

**ESTIMATE**

**Name of work :- Proposed Construction of 300MT Warehouse Building In G.no.545/1/A Paiki,  
For Agricia Agro Producer Co.ltd, At-Bembale,Tal-Madha, Dist: Solapur (MH)**

**Estimated Cost of Works (Rs.) :- 3515469.00**

**6 Add. Rupees thirty-five lakhs fifteen thousand four hundred sixty-nine and paise nil only**

Tenue Rs. 3515469.00  
Pay Rs. 3515469.00

Rupees thirty-five lakhs fifteen thousand four hundred sixty-nine and paise nil only



# SAI CONSULTANTS

Consulting Civil Engineer, Builders & Developers,  
Approved Valuers, Chartered Engineer & Govt. Contractors.

Shop no.2, Shradha Building, Gokul Colony,  
Collage Road, Rahuri, Tal-Rahuri, Dist-A'Nagar.  
Mo.9970253888, 9552183333  
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Ref no.

Date:-

Name of work :- Proposed Contruction of 300MT Warehouse Building In G.no.545/1/A  
Paiki, For Agricia Agro Producer Co.ltd, At-Bembale, Tal-Madha, Dist: Solapur (MH)

## RECAPITUALTION SHEET

1	Work Portion (Part A)	Rs.	2875665.00
2	Add Royalty	Rs.	49645.00
3	Add. 1.00 % Insurance on Part A	Rs.	28757.00
4	Add Testing Charges	Rs.	15025.00
5	Add. Electrification Charges	Rs.	28757.00
6	Add.18.00 % GST Part A	Rs	517620.00
Total Rs.			3515469.00
Say Rs.			3515469.00

Rupees thirty-five lakhs fifteen thousand four hundred sixty-nine and paise nil 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



Name of work :- Proposed Construction of 300MT Warehouse Building In G.no.545/1/A Paiki, For Agricia Agro Producer Co.ltd, At-Bembale,Tal-Madha, Dist: Solapur (MH)

**ABSTRACT**

Quantity	I.No	Item of work	Rate	unit	Amount
47.25	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	9780.75
19.50	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	284.00	Cubic Metre	5538.00
46.48	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	87580.87
66.75	4	Filling in plinth and floors with approved excavated material in 15cm. to 20cm. layersincluding watering and compacting etc. complete.	120.00	Cubic Metre	8010.00
61.89	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.	1047.22	Cubic Metre	64812.45
10.08	6	Providing and filling in the foundation with sand of approved quality including watering, compacting etc. complete. (To be executed with prior approval of Superintending Engineer)	2423.19	Cubic Metre	24425.76
21.47	7	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)	6362.59	Cubic Metre	136604.81



Quantity	I.No	Item of work	Rate	unit	Amount
9.23	8	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 /IS 456 (1978)	7807.51	Cubic Metre	72063.32
11.38	9	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)	14487.51	Cubic Metre	164867.86
11.88	10	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, compactionand 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)	12951.98	Cubic Metre	153869.52



Quantity	I.No	Item of work	Rate	unit	Amount
0.94	11	Providing and laying Cast in situ/Ready Mix cement concrete in M-20 of trap / granite/gneiss/ quartzite metal for R.C.C. fins of required thickness in positions shown on the drawings or as directed by Engineer -in-charge including steel centering, plywood / steel form work, steel props, laying/ pumping, compaction ,finishing uneven and honey combed surface with C.M.1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement, including cover block) Newly laid concrete shall be covered by gunny bag, plastic, tarp aulin etc. with fully automatic microprocess or based PLC with SCADA enable dreversible Drum Type mixer/ concrete Batchmix plant (Panmixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	18098.37	Cubic Metre	17012.47
0.72	12	Providing and casting in situ cement concrete of M-25 grade of trap granite / quartzite / gneiss metal for R.C.C. slabs and landings as per detailed designs and drawings or as directed including fixing plastic cover block of requird size at 27 Nos in per 10 Sqm to reinforcement to give a clear cover of 15mm in RCC slabs, fixing fan hook box of 100mm diameter PVC or MS material with required depth with holes or notches as required, bottom with 12mm diameter M.S. bar bend to shape with hooked ends for fan hook and painting to exposed surface, centering, formwork of 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). Bd.F.8 Page No. 302 /	14636.51	Cubic Metre	10538.29
2.70	13	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	242198.10
	14	Providing dry rubble stone pitching 23cm (about 9) thick including all material, quarry spalls, labour etc.complete.	915.27	Square Metre	28007.26



