

Estimate

DETAILED ESTIMATE

NAME OF WORK:

Construction of Processing Unit for Sugar Grid Agro Producer Company Ltd. At Gat No. 1751 Vaduj Tal. Khatav Dist. Satara

Estimated Cost : 4280000.00

Construction of Processing Unit for Sugar Grid Agro Producer Company Ltd. At Gat
No. 1751 Vaduj Tal. Khatav Dist. Satara

RECAPITULATION SHEET

Processing Unit Building	Rs. 3420359.59
Total Cost of Processing Unit	<hr/> Rs. 3420359.59
Electrification	Rs. 67763.01
Add Royalty Charges	Rs. 80495.45
Add Testing Charges	Rs. 28085.00
<hr/> Tender Cost Rs. 3596703.05	
Add 18% GST	Rs. 647406.55
Add 1% Labour Insurance	Rs. 35967.03
<hr/> Total Cost Rs. 4280076.63	
Say Rs. 4280000.00	

Construction of Processing Unit for Sugar Grid Agro Producer Company Ltd. At Gat No. 1751 Vaduj Tal. Khatav
Dist. Satara

ABSTRACT (Civil Work)

Quantity	Item Of Work	Rate	Unit	Amount
48.92 Cubic Metre	<p>Item 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</p> <p>DSR Page No./ Item No.21.02</p> <p>Spec. No. : Bd.A.1 Page No. 259 Page No. BDA 1</p>	193.00	One Cubic Metre	9442.33
12.10 Cubic Metre	<p>Item No. 2 :- Excavation for foundation in hard murum including removing the excavated material upto distance of 50 metres beyond the building area and 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 1.50 m) By Mechanical Means</p> <p>DSR Page No./ Item No.21.06</p> <p>Spec. No. : Bd.A.2 Page No. 259 Page No. BDA 2</p>	578.82	One Cubic Metre	7001.41
24.19 Cubic Metre	<p>Item No. 3 :- Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soling 15 cm to 20 cm thick including hand packing and compacting etc. complete.</p> <p>DSR Page No./ Item No.21.38</p> <p>Spec. No. : Bd.A.12 Page No. 264 Page No. BDA 12</p>	1294.00	One Cubic Metre	31304.45
3.02 Cumt	<p>Item No. 4 :- Providing and laying in situ cement concrete of 1:4:8 proportion with trap/ granite/ quartzite/ gneiss metal in foundation including necessary form work, compacting and curing etc. complete. (with reversible drum rtype mixer with SCADA with natural sand)</p> <p>DSR Page No./ Item No.11.04</p> <p>Spec. No. : CD.3 Page.No. 160 Page No. CD 3B</p>	6200.72	One Cumt	18750.98
459.04 Square Metre	<p>Item No. 5 :- 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</p> <p>DSR Page No./ Item No.33.3</p> <p>Spec. No. : As directed by Engineer in charge. Page No. BDM</p>	796.58	One Square Metre	365662.08
30.24 Cubic Metre	<p>Item No. 6 :- Providing and laying in situ cement concrete M20 of trap / granite /quartzite/ gneiss metal for R.C.C. work in foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. including bailing out water, formwork, cover blocks compaction and curing roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel) etc. etc. complete, with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant With Natural Sand</p>	7051.92	One Cubic Metre	213250.06

Quantity	Item Of Work	Rate	Unit	Amount
18.64 Cubic Metre	<p>DSR Page No./ Item No.25.11</p> <p>Spec. No. : Bd.F.3 Page No. 298 and B.7, Page No.38 Page No. BDF 3</p> <p>Item No. 7 :- Providing and casting in situ cement concrete M20 of trap / granite /quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawing or as directed including centering, formwork, cover blocks 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 concrete batch mix plant (pan mixer).... With natural sand.</p>	13372.92	One Cubic Metre	249228.44
41.11 Cubic Metre	<p>DSR Page No./ Item No.25.31</p> <p>Spec. No. : Bd.F.5 Page No. 300 and B.7, Page.No. 38 Page No. BDF 5</p> <p>Item No. 8 :- Providing & casting in situ cement concrete M20 of trap / granite /quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs & drawings or as directed including centering, formwork, cover blocks compaction & roughening the surface if special finish is to be provided & curing etc. complete. (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant (pan mixer).... With natural sa</p>	11868.92	One Cubic Metre	487931.30
26.00 Cubic Metre	<p>DSR Page No./ Item No.25.5</p> <p>Spec. No. : Bd.F.6 Page No. 300 and B.7, Page.No. 38 Page No. BDF 6</p> <p>Item No. 9 :- Providing fly ash brick masonry with conventional / I.S. type fly ash bricks in C.M. 1:6 in foundation and plinth including bailing out water manually striking joints, racking out joints watering and scaffolding etc. complete.</p>	7281.12	One Cubic Metre	189333.44
59.68 Cubic Metre	<p>DSR Page No./ Item No.27.12</p> <p>Spec. No. : As director by engineer incharge and BDG2 & 5 Page No. BDG</p> <p>Item No. 10 :- Providing fly ash 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</p>	7497.12	One Cubic Metre	447402.63
278.80 Cubic Metre	<p>DSR Page No./ Item No.27.13</p> <p>Spec. No. : As director by engineer incharge and BDG2 & 5 Page No. BDG</p> <p>Item No. 11 :- Filling in plinth and floors with contractors aterial/brought from outside and approved by Engineer incharge in layers of 15cm. to 20cm. including watering and compaction etc. complete. Spec. No. : Bd.A. 11/Page No. 263</p>	837.34	One Cubic Metre	233450.81
	<p>DSR Page No./ Item No.21.37</p> <p>Spec. No. : Bd.A.11 Page No. 263 Page No. BDA 11</p>			

Quantity	Item Of Work	Rate	Unit	Amount
1.51 Metric Tonne	<p>Item No. 12 :- Providing structural steel work in trusses, other similar trussed purlins and members with all bracing, gusset plates etc. as per detailed designs and drawings or as directed including cutting, fabricating, hoisting, erecting fixing in position, Making riveted/ bolted/ welded connection and one coat of anticorrosive paint and over it 2 coats of oil painting approved quality and shade etc. complete.</p> <p>DSR Page No./ Item No.23.04</p> <p>Spec. No. : Bd.C.8 Page No. 278 Page No. BDC 8</p>	105909.00	One Metric Tonne	159655.48
319.60 Square Metre	<p>Item No. 13 :- Providing and fixing corrugated galvanised iron sheets of 0.63mm thick (24 B.W.G.) for roofing without wind tiles including fastening with galvanised iron screws & bolts, lead & bitumen washers as per drawing etc. complete.(Weight of 5.5 kg/sq.m.).</p> <p>DSR Page No./ Item No.38.34</p> <p>Page No. 173</p>	1095.00	One Square Metre	349962.00
2.87 Metric Tonne	<p>Item No. 14 :- 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. a) For TMT Fe 415 steel bars (If Mild Steel/HYSD steel is to be used prior permission from S.E. should be taken)</p> <p>DSR Page No./ Item No.26.33</p> <p>Spec. No. : Bd.F.17, Page No. 306 Page No. BDF 17</p>	71926.81	One Metric Tonne	206635.14
6.36 Square Metre	<p>Item No. 15 :- Providing and fixing steel ventilator fully glazed partly fixed as per detailed drawing with hot dip zinc coating including fabricating glazing with plain / obscured glass pans and approved type quality and iron oxidized fixtures and fastening with guard square bars 12 mm 10 cm c/c and oil painting 2 coats etc. complete.</p> <p>DSR Page No./ Item No.39.3</p> <p>Spec. No. : Bd. T. 53, Page No. 509 & As directed by Engineer in charge. Page No. BDT 53</p>	4449.00	One Square Metre	28295.64
21.00 Square Metre	<p>Item No. 16 :- Providing and fixing rolling shutter fabricated from steel laths of minimum thickness 0.9 mm with lock plate of 3.15 mm thickness reinforced with 35 x 35 x 5 mm angle section fitted with sliding bolts and handles for both sides, deep M.S. channel section of depth and thickness not less than 65 mm and 3.15 mm respectively with hold fast arrangements, M.S. Bracket plate 300 x 300 x 3.15 mm minimum size and shape with square bar, suspension shaft of minimum 32 mm diameter, hood cover of M.S. sheet not less than 0.9 mm thickness and of any size at top and safety devices including mechanical gear operation arrangement consisting of worm gear wheels and worms of high grade cast iron or mild steel and one coat of red lead primer etc. complete. (I.S. 62481979) (Without mechanical gear)</p> <p>DSR Page No./ Item No.39.24</p> <p>Spec. No. : Bd.T.55, Page No. 510 Page No. BDT 55</p>	4310.00	One Square Metre	90510.00
149.06 Square Metre	<p>Item No. 17 :- Providing internal cement plaster 20mm thick in two coats in cement mortar 1:5 without neeru finish, to concrete, brick surface, in all positions including scaffolding and curing etc. complete</p>	395.29	One Square Metre	58921.14

