

ESTIMATE

Name of work :- Proposed Construction of 1000MT Warehouse Unit Building In G.no.53/1 Paiki, For Mshagro Farmers Producer Co. ltd., At- Padali, Tal-Paithan, Dist: Aurangabad (MH)

Estimated Cost of Works (Rs.) :- 11926472.00

Rupees One Crore Nineteen Lakh Twenty Six Thousand Four Hundred Seventy Two Only.

SAI CONSULTANT'S

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

Shop no.2, Shraddha Building, Gokul Colony,
Collage Road, Rahuri, Tal-Rahuri, Dist-A'Nagar.
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Ref no.

Date:-

Name of work :- Proposed Construction of 1000MT Warehouse Unit Building In
G.no.53/1 Paiki, For Mshagro Farmers Producer Co. Ltd., At- Padali, Tal-Paithan, Dist:
Aurangabad (MH)

RECAPITULATION SHEET

1	Work Portion (Part A)	Rs.	9719422.00
2	Add Royalty	Rs.	166185.00
3	Add Testing Charges	Rs.	15025.00
4	Add. 1.00 % Insurance on Part A	Rs.	97194.00
5	Add. Electrification Charges	Rs.	194388.00
6	Add.12.00 % GST Part A	Rs	1166331.00
	Total Rs.		11358545.00
7	Add. 5% Contigencies on Total	Rs	567927.00
	Say Rs.		11926472.00

Rupees One Crore Ninteen Lakh Twenty Six Thousand Four Hundred Seventy Two Only.

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

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



name of work :- Proposed Construction of 1000MT Warehouse Unit Building In G.no.53/1 Paiki, For Mshagro Farmers Producer Co. Ltd., At- Padali, Tal-Paithan, Dist: Aurangabad (MH)

ABSTRACT

Quantity	I.No	Item of work	Rate	unit	Amount
260.06	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	193.00	Cubic Metre	50191.58
143.26	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	265.00	Cubic Metre	37963.90
163.89	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 ;	1660.82	Cubic Metre	272191.79
403.32	4	Filling in plinth and floors with approved excavated material in 15cm. to 20cm. layersincluding watering and compacting etc. complete.	113.00	Cubic Metre	45575.16
268.87	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.	770.06	Cubic Metre	207046.03
54.31	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)	2471.83	Cubic Metre	134245.09
70.90	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 cut 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)	5981.66	Cubic Metre	424099.69

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Qty	I.No	Item of work	Rate	unit	Amount
2.97	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)	7268.91	Cubic Metre	603101.46
30.99	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)	13589.91	Cubic Metre	421151.31
29.24	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)	12069.92	Cubic Metre	352924.46



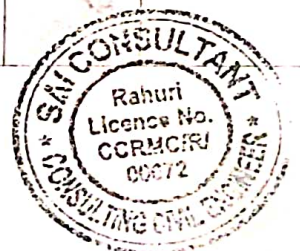
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Quantity	I.No	Item of work	Rate	unit	Amount
2.97	8	Providing and laying in situ cement concrete of M-25 grade of trap / granite/quartzite/gneiss metal for R.C.C. work like raft, grillages, strips, foundations and footings of R.C.C.columns and steel 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)	7268.91	Cubic Metre	603101.46
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29.24	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)	12069.92	Cubic Metre	352924.46



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Quantity	I.No	Item of work	Rate	unit	Amount
11.13	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 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, tarpaulin etc. with fully automatic microprocessor or based PLC with SCADA enable reversible Drum Type mixer/concrete Batchmix plant (Panmixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	17629.54	Cubic Metre	37550.92
4.69	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	14546.91	Cubic Metre	68225.01
14.06	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, parrises, 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.	71778.00	Metric Tonne	1009198.68



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Qty	I.No	Item of work	Rate	unit	Amount
5.68	14	Providing dry rubble stone pitching 23cm (about 9) thick including all material, quarry spalls, labour etc.complete.	752.82	Square Metre	44175.48
11.47	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,	7446.46	Cubic Metre	85410.90
91.83	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	7673.46	Cubic Metre	704653.83
1355.35	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.	610.08	Square Metre	826871.93
37.84	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.	4449.00	Square Metre	168350.16
1355.35	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!	7.00	Square Metre	9487.45
1355.35	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.	70.00	Square Metre	94874.50

