



Department of Agriculture

PHILIPPINE CARABAO CENTER

CERTIFIED ISO 9001 | ISO 14001 | ISO 45001

PROJECT: **CONSTRUCTION OF DAIRY PROCESSING AND MARKETING FACILITY FOR PCC-MLPC (TUBOD, LANAO DEL NORTE)**LOCATION: **Tubod, Lanao del Norte**SUBJECT: **Detailed Estimate**

PROGRAM OF WORKS				
Particulars	Quantity	Unit	Unit Rate	Total Cost

I. GENERAL REQUIREMENTS

Quantity = 1.00 LOT

O1 Mobilization/Demobilization	1.00	lot		
O1 Permits and Clearances(Check Permit Exemptions for Public Buildings)	1.00	lot		
O2 Temporary Facilities	1.00	lot		
O2 Safety and Health	1.00	lot		
O2 Project Billboards with Frame (COA Format and Size)	1.00	lot		

O1 - Not Subjected to OCM and Profit Mark-up

O2 - Not Subjected to OCM Mark-up

Total Cost**Unit Cost****/LOT****II. EARTHWORKS**

Quantity = 1.00 lot

1) Materials

Backfill	33.05	cu.m.		
Gravel Bed	38.00	cu.m.		

2) Labor**A) Clearing and Grubbing**

Laborers

days

B) Excavation

Laborers

days

C) Backfilling and Gravel Bedding

Laborers

days

Total Cost**Unit Cost****/lot****III. CONCRETING WORKS****A) Formworks And Scaffoldings**

Quantity = 267.52 sq.m.

1) Materials

4' x 8' x 1/2" thick Phenolic Board Form	37.67	pcs		
2" x 2" lumber	452.00	bdft		
Nylon String 1.0mm (tansi)	13.00	roll		
Wire Mesh 1/8" (salandra)	8.00	ft		
Common Nail (Assorted)	13.00	kg		
GI Tie Wire #16	13.00	kg		

2) Labor

Skilled

days

Laborers

days

Total Cost**Unit Cost****/sq.m.**

PROGRAM OF WORKS

Particulars	Quantity	Unit	Unit Rate	Total Cost
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B) Structural Concreting

Quantity = 70.00 cu.m.

1) Materials

Portland Cement (40kg)

650.00 bag

Washed Sand (S-1)

35.00 cu.m.

Gravel (G-3/4)

70.00 cu.m.

2) Labor

Skilled

days

Laborers

days

Total Cost
Unit Cost
/cu.m.

C) Reinforcing Steel Works

Quantity = 1,017.77 kg

1) Materials

10mm Ø x 6m Deformed Steel Bar

735.00 pcs

12mm Ø x 6m Deformed Steel Bar

77.00 pcs

16mm Ø x 6m Deformed Steel Bar

263.00 pcs

GI Tie Wire #16

78.00 kg

2) Labor

Skilled

days

Laborers

days

Total Cost
Unit Cost
/kg

IV. MASONRY WORKS

Quantity = 189.59 sq.m.

1) Materials

160mm thick Concrete Hollow Blocks

1635.00 pcs

100mm thick Concrete Hollow Blocks

738.00 pcs

Portland Cement (40kg)

223.00 bag

Washed Sand (S-1)

24.00 cu.m.

10mm Ø x 6m Deformed Steel Bar

162.00 pcs

GI Tie Wire #16

11.00 kg

2) Labor

Skilled

days

Laborers

days

Total Cost
Unit Cost
/sq.m.



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V. CARPENTRY

A) Ceiling, Accent and Frames

Quantity = 203.00 sq.m.

