

ESTIMATE

Name Of Work :- Proposed Construction of Strural Fabrication & Erection Of 1500MT Onion Storage Shed In G.no.868 Paiki, For Yuvan Farmers Producer Co.ltd,At-Takli, Tal-Niphad,Dist: Nashik (MH)

Estimated Cost of Works (Rs.) :- 17321958.00

Rupees One Crore Seventy Three Lack Twenty One Thousand Nine Hundred Fifty Eight Only.



SAI CONSULTANT'S
Consulting Civil Engineer, Builders & Developers,
Approved Valuers, Chartered Engineer & Govt. Contractors.

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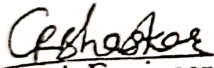
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Onion Storage Shed In G.no.868 Paiki, For Yuvan Farmers Producer Co.ltd, At-Takli, Tal-
Niphad, Dist: Nashik (MH)

RECAPITULATION SHEET

1	Work Portion (Part A)	Rs.	13925579.00
2	Add Royalty	Rs.	233096.00
3	Add Testing Charges		12900.00
4	Add. 1.00 % Insurance on Part A	Rs.	139256.00
5	Add.18.00 % GST Part A	Rs	2506604.00
	Total Rs.		16817435.00
6	Add. 3% Contingencies on Total	Rs	504523.00
	Say Rs.		17321958.00

Rupees One Crore Seventy Three Lack Twenty One Thousand Nine Hundred Fifty Eight Only.


Chartered Engineer
Gaurav Rajendra Bhaskar
B.E.(Civil) A.M.I.E.
Chartered Engineer
AM3023322


Consulting Engineer
SAI CONSULTANT
Consulting Civil Engineer
Rahuri, Dist. Ahmednagar



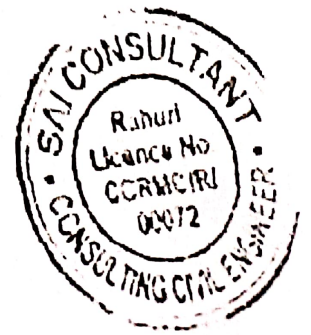
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ABSTRACT

Quantity	1 No	Item of work	Rate	unit	Amount
129.79	1	Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m.beyond the building area & stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (LIFT UPTO 1.5 M.) By Mechanical Means	207.00	Cubic Metre	26866.53
64.90	2	Excavation for foundation in Hard murum in cluding removing the excavated material upto ndistance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary backfilling, ramming, watering including shoring and strutting etc. complete. (Lift from 1.5 to 3.0m.) By Mechanical Means	284.00	Cubic Metre	18431.60
24.88	3	Providing dry trap/ granite/ quartzite/ gneiss rubble stone soiling 15 cm to 20 cm thick including hand packing and compacting complete. Spec.No. : Bd.A.12 Page No. 264 ;	1884.27	Cubic Metre	46880.64
194.69	4	Filling in plinth and floors with approved excavated material in 15cm. to 20cm. layersincluding watering and compacting etc. complete.	120.00	Cubic Metre	23362.80
1014.16	5	Filling in plinth and floors with contractors material/ brought from outside and approved by Engineer in charge in layers of 15 cm to 20 cm including watering and compaction etc.complete.	851.22	Cubic Metre	863273.28
12.43	6	Providing and laying Cast in situ/ Ready Mix cement concrete in M-10 of trap/granite/quartzite/ gneiss metal for foundation and bedding including bailing out water, Steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete ,with fully automatic microprocess or base dPLCwith SCADA enable dreversible Drum Type mixer/ concrete Batch mix plant (Panmixer) etc.complete. With fine aggregate (Crushed sand VSI Grade)	6431.85	Cubic Metre	79947.90



