

1204

# Estimate

## PLANS AND DETAILED ESTIMATE

### NAME OF WORK:

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

Estimated Cost : 7499930.00

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

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

### RECAPITULATION SHEET

Cost of Work Portion	=	6638597.34
( A ) Work Portion		<u>Rs. 6638597.34</u>
Add 12% GST fo Work Portion		Rs. 796631.68
Add 0.50 % Insurance Charge for Work Portion		Rs. 33192.99
( B ) Royalty Charges & Testing Charges		
Add Royalty Charges		Rs. 21532.66
Add Testing Charges		Rs. 9975.00
	Total	<u>Rs. 7499929.67</u>
	Say	<u>Rs. 7499930.00</u>

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

Quantity	Item Of Work	Rate	Unit	Amount
69.39 Cubic Metr	<p><b>Item No. 1 :-</b> 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 &amp; 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 Metr	13392.27
40.50 Cubic Metr	<p><b>Item No. 2 :-</b> 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 Metr	8586.00
361.85 Cubic Metre	<p><b>Item No. 3 :-</b> 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	468233.90
143.34 Cumt	<p><b>Item No. 4 :-</b> 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>	6156.62	One Cumt	882489.91
20.25 Cubic Metre	<p><b>Item No. 5 :-</b> 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>	7029.12	One Cubic Metre	142339.68
12.42 Cubic Metre	<p><b>Item No. 6 :-</b> 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>	13350.12	One Cubic Metre	165808.49

Quantity	Item Of Work	Rate	Unit	Amount
5.10 Cubic Metre	<p><b>Item No. 7 :-</b> Providing &amp; casting in situ cement concrete M20 of deep &amp; granite quarantier, girders metal for R.C.C. beams and lintels as per detailed designs &amp; drawings or as directed including centering, formwork, cover blocks compaction &amp; roughening the surface if special finish is to be provided &amp; 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>	11846.12	One Cubic metre	61481.36
4.97 Cubic Metre	<p><b>Item No. 8 :-</b> 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>	7839.04	One Cubic Metre	38960.02
602.73 Cubic Metre	<p><b>Item No. 9 :-</b> 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	331501.50
11.98 Metric Tonne	<p><b>Item No. 10 :-</b> 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 Spec. No. : Bd.C.8 Page No. 278 Page No. BDC 8</p>	105909.00	One Metric Tonne	1268934.38
2320.00 Square Metre	<p><b>Item No. 11 :-</b> 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 &amp; bolts, lead &amp; 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	1893120.00
669.70 Square Metre	<p><b>Item No. 12 :-</b> 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 ), Histrength 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	733321.50
3.28 Metric Tonne	<p><b>Item No. 13 :-</b> 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>	71989.04	One Metric Tonne	236462.39

Quantity	Item Of Work	Rate	Unit	Amount
21.00 Square Metre	<p><b>Item No. 14 :-</b> 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 &amp; As directed by Engineer in</p>	4449.00	One Square Metre	96098.40
38.00 Square Metre	<p><b>Item No. 15 :-</b> 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 shape with corner 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	163780.00
171.60 Square Metre	<p><b>Item No. 16 :-</b> 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>	661.65	One Square Metre	113539.14
171.60 Square Metre	<p><b>Item No. 17 :-</b> 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	12698.40
15.00 Running Metre	<p><b>Item No. 18 :-</b> 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	7530.00
5.00	<p><b>Item No. 19 :-</b> 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	320.00
<b>A) Work Portion Total with all Charges</b>				
90.71 Cum	<p><b>Item No. 20 :-</b> Add Royalty as per Government of Maharashtra Revenue and Forest Departments Order For Sand</p> <p><b>Item No. 21 :-</b> 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>	237.37	Rs One Cum	6638597.34 21532.66
5.00	Compressive Strength of M-20 grade C.C. Cube	690.00	No	3450.00
3.00	Carrying out water absorption , compressive strength & Efflorescence Test of Bricks	2175.00	No	6525.00

**Total Cost- 31507.66**

  
 Aiyav Patil

Name Of Work :- Construction of Godown Tapimai Farmers Production Company Ltd At Post Daul Tal  
Shindkheda Dist- Dhule

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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

20	x	1.50	x	1.50	x	1.52	=	68.31	Cubic Metre	
1	x	1.20	x	1.50	x	0.60	=	1.08	Cubic Metre	
								Total Qty. =	69.39	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.

