

DETAILED ESTIMATE FOR

Construction of Grain Godown and Machine Shed (450 M. T. Capacity) for Sayukta Agro Product Producer Company Limited , Shegaon (Bk) in Taluka - Warora , District - Chandrapur.

Amount Rs. 56,19,786. 00

GENERAL REPORT & SPECIFICATIONS

- 1 **Name of work** : Construction of Grain Godown (450 M. T. Capacity) and Machine Shed for Sayukta Agro Product Producer Company Limited , Shegaon (Bk) in Taluka - Warora , District - Chandrapur.
- 2 **Amount Rs.** : 56,19,786. 00
- 3 **Autority** :
- 4 **Necesscity** : At present there is no big Sanskruti Sabhagruha at Shegaon (Bk) . People face great difficulty to manage the cultural programme , wedding programme , meetings etc. Hence the estimate is framed accordingly.
- 5 **Provision** : Following provisions are made in this estimate.
- Structure** : RCC Footinf , Coloumn, Beam & Lintel In M-25 Grade concrete.
- Wall** : All main wall 23 Cm thick of Fly ash in cm 1:6
- Roof** : Trusses of Structural steel work & Colour coated Zinaluminium (R) AZ150 (min 150 gms/sq.mt. total on each side) profiled sheets for roofing.
- Plaster** : Internal :- 12 mm thick plaster in C.M. 1:5
External :- Sand face plaster in C.M. 1:4
- Flooring** : Raft of cement concrete M-20 Grade.
- Doors** : a) Main Enterance Door Rolling shutter of size 2.10 x 2.50 m
- Ventilator** : Mild steel grill work for ventilators 20 kg/ sqm as per drawing including fixtures and fixing Jali welded mesh 25*25* 13 Guage on grill .
- Painting** : 1) Outer painting - Two coats of exterior weather shield paint
2) Inner painting - Washable oil-bound distemper.
- Micellaneous** : A) Plinth Protection of 1.00 m wide around the Godown with R. C. C. Drain of 0.35 m wide and 0.45 m average depth.
B) Provision for Antitermite treatment, Fire fighting etc.
- 6 **Rates** : The rates are adopted as per the SSR for the year 2021- 22 w.e.f. 06/08/2021.

7 **Specification** : The work will be carried out strictly in accordance with the Standard Specification (Red book) of P.W.Department Govt. of Maharashtra. & as per MORT & H. Specifications.


Dr. Ashtashil V. Bhambulkar
B. E. Civil Engineering
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Ph.D. Civil Engg. (Environmental Engineering)
MIE, Chartered Engineer
Reg. No. M-1750369

Construction of Grain Godown (450 M. T. Capacity) and Machine Shed for Sayukta Agro Product
Producer Company Limited , Shegaon (Bk) in Taluka - Warora , District - Chandrapur.

GENERAL ABSTRACT

Sr. No.	Item of work	Amount (Rs.)
A	Cost of work	3804038
B	Royalty Charges	61240
C	Testing Charges	58730
	TOTAL Rs. (1)	3891145
D	Add for Electrification charges External & Internal 9 %	350203
	TOTAL R. (2)	4241348
E	Add 0.5 % for Insurance on A	21207
F	Add 12 % GST on A	508962
G	Add 4 % for Contingencies on Total 2	169654
H	Add 5 % for Centage Charges on Total 2	169654
I	Add 12 % for Price escalation on Total 2	508962
J	Total Rs. (3)	5619786

Say Rs. 56,19,786.00


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Name of work :- Construction of Grain Godown (450 M. T. Capacity) and Machine Shed for Sayukta Agro Product Producer Company Limited , Shegaon (Bk) in Taluka - Warora , District - Chandrapur.

ABSTRACT

I. No.	Description of Item	Quantity	Unit	Rate	Amount
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 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 1.5 m.) By Mechanical Means	39.17	Cum	193.00	7560.00
	SSR I. No. 21.02 / 115				
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	62.63	Cum	212.00	13278.00
	SSR I. No. 21.06 / 115				
3	Excavation for foundation in hard murum including removing the excavated material upto a distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift from 1.5 to 3.0m) By Manual Means	12.290	Cum	403.00	4953.00
	SSR I. No. 21.07 / 115				
4	Transportation of material obtained from debris of various sorts including necessary excavation/ loosing including loading, unloading and conveying and disposing as directed.	39.17	Cum	163.70	6412.00
	SSR based Item				
5	Providing preconstructional antitermite treatment as per I.S. 6313 (Part-II) treatment by treating the backfill in immediate contact with foundation at the rate of 5 litres of emulsion concentrate of 1.0 percent of clorophyrifos per square metre of vertical surface area covering 10 years guarantee on bond paper.	47.33	Sqm	97.00	4591.00
	SSR I. No. 21.23 / 116				
6	Providing preconstructional antitermite treatment as per I.S. 6313 (Part-II) by treating the top surface of plinth filling at the rate of 5 litres of emulsion concentrate at 1.0 percent of clorophyrifos per square metre of surface area covering ten years guarantee on bond paper.	142.74	Sqm	94.00	13418.00
	SSR I. No. 21.24 / 117				

I. No.	Description of Item	Quantity	Unit	Rate	Amount
7	Providing preconstructional antitermite treatment as per I.S.6313 (Part-I) to the soil along the external face of building by punching holes of 1.2 of 1.5 C.M. diametre about 30 -60 cm deep at 15 cm c/c as close to the wall as possible and to inject 0.5 percent of aldrin or clorophyrifos at the rate of 7.5 litres per hole and sealing the same with proper filling and covering 10years guarantee on bond paper.	19.93	Sqm	153.00	3049.00
	SSR I. No. 21.25 / 117				
8	Filling in plinth and floors with contractors material / brought from outside and approved by Engineer incharge in layers of 15 cm to 20 cm including watering and compaction etc. complete.	98.54	Cum	1061.50	104596.00
	SSR I. No. 21.37 / 117				
9	Providing soling using 80 mm size trap metal in 15 cm. layer including filling voids with Crushed sand/grit, ramming, watering etc. complete.	32.73	Cum	1913.55	62640.00
	SSR I. No. 21.40/ 118				
10	Providing and laying Cast in situ/Ready Mix cement concrete in M15 of trap/ granite /quartzite/gneiss metal for bed blocks, foundation blocks and such other items including bailing out water, Steel centering, formwork, laying / pumping, compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering will not be allowed.), with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	20.35	Cum	6478.50	131856.00
	SSR I. No. 24.08 / 131				
11	Providing and laying Cast in situ/Ready Mix cement concrete M-25 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, Steel centering, formwork ,cover blocks, laying/pumping, compaction and curing roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel) etc. complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	11.99	Cum	7557.40	90613.00
	SSR I. No. 25.13 / 133				

I. No.	Description of Item	Quantity	Unit	Rate	Amount
12	Providing and laying in situ /Ready Mix cement concrete M-20 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, Steel centering formwork, laying/ pumping cover blocks, compaction and curing roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel) etc. complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	15.79	Cum	7416.70	117100.00
	SSR I. No. 25.11 /222				
13	Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap / granite /quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete, (Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)				
	SSR I. No. 25.33 /134				
	Ground Floor	14.28	Cum	13878.40	198184.00
	First lift above 3.80 m	4.51	Cum	14009.95	63185.00
		18.79			
14	Providing and laying Cast in situ/Ready Mix cement concrete in M-25 of trap/ granite/ quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying/pumping, compactionand roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)				
	SSR I. No. 25.52 / 135				
	Ground Floor	14.28	Cum	12373.40	176692.00
	First lift above 3.80 m	4.51	Cum	12489.90	56329.00
		18.79			

I. No.	Description of Item	Quantity	Unit	Rate	Amount
18	Providing cast in situ / ready mix M 20 grade cement concrete for head walls of CD work / retaining walls etc. including necessary form work, compaction, finishing and curing etc. complete. (with reversible drum type mixer/ concrete batch mix plant (pan mixer) with SCADA SSR I. No. 11.29 / 63	5.78	Cum	10703.70	61867.00
19	Providing and laying weep holes of 100 mm diameter PVC pipes as per drawing for abutment returns, return walls etc. Complete. SSR I. No. 17.37 / 99	6.40	Rmt.	482.00	3085.00
20	Providing and fixing in position TMT - FE - 500 bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels, parrises, copings, fins, arches etc. as per detailed designs, drawings and schedules. including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete. SSR I. No. 26.33 / 139				
	Ground Floor	10.387	Mt	71886.90	746690.00
	First lift above 3.80 m	1.694	Mt	72604.70	123012.00
		12.08			
21	Providing Fly ash lime brick masonry (bricks conforming to I.S.12894 : 1990 of size 19 cm x 9 cm x 9 cm) in cement mortar 1:6 in foundations and plinth of inner walls / in plinth of external walls including bailing out water, striking joints on unexposed faces, racking out joints on exposed faces and watering complete. SSR I. No. 27.12 / 144				
	Ground Floor	5.74	Cum	7713.75	44277.00
22	Providing and laying Cast in situ/Ready Mix cement concrete in M-20 of trap/ granite/ quartzite/ gneiss metal for R.C.C.coping to plinth or parapet and sill of doors and windows moulded as per detailed drawings or chamfered as approved by the Engineer including steel centering, formwork, cover blocks, laying/pumping, compacting , curing , finishing and roughening them if special finish is to be provided and curing complete. (Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade) SSR I. No. 26.23 / 138				
	Ground Floor	0.00	Cum	7550.70	0.00
	First lift above 3.80 m	1.41	Cum	7618.70	10742.00
		1.41			

