

**CALAMBA WATER DISTRICT**

Engineering Department

**BILL OF QUANTITIES / ABC**

PROJECT : PROPOSED PUMPING STATION  
 SUBJECT : PERIMETER FENCE  
 LOCATION : Brgy. Bubuyan/Sirang Lupa/Homeland, Calamba City  
 DATE : August 31, 2021

ITEM NO.	DESCRIPTION	QTY.	UNIT	Estimated Direct Cost	Mark-up			Total Mark-up	VAT	Total Indirect Cost	Total Cost
					OCM	Profit	MOB/ DEMOB				
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
<b>C</b>	<b>CIVIL WORKS</b>										
<b>C.1</b>	<b>Concrete Works</b>										
C.1.1	Cement										
C.1.2	Sand										
C.1.3	Gravel										
	Reinforcing Bars										
C.1.4	12mmø x 6.0m Reinf. Bars										
C.1.5	10mmø x 6.0m Reinf. Bars										
C.1.6	Tie wire # 16										
C.1.7	1/2" thk x 4' x 8' Ordinary Plywood										
C.1.8	2" x 2" x 12' Coco Lumber										
C.1.9	2" x 4" x 12' Coco Lumber										
C.1.10	CWN # 4"-1kg										
C.1.11	CWN # 3"-1kg										
C.1.12	CWN # 2"-1kg										
C.1.13	CWN #1 1/2"-1kg										
<b>C.2</b>	<b>Masonry Works</b>										
C.2.1	125mm thk. CHB										
C.2.2	Cement										
C.2.3	Sand										
C.2.4	10mmø x 6.0m Reinf. Bars										
C.2.5	# 16 GI Wire										
C.2.6	Screen (Hard Cloth or Bistayan)										
C.2.7	Level Hose 1/4"ø x 12Lm.										
C.2.8	Nylon String (Tanse)										
<b>C.3</b>	<b>Service Entrance Post</b>										
C.3.1	Cement										
C.3.2	Sand										
C.3.3	Gravel										
C.3.4	10mmø x 6m Deformed Bars										
C.3.5	8mmø x 6m Deformed Bars										
C.3.6	Tie Wire #16										
C.3.7	1/2" thk x 4' x 8' Ordinary Plywood										

ITEM NO.	DESCRIPTION	QTY.	UNIT	Estimated Direct Cost	Mark-up			Total Mark-up	VAT	Total Indirect Cost	Total Cost
					OCM	Profit	MOB/ DEMOB				
C.3.8	CWN #11/2										
C.3.9	CWN #2										
C.3.10	CWN #3										
C.3.11	CWN #4										
C.3.12	2" x 2" x 8" Coco Lumber										
C.3.13	2" x 3" x 12' Coco Lumber										
<b>C.4</b>	<b>Steel Works (Gate &amp; Barbed Wires)</b>										
C.4.1	2" x 2" eye x 4' x 8' Steel Matting										
C.4.2	38mmø x 6.0m G.I. Pipe (Schedule 40)										
C.4.3	50mmø x 3m G.I. Pipe (Schedule 40)										
C.4.4	3/16" thk x 38mm x 6.0m Flat Bars										
C.4.5	12mmø x 3m Round Bar										
C.4.6	Barb Wires (30kgs per Roll)										
C.4.7	Welding Gloves										
C.4.8	Welding Mask										
C.4.9	Welding Glass (dark)										
C.4.10	6013 Welding Rods										
C.4.11	5/8"Ø Oval Eye Bolt (Scrap from Round Bar)										
C.4.12	5/8"Ø Oval Machine Bolt (Galvanized)										
<b>C.5</b>	<b>Painting Works (Gate and G.I. Pipes)</b>										
C.5.1	Red Lead Primer										
C.5.2	Ready Mix Silver Alumnum Paint										
C.5.3	Lacquer Thinner										
C.5.4	Paint Brush # 1										
C.5.5	Paint Brush # 3										
C.5.6	Rugs										
	TOTAL										

Prepared by:

Engr. Renante A. Capitle  
Sr. Utilities Service Officer

Checked by:

Ms.Ma. Carmela M. Elepaño  
Production Dept. Manager

Recommending Approval by:

Engr. Joselito A. Gillera  
Engineering Department Manager

Approved by:

Mr. Exequiel A. Aguilar Jr.  
General Manager

**CALAMBA WATER DISTRICT**

Engineering Department

**APPROVED BUDGET FOR THE CONTRACT / BILL OF QUANTITIES**

PROJECT: : PROPOSED PUMPING STATION  
#REF! : PUMP HOUSE  
LOCATION: : Brgy. Bubuyan/Sirang Lupa/Homeland, Calamba City  
DATE : August 31, 2021