Quantity	Item Of Work	Rate	Unit	Amount
201.68 Square Metre	DSR Page No./ Item No.32.06 Spec. No. : Bd.L.4 Page No. 368 Page No. BDL 4 Item No. 18 :- 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.	650.72	One Square Metre	131237.21
350.74 Square Metre	DSR Page No./ Item No.32.11 Spec. No. : Bd.L.7 Page No. 369 Page No. BDL 7 Item No. 19 :- Providing and applying two coats of water proof cement paint of approved manufacture and of approved colour to the plastered surfaces including scaffolding if necessary, cleaning and preparing the surface, watering for two days etc. complete.	74.00	One Square Metre	25954.61
15.00 Running Metre	DSR Page No./ Item No.35.13 Spec. No. : Bd.0.8 Page No. 406 Page No. BDO 8 Item No. 20 :- Providing and Fixing 110 mm diameter PVC Rain Water pipe with necessary fittings such as bends, tees, single junctions, slotted vent, clamps etc complete.	502.00	One Running Metre	7530.00
5.00	DSR Page No./ Item No.42.87 Spec. No. : As directed by Engineer in charge Page No. BDV Item No. 21 :- Shooting of still photographs outdoor and indoor of construction and other works of building , bridges, roads etc. in District and outside dist. At any distances ii) a set of same three copies of 4 ' x 6 ' Size	64.00	set	320.00
	DSR 2016-17 Item No 1949			
	A) Work Portion Total with all Charges		Rs	3311779.14
63.17 Cum	Item No. 22 :- Add Royalty as per Government of Maharashtra Revenue and Forest Departments Order For Sand	237.37	One Cum	14994.53
302.99 Cum	Item No. 23 :- Add Royalty as per Government of Maharashtra Revenue and Forest Departments Order For Other Material	216.18	One Cum	65500.92
		Royalty	Rs	80495.45
	Item No. 24 :- Testing Charges for quality control tests on various materials like metal crushed metal bitumen Hard murum Soft Murum , Sand, Cement , Steel etc as per frequency norms and rates for every material in Vigilence and Quality Control Laboratory as directed by Engineer in Charge			
2.00	Compressive Strength of M-20 grade C.C. Cube	690.00	Test	1380.00
3.00	Carrying out water absorption , compressive strength & Efflorescence Test of Bricks	2175.00	Test	6525.00
2.00	Liquid Limit & Plastic Limit H.M.	1170.00	Test	2340.00
2.00	Standard Consistency , fineness specific Gravity Setting Time (Initial & Final) Compressive Strength Soundness	3770.00	Test	7540.00
2.00	Steel Upto 16 mm (set of 3 bars)	1275.00	Test	2550.00
2.00	Nitrol Solution Test (set of 3 bars)	3875.00	Test	7750.00

Quantity	Item Of Work	Rate	Unit	Amount
		Testing Charges	Rs	28085.00
Total Civil Work + Royalty + Testing Charges				<u>3420359.59</u>

MEASUREMENT. (Civil Work)

Item 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

C1	14	x	1.20	x	1.20	x	1.20	=	24.19	CubicMetr	
C2	4	x	1.20	x	1.20	x	1.20	=	6.91		
C3	4	x	1.20	x	1.20	x	1.20	=	6.91		
C4	6	x	1.20	x	1.20	x	1.20	=	10.37		
	1	x	1.20	x	1.50	x	0.30	=	0.54	CubicMetr	
									Total Qty. =	48.92	CubicMetr

Item No. 2 :-

Excavation for foundation in hard murum including removing the excavated material upto distance of 50 metres beyond the building area and 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 1.50 m) By Mechanical Means

C1	14	x	1.20	x	1.20	x	0.30	=	6.05	CubicMetr	
C2	4	x	1.20	x	1.20	x	0.30	=	1.73		
C3	4	x	1.20	x	1.20	x	0.30	=	1.73		
C4	6	x	1.20	x	1.20	x	0.30	=	2.59		
									Total Qty. =	12.10	CubicMetr

Item No. 3 :-

Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soling 15 cm to 20 cm thick including hand packing and compacting etc. complete.

Column Footing	C1	14	x	1.20	x	1.20	x	0.60	=	12.10	Cubic Metre
	C2	4	x	1.20	x	1.20	x	0.60	=	3.46	
	C3	4	x	1.20	x	1.20	x	0.60	=	3.46	
	C4	6	x	1.20	x	1.20	x	0.60	=	5.18	
									Total Qty. =	24.19	Cubic Metre

Item No. 4 :-

Providing and laying in situ cement concrete of 1:4:8 proportion with trap/ granite/ quartzite/ gneiss metal in foundation including necessary form work, compacting and curing etc. complete. (with reversible drum rtype mixer with SCADA with natural sand)

C1	14	x	1.20	x	1.20	x	0.075	=	1.51	Cumt	
C2	4	x	1.20	x	1.20	x	0.075	=	0.43		
C3	4	x	1.20	x	1.20	x	0.075	=	0.43		
C4	6	x	1.20	x	1.20	x	0.075	=	0.65		
									Total Qty. =	3.02	Cumt

Item No. 5 :-

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

Bed			1	x	30.20	x	15.20	=	459.04	SquareMetre	
									Total Qty. =	459.04	SquareMetre

Item No. 6 :-

Providing and laying in situ cement concrete M20 of trap / granite /quartzite/ gneiss metal for R.C.C. work in foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. including bailing out water, formwork, cover blocks compaction and curing roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel) etc. etc. complete, with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant With Natural Sand

C1	14	x	1.20	x	1.20	x	0.45	=	9.07	Cubic Metre	
C1	14	x	1.20	x	1.20	x	0.30	=	6.05	Cubic Metre	
C2	4	x	1.20	x	1.20	x	0.45	=	2.59	Cubic Metre	
C2	4	x	1.20	x	1.20	x	0.30	=	1.73	Cubic Metre	
C3	4	x	1.20	x	1.20	x	0.45	=	2.59	Cubic Metre	
C3	4	x	1.20	x	1.20	x	0.30	=	1.73	Cubic Metre	
C4	6	x	1.20	x	1.20	x	0.45	=	3.89	Cubic Metre	
C4	6	x	1.20	x	1.20	x	0.30	=	2.59	Cubic Metre	
									Total Qty. =	30.24	Cubic Metre

Item No. 7 :-

Providing and casting in situ cement concrete M20 of trap / granite /quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawing or as directed including centering, formwork, cover blocks 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 concrete batch mix plant (pan mixer)... With natural sand.

C1	14	x	0.30	x	0.50	x	5.20	=	10.92	Cubic Metre	
C2	4	x	0.30	x	0.50	x	5.20	=	3.12		
C3	4	x	0.34	x	0.50	x	5.20	=	3.54		
C4	4	x	0.15	x	0.34	x	5.20	=	1.06		
									Total Qty. =	18.64	Cubic Metre

Item No. 8 :-

Providing & casting in situ cement concrete M20 of trap / granite /quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs & drawings or as directed including centering, formwork, cover blocks compaction & roughening the surface if special finish is to be provided & curing etc. complete. (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant (pan mixer)... With natural sa

GB1	2	x	1	x	3.55	x	0.30	x	0.30	=	0.64	Cubic Metre
GB1	2	x	1	x	3.55	x	0.30	x	0.30	=	0.64	Cubic Metre
PB1	6	x	1	x	6.52	x	0.23	x	0.30	=	2.70	Cubic Metre
PB2	6	x	1	x	6.52	x	0.23	x	0.30	=	2.70	Cubic Metre
LB1	2	x	1	x	3.55	x	0.23	x	0.30	=	0.49	Cubic Metre
LB1	2	x	1	x	3.55	x	0.23	x	0.30	=	0.49	Cubic Metre
SB1	6	x	1	x	6.52	x	0.23	x	0.30	=	2.70	Cubic Metre
SB1	6	x	1	x	6.52	x	0.23	x	0.30	=	2.70	Cubic Metre
									Total Qty. =	13.05	Cubic Metre	

Item No. 9 :-

Providing fly ash brick masonry with conventional / I.S. type fly ash bricks in C.M. 1:6 in foundation and plinth including bailing out water manually striking joints, racking out joints watering and scaffolding etc. complete.

