

CONTRACTOR'S LETTERHEAD

# PROGRAM OF WORKS

## BILL OF QUANTITIES

REPAIR 2020-CAR-BAGUIO CITY-011

School	: LOAKAN ELEMENTARY SCHOOL	Date:	
School I.D	: 136413	Budget Allocation:	PHP 1,814,358.06
Region	: CAR	Engineering and Administrative Overhead:	PHP 0.00
Division	: BAGUIO CITY	Approved Budget for the Contract:	PHP 1,816,886.17
Project Title :		Completion Period:	150 CD

### REPAIR/REHABILITATION OF 2 TOILETS

Location	: LOAKAN PROPER, BAGUIO CITY	Minimum Required Manpower:	
		General Foreman	Welder
		Helper	Mason
			Carpenter
			Painter
		Minimum Required Equipment:	
		Hand Tools	
		Welding Machine	Bar Cutter

ITEM NO.	Item Description	% of Total	Unit	Quantity	Total Cost	Remarks
	<b>I. DIRECT COST</b>					
	GENERAL REQUIREMENTS	1.69%	lot	1.00		
	<b>COMFORT ROOM #1 (3 Seaters)</b>					
5.0000	Masonry Works	0.99%	sq. m	41.00		
6.0000	Doors and Windows	2.89%	lot	1.00		
7.0000	Steel Works	0.37%	lot	1.00		
8.0000	Roofing Works	1.76%	lot	1.00		
9.0000	Carpentry Works	0.24%	lot	1.00		
10.0000	Electrical Works	0.18%	lot	1.00		
11.0000	Plumbing Works	3.99%	lot	1.00		
12.0000	Sanitary Works	0.70%	lot	1.00		
13.0000	Painting Works	0.82%	sq m	91.00		
14.0000	Tile Works	2.98%	sq m	51.00		
	<b>COMFORT ROOM #2 (5 Seaters)</b>					
2.0000	Concreting Works	0.25%	cu.m.	0.13		
5.0000	Masonry Works	1.51%	sq.m.	35.00		
6.0000	Doors and Windows	3.13%	lot	1.00		
7.0000	Steel Works	0.64%	lot	1.00		
8.0000	Roofing Works	2.40%	lot	1.00		
9.0000	Carpentry Works	1.07%	lot	1.00		
10.0000	Electrical Works	0.20%	lot	1.00		
11.0000	Plumbing Works	5.66%	lot	1.00		
12.0000	Sanitary Works	0.72%	lot	1.00		
13.0000	Painting Works	1.10%	sq m	147.00		
14.0000	Tile Works	4.50%	sq m	74.00		
	<b>Electrification</b>					
	Improvement of Covered Court	24.05%	lot	1.00		
	Provision of Perimeter Lightings	15.41%	lot	1.00		
	Panel Board	1.11%	lot	1.00		
	<b>Sub-Total</b>					
	<b>II. INDIRECT COST ___% of (I)</b>					
	Overhead Expenses (8%)	6.13%				
	Contingencies (3%)	2.30%				
	Miscellaneous (1%)	0.77%				
	Contractor's Profit (___%)	7.67%				
	<b>Sub-Total</b>					
	<b>III. TAX 5% of (I+II)</b>					
	<b>Sub-Total</b>	4.76%				
	<b>IV. TOTAL CONSTRUCTION COST (I + II + III)</b>	<b>100.00%</b>				

Prepared:

Contractor/Representative

CONTRACTOR'S LETTERHEAD

## PROGRAM OF WORKS

### DETAILED COST ESTIMATE

PROJECT REPAIR/REHABILITATION OF 2 TOILETS  
 SCHOOL : LOAKAN ELEMENTARY SCHOOL  
 LOCATION : LOAKAN PROPER, BAGUIO CITY  
 OWNER : DEPARTMENT OF EDUCATION