Item No.	Description	Qty.	Unit	Estimated Direct Cost	Mark-up			Total Mark-up	VAT	Total Indirect Cost	Total Cost
					OCM	Profit	MOB/ DEMOB				
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
<b>C</b>	<b>C2</b>	<b>Civil Works</b>									
	<b>C.2.1</b>	<b>Concrete &amp; Rebar Works</b>									
		Wall Footing									
	C.2.1.1.1	Cement									
	C.2.1.1.2	Sand									
	C.2.1.1.3	Gravel									
	C.2.1.1.4	12mmø x 6.0m deformed bar									
		Footings and Columns									
	C.2.1.2.1	Cement									
	C.2.1.2.2	Sand									
	C.2.1.2.3	Gravel									
	C.2.1.2.4	10mmø x 6.0m deformed bar									
	C.2.1.2.5	12mmø x 6.0m deformed bar									
	C.2.1.2.6	# 16 GI Wire									
	C.2.1.2.7	1/2" thk x 4' x 8' marine plywood									
	C.2.1.2.8	2" x 3" x 12' Coco Lumber									
	C.2.1.2.9	Assorted CWN # 1 1/2-1kg, #3-1kg, #4-1kg									
		Floor Slab Thk = 75mm.									
	C.2.1.3.1	Cement									
	C.2.1.3.2	Sand									
	C.2.1.3.3	Gravel									
	C.2.1.3.4	10mmø x 6.0m deformed bar									
		Roof Beam & Roof Slab Thk = 100mm									
	C.2.1.4.1	Cement									
	C.2.1.4.2	Sand									
	C.2.1.4.3	Gravel									
	C.2.1.4.4	1/2" thk x 4' x 8' ordinary plywood									
	C.2.1.4.5	2" x 2" x 12' Coco Lumber									
	C.2.1.4.6	2" x 3" x 12' Coco Lumber									
	C.2.1.4.7	Assorted CWN # 1 1/2-2kgs, #3-2kgs, #4-1kg									
	C.2.1.4.8	# 16 GI Wire									
	C.2.1.4.9	10mmø x 6.0m deformed bar									
		12mmø x 6.0m deformed bar									

Item No.	Description	Qty.	Unit	Estimated Direct Cost	Mark-up			Total Mark-up	VAT	Total Indirect Cost	Total Cost
					OCM	Profit	MOB/ DEMOB				
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
<b>C.2.2</b>	<b>Masonry Works</b>										
	CHB Installation & 1/2" thk Plastering										
C.2.2.1	4" thk. CHB										
C.2.2.2	0.20m x 0.18m Concrete Louver Blocks										
C.2.2.3	Cement										
C.2.2.4	Sand										
C.2.2.5	10mmø x 6.0m deformed bar										
C.2.2.6	# 16 GI Wire										
<b>C.2.3</b>	<b>Doors and Windows</b>										
C.2.3.1	1.00m x 2.10m Galvanized Metal Louver Door										
C.2.3.2	1.20m x 1.20m Steel Casement Type Window										
<b>C.2.4</b>	<b>Miscellaneous</b>										
C.2.4.1	Working Gloves (Ordinary)										
C.2.4.2	Safety Glass (Eye protection)										
C.2.4.3	Gasoline for Mixer										
C.2.4.4	Gasoline for Service Vehicle										
	Specs: 65 Gals Capacity										
	with dimension 90"(H) x 43"(W) x 47.20"(D)										
<b>TOTAL PROJECT COST</b>											

Prepared by:

Engr. Renante A. Capitle  
Sr. Utilities Service Officer

Checked by:

Ms.Ma. Carmela M. Elepaño  
Production Dept. Manager

Recommending Approval by:

Engr. Joselito A. Gillera  
Engineering Department Manager

Approved by:

