

ESTIMATE

**Name of work :- Proposed Construction of Cleaning & Grading Shed In G.no.138 Paiki,
For Surya Tej Farmers Producer Co. Ltd., At- Saknewadi, Tal:-Osmanabad, Dist:-
Osmanabad(MH)**

Estimated Cost of Works (Rs.) :- 3229823.00

Rupees thirty-two lakhs twenty-nine thousand eight hundred twenty-three and paise nil only



SAI CONSULTANT'S

SAI CONSULTANT'S
CONSULTING CIVIL ENGINEERS
RAHURI, DIST. AHMEDNAGAR
GUJARAT

Name of work :- Proposed Construction of Cleaning & Grading Shed In G.no.138 Paiki,
For Surya Tej Farmers Producer Co. Ltd., At- Saknewadi, Tal:-Osmanabad, Dist:-
Osmanabad(MH)

RECAPITUALTION SHEET

1	Work Portion (Part A)	Rs.	2592413.00
2	Add Royalty	Rs.	36499.00
3	Add Testing Charges	Rs.	14280.00
4	Add. 1.00 % Insurance on Part A	Rs.	25924.00
5	Add.18.00 % GST Part A	Rs	466634.00
	Total Rs.		3135750.00
6	Add. 3% Contingencies on Total	Rs	94073.00
	Say Rs.		3229823.00

Rupees thirty-two lakhs twenty-nine thousand eight hundred twenty-three and paise nil only

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

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



Name of work :- Proposed Construction of Cleaning & Grading Shed In G.no.138 Paiki, For Surya Tej Farmers Producer Co. Ltd., At- Saknewadi, Tal:-Osmanabad, Dist:- Osmanabad(MH)

ABSTRACT

Quantity	I.No	Item of work	Rate	unit	Amount
27.00	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	5589.00
13.50	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	3834.00
43.55	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 ;	1662.83	Cubic Metre	72416.25
40.50	4	Filling in plinth and floors with approved excavated material in 15cm. to 20cm. layersincluding watering and compacting etc. complete.	120.00	Cubic Metre	4860.00
66.72	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	69870.52
9.47	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)	2389.55	Cubic Metre	22629.04
18.93	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)	6176.64	Cubic Metre	116923.80



Quantity	I.No	Item of work	Rate	unit	Amount
6.69	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)	7618.83	Cubic Metre	50969.97
3.58	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)	14298.83	Cubic Metre	51189.81
9.15	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)	12783.83	Cubic Metre	116972.04
1.49	11	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	133657.47



202

Quantity	I.No	Item of work	Rate	unit	Amount
3.23	12	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,	7836.71	Cubic Metre	25312.57
20.89	13	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	8075.71	Cubic Metre	168701.58
172.48	14	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.	647.89	Square Metre	111748.07
7.20	15	Providing and fixing steel window of various sizes as per detailed drawing without hotdip zinc coating, with out ventilators, including fabricating/ glazing with plain/ obscured glass panels of approved type and quality, iron oxidised fixtures and fastenings, finishing with oil painting two coats complete (with guard bars 12 mm square at 10 cm c/c.)	4874.00	Square Metre	35092.80
172.48	16	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	1379.84
172.48	17	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	13798.40
21.00	18	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)	5308.00	Square Metre	111468.00



203

Quantity	I.No	Item of work	Rate	unit	Amount
179.62	19	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.	829.84	Square Metre	149055.86
6.95	20	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	830240.05
371.61	21	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 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 pan nominal 180-250 mm center-to-center. The end rib shall be designed for anti-capillary groove. and return leg. The feed material should have coil manufacturers product details marked at 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	435898.53
4.00	22	Turbo ventilator 24" MATERIAL RATES FOR SSR For Year 2021-22, Page no. 374, Building (Bd-R : Roofing and ceiling)	9702.00	No.	38808.00
13.80	23	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 ² , including fastening with self drilling screw having washers made of stainless steel etc. complete.	1594.00	Square Metre	21997.20
				Total Rs.	2592412.80
			Part A)	Say Rs.	2592413.00
53.34	24	Royalty Charges for sand	237.37	Cum	12661.32
110.27		Royalty Charges for Rubble and HM	216.18	Cum	23838.17
				Total Rs.	36499.49
			Part B)	Say Rs.	36499.00



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

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

Name of work :- Proposed Construction of Cleaning & Grading Shed In G.no.138 Paiki, For Surya Tej Farmers Producer Co. Ltd., At- Saknewadi, Tal:-Osmanabad, Dist:- Osmanabad(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	10	x	1.50	x	1.50	x	1.20	=	27.00	Cum		
									Total Qty	=	27.00	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	10	x	1.50	x	1.50	x	0.60	=	13.50	Cum		
									Total Qty	=	13.50	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	10	x	1.50	x	1.50	x	0.23	=	5.18	Cum		
Cleaning & Grading Shed Plinth	1	x	18.25	x	9.14	x	0.23	=	38.37			
									Total Qty	=	43.55	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										=	40.50	cum
Item no.1 & 2												
									Total Qty	=	40.50	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.

