

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

**PROJECT TITLE :** PROPOSED REHABILITATION OF QUEZON CITY SCIENCE INTERACTIVE CENTER  
**LOCATION :** BARANGAY STO. CRISTO, DISTRICT 1, QUEZON CITY  
**PROJECT NO. :** 20 - 00146  
**DURATION :** One Hundred Fifty (150) Calendar Days

**SCOPE OF WORK:**

- 1 General Requirements include Temporary Enclosure, Facilities and Utilities, Billboard, Construction Safety and Health, Scaffoldings, Clearing, Hauling and Disposal of Construction Materials and Debris.
- 2 Site works include Layout and Staking, Site Clearing and Preparation of Earthworks
- 3 Removal and Installation of Existing Steel Railings (Entrance Ramp)
- 4 Removal and Construction of Existing Concrete Slab at Ramp 1 and Ramp 2
- 5 Removal of existing CHB Wall at Left Wing, Right Wing, and Auditorium for Door Provision
- 6 Construction of stairs at Left Wing, Right Wing, and Auditorium
- 7 Installation of Polycarbonate at Porch 1
- 8 Removal and Replacement of Existing roof at Ramp and Roof Deck
- 9 Removal and Replacement of Existing Ceiling and Frames at Ground, Second, Third and Fourth Floors.
- 10 Removal and Replacement of Existing Floor Tiles at Basement, Ground, Second, Third and Fourth Floors.
- 11 Removal and Replacement of Existing Carpet at Exhibit Area and Auditorium
- 12 Removal and Replacement of existing Doors and Jambs including accessories
- 13 Refurbishment of Windows and Accessories
- 14 Repainting of Whole Structure
- 15 Removal and Replacement of Stainless Logo and Lettering
- 16 Removal and Replacement of Existing Plumbing Fixtures
- 17 Rehabilitation and Installation of sanitary/plumbing, roughing-ins, water pipelines, fixtures and accessories
- 18 Rehabilitation and Installation of electrical wirings, roughing-ins, devices, fixtures and accessories
- 19 Installation of panel board and accessories
- 20 Provision of Humidifier
- 21 Removal and Replacement of Sprinkler Heads (Fire Protection Works)
- 22 All necessary testing & commissioning works must be performed as per standard procedures

ITEM NO.	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
<b>I</b>	<b>GENERAL REQUIREMENTS</b>				
	Billboard	1	pc	P	P
	Clearing, Hauling and Disposal of Demolished Materials and Debris	7	t.l.		
	Construction Safety and Health	1	unit		
	Scaffolding (Rental)	686	sq.m.		
	Temporary Enclosure around Construction Area (H=2.4m)	174	l.m.		
	Temporary Lighting and Water Facilities	150	days		
				<b>Direct Cost I</b>	<b>P</b>

ITEM NO.	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
<b>II</b>	<b>SITE WORKS</b>				
	Site Clearing and Preparation	109	sq.m.	P	P
	Layout and Staking	109	sq.m.		
	Demolition Works				
	Removal of Existing Steel Railings (Entrance Ramp)	14	lm		
	Removal of Existing Concrete Slab (Ramp 1)	12	sq.m.		
	Removal of Existing Concrete Slab (Ramp 2)	5	sq.m.		
	Removal of Existing Concrete Slab (Porch 1)	36	sq.m.		
	Removal of existing CHB wall (Left Wing)	3	sq.m.		
	Removal of existing CHB wall (Right Wing)	3	sq.m.		
	Removal of existing CHB wall (Auditorium)	2	sq.m.		
	Removal of Existing Roof	378	sq.m.		
	Removal of Existing Ceiling and Frames	1,255	sq.m.		
	Removal of Existing Floor Tiles	2,506	sq.m.		
	Removal of Existing Carpet at Exhibit Gallery and Auditorium	145	sq.m.		
	Removal of Existing Doors and Jambs	34	sets		
	Removal of Existing Plumbing Fixtures				
	Water Closet	24	units		
	Urinal	12	units		
	Lavatory	24	units		
	Faucet	25	pcs		
	Floor Drain	25	pcs		
	Deck Drain	10	pcs		
	Excavation Works	29	cu.m.		
	Backfill and Compaction	17	cu.m.		
	Cleaning for Paint Preparations	6,459	sq.m.		
	Cleaning / Repair of Existing Aluminum Composite Panel	518	sq.m.		
				Subtotal	P
	Gravel Bedding	2	cu.m.	P	P
	Soil Treatment	36	sq.m.		
				Materials Cost	P
				Labor Cost	
				Direct Cost	P
				<b>Materials Cost II</b>	<b>P</b>
				<b>Labor Cost II</b>	
				<b>Direct Cost II</b>	<b>P</b>
<b>III</b>	<b>CIVIL WORKS / STRUCTURAL WORKS</b>				
A.	Concrete Works				
	On Site Mix Concrete, 28 Mpa, 3/4" Gravel @ 28 Days				
	Footing	1	cu.m.	P	P
	Retaining Wall	6	cu.m.		
	Stair	14	cu.m.		
	On Site Mix Concrete, 21 Mpa, 3/4" Gravel @ 28 Days				
	Ramp	2	cu.m.		
	Stiffener Column/Beam	9	cu.m.		
	Wall Footing	2	cu.m.		