Quantity	I.No	Item of work	Rate	unit	Amount
45.39	7	Providing and laying in situ cement concrete of M 25 grade of trap / granite/quartzite/gneiss metal for R.C.C. work like raft, grillages, strips, foundations and footings of R.C.C. columns and steel stanchions including bailing-out water manually, including centering formwork of plywood / steel, compaction, covering newly laid concrete by gunny bag, plastic or tarpaulin, finishing the formed surface with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc complete. (Excluding reinforcement) The cement mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. (Wooden planks / shuttering will not be allowed) Spec.No.:Bd.F.2 Page No. 298 /S 456 (1978)	7870.13	Cubic Metre	357225.20
7.20	8	Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap / granite /quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawing or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete.(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Natural Sand / Crushed sand VSI Grade finely washed etc)	14550.13	Cubic Metre	104760.94
24.92	9	Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap / granite /quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction and roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Natural Sand / Crushed sand VSI Grade finely washed etc)	13014.60	Cubic Metre	324323.83
7.34	10	Providing and fixing in position TMT - FE - 500 bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels pardis, copings, fins, arches etc. as per detailed designs, drawings and schedules. including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete.	89703.00	Metric Tonne	658420.02



Quantity	Sl No	Item of work	Rate	unit	Amount
113.81	11	Providing sand faced plaster externally in cement mortar using approved screened sand, in all positions including base coat of 13 mm thick in cement mortar 1:4 using waterproofing compound at 1 kg per cement bag curing the same for not less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 6 to 8 mm thick in cement mortar 1:4 finishing the surface by taking out grains and curing for fourteen days scaffolding etc. complete.	651.86	Square Metre	74415.81
27.84	12	Providing structural steel work in trusses, other similar trussed purlins and members with all bracing, gusset plates etc. as per detailed designs and drawings or as directed including cutting, fabricating, hoisting, erecting fixing in position, Making riveted/ bolted/ welded connection and one coat of anti corrosive paint and over it 2 coats of oil painting approved quality and shade etc. complete.	119459.00	Metric Tonne	3325738.56
25.50	13	Providing, fabricating and erecting at site of work the tubular steel structure (shed) as per standard design and specifications having various spans in between trusses and in multiples of standard length of bays as specified as per standard specifications, inclusive of cost of steel tubular trusses, tubular columns purlins, tie runners, foundation bolts, base plates, nuts and bolts, welding wherever required etc. as per detailed drawing inclusive of one coat of anticorrosive paint and two coats of oil painting of approved quality and shade etc. complete. Spec. Number : As directed by Engineer-in-charge.	114831.00	Metric Tonne	2928190.50
3947.40	14	Jali welded mesh 50*25 13 Guage MATERIAL RATES FOR SSR For Year 2021-22 Page No.374 Item No.24	231.00	Square Metre	911849.40
12000.00	15	Bamboo 25mm dia. MATERIAL RATES FOR SSR For Year 2021-22 Page No.382 Item No.18	28.00	Running Metet	336000.00



Quantity	I.No	Item of work	Rate	unit	Amount
3278.68	16	Providing and fixing colour coated Zincalume (R) AZ 150 (min 150 gms /sq mt. total on each side) profiled sheets for roofing. The feed materials manufactured out of nominal 0.45mm Base Metal Thickness (BMT) (0.5mm TCT), Hi-strength steel with min. 550 MP a yield strength, metallic hot dip coated with Aluminium-Zinc alloy (55% aluminium 43.4% zinc 1.6% silicon) with COLOR BOND (R) steel quality super durable polyester paint coat (with in organic pigment). The paint shall have a total coating thickness of nominal 35um, comprising of nominal 25 um exterior coat on top surface and nominal 10um reverse coat on back surface. Profile sheet shall have nom. 950-1050 mm effective cover width and nominal 25-30 mm deep ribs with subtle square fluting in the five panat nominal 180-250 mm center-to-center. The endrib shall be designed for anti-capillary groove, and return leg. The feed material should have coil manufacturers product details marked a regular interval. Including fasteners with min. fastened with min. 25um Zinc-Tin alloy coated, Hexhead, self-drilling screw etc. complete. (weight of profile 4.52 Kilogram / Square Metre).	1173.00	Square Metre	3845891.64
					Total Rs. 13925578.65
35.71	17	Royalty Charges for sand	Part A)	Say Rs.	13925579.00
1039.04		Royalty Charges for Rubble and HM	237.37	Cum	8476.48
					216.18
					Cum 224619.67
					Total Rs. 233096.15
					Part B) Say Rs. 233096.00

