sqm}.
                    8 \times 2 \times \frac{1}{2}(0.70 + 0.25) \times 0.35 = 2.66Sqm.
                                              Total = 10.26 \text{ Sqm}
                                                   @Rs.140.84/Sqm......Rs. 1,445.
                     3.1.1.2 : Sides of tie beams, plinth beams,
                        grade beams etc .at or below plinth level.
                         (ii) Using 25mm thick.
                        (2 \times 20.00) + (3 \times 5.00) = 55.00 \text{ Rm}.
                       Tie Beam = 2 \times 55.00 \times 0.30 = 33.00 \text{ Sgm}.
                                                        @Rs.191.27/Sqm......Rs. 6,312.0
                       3.1.1.3 : Columns, pillars, post & strut.
                       (a) Square, Rectangular, polygonal in plane
                           vertical face. (i) Using 25mm thick.
                          Lintel = (2 \times 20.00) + (3 \times 5.00) = 55.00 \text{ Rm}.
                                2 \times 55.00 \times 0.20 = 22.00 \text{ Sgm}.
                          Column up to P.L:
                         1 \times 21 \times 2 \times 3.00 \times 0.20 = 25.20 \text{ Sqm}.
                         1 \times 21 \times 2 \times 3.00 \times 0.15 = 18.90 \text{ Sgm}
                                             Total = 66.10 \text{ Sqm}
                                                       @Rs.213.73/Sqm......Rs.14,128.0
Item No.6/2.2.1:Providing and laying plain/reinforcement cement
                   concrete works in prop.1:2:4 including dewatering
                  if necessary and curing complete etc. for reinforcement
                  cement concrete work (Form work and reinforcement
                  will be measured and paid separately).
                 (I) Using mixture machine.
                 (a) In sub-structure upto plinth level.
                   Foundation, footing columns, with base tie and
                   plinth beam etc.other works not less than 100mm
                   thick up to P.L.
                   (a) M-15 or Prop.1:2:4.
                   Column: 21 x 0.80 x 0.60 x 0.15
                                                                 = 1.512 Cum.
                    21 \times \frac{1}{2} \{ (0.80 \times 0.60) + (0.25 \times 0.20) \} \times 0.275 = 1.530 \text{ Cum}.
                             21 x 1.15 x 0.20 x 0.25
                                                                 = 1.208 Cum.
                   Tie Beam (2 \times 20.00) + (3 \times 5.00) = 55.00 \text{ Rm}.
                              55.00 x 0.30 x 0.25
                                                                = 4.125 \text{ Cum}.
                   Less Column: 21 \times 0.30 \times 0.25 \times 0.20 = (-) 0.315 \text{ Cum}.
                                                           Total = 8.060 Cum.
                                                       @Rs.4734.15/Cum.....Rs.38,157.0
                    (b) In Super-structure from plinth level
                         up to 1st floor level.
                     (ii) Columns, pillars, posts, struts etc.
                        including preparing the top surface and
                        finishing of nosing.
                                                                                            CONTD. Rs.1,62,572.0
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B.F. Rs.1,62,572.0
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(a)M-15 or Prop.1:2:4.
                    Column : 1 \times 21 \times 3.00 \times 0.20 \times 0.15 = 1.890 \text{ Cum}.
                    Lintel: (2 \times 20.00) + (3 \times 5.00) = 55.00 \text{ Rm}.
                             55.00 x 0.15 x 0.10 =0.825 Cum
                    Less Column:
                      21 \times 0.20 \times 0.15 \times 0.10 = (-) 0.063 \text{ Cum}
                    Top Lintel: (2 \times 20.00) + (3 \times 5.00) = 55.00 \text{ Rm}.
                             55.00 \times 0.10 \times 0.10 = 0.550 \text{ Cum}
                    Less Column:
                      21 \times 0.20 \times 0.10 \times 0.10 = (-) 0.042 \text{ Cum}
                                              Total = 3.160 Cum
                                                 @Rs.4929.24/Cum......Rs.15,576.00
Item No.7/4.1.4: Brick work in cement mortar with 1<sup>st</sup> class brick
                  including racking out joints, and dewatering if
                  necessary and curing complete as directed in
                  sub-structure up to plinth level.
                  (b) In prop.1:4.
                  Wall above Tie Beam:
                    (2 \times 20.00) + (2 \times 5.00) = 50.00 \text{ Rm}.
                     1 \times 50.00 \times 0.60 \times 0.224 = 6.720 \text{ Cum}
                Less Column:
                  21 \times 0.60 \times 0.20 \times 0.224 = (-) 0.564 Cum.
                                         Total = 6.156 Cum.
                                           Item No.8/1.3. : Earth/ sand filling in plinth in layers not more than
                  150mm thick including necessary carriage, watering,
                  ramming etc. complete as directed and specified
                  including payment of land compensation, forest
                  royalty, sales tax and other duties and taxes as may
                 be necessary.
                 © With silt (predominantly non-plastic) by truck carriage
                    including loading and unloading.
                    Floor: 1 \times 19.75 \times 4.75 \times 0.60 = 56.288 \text{ Sgm}.
                                            Item No.9/4.1.8:75mm thick 1st class brick nogged wall in cement mortar
                  including racking out joints, and curing complete as directed
                  in super-structure above plinth level up to 1st floor level
                  (Protruding rod/ Tor steel of column to be embedded in
                 cement mortar and will be measured and paid separately).
                  (a)In prop. 1:4.
                  Wall over Lintel & below top Lintel.
                  (2 \times 20.00) + (3 \times 5.00) = 55.00 \text{ Rm}.
                                      1 \times 55.00 \times 0.55 = 30.25 \text{ Sqm}.
               G. Wall: 2 \times 2 \times 2.50 \times \frac{1}{2}(0.90+0.10) = 5.00 \text{ Sgm}.
           Less (i) Column:
                                  21 \times 0.55 \times 0.20 = (-) 2.31 \text{ Sqm}
                                                 Total = 32.94 Sqm.
                                                  @Rs.357.54/Sqm......Rs. 11,777.
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CO. Rs.2,36,608.0

