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Technical Report

Name of Work:- Model estimate for Onion storage (50 Ton capacity) godown at BAU, Sabour, Bhagalpur.

Estimated Cost:-Rs. 6,00,000.00

Report

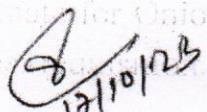
An estimate amounting to Rs **6,00,000.00** has been prepared for Model estimate for Onion storage (50 Ton capacity) godown at BAU, Sabour, Bhagalpur as per requisition. Which is available on page 1/c.

The estimate contains earth work, local sand filling, B/F/S, P.C.C (1:4:8), R.C.C (1:1.5:3), centering and shuttering, 12 mm C.P, reinforcement, steel work, corrugated sheet, ridges and hips, wind ties, M.S grill, Bamboo etc.

The rate of the estimate is based on Current S.O.R Govt. of Bihar (BCD) effective from 01.01.2022.

Therefore A/A as well as T/S amounting to Rs. **6,00,000.00** only may kindly be obtained.

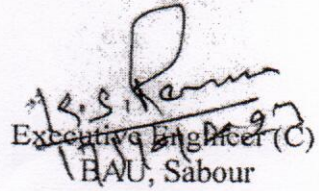
NO. 1386
7/10/2023


17/10/23

Junior Engineer (C)
BAU, Sabour


17/10/2023

Assistant Engineer (C)
BAU, Sabour


17/10/2023

Executive Engineer (C)
BAU, Sabour

1263

ABSTRACT OF COST

**Name of work:-Model estimate for Onion storage (50 Ton capacity) godown at
BAU, Sabour, Bhagalpur.**

Sl. No	Clause No.	Description	Unit	Qty.	Rate	Amount
1	2.8.1	Earth work in excavation in foundation trenches or drains(not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m . including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All Kinds of soil	m3	14.580	360.70	5259.01
2	2.28	Supplying and Filling in plinth with local sand and under floors including, watering, ramming consolidating and dressing complete.	m3	1.620	287.30	465.43
3	11.72	Providing designation 100 A one brick flat soling joints filled with local sand including cost of watering, taxes, royalty all complete as per building specification and direction of E/I,	m2	16.200	283.30	4589.46
4	4.1.8	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level. 1.4.8 (1 Cement :4 coarse sand :8 graded stone agregate 40 mm nominal size)	m3	1.620	2975.20	4819.82
5	5.1.2	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring,shuttering,finishing and reinforcement-All work puto plinth level 1:1:5:3(1 cement: 1.5 coarse sand:3 graded stone aggregate 20 mm nominal size)	m3	8.280	4688.30	38819.12
6	5.9.1	Centring and shuttering including strutting, propping etc. and removal of form for. Foundations, footings, bases of columns etc. for mass concrete	m2	49.300	211.60	10431.88
7	13.11.4	12 mm cement plaster of mix: 1:6(1 cement: 6 coarse sand)	m2	19.250	141.50	2723.88
8	5.22	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.				0.00
i	5.22.7A	Thermo-Mechanically Treated bars TMTC-500-8mm dia	Kg	80.580	94.50	7614.81
ii	5.22.7C	Thermo-Mechanically Treated bars TMTC-500-12mm dia	Kg	420.080	90.80	38143.26
9	10.16.1	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete Hot finished welded type tubes	Kg	1815.899	123.90	224989.89

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10	12.10.2	Providing asbestos cement 6 mm thick corrugated sheets roofing and fixing with G.I. J or L hooks bolts and nuts 8 mm dia G. I. plain and bitumen washers complete excluding the cost of purlins, rafters and trusses corrugated sheet. above 60 degree pitch	m2	133.300	383.10	51067.23
11	12.14.1	Providing and fixing ridges and hips in asbestos cement sheet roofing One piece plain angular ridges Consider a shed of 20x 10 m (external dimensions at plinth)	m	15.500	242.40	3757.20
12	12.13	Extra for providing and fixing wind ties of 40x6mm flat iron section.	m	124.000	147.80	18327.20
13		Carriage of materials as per specification and direction of E/I				0.00
i		Brick (Lead-1k+2p=8 Km	thou.	0.522	1235.30	644.83
ii		Coarse Sand (Lead-60 Km from Banka)	m3	4.579	1437.00	6580.02
iii		Stone Chips (Lead-58 Km from mirzachowki)	m3	8.630	1396.40	12050.93
iv		Local sand (Lead-1K+2P=3 Km)	m3	1.620	310.50	503.01
14		Add difference cost of materials as per specification and direction of E/I				0.00
i		Bricks	thou.	0.522	356.04	185.85
ii		Cement	MT	3.720	652.74	2428.19
15	9.110	Providing and fixing Bamboo jaffery/ fencing consisting of superior quality 25 mm dia (Average) half cut bamboo placed vertically and fixed together with three numbers horizontal running members of hallock wood in scantling of section 50X25 mm, fixed with nails and G.I wire on existing support, complete as per direction of Engineer-in-Charge	m2	227.520	491.20	111757.82
16	9.48.1	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete Fixed to steel windows by welding	Kg	101.682	144.50	14693.05
Total Rs.						559851.90
Less Contractor Profit 10%						55985.19
Total Rs.						503866.71
GST @ 5.36%						27007.26
Electrical work @ 7.5%						37790.00
Over head charge @5%						25193.34
Grand Total Rs.						593857.30
Add miscleaneous cost including cost of signboard, photography & contengency etc. complete						5000.00
Grand Total Rs.						598857.30
Say Rs.						600000.00