2	x	8	x	6.52	x	0.23	x	0.90	=	21.59	CubicMetre	
2	x	3	x	3.55	x	0.23	x	0.90	=	4.41	CubicMetre	
										Total Qty. =	26.00	CubicMetre

Item No. 10 :-

Providing fly ash 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

2	x	8	x	4.42	x	0.23	x	4.20	=	68.32	CubicMetre	
2	x	3	x	3.23	x	0.23	x	4.20	=	18.72	CubicMetre	
Deduct												
Shutter				4.00	x	2.10	x	2.50	=	-21.00	CubicMetre	
V2				28.00	x	0.10	x	0.60	=	-1.68		
V3				8.00	x	1.30	x	0.45	=	-4.68		
										Total Qty. =	59.68	CubicMetre

Item No. 11 :-

Filling in plinth and floors with contractors aterial/brought from outside and approved by Engineer incharge in layers of 15cm. to 20cm. including watering and compaction etc. complete. Spec. No. : Bd.A. 11/Page No. 263

1	x	30.47	x	15.25	x	0.60	=	278.80	Cubic Metre		
									Total Qty. =	278.80	Cubic Metre

Item No. 12 :-

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

Truss Member (100x100 x6mm)				4.50	x	2.20	x	5.53	=	54.75						
Purlin				3.70	x	1.90	x	5.53	=	38.88						
Cleat angle				7.00	x	0.15	x	3.61	=	3.79						
BASE PLATE (12mm tk-62.80/sqm)																
Nut Bolts (16 mm tk2.46Kg/m)	10	x	0.15	x	0.15	=	0.23	x	62.80	=	14.13					
	4	x	7.00	x	0.25	=	7.00	x	2.46	=	17.22					
										Total	=	128.76	Kg			
										10% Curtailment Wt	=	12.87634				
										Net	=	141.64	MetricTonne			
Weight of Trusses	1.35	x	4.10	x	141.64	=	783.98									
Waiting & Hall	6.00	x	8.70	x	5.10	=	266.22									
											10% Curtailment Wt	=	26.62			
											Net	=	1076.82			
										1076.82		1000.00	=	1.077		
M.S. Angle	2	x	1	x	0.25	=	0.50									
M.S. Angle	2	x	4	x	0.10	=	0.80									
Vertical Support	6	x	4	x	0.30	=	7.20									
Vertical Support	4	x	6	x	0.45	=	10.80									
Vertical Support	5	x	6	x	0.45	=	13.50									
Vertical Support	7	x	4	x	0.60	=	16.80									
Horizontal Support	4	x	3	x	0.90	=	10.80									
Horizontal Support	4	x	4	x	0.20	=	3.20									
Horizontal M.S. Angle	5	x	4	x	0.35	=	7.00									
											Net	=	70.60			
											70.60	x	6.10	=	430.66	
											430.66		1000.00	=	0.43066	
										Net Qty. =	1.51	MetricTonne				

Item No. 13 :-

Providing and fixing colour coated Zinalume (R) AZ150 (min 150 gms/sq.mt. total on each side) profiled sheets for roofing. The feed material is manufactured out of nominal 0.45 mm Base Metal Thickness (BMT) (0.5 mm TCT), Hi-strength steel with min.550 MPa yield strength, metallic hot dip coated with Aluminium-Zinc alloy (55% aluminium 43.4% zinc 1.6% silicon) with COLORBOND (R) steel quality super durable polyester paint coat (with inorganic pigment). The paint shall have a total coating thickness of nominal 35 um, comprising of nominal 25 um exterior coat on top surface and nominal 10 um 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 at nominal 180-250 mm centerto-center. The end rib 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. 25 um Zinc-Tin alloy coated, Hex head, self-drilling screw etc. complete. (weight of profile 4.52 Kilogram/Square Metre)

1	x	1.00	x	23.50	x	13.60	=	319.60	SquareMetre		
									Total Qty. =	319.60	SquareMetre

Item No. 14 :-

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. a) For TMT Fe 415 steel bars (If Mild Steel/HYSD steel is to be used prior permission from S.E. should be taken)

Item	Qty	Steel Per	=		
Footing	30.240	x	50.00	=	1512.00 Kg
Column	18.637	x	45.00	=	838.66 Kg
Beam	13.055	x	40.00	=	522.20 Kg
				=	2872.85 Kg
Total Qty. =					2.87 MT

Item No. 15 :-

Providing and fixing steel ventilator fully glazed partly fixed as per detailed drawing with hot dip zinc coating including fabricating glazing with plain / obscured glass pans and approved type quality and iron oxidized fixtures and fastening with guard square bars 12 mm 10 cm c/c and oil painting 2 coats etc. complete.

V2		28	x	0.10	x	0.60	=	1.68	
V3		8	x	1.30	x	0.45	=	4.68	
						Total Qty.	=	6.36	SquareMetre

Item No. 16 :-

Providing and fixing rolling shutter fabricated from steel laths of minimum thickness 0.9 mm with lock plate of 3.15 mm thickness reinforced with 35 x 35 x 5 mm angle section fitted with sliding bolts and handles for both sides, deep M.S. channel section of depth and thickness not less than 65 mm and 3.15 mm respectively with hold fast arrangements, M.S. Bracket plate 300 x 300 x 3.15 mm minimum size and shape with square bar, suspension shaft of minimum 32 mm diameter, hood cover of M.S. sheet not less than 0.9 mm thickness and of any size at top and safety devices including mechanical gear operation arrangement consisting of worm gear wheels and worms of high grade cast iron or mild steel and one coat of red lead primer etc. complete. (I.S. 62481979) (Without mechanical gear)

Shutter		4	x	2.10	x	2.50	=	21.00	SquareMetre
						Total Qty.	=	21.00	SquareMetre

Item No. 17 :-

Providing internal cement plaster 20mm thick in two coats in cement mortar 1:5 without neeru finish, to concrete, brick surface, in all positions including scaffolding and curing etc. complete

	2	x	8	x	6.52	x	0.90	=	93.89	SquareMetre
Parapet Wall	2	x	3	x	3.55	x	0.90	=	19.17	SquareMetre
	2	x	2	x	12.00	x	0.75	=	36.00	
						Total	=	149.06	SquareMetre	

Item No. 18 :-

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.

	2	x	2	x	29.00	x	1.00	=	116.00	SquareMetre
	2	x	2	x	21.42	x	1.00	=	85.68	SquareMetre
						Total	=	201.68	SquareMetre	

Item No. 19 :-

Providing and applying two coats of water proof cement paint of approved manufacture and of approved colour to the plastered surfaces including scaffolding if necessary, cleaning and preparing the surface, watering for two days etc. complete.

Qty as per Item No. 17	=	149.06	SquareMetre
Qty as per Item No. 18	=	201.68	SquareMetre
Total	=	350.74	SquareMetre

Item No. 20 :-

Providing and Fixing 110 mm diameter PVC Rain Water pipe with necessary fittings such as bends, tees, single junctions, slotted vent, clamps etc complete.