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fixing of roof trusses with purlin, bottom runner
                    etc. fabricated out of a combination of two or all
                   of the following sections: (i) square hollow sections
                   (SHS/RHS) (ii) rectangular hollow section and
                   (iii) M.S. black tubes conforming to relevant I.S.
                   code 1161-1968 as per approved design and drawing
                   including M.S. cleats, base plate, bolts and nuts which
                   ever required, including that required for fixing the
                   ceiling and one coat of red oxide Zinc Chromate primer
                   to all steel surface etc. complete as directed as per specifications.
                   50mm M.S. Tube.
                   King Post: 1 \times 10 \times 1.00 = 10.00 \text{ Rm}.
                   Queen Post: 2 \times 10 \times 0.60 = 12.00 \text{ Rm}.
                              2 \times 10 \times 1.10 = 22.00 \text{ Rm}.
                   Strut
                                  1 \times 10 \times 0.60 = 6.00 \text{ Rm}.
                              : 2 \times 10 \times 5.20 = 104.00 \text{ Rm}.
                   D/Tie
                              : 2 \times 10 \times 3.30 = 66.00 \text{ Rm}.
                   Rafter
                                         Total = 220.00 \text{ Rm}.
                                             @3.87 Kg./Rm....= 851.40 Kg.
                   Purlin 40mm dia Tube:
                           2 \times 5 \times 21.40 = 214.00 \text{ Rm}.
                                      @2.87 Kg./Rm....= 614.18 Kg.
                   M.S.base plate : 2 \times 10 \times 3.00 \text{ Kg}. = 60.00 \text{ Kg}.
                                                               Total = 1525.58 \text{ Kg}.
                                                                   Say 15.26 Otls.
                                            @Rs.7,126.00/Qtl......Rs.1,08,743.0
Item No.11/8.1.2: Providing corrugated galvd. Iron sheet roofing of
                  TATA SHAKTEE/SAIL, including fitting and fixing
                  necessary galvd. J or L hooks, bolts and nuts 8mm dia
                  with bitumen washer 25mm dia x 3mm thick and 1.6mm
                  thick limpet washer complete excluding cost of roof truss,
                  purlins etc. (Roof trusses and purlin etc. to be measured
                  and paid separately).
                   (e) 0.63mm thick.
                      2 \times 21.50 \times 3.35 = 144.05 \text{ Sgm}.
                                     @Rs. 425.09/Sqm......Rs.61,234.0
Item No.12/8.1.4: Providing galvd. Iron ridging of TATA SHAKTEE/SAIL
                   including supplying and fixing necessary galvd. Screw/
                   washers etc. complete as directed.
                  (e) 0.63mm thick (ii) 230mm lapping.
                     1 \times 21.50 = 21.50 \text{ Rm.}
                                       @Rs.148.88/Rm......Rs. 3,201.0
                                                                                      CON. Rs.4,09,786.0
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Item No.10/18.3.2: Providing welding, fitting, fixing, hoisting and