I. No.	Description of Item	Quantity	Unit	Rate	Amount
23	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 SSR I. No. 27.13 / 144				
	Ground Floor	34.76	Cum	7929.75	275638.00
	First lift above 3.80 m	14.10	Cum	7999.55	112794.00
		48.86			
24	Providing internal cement plaster 12mm thick in single coat in cement mortar 1:5 with putty finish to concrete or brick surfaces, in all positions including scaffolding and curing etc. complete. & Providing and applying Two coats of wall care Putty on plastered surface and Ceiling and Walls to prepare surface even and smooth of approved make, etc complete SSR I. No. 32.03 / 153				
	Ground Floor	190.17	Sqm	352.50	67035.00
	First lift above 3.80 m	89.99	Sqm	355.95	32032.00
		280.16			
25	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. SSR I. No. 32.11/153				
	Ground Floor	180.54	Sqm	618.00	111574.00
	First lift above 3.80 m	152.32	Sqm	623.95	95040.00
		332.86			
26	Providing internal cement plaster 6 mm thick in a single coat in cement mortar 1:4 without neeru finish to concrete surface in all positions including scaffolding and curing etc. complete. SSR I. No. 32.01 / 201				
	Ground Floor	85.47	Sqm	282.35	24132.00
	First lift above 3.80 m	70.81	Sqm	285.15	20191.00
27	Providing and fixing chicken mesh of 22 gauge, with about 30 cm. width at the junction of R.C.C members and brick work, of approved quality including fixing mesh in position by necessary drilling in concrete /B.B.masonry and or tying by binding wire etc. complete. SSR I. No. 32.26 / 154				
	Ground Floor	64.24	Sqm	129.00	8287.00

I. No.	Description of Item	Quantity	Unit	Rate	Amount
	First lift above 3.80 m	31.88	Sqm	130.30	4154.00
28	Providing and applying washable oil-bound distemper of approved colour and shade to old and new surfaces in two coats including scaffolding, preparing the surfaces. (excluding the				
	SSR I. No. 36.11 / 167				
	#REF!	190.17	Sqm	43.00	8177.00
	First lift above 3.80 m	89.99	Sqm	47.30	4257.00
		280.16			
29	Providing and applying two coats of exterior weather shield paint of approved manufacture and of approved colour to the plastered surfaces including cleaning ,preparing the plaster surface ,applying primer coat ,scaffolding if necessary, and watering the surface for two days etc complete.				
	SSR I. No. 35.28/165				
	#REF!	266.01	Sqm	238.00	63310.00
	First lift above 3.80 m	223.13	Sqm	261.80	58415.00
30	Providing and fixing mild steel grill work for windows, ventilators etc. 20 kg/sqm as per drawing including fixtures and fixing Jali welded mesh 25*25* 13 Guage on grill , necessary welding and painting with one coats of anticorrosive paint and two coats of oil painting complete.				
	SSR I. No.40.01 / 192				
	Ground Floor	5.04	Sqm	2028.20	10222.00
	First lift above 3.80 m	7.77	Sqm	2046.65	15902.00
31	Providing and fabricating structural steel work in rolled sections like joists, channels, angles, tees etc. as per detailed design and drawings or as directed including cutting, fabricating, hoisting, erecting, fixing in position making riveted / bolted /welded connections without connecting plates, braces etc. and including one coat of anticorrosive paint and over it two coats of oil painting of approved quality and shade etc. complete.				
	SSR I. No. 23.01 / 129				
	Ground Floor	0.08	M.T.	89289.90	7143.00
32	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.	2.49	MT.	107077.00	266086.00
	SSR No. 23.04 / 167			Rate of Height above 3.80 M	
	Height above 3.80 M				

I. No.	Description of Item	Quantity	Unit	Rate	Amount
33	Providing and fixing colour coated Zincalume (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)	180.82	Sqm	1106.50	200077.00
	SSR No. 38.34 / 173				
	Height above 3.80 M				
34	Providing and fixing of colour coated Zinocaluminium(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 withAluminium-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 mm, comprising of nominal 25 mm 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 sublet square fluting in the five pan at nominal 180-250 mmcenterto-center. The end rib shall be designed for anti-capacity 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) 600 mm girth (Surface Width).				
	SSR No. 38.35 / 174				
	A) Height up to 3.80 m height	10.55	Sqm	702.35	7410.00
	B) Height above 3.80 M	180.82	Sqm	709.35	128265.00

I. No.	Description of Item	Quantity	Unit	Rate	Amount
35	Providing and laying concrete pipes of I.S.NP. class of 300mm diameter in proper line, level and slope including necessary collars, excavation, laying, fixing with collars in cement mortar 1:1 and refilling the trench complete.	22.50	Rmt	762.05	17146.00
	SSR I. No. 42.09 / 200				
36	Providing and fixing mat finish stainless steel lettering of various heights as directed by enginner incharge including material, labour, cleaning etc. complete. A) for single letter like A, B, C				
	As per S.E. office letter No. 7004 / Technical cecion / P.O. 7 / Non CSR Items / 2017 Dt. 9/11/2017				
	Original letters	12.00	No.	20.00	240.00
	Sub letters	8.00	No.	9.00	72.00
37	Providing and fixing 90 cm x 60 cm Granite plate engraving 10 cm. height letter, figures including painting the lefters/figures with approved colour and shade complete	1.00	No.	7985.00	7985.00
	SSR I. No. 44.12 / 213				
38	Providing and fixing rolling shutter fabricated from steel laths of minimum thickness 0.9 mmwith lock plate of 3.15 mm thickness reinforced with 35 x 35 x 5 mm angle section fitted withsliding 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) (With mechanical gear)	5.25	Sqm	4730.00	24833.00
	SSR I. No. 39.25 / 181				
39	Providing, laying and fixing exterior grade fibrilling fibre reinforcement heavy duty designer cement concrete tiles for Flooring of approved colour and design 22 +/-2 mm thick bayer colour pigmented as per IS ..1237 - 1980 having compressive strength more than 500 Kilogram/sq. cm reaffirmed in 2006 ,having wert transvrse strength of 3.5 / mm 2, water absorption less than 10 % abrasion / wear resistance less than 2 mm ,skid resistance more than 25.0 (ASTM:E303) and no fading as per DIN - 51094 of size 300 x 300 in plan / designed pattern on a bed of 1:4 cement mortar including cement float ,filling joints with neat cement slurry ,curing, polishing and cleaning etc. complete. For flooring.	62.04	Sqm	1100.25	68260.00
	SSR I. No. 33.76 / 161				

I. No.	Description of Item	Quantity	Unit	Rate	Amount
40	Providing and fixing CO2 type fire extinguishers of 4.50kg capacity complete with valve, discharge horn carrying neck handle bracket as per I.S. 2878 with ISI Mark.	2	Nos.	4730.00	9460.00
	Approved by SE P.W. Circle, Nagpur				
41	Providing and fixing A.B.C. type fire extinguisher of 5.0 kg capacity with pressure gauge as per I.S. 13849.	2	Nos.	7850.00	15700.00
	Approved by SE P.W. Circle, Nagpur				
				Total Rs.	3804038.00


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I. No.	Description of Item		NO	Length	Breadth	Depth	Quantity	Unit	
1	2		3	4	5	6	7		
3	Excavation for foundation in hard murum including removing the excavated material upto a distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift from 1.5 to 3.0m) By Manual Means								
	SSR I. No. 21.07 / 115								
	Excavation for Footing								
	Group C1		6	1.50	1.50	0.30	4.05	Cum	
	=6 Nos.								
	Group C2 = 2 Nos.		2	1.50	1.50	0.30	1.35	Cum	
	Group C3 = 4 Nos.		4	1.80	1.50	0.30	3.24	Cum	
	Group CP = 2 Nos.		2	1.80	1.50	0.30	1.62	Cum	
	Group CD (Column up to Plint level) = 3 Nos.		3	1.50	1.50	0.30	2.03	Cum	
			17		Total Qty.		12.29	Cum	
4	Transportation of material obtained from debris of various sorts including necessary excavation/ loosing including loading, unloading and conveying and disposing as directed. Lead 1.00 Km								
	SSr based item								
	Total Qty. of Excavation								
	As per Item No. 1 I. Lift upto 1.5 m.							39.170	Cu.m.
		1.16	x	39.170			45.44	Cum	
		Loose factor							
5	Providing preconstructional antitermite treatment as per I.S. 6313 (Part-II) treatment by treating the backfill in immediate contact with foundation at the rate of 5 litres of emulsion concentrate of 1.0 percent of clorophyrifos per square metre of vertical surface area covering 10 years guarantee on bond paper.								
	SSR I. No. 21.23 / 116								
	Outer wall of plinth surface contact with murum filling								
	Front & Back side	2	1	18.30		0.65	23.79	Sqm	
	L/ S & R / S	2	1	7.80		0.65	10.14	Sqm	
	Sides of column 0.50 m below ground	2	6	0.30		0.50	1.80	Sqm	
	Column Group C1	2	6	0.50		0.50	3.00	Sqm	
	Column Group C2	2	2	0.30		0.50	0.60	Sqm	
		2	2	0.50		0.50	1.00	Sqm	
	Column Group C3	2	4	0.35		0.50	1.40	Sqm	
		2	4	0.50		0.50	2.00	Sqm	
	Column Group CP	2	2	0.60		0.50	1.20	Sqm	
		2	2	0.30		0.50	0.60	Sqm	
	Column Group CD	2	3	0.30		0.50	0.90	Sqm	
		2	3	0.30		0.50	0.90	Sqm	
					Total Qty		47.33	Sqm	
6	Providing preconstructional antitermite treatment as per I.S. 6313 (Part-II) by treating the top surface of plinth filling at the rate of 5 litres of emulsion concentrate at 1.0 percent of clorophyrifos per square metre of surface area covering ten years guarantee on bond paper.								
	SSR I. No. 21.24 / 117								
	Top surface of filling								
			1	18.30	7.80		142.74	Sqm	
					Total Qty.		142.74	Sqm	