ITEM NO.	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
B.	Reinforcing Steel Bars				
	Grade 40 Reinforcing Steel Bar including G.I. Tie Wire # 16				
	10mmØ Reinforcing Steel Bars				
	Entrance Stair	253	kgs		
	Pedestal	60	kgs		
	Retaining Wall	64	kgs		
	Slab on fill	97	kgs		
	Stiffener Column/Beam	311	kgs		
	Exit Stair	32	kgs		
	12mmØ Reinforcing Steel Bars				
	Ramp	401	kgs		
	Porch 1 Stair	650	kgs		
	Stiffener Column/Beam	161	kgs		
	Wall Footing	358	kgs		
	Grade 60 Reinforcing Steel Bar including G.I. Tie Wire # 16				
	16mmØ Reinforcing Steel Bars (Pedestal)	51	kgs		
C.	Formworks				
	Retaining Wall	59	sq.m.		
	Stiffener Column/Beam	8	sq.m.		
D.	Scaffoldings / Shoring				
	Stiffener Column/Beam	29	l.m.		
E.	Masonry Works				
	100mm CHB Laying including Mortar and Reinforcement	12	sq.m.		
	150mm Load Bearing CHB including Mortar, Reinforcement and One-Face Plastering	872	sq.m.		
	Floor Topping Preparation for Tiles	2,205	sq.m.		
F.	Thermal and Moisture Protection				
	Cementitious Capillary Type Waterproofing	155	sq.m.		
	Flexible Type Waterproofing	493	sq.m.		
G.	Metal Works				
	Canopy				
	50mm x 150mm x 6mm Tubular Bar Rafter	342	kgs		
	50mm x 200mm x 8mm Channel Bar	3,759	kgs		
	50mm x 200mm x 3mm Tubular Bar	889	kgs		
	20mm diameter x 150mm Long Dyna Bolt	9	pcs		
	Pedestal				
	20mm diameter x 300mm Anchor Bolt	20	pcs		
	16mm thk Baseplate	51	kgs		
	16mm thk Wingplate	101	kgs		
	Additional Exit (Roofing)				
	50mm X 75mm X 1.5mm Tubular Bar	130	kgs		
	50mm X 50mm X 1.5mm Tubular Bar	416	kgs		
	25mm X 25mm X 1.5mm Tubular Bar	171	kgs		
	0.2mm x 0.2mm x 12.5mm thk. Base plate	116	kgs		
	20mm diameter x 300mm Anchor Bolt	28	pcs		
	Porch 1 - Stair				
	Checkered Plate	45	kgs		
	16mm diameter Anchor Bolts	34	pcs		