Cecharaka
Chartered Engineer

Gaurav Rajendra Bhaskar
B.E.(Civil) A.M.I.E.
Chartered Engineer
AM3023322

Badhe
Consulting Engineer

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MEASUREMENT SHEET

L.No.

- 1 Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m.beyond the building area & stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (LIFT UPTO 1.5 M.) By Mechanical Means

For RCC Coloumn Type C1 Unit No.1	40	x	1.30	x	1.30	x	1.20	=	81.12	Cum
For RCC Coloumn Type C1 Unit No.2	24	x	1.30	x	1.30	x	1.20	=	48.67	Cum
Total Qty									=	129.79 Cum

- 2 Excavation for foundation in Hard murum in cluding removing the excavated material upto adistance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary backfilling, ramming, watering including shoring and strutting etc. complete. (Lift from 1.5 to 3.0m.) By Mechanical Means

For RCC Coloumn Type C1 Unit No.1	40	x	1.30	x	1.30	x	0.60	=	40.56	Cum
For RCC Coloumn Type C1 Unit No.2	24	x	1.30	x	1.30	x	0.60	=	24.34	Cum
Total Qty									=	64.90 Cum

- 3 Providing dry trap/ granite/ quartzite/ gneiss rubble stone soiling 15 cm to 20 cm thick including hand packing and compacting complete. Spec.No. : Bd.A.12 Page No. 264 ;

For RCC Coloumn Type C1 Unit No.1	40	x	1.30	x	1.30	x	0.23	=	15.55	Cum
For RCC Coloumn Type C1 Unit No.2	24	x	1.30	x	1.30	x	0.23	=	9.33	Cum
Total Qty									=	24.88 Cum

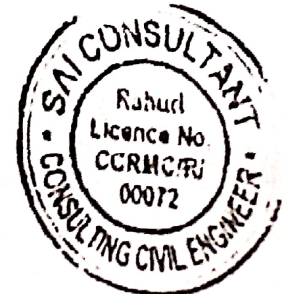
- 4 Filling in plinth and floors with approved excavated material in 15cm. to 20cm. layers including watering and compacting etc. complete.

Qty As per Exavated Quatity Item
no.1 & 2 Unit No.1 & 2

	=	194.69	cum
Total Qty	=	194.69	cum

- 5 Filling in plinth and floors with contractors material/ brought from outside and approved by Engineer in charge in layers of 15 cm to 20 cm including watering and compaction etc.complete.

Shed Plinth Unit No.1	1	x	31.24	x	56.54	x	0.38	=	671.20	cum
Shed Plinth Unit No.2	1	x	31.24	x	28.89	x	0.38	=	342.96	cum
Total Qty									=	1014.16 cum



- 6 Providing and laying Cast in situ/Ready Mix cement concrete in M-10 of trap/granite/quartzite/ gneiss metal for foundation and bedding including bailing out water, Steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic microprocessor or base dPLC with SCADA enable reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)

For RCC Coloumn Type C1 Unit No.1	40	x	1.30	x	1.30	x	0.12	=	7.77	cum
For RCC Coloumn Type C1 Unit No.2	24	x	1.30	x	1.30	x	0.12	=	4.66	cum
Total Qty =									12.43	cum