Quantity	I.No	Item of work	Rate	unit	Amount
4.93	15	Providing Brick masonry in cement mortal 1.6 using second Class Burnt Bricks in foundation and plinth of inner walls/ in plinth of external walls including bailing out water manually, striking joints on unexposed faces ,watering and scaffolding complete Bd. G. 1, Page No.313,	7847.47	Cubic Metre	38688.03
54.55	16	Providing second class Burnt Brick masonry with conventional/ I.S. type bricks in cement mortar 1:6 in superstructure including striking joints, raking out joints, watering and scaffolding etc. Complete	8086.47	Cubic Metre	441116.94
655.86	17	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.	649.00	Square Metre	425653.14
21.20	18	Providing and fixing steel ventilat or fully glazed partly fixed as per detailed drawing with hot dip zinc coating including fabricating glazing with plain/ obscured glass pans 5mm thick and approved type quality and iron oxidized fixtures and fastening with guards quare bars 12mm 10cmc /cand oil painting 2coats etc. complete.	4827.00	Square Metre	102332.40
655.86	19	Providing and applying white-wash in one coat on old/ new plastered or masonry surfaces and asbestos cement sheets including scaffolding and preparing the surface by brushing and brooming down etc. complete.	8.00	Square Metre	5246.88
655.86	20	Providing and applying plastic emulsion paint of approved quality, colour and shade to old and new surfaces in two coats including scaffolding, preparing the surface. (excluding the primer coat) etc. complete.	80.00	Square Metre	52468.80
5.25	21	Providing and fixing rolling shutter fabricated from steell at hsofminimum thickness 0.9mm with lock plate of 3.15 mm thickness reinforced with 35x35x5mm angle section fitted with sliding bolts and handles for both sides, deep M.S.channel section of depth and thickness not less than 65mm and 3.15mm respectively with hold fastarr angements, M.S.Bracket plate 300x300x3.15mm minimum size and shape with square bar, suspension shaft of minimum 32mm diameter, hood cover of M.S. sheet not less than 0.9mm thickness and of any size attopand safety device sincluding mechanical gear operation arrangement consisting of worm gear wheels and worms of high grade castir on or mild steel and one coat of redlead primer etc. complete.(I.S.62481979) (Without mechanical gear)	4829.00	Square Metre	25352.25



Quantity	I.No	Item of work	Rate	unit	Amount
169.58	22	Providing and laying in situ cement concrete M20 with tremix treatment for 100 mm thickness for flooring with groove cutting of 4mm wide and 20mm deep with necessary refilling with bitumen etc. complete.	847.38	Square Metre	143698.70
2.83	23	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	338068.97
210.85	24	Providing and fixing colour coated Zinalume (R) AZ 150 (min150 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 4.52Kilogram / Square Metre ).	1173.00	Square Metre	247327.05
2.00	25	Turbo ventilator 24" MATERIAL RATES FOR SSR For Year 2021-22, Page no. 374, Building (Bd-R : Roofing and ceiling)	9702.00	No.	19404.00
6.90	26	Providing and fixing UPVC Roof made up of 3 layers roofing material of thickness 2mm having width of 1130mm and of required Length having Tensile strength not less than 330Kilo gram/ cm <sup>2</sup> , including fastening with self drilling screw having washers made of stainless steel etc. complete.	1594.00	Square Metre	10998.60



Quantity	I.No	Item of work	Rate	unit	Amount
				Total Rs.	2875665.22
			<b>Part A)</b>	<b>Say Rs.</b>	<b>2875665.00</b>
82.58	27	Royalty Charges for sand	237.37	Cum	19602.01
138.97		Royalty Charges for Rubble and HM	216.18	Cum	30042.53
1.00	28	Material Testing Charges	15025.00	Cum	15025.00
				Total Rs.	64669.54
			<b>Part B)</b>	<b>Say Rs.</b>	<b>64670.00</b>

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

*Zedha*  
 Consulting Engineer  
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 Rahuri, Dist. Ahmednagar



Name of work :- Proposed Construction of 300MT Warehouse Building In G.no.545/1/A Paiki, For Agricia Agro Producer Co.ltd, At-Bembale,Tal-Madha, Dist: Solapur (MH)

MEASUREMENT SHEET

I.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 0.5 M.) By Mechanical Means