1) Materials

4' x 8' x 1/4" thk Ficem Ceiling Board	8.00	pcs
7" x 10' x 3/16" thk Metal Spandrel Ceiling	201.00	pcs
2' x 2' x 10mm thk Acoustic Ceiling Board Moisture Resistant	229.00	pcs
2" x 3" x 16' GA24 Carrying Channel	22.00	pcs
1/2" x 1 1/2" x 16' GA24 Single Furring	44.00	pcs
1" x 1" x 10' Wall Angle	36.00	pcs
Main Tee Splice clip	109.00	pcs
1" x 1 1/2" x 12' Main Tee Runner	40.00	pcs
1" x 1" x 2' Cross Tee Runner	232.00	pcs
Preformed Wire Clip	82.00	pcs
Adjustable Suspension Hanger Rod	49.00	pcs
Finishing Nail	41.00	kg
Screw #6x1 Self Tapping (100's)	7.00	box
Blind Rivets 1/8"x1/2" (100's)	7.00	box
20cm x 40cm Ceiling Vent	10.00	set
"Dairy Box" Stainless Steel Signage	1.00	set
"Dairy Box" Lighted Acrylic Signage (Products Outlet)	1.00	set
Consumables	1.00	lot

2) Labor

_____ Skilled
_____ Laborers

_____ days

_____ days

Total Cost

Unit Cost

/sq.m.



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VI. ROOFING AND STEEL WORKS

Quantity = 167.28 sq.m.

1) Materials

1 1/2" x 1 1/2" x 1/4" x 20' Angle Bars	10.00	pcs
2" x 4" x 20' C-Purlins	64.30	pcs
50mm x 50mm x 5mm Angle Bar (6m)	48.20	pcs
10mm Ø x 6m Plain Round Bar	20.80	pcs
10mm Ø Turn Buckle	16.00	pcs
GA 24 Pre-painted rib type long span roofing	211.68	l.m.
GA 24 Pre-Painted Gutter	20.00	pcs
23ft Aluminum Gutter Guard	5.00	pcs
GA 24 Pre-Painted Flashing Gutter	36.00	pcs
GA 24 Pre-Painted Gable Wall Flashing	4.00	pcs
Blind Rivets (100's)	10.00	box
Roof Sealant	10.00	bag
25mm x 25mm x 5mm Angle Bar (6m)	8.00	pcs
50CM x 50CM x 3.0MM thick Aluminum Composite Panel	61.00	pcs
Fabricated Stainless Railings	1.00	set
M12 x 60mm Bolt, Nut and Washer	2.00	box
Welding Rod	3.00	box
Cutting Disc	7.00	pcs
Consumables	1.00	lot

2) Labor

_____ Skilled
_____ Laborers

_____ days
_____ days

Total Cost

Unit Cost

/sq.m.



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VII. DOORS AND WINDOWS

Quantity = 1.00 lot

1) Materials

Doors and Door Jambs

D-01 : 1.00m W x 2.40m H Powder Coated Aluminum top and bot framed 12mm thk ordinary clear glass Swing Door	1.00	set		
D-02 : 0.80m W x 2.10m H Painted Wood Panel Door in Solid Wood Jamb, complete w/ Hardware and Acce.	1.00	set		
D-03 : 0.70m W x 2.10m H Fire-Rated Hollow Core Steel Door in Steel Jamb, w/ Clear Glass Peek Window, Complete w/ Hardware and accessories	1.00	set		
D-04 : 1.20m W x 2.10m H Fire-Rated Hollow Core Steel Double Swing Door in Steel Jamb, w/ Clear Glass Peek Window, Complete w/ Hardware	1.00	set		
D-05 : 0.80m W x 2.10m H Fire-Rated Hollow Core Steel Door in Steel Jamb, with Intumescent Strip, Complete w/ Hardware	3.00	set		
D-06 : 0.80m W x 2.10m H Fire-Rated Hollow Core Steel Door in Steel Jamb, w/ Pass-in swing-type window, Complete w/ Hardware and accessories	1.00	set		
D-07 : 2.0m W x 2.6m H Fire-Rated Hollow Core Steel Double Door in Steel Jamb, w/ Clear Glass Peek Window, Complete w/ Hardware	1.00	set		
D-08 : 0.90m W x 2.10m H Painted Wood Panel Door in Solid Wood Jamb, complete w/ Hardware and Acce.	1.00	set		

