

**BILL OF QUANTITIES**  
(Building Construction/Rehabilitation Project)

**PROJECT TITLE :** PROPOSED CONSTRUCTION OF THREE (3) STOREY PUMAREN MULTI PURPOSE HALL AND UPGRADING OF MAIN ELECTRICAL SYSTEM OF JUAN SUMULONG HIGH SCHOOL

**LOCATION :** BARANGAY SAN ROQUE, DISTRICT 3, QUEZON CITY

**PROJECT NO. :** 20 - 00144

**DURATION :** One Hundred Eighty (180) Calendar Days

**SCOPE OF WORKS:**

- 1 General requirement include temporary facilities and utilities, billboard, construction safety and health, scaffolding, clearing, hauling and disposal of construction materials and debris.
- 2 All necessary testing of materials and commissioning works must be performed as per standards procedures.

**CONSTRUCTION OF THREE STOREY PUMAREN MULTI-PURPOSE HALL**

- 1 Site works include site clearing, layout and staking and preparation of earthworks.
- 2 Provision of polyethylene sheets.
- 3 Civil and Structural Works including concreting, reinforcing steel bars, formworks and scaffoldings, masonry works, metal fabrication and thermal proofing.
- 4 Architectural Works including floor finishes, wall finishes, ceiling finishes, roofing works, doors and jambs, windows, painting works and miscellaneous works.
- 5 Installation of sanitary/plumbing roughing-ins, pipelines and fixtures.
- 6 Installation of electrical roughing-ins, wiring devices and fixtures.
- 7 Installation of panel board and its accessories.

**UPGRADING OF MAIN ELECTRICAL SYSTEM OF JUAN SUMULONG HS**

- 1 Installation of electrical roughing-ins, wiring devices and fixtures.
- 2 Installation of panel board and its accessories.

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
<b>I</b>	<b>GENERAL REQUIREMENTS</b>				
	Billboard	1	pc	₱	₱
	Clearing, Hauling and Disposal of Construction Materials and Debris	13	tl		
	Construction Health and Safety	1	unit		
	Scaffolding (Rental)	526	sq.m		
	Temporary Enclosure around the Construction Area (H=2.4m)	32	lm		
	Temporary Lighting and Water Facilities	180	day		
				<b>Direct Cost I</b>	₱
<b>II</b>	<b>CONSTRUCTION OF THREE STOREY PUMAREN MULTI-PURPOSE HALL</b>				
<b>A</b>	<b>SITE WORKS</b>				
	Site Clearing and Preparation	109	sq.m	₱	₱
	Layout and Staking	109	sq.m		
	Excavation Works				
	Column Footing	83	cu.m		
	Wall Footing	23	cu.m		
				Subtotal	₱
	Soil Treatment	109	sq.m	₱	₱
	Gravel Bedding	8	cu.m		
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱
	Backfill and Compaction	151	cu.m	₱	₱
				Subtotal	₱
				Materials Cost A	₱
				Labor Cost A	
				Direct Cost A	₱