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12/10/23
Junior Engineer (C)
BAU, Sabour

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17/10/2023
Assistant Engineer (C)
BAU, Sabour

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14.8.2023
Executive Engineer (C)
BAU, Sabour

Estimate

**Name of work:- Model estimate for Onion storage (50 Ton capacity) godown at
BAU, Sabour, Bhagalpur.**

Sl. No.	Clause No.	Description	Unit	Qty.
1	2.8.1	Earth work in excavation in foundation trenches or drains(not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m . including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All Kinds of soil F-20 x 0.90 x 0.90 x 0.90 =14.58 m3	m3	14.580
2	2.28	Supplying and Filling in plinth with local sand and under floors including, watering, ramming consolidating and dressing complete. F-20 x 0.90 x 0.90 x 0.10 =1.62 m3	m3	1.620
3	11.72	Providing designation 100 A one brick flat soling joints filled with local sand including cost of watering, taxes, royalty all complete as per building specification and direction of E/I, F-20x0.90 x 0.90 =16.20 m2	m2	16.200
4	4.1.8	Providing and laying in position cement concrete of specified grade exluding the cost of centring and shuttering-all work upto plinth level. 1.4:8 (1 Cement :4 coarse sand :8 graded stone agregate 40 mm nominal size) F-20 x 0.90 x 0.90 x 0.10 =1.62 m3	m3	1.620
5	5.1.2	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring,shuttering,finishing and reinforcement-All work puto plinth level 1:1:5:3(1 cement: 1.5 coarse sand:3 graded stone aggregate 20 mm nominal size) F-20 x 0.90 x 0.90 x 0.30 =4.86 m3 F-20 x 0.107 = 2.14 m3 Column-20 x 0.025 x 0.25 x 0.025 = <u>1.281 m3</u> Total =8.28 m3	m3	8.280
6	5.9.1	Centring and shuttering including strutting, propping etc. and removal of form for. Foundations, footings, bases of columns etc. for mass concrete F-P.C.C-20 x 4 x 0.90 x 0.10 = 7.20 m2 R.C.C- 20 x 4 x 0.90 x 0.30 = 21.60 m2 Column-20 x 4 x 0.25 x 1.025 = <u>20.50 m2</u> Total =49.30 m2	m2	49.300
7	13.11.4	12 mm cement plaster of mix: 1:6(1 cement: 6 coarse sand) Column-20 x 4 x 0.25 x 0.90 = 18.00 m2 Top-20 x 1 x 0.25 x 0.25 = <u>1.25 m2</u> Total=19.25 m2	m2	19.250
8	5.22	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.		
i	5.22.7A	Thermo-Mechanically Treated bars TMTC-500-8mm di Ring-20 x 0.85 x 12 =204.0 wt@0.395 =80.58	Kg	80.580