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT COST		TOTAL COST		GRAND TOTAL
				MATERIAL	LABOR	MATERIAL	LABOR	
	<b>GENERAL REQUIREMENTS</b>							
	Mobilization/Temporary Structures, Utilities and Services/Demobilization	lot	1.00					
	Safety and Health	lot	1.00					
	Project Billboard	lot	1.00					
	<b>Sub-total</b>							
	<b>COMFORT ROOM #1 (3 Seaters)</b>							
5.0000	<b>Masonry Works</b>	sq.m.	41.00					
	<b>Masonry Wall - Comfort Room Division</b>	sq.m	13.00					
5.0100	Demolition of Masonry Wall	sq.m	4.80					
5.0200	CHB 6" thk	pc	163.00					
5.0400	10mm x 6m RSB	kg	18.00					
2.0200	Portland Cement	bag	5.00					
2.0500	Washed Sand	cu.m	1.00					
3.1200	G.I. Tie Wire	kg	1.00					
	<b>Plastering</b>	sq.m	28.00					
2.0200	Portland Cement	bag	10.00					
2.0500	Washed Sand	cu.m	1.00					
	<b>Sub-total</b>							
6.0000	<b>Doors and Windows</b>							
6.0100	Removal of Door with Jamb	set	2.00					
6.0200	Removal of Window with Jamb	sq.m	3.00					
	D-1, Panel Door 0.90m x 2.10m on 150mm Wooden Jamb complete with Accessories (lever type door knob)	set	2.00					
6.0500	PVC Door	sq.m	6.00					
6.1200	Aluminum Casement Window	sq.m	3.00					
	<b>Sub-total</b>							
7.0000	<b>Steel Works</b>							
	<b>Window Grilles</b>							
7.2500	Square Bar 12mm□	pc	3.00					
7.1050	Flat Bar 1" x ¼"	kg	21.00					
7.3600	Welding Rod	kg	5.00					
7.1810	Machine Bolts ( 10 mm dia. )	pc	40.00					
13.1100	Primer, Zinc Chromate	gal	3.00					
	<b>Sub-total</b>							
8.0000	<b>Roofing Works</b>							
8.0100	Removal of Roofing Sheets	sq m	17.28					
8.0200	Removal of Ridge Roll	pc	5.00					
8.0500	Removal of Fascia Board	pc	6.00					
8.0600	G.I. Long-Span Roofing, Corrugated, Pre-Painted, 1220mm x 0.4mm	lm	37.00					
8.0700	G.I. Ridge Roll, Preformed, Pre-Painted, 0.610m x 2.440m x 0.6mm	pc	5.00					
9.1420	Fascia Board, Fiber Cement 10" x 12'	pc	6.00					
8.1000	Teckscrew 2-1/2"	pc	444.00					
8.1100	Blind Rivets	pc	70.00					
8.1300	Roof Sealant	L	2.00					
4.0400	CWN, Assorted	kg	2.00					
	<b>Sub-total</b>							
9.0000	<b>Carpentry Works</b>							
	<b>Ceiling</b>	sq.m	17.00					
9.0100	Removal of Ceiling	sq.m	17.00					
9.1700	Rough Lumber, Sun Dried, Tanguile	bd.ft	75.00					
9.0500	Plywood, Marine 1/4" x 4' x 8'	pc	6.00					
9.2100	Finishing Nails	kg	1.00					



ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT COST		TOTAL COST		GRAND TOTAL
				MATERIAL	LABOR	MATERIAL	LABOR	
9.2200	Concrete Nails	kg	3.00					
4.0400	CWN, Assorted	kg	2.00					
	<b>Sub-total</b>							
<b>10.0000</b>	<b>Electrical Works</b>							
	<b>Roughing-ins</b>							
10.0100	Electrical Conduit uPVC, 15mmØ	pc	8.00					
10.1200	Junction Box, 4" x 4" G.I.	pc	4.00					
10.1300	Utility Box, 2" x 4" G.I.	pc	2.00					
	<b>Wires &amp; Fixtures</b>							
10.1600	3.5 mm² THHN Wire, Stranded	m	20.00					
	Single Pole Wall Switch in One Switch Plate (10 AMP, 230V)	set	2.00					
	Ceiling Receptacle 3-1/2"Ø	pc	6.00					
	Incandescent Bulb 50W	set	6.00					
10.5500	Electrical Tape	pc	3.00					
	<b>Sub-total</b>							
<b>11.0000</b>	<b>Plumbing Works</b>							
11.0200	Water Closet 1.6gpf with Accessories	set	3.00					
11.0610	Lavatory, Including Fittings and Accessories	set	2.00					
11.4410	S.S. Floor Drain 4" x 4"	set	6.00					
11.4400	S.S. Grab Rail 1-1/2"Ø	set	3.00					
11.3700	Gate Valve, 1"Ø	pc	1.00					
11.0900	PP-R Pipe 1"Ø x 4.0m	pc	12.00					
11.2000	PP-R Elbow 90° x 1"Ø	pc	10.00					
11.2500	PP-R Tee, 1"Ø	pc	5.00					
11.1400	PP-R Coupling, 1"Ø	pc	6.00					
	PP-R Adaptor Female Thread 1"Ø	pc	8.00					
11.4200	Teflon Tape	roll	2.00					
	<b>Sub-total</b>							
<b>12.0000</b>	<b>Sanitary Works</b>							
12.0500	PVC Sanitary Pipe 4"Ø x 3.0m	pc	5.00					
12.0700	PVC Sanitary Pipe 2"Ø x 3.0m	pc	8.00					
12.0900	PVC Sanitary Elbow 90° x 4"Ø	pc	5.00					
12.1100	PVC Sanitary Elbow 90° x 2"Ø	pc	10.00					
12.2000	PVC Sanitary Wye Reducer 4" x 2"	pc	6.00					
12.2110	PVC Sanitary Tee 4" x 4"	pc	5.00					
12.2700	PVC P-Trap 2"	pc	2.00					
12.2400	Brass Cleanout 4" x 4"	pc	1.00					
12.3000	PVC Cement	can	3.00					
	<b>Sub-total</b>							
<b>13.0000</b>	<b>Painting Works</b>	<b>sq.m.</b>	<b>91.00</b>					
	<b>Concrete surfaces</b>	<b>sq.m</b>	<b>74.00</b>					
13.0100	Neutralizer	gal	4.00					
13.0200	Latex, Flat	gal	8.00					
13.0300	Masonry Putty	gal	3.00					
13.0400	Latex, Semi Gloss	gal	3.00					
13.0500	Acrylic Color	qrt	2.00					
	<b>Wood surfaces</b>	<b>sq.m</b>	<b>17.00</b>					
13.0600	Enamel, Flatwall	gal	1.00					
13.0800	Enamel, Semi Gloss	gal	2.00					
13.0700	Glazing Putty	gal	1.00					
13.0900	Paint Thinner	gal	0.50					
	<b>Sub-total</b>							
<b>14.0000</b>	<b>Tile Works</b>	<b>sq.m.</b>	<b>51.00</b>					
	<b>Wall</b>	<b>sq.m</b>	<b>41.00</b>					
14.0100	Ceramic Glazed Tile	sq.m	41.00					
14.0300	Tile Adhesive 25 kg/bag	bag	6.00					
14.0400	Tile Trim 6mm	pc	4.00					
14.0500	Tile Grout 5 kg/bag	bag	2.00					
	<b>Flooring</b>	<b>sq.m</b>	<b>10.00</b>					
14.0200	Ceramic Unglazed Tile	sq.m	10.00					
14.0300	Tile Adhesive 25 kg/bag	bag	2.00					
14.0500	Tile Grout 5 kg/bag	bag	1.00					
	<b>Sub-total</b>							
<b>COMFORT ROOM #2 (5 Seaters)</b>								
<b>2.0000</b>	<b>Concreting Works</b>	<b>cu.m</b>	<b>0.13</b>					
2.0200	Portland Cement	bag	2.00					
2.0400	Crushed Gravel 1"	cu.m	1.00					
2.0500	Washed Sand	cu.m	1.00					
	<b>Sub-total</b>							
<b>5.0000</b>	<b>Masonry Works</b>	<b>sq.m.</b>	<b>35.00</b>					
	<b>Masonry Wall - Comfort Room Division</b>	<b>sq.m</b>	<b>14.50</b>					