	1	x	15.00	x	1.00	=	15.00	
					Total Qty.	=	15.00	RunningMetre

Item No. 21 :-

Shooting of still photographs outdoor and indoor of construction and other works of building , bridges, roads etc. in District and outside dist. At any distances ii) a set of same three copies of 4' x 6' Size

	1.00	x	5.00	=	5.00	set
			Total Qty.	=	5.00	set

Item No. 22 :-

Add Royalty as per Government of Maharashtra Revenue and Forest Departments Order For Sand

1:4:8	3.02	x	0.47	=	1.42	Cum
Footing	30.24	x	0.425	=	12.85	
Columns	13.05	x	0.425	=	5.55	
Beam	13.05	x	0.425	=	5.55	
BB Masonary	26.00	x	0.32	=	8.32	
BB Masonary	59.68	x	0.32	=	19.10	
6 mm plaster	149.06	x	0.025	=	3.73	
Sand Face Plaster	201.68	x	0.033	=	6.66	
			Total Qty.	=	63.17	Cum

Item No. 23 :-

Add Royalty as per Government of Maharashtra Revenue and Forest Departments Order For Other Material

Rubble Soling	24.19	x	1.00	=	24.19	Cum
filling Plinth	278.80	x	1.00	=	278.80	Cum
			Total Qty.	=	302.99	

Item No. 24 :-

Testing Charges for quality control tests on various materials like metal crushed metal bitumen Hard murum Soft Murum , Sand, Cement , Steel etc as per frequency norms and rates for every material in Vigilance and Quality Control Laboratory as directed by Engineer in Charge

Compressive Strength of M-20 grade C.C. Cube	=	2.00	Test
Carrying out water absorption , compressive strength & Efflorescence Test of Bricks	=	3.00	Test
Liquid Limit & Plastic Limit H.M.	=	2.00	Test
Standard Consistency , fineness specific Gravity Setting Time (Initial & Final) Compressive Strength	=	2.00	Test
Steel Upto 16 mm (set of 3 bars)	=	2.00	Test
Nitrol Solution Test (set of 3 bars)	=	2.00	Test

Construction of Processing Unit for Sugar Grid Agro Producer Company Ltd. At Gat No. 1751 Vaduj Tal. Khatav Dist. Satara

ABSTRACT Electrical

Item Of Work	Quantity	Rate	Add 5% other than Dist-Place	Total of 3+4	Unit	I.N. / P.N.	Amount
Item No. 1 :- Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V, 3 core 4 sq. mm. copper conductor complete erected with glands & lugs, on wall/ trusses/ pole or laid in provided trench/ pipe as per specification no. CB-LT/CU	10.00	283.00	14.15	297.15	RMT	7-2-16/129	2971.50
Item No. 2 :- Making trench of suitable width and depth in hard murum /tar road for laying provided LT cable up to and including 36 sq. mm complete as per specification no. CW-EXNCTR	5.00	193.00	9.65	202.65	RMT	16-1-2/239	1013.25
Item No. 3 :- Making trench of suitable width and depth in Soft murum for laying provided LT cable up to and including 36 sq. mm complete as per specification no. CW-EXN - CTR	5.00	156.00	7.80	163.80	RMT	16-1-1/239	819.00
Item No. 4 :- Supplying erecting mains PVC unarmoured cable 1100 volt grade / ISI mark 3 core / 2.5 sqmm standard / soild copper complete erected on wall with duly painted G.I. Saddle @ 0.25 m C/C & rigidly grouted in the wall with the help of plated screws.	45.00	125.60	6.28	131.88	RMT	RA	5934.60
Item No. 5 :- Supplying erecting waether proof powder oated distribution board 4 way with 2 x 6 / 10 Amps S.P.M.C.B. with industrial two pin plug socket 10A and 3 pin plug top 10 A with top cover necessary connection etc. complete with approved make.	4.00	1290.00	64.50	1354.50	Number	RA	5418.00
Item No. 6 :- Providing point wiring for street light with PVC unarmoured cable 1100 Volt grade ISI mark 3 core 1.5 sqm standard / soild copper erected on wall with G.I. saddle duly painted @ 0.25 m C/C rigidly grouted in the wall with the help of plated screw including 4' x 4' M.S. box 2 way with epoxy painting & inside 10 amp Nylon connector strip for street light connection and flexible cable of 2 mtrs. for street light connection etc. complete as directed by engineer in charge	2.00	1223.60	61.18	1284.78	Number	RA	2569.56
Item No. 7 :- Supplying & erecting 10-12 W , 230 v integral type LED lamp suitable for B-22 / E-27 base	2.00	230.00	11.50	241.50	Number	2-10-11/42	483.00
Item No. 8 :- Supplying & erecting LED street light fitting suitable for 20 to 25 W. with PF > 0.95 class IP - 65 and above housing of pressure die cast aluminium alloy and ;heat sink extruded aluminium complete as per specification No. FG-ODF / FLS	2.00	2009.00	100.45	2109.45	Number	2-5-2/34	4218.90
Item No. 9 :- Supplying & erecting Street light Wall bracket made from 40 mm dia 'B' class G.I. pipe 1-2 m in total length complete as per specification no. FG-BKT / WB	2.00	712.00	35.60	747.60	Number	2-9-4/38	0.00 1495.20
Item No. 10 :- Supplying & erecting with galavanised iron earth plate size 60x60x0.6 cm complete with all materials testing & recording the results as per specifications no. EA-EP	1.00	4238.00	211.90	4449.90	Number	9-1-1/159	4449.90
Item No. 11 :- Providing Pipe type earthing with 40 mm dia G.I. pipe or 20 mm dia G.I. rod complete with all materials a per specification no EA-EP providing pipe type earting with 40 mm dia G.I. pipe or 20 mm dia G.I. Rod complete with all materials as per specification EA-EP	1.00	1355.00	67.75	1422.75	Number	9-1-4/159	1422.75
Item No. 12 :-							

Item Of Work	Quantity	Rate	Add 5% other than Dist-Place	Total of 3+4	Unit	I.N. / P.N.	Amount
Supplying erecting & marking DPMCB 6A to 32A C-series (for motor/power) in provided distrubtion board as per specification no SW-SWR/MCB	1.00	488.00	24.40	512.40	Number	5-3-6/94	512.40
Item No. 13 :- Supplying erecting & making SPMCB 6A to 32A B-series (for Lighting) in provided distrubtion board as per specification no SW-SWR/MCB	1.00	164.00	8.20	172.20	Number	5-3-3/94	172.20
Item No. 14 :- Supplying and erecting GI sheet 1.6mm (16SWG) to be used for fabrication of boxes panel boards etc. including cutting bending drilling welding riveting etc. and painting with one coat of red lead .	1.00	2264.00	113.20	2377.20	SQM	6-1-2/112	2377.20
Item No. 15 :- Supplying and erecting machine plywood 18/19 mm thick fixed to wall or on provided panel board with necessary materials such as screws wall fasteners supports nut bolts etc. complete	1.00	1342.00	67.10	1409.10	SQM	9-1-14/113	1409.10
Item No. 16 :- Supplying and erecting triple pole and netural distrubtion board (TPNDDB) surface /flush mounted suitable for SPMCB of 12 ways on iron /GI frame (horizontal bushar type) as per specification no CB-CE	2.00	4732.00	236.60	4968.60	Number	RA	9937.20
Item No. 17 :- Supplying and erecting GI pipe A class 25 mm dia rected for enclosing XLPE armoured cable on wall /pole as per specification no CB-CE	10.00	196.00	9.80	205.80	RMT	7-6-1/138	2058.00
Item No. 18 :- Supplying and erecting GI pipe A class 40 mm dia rected for enclosing XLPE armoured cable on wall /pole as per specification no CB-CE	10.00	304.00	15.20	319.20	RMT	7-6-2/138	3192.00
Item No. 19 :- Supplying and leying (including excuvation of suitable width & depth up to 90 cm) 75mm outside dia. Double wall corrugated pipes (DWC) of HDPE for enclosing cable below ground / road surface to required depth complete.	12.00	227.00	11.35	238.35	RMT	7-6-10/139	2860.20
Item No. 20 :- Supplying and erecting 18 guage M.S. Box Powder coated (4' x 4') 3 way for mains connection	2.00	80.00	4.00	84.00	Number	MR	0.00 168.00
Item No. 21 :- Supplying and erecting Siemens type brass cable glands for 3 to 4 core 6 Sqm .mm /2 to 4 core 10sqmm for XLPE ammoured cable as per specification no CB -GL	4.00	58.00	2.90	60.90	Number	7-7-2/139	243.60
Item No. 22 :- Supplying shockproof type hand lamp with lamp holder builb/lamp 100W guarded glass and 30 mtr. 3 core PVC flexible cord with hand shiled type 3 pin 6Amp plug. Top.	1.00	1573.00	78.65	1651.65	Number	RA	1651.65
Item No. 23 :- Supplying shockproof type hand lamp with lamp holder builb/lamp 100W guarded glass and 30 mtr. 3 core PVC flexible cord with hand shiled type 3 pin 6Amp plug. Top.	2.00	496.00	24.80	520.80	Number	1-9-8/17	1041.60
Item No. 24 :- point wiring for independent in 20mm ISI marked HMS PVC consuct with 1.5 Sq mm (2+1E) FRISH grade copper wire flush type switch earthing and required accessories as per specification No WG-PW/SW	1.00	466.00	23.30	489.30	Number	RA	489.30
Item No. 25 :- power point wiring for geaser/Refrigerator with ISI mark 2x2.50 sq mm copper PVC insulated wire 1.1 KV grade in PVC casing caping with double locking arragment with 1x1.00 sq mm copper PVC insulated wire for earthing on wall/ ceiling with necessary G.I. screws etc, fixed at an	2.00	131.00	6.55	137.55	RMT	RA	275.10
Item No. 26 :-							