ii	55.22.7C	Thermo-Mechanically Treated bars TMTC-500-12mm dia 12 mm F-20 x 7 x 2 x 1.20 = 336.0 wt.@0.89=299.04 12 mm Column-20 x 4 x 1.70=136.0 wt@0.89 = 121.04 Total=420.08 Kg	Kg	420.080
9	10.16.1	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete Hot finished welded type tubes Bracking-2.40 x 5 x 4 x 2 =96.0 m 40x40x5 - 2.40 x 5 x 2 x 2=48.0 m 15.0 x 4 x 2 =120.0 m Total =264.0 m Wt.@3.43 kg/m=905.52 Kg Post-75 x 75 mm -20 x 3.0 =60.0 mt. Wt.@6.84 Kg =410.40 Kg Truss-40 mm dia-6.30 x 3 Nos=18.90 m 4.30 x 2 x 3 Nos =25.80 m Total =44.70 m Wt.@3.61 Kg/m=161.36 Kg 25 mm dia-3 x 0.95 = 2.85 3 x 2 x 1.10 = 6.60 3 x 2 x 0.70 = 4.20 Total=13.65 mtr. Purling-15.50 x 4 x 2=124.00 Total=137.65 mtr. Wt.@ 2.40kg/m=338.619 Kg =1815.899 Kg	Kg	1815.899
10	12.10.2	Providing asbestos cement 6 mm thick corrugated sheets roofing and fixing with G.I. J or L hooks bolts and nuts 8 mm dia G. I. plain and bitumen washers complete excluding the cost of purlins, rafters and trusses corrugated sheet. above 60 degree pitch 4.30 x 2 x 15.50 = 133.30 m2	m2	133.300
11	12.14.1	Providing and fixing ridges and hips in asbestos cement sheet roofing One piece plain angular ridges Consider a shed of 20x 10 m (external dimensions at plinth) 15.50 x 1 = 15.50 m	m	15.500
12	12.13	Extra for providing and fixing wind ties of 40x6mm flat iron section, 4 x 15.50 x 2=124.0 mtr.	m	124.000
13		Carriage of materials as per specification and direction of E/I		
i		Brick (Lead-1k+2p=8 Km Qty-0.522 thou.	thou.	0.522
ii		Coarse Sand (Lead-60 Km from Banka) Qty.-4.579 m3	m3	4.579
iii		Stone Chips (Lead-58 Km from mirzachowki) Qty.-8.63 m3	m3	8.630
iv		Local sand (Lead-1K+2P=3 Km) Qty.-1.62 m3	m3	1.620
14		Add difference cost of materials as per specification and direction of E/I		
i		Bricks Qty.=0.522 thou.	thou.	0.522

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ii		Cement Qty.-3.72 Mt	MT	3.720
15	9.110	Providing and fixing Bamboo jaffery/ fencing consisting of superior quality 25 mm dia (Average) half cut bamboo placed vertically and fixed together with three numbers horizontal running members of hallock wood in scantling of section 50X25 mm, fixed with nails and G.I wire on existing support, complete as per direction of Engineer-in-Charge Bott.-2 x 2.40 x 15.0 x 2=144.0 m2 Side-2 x 2 x 15.0 x 1.20= 72.0 m2 Side-2 x 2 x 2.40 x 1.20 =11.52 m2 Total=227.52 m2	m2	227.520
16	9.48.1	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete Fixed to steel windows by welding 2 x 1.50 x 2.10 x=6.30 m2 Wt.@16.14 Kg/m=101.682 Kg	Kg	101.682