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
<b>B</b>	<b>CIVIL WORKS / STRUCTURAL WORKS</b>				
	Concrete Works				
	Ready Mix Concrete, 28 Mpa, 19mm Gravel @ 28 days				
	Column Footing	19	cu.m	₱	₱
	Slab-on-Fill	10.5	cu.m		
	Column	31.5	cu.m		
	Beam	26.25	cu.m		
	Suspended Slab	18.9	cu.m		
	On Site Mix Concrete				
	Wall Footing	8	cu.m		
	Stairs	3	cu.m		
	Counter Top	1	cu.m		
	Canopy	2.1	cu.m		
	Lintel Beam	4	cu.m		
	Reinforcing Steel Bars				
	Grade 40 Reinforcing Steel Bars Including Tie Wire G.I. #16				
	12mmØ Reinforcing Steel Bar				
	Wall Footing	252	kg		
	Suspended Slab	2,245	kg		
	Stairs	1,085	kg		
	Canopy	106	kg		
	Corbel Beam	33	kg		
	Lintel Beam	129.8	kg		
	10mmØ Reinforcing Steel Bar				
	Wall Footing	90.2	kg		
	Slab On-Fill	265	kg		
	Column	3,581	kg		
	Beam	1,417	kg		
	Counter Top	21	kg		
	Corbel Beam	42	kg		
	Lintel Beam (Canopy)	102	kg		
	Grade 60 Reinforcing Steel Bars Including Tie Wire G.I. #16				
	20mmØ Reinforcing Steel Bar				
	Column Footing	2,215	kg		
	16mmØ Reinforcing Steel Bar				
	Column Footing	563.2	kg		
	Column	4,376	kg		
	Beam	3,074	kg		
	Formworks				
	Footing	45	sq.m		
	Column	303	sq.m		
	Beam	143	sq.m		
	Stairs	29	sq.m		
	Suspended Slab	176	sq.m		
	Lintel Beam	13	sq.m		
	Scaffoldings / Shoring				
	Column	147	lm		
	Beam	155	lm		
	Suspended Slab	176	sq.m		
	Thermal and Moisture Protection				
	Cementitious Capillary Type Waterproofing				
	Toilet	10	sq.m		
	Vapor Barrier	109	sq.m		
	Masonry Works				
	100mm CHB Laying including Mortar, Reinforcement, and Plastering Interior Wall (Two Face)	123	sq.m		
	150mm CHB Laying including Mortar, Reinforcement, and Plastering Exterior Wall (Two Face)	400	sq.m		
	Plastering of Door and Window Opening	162	l.m		
	Plastering of Column and Beam	620	sq.m		
	Floor Topping and Preparation for Tiles	311	sq.m		

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Metal Works				
	Roof Framing				
	65mm x 65mm x 6mm Angular Bar	1,146	kg		
	50mm x 50mm x 6mm Angular Bar	790	kg		
	50mm x 100mm x 1.2mm Metal CEE Purlins	317	kg		
	Grilles				
	50mm x 50mm x 1.2mm Tubular	807	kg		
	50mm x 100mm x 1.5mm Tubular	285	kg		
	16mm Square Bar	240	kg		
	12mmØ Anchor Bolt	36	pc		
	50mm x 100mm x 6mm thick Gusset Plate	142	kg		
	Railings				
	50mmØ Stainless Steel w/ complete accessories	28	lm		
	Miscellaneous & Consumables				
	Acetylene Tank Refill	4	tank		
	Assorted Metal Drill Bit	8	pc		
	Cut Off Blade	8	pc		
	Grinding Disc Metal	10	pc		
	Oxygen tank Refill	8	tank		
	Welding Rod	5	box		
	Roofing Works				
	Pre-Painted Rib-type G.I. Roofing	77	sq.m		
	Pre-Painted G.I. End Flashing	41	lm		
	Heat Insulation	93	sq.m		
	12mm x 300mm Fiber Cement Fascia Board	41	lm		
	Tekscrew	372	pc		
	Silicon Sealant	5	tube		
				<b>Materials Cost B</b>	<b>₱</b>
				<b>Labor Cost B</b>	
				<b>Direct Cost B</b>	<b>₱</b>
<b>C</b>	<b>ARCHITECTURAL WORKS</b>				
	Floor Finishes				
	600mm x 600mm Ceramic Tiles	269	sq.m	₱	₱
	300mm x 300mm Non Skid Ceramic Tiles	11	sq.m		
	300mm x 300mm Non-Skid Homogenous Tiles	31	sq.m		
	Brass Stair Nosing	65	l.m		
	Wall Finishes				
	300mm x 300mm Ceramic Tiles	19	sq.m		
	Plastering Guide / Grooves	361	lm		
	4mm thick Aluminum Composite Panel including accessories	92	sq.m		
	Decorative Stone Bricks	8	sq.m		
	Ceiling Finishes				
	12mm Thk. Ordinary Gypsum Board with complete framing and accessories	170	sq.m		
	12mm Thk. Moisture Resistant Gypsum Board with complete framing and accessories	11	sq.m		
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Installation of Doors				
	Door				
	D1 - 2.4m x 1.6m Double Swing Glass Door on Aluminum Framing with Complete Accessories	1	set	₱	₱
	D2 - 2.5m x 3.2m Double Swing Glass Door on Aluminum Framing with Complete Accessories	1	set		
	D3 - 2.1m x 0.9m Metal Door w/ Panic Hardware	1	set		
	D4 - 2.1m x 0.9m Solid Panel Door	1	set		
	D5 - 2.1m x 0.7m Flush Door w/ Louvers	3	set		
	D6 - 2.43m x 1m Steel Door	1	set		
	D7 - 2.4m x 0.9m Metal Type Door w/ Transom and Fixed	4	set		
	Door Jambs				
	D3 - 2.1m x 0.9m Metal Jamb	1	set		
	D4 - 2.1m x 0.9m Wood Jamb	1	set		
	D5 - 2.1m x 0.7m Wood Jamb	3	set		
	D6 - 2.43m x 1m Metal Jamb	1	set		
	D7 - 2.4m x 0.9m Metal Jamb	4	set		
	Hardwares and Accessories				
	Door Hinges	33	set		
	Door Knobs	11	set		
	Barrel Bolts	1	set		
	Foot Bolts	1	set		
	Installation of Windows				
	W1 - 1.5m x 1.8m White aluminum casement window with complete accessories	3	set		
	W2 - 1.5m x 2.4m White aluminum casement window with complete accessories	9	set		
	W3 - 1.5m x 1.8m Sliding window on white aluminum frame with complete accessories	2	set		
	W4 - 0.4m x 1.2m White aluminum casement window with complete accessories	3	set		
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱
	Painting Works				
	Elastomeric Paint Finish (Exterior Wall)	421	sq.m		
	Flat Latex Paint Finish				
	Interior Wall	475	sq.m		
	Ceiling	90	sq.m		
	Slab Soffit	83	sq.m		
	Epoxy Enamel Paint Finish (Steel Members)	61	sq.m		
	Epoxy Paint (Electrical Works)	2	sq.m		
	Logos and Lettering				
	QC Logo	1	set		
	Stainless Steel Lettering "FRANZ PUMAREN BUILDING"	20	set		
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱
				<b>Materials Cost C</b>	₱
				<b>Labor Cost C</b>	
				<b>Direct Cost C</b>	₱