Item Of Work	Quantity	Rate	Add 5% other than Dist- Place	Total of 3+4	Unit	I.N. / P.N.	Amount
Supplying and erecting mains with 2x 4.00 Sq mm standerd copper PVC insulated wire with 2x2.15 sq mm copper PVC wire in PVC casting caping 20 mm on wall / celling .	2.00	154.00	7.70	161.70	RMT	RA	323.40

Item Of Work	Quantity	Rate	Add 5% other than Dist- Place	Total of 3+4	Unit	I.N. / P.N.	Amount
Item No. 27 :- Supplying and erecting double pole metal clad switch surface type flush type 240 V. 32 A with indicator lamp & fuse as per specification o. SW - SWR / MDP	1.00	177.00	8.85	185.85	Number	5-1-1/89	185.85
Item No. 28 :- Supplying and erecting double pole metal clad switch wih HC type fuse and neutral link 240 V , 32 A on iron /GI frame as per specification o. SW - SWR / MDP	4.00	783.00	39.15	822.15	Number	5-1-3/89	3288.60
Item No. 29 :- Supplying and erecting 3 W , 230 V integral type LED Lamp suitable for B-22 / E - 27 base	1.00	125.00	6.25	131.25	Number	2-10-9/40	131.25
Item No. 30 :- Supplying and erecting T8 fluourescent tube day light 1200 mm 36 W	2.00	44.00	2.20	46.20	Number	2-10-2/40	92.40
Item No. 31 :- Supplying and erecting ready to use Retrofit T8 LED 18 / 20 tube light with polycarbonate body , heat sink , integrated HF electronic driver complete & compatible to T8 / T12 LED luminaire by disconnecting starter & ballast if necessary	1.00	626.00	31.30	657.30	SQM	2-10-14/40	657.30
Item No. 32 :- Supplying and erecting regular / standard model ceiling fan of 900 / 1050 mm sweep complete erected in position as per specification no. FG-FN/CF	1.00	1894.00	94.70	1988.70	Number	2-12-2/41	1988.70
Item No. 33 :- Supplying and fixing wiremesh (Jali) cover suitable for fitting / an or for purpose , complete with necessary materials . The jali cover shall be made from good quality G.i. wire mesh size 25 x 25 (mm) and made up of 14 SWG G.I. wire with side / supporting MS strips of suitable size	2.00	442.00	22.10	464.10	Number	2-4-10/33	928.20
Item No. 34 :- Supplying and erecting ding dong / electronic musical type call bell with heavy duty coil suitable to operate in 230 V A.C. supply erected on polished double wooden block / sunmica block of suitable size	1.00	131.00	6.55	137.55	Number	2-9-3/38	137.55
Item No. 35 :- Supplying and erecting street light wall bracket made from 25 mm dia ' B ' class G.I. pipe 1.2 m in total length complete as per specification no. FG-BKT / WB	3.00	575.00	28.75	603.75	Number	5-4-23/97	1811.25
Item No. 36 :- Supplying and erecting CRCA sheet metal one wynclosures suitable for DP MCB / TP MCB /FP MCB erected on angle iron /GI frame complete	1.00	361.00	18.05	379.05	Number	5-3-24/95	379.05
Item No. 37 :- Supplying and erecting and marking four pole isolators only switch version of minature circuit brerakers of 40 A in provided distribution board complete	1.00	625.00	31.25	656.25	Number	5-4-23/97	656.25
					Total	Rs	67763.01

MEASUREMENT. Electrical

Item No. 1 :-

Supplying, erecting & terminating FR XLPE insulated, galvanised steel formed wire armoured (strip) cable 1100 V, 3 core 4 sq. mm. copper conductor complete erected with glands & lugs, on wall/ trusses/ pole or laid in provided trench/ pipe as per specification no. CB-LT/CU

1.00 x 10.00 = 10.00 RMT
Total Qty. = 10.00 RMT

Item No. 2 :-

Making trench of suitable width and depth in hard murum /tar road for laying provided LT cable up to and including 36 sq. mm complete as per specification no. CW-EXNCTR

1.00 x 5.00 = 5.00 RMT
Total Qty. = 5.00 RMT

Item No. 3 :-

Making trench of suitable width and depth in Soft murum for laying provided LT cable up to and including 36 sq. mm complete as per specification no. CW-EXN - CTR

1.00 x 5.00 = 5.00 RMT
Total Qty. = 5.00 RMT

Item No. 4 :-

Supplying erecting mains PVC unarmoured cable 1100 volt grade / ISI mark 3 core / 2.5 sqmm standard / soild copper complete erected on wall with duly painted G.I. Saddle @ 0.25 m C/C & rididly grouted in the wall with the help of plated screws.

1.00 x 45.00 = 45.00 RMT
Total Qty. = 45.00 RMT

Item No. 5 :-

Supplying erecting waether proof powder oated distribution board 4 way with 2 x 6 / 10 Amps S.P.M.C.B. with industrial two pin plug socket 10A and 3 pin plug top 10 A with top cover necessary connection etc. complete with approved make.

1.00 x 4.00 = 4.00 Number
Total Qty. = 4.00 Number

Item No. 6 :-

Providing point wiring for street light with PVC unarmoured cable 1100 Volt grade ISI mark 3 core 1.5 sqm standard / soild copper erected on wall with G.I. saddle duly painted @ 0.25 m C/C rigidly grouted in the wall with the help of plated screw including 4' x 4' M.S. box 2 way with epoxy painting &

1.00 x 2.00 = 2.00 Number
Total Qty. = 2.00 Number

Item No. 7 :-

Supplying & erecting 10-12 W , 230 v integral type LED lamp suitable for B-22 / E-27 base

1.00 x 2.00 = 2.00 Number
Total Qty. = 2.00 Number

Item No. 8 :-

Supplying & erecting LED street light fitting suitable for 20 to 25 W. with PF > 0.95 class IP - 65 and above housing of pressure die cast aluminium alloy and ;heat sink extruded aluminium complete as per specification No. FG-ODF / FLS

1.00 x 2.00 = 2.00 Number
Total Qty. = 2.00 Number

Item No. 9 :-

Supplying & erecting Street light Wall bracket made from 40 mm dia 'B ' class G.I. pipe 1-2 m in total length complete as per specification no. FG-BKT / WB

1.00 x 2.00 = 2.00 Number
Total Qty. = 2.00 Number

Item No. 10 :-

Supplying & erecting with galavanised iron earth plate size 60x60x0.6 cm complete with all materials testing & recording the results as per specifications no. EA-EP

1.00 x 1.00 = 1.00 Number
Total Qty. = 1.00 Number

Item No. 11 :-

Providing Pipe type earthing with 40 mm dia G.I. pipe or 20 mm dia G.I. rod complete with all materials a per specification no EA-EP providing pipe type earthing with 40 mm dia G.I. pipe or 20 mm dia G.I. Rod complete with all materials as per specification EA-EP

1.00 x 1.00 = 1.00 Number
Total Qty. = 1.00 Number

Item No. 12 :-

Supplying erecting & marking DPMCB 6A to 32A C-series (for motor/power) in provided distrubtion board as per specification no SW-SWR/MCB

1.00 x 1.00 = 1.00 Number
Total Qty. = 1.00 Number

Item No. 13 :-

Supplying erecting & making SPMCB 6A to 32A B-series (for Lighting) in provided distrubtion board as per specification no SW-SWR/MCB

1.00 x 1.00 = 1.00 Number
Total Qty. = 1.00 Number

Item No. 14 :-

Supplying and erecting GI sheet 1.6mm (16SWG) to be used for fabrication of boxes panel boards etc. including cutting bending drilling welding riveting etc. and painting with one coat of red lead .