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT COST		TOTAL COST		GRAND TOTAL
				MATERIAL	LABOR	MATERIAL	LABOR	
5.0100	Demolition of Masonry Wall	sq.m	18.60					
5.0200	CHB 6" thk	pc	182.00					
5.0400	10mm x 6m RSB	kg	20.00					
2.0200	Portland Cement	bag	5.00					
2.0500	Washed Sand	cu.m	1.00					
3.1200	G.I. Tie Wire	kg	1.00					
	<b>Handwashing</b>	<b>sq.m</b>	<b>3.00</b>					
5.0100	Demolition of Masonry Wall	sq.m	3.00					
5.0200	CHB 6" thk	pc	38.00					
5.0400	10mm x 6m RSB	kg	4.00					
2.0200	Portland Cement	bag	1.00					
2.0500	Washed Sand	cu.m	1.00					
3.1200	G.I. Tie Wire	kg	1.00					
	<b>Plastering</b>	<b>sq.m</b>	<b>17.50</b>					
2.0200	Portland Cement	bag	6.00					
2.0500	Washed Sand	cu.m	1.00					
	<b>Sub-total</b>							
<b>6.0000</b>	<b>Doors and Windows</b>							
6.0100	Removal of Door with Jamb	set	2.00					
6.0200	Removal of Window with Jamb	sq.m	3.70					
	D-1, Panel Door 0.90m x 2.10m on 150mm Wooden Jamb complete with Accessories (lever type door knob)	set	2.00					
6.0320		set	2.00					
6.0500	PVC Door	sq.m	5.00					
6.1200	Aluminum Casement Window	sq.m	4.70					
	<b>Sub-total</b>							
<b>7.0000</b>	<b>Steel Works</b>							
	<b>Window Grilles</b>							
7.2500	Square Bar 12mm□	pc	4.00					
7.1050	Flat Bar 1" x 1/4"	kg	29.00					
7.3600	Welding Rod	kg	8.00					
7.1810	Machine Bolts ( 10 mm dia. )	pc	88.00					
13.1100	Primer, Zinc Chromate	gal	5.00					
	<b>Sub-total</b>							
<b>8.0000</b>	<b>Roofing Works</b>							
8.0100	Removal of Roofing Sheets	sq m	38.50					
8.0300	Removal of Flashing	pc	5.00					
8.0500	Removal of Fascia Board	pc	7.00					
	G.I. Long-Span Roofing, Corrugated, Pre-Painted, 1220mm x 0.4mm	lm	52.00					
8.0600								
	Flashing, Pre-Painted, Ordinary, 0.915m x 2.440m x 0.4mm thk	pc	5.00					
8.0810								
9.1420	Fascia Board, Fiber Cement 10" x 12'	pc	7.00					
8.1000	Teckscrew 2-1/2"	pc	624.00					
8.1100	Blind Rivets	pc	70.00					
8.1300	Roof Sealant	L	3.00					
4.0400	CWN, Assorted	kg	4.00					
	<b>Sub-total</b>							
<b>9.0000</b>	<b>Carpentry Works</b>							
	<b>Ceiling</b>	<b>sq.m</b>	<b>41.00</b>					
9.0100	Removal of Ceiling	sq.m	41.00					
9.1700	Rough Lumber, Sun Dried, Tanguile	bd.ft	180.00					
9.0500	Plywood, Marine 1/4" x 4' x 8'	pc	15.00					
9.2100	Finishing Nails	kg	1.00					
9.2200	Concrete Nails	kg	1.00					
4.0400	CWN, Assorted	kg	4.00					
	<b>Sub-total</b>							
<b>10.0000</b>	<b>Electrical Works</b>							
	<b>Roughing-ins</b>							
10.0100	Electrical Conduit uPVC, 15mmØ	pc	8.00					
10.1200	Junction Box, 4" x 4" G.I.	pc	3.00					
10.1300	Utility Box, 2" x 4" G.I.	pc	2.00					
	<b>Wires &amp; Fixtures</b>							
10.1600	3.5 mm² THHN Wire, Stranded	m	20.00					
	Single Pole Wall Switch in One Switch Plate (10 AMP, 230V)	set	2.00					
10.2900								
	Ceiling Receptacle 3-1/2"Ø	pc	8.00					
	Incandescent Bulb 50W	set	8.00					
10.5500	Electrical Tape	pc	3.00					
	<b>Sub-total</b>							
<b>11.0000</b>	<b>Plumbing Works</b>							
11.0200	Water Closet 1.6gpf with Accessories	set	5.00					



ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT COST		TOTAL COST		GRAND TOTAL
				MATERIAL	LABOR	MATERIAL	LABOR	
11.0400	Concrete Counter Sink Type, with Lever Type Faucet and Complete Accessories	set	2.00					
11.0610	Lavatory, Including Fittings and Accessories	set	2.00					
11.4410	S.S. Floor Drain 4" x 4"	set	6.00					
11.4400	S.S. Grab Rail 1-1/2"Ø	set	3.00					
11.3700	Gate Valve, 1"Ø	pc	1.00					
11.0900	PP-R Pipe 1"Ø x 4.0m	pc	6.00					
11.2000	PP-R Elbow 90° x 1"Ø	pc	13.00					
11.2500	PP-R Tee, 1"Ø	pc	8.00					
11.1400	PP-R Coupling, 1"Ø	pc	6.00					
	PP-R Adaptor Female Thread 1"Ø	pc	8.00					
11.4200	Teflon Tape	roll	3.00					
11.4500	Mirror	sq.ft	36.00					
	<b>Sub-total</b>							
<b>12.0000</b>	<b>Sanitary Works</b>							
12.0500	PVC Sanitary Pipe 4"Ø x 3.0m	pc	8.00					
12.0700	PVC Sanitary Pipe 2"Ø x 3.0m	pc	3.00					
12.0900	PVC Sanitary Elbow 90° x 4"Ø	pc	6.00					
12.1100	PVC Sanitary Elbow 90° x 2"Ø	pc	4.00					
12.2000	PVC Sanitary Wye Reducer 4" x 2"	pc	1.00					
12.2110	PVC Sanitary Tee 4" x 4"	pc	6.00					
12.2700	PVC P-Trap 2"	pc	2.00					
12.2400	Brass Cleanout 4" x 4"	pc	1.00					
12.3000	PVC Cement	can	3.00					
	<b>Sub-total</b>							
<b>13.0000</b>	<b>Painting Works</b>	<b>sq.m.</b>	<b>147.00</b>					
	<b>Concrete surfaces</b>	<b>sq.m</b>	<b>104.00</b>					
13.0100	Neutralizer	gal	6.00					
13.0200	Latex, Flat	gal	11.00					
13.0300	Masonry Putty	gal	5.00					
13.0400	Latex, Semi Gloss	gal	4.00					
13.0500	Acri Color	qrt	3.00					
	<b>Wood surfaces</b>	<b>sq.m</b>	<b>43.00</b>					
13.0600	Enamel, Flatwall	gal	1.00					
13.0800	Enamel, Semi Gloss	gal	2.00					
13.0700	Glazing Putty	gal	1.00					
13.0900	Paint Thinner	gal	0.50					
	<b>Sub-total</b>							
<b>14.0000</b>	<b>Tile Works</b>	<b>sq.m.</b>	<b>74.00</b>					
	<b>Wall</b>	<b>sq.m</b>	<b>53.00</b>					
14.0100	Ceramic Glazed Tile	sq.m	53.00					
14.0300	Tile Adhesive 25 kg/bag	bag	5.00					
14.0400	Tile Trim 6mm	pc	14.00					
14.0500	Tile Grout 5 kg/bag	bag	3.00					
	<b>Flooring</b>	<b>sq.m</b>	<b>21.00</b>					
14.0200	Ceramic Unglazed Tile	sq.m	21.00					
14.0300	Tile Adhesive 25 kg/bag	bag	3.00					
14.0500	Tile Grout 5 kg/bag	bag	2.00					
	<b>Handwashing</b>							
14.0100	Ceramic Glazed Tile	sq.m	1.92					
14.0300	Tile Adhesive 25 kg/bag	bag	2.00					
14.0400	Tile Trim 6mm	pc	1.00					
14.0500	Tile Grout 5 kg/bag	bag	1.00					
	<b>Sub-total</b>							
<b>Electrification</b>								
	<b>Improvement of Covered Court</b>	<b>lot</b>	<b>1.00</b>					
	200 W HIGH BAY LED LIGHT	set	10.00					
	Prefabricated Anchoring for HIGH BAY LED	Assembly	10.00					
10.0210	Electrical Conduit uPVC, 25mmØ	pc	20.00					
10.1700	5.5 mm² THHN Wire, Stranded	m	210.00					
10.1800	14.0 mm² THHN Wire, Stranded	m	55.00					
	Scaffolding Rentals	set	350.00					
	<b>Sub-total</b>							
	<b>Provision of Perimeter Lightings</b>	<b>lot</b>	<b>1.00</b>					
	Integrated Solar Streetlight Weatherproof 150 Watts Light Output, 250 Watts Solar Panel Output with motion sensor and prefabricated mounting bracket	Assembly	5.00					
	30 Ft. Electrical Steel Pole (3.0 mm)	Assembly	5.00					
	<b>Sub-total</b>							

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT COST		TOTAL COST		GRAND TOTAL
				MATERIAL	LABOR	MATERIAL	LABOR	
	<b>Panel Board</b>	<b>lot</b>	<b>1.00</b>					
	6 Branches Panel Board with 40 AT Centermain Circuit Breaker and 15 AT Circuit Breaker, NEMA 3R Enclosure	set	1.00					
	Pull Box	pc	6.00					
10.1100	Entrance Cap 50mm dia.	pc	2.00					
10.0700	RSC 50mmØ	pc	2.00					
	2 " RSC Coupling	pc	2.00					
	<b>Sub-total</b>							
I.	<b>DIRECT COST</b>							
II.	<b>INDIRECT COST</b> ___ % of (I)							
III.	<b>TAX 5% of (I + II)</b>							
IV.	<b>TOTAL CONSTRUCTION COST (I + II + III)</b>							

Prepared by:

\_\_\_\_\_  
Contractor/Representative