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
<b>D</b>	<b>SANITARY AND PLUMBING WORKS</b>				
	Sewer Line System/Storm Line System				
	50mmØ PVC Pipe with hub	19	pc	₱	₱
	75mmØ PVC Pipe with hub	28	pc		
	100mmØ PVC Pipe with hub	28	pc		
	75mmØ x 50mmØ, Wye	16	pc		
	100mmØ x 50mmØ, Wye	16	pc		
	100mmØ x 75mmØ, Wye	10	pc		
	100mmØ x 100mmØ, Wye	20	pc		
	50mmØ x 50mmØ, Tee	30	pc		
	75mmØ x 50mmØ, Tee	10	pc		
	100mmØ x 100mmØ, Tee	15	pc		
	50mmØ, 1/4 Bend	15	pc		
	75mmØ, 1/4 Bend	25	pc		
	100mmØ, 1/4 Bend	16	pc		
	50mmØ, 1/8 Bend	16	pc		
	75mmØ, 1/8 Bend	8	pc		
	100mmØ, 1/8 Bend	30	pc		
	100mmØ, Cleanout	14	pc		
	75mmØ, Cleanout	4	pc		
	50mmØ, Cleanout	4	pc		
	50mmØ No-Hub Coupling	2	pc		
	50mmØ, P-Trap	15	pc		
	100mmØ x 75mmØ, Reducer	10	pc		
	Waterline System				
	20mmØ PVC Pipe, PN 16	9	pc		
	25mmØ PVC Pipe, PN 16	14	pc		
	20mmØ x 20mmØ, Tee Equal	15	pc		
	25mmØ x 25mmØ, Tee Equal	15	pc		
	25mmØ x 20mmØ, Reducer	8	pc		
	20mmØ, End Cap	15	pc		
	25mmØ, End Cap	15	pc		
	20mmØ, 90° Elbow	15	pc		
	25mmØ, 90° Elbow	12	pc		
	20mmØ, Union Patent	8	pc		
	25mmØ, Union Patent	6	pc		
	20mmØ x 12mmØ, Female Threaded Tee	12	pc		
	25mmØ x 20mm Ø, Female Threaded Tee	8	pc		
	20mmØ, Male Adaptor	16	pc		
	25mmØ, Male Adaptor	5	pc		
	20mmØ, Gate Valve PPR	8	pc		
	25mmØ, Gate Valve PPR	1	pc		
	25mmØ, Check Valve	1	pc		
	25mmØ, Water meter	1	pc		
	Fixtures (Water Efficient)				
	Water Closet, Tank Type	3	set		
	Urinal, Flash Valve	3	set		
	Lavatory Wall Hung	3	set		
	Stainless Single Kitchen Sink	3	set		
	Lavatory Faucet	3	set		
	Kitchen Sink Faucet	3	set		
	Stainless Grease Trap (5GPM)	3	set		
	Accessories and Hardwares				
	Stainless Steel Bidet with Accessories	3	set		
	Stainless Flexible Hose	21	pc		
	Single-Way Angle Valve	15	pc		
	Two-Way Angle Valve	3	pc		
	100 mm x 100mm, Floor Drain	3	pc		
	75mmØ, Deck Drain	3	pc		

