



Republic of the Philippines  
**DEPARTMENT OF EDUCATION**  
 FACILITIES AND SCHOOLS ENGINEERING  
 Pasig City



PROJECT: **PROPOSED THREE STOREY NINE (9) CLASSROOM**  
 SCHOOL:  
 LOCATION:  
 OWNER: DEPARTMENT OF EDUCATION  
 SUBJECT: APPROVED AGENCY ESTIMATE

I.D. NO	DESCRIPTION	UNIT	QTY	GRAND TOTAL
I.	<b>GENERAL REQUIREMENTS</b>			
	Mobilization/Temporary Structures, Utilities and Services/Demobilization	lot	1.00	66,016.84
	<b>Sub-total</b>			<b>66,016.84</b>
1.00	<b>Earthworks</b>			
1.01	Clearing and Grubbing	sq.m	342.00	6,840.00
1.02	Structural Excavation	cu.m	253.32	50,664.60
1.03	Backfilling and Compaction	cu.m	169.94	7,647.27
1.06	Select Fill	cu.m	76.95	15,005.25
1.04	Gravel Bedding G-1	cu.m	53.30	41,572.44
1.05	Soil Poisoning	sq.m	376.20	7,335.90
	<b>Sub-total</b>			<b>129,065.46</b>
2.00	<b>Concreting Works</b>			
	Column Footing	cu.m	41.91	
2.01	Portland Cement	bag	378.00	89,208.00
2.05	Crushed Gravel 1"	cu.m	42.00	36,960.00
2.03	Washed Sand	cu.m	21.00	16,380.00
	Tie beams	cu.m	29.03	
2.01	Portland Cement	bag	262.00	61,832.00
2.02	Crushed Gravel 3/4"	cu.m	29.25	29,542.50
2.03	Washed Sand	cu.m	14.75	11,505.00
	Wall Footing	cu.m	4.00	
2.01	Portland Cement	bag	36.00	8,496.00
2.05	Crushed Gravel 1"	cu.m	4.00	3,520.00
2.03	Washed Sand	cu.m	2.00	1,560.00
	Columns	cu.m	42.25	
2.01	Portland Cement	bag	381.00	89,916.00
2.02	Crushed Gravel 3/4"	cu.m	42.50	42,925.00
2.03	Washed Sand	cu.m	21.25	16,575.00
	Beams and Girders	cu.m	46.11	
2.01	Portland Cement	bag	415.00	97,940.00
2.02	Crushed Gravel 3/4"	cu.m	46.25	46,712.50
2.03	Washed Sand	cu.m	23.25	18,135.00
	Suspended Slab	cu.m	59.18	
2.01	Portland Cement	bag	533.00	125,788.00
2.02	Crushed Gravel 3/4"	cu.m	59.25	59,842.50
2.03	Washed Sand	cu.m	29.75	23,205.00
	Roof Beams	cu.m	16.74	
2.01	Portland Cement	bag	151.00	35,636.00
2.02	Crushed Gravel 3/4"	cu.m	16.75	16,917.50