I. No.	Description of Item		NO	Length	Breadth	Depth	Quantity	Unit
1	2		3	4	5	6	7	
7	Providing preconstructional antitermite treatment as per I.S.6313 (Part-I) to the soil along the external face of building by punching holes of 1.2 of 1.5 C.M. diametre about 30 -60 cm deep at 15 cm c/c as close to the wall as possible and to inject 0.5 percent of aldrin or clorophyrifos at the rate of 7.5 litres per hole and sealing the same with proper filling and covering 10years guarantee on bond paper.							
	SSR I. No. 21.25 / 117							
	External face of building of plinth protection							
	2 x 21.86 + 2 x 11.36		1	66.440		0.30	19.93	Sqm
8	Filling in plinth and floors with contractors material / brought from outside and approved by Engineer incharge in layers of 15 cm to 20 cm including watering and compaction etc. complete.							
	SSR I. No. 21.37 / 117							
	Filling below floors		1	18.30	7.80	0.65	92.78	Cum
	Deduction of Beams X - Direction							
	PB 8.1		1	4.54	0.23	0.10	-0.10	Cum
	PB C9.1		1	4.50	0.23	0.10	-0.10	Cum
	PB C10.1		1	4.50	0.23	0.10	-0.10	Cum
	PB C11.1		1	3.87	0.23	0.10	-0.09	Cum
	PB C1.1		1	3.90	0.23	0.05	-0.04	Cum
	Deduction of Beams Y - Direction	Nil						
	Plinth protection							
	Front & Back side of plinth protection	2	1	20.76	1.00	0.10	4.15	Sqm
	L & R side of plinth protection	2	1	10.26	1.00	0.10	2.05	Sqm
						A	98.54	Cum
9	Providing soling using 80 mm size trap metal in 15 cm. layer including filling voids with Crushed sand/grit, ramming, watering etc. complete.							
	SSR I. No. 21.40/ 118							
	Below Flooring		1	18.30	7.80	0.20	28.55	Cum
	Deduction of Beams X - Direction							
	PB C8.1		1	4.54	0.23	0.20	-0.21	Cum
	PB C9.1		1	4.50	0.23	0.20	-0.21	Cum
	PB C10.1		1	4.50	0.23	0.20	-0.21	Cum
	PB C11.1		1	3.87	0.23	0.20	-0.18	Cum
	PB C1.1		1	3.90	0.23	0.20	-0.18	Cum
	Deduction of Beams Y - Direction							
	PB C4.2 , C5.2 , C6.2 , C9.2 , C10.2 , C11.2		6	3.75	0.23	0.20	-1.04	Cum
	Plinth protection							
	Front & Back side of plinth protection	2	1	20.76	1.00	0.10	4.15	Sqm
	L & R side of plinth protection	2	1	10.26	1.00	0.10	2.05	Sqm
						Total Qty	32.73	Cum

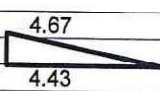
I. No.	Description of Item	NO	Length	Breadth	Depth	Quantity	Unit
1	2	3	4	5	6	7	
10	Providing and laying Cast in situ/Ready Mix cement concrete in M15 of trap/ granite /quartzite/gneiss metal for bed blocks, foundation blocks and such other items including bailing out water, Steel centering, formwork, laying / pumping, compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag, plastic tarpaulin etc. (Wooden centering will not be allowed.), with fully automatic micro SSR I. No. 24.08 / 131						
	for Footing Bed Concrete						
	Group C1 =6 Nos.	6	1.50	1.50	0.15	2.03	Cum
	Group C2 = 2 Nos.	2	1.50	1.50	0.15	0.68	Cum
	Group C3 = 4 Nos.	4	1.80	1.50	0.15	1.62	Cum
	Group CP = 2 Nos.	2	1.80	1.50	0.15	0.81	Cum
	Group CD (Column up to Plint level) =3 Nos.	3	1.50	1.50	0.15	1.01	Cum
		17					
	Below Flooring	1	18.30	7.80	0.05	7.14	Cum
	Deduction of Beams X - Direction						
	PB C8.1	1	4.54	0.30	0.05	-0.07	Cum
	PB C9.1	1	4.50	0.30	0.05	-0.07	Cum
	PB C10.1	1	4.50	0.30	0.05	-0.07	Cum
	PB C11.1	1	3.87	0.30	0.05	-0.06	Cum
	PB C1.1	1	3.90	0.30	0.05	-0.06	Cum
	Deduction of Beams Y - Direction						
	PB C4.2 , C5.2 , C6.2 , C9.2 , C10.2 , C11.2	6	3.75	0.30	0.05	-0.34	Cum
	for Drain	2	22.01	0.70	0.075	2.31	Cum
		2	10.11	0.70	0.075	1.06	Cum
	For plinth protection	2	20.76	1.00	0.075	3.11	Cum
		2	8.26	1.00	0.075	1.24	Cum
			Total			20.35	Cum
11	Providing and laying Cast in situ/Ready Mix cement concrete M-25 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, Steel centering, formwork ,cover blocks, laying/pumping, compaction and curing roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel) etc. complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)						
	SSR I. No. 25.13 / 133						
	for Footing						
	Group C1 =6 Nos.	6	1.20	1.20	0.45	3.89	Cum
	Group C2 = 2 Nos.	2	1.20	1.20	0.45	1.30	Cum
	Group C3 = 4 Nos.	4	1.50	1.20	0.45	3.24	Cum
	Group CP = 2 Nos.	2	1.50	1.20	0.45	1.62	Cum

I. No.	Description of Item	NO	Length	Breadth	Depth	Quantity	Unit
1	2	3	4	5	6	7	
	Group CD (Column up to Plint level) = C. N. 9 , 10 , 11	3	0.30	0.30	2.20	0.59	Cum
		17					
					Total	5.56	Cum A
	Plingth to floor level 3.80 m						
	Group C1 C. No. 4 , 5 , 6 , 14 , 15 , 16 =6Nos.	6	0.30	0.50	3.80	3.42	Cum
	Group C2 = 2 Nos.	2	0.30	0.50	3.80	1.14	Cum
	Group C3 C. No. 3 , 13 , 7 , 17 = 4 Nos.	4	0.35	0.50	3.80	2.66	Cum
	Group 4 Considered as a Jam Column H = 2.40 + 0.23 = 2.63 M	1	0.15	0.23	3.80	0.13	Cum
	Group CP C. No. 1 & 2= 2 Nos.	2	0.60	0.30	3.80	1.37	Cum
		15					
					Total	8.72	Cum B
					Total Qty. up to 1 st lift A + B	14.28	cum
						G. F.	
	F. F. Height above 3.80 m height						
	Group C1 C. No. 4 , 5 , 6 , 14 , 15 , 16 =6Nos.	6	0.30	0.50	1.80	1.62	Cum
	Group C2 = 2 Nos. H = 1.80+1.45 Gable end = 3.25 M	2	0.30	0.50	3.25	0.98	Cum
	Group C3 C. No. 3 , 13 , 7 , 17 = 4 Nos.	4	0.35	0.50	1.80	1.26	Cum
	Group CP C. No. 1 & 2= 2 Nos.	2	0.60	0.30	1.80	0.65	Cum
		14					
					Total Qty. 1 st. lift	4.51	Cum
						F.F.	
14	Providing and laying Cast in situ/Ready Mix cement concrete in M-25 of trap/ granite/ quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction and roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)						
	SSR I. No. 25.52 / 135						
	Spec.No.: Bd.F.6/Page No.300/I.S. 456 (2000)						
	Plinth beam X - Direction						
	PB C1.1 ,	1	3.90	0.23	0.40	0.36	Cum
	PB C3.1 , C8.1 , C 13.1	3	5.54	0.23	0.45	1.72	Cum
	PB C4.1 , C9.1 , C 14.1	6	4.50	0.23	0.45	2.79	Cum
	PB C5.1 , C10.1 , C 15.1						
	PB C6.1 , C11.1 , C 16.1	3	3.87	0.23	0.45	1.20	Cum
	Plinth beam Y - Direction						
	PB C1.2 , C 2.2	2	0.93	0.23	0.23	0.10	Cum
	PB C3.2 , C4.2 , C5.2 , 6.2 , 7.2 , 8.2 , 9.2 , 10.2 , 11.2 , 12.2 ,	10	3.75	0.23	0.35	3.02	Cum