For RCC Coloumn Type C1	10	x	1.40	x	1.40	x	1.50	=	29.40	Cum
For RCC Coloumn Type C2	4	x	1.40	x	1.40	x	1.50	=	11.76	
For RCC Coloumn Type C4	1	x	1.30	x	1.30	x	1.20	=	2.03	
For RCC Coloumn Type C5	2	x	1.30	x	1.30	x	1.20	=	4.06	
<b>Total Qty</b>									<b>=</b>	<b>47.25 Cum</b>

- 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	10	x	1.40	x	1.40	x	0.60	=	11.76	Cum
For RCC Coloumn Type C2	4	x	1.40	x	1.40	x	0.60	=	4.70	
For RCC Coloumn Type C4	1	x	1.30	x	1.30	x	0.60	=	1.01	
For RCC Coloumn Type C5	2	x	1.30	x	1.30	x	0.60	=	2.03	
<b>Total Qty</b>									<b>=</b>	<b>19.50 Cum</b>

- 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	10	x	1.40	x	1.40	x	0.23	=	4.51	Cum
For RCC Coloumn Type C2	4	x	1.40	x	1.40	x	0.23	=	1.80	
For RCC Coloumn Type C4	1	x	1.30	x	1.30	x	0.23	=	0.39	
For RCC Coloumn Type C5	2	x	1.30	x	1.30	x	0.23	=	0.78	
Ware House Plinth	1	x	16.29	x	10.41	x	0.23	=	39.00	
<b>Total Qty</b>									<b>=</b>	<b>46.48 Cum</b>

- 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									=	66.75	cum
Item no.1 & 2											
<b>Total Qty</b>									<b>=</b>	<b>66.75 cum</b>	

- 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.

Ware House Plinth	1	x	16.29	x	10.41	x	0.45	=	76.31	cum
Internal side WH.	2	x	16.29	x	0.60	x	0.45	=	8.80	
Plinthery Rubble fillig	2	x	10.41	x	0.60	x	0.45	=	5.62	
									<b>14.42</b>	
<b>Total Qty</b>									<b>=</b>	<b>61.89 cum</b>



- 6 Providing and filling in the foundation with sand of approved quality including watering, compacting etc. complete. (To be executed with prior approval of Superintending Engineer)

Deduction Internal side WH. Periphery Rubble fillig	2	x	16.29	x	0.60	x	0.05	=	0.98	cum
	2	x	10.41	x	0.60	x	0.05	=	0.62	
Ware House Flooring Soling	1	x	16.29	x	10.41	x	0.05	=	8.48	
<b>Total Qty</b>								=	<b>10.08</b>	<b>cum</b>

- 7 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 (Pannixer) etc.complete. With fine aggregate (Crushed sand VSI Grade)

For RCC Coloumn Type C1	10	x	1.40	x	1.40	x	0.10	=	1.96	cum
For RCC Coloumn Type C2	4	x	1.40	x	1.40	x	0.10	=	0.78	
For RCC Coloumn Type C4	1	x	1.30	x	1.30	x	0.10	=	0.17	
For RCC Coloumn Type C5	2	x	1.30	x	1.30	x	0.10	=	0.34	
Ware House Plinth	1	x	16.75	x	10.88	x	0.10	=	18.22	cum
<b>Total Qty</b>								=	<b>21.47</b>	<b>cum</b>

- 8 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 /IS

1st Step of Footing

For RCC Coloumn Type C1	10	x	1.10	x	1.10	x	0.38	=	4.60	cum
For RCC Coloumn Type C2	4	x	1.10	x	1.10	x	0.30	=	1.45	
For RCC Coloumn Type C4	1	x	1.00	x	1.00	x	0.30	=	0.30	
For RCC Coloumn Type C5	2	x	1.00	x	1.00	x	0.30	=	0.60	

2nd Step of Footing

For RCC Coloumn Type C1	10	x	0.80	x	0.80	x	0.23	=	1.47	
For RCC Coloumn Type C2	4	x	0.80	x	0.80	x	0.20	=	0.51	
For RCC Coloumn Type C4	1	x	0.70	x	0.70	x	0.20	=	0.10	
For RCC Coloumn Type C5	2	x	0.70	x	0.70	x	0.20	=	0.20	
<b>Total Qty</b>								=	<b>9.23</b>	<b>cum</b>

- 9 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.