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Qty	I.No	Item of work	Rate	unit	Amount
5.20	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)	4310.00	Square Metre	108612.00
549.76	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.	788.75	Square Metre	433623.20
24.84	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.	105909.00	Metric Tonne	2630779.56
753.55	24	Providing and fixing colour coated Zinalume (R) AZ 150 (min150 gms /sq.mt. total on each side) profiled sheets for roofing. The feed materialis 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 subtles quare flutingin 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-Tinalloy coated, Hexhead, self-drilling screw etc. complete. (weight of profile 4.52Kilogram / Square Metre).	1095.00	Square Metre	825137.25



Name of work :- Proposed Construction of 1000MT Warehouse Unit Building In G.no.53/1 Paiki, For Mshagro Farmers Producer Co. Ltd., At- Padali, Tal-Paithan, Dist: Aurangabad (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 1.5 M.) By Mechanical Means

For RCC Coloumn Type C1	20	x	2.10	x	2.10	x	1.50	=	132.30	Cum	
For RCC Coloumn Type C2	6	x	2.10	x	2.10	x	1.80	=	47.63		
For RCC Coloumn Type C4	4	x	2.10	x	2.10	x	1.80	=	31.75		
For RCC Coloumn Type C5	8	x	2.10	x	1.60	x	1.80	=	48.38		
Total Qty									=	260.06	Cum

- 2 Excavation for foundation in Hard murum in cluding removing the excavated material upto a distance 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	20	x	2.10	x	2.10	x	0.90	=	79.38	Cum	
For RCC Coloumn Type C2	6	x	2.10	x	2.10	x	0.90	=	23.81		
For RCC Coloumn Type C4	4	x	2.10	x	2.10	x	0.90	=	15.88		
For RCC Coloumn Type C5	8	x	2.10	x	1.60	x	0.90	=	24.19		
Total Qty									=	143.26	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	20	x	2.10	x	2.10	x	0.30	=	26.46	Cum	
For RCC Coloumn Type C2	6	x	2.10	x	2.10	x	0.23	=	6.09		
For RCC Coloumn Type C4	4	x	2.10	x	2.10	x	0.23	=	4.06		
For RCC Coloumn Type C5	8	x	2.10	x	1.60	x	0.23	=	6.18		
Ware House Plinth	1	x	35.10	x	15.00	x	0.23	=	121.10		
Total Qty									=	163.89	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 = 403.32 cum

Item no.1 & 2

Total Qty = 403.32 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.

Ware House Plinth	1	x	33.90	x	13.80	x	0.65	=	304.08	cum	
Deduction Internal side WH.	2	x	35.10	x	0.60	x	0.60	=	25.27		
Periphery Rubble fillig	2	x	13.80	x	0.60	x	0.60	=	9.94		
									35.21		
Total Qty									=	268.87	cum



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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	35.10	x	0.60	x	0.10	=	4.21	cum
	2	x	13.80	x	0.60	x	0.10	=	1.66	
Ware House Flooring Soling	1	x	35.10	x	13.80	x	0.10	=	48.44	
Total Qty =									54.31	cum

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 dPLC with SCADA enable dreversible Drum Type mixer/ concrete Batch mix plant (Panmixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)

For RCC Coloumn Type C1	20	x	2.10	x	2.10	x	0.10	=	8.82	cum
For RCC Coloumn Type C2	6	x	2.10	x	2.10	x	0.10	=	2.65	
For RCC Coloumn Type C4	4	x	2.10	x	2.10	x	0.10	=	1.76	
For RCC Coloumn Type C5	8	x	2.10	x	1.60	x	0.10	=	2.69	
Ware House Plinth	1	x	35.56	x	15.46	x	0.10	=	54.98	cum
Total Qty =									70.90	cum

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	20	x	1.80	x	1.80	x	0.60	=	38.88	cum
For RCC Coloumn Type C2	6	x	1.80	x	1.80	x	0.45	=	8.75	
For RCC Coloumn Type C4	4	x	1.80	x	1.80	x	0.45	=	5.83	
For RCC Coloumn Type C5	8	x	1.80	x	1.30	x	0.45	=	8.42	

2nd Step of Footing

For RCC Coloumn Type C1	20	x	1.50	x	1.50	x	0.30	=	13.50	
For RCC Coloumn Type C2	6	x	1.50	x	1.50	x	0.22	=	2.97	
For RCC Coloumn Type C4	4	x	1.50	x	1.50	x	0.22	=	1.98	
For RCC Coloumn Type C5	8	x	1.50	x	1.00	x	0.22	=	2.64	
Total Qty =									82.97	cum