2.03	Washed Sand	cu.m	8.50	6,630.00
	Stairs	cu.m	19.44	
2.01	Portland Cement	bag	175.00	41,300.00
2.02	Crushed Gravel 3/4"	cu.m	19.50	19,695.00
2.03	Washed Sand	cu.m	9.75	7,605.00
	Slab on Grade	cu.m	34.20	
2.01	Portland Cement	bag	308.00	72,688.00
2.05	Crushed Gravel 1"	cu.m	34.25	30,140.00
2.03	Washed Sand	cu.m	17.25	13,455.00
	Ramp on Fill	cu.m	2.00	
2.01	Portland Cement	bag	18.00	4,248.00
2.05	Crushed Gravel 1"	cu.m	2.00	1,760.00
2.03	Washed Sand	cu.m	1.00	780.00
	Media Agua	cu.m	4.80	
2.01	Portland Cement	bag	44.00	10,384.00
2.02	Crushed Gravel 3/4"	cu.m	5.00	5,050.00
2.03	Washed Sand	cu.m	2.50	1,950.00
	<b>Sub-total</b>			<b>1,048,281.00</b>
3.00	<b>Rebar Works</b>			
	Column Footing	kg	3,083.38	
	Tie beams	kg	4,099.29	
	Wall Footing	kg	118.28	
	Columns	kg	13,123.95	
	Beams and Girders	kg	9,162.70	
	Suspended Slab	kg	4,408.96	
	Roof Beams	kg	2,307.71	
	Stairs	kg	1,106.56	
	Slab on Grade	kg	1,312.49	
	Ramp on Fill	kg	84.17	
	Media Agua	kg	354.88	
3.01	Deformed Round Bars, Grade 40	kg	39,162.37	1,589,645.89
3.02	G.I. Tie Wire	kg	784.00	46,256.00
	<b>Sub-total</b>			<b>1,635,901.89</b>
4.00	<b>Formworks</b>			
	Tie beams	sq.m	193.50	
4.01	Coco Lumber	bd.ft	2,129.00	40,536.16
4.02	Plywood Ordinary, 1/4" x 4' x 8'	pc	34.00	14,552.00
4.04	CWN, Assorted	kg	30.00	2,448.00
	Columns	sq.m	460.67	
4.01	Coco Lumber	bd.ft	7,832.00	149,121.28
4.02	Plywood Ordinary, 1/4" x 4' x 8'	pc	79.00	33,812.00
4.04	CWN, Assorted	kg	110.00	8,976.00
	Beams and Girders	sq.m	532.50	
4.01	Coco Lumber	bd.ft	9,053.00	172,369.12
4.02	Plywood Ordinary, 1/4" x 4' x 8'	pc	92.00	39,376.00
4.04	CWN, Assorted	kg	127.00	10,363.20
	Suspended Slab	sq.m	591.75	
4.01	Coco Lumber	bd.ft	10,060.00	191,542.40
4.03	Plywood Ordinary, 1/2" x 4' x 8'	pc	102.00	74,908.80
4.04	CWN, Assorted	kg	141.00	11,505.60
	Roof Beams	sq.m	132.90	
4.01	Coco Lumber	bd.ft	2,260.00	43,030.40
4.02	Plywood Ordinary, 1/4" x 4' x 8'	pc	23.00	9,844.00
4.04	CWN, Assorted	kg	32.00	2,611.20
	Stairs	sq.m	57.20	

4.01	Coco Lumber	bd.ft	973.00	18,525.92
4.02	Plywood Ordinary, 1/4" x 4' x 8'	pc	10.00	4,280.00
4.04	CWN, Assorted	kg	14.00	1,142.40
	Media Agua	sq.m	43.20	
4.01	Coco Lumber	bd.ft	735.00	13,994.40
4.02	Plywood Ordinary, 1/4" x 4' x 8'	pc	8.00	3,424.00
4.04	CWN, Assorted	kg	11.00	897.60
	<b>Sub-total</b>			<b>847,260.48</b>
5.00	<b>Masonry Works</b>			
	Masonry Wall	sq.m	982.94	
5.05	CHB 6" thk	pc	12,287.00	160,959.70
5.02	Portland Cement	bag	492.00	121,130.40
5.03	Washed Sand	cu.m	42.00	34,272.00
5.06	10mm x 6m RSB	kg	1,302.00	59,903.93
5.07	G.I. Tie Wire	kg	27.00	1,836.00
	Plastering	sq.m	1,965.88	
5.02	Portland Cement	bag	649.00	159,783.80
5.03	Washed Sand	cu.m	65.00	53,040.00
	Floor Topping	sq.m	591.75	
5.02	Portland Cement	bag	391.00	96,264.20
5.03	Washed Sand	cu.m	40.00	32,640.00
	<b>Sub-total</b>			<b>719,830.03</b>
6.00	<b>Doors and Windows</b>			
6.03	D-1, Panel Door 0.90m x 2.10m on 150mm Wooden Jamb complete with Accessories	set	18.00	138,692.25
6.04	D-2 Flush Door 0.90m x 2.10m on 150mm Wooden Jamb complete with Accessories	set	2.00	8,393.25
6.05	D-3 Flush Door 0.70m x 2.10m on 150mm Wooden Jamb complete with Accessories	set	4.00	16,338.50
6.06	D-4 Cubicle Door 0.60m x 1.20m on 150mm Wooden Jamb complete with Accessories	set	3.00	11,557.69
6.07	W - 1, ( 2.6 x 1.6 m) Jalousie Window with Clear Glass Blades on Standard Aluminum Casing and Fixed Clear Glass Transom on 50 x 150 mm Wooden Jamb complete with Accessories	set	22.00	169,510.00
6.08	W - 2, ( 1.5 x 1.6 m) Jalousie Window with Clear Glass Blades on Standard Aluminum Casing and Fixed Clear Glass Transom on 50 x 150 mm Wooden Jamb complete with Accessories	set	18.00	78,660.00
6.09	W - 3, ( 0.7 x 2.6 m) Jalousie Window with Clear Glass Blades on Standard Aluminum Casing and Fixed Clear Glass Transom on 50 x 150 mm Wooden Jamb complete with Accessories	set	2.00	8,050.00
	<b>Sub-total</b>			<b>431,201.69</b>
7.00	<b>Steel Works</b>			
7.13	L 50 x 50 x 5mm	kg	1,628.64	81,236.56
7.14	L 50 x 50 x 6mm	kg	1,931.04	96,320.28