(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with

SCADA enable 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	10	x	0.23	x	0.45	x	7.20	=	7.45	cum
For RCC Coloumn Type C2	4	x	0.23	x	0.45	x	7.20	=	2.98	



For RCC Coloumn Type C4	1	x	0.23	x	0.38	x	7.20	=	0.63
For RCC Coloumn Type C5	2	x	0.23	x	0.38	x	1.82	=	0.32
							<b>Total Qty</b>	=	<b>11.38 cum</b>

- 10 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	8	x	3.90	x	0.23	x	0.38	=	2.73
Short Wall Ground Beams	6	x	3.32	x	0.23	x	0.38	=	1.74
Varandah Plinth Beams Long	1	x	3.60	x	0.23	x	0.38	=	0.31
Varandah Plinth Beams Short	2	x	1.43	x	0.23	x	0.30	=	0.20
Long & Short Wall above V2	26	x	0.95	x	0.23	x	0.15	=	0.85
Long Wall Lintel Beams	8	x	3.90	x	0.23	x	0.30	=	2.15
Long Wall Beams Above RS	1	x	4.36	x	0.23	x	0.38	=	0.38
Long Wall Floor Beams	8	x	3.90	x	0.23	x	0.30	=	2.15
Short Wall Ground Beams	6	x	3.32	x	0.23	x	0.30	=	1.37
							<b>Total Qty</b>	=	<b>11.88 cum</b>

- 11 Providing and laying Cast in situ/Ready Mix cement concrete in M-20 of trap / granite/gneiss/ quartzite metal for R.C.C. fins of required thickness in position as shown on the drawings or as directed by Engineer -in-charge including steel centering, plywood / steel form work, steel props, laying/ pumping, compaction ,finishing uneven and honey combed surface with C.M. 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement, including cover block) Newly laid concrete shall be covered by gunny bag, plastic, tarp aulin etc. with fully automatic microprocess or based PLC with SCADA enable dreversible Drum Type mixer/ concrete Batchmix plant (Panmixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)

Long Wall Ventilators V2 Top	13	x	1.56	x	0.45	x	0.075	=	0.68
Long Wall Ventilators V2 Sides	26	x	0.45	x	0.30	x	0.075	=	0.26
							<b>Total Qty</b>	=	<b>0.94 cum</b>

- 12 Providing and casting in situ cement concrete of M-25 grade of trap granite / quartzite / gneiss metal for R.C.C. slabs and landings as per detailed designs and drawings or as directed including fixing plastic cover block of required size at 27 Nos in per 10 Sqm to reinforcement to give a clear cover of 15mm in RCC slabs, fixing fan hook box of 100mm diameter PVC or MS material with required depth with holes or notches as required, bottom with 12mm diameter M.S. bar bend to shape with hooked ends for fan hook and painting to exposed surface, centering, formwork of 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). Bd.F.8 Page No. 302 / IS 456:2000

Varandah Plinth Slab	1	x	3.90	x	1.60	x	0.115	=	0.72
							<b>Total Qty</b>	=	<b>0.72 cum</b>

- 13 Providing and fixing in position TMT - FE - 500 bar reinforcement of various diameters for R.C.C. pile caps, footing, 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 wire mesh, lacing and supporting as required complete.

9.23 @ 70.00 Kg = 646.10 Kg

For RCC Coloumn	11.38	@	80.00	Kg	=	910.40	Kg
For RCC Beam	11.88	@	85.00	Kg	=	1009.80	Kg
For RCC Fins	0.94	@	75.00	Kg	=	70.50	Kg
For RCC Slab	0.72	@	90.00	kg	=	64.80	kg
				<b>Total Qty</b>	=	<b>2701.60</b>	<b>Kg</b>
				<b>Say</b>	=	<b>2.70</b>	<b>MT</b>

- 14 Providing dry rubble stone pitching 23cm (about 9) thick including all material, quarry spalls, labour etc.complete.

Long Wall Internal Side Over size Metal in 2 Layers	2	x	16.29		x	0.60	=	19.55	Sqm
Short Wall Internal Side Over size Metal in 2 Layers	2	x	9.21		x	0.60	=	11.05	
				<b>Total Qty</b>	=	<b>30.60</b>		<b>Sqm</b>	

- 15 Providing Brick masonry in cement mortal 1.6 using second Class Burnt Bricks in foundation and plinth of inner walls/ in plinth of external walls including bailing out water manually, striking joints on unexposed faces ,watering and scaffolding complete Bd. G. 1, Page No.313,

Long Wall Ground Beams	8	x	3.90	x	0.23	x	0.42	=	3.01	cum
Short Wall Ground Beams	6	x	3.32	x	0.23	x	0.42	=	1.92	
				<b>Total</b>				=	<b>4.93</b>	
				<b>Total Qty</b>	=	<b>4.93</b>			<b>cum</b>	

