


Estimate

PLANS AND DETAILED ESTIMATE

NAME OF WORK:

Construction of Processing Unit in Gat No. 2/1/3/4 Plot No. 10 At
Post Daul Tal- Shindkheda Dist- Dhule

Estimated Cost : 3399931.00


Ajay B. Patil
Consulting Civil Engineer
Reg.No.-NSK/JD/57/PAB

Name Of Work :- Construction of Processing Unit in Tapimai Farmers Production Company Ltd. At Post Daul Tal- Shindkheda Dist- Dhule

RECAPITULATION SHEET

Cost of Work Portion	=	3007302.10
(A) Work Portion		<hr/>
	Rs.	3007302.10
Add 12% GST fo Work Portion	Rs.	360876.25
Add 0.50 % Insurance Charge for Work Portion	Rs.	15036.51
(B) Royalty Charges & Testing Charges		
Add Royalty Charges	Rs.	13161.08
Add Testing Charges	Rs.	3555.00
		<hr/>
	Total	Rs. 3399930.94
	Say	Rs. 3399931.00
		<hr/>


Ajay B. Patil
Consulting Civil Engineer
Reg.No.-NSK/JD/57/PAR

ABSTRACT

Quantity	Item Of Work	Rate	Unit	Amount
24.73 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 DSR Page No./ Item No.21.02 Spec. No. : Bd.A.1 Page No. 259 Page No. BDA 1</p>	193.00	One Cubic Metre	4772.89
6.05 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 DSR Page No./ Item No.21.06 Spec. No. : Bd.A.2 Page No. 259 Page No. BDA 2</p>	212.00	One Cubic Metre	1282.60
48.58 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. DSR Page No./ Item No.21.38 Spec. No. : Bd.A.12 Page No. 264 Page No. BDA 12</p>	1294.00	One Cubic Metre	62862.52
76.00 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) DSR Page No./ Item No.11.04 Spec. No. : CD.3 Page.No. 160 Page No. CD 3B</p>	6035.85	One Cumt	458724.60
13.55 Cubic Metre	<p>Item No. 5 :- 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 Spec. No. : Bd.F.3 Page No. 298 and B.7, Page No.38 Page No. BDF 3</p>	6911.52	One Cubic Metre	93651.09
5.80 Cubic Metre	<p>Item No. 6 :- 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 Spec. No. : Bd.F.5 Page No.</p>	13232.52	One Cubic Metre	76748.61

Quantity	Item Of Work	Rate	Unit	Amount
1.90 Cubic Metre	<p>Item No. 7 :- 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)</p> <p>DSR Page No./ Item No.25.5 Spec. No. : Bd.F.6 Page No. 300 and B.7, Page.No. 38 Page No. BDF 6</p>	11728.52	One Cubic Metre	22284.18
7.04 Cubic Metre	<p>Item No. 8 :- Providing second class Burnt Brick masonry with conventional/ I.S. type bricks in cement mortar 1:6 in foundations and plinth of inner walls/ in plinth external walls including bailing out water manually , striking joints on unexposed faces, raking out joints on exposed faces and watering etc. Complete</p> <p>DSR Page No./ Item No.27.01 Spec. No. : Bd.G. 1 Page No. 313 Page No. BDG 1</p>	7698.60	One Cubic Metre	54198.14
322.56 Cubic Metre	<p>Item No. 9 :- 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> <p>DSR Page No./ Item No.21.37 Spec. No. : Bd.A.11 Page No. 263 Page No. BDA 11</p>	550.00	One Cubic Metre	177408.00
9.17 Metric Tonne	<p>Item No. 10 :- 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.</p> <p>DSR Page No./ Item No.23.04 Spec. No. : Bd.C.8 Page No. 278 Page No. BDC 8</p>	105909.00	One Metric Tonne	970764.11
238.40 Square Metre	<p>Item No. 11 :- 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</p> <p>DSR Page No./ Item No.38.04 Spec. No. : Bd.R.5, Page No. 453 Page No. BDR 5</p>	816.00	One Square Metre	194534.40
358.40 Square Metre	<p>Item No. 12 :- 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), Histrrength steel with min.550 MPa yield strength, metallic hot dip coated with AluminiumZinc 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</p> <p>SSR Item No. 38.34 Spec. No. : As directed by Engineer in charge Page No. BDR</p>	1095.00	One Square Metre	392448.00
2.25 Metric Tonne	<p>Item No. 13 :- Providing and fixing in position TMT FE 500 bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels pardis, copings, fins, arches etc. as per detailed designs, drawings and schedules. including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete. 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>	71926.81	One Metric Tonne	161907.24