ITEM NO.	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
G.	Miscellaneous				
	Acetylene Tank Refill	5	tank		
	Assorted Metal Drill Bit	10	pcs		
	Cut-off Blade	10	pcs		
	Grinding Disc Metal	10	pcs		
	Oxygen Tank Refill	10	tank		
	Welding Rod	8	boxes		
H.	Roofing Works				
	Pre-painted Rib-type G.I. Roofing	67	sq.m.		
	Pre-painted G.I. End Flashing	28	l.m		
	Pre-painted G.I. Gutter	27	l.m		
	Polycarbonate Sheet and Accessories	191	sq.m.		
	Blind Rivets	268	pcs		
	Tekscrew	165	pcs		
	Polyurethane Foam Insulation - Planetarium Roof	91	sq.m.		
	Pre-painted G.I. Curve Roofing - Planetarium Roof	100	sq.m.		
				Materials Cost III	P
				Labor Cost III	
				Direct Cost III	P
<b>IV</b>	<b>ARCHITECTURAL WORKS</b>				
A.	Floor Finishes				
	300mm x 300mm Ceramic Tiles	123	sq.m.	P	P
	450mm x 450mm x 3mm Carpet Vinyl Tiles	194	sq.m.		
	600mm x 600mm Non-skid Ceramic Tiles	2082	sq.m.		
	Rubber Nosing	323	l.m.		
B.	Wall Partitioning and Finishes				
	300mm x 300mm Ceramic Wall Tiles	310	sq.m.		
	Plastering Guide / Grooves	2124	l.m.		
C.	Ceiling Finishes				
	1200mm x 600mm Accoustic Ceiling Board	1133	sq.m.		
	12mm thk Moisture Resistant Gypsum Board	123	sq.m.		
	PVC Ceiling Plank (Porch 1 & 2)	326	sq.m.		
				Materials Cost	P
				Labor Cost	
				Direct Cost	P
D.	Installation of Doors				
	D1 - 2.10m x 0.90m Swing Type Glass Door	2	sets		
	D2 - 2.10m x 1.80m Double - Swing Type Glass Door	1	set		
	D3 - 2.10m x 4.50m Double - Swing Type Glass Door w/ Fixed Glass Partition	2	sets		
	D4 - 2.10m x 1.00m Metal Flush Door w/ Louver	7	sets		
	D5 - 2.10m x 0.90m Metal Flush Door w/ Louver	8	sets		
	D6 - 1.60m x 0.90m Flush Door w/ 19mm thk Marine Plywood	20	sets		
	D7 - 2.10m x 1.2m Solid Panel Door	1	set		
	Door Jamb				
	D4 - 2.10m x 1.00m Metal Flush Door w/ Louver	7	sets		
	D5 - 2.10m x 0.90m Metal Flush Door w/ Louver	8	sets		
	D7 - 2.10m x 1.2m Solid Panel Door	1	sets		
	Door Knob	16	pcs		
	Door Pull	20	pcs		
	Door Hook	20	pcs		
	Door Bolt	20	pcs		
	Door Hinges	164	pcs		
E.	Installation of Window Locks				
	Window Locks	200	pcs		
				Materials Cost	P
				Labor Cost	
				Direct Cost	P

