

ESTIMATE

- 1] DIVISION - :-
- 2] SANCTIONED ESTIMATE NO. :-
- 3] Fund Head :-
- 4] Major Head :-
- 5] Minor Head :-
- 6] Service head :-
- 7] Departmental Head :-

This estimate is prepared in the office of the
For The probable expenditure that will be incurred for Estimate For

**Proposed Construction of Orange Grading & Waxing Factory Shed to Hiredhand Agro Farmers
Producer Company Ltd. on Gat No. 552, Mouja - Urad, Tq. Warud, Distt. Amravati**

Estimated Amount Rs.	11884830.00
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Administratively approved under _____

No. _____ Date _____ 2022-23

Technical sanction under _____

No. _____ Date _____ 2022-23

Revised Technical sanction under _____

No. _____ Date _____ 2022-23

Estimate Prepared by _____

Estimate Checked by _____

General Description

// Separately Attached //

Prepared by

M. P. PAKALE
M. P. PAKALE
CIVIL ENGINEER & GOVT. CONTRACTOR
AMC Lic. No. *M/101182*
26, ABHIYANTA COLONY, AMRAVATI



General Report

Name of Work :- Proposed Construction of Orange Grading & Waxing Factory Shed to Hiredhand Agro Farmers Producer Company Ltd. on Gat No. 552, Mouja - Urad, Tq. Warud, Distt. Amravati

Estimate Cost :- Rs. 11884830.00

Authority :- This Work has been decided by _____ In General Body Meeting
Dated _____ to take up these work under above Programme.

Necessity :- As per the resolution passed by the
Vide resolution date / / there is necessity of
Proposed Construction of Orange Grading & Waxing Factory Shed to Hiredhand Agro Farmers Producer Company Ltd. on Gat No. 552, Mouja - Urad, Tq. Warud, Distt. Amravati


- Provision :-
- 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
 - 2 Providing soling using 80 mm size trap metal in 15 cm. layer including filling voids with Crushed sand/grit, ramming, watering etc. complete.
 - 3 Providing and laying Cast in situ/Ready Mix cement concrete in M-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, Steel
 - 4 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
 - 5 Providing and laying Cast in situ/Ready Mix cement concrete M-20 of trap / granite /quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawing or as
 - 6 Providing and laying Cast in situ/Ready Mix cement concrete M-20 of trap / granite /quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs and drawings
 - 7 Providing and laying Cast in situ/Ready Mix cement concrete M-20 of trap/ granite / quartzite/ gneiss metal for R.C.C. slabs and landings as per detailed designs and drawings
 - 8 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,
 - 9 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
 - 10 Providing and fixing colour coated Zincolume (R) AZ150 (min 150 gms/sq.mt. total on each side) profiled sheets for roofing. The feed material is manufactured out of nominal
 - 11 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
 - 12 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.
 - 13 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
 - 14 Providing and laying Cast in situ/Ready Mix cement concrete M-15 of trap/ granite/quartzite/gneiss metal for coping to plinth or parapet, moulded or chamfered as per
 - 15 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
 - 16 Providing and laying in situ cement concrete M20 with tremix treatment for 100 mm thickness for flooring with groove cutting of 4mm wide and 20mm deep with necessary

- 17 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
- 18 Providing and fixing in position Mild steel fixed staggered (Z Type) Ventilator as per detailed drawing with hot deep zink coating including fabricating with Mild steel 'Z' Section of
- 19 Providing and fixing 22 B.W.G. plain galvanised iron sheets on top of weather shed, including scaffolding, fixing by means of nut and bolts or as directed etc. complete.
- 20 Providing and fixing 45 cm wide mild steel ladder of 40mm x 6 mm mild steel flat stringers and steps of 18 mm dia. mild steel bar for water tank including fixing it in (1:2:4) M-15
- 21 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
- 22 Providing and fixing lighthouse conductor system comprising of erecting Air-Termination consisting of tubular copper rod of 25mm dia. 1.2 mm thick with multiple points head 1.2 mt.
- 23 Providing and applying three coats of water proof cement paint of approved manufacture and of approved colour to new plastered surfaces including scaffolding if necessary.

Note

:- The rates are adopted as P.W.D. S.S.R. 2022-2023

Prepared by


M. AMARM RAKALE
 CIVIL ENGINEER & GOVT. CONTRACTOR
 AMC Lic. No. M.E. 11872
 26, ABHIYANTA COLONY, AMRAVATI

GENERAL ABSTRACT

Name of Work :- Proposed Construction of Orange Grading & Waxing Factory Shed to Hiredhand Agro Farmers Producer Company Ltd. on Gat No. 552, Mouja - Urad, Tq. Warud, Distt. Amravati

Name of Owner :- Hiredhand Agro Farmers Producer Company Ltd.