Quantity	Item Of Work	Rate	Unit	Amount
15.84 Square Metre	<p>Item No. 14 :- 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 Spec. No. : Bd. T. 53, Page No. 509 & As directed by Engineer in</p>	4449.00	One Square Metre	70472.16
16.00 Square Metre	<p>Item No. 15 :- 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 200 x 200 x 2.15 mm minimum size and above with square bar</p> <p>DSR Page No./ Item No.39.24 Spec. No. : Bd.T.55, Page No. 510 Page No. BDT 55</p>	4310.00	One Square Metre	68960.00
255.80 Square Metre	<p>Item No. 16 :- 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</p> <p>DSR Page No./ Item No.32.11 Spec. No. : Bd.L.7 Page No. 369 Page No. BDL 7</p>	643.77	One Square Metre	164676.36
255.80 Square Metre	<p>Item No. 17 :- 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</p> <p>DSR Page No./ Item No.35.13 Spec. No. : Bd.0.8 Page No. 406 Page No. BDO 8</p>	74.00	One Square Metre	18929.20
25.00 Running Metre	<p>Item No. 18 :- Providing and Fixing 110 mm diameter PVC Rain Water pipe with necessary fittings such as bends, tees, single junctions, slotted vent, clamps etc complete.</p> <p>DSR Page No./ Item No.42.87 Spec. No. : As directed by Engineer in</p>	502.00	One Running Metre	12550.00
2.00	<p>Item No. 19 :- Shooting of still photographs outdoor and indoor of construction and other works of building , bridges, roads etc. in District and outside dist. At any</p> <p>DSR 2016-17 Item No 1949</p>	64.00	set	128.00
A) Work Portion Total with all Charges				
55.45 Cum	<p>Item No. 20 :- Add Royalty as per Government of Maharashtra Revenue and Forest Departments Order For Sand</p>	237.37	Rs One Cum	3007302.10 13161.08
2.00	<p>Item No. 21 :- 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</p>	690.00	No	1380.00
1.00	<p>Compressive Strength of M-20 grade C.C. Cube Carrying out water absorption , compressive strength & Efflorescence Test of Bricks</p>	2175.00	No	2175.00

Total Cost- 16716.08

[Handwritten Signature]
Aiyer R. Dutt

Name Of Work :- Construction of Processing Unit in Tapimai Farmers Production Company Ltd. At Post Daul Tal- Shindkheda Dist- Dhule

MEASUREMENT.

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

14	x	1.20	x	1.20	x	1.20	=	24.19	Cubic Metre
1	x	1.20	x	1.50	x	0.30	=	0.54	Cubic Metre

Total Qty. = 24.73 Cubic Metre

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.

14	x	1.20	x	1.20	x	0.30	=	6.05	Cubic Metre
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Total Qty. = 6.05 Cubic Metre

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	14	x	1.20	x	1.20	x	0.20	=	4.03	Cubic Metre
Bed	1	x	22.40	x	16.00	x	0.12	=	44.55	Cubic Metre
							Total Qty.	=	48.58	Cubic Metre

Item No. 4 :-

Providing and laying in situ cement concrete of 1:4:8 proportion with trap/ granite/ quartzite/ gneiss metal in

Step	14	x	1.20	x	1.20	x	0.20	=	4.03	Cumt
Bed	1	x	1.20	x	1.20	x	0.20	=	0.29	Cumt
	1	x	22.40	x	16.00	x	0.20	=	71.68	Cumt
							Total Qty.	=	76.00	Cumt

Item No. 5 :-

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

	14	x	1.50	x	1.50	x	0.23	=	7.25	Cubic Metre
	14	x	1.50	x	1.50	x	0.20	=	8.30	Cubic Metre
							Total Qty.	=	13.55	Cubic Metre

Item No. 6 :-

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

	14	x	0.23	x	0.45	x	4.00	=	5.80	Cubic Metre
							Total Qty.	=	5.80	Cubic Metre

Item No. 7 :-

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,

GB1	2	x	1	x	3.91	x	0.23	x	0.30	=	0.54	Cubic Metre
GB1	4	x	1	x	3.91	x	0.23	x	0.30	=	1.08	Cubic Metre
LB1	2	x	1	x	2.00	x	0.23	x	0.30	=	0.28	Cubic Metre
							Total Qty.	=	1.90	Cubic Metre		

Item No. 8 :-

Providing second class Burnt Brick masonry with conventional/ I.S. type bricks in cement mortar 1:6 in foundations and plinth of inner walls/ in plinth external walls including bailing out water manually, striking joints on unexposed faces, raking out joints on exposed faces and watering etc. Complete

For Plinth	1	x	6	x	3.00	x	0.23	x	0.90	=	3.73	Cubic Metre
	1	x	3	x	5.33	x	0.23	x	0.90	=	3.31	Cubic Metre
							Total Qty.	=	7.04	Cubic Metre		

