

## PROGRAM OF WORKS BILL OF QUANTITIES

### REPAIR 2021 - CARAGA - Surigao City - 001

<b>School</b> : OROK ELEMENTARY SCHOOL	<b>Date:</b>
<b>School I.D</b> : 132256	<b>Budget Allocation:</b>
<b>Region</b> : CARAGA	<b>Engineering and Administrative Overhead:</b>
<b>Division</b> : SURIGAO CITY	<b>Approved Budget for the Contract:</b>
<b>Project Title :</b>	<b>Completion Period:</b> 120 calendar days
<b>: PROPOSED REPAIR AND REHABILITATION OF TWO (2) - CLASSROOM SCHOOL BUILDING (DECS) - (7.00m x 8.00m)</b>	<b>Minimum Required Manpower:</b>
	General Foreman                      Welder                      Carpenter
	Helper                                      Mason                      Painter
<b>Location</b> : Brgy. Orok, Surigao City	<b>Minimum Required Equipment:</b>
	Hand Tools                                      Welding Machine
	One-Bagger Mixer                              Bar Cutter

ITEM NO.	Item Description	% of Total	Unit	Quantity	Total Cost	Remarks
	<b>I. DIRECT COST</b>					
	GENERAL REQUIREMENTS		lot	1.00		
	<b>BLDG. 3 - DECS 7m X 8m</b>					
8.00	Roofing Works		lm	105.00		
7.00	Steel Works		lot	1.00		
9.00	Carpentry Works		sq m	82.66		
10.00	Electrical Works		lot	1.00		
6.00	Doors and Windows		lot	1.00		
13.00	Painting Works		sq m	241.49		
11.00	Plumbing Works		lot	1.00		
14.00	Tile Works		sq m	64.22		
	Ramp on Fill (with Ramp Railing)		lot	1.00		
	<b>BLDG. 4 - DECS 7m X 8m</b>					
8.00	Roofing Works		lm	105.00		
7.00	Steel Works		lot	1.00		
9.00	Carpentry Works		sq m	82.66		
10.00	Electrical Works		lot	1.00		
6.00	Doors and Windows		lot	1.00		
13.00	Painting Works		sq m	241.49		
14.00	Tile Works		sq m	56.00		
	Ramp on Fill (with Ramp Railing)		lot	1.00		
	<b>Sub-Total</b>					
	<b>II. INDIRECT COST 22% of (I)</b>					
	Overhead Expenses (8%)					
	Contingencies (3%)					
	Miscellaneous (1%)					
	Contractor's Profit (10%)					
	<b>Sub-Total</b>					
	<b>III. TAX 5% of (I+II)</b>					
	<b>Sub-Total</b>					
	<b>IV. TOTAL CONSTRUCTION COST (I + II + III)</b>					



## PROGRAM OF WORKS

### DETAILED COST ESTIMATE

PROJECT : PROPOSED REPAIR AND REHABILITATION OF TWO (2) - CLASSROOM SCHOOL BUILDING (DECS) - (7.00m x 8.00m)  
SCHOOL : OROK ELEMENTARY SCHOOL  
LOCATION : Brgy. Orok, Surigao 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					
	Project Billboard	lot	1.00					
	Safety and Health	lot	1.00					
	Hauling cost	lot	1.00					
	<b>Sub-total</b>							
<b>BLDG. 3 - DECS 7m X 8m</b>								
8.0000	<b>Roofing Works</b>							
8.0100	Removal of Roofing Sheets	sq m	97.44					
8.0200	Removal of Ridge Roll	pc	4.00					
8.0300	Removal of Flashing	pc	9.00					
8.0500	Removal of Fascia Board	pc	22.00					
	G.I. Long-Span Roofing, Corrugated, Pre-Painted, 1220mm x 0.5mm BMT	lm	105.00					
	G.I. Flashing, Preformed, Pre-Painted, 0.610m x 2.440m x 0.5mm BMT	pc	9.00					
	G.I. Ridge Roll, Preformed, Pre-Painted, 0.610m x 2.440m x 0.5mm BMT	pc	4.00					
9.1430	Fascia Board, Fiber Cement 12" x 8'	pc	13.00					
7.1040	L 20 x 20 x 2mm	kg	53.90					
7.1020	L 38 x 38 x 4.5mm	kg	36.30					
	3" Flat head Countersunk screw	pc	204.60					
8.0900	J-Bolt (6mm dia.)	pc	583.00					
	Teckscrew 2-3/4"	pc	1,137.40					
8.1300	Roof Sealant	L	2.00					
	<b>Sub-total</b>							
7.0000	<b>Steel works</b>							
	<i>Trusses and Members</i>							
9.0070	Removal of Wooden Truss/ Beams	bd.ft	671.40					
9.0080	Removal of Purlins	bd.ft	397.20					
7.0900	L 50 x 50 x 6mm	kg	1,261.80					
7.0200	2" x 4" x 1.5mm C - purlins	kg	681.00					
7.1010	L 50 x 50 x 2mm	kg	13.20					
7.1810	Machine Bolts ( 10 mm dia. )	pc	156.00					
7.2200	12mmØ Sag Rods with Standard Nuts and Washers	pc	11.78					
7.1900	Plain Round Bar 16mmØ x 6m	pc	10.80					
7.2000	Turn Buckle 16 mmØ	pc	8.00					
	Anchor Bolt with Nuts and Washer, 12mmØ x 50mm x 300mm	pc	20.00					
	Anchor Bolt with Nuts and Washer, 10mmØ x 50mm x 150mm	pc	4.00					
7.1100	Steel Plate 1.20m x 2.40m x 6mm thk	pc	1.25					
7.1200	Steel Plate 1.20m x 2.40m x 10mm thk	pc	0.50					
7.3600	Welding Rod	kg	45.64					
13.1100	Primer, Zinc Chromate	gal	3.00					
	<b>Sub-total</b>							
9.0000	<b>Carpentry works</b>							
	<i>Interior Ceiling</i>							
9.0100	Removal of Ceiling	sq.m	57.32					
9.0500	Plywood, Marine 1/4" x 4' x 8'	pc	20.00					