I. No.	Description of Item		NO	Length	Breadth	Depth	Quantity	Unit
1	2		3	4	5	6	7	
	V1		7	1.20	0.23	0.60	1.16	Cum
	Lintels & Beam as per Item No. (Beam at lintel level)	Item No. 14					5.65	Cum
	Pardi Item No.	17					0.76	Cum
			Total Qty.of Deduction				8.78	Cum
			Net Qty.	A - B			34.76	Cum
							G. F.	
	1 st lift above 3.80 m							
	Up to height 5.60 -3.80 = 1.80							
	3.1 , 13.1		2	4.54	0.23	1.80	3.76	Cum
	4.10 , 14.1 , 5.1 , 15.1		4	4.5	0.23	1.80	7.45	Cum
	6.1 , 16.1		2	3.87	0.23	1.80	3.2	Cum
	Y - Direction							
	3.1 , 8.1 , 7.1 , 12.7		4	3.75	0.23	1.80	6.21	Cum
	Brick work for Gable end							
	H = 1.45	2	2	0.50	0.23	1.45	0.67	Cum
			Half Base					
			Total Qty. of B. work				21.290	Cum
	Deductions for							
	V2		11	1.20	0.23	0.60	1.82	Cum
	V3		2	1.30	0.23	0.45	0.27	Cum
	Lintels & Beam as per Item No.	Item No. 14					3.80	Cum
	Coping as per Item No.	22					0.43	Cum
	Pardi Item No.	17					0.87	
			Total Qty.of Deduction				7.19	Cum
			Net Qty.	A - B			14.10	Cum
							F. F.	
24	Providing internal cement plaster 12mm thick in single coat in cement mortar 1:5 with putty finish to concrete or brick surfaces, in all positions including scaffolding and curing etc. complete. & Providing and applying Two coats of wall care Putty on plastered surface and Ceiling and Walls to prepare surface even and smooth of approved make, etc complete.							
	SSR I. No. 32.03 / 153							
	Ground Floor				Height	3.80		
	Inner plaster Back & Front side	2	1	18.30		3.80	139.08	Sqm
	L & R Side	2	1	7.80		3.80	59.28	Sqm
	Deductions for							
	rolling shutter	1	1	2.10		2.50	-5.25	Sqm
	V1	Full						
	1.20+0.10+0.10 = 1.40	Half	7	1.40		0.600	-2.94	Sqm
			Net Qty.				190.17	Sqm
							G.F.	
	1 St lift beyond 3.80 m height							
	Up to 5.60 -3.80 = 1.80 m		1.8					

I. No.	Description of Item		NO	Length	Breadth	Depth	Quantity	Unit
1	2		3	4	5	6	7	
	Inner plaster Back & Front side	2	1	18.30		1.80	65.88	Sqm
	L & R Side	2	1	7.80		1.80	28.08	Sqm
	For Gable end	2	2	0.50	0.23	1.45	0.67	Cum
				Half Base				
	Deductions for							
	V2	0.5	11	1.20		0.60	-3.96	Sqm
	1+0.1+0.1 = 1.20							
	V3	0.5	2	1.50		0.45	-0.68	Sqm
	1.30+0.10+0.1 = 1.50 M							
					Net Qty.		89.99	Sqm
							F.F.	
25	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.							
	SSR I. No. 32.11/153							
	Ground Floor		Note :- Height up to 3.80 m including plinth					
	Outer plaster Front & Back	2	1	19.00		3.80	144.40	Sqm
	L & R Side	2	1	8.80		3.80	66.88	Sqm
	Deductions for							
	V1	0.5	7	1.40		0.60	-2.94	Sqm
		Half						
	Deduct Front face of columns F&B							
	C3 , 7 , 13 17	2	2	0.35		3.80	-5.32	Sqm
	C 4 , 5 , 6 , 14 , 15 ,16	2	3	0.30		3.80	-6.84	Sqm
	L & R Side							
	C3 , 7 , 13 17	2	2	0.50		3.80	-7.60	Sqm
	C8 , 12	1	2	0.30		3.80	-2.28	Sqm
	Front face of Rat arrester F & B	2	1	19.66		0.10	-3.93	Sqm
	Front face of Rat arrester L & R	2	1	9.16		0.10	-1.83	Sqm
					Net Qty.		180.54	Sqm
							G.F.	
	1 St lift							
	H = 5.60+ 1.00 = 6.60 -3.80 = 2.80 m							
	Outer plaster Front & Back	2	1	19.00		2.80	106.40	Sqm
	L & R Side	2	1	8.80		2.80	49.28	Sqm
	Gable end	2	2	0.50		1.45	2.90	Sqm
				Half Base				
	Deductions for							
	V2 (Outer outer)	0.5	11	1.20		0.80	-5.28	Sqm
	Length 1.00+0.10+0.10 = 1.20 m	Half						
	V3 (Outer outer)	0.5	2	1.50		0.65	-0.98	Sqm
					Net Qty.		152.32	Sqm
							F.F.	
26	Providing internal cement plaster 6 mm thick in a single coat in cement mortar 1:4 without neeru finish to concrete surface in all positions including scaffolding and curing etc. complete.							
	SSR I. No. 32.01 / 201							
	Projected face of Columns up to 3.80 m height front & Back	2	2	0.27		3.80	4.10	Sqm
	L & R Side	2	2	0.12		3.80	1.82	Sqm
	Front face of columns front & Back	2	3	0.30		3.80	6.84	Sqm
	L & R side (C 8 & C12)	2	1	0.30		3.80	2.28	Sqm

I. No.	Description of Item		NO	Length	Breadth	Depth	Quantity	Unit	
1	2		3	4	5	6	7		
29	Providing and applying two coats of exterior weather shield paint of approved manufacture and of approved colour to the plastered surfaces including cleaning ,preparing the plaster surface ,applying primer coat ,scaffolding if necessary, and watering the surface for two days etc complete.								
	SSR I. No. 35.28/165								
	Ground Floor		Note :- Height up to 3.80 m including plinth						
	G. F.								
	Total Qty. of sand face plaster						180.54	Sqm	
	Total Qty. of 6 mm plaster						85.47	Sqm	
							Net Qty.	266.01	
								G.F.	
	1 St lift								
	Total Qty. of sand face plaster						152.32	Sqm	
	Total Qty. of 6 mm plaster						70.81	Sqm	
							Net Qty.	223.13	
								F.F.	
30	Providing and fixing mild steel grill work for windows, ventilators etc. 20 kg/sqm as per drawing including fixtures and fixing Jali welded mesh 25*25* 13 Guage on grill , necessary welding and painting with one coats of anticorrosive paint and two coats of oil painting complete.								
	SSR I. No.40.01 / 192								
	Ground floor								
	V1		7	1.20		0.60	5.04	Sqm	
							Total	5.04	
	Height above 3.80 m height								
	V2		11	1.00		0.60	6.60	Sqm	
	V3		2	1.30		0.45	1.17	Sqm	
							Total	7.77	
31	Providing and fabricating structural steel work in rolled sections like joists, channels, angles, tees etc. as per detailed design and drawings or as directed including cutting, fabricating, hoisting, erecting, fixing in position making riveted / bolted /welded connections without connecting plates, braces etc. and including one coat of anticorrosive paint and over it two coats of oil painting of approved quality and shade etc. complete.								
	SSR I. No. 23.01 / 129								
	Movable steps for Loading & Unloading platform								
	M. S. Equal Angle 25 x 25 x 3 mm								
	For outer frame	2	1	2.01			4.020	Rmt.	
		2	1	1.84			3.680	Rmt.	
		2	1	0.16			0.320	Rmt.	
	For Steps	2	6	0.89			10.680	Rmt.	
		2	6	0.29			3.480	Rmt.	
	Vertical support to stape as a rise	7	4	0.15			4.200	Rmt.	
	Connecting member at top to both outer frames		1	0.90			0.900	Rmt.	
	Connecting member at bottom to both outer frames		2	0.90			1.800	Rmt.	
	Horizontal member for hook		1	0.90			0.900	Rmt.	
							Total Qty.	29.980	
	Weight of Angle 25 x 25 x3 mm	1.12	kg/m				33.580	Kg.	
								A	
	M. S. Flat patti 25 x 25 x3 mm								

I. No.	Description of Item		NO	Length	Breadth	Depth	Quantity	Unit
1	2		3	4	5	6	7	
	Weight of 12 mm square bar	1.13	Kg/ Rmt				23.9	Kg.
							Total Qty.	36.92 Kg.
	Add 5 % for wastage							1.85 Kg.
							Total Qty.	38.77 Kg.
	Weight of 3.00 m x 0.45 m / 3.00 m length Jalli							0.04 M.T.
							Weight / Rmt. =	0.01 Mt/ Rmt.
	Front & Back side	2	21.86	=	43.72	Rmt.		
	L & R side	2	10.26	=	20.52	Rmt.		
					Total	64.24 Rmt.		
			@		0.01	M.T. /Rmt		0.64 M.T.
								Z
							Total weight X + Y + Z	79.54 Kg.
							Total weight in MT.	0.08 MT.
32	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.							
	SSR No. 23.04 / 129							
	Weight of trusses as per Table 237 Lean to roof trusses (ISA Section) Span 9.00 M Slop 1 in 3 & Wind pressure Zone 100 Kg / Sqm .							
			1	18.53	8.03		148.80	Sqm
	Total weight of trusses = @	16.70	Kg / Sqm				2484.960	Kg.
	Add 10 for Eixtures weight						248.500	Kg.
							2733.460	Kg.
							Total Qty.	2.485 MT.
33	Providing and fixing colour coated Zincaleum (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)							
	SSR No. 38.34 / 173							
	A) Height up to 3.80 m							
	for shad over Loading , Unloading platform							
			1	5.70	1.85		10.55	Sqm
							G.F.	
	B) Height above 3.80 m , For Roof	2	1	19.36	4.67		180.82	Sqm
						Slant length	F.F.	
	1.48							
								