- 16 Providing second class Burnt Brick masonry with conventional/ I.S. type bricks in cement mortar 1:6 in superstructure including striking joints, raking out joints, watering and scaffolding etc. Complete

Long Wall Superstructure	8	x	3.90	x	0.23	x	4.79	=	34.37	cum
Short Wall Superstructure	6	x	3.32	x	0.23	x	4.79	=	21.95	cum
Short Gable Wall	2	x	5.21	x	0.23	x	1.80	=	4.31	
				<b>Total</b>				=	<b>60.63</b>	
Deduction For V2	26	x	0.60	x	0.60	x	0.23	=	2.15	
Deduction For V1	14	x	1.41	x	0.60	x	0.23	=	2.72	
Deduction For RS	1	x	2.10	x	2.50	x	0.23	=	1.21	
				<b>Total</b>				=	<b>6.08</b>	
				<b>Total Qty</b>	=	<b>54.55</b>			<b>cum</b>	

- 17 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	2	x	16.75		x	5.88	=	196.98	Sqm
Short Wall	2	x	10.87		x	5.88	=	127.83	
Long Wall	2	x	16.75		x	4.88	=	163.48	
Short Wall	2	x	10.87		x	4.88	=	106.09	
Short Wall Cable Walls External	2	x	5.21		x	1.80	=	18.74	
Short Wall Cable Walls Internal	2	x	5.21		x	1.80	=	18.74	
Long Wall Column Offsets C1	10	x	0.44		x	5.88	=	25.87	



Long Wall Coloumn Offsets C2	4	x	0.44	x	5.88	=	10.35
Long Wall Coloumn Offsets C4	1	x	0.53	x	4.88	=	2.59
Long Wall Coloumn Offsets C5	2	x	1.22	x	1.00	=	2.44
Verandah Slab	1	x	4.36	x	1.83	=	7.98
Verandah Slab Sides	2	x	1.83	x	0.30	=	1.10
Verandah Slab Front	1	x	4.36	x	0.30	=	1.31
V2 Top	26	x	1.56	x	0.45	=	18.25
V2 Sides	52	x	0.45	x	0.30	=	7.02
					Total		708.77
Deduction							
Deduction For V2 Both Side	52	x	0.60	x	0.60		18.72
Deduction For V1 Both Side	28	x	1.41	x	0.60		23.69
Deduction For RS Both Side	2	x	2.10	x	2.50		10.50
					Total		52.91
<b>Total Qty =</b>							<b>655.86 Sqm</b>

- 18 Providing and fixing steel ventilat or fully glazed partly fixed as per detailed drawing with hot dip zinc coating including fabricating glazing with plain/ obscured glass pans 5mm thick and approved type quality and iron oxidized fixtures and fastening with guards quare bars 12mm 10cmc /cand oil painting 2coats etc. complete.

V2	26	x	0.60	x	0.60	=	9.36	Sqm
V1	14	x	1.41	x	0.60		11.84	
<b>Total Qty =</b>							<b>21.20</b>	<b>Sqm</b>

- 19 Providing and applying white-wash in one coat on old/ new plastered or masonry surfaces and asbestos cement sheets including scaffolding and preparing the surface by brushing and brooming down etc. complete.

Qty.As per Item no.17						=	655.86	Sqm
<b>Total Qty =</b>							<b>655.86</b>	<b>Sqm</b>

- 20 Providing and applying plastic emulsion paint of approved quality, colour and shade to old and new surfaces in two coats including scaffolding, preparing the surface. (excluding the primer coat) etc. complete.

Qty.As per Item no.17						=	655.86	Sqm
<b>Total Qty =</b>							<b>655.86</b>	<b>Sqm</b>

- 21 Providing and fixing rolling shutter fabricated from steel at hsofminimum thickness 0.9mm with lock plate of 3.15 mm thickness reinforced with 35x35x5mm angle section fitted with sliding bolts and handles for both sides, deep M.S.channel section of depth and thickness not less than 65mm and 3.15mm respectively with hold fastarr angements, M.S.Bracket plate 300x300x3.15mm minimum size and shape with square bar, suspension shaft of minimum 32mm diameter, hood cover of M.S. sheet not less than 0.9mm thickness and of any size attopand safety device sincluding mechanical gear operation arrangement consisting of worm gear wheels and worms of high grade castir on or mild steel and one coat of redlead primer etc. complete.(I.S.62481979) (Without mechanical gear)

RS	1	x	2.10	x	2.50	=	5.25	Sqm
<b>Total Qty =</b>							<b>5.25</b>	<b>Sqm</b>



Providing and laying in situ cement concrete M20 with tremix treatment for 100 mm thickness for flooring with necessary curing of 4mm wide and 20mm deep with necessary refilling with bitumen etc. complete.