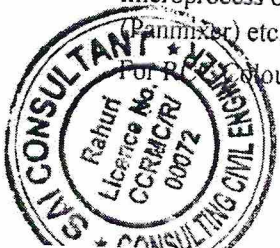
Cleaning & Grading Shed Plinth	1	x	18.25	x	9.14	x	0.40	=	66.72	cum		
									Total Qty	=	66.72	cum

- 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)

Cleaning & Grading Shed Plinth	1	x	18.25	x	9.14	x	0.05	=	8.34	cum		
For RCC Coloumn Type C1	10	x	1.50	x	1.50	x	0.05	=	1.13			
									Total Qty	=	9.47	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 dPLCwith 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	10	x	1.50	x	1.50	x	0.10	=	2.25	cum
-------------------------	----	---	------	---	------	---	------	---	------	-----



285

Cleaning & Grading Shed Plinth	1	x	18.25	x	9.14	x	0.10	=	16.68
Total Qty =									18.93 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 456 (1978)

1st Step of Footing

For RCC Coloumn Type C1	10	x	1.20	x	1.20	x	0.38	=	5.47 cum
-------------------------	----	---	------	---	------	---	------	---	----------

2nd Step of Footing

For RCC Coloumn Type C1	10	x	0.90	x	0.90	x	0.15	=	1.22
Total Qty =									6.69 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, 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	10	x	0.23	x	0.38	x	4.10	=	3.58 cum
Total Qty =									3.58 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	6	x	4.38	x	0.23	x	0.38	=	2.30
	2	x	4.42	x	0.23	x	0.38	=	0.77
Short Wall Ground Beams	2	x	8.84	x	0.23	x	0.60	=	2.44
Long Wall Lintel Beams	6	x	4.38	x	0.23	x	0.30	=	1.81
	2	x	4.42	x	0.23	x	0.30	=	0.61
Short Wall Lintel Beams	2	x	8.84	x	0.23	x	0.30	=	1.22
Total Qty =									9.15 cum

- 11 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	6.69	@	70.00	Kg	=	468.30	Kg
For RCC Coloumn	3.58	@	80.00	Kg	=	286.40	Kg
For RCC Beam	9.15	@	80.00	Kg	=	732.00	Kg
Total Qty =						1486.70	Kg
Say =						1.49	MT



208

- 12 Providing Brick masonry in cement mortar 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	6	x	4.38	x	0.23	x	0.40	=	2.42	cum
Short Wall Ground Beams	2	x	8.84	x	0.23	x	0.20	=	0.81	
							Total		3.23	
							Total Qty	=	3.23	cum

- 13 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 Ground Beams	6	x	4.38	x	0.23	x	3.00	=	18.13	cum
Short Wall Ground Beams	2	x	8.84	x	0.23	x	3.00	=	12.20	
							Total	=	30.33	
Deduction										
Deduction For RS	2	x	3.00	x	0.23	x	3.00	=	4.14	
Deduction For WI	4	x	1.50	x	0.23	x	1.20	=	1.66	
Lintel Beam	6	x	4.38	x	0.23	x	0.30	=	1.81	
	2	x	4.42	x	0.23	x	0.30	=	0.61	
	2	x	8.84	x	0.23	x	0.30	=	1.22	
									9.44	
							Total	=	20.89	
							Total Qty	=	20.89	cum

- 14 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	2	x	18.71			x	1.00	=	37.42	Sqm
Short Wall up to Plinth	2	x	9.60			x	1.00	=	19.20	
Long Wall Above Plinth	2	x	18.71			x	3.00	=	112.26	
Short Wall Above Plinth	2	x	9.60			x	3.00	=	57.60	
							Total		226.48	
Deduction										
Deduction For RS Both Side	4	x	3.00			x	3.30		39.60	
Deduction For WI	8	x	1.50			x	1.20		14.40	
							Total		54.00	
							Total Qty	=	172.48	Sqm

- 15 Providing and fixing steel window of various sizes as per detailed drawing without hotdip zinc coating, with out ventilators, including fabricating/ glazing with plain/ obscured glass panels of approved type and quality, iron oxidised fixtures and fastenings, finishing with oil painting two coats complete (with guard bars 12 mm square at 10 cm c/c.)