Mr. Exequiel A. Aguilar Jr.  
General Manager

**CALAMBA WATER DISTRICT**

Engineering Department

**APPROVED BUDGET FOR THE CONTRACT / BILL OF QUANTITIES**

PROJECT: PROPOSED PUMPING STATION

SUBJECT: DISCHARGE SYSTEM

LOCATION: : Brgy. Bubuyan/Sirang Lupa/Homeland, Calamba City

DATE: August 31, 2021

Item No.	Description	Qty.	Unit	Estimated Direct Cost	Mark-up			Total Mark-up	VAT	Total Indirect Cost	Total Cost
					OCM	Profit	MOB/ DEMOB				
<b>W</b>	<b>Materials</b>										
	Installation of Discharge Pipe										
	75mmø CI Check Valve, F/F										
	75mmø CI Gate Valve, F/F (with Hand Wheel)										
	75mmø CI Basket Strainer, F/F										
	75mmø CI Water Meter, F/F w/ pulse output										
	75mmø CI Tee, F/F										
	75mmø x 90° CI Elbow, F/F										
	75mmø x 45° CI Elbow, F/F										
	75mmø Combi. Flange										
	75mmø Steel Ring Flange										
	75mmø Flange Gasket										
	5/8' x 3' Bolts & Nuts										
	75mmø GI Pipe, Sched.40										
	for Support Pipe										
	1/4 Plywood (ordinary)										
	1 1/2" Common Wire Nail (CWN)										
	2 x 2 x12 Coco Lumber										
	10mmø x 6m Deformed Bar										
	# 18 G.I. Tie Wires										
	Cement										
	Sand										
	Gravel										
	for Drop Pipe assembly										
	75mmø PVC Column Pipe (10ft.)										
	75mmø Column Pipe Adaptor										
	Solvent										
	Air-Release/Air-Vacuum Valve Assembly										
	25mmø Air Release/Air Vaccum Valve										
	25mmø GI Coupling										
	25mmø x 100mm GI Nipple										
	25mmø Brass Gate Valve										
	25mmø x 20mmø GI Tee										
	20mmø x 100mmø GI Nipple										
	20mmø x 90° GI Elbow										
	20mmø x 10mm GI Bushing										
	Pressure Gauge, oil filled (150 psi)										

Item No.	Description	Qty.	Unit	Estimated Direct Cost	Mark-up			Total Mark-up	VAT	Total Indirect Cost	Total Cost
					OCM	Profit	MOB/ DEMOB				
	for Chlorine Stub Out										
	20mmø GI Coupling										
	20mmø x 100mm GI Nipple										
	20mmø x 15mmø GI Reducer										
	20mmø PE Tubing (casing for chlorine host)										
	Discharge Box										
	10mmø x 6m Deformed Bar										
	G.I. Tie Wires										
	50mmø PVC Pipe										
	50mmø x 90° Elbow, M/M										
	50mmø x 300mm GI Nipple										
	50mmø Gibault										
	50mmø Brass Gate Valve										
	CHB 5"										
	Cement										
	Sand										
	Gravel										
	Teflon Tape										
	<i>Tools / Equipments / others</i>										
	Hacksaw Handle										
	Hacksaw Blade										
	Welding mask										
	Welding Gloves										
	Welding Rod										
	Acetylene										
	Oxygen										
	Grinding disk										
	Cutting disk										
	<b>Total Project Cost</b>										

Prepared by:

Engr. Renante A. Capitle  
Sr. Utilities Service Officer

Checked by:

**Ms.Ma. Carmela M. Elepaño**  
Production Dept. Manager

Recommending Approval by:

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Engineering Department Manager

Approved by:

**Mr. Exequiel A. Aguilar Jr.**  
General Manager

**CALAMBA WATER DISTRICT**  
Engineering Department

**APPROVED BUDGET FOR THE CONTRACT / BILL OF QUANTITIES**

**PROJECT** : PROPOSED PUMPING STATION  
**SUBJECT** #REF!  
**LOCATION** : Brgy. Bubuyan/Sirang Lupa/Homeland, Calamba City  
**DATE** : August 31, 2021