7.07	LC 150 x 65 x 20 x 2.0mm	kg	3,334.67	166,900.01
7.18	Plain Round Bar 10mmØ x 6m	pc	16.00	2,225.60
7.19	Plain Round Bar 12mmØ x 6m	pc	16.00	3,848.00
7.30	Turn Buckle 12 mmØ	pc	8.00	624.00
7.34	Anchor Bolt with Nuts and Washer, 12mmØ x 50mm x 300mm	pc	108.00	3,790.80
7.35	Anchor Bolt with Nuts and Washer, 10mmØ x 50mm x 200mm	pc	108.00	1,684.80
7.25	Steel Plate 1.20m x 2.40m x 10mm	pc	2.25	27,202.50
7.27	Steel Plate 1.20m x 2.40m x 6mm	pc	4.50	31,531.50
7.44	G.I. Pipe 1-1/4"Ø Sch.40	pc	14.00	9,791.60
7.45	G.I. Pipe 2"Ø Sch.40	pc	23.00	33,787.00
7.23	Square Bar 19mm□ x 6m	pc	28.00	14,996.80
7.46	Welding Rod	kg	138.00	12,019.80
13.12	Primer, Zinc Chromate	gal	8.00	5,584.80
	<b>Sub-total</b>			<b>491,544.05</b>
8.00	<b>Roofing Works</b>			
8.09	Corrugated G.I. Sheet Ga.26, 36" x 12'	pc	248.00	180,246.40
8.12	Gutter Ga.26, 24" x 8'	pc	34.00	11,220.00
8.13	Flashing Ga.26, 24"x 8'	pc	12.00	3,960.00
8.14	Ridge Roll Ga.26, 24"x 8'	pc	17.00	5,610.00
8.35	Teckscrew 2-1/2"	pc	3,749.76	8,155.73
8.36	Roof Sealant	L	6.00	1,488.00
8.37	Blind Rivets	pc	630.00	945.00
	<b>Sub-total</b>			<b>211,625.13</b>
9.00	<b>Carpentry Works</b>			
	Interior ceiling	sq.m	342.00	
9.13	Rough Lumber, Sun Dried, Tanguile	bd.ft	1,495.00	69,966.00
9.02	Plywood, Ordinary 1/4" x 4' x 8'	pc	116.00	47,560.00
9.22	Finishing Nails	kg	7.00	637.00
9.23	Common Wire Nails	kg	27.00	1,755.00
9.24	Concrete Nails	kg	7.00	637.00
9.42	Wood Preservative, Brown	L	11.00	12,870.00
	Exterior ceiling	sq.m	87.12	
9.13	Rough Lumber, Sun Dried, Tanguile	bd.ft	381.00	17,830.80
9.06	Plywood, Marine 1/4" x 4' x 8'	pc	30.00	13,950.00
9.22	Finishing Nails	kg	2.00	182.00
9.23	Common Wire Nails	kg	7.00	455.00
9.24	Concrete Nails	kg	2.00	182.00
9.42	Wood Preservative, Brown	L	3.00	3,510.00
9.15	Ceiling Vent 1" x 12" x 4' with Screen	pc	16.00	5,096.00
9.16	Fascia Board, Wooden	bd.ft	339.48	15,887.66
	Blackboards	sq.m	51.84	
9.13	Rough Lumber, Sun Dried, Tanguile	bd.ft	330.00	15,444.00
9.43	Lawanit, 1/4" thk	pc	18.00	6,552.00
9.22	Finishing Nails	kg	1.00	91.00
9.23	Common Wire Nails	kg	6.00	390.00
9.24	Concrete Nails	kg	1.00	91.00
	<b>Sub-total</b>			<b>213,086.46</b>
10.00	<b>Electrical Works</b>			
	Roughing-ins			
10.01	Electrical Conduit uPVC, 15mmØ	pc	230.00	14,950.00
10.07	RSC 25mmØ	pc	1.00	227.50
10.36	Entrance Cap 25mm dia.	pc	1.00	80.50