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT COST		TOTAL COST		GRAND TOTAL
				MATERIAL	LABOR	MATERIAL	LABOR	
	50 mm x 50 mm Ceiling Joist	bd.ft	125.12					
	50 mm x 75 mm Ceiling Joist	bd.ft	189.48					
9.1700	Rough Lumber, Sun Dried, Tanguile	bd.ft	314.59					
9.2100	Finishing Nails	kg	2.00					
4.0400	CWN, Assorted	kg	6.00					
9.2200	Concrete Nails	kg	1.50					
9.1900	Wood Preservative, Brown	L	2.00					
	Exterior Ceiling	sq m	25.34					
9.0100	Removal of Ceiling	sq.m	25.34					
9.0500	Plywood, Marine 1/4" x 4' x 8'	pc	10.00					
	50 mm x 50 mm Ceiling Joist	bd.ft	81.81					
	50 mm x 75 mm Ceiling Joist	bd.ft	74.56					
9.1700	Rough Lumber, Sun Dried, Tanguile	bd.ft	156.37					
9.2100	Finishing Nails	kg	0.50					
4.0400	CWN, Assorted	kg	3.00					
9.2200	Concrete Nails	kg	1.00					
9.1900	Wood Preservative, Brown	L	1.00					
9.1400	25mm x 25mm x 300mm Wood slats @25mm clear spacing ceiling ventilation (provide stainless steel wire mesh inside)	pc	2.00					
	<i>Blackboards</i>							
9.1800	S4S Lumber, Kiln Dried, Tanguile	bd.ft	37.00					
9.2000	Lawanit, 1/4" thk	pc	2.00					
9.2100	Finishing Nails	kg	0.50					
4.0400	CWN, Assorted	kg	1.00					
9.2200	Concrete Nails	kg	0.50					
	<b>Sub-total</b>							
10.0000	<b>Electrical Works</b>							
	<i>Roughing-ins</i>							
10.0100	Electrical Conduit uPVC, 15mmØ	pc	16.00					
10.0490	RSC 20mmØ	pc	1.00					
10.0800	Entrance Cap 20mm dia.	pc	1.00					
10.1200	Junction Box, 4" x 4" G.I.	pc	4.00					
10.1300	Utility Box, 2" x 4" G.I.	pc	4.00					
	<i>Wires &amp; Fixtures</i>							
10.1600	3.5 mm² THHN Wire, Stranded	m	180.00					
10.2700	Duplex Convenience Outlet, Grounding Type, 20A, 250V	set	4.00					
10.3200	3 Single Pole Wall Switches in One Switch Plate (10 AMP, 230V)	set	1.00					
10.3610	FL 1 x 40W Industrial Type	set	6.00					
10.3310	Safety Switch 30A 2P	set	1.00					
10.5500	Electrical Tape	pc	1.00					
10.5400	Wall Fan, 60W, 230V, 60Hz	set	2.00					
	<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	34.00					
6.0610	Door Jamb 45mm x 150mm	set	3.00					
6.0330	D-2, (0.90m x 2.10m) Panel Door	set	2.00					
6.0430	D-3, (0.70m x 2.10m) Flush Door	set	1.00					
6.2000	Hinges, Standard 3-1/2" x 3-1/2"	pa	8.00					
6.1900	Entrance, Lever Lockset	set	2.00					
6.0700	Window Jamb	bd.ft	406.00					
6.1009	Jalousie Window with Clear Glass Blades on Jalousie Type Silver Colored Frame with Grilles	sq.ft	163.00					
6.1400	Steel Encased Clear Glass Window with Grilles	sq.ft	202.00					
	<b>Sub-total</b>							
13.0000	<b>Painting Works</b>							
	Concrete surfaces	sq.m	126.50					
13.0100	Neutralizer	gal	6.00					
13.0200	Latex, Flat	gal	12.00					
13.0300	Masonry Putty	gal	5.00					
13.0400	Latex, Semi Gloss	gal	5.00					
13.0500	Acri Color	qrt	3.00					
	Interior and exterior Ceiling	sq.m	86.94					
13.0600	Enamel, Flatwall	gal	4.00					
13.0800	Enamel, Semi Gloss	gal	9.00					
13.0700	Glazing Putty	gal	4.00					
13.0900	Paint Thinner	gal	5.00					