Warehouse Flooring	1	x	16.29	x	10.41	=	169.58	Sqm
<b>Total Qty</b>						=	<b>169.58</b>	<b>Sqm</b>

- 23 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	3	x	850.00	x		=	2550.00	MT
Varandah Canopy	1	x	280.00	x		=	280.00	
							<u>2830.00</u>	
<b>Total Qty</b>						=	<b>2.83</b>	<b>MT</b>

- 24 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 / Square Metre).

Roof Slop	2	x	6.30	x	16.59	=	209.03	Sqm
Verandah	1	x	4.36	x	2.00	=	8.72	
							<u>217.75</u>	
Deduction For Turbo Ventilator & Sky light Upvc roof	2.00	x	3.00	x	1.150	=	6.90	
							<u>6.90</u>	
<b>Total Qty</b>						=	<b>210.85</b>	<b>Rmt</b>

- 25 Turbo ventilator 24" MATERIAL RATES FOR SSR For Year 2021-22, Page no. 374, Building (Bd-R : Roofing and ceiling)

At Roof Level Ventilation						=	2.00	No.
<b>Total Qty</b>						=	<b>2.00</b>	<b>No.</b>

- 26 Providing and fixing UPVC Roof made up of 3 layers roofing material of thickness 2mm having width of 1130mm and of required Length having Tensile strength not less than 330 Kilo gram/ cm<sup>2</sup>, including fastening with self drilling screw having washers made of stainless steel etc. complete.

	2.00	x	3.00	x	1.15	=	6.90	Sqm
<b>Total Qty</b>						=	<b>6.90</b>	<b>Sqm</b>

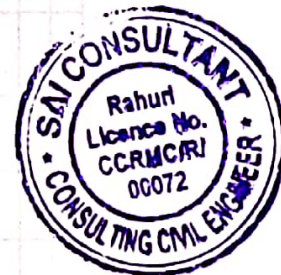
- 27 Royalty Charges

Material	Qty	Qty of Material	Cum
Providing and filling in the foundation	1	10.08	Cum
Excavating and laying Cast in situ/ R	1	21.47	Cum
Providing and laying in situ cement	1	9.23	
Providing and laying Cast in situ/R	1	11.38	
		<u>4.84</u>	

10	Providing second class Burnt Brick	1	x	11.88	x	0.425	=	5.05		
11	Providing sand faced plaster extern:	1	x	0.94	x	0.425	=	0.40		
12	Providing and casting in situ cemen	1	x	0.72	x	0.425	=	0.31		
15	Providing Brick masonry in cement	1	x	4.93	x	0.320	=	1.58		
16	Providing second class Burnt Brick	1	x	54.55	x	0.320	=	17.46		
17	Providing sand faced plaster extern:	1	x	655.86	x	0.033	=	21.64		
22	Providing and laying in situ cement	1	x	169.58	x	0.043	=	7.21		
							<b>Sand</b>	<b>Total Qty</b>	<b>= 82.58</b>	<b>Cum</b>
3	Providing dry trap/ granite/ quartzit	1	x	46.48	x	1.00	=	46.48		
5	Filling in plinth and floors with con	1	x	61.89	x	1.00	=	61.89		
14	Providing dry rubble stone pitching	1	x	30.60	x	1.00	=	30.60		
							<b>Hm and Rubble</b>	<b>Total Qty</b>	<b>= 138.97</b>	<b>Cum</b>

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

*Zadha*  
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Name of work :- Proposed Construction of 300MT Warehouse Building In G.no.545/1/A Patki, For Agracia Agro Producer Co.ltd, At-Bembale,Tal-Madha, Dist: Solapur (MH)

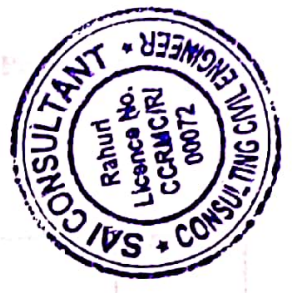
RATE ANALYSIS AS PER PWD SSR 2022-23 For MAHARASTRA STATE