Item	Description	Qty.	Unit	Estimated Direct Cost	Mark-up			Total Mark-up	VAT	Total Indirect Cost	Total Cost
					OCM	Profit	MOB/ DEMOB				
<b>E</b>	<b>ELECTRICAL WORKS</b>										
<b>E-1.1</b>	<b>Lighting Fixtures</b>										
E-1.1.1	18W Compact Fluorescent Lamp										
E-1.1.2	Ceiling Socket of 4"Ø										
<b>E-1.2</b>	<b>Outlets &amp; Switches including plate cover, flush-mounted</b>										
	<b>grounding type</b>										
E-1.2.1	Duplex Wide Series Universal Convenience Outlet - grounding type w/ faceplate, 15 A, 230V, 1-phase,										
E-1.2.2	Duplex Wide Series Universal C.O. Weatherproof type with cover-grounding type 15 A, 230V, 1-phase,										
E-1.2.3	2-gang Normal Switch (Wide Series), 10A, 230V										
E-1.2.4	3-gang Normal Switch (Wide Series), 10A, 230V										
<b>E-1.3</b>	<b>Conductors</b>										
E-1.3.1	3.5 mm <sup>2</sup> THWN Copper Conductor - Stranded (BLACK)										
E-1.3.2	125 mm <sup>2</sup> THWN Copper Conductor - Stranded (BLACK)										
E-1.3.3	14.0 mm <sup>2</sup> THWN Copper Conductor - Stranded (WHITE)										
E-1.3.4	14.0 mm <sup>2</sup> THWN Copper Conductor - Stranded (black)										
E-1.3.5	30 mm <sup>2</sup> /3C Submersible Cable										
<b>E-1.4</b>	<b>Electrical Conduit including Locknuts, Washer, Elbows and other Fittings</b>										
E-1.4.1	20mmØ PVC w/ coupling x 3mts										
E-1.4.2	20mmØ Locknut										
E-1.4.3	20mmØ Bushing										
E-1.4.4	40mmØ RSC w/ coupling x 3mts										
E-1.4.5	40mmØ PVC w/ coupling x 3mts										
E-1.4.6	40mmØ Locknut										
E-1.4.7	40mmØ Bushing										
<b>E-1.5</b>	<b>Electrical Equipment</b>										
E-1.5.1	MTS (Manual Transfer Switch) Main: 250AT, 3P, 3Ø, 230V										
E-1.5.2	PANELBOARD - MDP Main: 250AT, 3P, 3Ø, 230V Branches: 1 - 150AT, 3P, 3Ø, 230V 1 - 60AT, 3P, 3Ø, 230V 2 - 30AT, 3P, 3Ø, 230V w/ grounding bus terminal										

Item	Description	Qty.	Unit	Estimated Direct Cost	Mark-up			Total Mark-up	VAT	Total Indirect Cost	Total Cost
					OCM	Profit	MOB/ DEMOB				
E	<b>ELECTRICAL WORKS</b>										
E-1.5.3	PANELBOARD - PPM										
	Main: 60AT, 3P, 3Φ, 230V										
	Branches: 5 - 20AT, 2P, 1Φ, 230V										
	w/ grounding bus terminal										
E-1.5.4	VFD										
<b>E-1.6</b>	<b>Others</b>										
E-1.6.1	Rubber Tape										
E-1.6.2	Electrical Tape										
E-1.6.3	Junction Box w/ cover										
E-1.6.4	Utility box										
E-1.6.5	Wire-nut (2-5 conductor)										
E-1.6.6	2.5mm x 200mm Cable Tie 100's										
E-1.6.7	G.I. Wire G#16										
E-1.6.8	Exhaust fan										
E-1.6.9	Miscellaneous										
	<b>TOTAL PROJECT COST</b>										

Prepared by:

Engr. Renante A. Capitle  
Sr. Utilities Service Officer

Checked by:

**Ms.Ma. Carmela M. Elepaño**  
Production Dept. Manager

Recommending Approval by:

**Engr. Joselito A. Gillera**  
Engineering Department Manager

Approved by:

**Mr. Exequiel A. Aguilar Jr.**  
General Manager



# CALAMBA WATER DISTRICT

Engineering Department

## BILL OF QUANTITIES / ABC

**PROJECT** : PROPOSED PUMPING STATION  
**SUBJECT** : ELECTROMECHANICAL  
**LOCATION** : Brgy. Bubuyan/Sirang Lupa/Homeland, Calamba City  
**DATE** : August 31, 2021

Item	Description	Qty.	Unit	Estimated Direct Cost	Mark-up			Total Mark-up	VAT	Total Indirect Cost	Total Cost
					OCM	Profit	MOB/ DEMOB				
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
<b>EM</b>	<b>ELECTROMECHANICAL</b>										
<b>EM-1.1</b>	Metering Pump										
<b>EM-1.2</b>	Submersible Pump and Motor (PRELIMINARY DESIGN Q=18lps;TDH=175m)										
<b>Total Project Cost</b>										<b>P</b>	

**Prepared by:**

Engr. Renante A. Capitle  
Sr. Utilities Service Officer

**Checked by:**

**Ms.Ma. Carmela M. Elepaño**  
Production Dept. Manager

**Recommending Approval by:**

**Engr. Joselito A. Gillera**  
Engineering Department Manager

**Approved by:**

**Mr. Exequiel A. Aguilar Jr.**  
General Manager

**CALAMBA WATER DISTRICT**

Engineering Department

**APPROVED BUDGET FOR THE CONTRACT / BILL OF QUANTITIES**

PROJECT: : PROPOSED PUMPING STATION  
 #REF! : PUMP HOUSE(sewer)  
 LOCATION: : Brgy. Bubuyan, Calamba City  
 DATE: : August 31, 2021