1.00 x 1.00 = 1.00 SQM
Total Qty. = 1.00 SQM

Item No. 15 :-

Supplying and erecting machine plywood 18/19 mm thick fixed to wall or on provided panel board with necessary materials such as screws wall fasteners supports nut bolts etc. complete

1.00 x 1.00 = 1.00 SQM
Total Qty. = 1.00 SQM

Item No. 16 :-

Supplying and erecting triple pole and netural distrubtion board (TPNDB) suface /flush mounted suitable for SPMCB of 12 ways on iron /GI frame (horizontal bushar type) as per specification no CB-CE

1.00 x 2.00 = 2.00 Number
Total Qty. = 2.00 Number

Item No. 17 :-	Supplying and erecting GI pipe A class 25 mm dia rected for enclosing XLPE armoured cable on wall /pole as per specification no CB-CE						
		1.00	x	10.00	=	10.00	RMT
				Total Qty.	=	10.00	RMT
Item No. 18 :-	Supplying and erecting GI pipe A class 40 mm dia rected for enclosing XLPE armoured cable on wall /pole as per specification no CB-CE						
		1.00	x	10.00	=	10.00	RMT
				Total Qty.	=	10.00	RMT
Item No. 19 :-	Supplying and leying (including excuvation of suitable width & depth up to 90 cm) 75mm outside dia. Double wall corrugated pipes (DWC) of HDPE for enclosing cable below ground / road surface to required depth complete.						
		1.00	x	12.00	=	12.00	RMT
				Total Qty.	=	12.00	RMT
Item No. 20 :-	Supplying and erecting 18 guage M.S. Box Powder coated (4' x 4') 3 way for mains connection						
		1.00	x	2.00	=	2.00	Number
				Total Qty.	=	2.00	Number
Item No. 21 :-	Supplying and erecting Siemens type brass cable glands for 3 to 4 core 6 Sqm .mm /2 to 4 core 10sqmm for XLPE ammoured cable as per specification no CB -GL						
		1.00	x	4.00	=	4.00	Number
				Total Qty.	=	4.00	Number
Item No. 22 :-	Supplying shockproof type hand lamp with lamp holder builb/lamp 100W guarded glass and 30 mtr. 3 core PVC flexible cord with hand shiled type 3 pin 6Amp plug. Top.						
		1.00	x	1.00	=	1.00	Number
				Total Qty.	=	1.00	Number
Item No. 23 :-	Supplying shockproof type hand lamp with lamp holder builb/lamp 100W guarded glass and 30 mtr. 3 core PVC flexible cord with hand shiled type 3 pin 6Amp plug. Top.						
		1.00	x	2.00	=	2.00	Number
				Total Qty.	=	2.00	Number
Item No. 24 :-	point wiring for independent in 20mm ISI marked HMS PVC consuct with 1.5 Sq mm (2+1E) FRISH grade copper wire flush type switch earthing and required accessories as per specification No WG-PW/SW						
		1.00	x	1.00	=	1.00	Number
				Total Qty.	=	1.00	Number
Item No. 25 :-	power point wiring for geaser/Refrigerator with ISI mark 2x2.50 sq mm copper PVC insulated wire 1.1 KV grade in PVC casing caping with double locking arragment with 1x1.00 sq mm copper PVC insulated wire for earthing on wall/ ceiling with necessary G.I. screws etc, fixed at an						
		1.00	x	2.00	=	2.00	RMT
				Total Qty.	=	2.00	RMT
Item No. 26 :-	Supplying and erecting mains with 2x 4.00 Sq mm standerd copper PVC insulated wire with 2x2.15 sq mm copper PVC wire in PVC casting caping 20 mm on wall / ceiling .						
		1.00	x	2.00	=	2.00	RMT
				Total Qty.	=	2.00	RMT
Item No. 27 :-	Supplying and erecting double pole metal clad switch surface type flush type 240 V. 32 A with indicator lamp & fuse as per specification o. SW - SWR / MDP						
		1.00	x	1.00	=	1.00	Number
				Total Qty.	=	1.00	Number
Item No. 28 :-	Supplying and erecting double pole metal clad switch wih HC type fuse and neutral link 240 V , 32 A on iorn /GI frame as per specification o. SW - SWR / MDP						
		1.00	x	4.00	=	4.00	Number
				Total Qty.	=	4.00	Number
Item No. 29 :-	Supplying and erecting 3 W , 230 V integral type LED Lamp suitable for B-22 / E - 27 base						
		1.00	x	1.00	=	1.00	Number
				Total Qty.	=	1.00	Number
Item No. 30 :-	Supplying and erecting T8 fluoescent tube day light 1200 mm 36 W						
		1.00	x	2.00	=	2.00	Number
				Total Qty.	=	2.00	Number
Item No. 31 :-	Supplying and erecting ready to use Retrofit T8 LED 18 / 20 tube light with polycarbonate body , heat sink , integrated HF electronic driver complete & compatible to T8 / T12 LED luminaire by disconnectiong starter & ballast if necessary						
		1.00	x	1.00	=	1.00	SQM
				Total Qty.	=	1.00	SQM
Item No. 32 :-	Supplying and erecting regular / standard model ceiling fan of 900 / 1050 mm sweep complete erected in position as per specification no. FG-FN/CF						
		1.00	x	1.00	=	1.00	Number
				Total Qty.	=	1.00	Number
Item No. 33 :-	Supplying and fixing wiremesh (Jali) cover suitable for fitting / an or for purpose , complete with necessary materials . The jali cover shall be made from good quality G.I. wire mesh size 25 x 25 (mm) and made up of 14 SWG G.I. wire with side / supporting MS strips of suitable size						
		1.00	x	2.00	=	2.00	Number
				Total Qty.	=	2.00	Number
Item No. 34 :-	Supplying and erecting ding dong / electronic musical type call bell with heavy duty coil suitable to operate in 230 V A.C. supply erected on polished double wooden block / sunmica block of suitable size						

1.00 x 1.00 = 1.00 Number
Total Qty. = 1.00 Number

Item No. 35 :-

Supplying and erecting street light wall bracket made from 25 mm dia ' B ' class G.I. pipe 1.2 m in total length complete as per specification no. FG-BKT / WB

1.00 x 3.00 = 3.00 Number
Total Qty. = 3.00 Number

Item No. 36 :-

Supplying and erecting CRCA sheet metal one wynclosures suitable for DP MCB / TP MCB /FP MCB erected on angle iron /GI frame complete

1.00 x 1.00 = 1.00 Number
Total Qty. = 1.00 Number

Item No. 37 :-

Supplying and erecting and marking four pole isolators only switch version of minature circuit brerakers of 40 A in provided distribution board complete

1.00 x 1.00 = 1.00 Number
Total Qty. = 1.00 Number

Rate Analysis Electrical

Item No. 4 :-

Supplying erecting mains PVC unarmoured cable 1100 volt grade / ISI mark 3 core / 2.5 sqmm standard / solid copper complete erected on wall with duly painted G.I. Saddle @ 0.25 m C/C & rigidly grouted in the wall with the help of plated screws.

	Rs.
M.R. A) PVC unarmoured cable 3 core 2.5 Sq. mm -----	84.00
M.R. B) G.I. saddle , screw and rawl plug etc -----	12.00
Add 10% C.P.	9.60
D.S. R. C) Labour charges -- as per item no. 7-2-16	20.00

Total Qty. = 125.60

Item No. 5 :-

Supplying erecting weather proof powder oated distribution board 4 way with 2 x 6 / 10 Amps S.P.M.C.B. with industrial two pin plug socket 10A and 3 pin plug top 10 A with top cover necessary connection etc. complete with approved make.