Steel Casement Windows

W1: 4.70m W x 2.30m H Powder-Coated Aluminum-Framed 8mm thick Fixed Glass Window	1.00	set		
W2: 2.50 W x 1.50m H Powder-Coated Aluminum-Framed 4.5mm thick Clear Glass sliding Window	1.00	set		
W3: 0.80 W x 0.40m H Powder-Coated Aluminum-Framed 4.5mm thick Clear Glass sliding Window	3.00	set		
W4: 3.25m W x 1.80m H Powder-Coated Aluminum-Framed 4.5mm thick Clear Glass Awning and Fixed Window	1.00	set		
W5: 2.7m W x 1.80m H Powder-Coated Aluminum-Framed 4.5mm thick Clear Glass Awning and Fixed Window	1.00	set		
W6: 1.00 W x 0.8m H Powder-Coated Aluminum-Framed 4.5mm thick Clear Glass sliding Window	2.00	set		



2) Labor

_____ Skilled	_____ days
_____ Laborers	_____ days

Total Cost

Unit Cost

/lot



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VIII. FINISHES**A) Paint Works**

Quantity = 397.70 sq.m.

1) Materials**Wall Finishes**

Masonry Neutralizer, 4L	11.00	gal		
Skim Coat (20kg/bag)	37.00	bag		
Ext: Solvent-Based Acrylic Primer, 4L	9.00	gal		
Ext: Semi-Gloss Latex Paint, 4L (Boysen Wallguard or similar)	15.00	gal		
Int: Permatex Primer, 4L (Boysen Permatex or Similar)	7.00	gal		
Int: Semi-gloss Latex Paint, 4L (Boysen Permacoat Latex or similar)	14.00	gal		

Floor Finish (Processing Area)

Skim Coat (20kg/bag)	7.00	bag		
Proc. Area: Paint Primer, 4L	5.00	gal		
Processing Area: Polyurethane Paint set with Hardener (Davies Keramifloor polyurethane floor coating or similar)	8.00	gal		
Polyurethane Reducer, 4L	3.00	gal		

Ceiling Finishes and Metal Surfaces

Skim Coat (20kg/bag)	9.00	bag		
Permatex Primer, 4L (Boysen Permatex or Similar)	5.00	gal		
Flat latex Paint, 4L (Boysen Permacoat Latex or similar)	8.00	gal		
Red Oxide Primer, 4L	4.00	gal		
Quickdry Enamel Paint, 4L	7.00	gal		
Consumables	1.00	lot		

Wall Finish (Products Outlet)

185x20x2900mm WPC Wall Cladding	20.00	set		
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2) Labor

_____ Skilled	_____ days		
_____ Laborers	_____ days		

Total Cost**Unit Cost****/sq.m.****B) Tile Works**

Quantity = 53.20 sq.m.

1) Materials

400mm x 400mm Polished Granite Floor Tiles	172.00	pcs		
PVC Tile edge trim	50.00	pcs		
300mm x 300mm Dark Floor Tiles for CR	46.00	pcs		
300mm x 300mm Wall Tiles for CR	147.00	pcs		
Wall Cladding Tiles 20cm x 120cm Wood Design	75.00	pcs		
Tile Grout (2kg)	16.00	bag		
Tile Adhesive (25kg)	10.00	bag		

2) Labor

_____ Skilled	_____ days		
_____ Laborers	_____ days		

Total Cost**Unit Cost****/sq.m.**



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IX. PLUMBING WORKS AND FIXTURES