Sr. No.	Description of Item	S.S.R. Page No. & It. No.	Basic Rate	Add extra lead charges for.....						Total Lead charges	Gross Rate
				Rubble/Cr. Metal	Sand	Cr. Metal	Murum	Cement/Steel			
1	Excavation for foundation in earth, soil of all types, sand, gr	21.02	207.00	502.27	263.19	410.55	252.22	5.22	0.00	207.00	
2	Excavation for foundation in Hard murum in cluding remov	21.08	284.00						0.00	284.00	
3	Providing dry trap/ granite/ quartzite/ gneiss rubble stone so	21.38	1382.00	1.00	502.27				502.27	1884.27	
4	Filling in plinth and floors with approved excavated materia	21.36	120.00						0.00	120.00	
5	Filling in plinth and floors with contractors material/ brough	21.37	795.00				1.00	252.22	252.22	1047.22	
6	Providing and filling in the foundation with sand of approve	21.39	2160.00		1.00	263.19			263.19	2423.19	
7	Providing and laying Cast in situ/ Ready Mix cement concre	24.01	5830.00		0.47	123.70	0.940	385.92	4.40	6362.59	
8	Providing and laying in situ cement concrete of M-25 grade	25.13	7287.00		0.425	111.86	0.90	369.50	7.50	7807.51	
9	Providing and laying Cast in situ/Ready Mix cement concre	25.33	13967.00		0.425	111.86	0.90	369.50	7.50	14487.51	
10	Providing and laying Cast in situ/Ready Mix cement concre	25.52	12452.00		0.425	111.86	0.85	348.97	7.50	12951.98	
11	Providing and laying Cast in situ/Ready Mix cement concre	26.31	17601.00		0.425	111.86	0.85	348.97	7.00	18098.37	
12	Providing and casting in situ cement concrete of M-25 grad	25.72	14116.00		0.425	111.86	0.90	369.50	7.50	14636.51	
13	Providing and fixing in position TMT - FE - 500 bar reinfor	26.33	89703.00						0.00	89703.00	
14	Providing dry rubble stone pitching 23cm (about 9) thick in	2.34	413.00	1.00	502.27				502.27	915.27	
15	Providing Brick masonry in cement mortar 1.6 using second	27.01	7755.00		0.32	84.22		1.58	8.25	7847.47	
16	Providing second class Burnt Brick masonry with conventio	27.05	7994.00		0.32	84.22		1.58	8.25	8086.47	
17	Providing sand faced plaster externally in cement mortar us	32.11	639.00		0.033	8.69		0.25	1.31	649.00	
18	Providing and fixing steel ventilat or fully glazed partly fixe	39.30	4827.00						0.00	4827.00	
19	Providing and applying white-wash in one coat on old/ new	36.02	8.00						0.00	8.00	
20	Providing and applying plastic emulsion paint of approved	36.12	80.00						0.00	80.00	
21	Providing and fixing rolling shutter fabricated from steel al	39.24	4829.00						0.00	4829.00	
22	Providing and laying in situ cement concrete M20 with tren	33.30	796.00		0.043	11.19	0.089	36.54	0.70	847.38	
23	Providing structural steel work in trusses, other similar trus	23.04	119459.00						0.00	119459.00	
24	Providing and fixing colour coated Zincalume (R) AZ 150 (	38.34	1173.00						0.00	1173.00	
25	Turbo ventilator 24" MATERIAL RATES FOR SSR For Ye	SSR 21-22,Page no. 374 l.no.42	9702.00						0.00	9702.00	
26	Providing and fixing UPVC Roof made up of 3 layers roofi	38.37	1594.00						0.00	1594.00	
27	Royalty Charges for Rubble and HM		216.18						0.00	216.18	

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Name of work :- Proposed Construction of 300MT Warehouse Building In G.no.545/1/A Paiki, For Agricia Agro Producer Co.ltd, At-Bembale,Tal-Madha, Dist: Solapur (MH)

Appendix - I

Sr. No.	Description	Rubble	Murum	Crush metal	Crush metal 40 mm above	Sand	Cement	Steel	Asphalt
1	2	3	4	4	4	5	6	7	8
	Source	Restricted	Local	Restricted	Restricted	Local	Local	Local	
1	Average lead as per Quarry chart in km	15.00	5.00	15.00	15.00	5.00	1.00	1.00	
2	Lead charges	502.27	252.22	410.55	393.44	263.19	104.39	104.39	
4	Extra lead charges	502.27	252.22	410.55	393.44	263.19	104.39	104.39	
5	Extra lead charges per bag of cement						5.22		

