

## PROGRAM OF WORKS

### BILL OF QUANTITIES

## PROJECT:

Repair, Rehabilitation and Retrofitting of various DepEd Central Office Buildings (Rizal & Alonzo- Lot 1)

OWNER: DEPARTMENT OF EDUCATION

LOCATION: DepED Complex, Meralco Avenue, Pasig City

## Date:

Budget Allocation: 79,008,253.58

Engineering and Administrative Overhead:

Approved Budget for Contract: 79,008,253.58

Completion Period:

Minimum Required Manpower:

Project Engineer Electrician Painter Helper

General Foreman Carpenter Laborer

Mason Plumber Welder

Minimum Required Equipment:

Power Tools

ITEM NO.	ITEM DESCRIPTION	% of Total	UNIT	Quantity	Direct Cost		Adjusted Unit Cost	Adjusted Total Cost
					Estimated Direct Cost	Unit Direct Cost		
(1)	(2)	(3)	(4)	(5)	(6)	(7) (6)/(5)	(8) (9)/(5)	(9)
<b>A.</b>	<b>General Requirements</b>							
a.1	Mobilization / Demobilization /Temporary Facilities		lot	1.00				
a.2	Project Billboard		each	1.00				
a.3	Construction Safety and Health		lot	1.00				
<b>Part I - Repair and Rehabilitation</b>								
<b>B.</b>	<b>Removal Works</b>							
b.1	Removal of Existing Cement Tile Roofing (Tegula) & Roofing Sheets		sq.m	4,749.00				
b.2	Removal of Existing Wooden Batten Support		sq.m	3,392.84				
b.3	Removal of Existing 1/2" thick Plyboard Backing		sq.m	3,392.84				
b.4	Removal of Damaged Trusses and Members		kgs	10,574.00				
b.5	Removal of Existing Ceiling and Frames		sq.m	5,130.96				
b.6	Removal of Existing Drainage (e.g. Downspouts and existing catch basin)		lot	1.00				
b.7	Removal of Existing Gutter, Ridge Roll and Flashing		pc	327.00				
b.8	Removal of Existing Tiles and Vinyl		sq.m	4,384.25				
b.9	Removal of existing railing at footbridge		lot	1.00				
b.10	Removal of Existing Concrete Walls and Existing Partition Walls		sq.m	1,952.10				
b.11	Removal of Existing sanitary fixtures, sewer line and waterline (Alonzo common CRs, Lounge, ICO, OD-Admin Service, Field Operations, HROD and Legislative Affairs)		lot	1.00				
<b>C.</b>	<b>Hauling and Clearing Works</b>							
c.1	Clearing and Hauling of Debris (Non-Usable Materials)		lot	1.00				
c.2	Hauling of salvaged material to kasipagan area - Usable Materials (Beside DepEd Complex)		lot	1.00				
<b>D.</b>	<b>Steel Works</b>							
d.1	Railing at Footbridge		lot	1.00				
d.2	Truss at VIP Lounge		lot	1.00				
<b>E.</b>	<b>Roofing Works</b>							
e.1	Long-span Metal Roofing and Shingles		sq.m	4,777.62				
<b>F.</b>	<b>Earthworks</b>							
f.1	Earthworks (Structural Excavation, Backfilling and Compaction)		cu.m	5.27				
<b>G.</b>	<b>Concreting Works</b>							
g.1	Concreting Works		cu.m	7.83				
<b>H.</b>	<b>Rebar Works</b>							
h.1	Rebar Works		kgs	870.33				
<b>I.</b>	<b>Form Works</b>							
i.1	Form Works		sq.m	29.70				
<b>J.</b>	<b>Masonry Works</b>							