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, concrete 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 PEC 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	20	x	0.23	x	0.450	x	9.20	=	19.04	cum
For RCC Coloumn Type C2	6	x	0.23	x	0.45	x	9.50	=	5.90	



For RCC Coloumn Type C4	4	x	0.23	x	0.38	x	9.50	=	3.32
For RCC Coloumn Type C5	8	x	0.23	x	0.38	x	3.90	=	2.73
							Total Qty	=	30.99 cum

- 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	18	x	3.81	x	0.23	x	0.60	=	9.46
Short Wall Ground Beams	4	x	3.64	x	0.23	x	0.45	=	1.51
Varandah Plinth Beams Long	4	x	3.51	x	0.23	x	0.38	=	1.23
Varandah Plinth Beams Short	8	x	1.60	x	0.23	x	0.38	=	1.12
Long & Short Wall above V2	44	x	0.95	x	0.23	x	0.38	=	3.65
Long Wall Lintel Beams	14	x	3.81	x	0.23	x	0.30	=	3.68
Long Wall Beams Above RS	4	x	3.81	x	0.23	x	0.38	=	1.33
Long Wall Floor Beams	18		3.81		0.23		0.38		5.99
Short Wall Floor Beams	4	x	3.64	x	0.23	x	0.38	=	1.27
							Total Qty	=	29.24 cum

- 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	22	x	1.56	x	0.45	x	0.100	=	1.54
Long Wall Ventilators V2 Sides	44	x	0.45	x	0.30	x	0.100	=	0.59
							Total Qty	=	2.13 cum

- 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	4	x	4.27	x	1.83	x	0.150	=	4.69
							Total Qty	=	4.69 cum

- 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.

For RCC Footing	82.97	@	80.00	Kg	=	6637.60	Kg
For RCC Coloumn	30.99	@	100.00	Kg	=	3099.00	Kg
For RCC Beam	29.24	@	120.00	Kg	=	3508.80	Kg
For RCC Pins	2.13	@	120.00	Kg	=	255.60	Kg

For RCC Slab

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4.69	@	120.00	kg	=	562.80	kg
Total Qty				=	14063.80	Kg
Say				=	14.06	MT

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	35.10		x	0.60	=	42.12	Sqm	
Short Wall Internal Side Over size Metal in 2 Layers	2	x	13.80		x	0.60	=	16.56		
Total Qty								=	58.68	Sqm

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	18	x	3.81	x	0.23	x	0.60	=	9.46	cum
Short Wall Ground Beams	4	x	3.64	x	0.23	x	0.60	=	2.01	
Total									11.47	
Total Qty								=	11.47	cum

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	18	x	3.81	x	0.23	x	5.20	=	82.02	cum
Short Wall Superstructure	4	x	3.64	x	0.23	x	5.20	=	17.41	cum
Short Gable Wall	2	x	7.50	x	0.23	x	2.00	=	6.90	
Total								=	106.33	
Deduction For V2	44	x	0.60	x	0.60	x	0.23	=	3.64	
Deduction For V1	26	x	1.41	x	0.60	x	0.23	=	5.06	
Deduction For RS	4	x	2.10	x	3.00	x	0.23	=	5.80	
Total								=	14.50	
Total Qty								=	91.83	cum

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	35.56		x	6.50	=	462.28	Sqm
Short Wall	2	x	15.46		x	6.50	=	200.98	
Long Wall	2	x	35.56		x	5.50	=	391.16	
Short Wall	2	x	15.46		x	5.50	=	170.06	
Short Span Gable Walls External	2	x	7.50		x	2.00	=	30.00	
Short Span Gable Walls Internal	2	x	7.50		x	2.00	=	30.00	
Long Wall Coloumn Offsets C1	20	x	0.4		x	6.50	=	57.20	
Long Wall Coloumn Offsets C2	6	x	0.4		x	6.50	=	17.16	
Long Wall Coloumn Offsets C4	4	x	0.2		x	2.10	=	2.44	
Long Wall Coloumn Offsets C5	3	x	1.36		x	1.20	=	13.06	