I. No.	Description of Item	NO	Length	Breadth	Depth	Quantity	Unit
1	2	3	4	5	6	7	
34	Providing and fixing of colour coated Zinaluminium(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 withAluminium-Zinc alloy (55% aluminiumm 43.4% zinc 1.6% silicon) with COLORBOND (R) steel quality super durable polyster paint coat (with inorganic pigment). The paint shall have a total coating thickness of nominal 35 mm, comprising of nominal 25mm 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 sublet square fluting in the five pan at nominal 180-250 mmcenterto-center. The end rib shall be designed for anti-capacity 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) 600 mm girth (Surface Width).						
	SSR No. 38.35 / 174						
	Height above 3.80 m , For Rodge	1	19.36			19.360	Rmt.
35	Providing and laying concrete pipes of I.S.NP. class of 300mm diameter in proper line, level and slope including necessary collars, excavation, laying, fixing with collars in cement mortar 1:1 and refilling the trench complete.						
	SSR I. No. 42.09 / 200						
	For crossing	1	7.50			7.50	Rmt
	For disposal of Plinth protection drain water.	1	15.00			15.00	Rmt
					Total Qty.	22.50	Rmt.
36	Providing and fixing mat finish stainless steel lettering of various heights as directed by enginner incharge including material, labour, cleaning etc. complete. A) for single letter like A, B, C						
	As per S.E. office letter No. 7004 / Technical cecion / P.O. -7 / Non CSR Items / 2017 Dt.						
	Original letters	12				12	Nos
	Sub letters	8				8	Nos
37	Providing and fixing 90 cm x 60 cm Granite plate engraving 10 cm. height letter, figures including painting the letters/figures with approved colour and shade complete						
	SSR I. No. 44.12 / 213						
		1				1	No.
38	Providing and fixing rolling shutter fabricated from steel laths of minimum thickness 0.9 mmwith lock plate of 3.15 mm thickness reinforced with 35 x 35 x 5 mm angle section fitted withsliding 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) (With mechanical gear)						
	SSR I. No. 39.25 / 181						
	Rolling shutter Front side	1	2.10		2.50	5.25	Sqm

I. No.	Description of Item		NO	Length	Breadth	Depth	Quantity	Unit
1	2		3	4	5	6	7	
39	Providing, laying and fixing exterior grade fibrilling fibre reinforcement heavy duty designer cement concrete tiles for Flooring of approved colour and design 22 +/- 2 mm thick bayer colour pigmented as per IS ..1237 - 1980 having compressive strength more than 500 Kilogram/sq. cm reaffirmed in 2006 ,having wert transvrse strength of 3.5 / mm 2, water absorption less than 10 % abrasion / wear resistance less than 2 mm ,skid resistance more than 25.0 (ASTM:E303) and no fading as per DIN - 51094 of size 300 x 300 in plan / designed pattern on a bed of 1:4 cement mortar including cement float ,filling joints with neat cement slurry ,curing, polishing and cleaning etc. complete. For flooring.							
	SSR I. No. 33.76 / 161							
	Front side & Back side	2	1	20.76	1.00		41.52	Sqm
	For plinth protection							
	L & R side	2	1	10.26	1.00		20.52	Sqm
	For plinth protection							
				Total			62.04	Sqm
40	Providing and fixing CO2 type fire extinguishers of 4.50kg capacity complete with value, discharge horn carrying neck handal bracket as per I.S. 2878 with ISI Mark.							
	Approved by SE P.W. Circle, Nagpur							
			2				2	Nos
41	Providing and fixing A.B.C. type fire extinguisher of 5.0 kg capacity with pressure guage as per I.S. 13849.							
			2				2	Nos


Dr. Ashtashil V. Bhambulkar
 B. E. Civil Engineering
 M. Tech. (Environmental Engineering)
 Ph.D. Civil Engg. (Environmental Engineering)
 MIE. Chartered Engineer
 Reg. No. M-1750369

**Name of work :- Construction of Grain Godown (450 M. T. Capacity) and Machine Shed for Sayukta Agro Product Producer Company Limited ,
Shegaon (Bk) in Taluka - Warora , District - Chandrapur**

RATE ANALYSIS

Sr. No.	Item of work	C.S.R. I. No.	Page No.	C.S.R. Rate	Deduct for SCADA & Reversible drum type mixer	Deduct for Royalty of sand	Net rate	Unit	T. P. Charges				Grand Total Rs. (8 + 14)	Rate proposed Rs.	
									Material Qty.	Rate	Unit	Amount			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	and soft murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the Up to 1.50 m Height	115	115	193.00	0.00	0.00	193.00	/Cum	0.00	0.00	0.00	0.00	0.00	193.00	193.00 /Cum
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, Up to 1.50 m Height	115	115	212.00	0.00	0.00	212.00	/Cum	0.00	0.00	0.00	0.00	0.00	212.00	212.00 /Cum
3	Excavation for foundation in hard murum including removing the excavated material upto a distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, 1.50 m to 3.00 m Height	115	115	403.00	0.00	0.00	403.00	/Cum	0.00	0.00	0.00	0.00	0.00	403.00	403.00 /Cum
4	Transportation of material obtained from debris of various sorts including necessary excavation/ loosening including loading, unloading and conveying and disposing as directed. Lead 1.00 Km S.S.R. I. No. CSR based item	Rate as per transportation rate		163.69	0.00	0.00	163.69	/Cum	0.00	0.00	0.00	0.00	0.00	163.69	163.70 /Cum
5	Providing preconstructional antitermite treatment as per I.S. 6313 (Part-II) treatment by treating the backfill in immediate contact with foundation at the rate of 5 litres of emulsion	116	116	97.00	0.00	0.00	97.00	/Sqrm	0.00	0.00	0.00	0.00	0.00	97.00	97.00 /Sqrm
6	Providing preconstructional antitermite treatment as per I.S. 6313 (Part-II) by treating the top surface of plinth filling at the rate of 5 litres of emulsion concentrate at 1.0 percent of chlorophytos per	117	117	94.00	0.00	0.00	94.00	/Sqrm	0.00	0.00	0.00	0.00	0.00	94.00	94.00 /Sqrm

Sr. No.	Item of work	C.S.R. I. No.	Page No.	C.S.R. Rate	Deduct for SCADA & Reversible drum type mixer	Deduct for Royalty of sand	Net rate	Unit	T. P. Charges					Grand Total Rs. (8 + 14)	Rate proposed Rs.	
									Material Qty.	Rate	Unit	Amount				
1		2														
7	Providing preconstructional anti-termite treatment as per I.S.6313 (Part-I) to the soil along the external face of building by punching holes of 1.2 of 1.5 C.M. diameter about 30 -60 cmdeep at 15 cm	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
		21.25	117	153.00	0.00	0.00	153.00	/Sqm	0.00	0.00	0.00	0.00	0.00	153.00	153.00	/Sqm
8	Filling in plinth and floors with contractors material/brought from outside and approved by Engineer incharge in layers of 15 cm to 20 cm including watering and compaction etc. complete.	21.37	117	550.00	0.00	0.00	550.00	/Cum	Murum	1.00	511.51	/Cum	511.51	1061.51	1061.50	/Cum
9	Providing soiling using 80 mm size trap metal in 15 cm. layer including filling voids with Crushed sand/grit, ramming, watering etc. complete.	21.40	118	1322.00	0.00	0.00	1322.00	/Cum	Metal	1.00	511.51	/Cum	511.51	1913.57	1913.55	/Cum
									Sand	0.150	533.75		80.06			
										1.15			591.57			
10	Providing and laying Cast in situ/Ready Mix cement concrete in M15 of trap/ granite /quartzite/gneiss metal for bed blocks, foundation blocks and such other items including bailing out water,	24.08	131	6030.00	0.00	0.00	6030.00	/Cum	20 mm Metal 12/10m m metal	0.22	533.75	/Cum	117.43	6478.51	6478.50	/Cum
									Sand	0.11	533.75	/Cum	58.71			
									Cement	0.445	533.75	/Cum	237.52			
										6.400	5.45	/Bag	34.85			
													448.51			
11	Providing and laying Cast in situ/Ready Mix cement concrete M-25 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	25.13	133	6836.00	0.00	0.00	6836.00	/Cum	20 mm Metal 12/10 mm metal	0.57	533.75	/Cum	304.24	7557.38	7557.40	/Cum
										0.28	533.75	/Cum	149.45			

Sr. No.	Item of work	C.S.R. No.	Page No.	C.S.R. Rate	Deduct for SCADA & Reversible drum type mixer 6%	Deduct for Royalty of sand 0 Per Cum	Net rate	Unit	T. P. Charges					Grand Total Rs. (8 + 14)	Rate proposed Rs.
									Material Qty.	Rate	Unit	Amount			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
12	Providing and laying in situ /Ready Mix cement concrete M-20 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	25.11	133	6666.00	0.00	0.00	6666.00	/Cum	Sand cement	0.425 7.50	533.75 5.45	/Cum /Bag	226.84 40.85 721.38	7416.68	7416.70 /Cum
13	Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap / granite /quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, ...	25.33	134	13157.00	0.00	0.00	13157.00	/Cum	20 mm Metal 12/10 mm metal Sand cement	0.57 0.28 0.425 7.50	533.75 533.75 5.45	/Cum /Cum /Cum /Bag	304.24 149.45 226.84 40.85 721.38	13878.38	13878.40 /Cum G. F.
	F. F. 1 % on Basic rate + rate of G. F.			131.57										14009.95	14009.95 /Cum
	S. F. 2 % on Basic rate + rate of G. F.			263.14										14141.52	14141.50 /Cum S. F.

Sr. No.	Item of work	C.S.R. No.	Page No.	C.S.R. Rate	Deduct for SCADA & Reversible drum type mixer 6%	Deduct for Royalty of sand 0 Per Cum	Net rate	Unit	T. P. Charges					Grand Total Rs. (8 + 14)	Rate proposed Rs.
									Material Qty.	Rate	Unit	Amount			
1		3	4	5	6	7	8	9	10	11	12	13	14	15	16
14	Providing and laying Cast in situ/Ready Mix cement concrete in M-25 of trap/ granite/ quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including steel reinforcement formwork, mixer, blake	25.52	135	11652.00	0.00	0.00	11652.00	/Cum	20 mm Metal 12/10 mm metal	0.57	533.75	/Cum	304.24	12373.38	12373.40 /Cum
	F. F. 1 % on Basic rate + rate of G. F.			116.52									721.38	12489.90	12489.90 /Cum F. F.
15	Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap/ granite/ quartzite/ gneiss metal for R.C.C. chajja as per	26.07	137	13283.00	0.00	0.00	13283.00	/Cum	20 mm Metal 12/10 mm metal	0.57	533.75	/Cum	304.24	14004.38	14004.40 /Cum
	F. F. 1 % on Basic rate + rate of G. F.			132.83									149.45	14137.21	14137.20 /Cum F. F.
16	Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap/ granite / quartzite/ gneiss metal for R.C.C. slabs and landings as per detailed designs and drawings including steel	25.72	136	14114.00	0.00	0.00	14114.00	/Cum	20 mm Metal 12/10 mm metal	0.67	533.75	/Cum	357.61	14856.73	14856.75 /Cum
	F. F. 1 % on Basic rate + rate of G. F.			141.14									117.43	14997.87	14997.85 /Cum F. F.
													226.84	14997.87	14997.85 /Cum F. F.
													40.85	14997.87	14997.85 /Cum F. F.
													742.73	14997.87	14997.85 /Cum F. F.