ITEM NO.	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
F.	Painting Works				
	Elastomeric Paint (Exterior Walls)	2,092	sq.m.		
	Flat Latex Paint (Interior Walls)	4,677	sq.m.		
	Flat Latex Paint (Ceiling)	870	sq.m.		
	Rubberize Paint Finish (Ramp and Stairs)	482	sq.m.		
	Skim Coating		sq.m.		
	Epoxy Enamel Paint (Steel Members)	509	sq.m.		
G.	Logos and Letterings				
	Quezon City Logo	2	sets		
	School Logo	1	sets		
	Stainless Steel Signage "QC CENTREX"	18	sets		
				Materials Cost	P
				Labor Cost	
				Direct Cost	P
				<b>Materials Cost IV</b>	<b>P</b>
				<b>Labor Cost IV</b>	
				<b>Direct Cost IV</b>	<b>P</b>
V	<b>SANITARY AND PLUMBING WORKS</b>				
A.	Sewer Line System/Storm Line Roughing-ins				
	50mm Ø PVC Standard Hub Pipe	7	pcs	P	P
	75mm ØPVC Standard Hub Pipe	4	pcs		
	50mm Ø x 50mm Ø Tee	20	pcs		
	75mm Ø x 1/8 Bend	40	pcs		
	50mm Ø P-Trap	20	pcs		
B.	Fixtures & Accessories (Water Efficient)				
	Lavatory Countertop	20	sets		
	Stainless Bidet	20	pcs		
	Urinal , Flush Valve	12	sets		
	Water Closet, Tank Type	20	sets		
C.	Accessories & Hardwares				
	Door Hook (Coat Hook) at Toilet Partition	20	pcs		
	Flexible Hose	40	pcs		
	Stainless Lavatory Faucet	20	pcs		
	Three-Way Angle Valve	20	pcs		
C.	Miscellaneous & Consumables				
	All Around Sealant	1	can		
	Hacksaw Blade	2	pcs		
	PVC Solvent Cement, 400cc	10	cans		
	Teflon Tape	80	rolls		
	Waste Cloth	2	kgs		
	Welding Rod	6	boxes		
				<b>Materials Cost V</b>	<b>P</b>
				<b>Labor Cost V</b>	
				<b>Direct Cost V</b>	<b>P</b>
VI	<b>ELECTRICAL WORKS</b>				
A.	Replacement of Lighting Fixtures				
	Lighting fixtures (Energy Efficient)				
	600mm x 600mm, 2 x 10w, Troffer Type, w/ complete accessories, recessed type	50	pcs	P	P
	1 x 18w LED, Dust Proof Cover, w/ complete accessories, recessed type	8	pcs		
	300mm x 1200mm, 1 x 18w LED, Troffer Type, w/ complete accessories, recessed type	28	pcs		
	150mmØ Round Surface Mounted LED Pinlight	173	pcs		
	150mmØ Round Recessed LED Pinlight		pcs		
	23W Exhaust Fan , Ceiling type	47	pcs		
				Materials Cost	P
				Labor Cost	
				Direct Cost	P

ITEM NO.	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
B.	Relocation and Replacement of Panelboards				
	Roughing-ins				
	25mmØ IMC Pipe	4	pcs	P	P
	50mmØ IMC Pipe	4	pcs		
	25mmØ IMC Elbow	2	pcs		
	50mmØ IMC Elbow	2	pcs		
	25mmØ IMC Coupling	2	pcs		
	50mmØ IMC Coupling	2	pcs		
	25mmØ IMC Locknut & Bushing	4	pcs		
	50mmØ IMC Locknut & Bushing	4	pcs		
	Pullbox 200mm x 200mm x 400mm	2	pcs		
C.	Wires and Cables				
	8.0mm² TW Wire	8	lm		
	22mm² TW Wire	8	lm		
	30mm² THHN Wire	8	lm		
	80mm² THHN Wire	8	lm		
D.	Pipe Hangers & Supports				
	Horizontal layout of pipe more or less than 50mmØ	8	lm		
E.	Panelboard				
	PPD	1	assy		
	Main: 1-25AT/50AF, 2P ,230V, 60Hz , MCCB in NEMA 1				
	LPP	1	assy		
	Main: 1-100AT/120AF, 2P ,230V, 60Hz , MCCB in NEMA 1				
	Branches: 8-20AT/50AF, 2P ,230V, 60Hz , MCCB				
	PACU	1	assy		
	Main: 1-200AT/220AF, 3P ,230V, 60Hz , MCCB in NEMA 1				
	Branches: 8-40AT/50AF, 2P ,230V, 60Hz , MCCB				
F.	Miscellaneous & Consumables				
	#16 G.I. Tie Wire (for cable pulling)	1	kg		
	Electrical Tape	5	rolls		
	Masking Tape	2	rolls		
	Rubber Tape	2	rolls		
	Pulling Lubricant	1	gal		
				Materials Cost	P
				Labor Cost	
				Direct Cost	P
				<b>Materials Cost VI</b>	<b>P</b>
				<b>Labor Cost VI</b>	
				<b>Direct Cost VI</b>	<b>P</b>
<b>VII</b>	<b>MECHANICAL WORKS</b>				
A.	Dehumidifier				
	1400 BTU Cooling Capacity,101 PTs per day	1	unit	P	P
	capacity, 16F-89F Full Thermostatic control, 401A,				
	360 cu.m/h, 222CFM,1250 W/10.8A,115V,60Hz, 1Ø				
				Materials Cost	P
				Labor Cost with Technical Supervision	
				Direct Cost	P
B.	Fire Protection Works				
	Sprinkler Heads	49	pcs		
	Pendent w/ escutcheon plate, 15mmØ, 57C to 77C				
	Miscellaneous & Consumables				
	Teflon Tape	54	rolls		
				Materials Cost	P
				Labor Cost	
				Direct Cost	P
				<b>Materials Cost VII</b>	<b>P</b>
				<b>Labor Cost VII</b>	
				<b>Direct Cost VII</b>	<b>P</b>