Sr. No.	NAME OF WORK	TOTAL AMOUNT
1	Proposed Construction of Orange Grading & Waxing Factory Shed to Hiredhand Agro Farmers Producer Company Ltd. on Gat No. 552, Mouja - Urad, Tq. Warud, Distt. Amravati	Rs. 10241809.00
	A) Total Amount of Civil Construction Work =	Rs. 10241809.00
	B) Add Royalty Charges as per statement attached =	Rs. 306064.00
	C) Add Quality Control Charges as per statement attached =	Rs. 5520.00
	Total Amount (A+B+C) =	Rs. 10553393.00
	D) Add G.S.T.@12% on Total Amount A)	Rs. 1229018.00
	E) Add Insurance Charges @1% on Total Amount A)	Rs. 102419.00
	Total Estimate Amount =	Rs. 11884830.00
	Say's Amount =	Rs. 11884830.00

In Word :- (Rs. One crore Eighteen lakh Eighty Four thousand Eight hundred Thirty only)

NOTE :- THE ESTIMATE IS FRAMED AS PER PWD S.S.R. 2022-2023

M. R. RAKALE
Mr. AMAR M. RAKALE
 CIVIL ENGINEER & GOVT. CONTRACTOR
 AMC Lic. No..M.L.S.011 612
 26, ABHIYANTA COLONY, AMRAVATI

ABSTRACT

Name of Work :- Proposed Construction of Orange Grading & Waxing Factory Shed to Hiredhand Agro Farmers Producer Company Ltd. on Gat No. 552, Mouja - Urad, Tq. Warud, Distt. Amravati

Name of Owner :- Hiredhand Agro Farmers Producer Company Ltd.

SR. No.	Particulars of Item	Quantity	Rate	Unit	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.) Bv Mechanical Means Spec.No : Bd.A.1/Page No.259 (SSR Sr.No.721, Item No.21.02)	122.18	207.00	Cum.	25293.00
2	Providing soling using 80 mm size trap metal in 15 cm. layer including filling voids with Crushed sand/grit, ramming, watering etc. complete. Spec. No. : As directed by Engineer in charge. (SSR Sr.No.754, Item No.21.40)	162.31	1957.80	Cum.	317774.00
3	Providing and laying Cast in situ/Ready Mix cement concrete in M-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, Steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Natural Sand / Crushed sand VSI Grade finely washed etc) Spec. No. : Bd. E. 1/Page No. 287 (SSR Sr.No.827, Item No.24.01)	93.35	6399.35	Cum.	597404.00
4	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 (Natural Sand / Crushed sand VSI Grade finely washed etc) Spec.No Bd.F.3 Page No. 298 and B.7./Page No.38 (SSR Sr. No 836, Item No 25.11)	11.66	7621.24	Cum.	88895.00

5	<p>Providing and laying Cast in situ/Ready Mix cement concrete M-20 of trap / granite /quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawing or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete.(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Natural Sand / Crushed sand VSI Grade finely washed etc)</p>	10.935	14300.24	Cum.	156374.00
<p>spec.No.: Bd.F.5/Page No. 300/I.S. 456(2000) (CSR item No.3, page No.10)</p>					
6	<p>Providing and laying Cast in situ/Ready Mix cement concrete M-20 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 (Natural Sand / Crushed sand VSI Grade finely washed etc)</p>	30.75	12786.24	Cum.	393146.00
<p>Spec.No.: Bd.F.6 Page No. 300 and B.7, Page No.38 (SSR Sr.No.846, Item No.25.50)</p>					
7	<p>Providing and laying Cast in situ/Ready Mix cement concrete M-20 of trap/ granite / quartzite/ gneiss metal for R.C.C. slabs and landings as per detailed designs and drawings including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete.(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Natural Sand / Crushed sand VSI Grade finely washed etc)</p>	3.537	14449.24	Cum.	51106.98
<p>Spec.No.: Bd.F.8 Page No. 302 and B.7, Page No.38 (SSR Sr.No.851, Item No.25.70)</p>					

8	<p>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.</p> <p>Spec.No.: Bd.F.17, Page No. 306 (SSR Sr. No.871, Item No.26.33)</p>	6 684	89851.81	MT.	600569.00
9	<p>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>Spec.No.: Bd.C.8 Page No. 278 (SSR Sr. No.819, Item No.23.04)</p>	27.904	119607.81	MT.	3337536.00
10	<p>Providing and fixing colour coated Zincolume (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 center-to-center. The end rib shall be designed for anti-capillary groove. and return leg. The feed material should have coil manufacturers product details marked 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 kg/sqm)</p> <p>Spec.No.: As directed by Engineer in charge. (SSR Sr. No.1174,Item No.38.34)</p>	1781.66	1321.81	Sqm.	2355009.00

11	<p>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 min.550 MPa yield strength, metallic hot dip coated withAluminium-Zinc alloy (55% aluminiummm 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 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 mmcenter-to-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 Spec.No.: As directed by Engineer in charge. (SSR Sr. No.1175,Item No.38.35)</p>	37.04	899.81	Rmt.	33328.00
12	<p>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. Spec. No. : Bd.A.11 Page No. 263 (SSR Sr.No.751, Item No.21.37)</p>	1120.248	818.98	Cum.	917461.00
13	<p>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. Spec.No.: Bd.G. 1 Page No. 313 (SSR Sr.No.889, Item No.27.01)</p>	15.715	8337.99	Cum.	131035.00
14	<p>Providing and laying Cast in situ/Ready Mix cement concrete M-15 of trap/ granite/quartzite/gneiss metal for coping to plinth or parapet, moulded or chamfered as per drawing or as directed including steel centering, plywood/ steel formwork 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 fine aggregate.(Natural Sand./Crushed sand_VSI Spec. No. : Bd.E. 3/Page No. 288/I. S. 456 (2000) (SSR Sr.No.835, Item No.24.16)</p>	2.62	6991.35	Cum.	18313.00