- 7 Providing and laying in situ cement concrete of M-25 grade of trap / granite/quartzite/gneiss metal for R.C.C. work like raft, grillages, strips, foundations and footings of R.C.C.columns and steel stanchions including bailing-out water manually, including centering formwork of plywood / steel, compaction, covering newly laid concrete by gunny bag, plastic or tarpaulin, finishing the formed surface with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc complete. (Excluding reinforcement) The cement mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. (Wooden planks / shuttering will not be allowed) Spcc.No.:Bd.F.2 Page No. 298 /IS 456 (1978)

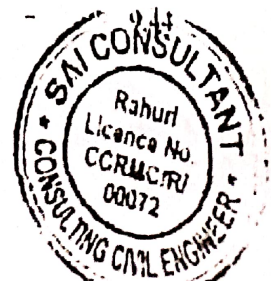
1st Step of Footing										
For RCC Coloumn Type C1 Unit No.1	40	x	1.20	x	1.20	x	0.38	=	21.89	cum
For RCC Coloumn Type C1 Unit No.2	24	x	1.20	x	1.20	x	0.38	=	13.13	
2nd Step of Footing										
For RCC Coloumn Type C1 Unit No.1	40	x	0.90	x	0.90	x	0.20	=	6.48	
For RCC Coloumn Type C1 Unit No.2	24	x	0.90	x	0.90	x	0.20	=	3.89	
Total Qty =									45.39	cum

- 8 Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap / granite /quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawing or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete,(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Natural Sand / Crushed sand VSI Grade finely washed etc)

For RCC Coloumn Type C1 Unit No.1	40	x	0.30	x	0.30	x	1.25	=	4.50	cum
For RCC Coloumn Type C1 Unit No.2	24	x	0.30	x	0.30	x	1.25	=	2.70	
Total Qty =									7.20	cum

- 9 Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap / granite /quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction and roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Natural Sand / Crushed sand VSI Grade finely washed etc)

Long Wall Ground Beams Unit No.1	18	x	6.00	x	0.23	x	0.38	=		
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Long Wall Ground Beams Unit No.2

Short Wall Ground Beams Unit No.1

Short Wall Ground Beams Unit No.2

Short Wall Ground Beams Unit No.1

Short Wall Ground Beams Unit No.2

10	x	5.51	x	0.21	x	0.38	=	4.82
4	x	9.15	x	0.21	x	0.38	=	3.20
4	x	9.15	x	0.21	x	0.38	=	3.20
2	x	12.20	x	0.21	x	0.38	=	2.13
2	x	12.20	x	0.21	x	0.38	=	2.13
Total Qty								= 24.92 cum

- 10 Providing and fixing in position TMT - EE - 500 bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels, copings, fins, arches etc. as per detailed designs, drawings and schedules. Including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete.

For RCC Footing

For RCC Column

For RCC Beam

45.39	@	80.00	Kg	=	3631.20	Kg
7.20	@	100.00	Kg	=	720.00	Kg
24.92	@	120.00	Kg	=	2990.40	Kg
Total Qty					= 7341.60	Kg
Say					= 7.34	MT

- 11 Providing sand faced plaster externally in cement mortar using approved screened sand, in all positions including base coat of 15 mm thick in cement mortar 1:4 using waterproofing compound at 1 kg per cement bag curing the same for not less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 6 to 8 mm thick in cement mortar 1:4 finishing the surface by taking out grains and curing for fourteen days scaffolding etc. complete.

Long Wall up to Plinth Unit No.1	2	x	31.70	x	0.38	=	24.09	Sqm
Long Wall up to Plinth Unit No.2	2	x	31.70	x	0.38	=	24.09	
Short Wall up to Plinth Unit No.1	2	x	57.00	x	0.38	=	43.32	
Short Wall up to Plinth Unit No.2	2	x	29.35	x	0.38	=	22.31	
Total							113.81	
Total Qty							= 113.81	Sqm

- 12 Providing structural steel work in trusses, other similar trussed purlins and members with all bracing, gusset plates etc. as per detailed designs and drawings or as directed including cutting, fabricating, hoisting, erecting fixing in position, Making riveted/ bolted/ welded connection and one coat of anti corrosive paint and over it 2 coats of oil painting approved quality and shade etc. complete.