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT COST		TOTAL COST		GRAND TOTAL
				MATERIAL	LABOR	MATERIAL	LABOR	
	Doors and Windows Jambes	sq.m	28.05					
13.0600	Enamel, Flatwall	gal	2.00					
13.0700	Glazing Putty	gal	1.00					
13.0800	Enamel, Semi Gloss	gal	3.00					
13.0900	Paint Thinner	gal	2.00					
	<b>Sub-total</b>							
11.0000	<b>Plumbing Works</b>							
11.051	Faucet	set	1.00					
11.020	Water Closet 1.6gpf with Accessories	set	1.00					
11.010	Water Closet Flange	set	1.00					
11.110	PP-R Pipe 1/2"Ø x 4.0m	pc	10.00					
11.220	PP-R Elbow 90° x 1/2"Ø	pc	4.00					
11.270	PP-R Tee, 1/2"Ø	pc	2.00					
11.160	PP-R Coupling, 1/2"Ø	pc	10.00					
11.380	Gate Valve, 3/4"Ø	pc	1.00					
11.420	Teflon Tape	roll	4.00					
12.050	PVC Sanitary Pipe 4"Ø x 3.0m	pc	2.00					
12.070	PVC Sanitary Pipe 2"Ø x 3.0m	pc	2.00					
12.160	PVC Sanitary Wye 4" x 4"	pc	1.00					
12.200	PVC Sanitary Wye Reducer 4" x 2"	pc	1.00					
12.130	PVC Sanitary Elbow 1/8 x 4"Ø	pc	1.00					
12.141	PVC Sanitary Elbow 1/8 x 2"Ø	pc	2.00					
12.110	PVC Sanitary Elbow 90° x 2"Ø	pc	2.00					
12.221	PVC Sanitary Tee Reducer 4" x 2"	pc	1.00					
12.220	PVC Sanitary Tee 2" x 2"	pc	1.00					
12.270	PVC P-Trap 2"	pc	1.00					
12.300	PVC Cement	can	2.00					
11.441	S.S. Floor Drain 4" x 4"	set	1.00					
11.450	Mirror	sq.ft	4.00					
12.011	Three Chamber Septic Vault	unit	1.00					
	<b>Sub-total</b>							
14.0000	<b>Tile Works</b>							
14.050	Flooring 1 CL	sq.m	56.00					
14.022	Unglazed Floor Tiles 60cm x 60cm	pc	168.00					
14.030	Tile Adhesive 25 kg/bag	bag	27.00					
14.050	Tile Grout 5 kg/bag	bag	10.00					
	Wall (CR)	sq.m	6.90					
14.011	Glazed Wall Tiles 20cm x 20cm	pc	176.00					
14.030	Tile Adhesive 25 kg/bag	bag	3.00					
14.040	Tile Trim 6mm	pc	2.00					
14.050	Tile Grout 5 kg/bag	bag	1.00					
14.050	Flooring (CR)	sq.m	1.32					
14.021	Unglazed Floor Tiles 20cm x 20cm	pc	34.00					
14.030	Tile Adhesive 25 kg/bag	bag	1.00					
14.050	Tile Grout 5 kg/bag	bag	1.00					
	<b>Sub-total</b>							
	<b>Ramp on Fill (with Ramp Railing)</b>	cu.m	0.54					
2.0200	Portland Cement	bag	5.00					
2.0400	Crushed Gravel 1"	cu.m	0.75					
2.0500	Washed Sand	cu.m	0.50					
5.0400	10mm x 6m RSB	kg	23.28					
3.1200	G.I. Tie Wire	kg	1.00					
7.2610	G.I. Pipe 1-1/2"Ø Sch. 40	pc	6.00					
7.3600	Welding Rod	kg	3.00					
	<b>Sub-total</b>							
	<b>BLDG. 4 - DECS 7m X 8m</b>							
8.0000	<b>Roofing Works</b>							
8.0100	Removal of Roofing Sheets	sq m	97.44					
8.0200	Removal of Ridge Roll	pc	4.00					
8.0300	Removal of Flashing	pc	9.00					
8.0500	Removal of Fascia Board	pc	22.00					
	G.I. Long-Span Roofing, Corrugated, Pre-Painted, 1220mm x 0.5mm BMT	lm	105.00					
	G.I. Flashing, Preformed, Pre-Painted, 0.610m x 2.440m x 0.5mm BMT	pc	9.00					
	G.I. Ridge Roll, Preformed, Pre-Painted, 0.610m x 2.440m x 0.5mm BMT	pc	4.00					
9.1430	Fascia Board, Fiber Cement 12" x 8'	pc	13.00					
7.1040	L 20 x 20 x 2mm	kg	53.90					
7.1020	L 38 x 38 x 4.5mm	kg	36.30					
	3" Flat head Countersunk screw	pc	204.60					

