

PROJECT: **CONSTRUCTION OF DAIRY PROCESSING PLANT AND PRODUCT OUTLET FOR CBIN/PCC-WVSU (TIGBUAN, ILOILO),**
LOCATION: **Tigbauan, Iloilo**
SUBJECT: **Detailed Estimate**

PROGRAM OF WORKS				
Particulars	Quantity	Unit	Unit Rate	Total Cost
I. GENERAL REQUIREMENTS				
Quantity =	1.00	LOT		
01 Mobilization/Demobilization	1.00	lot		
01 Permits and Clearances(Check Permit Exemptions for Public Buildings)	1.00	lot		
02 Temporary Facilities	1.00	lot		
02 Safety and Health	1.00	lot		
02 Project Billboards with Frame (COA Format and Size)	1.00	lot		
01 - Not Subjected to OCM and Profit Mark-up				
02 - 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	30.00	cu.m.		
2) Labor				
A) Clearing and Grubbing				
Laborers	4.00	days		
B) Excavation				
Laborers	7.00	days		
C) Backfilling and Gravel Bedding				
Laborers	8.00	days		
			Total Cost	
			Unit Cost	/lot
III. CONCRETING WORKS				
A) Formworks And Scaffoldings				
Quantity =	265.65	sq.m.		
1) Materials				
4' x 8' x 1/2" thick Phenolic Board Form	37.33	pcs		
2" x 2" lumber	448.00	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	10.00	days		
Laborers	10.00	days		
			Total Cost	
			Unit Cost	/sq.m.



Department of Agriculture

PHILIPPINE CARABAO CENTER

CERTIFIED ISO 9001 | ISO 14001 | ISO 45001

PROGRAM OF WORKS

Particulars	Quantity	Unit	Unit Rate	Total Cost
-------------	----------	------	-----------	------------

B) Structural Concreting

Quantity = 67.00 cu.m.

1) Materials

Portland Cement (40kg)

629.00 bag

Washed Sand (S-1)

34.00 cu.m.

Gravel (G-3/4)

67.00 cu.m.

2) Labor

4 Skilled

16.00 days

4 Laborers

16.00 days

Total Cost**Unit Cost** _____/cu.m.**C) Reinforcing Steel Works**

Quantity = 1,002.55 kg

1) Materials

10mm Ø x 6m Deformed Steel Bar

713.00 pcs

12mm Ø x 6m Deformed Steel Bar

77.00 pcs

16mm Ø x 6m Deformed Steel Bar

262.00 pcs

GI Tie Wire #16

78.00 kg

2) Labor

Skilled

22.00 days

Laborers

22.00 days

Total Cost**Unit Cost** _____/kg**IV. MASONRY WORKS**

Quantity = 185.63 sq.m.

1) Materials

160mm thick Concrete Hollow Blocks

1585.00 pcs

100mm thick Concrete Hollow Blocks

738.00 pcs

Portland Cement (40kg)

217.00 bag

Washed Sand (S-1)

23.00 cu.m.

10mm Ø x 6m Deformed Steel Bar

154.00 pcs

GI Tie Wire #16

11.00 kg

2) Labor

Skilled

17.00 days

Laborers

17.00 days

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



Department of Agriculture

PHILIPPINE CARABAO CENTER

CERTIFIED: ISO 9001 | ISO 14001 | ISO 45001

PROGRAM OF WORKS

Particulars	Quantity	Unit	Unit Rate	Total Cost
-------------	----------	------	-----------	------------

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

4 Skilled	12.00	days
4 Laborers	12.00	days

Total Cost

Unit Cost _____ **/sq.m.**



Department of Agriculture

PHILIPPINE CARABAO CENTER

CERTIFIED ISO 9001 | ISO 14001 | ISO 45001

PROGRAM OF WORKS

Particulars	Quantity	Unit	Unit Rate	Total Cost
-------------	----------	------	-----------	------------

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		
GI Tie Wire #16	42.00	kg		
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	20.00	days	580.00	
Laborers	20.00	days	9.00	

Total Cost
Unit Cost

/sq.m.