Total No. of Truss With Purlin & Runner Between Truss Unit no.1	10	x	1700.00	=	17000.00	MT
Total No. of Truss With Purlin & Runner Between Truss Unit no.2	6	x	1700.00	=	10200.00	
Anchor Bolt & Template Plates	32	x	20.00		640.00	
					27840.00	
Total Qty					= 27.84	MT



- 13 Providing, fabricating and erecting at site of work the tubular steel structure (shed) as per standard design and specifications having various spans in between trusses and in multiples of standard length of bays as specified as per standard specifications, inclusive of cost of steel tubular trusses, tubular column purlins, tie runners, foundation bolts, base plates, nuts and bolts, welding wherever required etc. as per detailed drawing inclusive of one coat of anticorrosive paint and two coats of oil painting of approved quality and shade etc. complete. Spec. Number : As directed by Engineer-in-charge.

25 MT Onion Storage Boxes 40 Nos. Unit No 1	40	x	425.00	=	17000.00	MT
25 MT Onion Storage Boxes 20 Nos. Unit No.2	20	x	425.00	=	8500.00	
					25500.00	
				Total Qty =	25.50	MT

- 14 Jali welded mesh 50*25 13 Guage MATERIAL RATES FOR SSR For Year 2021-22 Page No.374 Item No.24

Onion Storage Boxes Sides	2	x	13.62	x	1.5	=	40.86
	2	x	1.50	x	1.5	=	4.50
Onion Storage Boxes Bottom	1	x	13.62	x	1.5	=	20.43
							65.79
Total Onion Storage Box Unit no.1 for 40 no.	40	x	65.79	=	2631.60		
Total Onion Storage Box Unit no.2 for 20 no.	20	x	65.79	=	1315.80		
				Total Qty =	3947.40	Sq.mt	

- 15 Bamboo 25mm dia. MATERIAL RATES FOR SSR For Year 2021-22 Page No.382 Item No.18

25MT Onion Storage Boxes 40 Nos. Unit No.1	40	200	8000.00	RMT
25MT Onion Storage Boxes 20 Nos. Unit No.2	20	200	4000.00	
			Total Qty =	12000.00 RMT

- 16 Providing and fixing colour coated Zinalume (R) AZ 150 (min 150 gms /sq.mt. total on each side) profiled sheets for roofing. The feed material is manufactured out of nominal 0.45mm Base Metal Thickness (BMT) (0.5mm TCT), Hi-strength steel with min. 550 MP a yield strength, metallic hot dip coated with Aluminium-Zinc alloy (55% aluminium 43.4% zinc 1.6% silicon) with COLOR BOND (R) steel quality super durable polyester paint coat (with in organic pigment). The paint shall have a total coating thickness of nominal 35um, comprising of nominal 25 um exterior coat on top surface and nominal 10um reverse coat on back surface. Profile sheet shall have nom. 950-1050 mm effective cover width and nominal 25-30 mm deep ribs with subtle square fluting in the five panat nominal 180-250 mm center-to-center. The endrib shall be designed for anti-capillary groove, and return leg. The feed material should have coil manufacturers product details marked a regular interval. Including fasteners with min. fastened with min. 25um Zinc-Tin alloy coated, Hexhead, self-drilling screw etc. complete. (weight of profile 4.52 Kilogram

Roof Slop Unit No.1	2	x	18.00	x	58.80	=	2116.80	Sqm
Roof Slop Unit No.2	2	x	18.00	x	31.15	=	1121.40	
Canopy Unit No.1	1	x	0.45	x	58.80	=	26.46	
Canopy Unit No.2	1	x	0.45	x	31.15	=	14.02	
						Total	3278.68	
						Total Qty =	3278.68	Sqm