Quantity = 1.00 lot

1) Materials

Cold Water Line

20mm Ø x 4m PPR pipe PN20	17.00	pcs
20mm Ø PPR elbow 90	14.00	pcs
20mm Ø PPR tee	8.00	pcs
20mm Ø PPR Coupling	12.00	pcs
20mm Ø cap	12.00	pcs
Check Valve	1.00	set
Gate Valve	2.00	set
Water Faucet	5.00	set

Sanitary Line and Storm Drainage

100mm Ø x 3m PVC Pipe	40.00	pcs
100mm Ø PVC elbow, 45°	25.00	pcs
100mm Ø PVC Tee	4.00	pcs
100mm Ø PVC Clean Out w/ plug & sealing ring	4.00	pcs
100mm Ø PVC P-trap w/ plug & sealing ring	3.00	pcs
100mm x 100mm Stainless Steel Floor Drain w/ Strainer	3.00	set
10cm x 100cm Stainless Steel Floor Drain w/ Anti-odor Strainer	3.00	set
100mm Ø S.S. Dome Type Roof Drain	11.00	set

Fixtures and Accessories

ST-1000 Septic Tank Complete Set	4.00	sets
Lavatory complete Set	2.00	set
Watercloset with Flush	1.00	set
Catch Basin (70cm x 70cm)	6.00	set
Consumables	1.00	lot

2) Labor

_____ Skilled	_____ days
_____ Laborers	_____ days

Total Cost

Unit Cost

/lot



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X. ELECTRICAL WORKS

Quantity = 1.00 lot

1) Materials**Lighting Device and Electrical Fixtures**

6" Recessed Pin Light with glass cover, 1 - 13 watts LED Bulb	29.00	set
60cm x 60cm, 36 Watts, Recessed Led Panel Light	15.00	set
16"Diameter Blade Steel Exhaust Fan with Shutter, Industrial Grade, Wall Mounted	2.00	set
1.0HP Smart Inverter Split Type Airconditioning Unit for Office	1.00	set
2HP Smart Inverter Split Type Airconditioning Unit for Products Outlet	1.00	set
12"x12" Ceiling Exhaust Fan with Pipes and Vent Cap	1.00	set
One gang switch, 15A, 230VAc	3.00	set
Two gang switch, 15A, 230VAc	7.00	set
Three gang switch, 15A, 230VAc	3.00	set

Electrical Wiring Device and Fittings

2.0 mm ² THHN wire	328.00	l.m.
3.5 mm ² THHN wire	147.00	l.m.
5.5 mm ² THHN wire	109.00	l.m.
26.7 mm ² THHN wire	26.00	l.m.
32. 0mm RSC pipe	10.00	pcs
20mmØ x 3.0m PVC Pipe w/ coupling	69.00	pcs
20mmØ PVC elbow	30.00	pcs
PVC Octagonal Junction Box	28.00	pcs
6" x 6" pvc pull box	18.00	pcs
2" x 4" pvc utility box	23.00	pcs
Duplex Convenience Outlet, Surface mounted	22.00	set

Panel Board and others

DP-B: Bolt on type Panel Board NEMA with Breakers

MCB 100AT, 200AF, 3P, 230 V 60Hz

Branches: 4 - 20AT 100AF 230V

12 - 30AT 100AF 230V

1.00 set

Consumables

1.00 lot

2) Labor

____ Skilled

____ days

____ Laborers

____ days

Total Cost**Unit Cost****/lot**



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<i>Particulars</i>	<i>Quantity</i>	<i>Unit</i>	<i>Unit Rate</i>	<i>Total Cost</i>

SUMMARY OF ESTIMATED EXPENDITURE:

Direct Cost:

A) Material Cost:

B) Labor Cost:

C) General Requirements O1:

D) General Requirements O2:

E) Total Direct Cost: (A+B+C+D)

Indirect Costs:

F) OCM (A+B) * _____

G) Profit (A+B+D)* _____

H) Tax (E+F+G)* _____

I) Total Indirect Cost: (F+G+H)

TOTAL ESTIMATED PROJECT COST:

(E+I)