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		



Department of Agriculture

PHILIPPINE CARABAO CENTER

CERTIFIED: ISO 9001 | ISO 14001 | ISO 45001

PROGRAM OF WORKS				
Particulars	Quantity	Unit	Unit Rate	Total Cost
Steel Casement Windows				
W1: 1.7m W x 1.80m H Powder-Coated Aluminum-Framed 8mm thick Awning & Fixed Glass Window	1.00	set		
W2: 4.70m W x 2.30m H Powder-Coated Aluminum-Framed 8mm thick Fixed Glass Window	1.00	set		
W3: 2.50 W x 1.50m H Powder-Coated Aluminum-Framed 4.5mm thick Clear Glass sliding Window	1.00	set		
W4: 0.80 W x 0.40m H Powder-Coated Aluminum-Framed 4.5mm thick Clear Glass sliding Window	3.00	set		
W5: 3.25m W x 1.80m H Powder-Coated Aluminum-Framed 4.5mm thick Clear Glass Awning and Fixed Window	1.00	set		
W6: 0.9m W x 1.80m H Powder-Coated Aluminum-Framed 4.5mm thick Clear Glass Awning and Fixed Window	1.00	set		
W7: 1.00 W x 0.8m H Powder-Coated Aluminum-Framed 4.5mm thick Clear Glass sliding Window	2.00	set		
<hr/>				
2) Labor				
Skilled	10.00	days		
Laborers	10.00	days		
<hr/>				
			Total Cost	
			Unit Cost	/lot



Department of Agriculture

PHILIPPINE CARABAO CENTER

CERTIFIED ISO 9001 | ISO 14001 | ISO 45001

PROGRAM OF WORKS

Particulars	Quantity	Unit	Unit Rate	Total Cost
-------------	----------	------	-----------	------------

VIII. FINISHES**A) Paint Works**

Quantity = 397.70 sq.m.

1) Materials**Wall Finishes**

Masonry Neutralizer, 4L	10.00	gal		
Skim Coat (20kg/bag)	33.00	bag		
Ext: Solvent-Based Acrylic Primer, 4L	8.00	gal		
Ext: Semi-Gloss Latex Paint, 4L (Boysen Wallguard or similar)	13.00	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		
---------------------------------	-------	-----	--	--

2) Labor

Skilled	12.00	days		
Laborers	12.00	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	11.00	days		
Laborers	11.00	days		

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



Department of Agriculture

PHILIPPINE CARABAO CENTER

CERTIFIED: ISO 9001 | ISO 14001 | ISO 45001

PROGRAM OF WORKS

Particulars	Quantity	Unit	Unit Rate	Total Cost
-------------	----------	------	-----------	------------

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	34.00	pcs		
100mm Ø PVC elbow, 45°	22.00	pcs		
100mm Ø PVC Tee	3.00	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	13.00	days		
Laborers	13.00	days		

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



Department of Agriculture

PHILIPPINE CARABAO CENTER

CERTIFIED ISO 9001 | ISO 14001 | ISO 45001

PROGRAM OF WORKS

Particulars	Quantity	Unit	Unit Rate	Total Cost
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	1.00	set		
MCB 100AT, 200AF, 3P, 230 V 60Hz				
Branches: 4 - 20AT 100AF 230V				
12 - 30AT 100AF 230V				
Consumables	1.00	lot		
2) Labor				
Skilled	12.00	days		
Laborers	12.00	days		
Total Cost				
Unit Cost				/lot

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) * 15%

G) Profit (A+B+D)* 10%

H) Tax (E+F+G)* 5%

I) Total Indirect Cost: (F+G+H)**TOTAL ESTIMATED PROJECT COST:****(E+I) PHP**