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Name of work :- Proposed Construction of 300MT Warehouse Building In G.no.545/1/A Paiki, For Agricia Agro Producer Co.ltd, At-Bembale, Tal-Madha, Dist: Solapur (MH)

TESTING CHART

Item	Qty	Soil/HM	Bitumen	Metal	Agg.	Tests	Frequency	Total Test	At Site	At Lab	Rate	Amt
Concrete												
		Cement	Sand		Agg							
M 10	21.47	4.72	10.09		20.18	Comp. Strength- Cube		9	5	4	690.00	2760.00
M 20	17.90	6.26	7.61		16.11							0.00
M 25	33.21	12.45	14.11		29.89							
<b>Total</b>	<b>72.58</b>	<b>23.44</b>	<b>31.81</b>		<b>66.18</b>	Crush Metal-Basic Test	1/1000 Cum	3	2	1	2600.00	2600.00
		MT	Cum		Cum	Gradation	1/100 Cum	3	2	2	745.00	1490.00
						Comboned Flakiness & Elongation of single metal	1/400 Cum	2	1	1	850.00	850.00
						Cement-Fineness, consistency, Setting time, Compressive strength, Specific Gravity	1/50 MT	1	1	1	3770.00	3770.00
						Sand-Fineness Modulus, Silt Content	1/ Source	1	1	1	1380.00	1380.00
						Water Absorption (Set of 5 Bricks), Compressive Strength (Set of 5 Bricks), Efflorescence (Set of 5 Bricks).	Set of 5 Bricks	1	1	1	2175.00	2175.00
											Total	15025.00

*Zaheer*  
Consulting Engineer

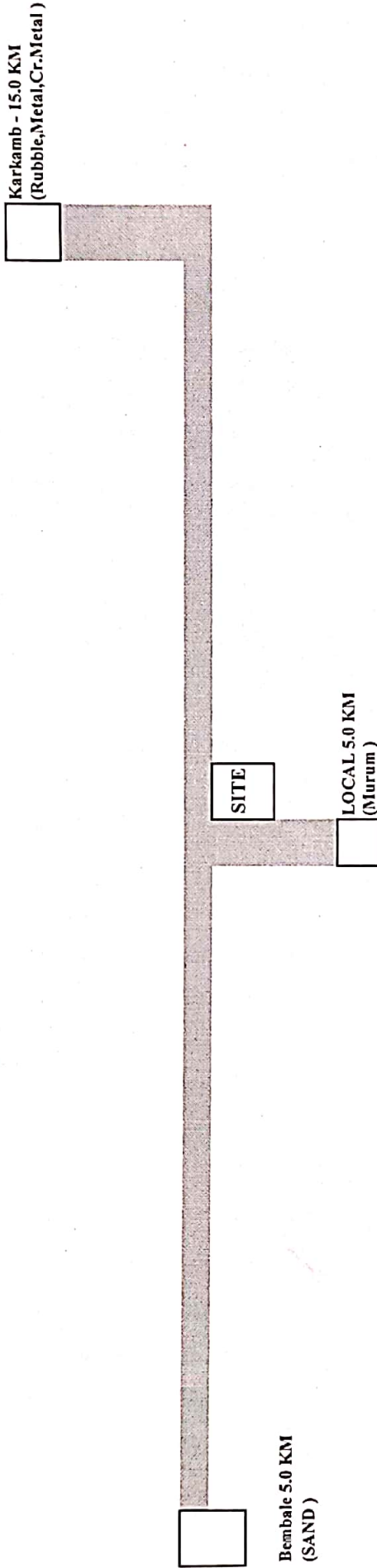
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Name of work :- Proposed Construction of 300MT Warehouse Building In G.no.545/1/A Paiki, For Agricia Agro Producer Co.ltd, At-Bembale,Tal-Madha, Dist: Solapur (MH)

**Quarry Chart**



**LEAD STATEMENT**

Material	Quarry	Lead in Km.
Rubble	Karkamb	15.00
Metal	Karkamb	15.00
Crushed Metal	Karkamb	15.00
Murum	Local	5.00
Sand	Bembale	5.00

**CERTIFICATE.**

- 1 Certified that the quarries shown on the quarry chart for metal & murum are inspected by me & they are nearest & economical to the work & contain sufficient & good quality material required for the work.
- 2 Certified that lead for quarries shown and accounted in the estimate is as per nearest route.
- 3 Certified that leads considered are found to be correct.



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