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Item No.13/6 2.1: 10mm thick cement plaster in single coat on fair/rough
                     side of walls for interior plastering up to 1st floor level
                     including arises etc. including curing complete as directed.
                     (b) In prop.1:4.
                     Plinth wall: 2 \times 20.25 = 40.50 \text{ Rm}.
                                  2 \times 5.25 = 10.50 \text{ Rm}.
                                      Total = 51.00 \text{ Rm. } \times 0.50 = 25.50 \text{ Sgm}
                     Column: 1 \times 21 \times (0.20+0.15) \times 2 \times 2.20 = 32.34 \text{ Sqm}.
                      Wall over Lintel & below top Lintel.
                     (2 \times 20.00) + (3 \times 5.00) = 55.00 \text{ Rm}.
                 \begin{array}{rcl}
1 \times 2 \times 55.00 \times 0.80 & = 88.00 \text{ Sqm.} \\
\text{G. Wall} : 2 \times 2 \times 2 \times 2.50 \times \frac{1}{2}(0.90 + 0.10) & = 10.00 \text{ Sqm.}
\end{array}
                                                          Total = 155.84 Sqm.
                                                  @Rs.88.60/Sqm......Rs. 13,807.
Item No.14/5.1.4 : 65mm thick cement concrete floor consisting of 50mm
                     under layer of cement in prop.1:3:6 and 15mm thick
                     wearing layer in cement concrete in prop.1:1:2 etc.
                     including curing etc. complete as directed.
                   Floor: 1 \times 20.00 \times 5.00 = 100.00 \text{ Sqm}
                                          @Rs.449.48/Sqm......Rs.44,948.(
Item No.15/9.4.1: Providing barge board of size 200mm x 20mm
                     with 1st class local Hollock/ Bonsum timber
                     including fitting and fixing with necessary
                     wood screws etc. complete
                     1 \times (2 \times 21.40) + (2 \times 2 \times 3.30) = 56.00 \text{ Rm}.
                                                      @Rs.224.81/Rm......Rs. 12,589
Item No. 16 / 7.1.5 : Providing single layer bamboo mat ceiling with lattice
                   pattern jaffri or mesh size 40mm x 40mm made out of
                   bamboo slips of size 5mm x 2mm size at bottom stiffened
                   with bamboo slip of 25mm x 5mm size (Ceiling joist to
                   be measured and paid separately).
                  Ceiling: 1x 19.80 x 4.80 = 95.04 Sqm

@Rs,124.06/Sqm......Rs. 11,791.
Item No.17/13.2.2 (f): Distempering with dry distemper of approved brand
                        and manufacture (Two coats) and required shade on
                        new wall surface to give an even shade over and
                        including a priming coat of white primer after
                        thoroughly brushing the surface including preparing
                        surface even and sand papered smooth.
                    Plinth wall: 2 \times 20.25 = 40.50 \text{ Rm}.