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Pipe Hangers and Support				
	For horizontal pipes less than 50mm diameter (2m interval)	27	lm		
	For horizontal pipes greater than 50mm diameter (1m interval)	137	lm		
	Miscellaneous & Consumables				
	400cc PVC Solvent Cement	4	can		
	Waste Cloth	10	kg		
	Hacksaw Blade	8	pc		
	Welding Rod	1	box		
	12mmØ Metal Drill Bit	8	pc		
	12mmØ Concrete Drill Bit	8	pc		
	Silicon Gun	1	pc		
	Silicon Sealant	5	tubes		
	Teflon Tape	29	pc		
				<b>Materials Cost D</b>	<b>₱</b>
				<b>Labor Cost D</b>	
				<b>Direct Cost D</b>	<b>₱</b>
<b>E</b>	<b>ELECTRICAL WORKS</b>				
	Roughing-ins, Pipes and Fittings				
	20mmØ PVC Pipe	98	pc	₱	₱
	25mmØ PVC Pipe	78	pc		
	25mmØ IMC Pipe	19	pc		
	32mmØ IMC Pipe	9	pc		
	20mmØ PVC Adaptor	100	pc		
	25mmØ PVC Adaptor	60	pc		
	25mmØ IMC Coupling	15	pc		
	32mmØ IMC Coupling	8	pc		
	25mmØ IMC Elbow	15	pc		
	32mmØ IMC Elbow	8	pc		
	20mmØ PVC Locknut and Bushing	100	pc		
	25mmØ PVC Locknut and Bushing	60	pc		
	25mmØ IMC Locknut and Bushing	10	pc		
	32mmØ IMC Locknut and Bushing	10	pc		
	32mmØ Weatherproof Entrance Cap, Diecast type	1	pc		
	50mm x 100mm Metal Utility Box	110	pc		
	100mm x 100mm Metal Junction box	65	pc		
	200mm x 200mm x 300mm Pullbox	3	pc		
	20mm Ø x 3000mm Grounding Rod (Copper Clod) with Ground Clamp	1	pc		
	Wires and Cables				
	3.5mm² THHN Wire	20	roll		
	5.5mm² THHN Wire	15	roll		
	8.0mm² THHN Wire	30	lm		
	14mm² THHN Wire	32	lm		
	22mm² THHN Wire	60	lm		
	38mm² THHN Wire	516	lm		
	Wiring Devices and Other Fixtures				
	Duplex Convenience Outlet with Grounding, One-gang	10	set		
	Duplex Convenience Outlet, Two-gang	57	set		
	Aircon Outlet, Multipurpose outlet 250V/20A	6	set		
	Switch w/ Plate & Cover, One Gang	9	set		
	Switch w/ plate & cover, Two Gang	4	set		
	Switch w/ plate & cover, Three Gang	3	set		
	Switch w/ plate & cover, Three way	4	set		
	Selector Switch	12	pc		
	Orbit Fan	12	pc		
	300 x 300mm Ceiling Mounted Exhaust Fan	3	pc		