Sr. No.	Item of work	C.S.R. No.	Page No.	C.S.R. Rate	Deduct for SCADA & Reversible drum type mixer	Deduct for Royalty of sand	Net rate	Unit	T. P. Charges					Grand Total Rs. (8 + 14)	Rate proposed Rs.
									Material Qty.	Rate	Unit	Amount	Rate		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
17	Providing and laying Cast in situ/Ready Mix cement concrete in M-25 of trap/ granite/ quartzite/ gneiss metal for R.C.C. pardi of required thickness including steel centering.	26.19	137	14863.00	0.00	0.00	14863.00 /Cum	/Cum	20 mm Metal 12/10	0.67	533.75	/Cum	357.61	15605.73	15605.75 /Cum
	F. F. 1 % on Basic rate + rate of G. F.			148.63									742.73	15754.36	15754.35 /Cum F. F.
18	Providing cast in situ / ready mix M 20 grade cement concrete for head walls of CD work / retaining walls etc. Including necessary form work, compaction, finishing and curing etc. complete. (with	11.29	63	9953.00 Rate for M-20	0.00	0.00	9953.00 /Cum	/Cum	20 mm Metal 12/10 mm metal	0.67 0.22	533.75 533.75	/Cum	357.61 117.43	10703.68	10703.70 /Cum
									Sand Cement	0.425 7.50	533.75 5.45	/Cum /Bag	226.84 40.85		
													750.68		
19	Providing and laying weep holes of 100 mm diameter PVC pipes as per drawing for abutment returns, return walls etc. Complete.	17.37	99	482.00	0.00	0.00	482.00 /Rmt.	/Rmt.	0.00	0.000	0.00	/Rmt.	0.00	482.00	482.00 /Rmt.
20	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 pardi, copings, fins, arches etc. as per detailed designs, drawings	26.33	139	7178.00	0.00	0.00	7178.00	/ M.T.	Steel	1.00	108.92	/ M.T.	108.92	7188.92	7188.90 / M.T.
	F. F. 1 % on Basic rate + rate of G. F.			717.78										72604.70	72604.70 / M.T. F. F.

Sr. No.	Item of work	C.S.R. No.	I. Page No.	C.S.R. Rate	Deduct for SCADA & Reversible drum type mixer	Deduct for Royalty of sand	Net rate	Unit	T. P. Charges					Grand Total Rs. (8 + 14)	Rate proposed Rs.
									Material Qty.	Rate	Unit	Amount			
1		3	4	5	6	7	8	9	10	11	12	13	14	15	16
21	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 F. F. 1 % on Basic rate + rate of G. F.	27.12	144	6762.00	0.00	0.00	6762.00	/Cum	Bricks 475 Nos.	0.95	812.99	/Cum	772.34	7713.75	7713.75 /Cum G.F.
22	Providing and laying Cast in situ/Ready Mix concrete in M-20 of trap/ granite/ quartzite/ gneiss metal for R.C.C. coping to plinth or parapet and sill of doors and windows moulded as per detailed drawings or chartered as approved by the Engineer F. F. 1 % on Basic rate + rate of G. F.	26.23	138	6800.00	0.00	0.00	6800.00	/Cum	20 mm Metal 12/10 mm metal Sand cement	0.67 0.22 0.445 7.00	533.75 533.75 533.75 5.45	/Cum /Cum /Cum /Bag	357.61 117.43 237.52 38.12	7781.37	7781.35 /Cum F. F. 7550.70 /Cum
23	Providing fly ash brick masonry with conventional/ I.S. type bricks in cement mortar 1:6 in superstructure including striking joints, racking out joints, watering and scaffolding etc. Complete F. F. 1 % on Basic rate + rate of G. F.	27.13	144	6978.00	0.00	0.00	6978.00	/Cum	Bricks 475 Nos. Sand Cement	0.95 0.320 1.580	812.99 533.75 5.45	/Cum /Cum /Bag	772.34 170.80 8.60	7618.68	7618.70 /Cum F. F. 7929.75 /Cum 7999.55 /Cum F. F.

Sr. No.	Item of work	C.S.R. I No.	Page No.	C.S.R. Rate	Deduct for SCADA & Reversible drum type mixer	Deduct for Royalty of sand	Net rate	Unit	T. P. Charges					Grand Total Rs. (8 + 14)	Rate proposed Rs.
									Material Qty.	Rate	Unit	Amount			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
24	Providing internal cement plaster 12mm thick in single coat in cement mortar 1:5 with putty finish to concrete or brick surfaces, in all positions including scaffolding and curing etc. complete. & For Putty F. F. 1 % on Basic rate + rate of G. F. Without Putty	32.03 32.34	153 155	257.00 87.00 344.00 3.44	0.00	0.00	344.00 /Sqm	Sand Cement	0.015 0.09	533.75 /Sqm 5.45 /Bag		8.01 0.49 8.50	352.50	352.50 /Sqm	
25	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 F. F. 1 % on Basic rate + rate of G. F. Without Putty	32.03 32.11	153 153	257.00 599.00 5.99	0.00	0.00	257.00 /Sqm 599.00 /Sqm	Sand Cement	0.015 0.033 0.25	533.75 /Sqm 5.45 /Bag		8.01 0.49 8.50 17.61 1.36 18.98	265.50 617.98	265.50 /Sqm 618.00 /Sqm	F. F. G. F.
26	Providing internal cement plaster 6 mm thick in a single coat in cement mortar 1:4 with Putty finish to concrete surface in all positions including scaffolding and curing etc. complete. & With putty F. F. 1 % on Basic rate + rate of G. F.	32.06 32.01 32.34	201 153 155	359.00 191.00 87.00 278.00 2.78	0.00	0.00	359.00 /Sqm 278.00 /Sqm	Sand Cement	0.025 0.14 0.0076 0.054	533.75 /Sqm 5.45 /Bag		13.34 0.76 14.11 4.06 0.29 4.35	623.97 373.11 282.35	623.95 /Sqm 373.10 /Sqm 282.35 /Sqm	F. F. G. F. Without putty

Sr. No.	Item of work	C.S.R. No.	Page No.	C.S.R. Rate	Deduct for SCADA & Reversible drum type mixer 6% Per Cum	Deduct for Royalty of sand 0	Net rate	Unit	T. P. Charges					Grand Total Rs. (8 + 14)	Rate proposed Rs.
									Material Qty.	Rate	Unit	Amount			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
31	Providing and fabricating structural steel work in rolled sections like joists, channels, angles, tees etc. as per detailed design and drawings or as directed including cutting, fabricating, hoisting.	23.01	129	89181.00	0.00	0.00	89181.00	/M.T.	Steel	1.00	108.92	/M.T.	108.92	89289.92	89289.90 /M.T.
32	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/ Height above 3.80 M F. F. 1 % on Basic rate + rate of G. F.	23.04	129	105909.00	0.00	0.00	105909.00	/M.T.	Steel	1.000	108.92	/M.T.	108.92	106017.92	/M.T.
33	Providing and fixing colour coated Zincalume (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 Height above 3.80 M F. F. 1 % on Basic rate + rate of G. F.	38.34	173	1095.00	0.00	0.00	1095.00	/Sq.m	Sheet	0.005	108.92	/MT.	0.54	1095.54	1095.55 /Sq.m F. F.
34	Providing and fixing of colour coated Zincaluminium(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 Height above 3.80 M F. F. 1 % on Basic rate + rate of G. F.	38.35	174	702.00	0.00	0.00	702.00	/Rmt.	Sheet	0.003	108.92	/MT.	0.33	702.33	702.35 /Rmt. F. F.
35	Providing and laying concrete pipes of I.S.NP. class of 300mm diameter in proper line, level and slope including necessary collars, excavation, laying, fixing with collars in cement mortar 1:1 and refilling the trench complete.	42.09	200	727.00	0.00	0.00	727.00	/Rmt.	Pipe	1.00	35.07	/Rmt.	35.07	762.07	762.05 /Rmt. F. F.