2 \times 5.25 = 10.50 \text{ Rm}.
                                     Total = 51.00 \text{ Rm. } \times 0.50 = 25.50 \text{ Sqm}
                    Column: 1 \times 21 \times (0.20+0.15) \times 2 \times 2.20 = 32.34 \text{ Sqm}.
                     Wall over Lintel & below top Lintel.
                    (2 \times 20.00) + (3 \times 5.00) = 55.00 \text{ Rm}.
                                       1 \times 2 \times 55.00 \times 0.80 = 88.00 \text{ Sqm}.
                G. Wall: 2 x 2 x 2 x 2.50x ½(0.90+<u>0.10</u>)
                                                                = 10.00 \text{ Sqm}.
                                                         Total = 155.84 Sqm.
                                               @Rs.62.42/Sqm......Rs. 9,728.00
                                                                                                 CON. Rs.5,02,649.00
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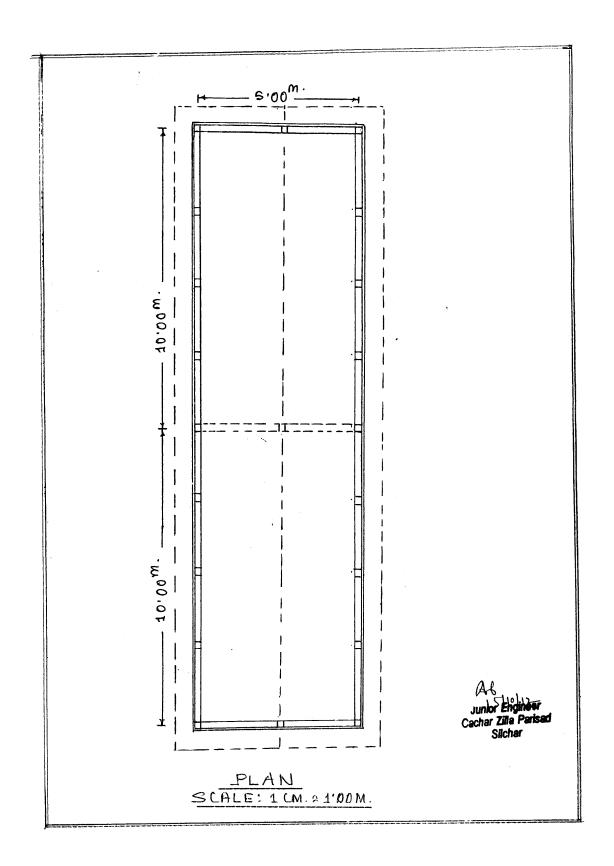
Item No.18/14..3.3.: Applying two coats of wood preservative on wood and wood based surfaces including preparing the surface by thoroughly cleaning oil, grease dirt and other foreign matter, sand papering and knotting.

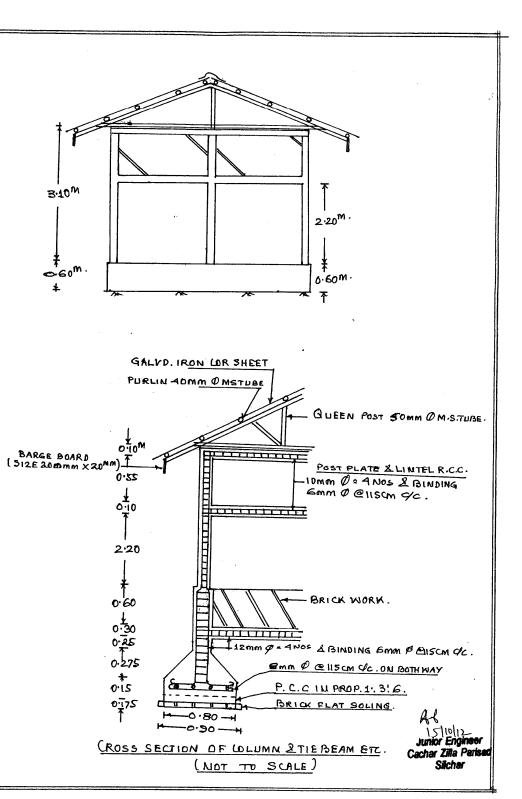
(a) With kiricide oil.