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT COST		TOTAL COST		GRAND TOTAL
				MATERIAL	LABOR	MATERIAL	LABOR	
8.0900	J-Bolt (6mm dia.)	pc	583.00					
	Teckscrew 2-3/4"	pc	1,137.40					
8.1300	Roof Sealant	L	2.00					
	<b>Sub-total</b>							
7.0000	<b>Steel works</b>							
	<i>Trusses and Members</i>							
9.0070	Removal of Wooden Truss/ Beams	bd.ft	671.40					
9.0080	Removal of Purlins	bd.ft	397.20					
7.0900	L 50 x 50 x 6mm	kg	1,261.80					
7.0200	2" x 4" x 1.5mm C - purlins	kg	681.00					
7.1010	L 50 x 50 x 2mm	kg	13.20					
7.1810	Machine Bolts ( 10 mm dia. )	pc	156.00					
7.2200	12mmØ Sag Rods with Standard Nuts and Washers	pc	11.78					
7.1900	Plain Round Bar 16mmØ x 6m	pc	10.80					
7.2000	Turn Buckle 16 mmØ	pc	8.00					
	Anchor Bolt with Nuts and Washer, 12mmØ x 50mm x 300mm	pc	20.00					
	Anchor Bolt with Nuts and Washer, 10mmØ x 50mm x 150mm	pc	4.00					
7.1100	Steel Plate 1.20m x 2.40m x 6mm thk	pc	1.25					
7.1200	Steel Plate 1.20m x 2.40m x 10mm thk	pc	0.50					
7.3600	Welding Rod	kg	45.64					
13.1100	Primer, Zinc Chromate	gal	3.00					
	<b>Sub-total</b>							
9.0000	<b>Carpentry works</b>							
	<i>Interior Ceiling</i>							
	Removal of Ceiling	sq.m	57.32					
9.0100	Removal of Ceiling	sq.m	57.32					
9.0500	Plywood, Marine 1/4" x 4' x 8'	pc	20.00					
	50 mm x 50 mm Ceiling Joist	bd.ft	125.12					
	50 mm x 75 mm Ceiling Joist	bd.ft	189.48					
9.1700	Rough Lumber, Sun Dried, Tanguile	bd.ft	314.59					
9.2100	Finishing Nails	kg	2.00					
4.0400	CWN, Assorted	kg	6.00					
9.2200	Concrete Nails	kg	1.50					
9.1900	Wood Preservative, Brown	L	2.00					
	<i>Exterior Ceiling</i>							
	Removal of Ceiling	sq.m	25.34					
9.0100	Removal of Ceiling	sq.m	25.34					
9.0500	Plywood, Marine 1/4" x 4' x 8'	pc	10.00					
	50 mm x 50 mm Ceiling Joist	bd.ft	81.81					
	50 mm x 75 mm Ceiling Joist	bd.ft	74.56					
9.1700	Rough Lumber, Sun Dried, Tanguile	bd.ft	156.37					
9.2100	Finishing Nails	kg	0.50					
4.0400	CWN, Assorted	kg	3.00					
9.2200	Concrete Nails	kg	1.00					
9.1900	Wood Preservative, Brown	L	1.00					
9.1400	25mm x 25mm x 300mm Wood slats @25mm clear spacing ceiling ventilation (provide stainless steel wire mesh inside)	pc	2.00					
	<i>Blackboards</i>							
9.1800	S4S Lumber, Kiln Dried, Tanguile	bd.ft	37.00					
9.2000	Lawanit, 1/4" thk	pc	2.00					
9.2100	Finishing Nails	kg	0.50					
4.0400	CWN, Assorted	kg	1.00					
9.2200	Concrete Nails	kg	0.50					
	<b>Sub-total</b>							
10.0000	<b>Electrical Works</b>							
	<i>Roughing-ins</i>							
10.0100	Electrical Conduit uPVC, 15mmØ	pc	16.00					
10.0490	RSC 20mmØ	pc	1.00					
10.0800	Entrance Cap 20mm dia.	pc	1.00					
10.1200	Junction Box, 4" x 4" G.I.	pc	4.00					
10.1300	Utility Box, 2" x 4" G.I.	pc	4.00					
	<i>Wires &amp; Fixtures</i>							
10.1600	3.5 mm <sup>2</sup> THHN Wire, Stranded	m	180.00					
10.2700	Duplex Convenience Outlet, Grounding Type, 20A, 250V	set	4.00					
10.3200	3 Single Pole Wall Switches in One Switch Plate (10 AMP, 230V)	set	1.00					
10.3610	FL 1 x 40W Industrial Type	set	6.00					
10.3310	Safety Switch 30A 2P	set	1.00					
10.5400	Wall Fan, 60W, 230V, 60Hz	set	2.00					
10.5500	Electrical Tape	pc	1.00					
	<b>Sub-total</b>							