10.16	Junction Box, 4" x 4" G.I.	pc	70.00	1,365.00
10.17	Utility Box, 2" x 4" G.I.	pc	67.00	1,241.18
10.37	Grounding Rod, 2.4m x 16mm dia.	pc	1.00	172.50
	<b>Wires &amp; Fixtures</b>			
10.11	3.5 mm <sup>2</sup> THW Wire, Stranded	m	2,070.00	62,969.40
10.14	14.0 mm <sup>2</sup> THW Wire, Stranded	m	10.00	1,098.50
10.28	Duplex C.O. with Plate	pc	27.00	4,347.00
10.23	Single Switch with Plate	pc	8.00	825.70
10.24	2-Gang Switch with Plate	pc	15.00	2,475.38
10.25	3-Gang Switch with Plate	pc	3.00	680.51
10.20	FL 2 x 40W Industrial Type	set	55.00	53,130.00
10.53	Incandescent Bulb 50W	set	6.00	241.50
10.33	Ceiling Receptacle 3-1/2"Ø	pc	6.00	172.50
10.50	Panel Box, Flush Type, 12 Branches	set	1.00	2,910.36
10.43	Circuit Breaker, 100A 2P	set	1.00	747.50
10.38	Circuit Breaker, 20A 2P	set	11.00	3,959.45
10.58	Electrical Tape	pc	9.00	388.13
10.54	Vibrating Bell 8"	set	3.00	5,175.00
10.55	Fire Alarm Bell, Vibrating Type	set	3.00	6,900.00
10.56	Fire Alarm Station, Manual Single Action	set	3.00	6,037.50
10.57	Fire Alarm Control Panel, One Zone	set	1.00	6,325.00
	<b>Sub-total</b>			<b>176,420.10</b>
11.00	<b>Plumbing Works</b>			
11.62	Water Closet 1.6gpf with Accessories	set	5.00	31,625.00
11.64	Lavatory, Pedestal Type with Accessories	set	2.00	7,245.00
11.60	Faucet, Hose Bibb, Brass 1/2"Ø	pc	9.00	1,656.00
11.61	Water Closet Flange	set	5.00	1,509.38
11.67	Tissue Holder	pc	4.00	1,150.00
11.05	G.I. Pipe 3/4"Ø Sch.40	pc	10.00	5,220.00
11.09	G.I. Coupling, 3/4"Ø	pc	8.00	171.10
11.24	G.I. Coupling Reducer, 1/2" x 3/4"Ø	pc	2.00	116.00
11.06	G.I. Pipe 1/2"Ø Sch.40	pc	6.00	2,262.00
11.21	G.I. Elbow 90o x 1/2"Ø	pc	17.00	271.15
11.08	G.I. Coupling, 1/2"Ø	pc	2.00	31.18
11.15	G.I. Tee, 1/2"Ø	pc	12.00	308.85
11.45	Gate Valve, 3/4"Ø	pc	1.00	464.00
11.44	Gate Valve, 1/2"Ø	pc	2.00	725.00
11.65	S.S.Floor Drain 4' x 4"	pc	14.00	1,569.75
11.68	S.S. Grab Rail 1-1/2"Ø	pc	2.00	6,670.00
11.66	Teflon Tape	roll	18.00	248.40
11.69	Mirror	sq.ft	48.00	5,520.00
	<b>Sub-total</b>			<b>66,762.80</b>
12.00	<b>Sanitary Works</b>			
12.01	Catch Basin	unit	10.00	21,750.00
12.02	Concrete Pipe 150mmØ	pc	88.00	25,520.00
12.32	Septic Vault	unit	1.00	78,367.00
12.09	uPVC Sanitary Pipe 4"Ø	pc	20.00	16,240.00
12.16	uPVC Elbow 1/8 x 4"Ø	pc	2.00	239.25
12.13	uPVC Elbow 90o x 4"Ø	pc	8.00	1,113.60
12.27	uPVC Wye 4" x 4"	pc	8.00	1,914.00
12.21	uPVC Tee 4" x 4"	pc	6.00	1,200.60
12.25	uPVC Wye 4" x 2"	pc	8.00	1,125.20
12.29	Brass Cleanout 6" x 6"	pc	8.00	7,830.00