15	<p>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. Spec.No.: Bd.L.7Page NO.369 (SSR Sr.No.963, Item No.32.11)</p>	149.59	662.64	Sqm.	99126.00
16	<p>Providing and laying in situ cement concrete M20 with tremix treatment for 100 mm thickness for flooring with groove cutting of 4mm wide and 20mm deep with necessary refilling with bitumen etc. complete. Spec. No. : As directed by Engineer in charge (SSR Sr.No. 1017, Item No.33.30)</p>	893.04	822.04	Sqm.	734116.00
17	<p>Providing and fixing rolling shutter fabricated from steel laths of minimum thickness 0.9 mm with lock plate of 3.15 mm thickness reinforced with 35 x 35 x 5 mm angle section fitted with sliding bolts and handles for both sides, deep M.S. channel section of depth and thickness not less than 65 mm and 3.15 mm respectively. with hold fast arrangements, M.S. Bracket plate 300 x 300 x 3.15 mm minimum size and shape with square bar, suspension shaft of minimum 32 mm diameter, hood cover of M.S. sheet not less than 0.9 mm thickness and of any size at top and safety devices including mechanical gear operation arrangement consisting of worm gear wheels and worms of high Spec.No.: BD-T-55 Page No. 510 (SSR Sr.No.1218, Item No.39.25)</p>	22.50	5308.00	Sqm.	119430.00
18	<p>Providing and fixing in position Mild steel fixed staggered (Z Type) Ventilator as per detailed drawing with hot deep zink coating including fabricating with Mild steel 'Z' Section of size 20mm x 25 mm and 3 mm thick at weight 1.42 Kg/Rmt. with stainless steel mosquito net of 304 Grade. 4 mm thick float glass as directed by Engineer In charge including necessary welding, grinding, two coats of oil paint etc. complete Spec.No.: As directed by Engineer incharge. (SSR Sr.No.1272, Item No.39.77)</p>	18.00	4035.00	Sqm.	72630.00
19	<p>Providing and fixing 22 B.W.G. plain galvanised iron sheets on top of weather shed, including scaffolding, fixing by means of nut and bolts or as directed etc. complete. (Brackets of 70 x 45 mm to be paid separately) Spec.No.: As directed by Engineer incharge. (SSR Sr.No.1283, Item No.39.88)</p>	46.30	1052.00	Sqm.	48704.00

20	Providing and fixing 45 cm wide mild steel ladder of 40mm x 6 mm mild steel flat stringers and steps of 18 mm dia. mild steel bar for water tank including fixing it in (1:2:4) M-15 cement concrete block 60cm x 30cm x 30cm and painting the ladder complete. (Anti Corrosive Paint)	6.00	1128.00	Rmt.	6768.00
	Spec.No.: Bd.V. 19 Page No. 559 (SSR Sr.No.1350, Item No.41.56)				
21	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 chlorophyrisos per square metre of surface area covering ten years guarantee on bond paper.	893.04	108.00	Sqm.	96449.00
	Spec.No.: As directed by Engineer in charge. (SSR Sr.No.739, Item No.21.24)				
22	Providing and fixing lightning conductor system comprising of erecting Air-Termination consisting of tubular copper rod of 25mm dia. 1.2 mm thick with multiple points head 1.2 mt. long (Heavy Duty) welded or clamped to G.I. pipe pole B grade 50 mm dia of required length with M.S. round bnase plate 25 Cm diam and 10mm thick at bottom embeded in cement concrete 1:3:6 dfoundation of size 45 cm diam x 45 cm Height and providing earthing with copper earth plate of size 60 x 60x 0.3 cms with cadmium plated nut bolts to fix earthing strip burried in specially prepared earth pits 1.5 metre below ground level with 40 kg charcoal and salt with alternate layers of charcoal and salt and G.I.pipe 40mm dia 2 meter length burried in earthe upto earthing plate remaining portion above ground level for watering and refilling comcpete Note- Copper strip from lightning conductor is not considered in this item.	1.00	25784.00	No.	25784.00
	Spec.No.: BDW 1 Page 581 (SSR Sr.No.1533, Item No.44.18)				
23	Providing and applying three coats of water proof cement paint of approved manufacture and of approved colour to new plastered surfaces including scaffolding if necessary, cleaning and preparing the surface, watering for two days etc. complete.	149.59	104.00	Sqm.	15558.00
	Spec.No.: Bd.O.8/Page No.406 (SSR Sr.No.1085, Item No.35.15)				
Total Amount of Civil Construction Work A) = Rs.					10241809.00