Sr. No.	Item of work	C.S.R. I. No.	Page No.	C.S.R. Rate	Deduct for SCADA & Reversible drum type mixer	Deduct for Royalty of sand	Net rate	Unit	T. P. Charges				Grand Total Rs. (8 + 14)	Rate proposed Rs.	
									Material Qty.	Rate	Unit	Amount			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
36	Providing and fixing mat finish stainless steel lettering of various heights as directed by engineer incharge including material, etc in English and + , , É, È, È B) For half letters "É@ÚÉ`òÓÍÉÓ±É ÈòÉ×½þÉ, "ÉÉ½É, =ÈòÉ@ú, @ú½É@ú +ÉÉ½É É´É±ÉÉ×½ð @±ÉÉÉ@ú	44.12	213	20.00 9.00 7985.00	0.00 0.00 0.00	0.00 0.00 0.00	20.00 /per Cm of height 9.00 /per Cm of height 7985.00 /No.	per Cm of height per Cm of height /No.	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	20.00 9.00 7985.00	20.00 /per Cm of height 9.00 /per Cm of height 7985.00 /No.
37	Providing and fixing 90 cm x 60 cm Granite plate engraving 10 cm. height letter, figures including painting the letters/figures with approved colour and shade complete	39.25	181	4730.00	0.00	0.00	4730.00 /Sqrm	/Sqrm	0.00	0.00	0.00	0.00	0.00	4730.00	4730.00 /Sqrm
38	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	33.76	161	1078.00	0.00	0.00	1078.00 /Sqrm	/Sqrm	Tiles	1.000	10.89	10.89 /Sqrm	10.89	1100.27	1100.25 /Sqrm
39	Providing, laying and fixing exterior grade fibrilling fibre reinforcement heavy duty designer cement concrete tiles for Flooring of approved colour and design 22 +/- 2 mm thick bayer colour pigmented as per IS .. 1237 - 1980 having compressive strength more than 500 Kilogram/sq. cm reaffirmed in 2006								Sand	0.020	533.75	10.68	10.68		
									Cement	0.130	5.45	0.71	0.71		
													22.27		

As per S.E. office letter No. 7004 / Technical section / P.O. -7 / Non CSR items / 2017 Dt. 9/11/2017

Sr. No.	Item of work	C.S.R. I. No.	Page No.	C.S.R. Rate	Deduct for SCADA & Reversible drum type mixer 6% Per Cum	Deduct for Royalty of sand 0 Per Cum	Net rate	Unit	T. P. Charges					Grand Total Rs. (8 + 14)	Rate proposed Rs.
									Material Qty.	Rate	Unit	Amount			
1		3	4	5	6	7	8	9	10	11	12	13	14	15	16
40	Providing and fixing CO2 type fire extinguishers of 4.50kg capacity complete with valve, discharge horn carrying neck handal bracket as per I.S. 2878 with ISI Mark. approved by SE P.W. Circle, Nagpur			8550.00	0.00	0.00	8550.00 /No.		0.00	0.00	0.00 /No.		0.00	8550.00	8550.00 /No.
41	Providing and fixing A.B.C. type fire extinguisher of 5.0 kg capacity with pressure guage as per I.S. 13849. approved by SE P.W. Circle, Nagpur			7850.00	0.00	0.00	7850.00 /No.		0.00	0.00	0.00 /No.		0.00	7850.00	7850.00 /No.


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**Construction of Grain Godown (450 M. T. Capacity) and Machine Shed for Sayukta Agro Product
Producer Company Limited , Shegaon (Bk) in Taluka - Warora , District - Chandrapur.**

LEAD STATEMENT

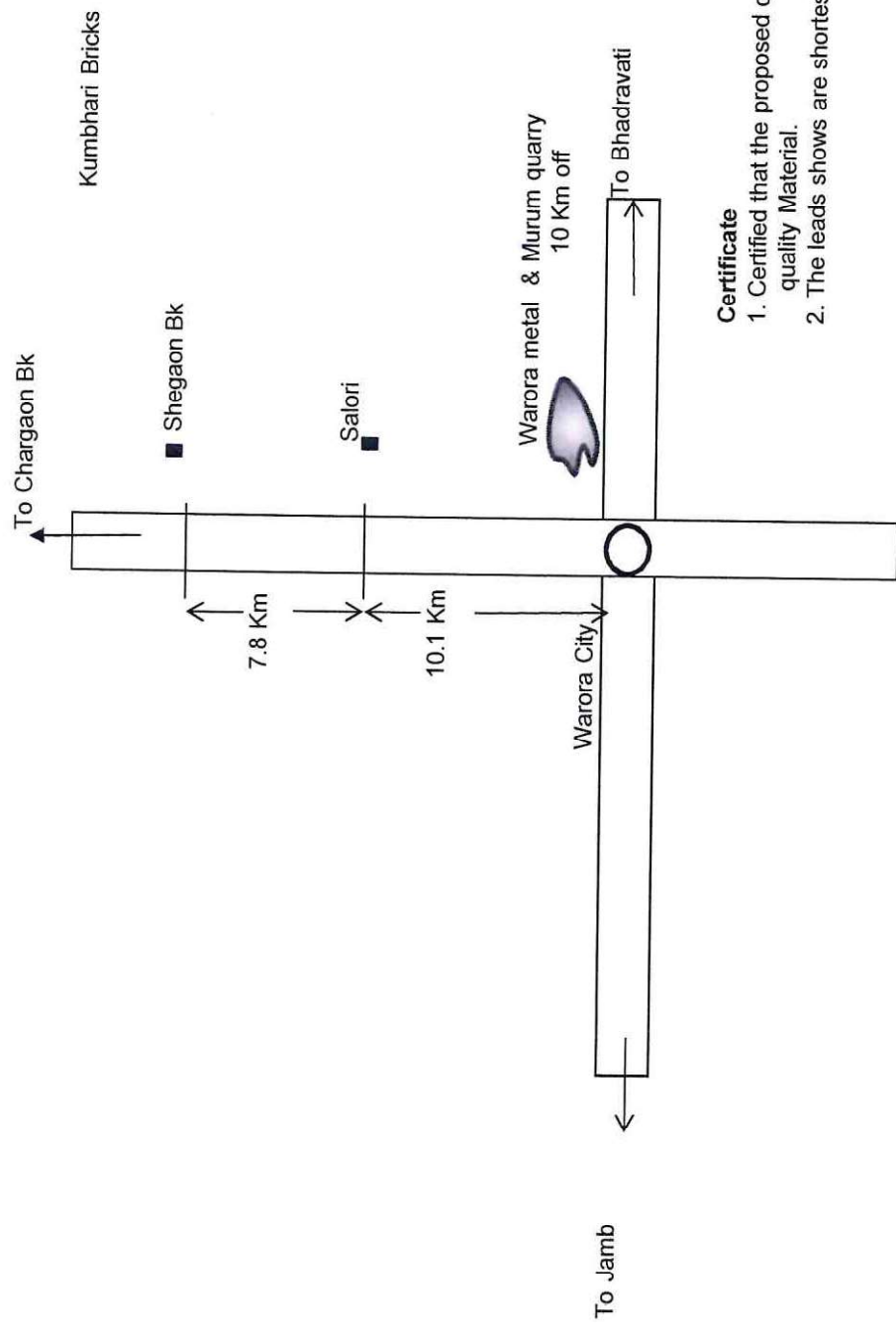
Sr. No.	Material	Source of material	Lead in Km.	Lead charges	Net charges
1	C. B. Metal < 40 mm sizes	From Warora metal quarry	25	533.75	533.75 / Cum
2	Metal > 40 mm size	From Warora metal quarry	25	511.51	511.51 Cum
3	Rubble	From Warora metal quarry	25	652.99	652.99 / Cum
4	Murum	From Warora metal quarry	25	511.51	511.51 / Cum
5	Sand	From Local	35	533.75	533.75 / Cum
6	Briks Fly ash / Brunt	From Local	45	812.99	812.99 / Cum
7	Steel	From Warora	20	108.92	108.92 / M.T.
8	Cement	From Warora	20		5.45 / Bag
9	Paving block	From Warora	20	108.92	108.92 / Cum
10	Tiles/ Cota stone etc.	From Warora	20	10.89	10.89 / Sqm
11	Roofing sheets	From Warora	20	108.92	108.92 / M.T.
12	R.C.C.Pipe	From Warora	20	35.07	35.07 / Rmt.
	300 mm dia Np - 2 class pipe R.C.C. Hume pipe				



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Name of work :- Construction of Grain Godown (450 M. T. Capacity) and Machine Shed for Sayukta Agro Product Producer Company Limited ,
Shegaon (Bk) in Taluka - Warora , District - Chandrapur.

QUARRY CHARI



Certificate

- 1. Certified that the proposed quarry having sufficient & good quality Material.
- 2. The leads shows are shortest route only.


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Sr. No.	Item of work	Qty.	Material required												
			/ cum	Metal > 40 mm	/ cum	Metal < 40 mm	/ Cum	Sand	bags/ Cum	Cement	in M.T.	Steel	/ Cum	Murum	
25	Sand face plaster	332.86					0.033	10.98	0.250	83.22					
26	6 mm plaster in CM 1:3	0.00				0.008	0.00	0.054	0						
39	Cement tiles Flooring	62.04				0.020	1.24	0.13	8.07						
Total Qty required for One Godown				32.73 Cum		#REF! Cum		#REF! Cum		#REF! Bags		12.080 MT.			98.54 Cum

Metal > 40 mm 32.73

Murum 98.54

Total Qty. 131.27 Cum

@ Rs 465 /Cum = Rs 61240.50

Sand #REF! Cum (Crusher Sand Royalty paid)

Material required													
/ Cum	Bricks	/ Sqm	Cota stone flooring	/ Sqm	Ceramic tiles / vetrified	/ Sqm	Granite	/ Sqm	C. C. tiles flooring	/ Sqm	Kadappa partition	/ M.T.	Bitumern 60/70 VG - 30
								1	62.04				
	51.87 24638.00	Cum Nos	0		0.00				62.04		Sqrm		MT.

Name of work :- Construction of Grain Godown (450 M. T. Capacity) and Machine Shed for Sayukta Agro Product Producer Company Limited ,
Shegaon (Bk) in Taluka - Warora , District - Chandrapur.