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Lighting Fixtures (Energy Efficient)				
	300mm x 1200mm, 1 x 18w, Troffer Type, w/ complete accessories, recessed type	20	set		
	T5, 28w Tube light	10	set		
	150mmØ Round Surface Pinlight (casing only)	16	set		
	18W bulb	16	set		
	Wall Mounted Lighting	2	set		
	Emergency Light, Twinhead	10	pc		
	Panelboards				
	LPPA, LPPB, LPPC Main: 1-70AT/100AF,2P,230V,MCCB, in NEMA 1 Branches: 2-20AT/100AF,2P,230V,MCCB 4-20AT/100AF,2P,230V,MCCB	3	assy		
	DP-3STY Main: 1-125AT/150AF,3P,230V,MCCB, in NEMA 1 Branches: 3-70AT/100AF,2P,230V,MCCB	1	assy		
	Miscellaneous and Consumables				
	400cc PVC Solvent Cement	4	can		
	Electrical Tape	15	roll		
	G.I. Tie Wire (for cable pulling)	10	kg		
	Hacksaw Blade	9	pc		
	Masking Tape	11	roll		
	Rubber Tape	5	roll		
				<b>Materials Cost E</b>	₱
				<b>Labor Cost E</b>	
				<b>Direct Cost E</b>	₱
<b>F</b>	<b>UTILITIES AND ANCILIARY WORKS</b>				
	Civil/Structural Works				
	Septic Tank (3.45m x 1.65m x 2.1m)	12	cu.m		
	500 x 500 Catch Basin	3	set		
	CHB Lined Canal with Cover (3-Layers)	33	lm		
	Steel Grating for Line Canal	33	lm		
	Concreting of Pathwalk	180	sq.m		
				<b>Direct Cost F</b>	₱
				<b>Materials Cost II</b>	₱
				<b>Labor Cost II</b>	
				<b>Direct Cost II</b>	₱
<b>III</b>	<b>UPGRADING OF MAIN ELECTRICAL SYSTEM OF JUAN SUMULONG HS</b>				
	Roughing-ins, Pipes and Fittings				
	25mmØ IMC Pipe	2	pc		
	90mmØ IMC Pipe	7	pc		
	25mmØ IMC Coupling	2	pc		
	90mmØ IMC Coupling	2	pc		
	25mmØ IMC Locknut and Bushing	2	pc		
	32mmØ IMC Locknut and Bushing	5	pc		
	90mmØ Weatherproof Entrance Cap, Diecast type	6	set		
	150mm² Ø Solderless Connector w/ Two-bolt	2	pc		
	250mm² Ø Solderless Connector w/ Two-bolt	2	set		
	10mmØ DIA x 250mm Oval Eyebolt	1	set		
	Secondary Rack w/ 3 Spool Heavy Duty Beta	4	set		
	Wires and Cables				
	30mm² THHN Copper Wire	20	lm		
	50mm² THHN Copper Wire	20	lm		
	150mm² THHN Copper Wire	420	lm		
	250mm² THHN Copper Wire	60	lm		
	50mm² Bare Copper Wire	7.5	lm		

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Pipe Hangers and Supports				
	Vertical layout for 1 meter interval	27	lm		
	Panelboards				
	MDP Main: 1-800AT/850AF,3P,230V,MCCB, in NEMA 3R Branches: 1-300AT/300AF,3P,230V,MCCB 1-200AT/250AF,2P,230V,MCCB 1-175AT/200AF,2P,230V,MCCB	1	assy		
	20mm Ø x 3000mm Grounding Rod (Copper Clod) w/ Ground Clamp	1	pc		
	Miscellaneous & Consumables				
	10mmØ Nylon Gray	50	lm		
	All Around Sealant	2	cans		
	Electrical Tape	25	rolls		
	Masking Tape	25	rolls		
	No. 90 Cadweld power	1	pack		
	Rubber Tape	15	roll		
				<b>Materials Cost III</b>	₱
				<b>Labor Cost III</b>	
				<b>Direct Cost III</b>	₱

**SUMMARY**

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	TOTAL COST
I	<b>GENERAL REQUIREMENTS</b>	₱
II	<b>CONSTRUCTION OF THREE STOREY PUMAREN MULTI-PURPOSE HALL</b>	
III	<b>UPGRADING OF MAIN ELECTRICAL SYSTEM OF JUAN SUMULONG HS</b>	
	<b>TOTAL DIRECT COST</b>	₱
	Overhead, Contingencies and Miscellaneous Expenses (OCM)	
	Profit	
	VAT	
	<b>TOTAL ESTIMATED COST</b>	₱