12.28	Brass Cleanout 4" x 4"	pc	4.00	2,030.00
12.11	uPVC Elbow 90o x 2"Ø	pc	20.00	725.00
12.07	uPVC Sanitary Pipe 2"Ø	pc	20.00	6,090.00
12.22	uPVC Wye 2" x 2"	pc	8.00	440.80
12.17	uPVC Tee 2" x 2"	pc	8.00	417.60
12.30	uPVC P-Trap 2"	pc	4.00	382.80
12.08	uPVC Sanitary Pipe 3"Ø	pc	40.00	24,360.00
12.12	uPVC Elbow 90o x 3"Ø	pc	30.00	2,305.50
12.33	PVC Cement	can	9.00	1,755.00
	<b>Sub-total</b>			<b>193,806.35</b>
13.00	<b>Painting Works</b>			
	Concrete surfaces	sq.m	3,553.76	
13.18	Neutralizer	gal	45.00	7,722.00
13.01	Latex, Flat	gal	143.00	78,821.60
13.14	Masonry Putty	gal	143.00	68,425.50
13.02	Latex, Semi Gloss	gal	143.00	89,975.60
13.20	Acri Color	qrt	36.00	7,722.00
	Wood surfaces	sq.m	863.80	
13.04	Enamel, Flatwall	gal	44.00	27,627.60
13.15	Glazing Putty	gal	44.00	32,472.00
13.05	Enamel, Semi Gloss	gal	44.00	28,428.40
13.16	Paint Thinner	gal	33.00	7,293.00
	Roofing & Accessories	sq.m	468.72	
13.12	Primer, Zinc Chromate	gal	16.00	11,169.60
13.13	Gloss Acrylic Roof Paint	gal	32.00	21,424.00
13.16	Paint Thinner	gal	4.00	884.00
	<b>Sub-total</b>			<b>381,965.30</b>
14.00	<b>Tile Works</b>			
	Wall	sq.m	64.00	
14.04	Glazed Wall Tiles 20cm x 20cm	pc	1,648.00	29,993.60
14.16	Tile Adhesive 25 kg/bag	bag	12.00	3,400.80
14.13	Tile Trim 6mm	pc	16.00	2,033.20
14.15	Tile Grout 5 kg/bag	bag	5.00	975.00
14.15	Flooring	sq.m	39.00	
14.01	Unglazed Floor Tiles 20cm x 20cm	pc	1,005.00	15,678.00
14.16	Tile Adhesive 25 kg/bag	bag	8.00	2,267.20
14.15	Tile Grout 5 kg/bag	bag	3.00	585.00
	<b>Sub-total</b>			<b>54,932.80</b>
I.	<b>DIRECT COST</b>			<b>6,667,700.37</b>
II.	<b>INDIRECT COST 21% of (I)</b>			<b>1,400,217.08</b>
III.	<b>TAX 12% of (I+II)</b>			<b>968,150.09</b>
IV.	<b>TOTAL CONSTRUCTION COST (I+II+III)</b>			<b>9,036,067.55</b>
V.	<b>ENGINEERING OVERHEAD 3.5% of (IV)</b>			<b>316,262.36</b>
VI.	<b>TOTAL PROJECT COST (IV+V)</b>			<b>PHP9,352,329.91</b>
				<b>PHP9,353,000.00</b>

Prepared by:

Noted:

Project Engineer, PFS&amp;D

School Princip: Division PFC

Checked:

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