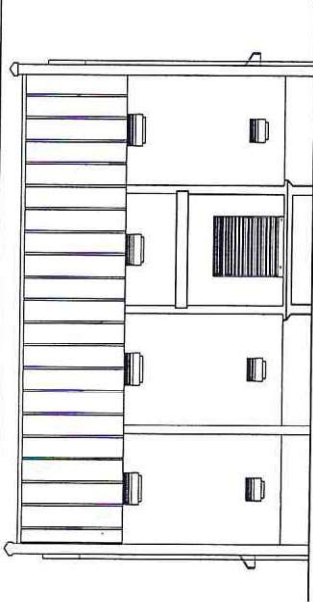
MATERIAL TESTING CHARGES

Sr No	Material	Quantity	FREQUENCY	NO OF TEST	30 % Test at Govt. Lab	Rate /Test	Amount
1	Cement(in MT)						
	Standard Consistency Fineness, Specific Gravity, Setting Time (Initial & Final), Compressive Strength, Soundness	#REF!	For each consignment of 50 M.T. or part thereof.	#REF!	1	3770.00	3,770.00
2	Coarse Aggregates						
	i) Water Absorption, Specific Gravity. Impact Value Crushing	#REF!	1 Test for per 200 cum	1	1	2600.00	2,600.00
	ii) Sieve Analysis.	#REF!	1 Test for per 200 cum	1	1	690.00	690.00
	iii) Abrasion Value.	#REF!	1 Test for per 200 cum	1	1	1170.00	1,170.00
	iv) Flakiness Index/ Elongation Index.	#REF!	1 Test for per 500 cum	1	1	850.00	850.00
	v) Stripping Value.	#REF!	1 Test for per 500 cum	1	1	745.00	745.00
	vi) Soundness.	#REF!	1 Test for per 500 cum	1	1	2495.00	2,495.00
3	Fine Aggregate						
	i) fineness modulus(sieve analysis)	#REF!	At the beginning and if there is change in source	1	1	1380.00	1,380.00
	ii)Chloride and sulphate Content	#REF!	" "	1	1	795.00	795.00
	iii)Silt factor	#REF!	" "	1	1	850.00	850.00
4	Concrete (for all grades)						
	i) Compressive strength of C.C.cube						
	M-10	0.00	1 cum to 5 cum -1 Test	0	0	690.00	-
	M-15 (Average 15 Cum / Day)	20.35	6 cum to 15 cum -2 Tests	3	3	690.00	2,070.00
	M-15	0.00	16 cum to 30 cum -3 Tests	0	0	690.00	-
	M-20	17.20	31 cum to 50 cum -4 Tests	2	2	690.00	1,380.00
	M-25	#REF!	Additional sample for	#REF!	7	690.00	4,830.00
	M-30.	0.00	each addition of 50cum or	0	0	690.00	-
	ii)Concrete Mixed design						
	M-20	17.20	At the beginning and if there is change in source	1	1	13755.00	13,755.00
	M-25	#REF!		1	1	13755.00	13,755.00
6	Stone / Rubble						
	i)Crushing value/ Compressive strength, water absorption and specific gravity	-	At the beginning and if there is change in source	0	0	2020.00	-

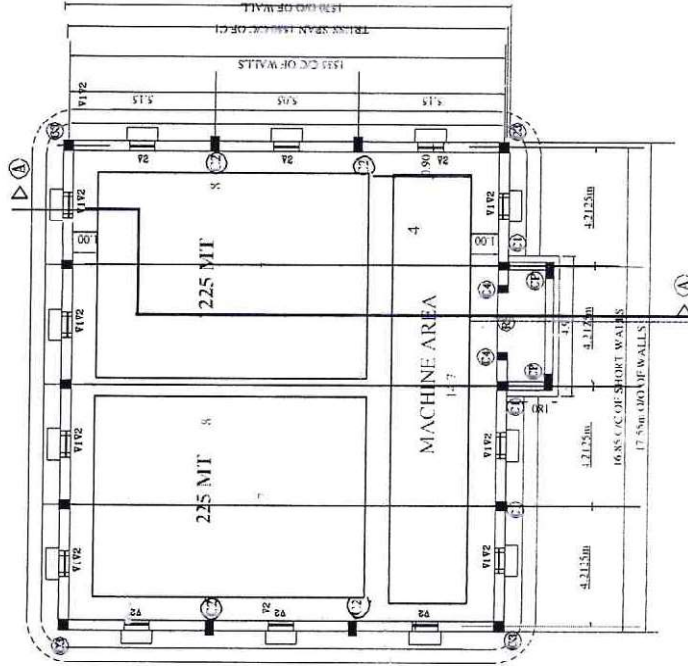
Sr No	Material	Quantity	FREQUENCY	NO OF TEST	30 % Test at Govt. Lab	Rate /Test	Amount
7	Soil/ Moorrum						
	i) sieve analysis	98.54	1 test per 400 cum of soil/	1	0	690.00	-
	ii) field moisture content	98.54		1	0	0.00	-
	iii) liquid limit and plastic limit	98.54		1	0	1170.00	-
	iv) Compaction test(proctor density)	98.54		1	0	1860.00	-
	v) C.B.R. test (lab)	98.54		1	0	6905.00	-
	vi) field density by sand replacement method	98.54		1	0	1115.00	-
	vii) sulphate and chloride contents	98.54		1	0	795.00	-
8	Steel Bar						
	i)Upto 16 mm (Set of 3 Bars)(Tensile strength, %,Elongation ,	12.08	One test for every 5.00mt or	3	3	1275.00	3,825.00
	ii)Above 16 mm (Set of 3 Bars)(Tensile strength, %,Elongation ,	4.83	One test for every 5.00mt or	1	1	1595.00	1,595.00
9	Tiles (Chequered)						
	i)Flexural test, ii) Water absorption , iii) Resistance to wear	62.04	1 Test of every 2000 tiles	0		2495.00	-
10	Vetrified tiles / Ceramic tiles (Size of Tile 0.60 x 0.60)	0.00	6 tiles shall be tested or every test for every 2000 tiles or part thereof	0	0	2495.00	-
	i)Flexural test, ii) Water absorption , iii) Resistance to wear			1	0	2495.00	-
11	Kota stone stone flooring , Trade & Risers (Appx. Size of tiles 0.45 x 0.60)	0.00	Every test for every 2000 tiles or part thereof	0	0	1300.00	-
	Water absorption , Specific gravity.						
12	Bricks	24638.00	One test to 50,000 Nos and part thereof	1	1	2175.00	2,175.00
	Water absorption , Compressive strength , Efflorescence						
						Total	58,730.00


Dr. Ashtashil V. Bhambulkar
 B. E. Civil Engineering
 M. Tech (Environmental Engineering)
 Ph.D. Civil Engg. (Environmental Engineering)
 MIE, Chartered Engineer
 Reg. No. M-1750369

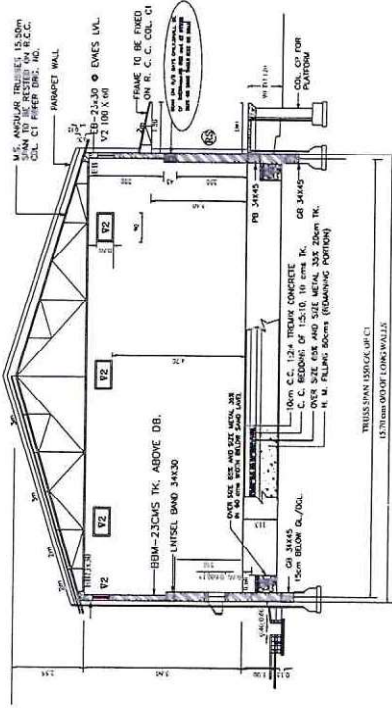
1/450 T.



ELEVATION



PLAN FOR (450 MT) WH. BLDG.



SECTION 'A-A'

1. Use C.C. for frames, concrete, etc.
 2. Use 10mm dia. bars for reinforcement.
 3. Use 10mm dia. bars for reinforcement.
 4. Use 10mm dia. bars for reinforcement.
 5. Use 10mm dia. bars for reinforcement.

SCHEDULE OF R. C. C. COLUMNS.

TYPE	SIZE	NO.	REMARKS
C1	30 X 45	6	LONG WALLS
C2	30 X 45	4	CABLE WALLS
C3	34 X 34	4	CABLE WALLS
C4	15 X 34	2	TO BE POSTED ON DB & RS PANNELS
CP	57 X 30	2	FOR PLATFORMS BELOW BEAM.

SCHEDULE OF ROLLING SHUTTERS/VENTILATORS

TYPE	SIZE (IN CMS)	NO.	DISCRPTION
RS	180 X 240	1	PULL AND PUSH TYPE FIXED FORM INSIDE
V1	60 X 60	7	STEEL VENTILATORS, FLAT GLAZED WITH SHUTTERS/BOX HINGES DOWN 50 MESH TO BE SWG. TO BE FIXED BY 19mm dia. M.S. FLAT & 12mm dia. BAR (7 NOS.) IN VERTICAL POSITION TO BE C/C FIXED TO FRAME FROM OUTSIDE.
V2	100 X 60	14	12mm dia. BAR (14 NOS) IN VERTICAL POSITION TO BE C/C FIXED TO FRAME FROM OUTSIDE.

DRAWING NO. /
 DRAWING NO.
 SCALE 1:100
 DRAWN BY
 EXISTING
 1/450 MT CAPACITY
 WH. BLDG UNIT No. 1
Dr. Ashutosh V. Bhambulkar
 M. Tech. (Environmental Engineering)
 Ph. D. Civil Engg. (Environmental Engineering)
 MIE, Chartered Engineer
 Reg. No. M-1750369

BUILT UP AREA CALCULATIONS

MAIN BUILDING SQ. M.
 A) 17.55m x 15.70m = 275.53
 B) 4.95m x 1.80m = 8.87
 TOTAL PLATFORM AREA = 284.40 SQ. M.
 GROSS BUILT UP AREA

PLAT FORMS

BLOCK PLAN