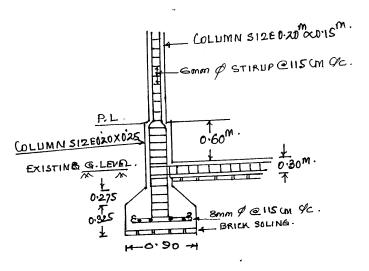
Ceiling: $1 \times 2 \times 19.80 \times 4.80 = 190.08 \text{ Sqm}$

@Rs.19.72/Sqm......Rs. 3,748.00

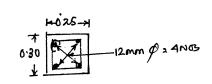
Total = Rs.5,06,397.0 Say Rs.5,06,400.0 (Rupees Five Lakhs Six thousan & Four hundred) only







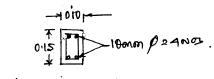
CROSS-SECTION OF COLUMN.



0.25 ± 12mon 9 = 4Noz

9'S OF TIE BEAM.

98 OF COLUMN.



Junior Engineer Cachar Zilla Parisad Süchar

45 OF LINTEL.

ESTIMATE

Name of work: Construction of Market Shed in various places of Cachar District under Cachar Zilla Parishad, Silchar under T.F.C. Scheme for the year 2012-13.

Item of work: As per Schedule of rates for P.W.D. Building (Civil works) for all Divisions under Assa P.W.D. 2010-11 which is current in the State of Assam.

Item No.1/30.1: Construction of sub-grade and earthen shoulders with approved materials obtained from borrow pits with all lifts & leads, transporting to site, spreading grading to required slope and compacting to meet requirement of table 300-2 (including compensation of earth) (including cost of testing of materials at site and laboratory as directed by the Deptt.)

(a) From Private land.

1 x 2 x 2 x 8.85 x 2.50 x 0.20 = 17.70 Cum. 1 x 2 x 11.85 x 2.50 x 0.20 = 11.85 Cum. 2 x 21.85 x 2.50 <u>x 0.20 = 21.85 Cum</u>. Total = 51.40 Cum.

@Rs.201.00/Cum......Rs. 10,331.

Item No.2/4.1.1: Providing brick soling in foundation and under floor with stone/ best quality picked jhama brick, sand packed and laid to level and panel after preparing the sub-grade as directed including all labour and materials and if necessary dewatering, complete.

(a)Brick on flat soling.

 $1 \times 2 \times 2 \times 8.85 \times 2.50 = 88.50 \text{ Sqm.}$ $1 \times 2 \times 11.85 \times 2.50 = 59.25 \text{ Sqm.}$ $2 \times 21.85 \times 2.50 = 109.25 \text{ Sqm.}$ Total = 257.00 Sqm

@Rs.286.37/Sqm......Rs.73,597.00

Item No.3/2.1.1: Plain cement concrete works with coarse aggregate of sizes 13mm to 32mm in foundation bed for footing steps, walls, bricks works etc. as directed and specified including dewatering if necessary and curing complete (Shuttering where necessary shall be measured and paid separately).

(a)In prop.1:3:6

CON. Rs.83,928.00

Item No.31/19.2 : Providing plinth protection with bricks flat laid in cement mortar 1:4 and finished with 15mm thick cement plaster in prop.1:2 with a floating coat of neat cement finish. $1 \times (2 \times 3 \times 21.00) + (2 \times 3 \times 5.25) + (2 \times 2 \times 11.25) + (2 \times 2 \times 5.25) \times 0.50 = 111.75 \text{ Sqm}.$

@Rs.458.06/Sqm......Rs. 51,188.0

Item No.32/19.4: Providing drain with cement concrete (1:3:6) 10cm thick sides 10cm thick bed over brick flat soling including 15mm thick cement slurry as directed with necessary etc. refilling the sides after completion of work etc. as specified.

(i) 300mm wide and average 150mm deep with bed slope 1 in 150 with initial depth of 100mm.

1 x (2 x 3 x 21.00) + (1 x 3.00) + (2 x 2 x 11.25) + (2 x 2 x 5.25) = 195.00 Rm.

@Rs.669.98/Rm......Rs. 1,30,646.0

Total = Rs.3,61,754.0
Say Rs.3,61,800.0
(Rupees Three Lakhs Sixty one thousar & Eight hundred) only