WI	4	x	1.50			x	1.20	=	7.20	Sqm
							Total Qty	=	7.20	Sqm



207

- 16 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.14 = 172.48 Sqm
- Total Qty = 172.48 Sqm**
- 17 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.14 = 172.48 Sqm
- Total Qty = 172.48 Sqm**
- 18 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)
- RS 2 x 3.00 x 3.50 = 21.00 Sqm
- Total Qty = 21.00 Sqm**
- 19 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 18.71 x 9.60 = 179.62 Sqm
- Total Qty = 179.62 Sqm**
- 20 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 5 x 1250.00 = 6250.00 MT
- Varandah Canopy 2 x 350.00 = 700.00
-
- 6950.00
- Total Qty = 6.95 MT**



208

- 21 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 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 at 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	5.00	x	18.71	=	187.10	Sqm
Verandah	2	x	3.40	x	2.00	=	13.60	
Vertical Sheets Long Wall	2	x	18.71	x	3.40	=	127.23	
Vertical Sheets Short Wall	2	x	9.60	x	3.40	=	65.28	
						Total	=	393.21
Deduction For Turbo Ventilator & Sky light Upvc roof	4.00	x	3.00	x	1.15	=	13.80	
Deduction For RS	2.00		3.00		1.30		7.80	
						Total		21.60
						Total Qty	=	371.61 Rmt

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

At Roof Level Ventilation						=	4.00	No.
						Total Qty	=	4.00 No.

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

	4.00	x	3.00	x	1.15	=	13.80	Sqm
						Total Qty	=	13.80 Sqm

- 24 Royalty Charges

	Material		Qty			Qty of Material	Cum
6	Providing and filling in the foundati	1	x	9.47	x	1.000	= 9.47 Cum
7	Providing and laying Cast in situ/ R	1	x	18.93	x	0.470	= 8.90
8	Providing and laying in situ cement	1	x	6.69	x	0.425	= 2.84
9	Providing and laying Cast in situ/Re	1	x	3.58	x	0.425	= 1.52
10	Providing second class Burnt Brick	1	x	9.15	x	0.425	= 3.89
14	Providing sand faced plaster externa	1	x	172.48	x	0.033	= 5.69
12	Providing Brick masonry in cement	1	x	3.23	x	0.320	= 1.03
13	Providing second class Burnt Brick	1	x	20.89	x	0.320	= 6.68
14	Providing sand faced plaster externa	1	x	172.48	x	0.033	= 5.69
19	Providing and laying in situ cement	1	x	179.62	x	0.043	= 7.63
						Sand Total Qty	= 53.34 Cum
3	Providing dry trap/ granite/ quartzit	1	x	43.55	x	1.00	= 43.55
5	Filling in plinth and floors with con	1	x	66.72	x	1.00	= 66.72
				Hm and Rubble		Total Qty	= 110.27 Cum

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

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



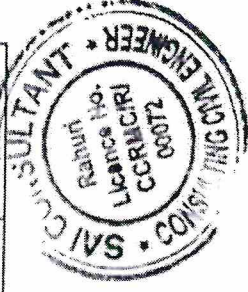
Name of work :- Proposed Construction of Cleaning & Grading Shed In G.no.138 Paiki, For Surya Tej Farmers Producer Co. Ltd., At- Saknewadi, Tal:-Osmanabad, Dist:- Osmanabad(MH)