Item No. 9 :-

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. Spoc. No. : Bd.A. 11/Part No. 263

	1	x	22.40	x	16.00	x	0.90	=	322.56	Cubic Metre
							Total Qty.	=	322.56	Cubic Metre

Item No. 10 :-

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

Truss Member (100x100 x6mm)	10.00	x	2.00	x	5.53	=	110.60				
Purlin	15.00	x	1.00	x	5.53	=	82.95				
Cleat angle	4.00	x	0.15	x	3.61	=	2.17				
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
	15	x	4.00	x	0.45	=	27.00	x	2.46	=	66.42
						Total	=	276.27	Kg		
						10% Curtailment Wt	=	27.627			
						Net	=	303.90	Metric Ton		

Weight of Trusses	1.00	x	4.00	x	303.90	=	1215.59
Waiting & Hall	2.90	x	6.01	x	5.10	=	88.80

Beam	1.90	x	0.425	=	0.81	
BB Masonary	7.04	x	0.32	=	2.25	
Sand Face Plaster	255.80	x	0.033	=	8.44	
			Total Qty.	=	55.45	Cum

Item No. 21 :-

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 Vigilece and Quality Control Laboratory as directed by Engineer in Charge

Compressive Strength of M-20 grade C.C. Cube	=	2.00	No
Carrying out water absorption , compressive strength & Efflorescence Test of Bricks	=	1.00	No


Ajay B. Patil
 Consulting Civil Engineer
 Reg.No.-NSK/JDI/57/PAB

Name of Work :- Construction of Processing Unit in Tapimai Farmers Production Company Ltd. At Post Daul Tal-Shindkheda Dist-Dhule
 RATE ANALYSIS

Sl. No.	Description	D.S.R./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	
				Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount	Factor	Amount				Factor	Amount
2	Excavation for foundation in earth, soil of all types, sand, gravel and soft	3	193.00	5	148.81	6	229.63	7	229.63	8	229.63	9	280.93	10	220.06		193.00			
	Excavation for foundation in hard murum including removing the excavated	DSR Page No./ Item No.21.02	212.00														212.00			
	Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soling 15 cm	DSR Page No./ Item No.21.38	1294.00														1294.00			
	Providing and laying in situ cement concrete of 1:4:8 proportion with trap/	DSR Page No./ Item No.11.04	5780.00	0.35	52.08		0.47	107.92	0.94	215.85						375.85	6035.85			
	Providing and laying in situ cement concrete M20 of trap / granite /quartzite/	DSR Page No./ Item No.25.11	6666.00	0.35	52.08		0.425	97.59	0.94	215.85						365.52	6911.52			
	Providing and casting in situ cement concrete M20 of trap / granite /quartzite/	DSR Page No./ Item No.25.31	12987.00	0.35	52.08		0.425	97.59	0.94	215.85						365.52	13232.52			
	Providing & casting in situ cement concrete M20 of trap / granite /quartzite/	DSR Page No./ Item No.25.5	11483.00	0.35	52.08		0.425	97.59	0.94	215.85						365.52	11728.52			
	Providing second class Burnt Brick masonry with conventional/ I.S. type	DSR Page No./ Item No.27.01	7343.00	0.35	52.08	0.48	230.04	0.32	73.48							355.60	7698.60			
	Filling in plinth and floors with contractors material/brought from	DSR Page No./ Item No.21.37	550.00													0.00	550.00			
	Providing structural steel work in trusses, other similar trussed purlins and	DSR Page No./ Item No.23.04	105909.00													0.00	105909.00			
	Providing and fixing corrugated galvanised iron sheets of 0.63mm thick	DSR Page No./ Item No.38.04	816.00													0.00	816.00			
	Providing and fixing colour coated Zincalume (R) Z150 (min 150	SSR Item No. 38.34	1095.00													0.00	1095.00			
	Providing and fixing in position TMT FE 00 bar reinforcement of	DSR Page No./ Item No.26.33	71778.00	1.00	148.81											148.81	71926.81			

Name Of Work :- Construction of Processing Unit in Tapimai Farmers Production Company Ltd. At
 Post Daul Tal- Shindkheda Dist- Dhule

LEAD STATEMENT

Sr No.	Material	Source of Material	Total lead in Km	Total Lead charges	Net Additional Lead Charges	Unit
1	2	3	4	5	7	8
1	Cement		5.00	148.81	148.81	MT
2	Steel		5.00	148.81	148.81	Cum
3	Sand		5.00	229.63	229.63	Cum
4	Bricks		5.00	479.26	479.26	Cum
5	Crushed metal		5.00	229.63	229.63	Cum
6	Rubble		5.00	280.93	280.93	Cum
7	HM/SM		5.00	220.06	220.06	Cum



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