I.N. 5-3-3/94 A) SPMCB 6 Amp. - 1 No. @ Rs. 164	164.00
I.N. 5-4-22-97 B) 1.25 mm CRCA sheet metal enclosure with 10 Amp 2 pin plug	765.00
I.N. 5-4-23/97 . C) CRCA sheet metal one way enclosure ----	361.00

Total Qty. = 1290.00

Item No. 6 :-

Providing point wiring for street light with PVC unarmoured cable 1100 Volt grade ISI mark 3 core 1.5 sqm standard / solid copper erected on wall with G.I. saddle duly painted @ 0.25 m C/C rigidly grouted in the wall with the help of plated screw including 4' x 4' M.S. box 2 way with epoxy painting &

M.R. A) PVC unarmoured cable 3 core 1.5 Sq. mm ----- (13 x 52)	676.00
M.R. B) M.S. Box epoxy coated (2 way 4' x 4' -----	70.00
M.R.. C) Nylon Connector strip 10 Amp	10.00
M.R.. D) G.I. saddle , screw and rawl plug etc. -----	25.00
M.R.. E) Flexible cable for street light connection 3 core 1.5 sq. mm (2 x 45)	95.00
	876.00
Add 10% CP	87.60
M.R.. F) Labour Charges (20 x 13)	260.00

Total Qty. = 1223.60

Item No. 16 :-

Supplying and erecting triple pole and neutral distribution board (TPNUB) surface /flush mounted suitable for SPMCB of 12 ways on iron /GI frame (horizontal bushar type) as per specification no CB-CE

I.N. 5-4-1/96 A) TPN MCB & Neutral Distribution board 12 ways ----- I. No.	1775.00
I.N. 5-3-15/94 B) TPNMCB 40 A to 63 A ----- I. No.	977.00
I.N. 5-3-2/94 . C) Single pole MCB 6 A to 32 A ----- 12 Nos. @ Rs. 165 / No.	1980.00

Total Qty. = 4732.00

Item No. 22 :-

Supplying shockproof type hand lamp with lamp holder bulb/lamp 100W guarded glass and 30 mtr. 3 core PVC flexible cord with hand shiled type 3 pin 6Amp plug. Top.

I.N. 2-2-1/31 A) Shockproof hand lamp ----- 1 No.	164.00
I.N. 2-10-12 /40 B) LED Lamp 10/12 W ----- 1 No.	309.00
M.R. C) 3 core 1.50 sq. mm flexible cord ----- 20 Rmt @ vRs. 50 / -	1000.00
Add 10% CP on (C)	100.00

Total Qty. = 1573.00

Item No. 24 :-

point wiring for independent in 20mm ISI marked HMS PVC conduct with 1.5 Sq mm (2+1E) FRISH grade copper wire flush type switch earthing and required accessories as per specification No WG-PW/SW

I.N. 1-3-3/5 A) 2 x 2.5 S.qmm copper wire ----- 2 Rmt @ Rs. 57	114.00
I.N. 1-7-12 /12 B) Combined switch & socket 13 A ----- I. No. @ Rs. 136	136.00
I.N. 1-2-9/5 C) PVC Casing capping 20 mm ----- 6 Rmt @VRs. 36	216.00

Total Qty. = 466.00

Item No. 25 :-

power point wiring for geaser/Refrigerator with ISI mark 2x2.50 sq mm copper PVC insulated wire 1.1 KV grade in PVC casing capping with double locking arrangement with 1x1.00 sq mm copper PVC insulated wire for earthing on wall/ ceiling with necessary G.I. screws etc, fixed at an

I.N. 1-3-3/5 A) 2 x 2.5 S.qmm copper wire ----- 2 Rmt @ Rs. 57	57.00
I.N. 1-3-1/5 B) 2 x 1.5 Sq. mm Copper wire ----- I. No. @ Rs. 38	38.00
I.N. 1-2-9/4 C) PVC Casing capping 20 mm ----- @VRs. 36	36.00

Total Qty. = **131.00**

Item No. 26 :-

Supplying and erecting mains with 2x 4.00 Sq mm standerd copper PVC insulated wire with 2x2.15 sq mm copper PVC wire in PVC casting capping 20 mm on wall / ceiling .

I.N. 1-3-3/5 A) 2 x 4 S.qmm copper wire ----- @ Rs. 78	78.00
I.N. 1-3-1/6 B) 2 x 1.5 Sq. mm Copper wire ----- @ Rs. 38	38.00
I.N. 1-2-10/4 C) PVC Casing capping 25 mm ----- @Rs. 38	38.00

Total Qty. = **154.00**

Construction of Processing Unit for Sugar Grid Agro Producer Company Ltd. At Gat No. 1751 Vaduj Tal. Khatav Dist. Satara

RATE ANALYSIS

Sr. No	Description	D.S.R I/p	Rate as per DSR	Additional Lead Charges for												Total Rate	Deduct SCADA 120/Cu m	Total Rate of Item		
				Cement		Steel		Bricks		Sand		Cr. Metal		Rubble					Murum	
				148.81		148.81		679.67		440.01		299.83		366.82					287.34	
				Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount				Factor	Amount
1	2	3	4	5	6			7	8	9	10	12								
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	DSR Page No./ Item No.21.02	193.00														0.00		193.00	
2	Excavation for foundation in hard murum including removing the excavated material upto distance of 50 metres beyond the building area and 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 1.50 m) By Mechanical Means	DSR Page No./ Item No.21.06	212.00									1.00	366.82				366.82		578.82	

Sr. No	Description	D.S.R I/p	Rate as per DSR	Additional Lead Charges for												Total Rate	Deduct SCADA 120/Cum	Total Rate of Item		
				Cement		Steel		Bricks		Sand		Cr. Metal		Rubble					Murum	
				148.81		148.81		679.67		440.01		299.83		366.82					287.34	
				Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount				Factor	Amount
1	2	3	4	5	6	7	8	9	10	12										
3	Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soling 15 cm to 20 cm thick including hand packing and compacting etc. complete.	DSR Page No./ Item No.21.38	1294.00														0.00		1294.00	
4	Providing and laying in situ cement concrete of 1:4:8 proportion with trap/ granite/ quartzite/ gneiss metal in foundation including necessary form work, compacting and curing etc. complete. (with reversible drum rtype mixer with SCADA with natural sand)	DSR Page No./ Item No.11.04	5780.00	0.35	52.08					0.47	206.80	0.94	281.84					540.72	120.00	6200.72
5	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	DSR Page No./ Item No.33.3	746.00	0.035	5.20					0.0425	18.70	0.089	26.68					50.58		796.58

Sr. No	Description	D.S.R I/p	Rate as per DSR	Additional Lead Charges for												Total Rate	Deduct SCADA 120/Cum	Total Rate of Item		
				Cement		Steel		Bricks		Sand		Cr. Metal		Rubble					Murum	
				148.81		148.81		679.67		440.01		299.83		366.82					287.34	
				Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount				Factor	Amount
1	2	3	4	5		6		7		8		9		10		12				
6	Providing and laying in situ cement concrete M20 of trap / granite /quartzite/ gneiss metal for R.C.C. work in foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. including bailing out water, formwork, cover blocks compaction and curing roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel) etc. etc. complete, with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant With Natural Sand	DSR Page No./ Item No.25.11	6666.00	0.35	52.08					0.425	187.00	0.89	266.84					505.92	120.00	7051.92

Sr. No	Description	D.S.R I/p	Rate as per DSR	Additional Lead Charges for												Total Rate	Deduct SCADA 120/Cu m	Total Rate of Item		
				Cement		Steel		Bricks		Sand		Cr. Metal		Rubble					Murum	
				148.81		148.81		679.67		440.01		299.83		366.82					287.34	
				Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount				Factor	Amount
1	2	3	4	5	6			7	8	9	10	12								
7	Providing and casting in situ cement concrete M20 of trap / granite /quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawing or as directed including centering, formwork, cover blocks 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 concrete batch mix plant (pan mixer).... With natural sand.	DSR Page No./ Item No.25.31	12987.00	0.35	52.08					0.425	187.00	0.89	266.84					505.92	120.00	13372.92