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT COST		TOTAL COST		GRAND TOTAL
				MATERIAL	LABOR	MATERIAL	LABOR	
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	34.00					
6.0610	Door Jamb 45mm x 150mm	set	2.00					
6.0330	D-2, (0.90m x 2.10m) Panel Door	set	2.00					
6.2000	Hinges, Standard 3-1/2" x 3-1/2"	pa	8.00					
6.1900	Entrance, Lever Lockset	set	2.00					
6.0700	Window Jamb	bd.ft	406.00					
6.1009	Jalousie Window with Clear Glass Blades on JalouPlus Type Silver Colored Frame with Grilles	sq.ft	163.00					
6.1400	Steel Encased Clear Glass Window with Grilles	sq.ft	202.00					
	<b>Sub-total</b>							
13.0000	<b>Painting Works</b>							
	Concrete surfaces	sq.m	126.50					
13.0100	Neutralizer	gal	6.00					
13.0200	Latex, Flat	gal	12.00					
13.0300	Masonry Putty	gal	5.00					
13.0400	Latex, Semi Gloss	gal	5.00					
13.0500	Acri Color	qrt	3.00					
	Interior and exterior Ceiling	sq.m	86.94					
13.0600	Enamel, Flatwall	gal	4.00					
13.0800	Enamel, Semi Gloss	gal	9.00					
13.0700	Glazing Putty	gal	4.00					
13.0900	Paint Thinner	gal	5.00					
	Doors and Windows Jambs	sq.m	28.05					
13.0600	Enamel, Flatwall	gal	2.00					
13.0700	Glazing Putty	gal	1.00					
13.0800	Enamel, Semi Gloss	gal	3.00					
13.0900	Paint Thinner	gal	2.00					
	<b>Sub-total</b>							
14.0000	<b>Tile Works</b>							
14.050	Flooring 1 CL	sq.m	56.00					
14.022	Unglazed Floor Tiles 60cm x 60cm	pc	168.00					
14.030	Tile Adhesive 25 kg/bag	bag	27.00					
14.050	Tile Grout 5 kg/bag	bag	10.00					
	<b>Sub-total</b>							
	<b>Ramp on Fill (with Ramp Railing)</b>	cu.m	0.54					
2.0200	Portland Cement	bag	5.00					
2.0400	Crushed Gravel 1"	cu.m	0.75					
2.0500	Washed Sand	cu.m	0.50					
5.0400	10mm x 6m RSB	kg	23.28					
3.1200	G.I. Tie Wire	kg	1.00					
7.2610	G.I. Pipe 1-1/2"Ø Sch. 40	pc	6.00					
7.3600	Welding Rod	kg	3.00					
	<b>Sub-total</b>							
I.	<b>DIRECT COST</b>							
II.	<b>INDIRECT COST 22% of (I - Gen. Req.)</b>							
III.	<b>TAX 5% of (I + II)</b>							
IV.	<b>TOTAL CONSTRUCTION COST (I + II + III)</b>							