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Verandah Slab	4	x	4.73	x	2.06	=	38.98	
Verandah Slab Sides	8	x	2.06	x	0.38	=	6.26	
Verandah Slab Front	4	x	4.73	x	0.38	=	7.19	
V2 Top	44	x	1.56	x	0.45	=	30.89	
V2 Sides	88	x	0.45	x	0.60	=	23.76	
							<u>1481.42</u>	
Deduction								
Deduction For V2 Both Side	88	x	0.60	x	0.60		31.68	
Deduction For V1 Both Side	52	x	1.41	x	0.60		43.99	
Deduction For RS Both Side	8	x	2.10	x	3.00		50.40	
							<u>126.07</u>	
							<u>1355.35</u>	Sqm

- 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	44	x	0.60	x	0.60	=	15.84	Sqm
V1	26	x	1.41	x	0.60		22.00	
							<u>37.84</u>	Sqm

- 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						=	1355.35	Sqm
							<u>1355.35</u>	Sqm

- 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						=	1355.35	Sqm
							<u>1355.35</u>	Sqm

- 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 atopand 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	4	x	2.10	x	3.00		12.60	Sqm
							<u>12.60</u>	Sqm

- 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.

Warehouse Flooring	1	x	35.56	x	15.46		549.76	Sqm
							<u>549.76</u>	Sqm

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	8	x	2880.00	x	=	23040.00	MT
Varandah Canopy	4	x	450.00	x	=	1800.00	
						<u>24840.00</u>	
Total Qty					=	24.84	MT

- 24 Providing and fixing colour coated Zincalume (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 inorganic 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	2	x	10.50	x	35.56	=	746.76	Sqm
Verandah	4	x	4.73	x	2.00	=	37.84	
							<u>784.60</u>	
Deduction For Turbo Ventilator & Sky light Upvc roof	9.00	x	3.00	x	1.150	=	31.05	
							<u>31.05</u>	
Total Qty						=	753.55	Rmt

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

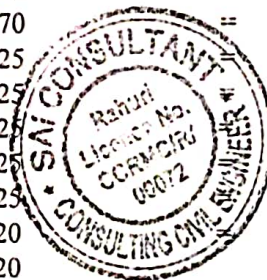
At Roof Level Ventilation						=	9.00	No.
							<u>9.00</u>	<u>No.</u>
Total Qty						=	9.00	No.

- 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/ cm², including fastening with self drilling screw having washers made of stainless steel etc. complete.

	9.00	x	3.00	x	1.15	=	31.05	Sqm
Total Qty						=	31.05	Sqm

- 27 Royalty Charges

Material	Qty				Qty of Material	Cum
6 Providing and filling in the foundati	1	x	54.31	x	1.000	= 54.31 Cum
7 Providing and laying Cast in situ/ R	1	x	70.90	x	0.470	= 33.32
8 Providing and laying in situ cement	1	x	82.97	x	0.425	= 35.26
9 Providing and laying Cast in situ/R	1	x	30.99	x	0.425	= 13.17
10 Providing second class Burnt Brick	1	x	29.24	x	0.425	= 12.43
11 Providing sand faced plaster extern	1	x	2.13	x	0.425	= 0.91
12 Providing and casting in situ cemen	1	x	4.69	x	0.425	= 1.99
15 Providing Brick masonry in cement	1	x	11.47	x	0.320	= 3.67
16 Providing second class Burnt Brick	1	x	91.83	x	0.320	= 29.39
17 Providing sand faced plaster extern	1	x	1355.35	x	0.033	= 44.73



Providing and laying in situ cement	1	x	549.76	x	0.043		23.36	
						Sand	Total Qty	= 252.54 Cum
3 Providing dry trap/ granite/ quartzit	1	x	163.89	x	1.00		=	163.89
5 Filling in plinth and floors with con	1	x	268.87	x	1.00		=	268.87
14 Providing dry rubble stone pitching	1	x	58.68	x	1.00		=	58.68
			Hm and Rubble		Total Qty		=	491.44 Cum

G Bhaskar
Chartered Engineer

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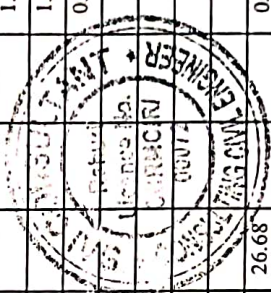
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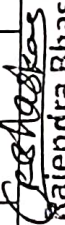
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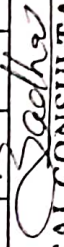