Sr. No	Description	D.S.R I/p	Rate as per DSR	Additional Lead Charges for												Total Rate	Deduct SCADA 120/Cu m	Total Rate of Item		
				Cement		Steel		Bricks		Sand		Cr. Metal		Rubble					Murum	
				148.81		148.81		679.67		440.01		299.83		366.82					287.34	
				Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount				Factor	Amount
1	2	3	4	5	6			7	8	9	10	12								
8	Providing & casting in situ cement concrete M20 of trap / granite /quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs & drawings or as directed including centering, formwork, cover blocks compaction & roughening the surface if special finish is to be provided & curing etc. complete. (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant (pan mixer).... With natural sa	DSR Page No./ Item No.25.5	11483.00	0.35	52.08					0.425	187.00	0.89	266.84					505.92	120.00	11868.92
9	Providing fly ash brick masonry with conventional / I.S. type fly ash bricks in C.M. 1:6 in foundation and plinth including bailing out water manually striking joints, racking out joints watering and scaffolding etc. complete.	DSR Page No./ Item No.27.12	6762.00	0.35	52.08			0.48	326.24	0.32	140.80							519.12		7281.12

Sr. No	Description	D.S.R I/p	Rate as per DSR	Additional Lead Charges for												Total Rate	Deduct SCADA 120/Cum	Total Rate of Item		
				Cement		Steel		Bricks		Sand		Cr. Metal		Rubble					Murum	
				148.81		148.81		679.67		440.01		299.83		366.82					287.34	
				Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount				Factor	Amount
1	2	3	4	5	6			7	8	9	10	12								
10	Providing fly ash 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	DSR Page No./ Item No.27.13	6978.00	0.35	52.08			0.48	326.24	0.32	140.80					519.12		7497.12		
11	Filling in plinth and floors with contractors material/brought from outside and approved by Engineer incharge in layers of 15cm. to 20cm. including watering and compaction etc. complete. Spec. No. : Bd.A. 11/Page No. 263	DSR Page No./ Item No.21.37	550.00											1.00	287.34	287.34		837.34		
12	Providing structural steel work in trusses, other similar trussed purlins and members with all bracing, gusset plates etc. as per detailed designs and drawings or as directed including cutting, fabricating, hoisting, erecting fixing in position, Making riveted/ bolted/ welded connection and one coat of anticorrosive paint and over it 2 coats of oil painting approved quality and shade etc. complete.	DSR Page No./ Item No.23.04	105909.00													0.00		105909.00		

Sr. No	Description	D.S.R I/p	Rate as per DSR	Additional Lead Charges for												Total Rate	Deduct SCADA 120/Cu m	Total Rate of Item		
				Cement		Steel		Bricks		Sand		Cr. Metal		Rubble					Murum	
				148.81		148.81		679.67		440.01		299.83		366.82					287.34	
				Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount				Factor	Amount
1	2	3	4	5	6			7	8	9	10	12								
13	Providing and fixing corrugated galvanised iron sheets of 0.63mm thick (24 B.W.G.) for roofing without wind tiles including fastening with galvanised iron screws & bolts, lead & bitumen washers as per drawing etc. complete.(Weight of 5.5 kg/sq.m.).	DSR Page No./ Item No.38.04	816.00													0.00		816.00		
14	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. a) For TMT Fe 415 steel bars (If Mild Steel/HYSD steel is to be used prior permission from S.E. should be taken)	DSR Page No./ Item No.26.33	71778.00			1.00	148.81									148.81		71926.81		

Sr. No	Description	D.S.R I/p	Rate as per DSR	Additional Lead Charges for												Total Rate	Deduct SCADA 120/Cum	Total Rate of Item		
				Cement		Steel		Bricks		Sand		Cr. Metal		Rubble					Murum	
				148.81		148.81		679.67		440.01		299.83		366.82					287.34	
				Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount				Factor	Amount
1	2	3	4	5	6		7	8	9	10	12									
15	Providing and fixing steel ventilator fully glazed partly fixed as per detailed drawing with hot dip zinc coating including fabricating glazing with plain / obscured glass pans and approved type quality and iron oxidized fixtures and fastening with guard square bars 12 mm 10 cm c/c and oil painting 2 coats etc. complete.	DSR Page No./ Item No.39.3	4449.00													0.00		4449.00		

Sr. No	Description	D.S.R I/p	Rate as per DSR	Additional Lead Charges for												Total Rate	Deduct SCADA 120/Cu m	Total Rate of Item		
				Cement		Steel		Bricks		Sand		Cr. Metal		Rubble					Murum	
				148.81		148.81		679.67		440.01		299.83		366.82					287.34	
				Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount				Factor	Amount
1	2	3	4	5	6			7	8	9	10	12								
16	Providing and fixing rolling shutter fabricated from steel laths of minimum thickness 0.9 mm with lock plate of 3.15 mm thickness reinforced with 35 x 35 x 5 mm angle section fitted with sliding bolts and handles for both sides, deep M.S. channel section of depth and thickness not less than 65 mm and 3.15 mm respectively with hold fast arrangements, M.S. Bracket plate 300 x 300 x 3.15 mm minimum size and shape with square bar, suspension shaft of minimum 32 mm diameter, hood cover of M.S. sheet not less than 0.9 mm thickness and of any size at top and safety devices including mechanical gear operation arrangement consisting of worm gear wheels and worms of high grade cast iron or mild steel and one coat of red lead primer etc. complete. (I.S. 62481979) (Without mechanical gear)	DSR Page No./ Item No.39.24	4310.00													0.00		4310.00		

Sr. No	Description	D.S.R I/p	Rate as per DSR	Additional Lead Charges for												Total Rate	Deduct SCADA 120/Cu m	Total Rate of Item		
				Cement		Steel		Bricks		Sand		Cr. Metal		Rubble					Murum	
				148.81		148.81		679.67		440.01		299.83		366.82					287.34	
				Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount				Factor	Amount
1	2	3	4	5	6			7	8	9	10	12								
17	Providing internal cement plaster 20mm thick in two coats in cement mortar 1:5 without neeru finish, to concrete, brick surface, in all positions including scaffolding and curing etc. complete	DSR Page No./ Item No.32.06	359.00	0.17	25.29					0.025	11.00							36.29		395.29
18	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.	DSR Page No./ Item No.32.11	599.00	0.25	37.20					0.033	14.52							51.72		650.72

Sr. No	Description	D.S.R I/p	Rate as per DSR	Additional Lead Charges for												Total Rate	Deduct SCADA 120/Cum	Total Rate of Item		
				Cement		Steel		Bricks		Sand		Cr. Metal		Rubble					Murum	
				148.81		148.81		679.67		440.01		299.83		366.82					287.34	
				Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount				Factor	Amount
1	2	3	4	5	6			7	8	9	10	12								
19	Providing and applying two coats of water proof cement paint of approved manufacture and of approved colour to the plastered surfaces including scaffolding if necessary, cleaning and preparing the surface, watering for two days etc. complete.	DSR Page No./ Item No.35.13	74.00													0.00		74.00		
20	Providing and Fixing 110 mm diameter PVC Rain Water pipe with necessary fittings such as bends, tees, single junctions, slotted vent, clamps etc complete.	DSR Page No./ Item No.42.87	502.00													0.00		502.00		
22	Add Royalty as per Government of Maharashtra Revenue and Forest Departments Order For Sand		237.37													0.00		237.37		

Construction of Processing Unit for Sugar Grid Agro Producer Company Ltd. At Gat No. 1751 Vaduj Tal. Khatav Dist. Satara

LEAD STATEMENT

Sr No.	Material	Total lead in Km	Total Lead charges	Net Additional Lead Charges	Unit
1	2	3	4	5	6
1	Cement	5.00	148.81	148.81	MT
2	Steel	5.00	148.81	148.81	Cum
3	Sand	25.00	440.01	440.01	Cum
4	Bricks	10.00	679.67	679.67	Cum
5	Crushed metal	10.00	299.83	299.83	Cum
6	Rubble	10.00	366.82	366.82	Cum
7	HM/SM	10.00	287.34	287.34	Cum