20	x	1.50	x	1.50	x	0.90	=	40.50	Cubic Metre	
								Total Qty. =	40.50	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	20	x	1.50	x	1.50	x	0.60	=	27.00	Cubic Metre
Bed	1	x	45.25	x	14.80	x	0.50	=	334.85	Cubic Metre
								Total Qty. =	361.85	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	20	x	1.50	x	1.50	x	0.20	=	9.00	Cumt
Bed	1	x	1.20	x	1.65	x	0.20	=	0.40	Cumt
	1	x	45.25	x	14.80	x	0.20	=	133.94	Cumt
								Total Qty. =	143.34	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

20	x	1.50	x	1.50	x	0.25	=	11.25	Cubic Metre	
20	x	1.50	x	1.50	x	0.20	=	9.00	Cubic Metre	
								Total Qty. =	20.25	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

20	x	0.23	x	0.45	x	6.00	=	12.42	Cubic Metre	
								Total Qty. =	12.42	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	5	x	1	x	3.00	x	0.23	x	0.30	=	1.04	Cubic Metre
GB1	3	x	1	x	3.00	x	0.23	x	0.30	=	0.62	Cubic Metre
LB1	5	x	1	x	3.10	x	0.23	x	0.30	=	1.07	Cubic Metre
LB1	3	x	1	x	3.10	x	0.23	x	0.23	=	0.49	Cubic Metre
LB2	5	x	1	x	3.30	x	0.23	x	0.23	=	0.87	Cubic Metre
TB1	3	x	1	x	5.33	x	0.23	x	0.30	=	1.10	Cubic Metre
								Total Qty. =	5.19	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	5	x	3.00	x	0.23	x	0.90	=	3.11	Cubic Metre
	1	x	3	x	3.00	x	0.23	x	0.90	=	1.86	Cubic Metre
								Total Qty. =	4.97	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. Soec. No. : Bd.A. 11/Part No. 263

1	x	45.25	x	14.80	x	0.90	=	602.73	Cubic Metre	
								Total Qty. =	602.73	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)	15.00	x	5.00	x	5.53	=	414.75			
Purlin	10.00	x	4.00	x	5.53	=	221.20			
Cleat angle	10.00	x	0.15	x	3.61	=	5.42			
BASE PLATE (12mm tk-62.80/sqm)										
Nut Bolts (16 mm tk2.46Kg/m)	25	x	0.15	x	0.15	=	0.56			
	15	x	14.00	x	0.45	=	94.50			
							2.46			
							=	232.47		
							Total	=	909.17	Kg
							10% Curtailment Wt	=	90.9165	

Waiting & Hall	4.00	x	8.50	x	5.10	=	173.40
						=	17.34
						=	5191.15
M.S. Angle	10	x	6	x	8.00	=	480.00
M.S. Angle	5	x	8	x	4.00	=	160.00
Vertical Support	4	x	5	x	0.30	=	6.00
Vertical Support	3	x	4	x	0.45	=	5.40
Vertical Support	5	x	3	x	0.45	=	6.75
Vertical Support	3	x	7	x	0.60	=	12.60
Horizontal Support	7	x	8	x	0.90	=	50.40
Horizontal Support	6	x	12	x	1.00	=	72.00
Horizontal M.S. Angle	8	x	10	x	4.00	=	320.00
						=	1113.15

1113.15	x	6.10	=	6790.22
			=	1000.00
			=	6.790215
			=	11.98

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 etc. complete. (Weight of 5.5 kg/sq.m.).

1	x	2.00	x	45.25	x	20.00	=	1810.00	Square□Me
1	x	2.00	x	14.80	x	5.00	=	148.00	Square□Me
				1810.00	x	20%	=	362.00	Square□Me
							=	2320.00	Square□Me

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 ), Histrength

1	x	45.25	x	14.80	x	1.00	=	669.70	Square□Me
							=	669.70	Square□Me

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

Item	Qty	Steel Per				
Footing	20.250	x	86.00	=	1741.50	Kg
Column	12.420	x	95.00	=	1179.90	Kg
Beam	5.190	x	70.00	=	363.30	Kg
				=	3284.70	Kg
				=	3.28	MT

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

Ventilator	15	x	1.20	x	1.20	=	21.60
						=	21.60

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

Shutter	2	x	4.00	x	4.75	=	38.00	Square□Me
						=	38.00	Square□Me

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 base coat rough

2	x	5	x	3.00	x	5.00	=	150.00	Square□Me
2	x	3	x	3.00	x	1.20	=	21.60	Square□Me
							=	171.60	Square□Me

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 two days etc. complete.

Qty as per Item No. 17				=	171.60	Square□Me
				=	171.60	Square□Me

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

1	x	15.00	x	1.00	=	15.00
					=	15.00

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 distances ii) a set of same three copies of 4 ' x 6 ' Size

1.00	x	5.00	=	5.00	set
			=	5.00	set

Item No. 20 :-

Footing	20.25	x	0.425	=	8.61	
Columns	12.42	x	0.425	=	5.28	
BB Masonary	4.97	x	0.32	=	1.59	
Sand Face Plaster	171.60	x	0.033	=	5.66	
			Total Qty.	=	90.71	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

= 5.00 No

Carrying out water absorption , compressive strength & Efflorescence Test of Bricks

= 3.00 No



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





Name Of Work :- Construction of Godown 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		10.00	211.04	211.04	MT
2	Steel		10.00	211.04	211.04	Cum
3	Sand		10.00	299.83	299.83	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



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