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13/10/23

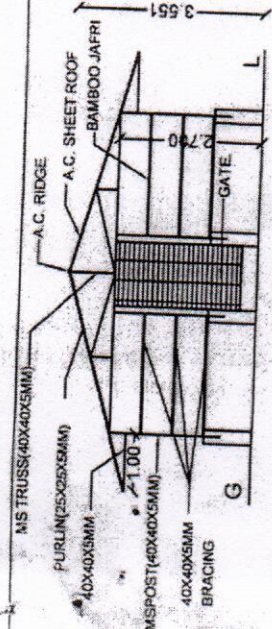
Junior Engineer (C)
BAU, Sabour

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13/10/23

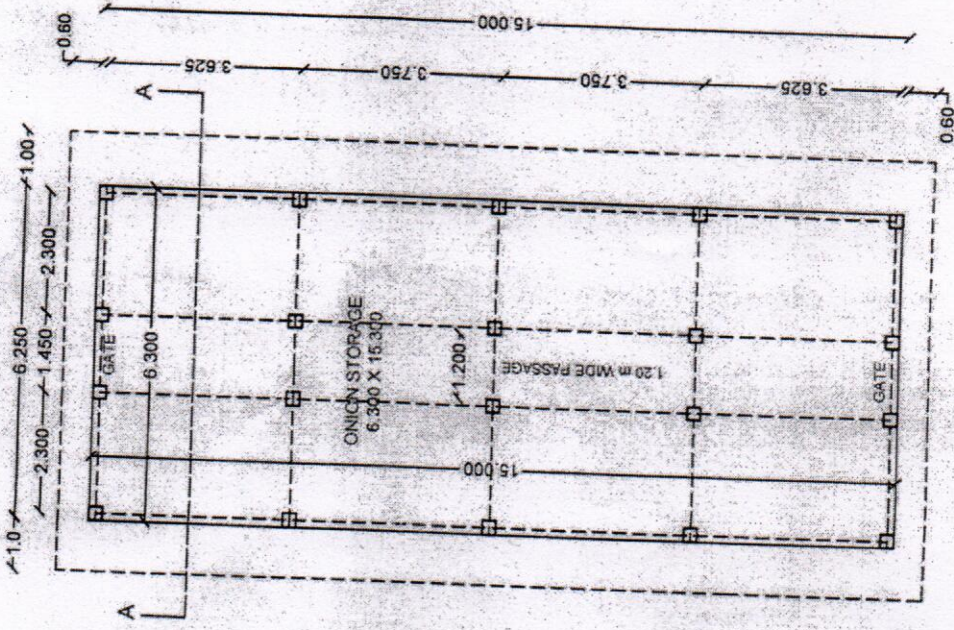
Assistant Engineer (C)
BAU, Sabour

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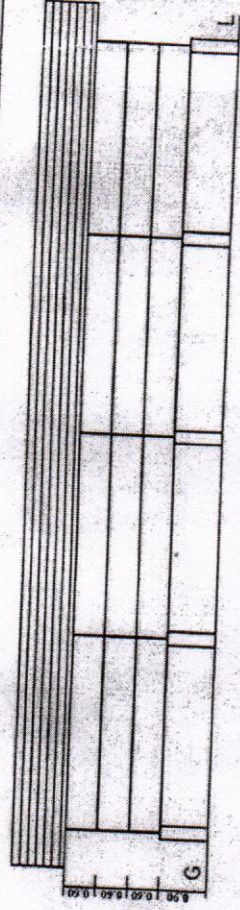
Executive Engineer (C)
BAU, Sabour



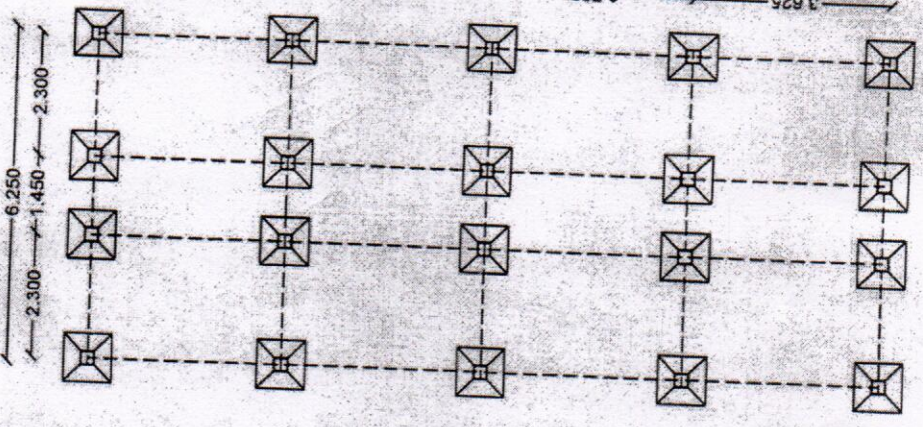
SECTION-AA



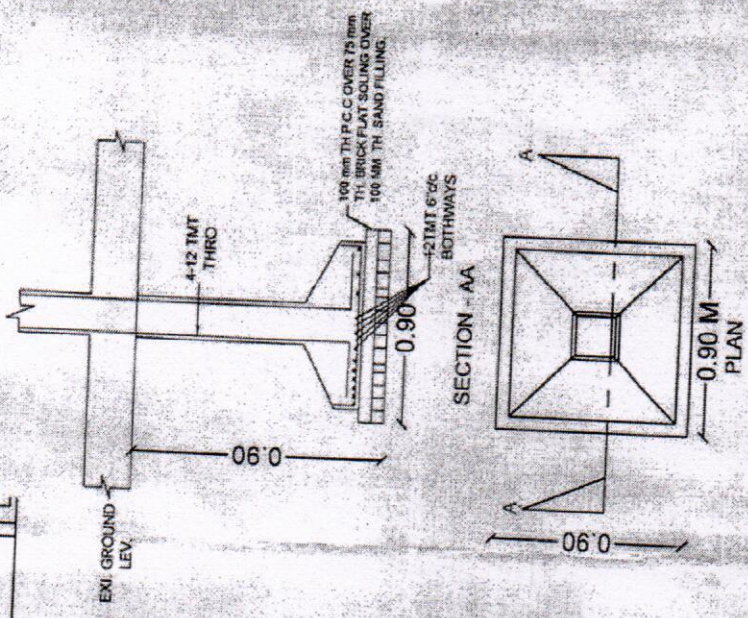
PLAN



SIDE ELEVATION



FOUNDATION PLAN



DETAILS OF FOUNDATION

PROPOSED PLAN OF ONION STORAGE STRUCTURE
(CAPACITY = 50 TON) UNDER BIHAR AGRICULTURAL
UNIVERSITY SABOUR BHAGALPUR

DRAWN BY

Amit Kumar
TRACER 7/10/23
B.A.U.SABOUR

J.E (C)
B.A.U.SABOUR

17/10/23
A.E (C)
B.A.U.SABOUR

FIELD
E.E (C)
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