ITEM NO.	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
<b>VIII</b>	<b>UTILITIES AND ANCILLARY WORKS</b>				
A.	Storm Drainage				
	Trench with Steel Grating including accessories	4	l.m.		
				Subtotal	
B.	Equipment & Accessories				
	Booster Pump				
	Centrifugally end-section, cast-iron construction, hard plastic impeller, double mechanical seal with a capacity of 123 GPM against 100 FT. TDH, close coupled to a 5.00 HP, 220V 1" dia. 60 Hz, high efficient motor complete with magnetic starter and other accessories needed for and or alternate operation and parallel operation	1	set	P	P
	Sump Pumps (Basement)				
	Submersible-type, non-clog, designed to pump waste water. Pump shall have a capacity of 50 GPM against a total dynamic head of 40 ft. and driven by 1.0 HP, 220V, 1 dia., 60Hz submersible motor. Complete with float switches for automatic, alternating & parallel operation.	2	sets		
	Pressure Tank				
	Stainless steel, Ga #14, 200 Gallons capacity, complete with inlet port, outlet port, drain port, pressure gauge, and pressure switch set at 20/40 psi cut-in/cut-off pressure & other accessories to complete system	1	set		
				Materials Cost	P
				Labor Cost w/ Technical Supervision	
				Direct Cost	P
				<b>Materials Cost VIII</b>	<b>P</b>
				<b>Labor Cost VIII</b>	
				<b>Direct Cost VIII</b>	<b>P</b>

**SUMMARY**

I	GENERAL REQUIREMENTS				P
II	SITE WORKS				
III	CIVIL WORKS / STRUCTURAL WORKS				
IV	ARCHITECTURAL WORKS				
V	SANITARY AND PLUMBING WORKS				
VI	ELECTRICAL WORKS				
VII	MECHANICAL WORKS				
VIII	UTILITIES AND ANCILLARY WORKS				
				<b>TOTAL DIRECT COST</b>	<b>P</b>
				Overhead, Contingencies and Miscellaneous Expenses (OCM)	
				Profit	
				VAT	
				<b>PROJECT COST</b>	<b>P</b>

**PROJECT TITLE : PROPOSED REHABILITATION OF QUEZON CITY SCIENCE INTERACTIVE CENTER**

**LOCATION : BARANGAY STO. CRISTO, DISTRICT 1, QUEZON CITY**

**PROJECT NO. : 20 - 00146**

**DURATION : One Hundred Fifty (150) Calendar Days**

***BREAKDOWN OF COST***

	<b>Item of Work (Description)</b>	<b>MATERIALS COST</b>	<b>LABOR COST</b>	<b>INDIRECT COST</b>	<b>AGGREGATE COST</b>
I	GENERAL REQUIREMENTS				
II	SITE WORKS				
III	CIVIL WORKS / STRUCTURAL WORKS				
IV	ARCHITECTURAL WORKS				
V	SANITARY AND PLUMBING WORKS				
VI	ELECTRICAL WORKS				
VII	MECHANICAL WORKS				
VIII	UTILITIES AND ANCILLARY WORKS				

**TOTAL COST ₱ \_\_\_\_\_**

LUMP SUM BID IN WORDS : \_\_\_\_\_

\_\_\_\_\_

Contractor : \_\_\_\_\_