RATE ANALYSIS AS PER PWD SSR 2022-23 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			
1	Excavation for foundation in earth, soil of all types, sand, g	21.02	207.00	280.83	229.55	229.55	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	280.83				280.83	1662.83	
4	Filling in plinth and floors with approved excavated materi	21.36	120.00						0.00	120.00	
5	Filling in plinth and floors with contractors material/ broug	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						229.55	2389.55	
7	Providing and laying Cast in situ/ Ready Mix cement concre	24.01	5830.00			0.940	215.78	4.40	22.97	6176.64	
8	Providing and laying in situ cement concrete of M-25 grade	25.13	7287.00			0.85	195.12	7.50	39.15	7618.83	
9	Providing and laying Cast in situ/Ready Mix cement concre	25.33	13967.00			0.85	195.12	7.50	39.15	14298.83	
10	Providing and laying Cast in situ/Ready Mix cement concre	25.52	12452.00			0.85	195.12	7.50	39.15	12783.83	
11	Providing and fixing in position TMT - FE - 500 bar reinfor	26.33	89703.00						0.00	89703.00	
12	Providing Brick masonry in cement mortar 1.6 using second	27.01	7755.00			0.32	73.46	1.58	8.25	7836.71	
13	Providing second class Burnt Brick masonry with conventio	27.05	7994.00			0.32	73.46	1.58	8.25	8075.71	
14	Providing sand faced plaster externally in cement mortar us	32.11	639.00			0.033	7.58	0.25	1.31	647.89	
15	Providing and fixing steel window of various sizes as per de	39.20	4874.00						0.00	4874.00	
16	Providing and applying white-wash in one coat on old/ new	36.02	8.00						0.00	8.00	
17	Providing and applying plastic emulsion paint of approved c	36.12	80.00						0.00	80.00	
18	Providing and fixing rolling shutter fabricated from steel at	39.25	5308.00						0.00	5308.00	
19	Providing and laying in situ cement concrete M20 with tren	33.30	796.00			0.043	9.76	0.70	3.65	829.84	
20	Providing structural steel work in trusses, other similar truss	23.04	119459.00						0.00	119459.00	
21	Providing and fixing colour coated Zincalume (R) AZ 150 (38.34	1173.00						0.00	1173.00	
22	Turbo ventilator 24" MATERIAL RATES FOR SSR For Y	SSR 22-23,Page no. 374 I.no.42	9702.00						0.00	9702.00	
23	Providing and fixing UPVC Roof made up of 3 layers roofli	38.37	1594.00						0.00	1594.00	
24	Royalty Charges for Rubble and HM		216.18						0.00	216.18	

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

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



209

Name of work :- Proposed Construction of Cleaning & Grading Shed In G.no.138 Paiki, For Surya Tej Farmers Producer Co. ltd., At- Saknewadi, Tal:-Osmanabad, Dist:- Osmanabad(MH)

Appendix - I
Lead Chart

Sr. No.	Description	Rubble	Murum	Crush metal	Crush metal 40 mm above	Crush Sand	Cement	Steel	Asphalt
1	2	3	4	4	4	5	6	7	8
	Source	Restricted	Local	Restricted	Restricted	Restricted	Local	Local	
1	Average lead as per Quarry chart in km	3.00	5.00	3.00	3.00	3.00	1.00	1.00	
2	Lead charges	280.83	252.22	229.55	219.98	229.55	104.39	104.39	
4	Extra lead charges	280.83	252.22	229.55	219.98	229.55	104.39	104.39	
5	Extra lead charges per bag of cement						5.22		

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

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



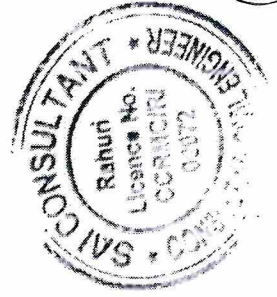
Name of work :- Proposed Construction of Cleaning & Grading Shed In G.no.138 Paiki, For Surya Tej Farmers Producer Co. Ltd., At- Saknewadi, Tal:-Osmanabad, Dist:-
Osmanabad(MH)

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	18.93	4.16	8.90		17.79	Comp. Strength- Cube		9	5	4	690.00	2760.00
M 20	17.96	6.74	0.76		16.17							
M 25	19.42	7.28	0.83		17.48							
Total	56.31	18.18	10.49		51.44	Crush Metal-Basic Test	1/1000 Cum	3	2	1	2600.00	2600.00
		MT	Cum		Cum	Gradation	1/100 Cum	3	2	1	745.00	745.00
						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	14280.00

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

Sachin
Consulting Engineer
SAI CONSULTANT
Consulting Civil Engineer
Rahun, Dist. Ahmednagar



(121)

Name of work :- Proposed Construction of Cleaning & Grading Shed In G.no.138 Paiki, For Surya Tej Farmers Producer Co. Ltd., At- Saknewadi, Tal:-Osmanabad, Dist:- Osmanabad(MH)

Quarry Chart



LEAD STATEMENT

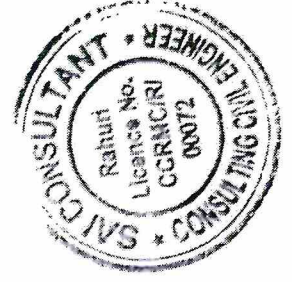
Material	Quarry	Lead in Km.
Rubble	Wagholi	3.00
Metal	Wagholi	3.00
Crushed Metal	Wagholi	3.00
Murum	Local	5.00
Crush Sand	Wagholi	3.00

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.

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

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



(212)