Item No.	Description	Qty.	Unit	Estimated Direct Cost	Mark-up			Total Mark-up	VAT	Total Indirect Cost	Total Cost
					OCM	Profit	MOB/ DEMOB				
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
<b>PS</b>	<b>Plumbing &amp; Sanitary Works</b>										
<b>PS.1</b>	<b>Lavatory with cabinet</b>										
PS.1.1	Lavatory with cabinet White (1000mm x 520mm)										
PS.1.2	Stainless Faucet										
<b>PS.2</b>	<b>Grease Trap Unit</b>										
PS.2.1	38mmø x 3m PVC Pipe Neltex										
PS.2.2	Plastic Container 400mm(L)x300mm(W)x400mm(H)										
PS.2.3	38mmø PVC Tee										
PS.2.4	38mmø x 90° PVC Elbow										
<b>PS.3</b>	<b>Plumbing &amp; Waterline</b>										
PS.3.1	38mmø x 3m PVC Pipe Neltex										
PS.3.2	38mmø x 90° PVC Elbow										
PS.3.3	PVC Solvent 100 CC										
PS.3.4	1/2"ø x 6m. G.I. Pipe										
PS.3.5	1/2"ø x 90deg G.I. Elbow										
PS.3.6	1/2"ø G.I. Tee										
PS.3.7	1/2"ø G.I. Coupling										
PS.3.8	1/2"ø G.I. Patente										
PS.3.9	1/2"ø G.I. Gate Valve Brass										
PS.3.10	1/2"ø G.I. Niple										
PS.3.11	1/2"ø G.I. Bushing										
PS.3.12	PE Tubing Black 3/8"ø (Chlorinator Hose)										
PS.3.13	1/2"ø x 12m pipe tubing sleeve for chlorine hose										
<b>PS.4</b>	<b>Natural Treatment System</b>										
PS.4.1	5" Thk. CHB										
PS.4.2	Cement										
PS.4.3	Sand										
PS.4.4	10mmø x 6m Deformed Bars										
PS.4.5	2"ø to 3"ø Washed Gravel										
PS.4.6	Reed Plants										
<b>TOTAL PROJECT COST</b>										<b>P</b>	

Prepared by:

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Sr. Utilities Service Officer

Checked by:

**Ms.Ma. Carmela M. Elepaño**  
Production Dept. Manager

Recommending Approval by:

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Engineering Department Manager

Approved by:

**Mr. Exequiel A. Aguilar Jr.**  
General Manager

**CALAMBA WATER DISTRICT**

Engineering Department

**APPROVED BUDGET FOR THE CONTRACT / BILL OF QUANTITIES**

PROJECT: : PROPOSED PUMPING STATION BUILDING  
 #REF! : SPECIALITIES  
 LOCATION: : Brgy. Bubuyan/Sirang Lupa/Homeland, Calamba City  
 DATE : August 31, 2021

Item No.	Description	Qty.	Unit	Estimated Direct Cost	Mark-up			Total Mark-up	VAT	Total Indirect Cost	Total Cost
					OCM	Profit	MOB/ DEMOB				
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
<b>S.1</b>	<b>Wooden Cabinet</b>										
	Fabrication of Cabinet										
S.1.1.1	3/4" x 4' x 8' Marine Plywood										
S.1.1.2	1/4" x 4' x 8' Ordinary Plywood										
S.1.1.3	2" x 3" x 8" Kiln Dried Good Lumber										
S.1.1.4	1" x 1" x 8" Kiln Dried Good Lumber (Liston)										
S.1.1.5	4" Stainless Cabinet Handles										
S.1.1.6	Magnetic Catches (2 pcs per panel)										
S.1.1.7	Stainless Piano Hinges 1/2" x 4'										
S.1.1.8	Stikwel Glue										
S.1.1.9	CWN 1 1/2"										
S.1.1.10	CWN # 2										
	Painting of Cabinet										
S.1.2.1	Flat Enamel White										
S.1.2.2	Gloss Enamel QDE Paint (Chocolate Brown)										
S.1.2.3	Glazing Putty										
S.1.2.4	Polytuf										
S.1.2.5	Paint Brush 1"										
S.1.2.6	Paint Brush 3"										
S.1.2.7	Roller brush 6"										
S.1.2.8	Sand Paper # 100										
<b>S.2</b>	<b>Painting Works</b>										
S.2.1	Latex Paint off white color or light blue										
S.2.2	Latex Paint Dark Blue										
<b>TOTAL PROJECT COST</b>										<b>P</b>	<b>-</b>

Prepared by:

Checked by:

Recommending Approval by:

Approved by:

**Engr. Renante A. Capitle**  
Sr. Utilities Service Officer

**Ms.Ma. Carmela M. Elepaño**  
Production Dept. Manager

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General Manager