RATE ANALYSIS AS PER PWD SSR 2021-22 For MAHARASHTRA STATE

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			
				366.82/287.34	299.83/M ³	299.83/M ³	220.06/M ³	4.75/M.T.			
1	Excavation for foundation in earth, soil of all types, sand, gravel	21.02	193.00						0.00	193.00	
2	Excavation for foundation in Hard murum in cluding removal	21.08	265.00						0.00	265.00	
3	Providing dry trap/ granite/ quartzite/ gneiss rubble stone soil	21.38	1294.00	1.00	366.82				366.82	1660.82	
4	Filling in plinth and floors with approved excavated material	21.36	113.00						0.00	113.00	
5	Filling in plinth and floors with contractors material/brough	21.37	550.00				1.00	220.06	220.06	770.06	
6	Providing and filling in the foundation with sand of approve	21.39	2172.00	1.00	299.83				299.83	2471.83	
7	Providing and laying Cast in situ/ Ready Mix cement concrete	24.01	5538.00	0.47	140.92	0.940	281.84		443.66	5981.66	
8	Providing and laying in situ cement concrete of M-25 grade	25.13	6836.00	0.425	127.43	0.90	269.85		432.91	7268.91	
9	Providing and laying Cast in situ/Ready Mix cement concrete	25.33	13157.00	0.425	127.43	0.90	269.85		432.91	13589.91	
10	Providing and laying Cast in situ/Ready Mix cement concrete	25.52	11652.00	0.425	127.43	0.85	254.86		417.92	12069.92	
11	Providing and laying Cast in situ/Ready Mix cement concrete	26.31	17214.00	0.425	127.43	0.85	254.86		415.54	17629.54	
12	Providing and casting in situ cement concrete of M-25 grade	25.72	14114.00	0.425	127.43	0.90	269.85		432.91	14546.91	
13	Providing and fixing in position TMT - FE - 500 bar reinforcement	26.33	71778.00						0.00	71778.00	
14	Providing dry rubble stone pitching 23cm (about 9) thick including	2.34	386.00	1.00	366.82				366.82	752.82	
15	Providing brick masonry in cement mortar 1.6 using second	27.01	7343.00	0.32	95.95			1.58	7.51	7446.46	
16	Providing second class Burnt Brick masonry with conventional	27.05	7570.00	0.32	95.95			1.58	7.51	7673.46	
17	Providing sand faced plaster externally in cement mortar using	32.11	599.00	0.033	9.89			0.25	1.19	610.08	
18	Providing and fixing steel ventilat or fully glazed partly fixed	39.30	4449.00						0.00	4449.00	
19	Providing and applying white-wash in one coat on old/ new	36.02	7.00						0.00	7.00	
20	Providing and applying plastic emulsion paint of approved quality	36.12	70.00						0.00	70.00	
21	Providing and fixing rolling shutter fabricated from steel at	39.24	4310.00						0.00	4310.00	
22	Providing and laying in situ cement concrete M20 with trem	33.30	746.00	0.043	12.74	0.089	26.68	0.70	3.33	788.75	
23	Providing structural steel work in trusses, other similar truss	23.04	105909.00						0.00	105909.00	
24	Providing and fixing colour coated Zincalume (R) AZ 150 (4	38.34	1095.00						0.00	1095.00	
25	Turbo ventilator 2' 4" MATERIAL RATES FOR SSR For Year	SSR 21-22, Page no. 374 I.no.42	8680.00						0.00	8680.00	
26	Providing and fixing UPVC Roof made up of 3 layers roofri	38.37	1477.00						0.00	1477.00	
27	Royalty Charges for Rubble and FIM		216.18						0.00	216.18	




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 Aurangabad, Dist. Ahmednagar

Name of work :- Proposed Construction of 1000MT Warehouse Unit Building In G.no.53/1 Paiki, For Mshagro Farmers Producer Co. Ltd., At- Padali, Tal-Paithan, Dist: Aurangabad (MH)

Quarry Chart



LEAD STATEMENT

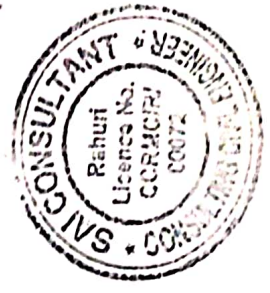
Material	Quarry	Lead in Km.
Rubble	Bidkin	10.00
Metal	Bidkin	10.00
Crushed Metal	Bidkin	10.00
Murum	Local	5.00
Crush Sand	Bidkin	10.00

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.

G. Rajendra Bhaskar
 Chartered Engineer
 Gaurav Rajendra Bhaskar
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