j.1	Masonry Works		sq.m	559.75			
<b>K.</b>	<b>Doors and Windows</b>						
k.1	Doors and Windows at Lounge and Doors at Offices		lot	1.00			
k.2	Refurbishment/Repair of damaged Exterior Windows and Entrance/Exit Glass Doors of Alonzo and Rizal Bldg		lot	1.00			
<b>L.</b>	<b>Miscellaneous</b>						
l.1	Miscellaneous at Lounge		lot	1.00			
<b>M.</b>	<b>Furniture</b>						
m.1	Furniture at Lounge		lot	1.00			
<b>N.</b>	<b>Interior Finishes</b>						
n.1	Interior Finishes		sq.m	119.52			
<b>O.</b>	<b>Carpentry Works</b>						
o.1	Installation of New Ceiling		sq.m	5,130.96			
o.2	Installation of Dry Wall Partition Walls		sq.m	2,169.12			
<b>P.</b>	<b>Electrical Works</b>						
p.1	Conduit, Boxes and Fitting		lot	1.00			
p.2	Wires and Wiring Devices		lot	1.00			
p.3	Lighting Fixture / Fixture		lot	1.00			
<b>Q.</b>	<b>Plumbing and Sanitary Works</b>						
q.1	Drainage Line Works		lot	1.00			
q.2	Water Line Works		lot	1.00			
q.3	Sewer Line Works		lot	1.00			
q.4	Fixtures, Partitions and Accessories		lot	1.00			
<b>R.</b>	<b>Painting Works</b>						
r.1	Painting		sq.m	14,120.50			
r.2	Scaffolding		set	738.00			
<b>S.</b>	<b>Tile Works</b>						
s.1	Installation of Tiles and Vinyl		sq.m	4,384.25			
s.2	Restoration of Existing Clay/Brick Tile and Pebble Washout Floor finish at RiLonzo Lobby		sq.m	570.00			
<b>Part II - Retrofitting</b>							
<b>T.</b>	<b>Dismantling, Restoration / Re-installation Works</b>						
t.1	Dismantling, Restoration / Re-installation Works		sq.m	1,157.01			
<b>U.</b>	<b>Earthworks</b>						
u.1	Structural Excavation		cu.m	1,016.01			
u.2	Backfilling and Compaction		cu.m	867.82			
u.3	Gravel Bedding		cu.m	19.44			
<b>V.</b>	<b>Surface Preparation</b>						
v.1	Surface Preparation		sq.m	2,349.73			
<b>W.</b>	<b>Concreting Works and Plastering</b>						
w.1	Concreting Works		cu.m	337.73			
w.2	Plastering		sq.m	2,349.73			
<b>X.</b>	<b>Rebar Works</b>						
x.1	Rebar Works		kgs	53,374.23			
x.2	Application of structural epoxy anchoring adhesive		sq.m	187.36			
<b>Y.</b>	<b>Form Works</b>						
y.1	Form Works		sq.m	913.50			
<b>Z.</b>	<b>Steel Works</b>						
z.1	Structural Steel (For Columns and Beams including application of anti-corosion and structural concrete adhesive)		kgs	63,012.94			
z.2	Structural Steel (Additional Steel Plates and Bracing on Steel Trusses and Additional Support on Column-Truss Joint Connection)		kgs	10,574.00			
<b>TOTAL CONSTRUCTION COST</b>			<b>%</b>			<b>Php</b>	

Signed by:

_____ Name and Signature of Bidder's Authorized Representative
_____ Position
_____ Name of Bidder
_____ Date

**PROGRAM OF WORKS**  
**BILL OF QUANTITIES**

PROJECT:

**Repair, Rehabilitation and Retrofitting of various DepEd Central Office Buildings (Bonifacio Bldg - Lot 2)**

OWNER: **DEPARTMENT OF EDUCATION**

LOCATION: **DepED Complex, Meralco Avenue, Pasig City**

Date:

**Budget Allocation: 83,991,746.42**

**Engineering and Administrative Overhead:**

**Approved Budget for Contract: 83,991,746.42**

**Completion Period:**

**Minimum Required Manpower:**

Project Engineer      Electrician      Painter      Helper  
General Foreman      Carpenter      Laborer  
Mason                      Plumber      Welder

**Minimum Required Equipment:**

Power Tools

ITEM NO.	ITEM DESCRIPTION	% of Total	UNIT	Quantity	Direct Cost		Adjusted Unit Cost	Adjusted Total Cost
					Estimated Direct Cost	Unit Direct Cost		
(1)	(2)	(3)	(4)	(5)	(6)	(7) (6)/(5)	(8) (9)/(5)	(9)
<b>A. General Requirements</b>								
a.1	Mobilization / Demobilization /Temporary Facilities		lot	1.00				
a.2	Project Billboard		each	1.00				
a.3	Construction Safety and Health		lot	1.00				
<b>Part I - Repair and Rehabilitation</b>								
<b>B. Removal Works</b>								
b.1	Removal of Existing Roofing Sheets (Damaged), Gutter, Flashing and Fascia board		sq.m	64.99				
b.2	Removal of Existing Ceiling and Frames (@ Eaves, 5th floor corridor, 4th floor offices, and at Comfort rooms from GF-5th Flr)		sq.m	1,768.98				
b.3	Removal of Existing Trench Drain		l.m	98.60				
b.4	Removal of Existing Tiles (Grd-5th flr common comfort rooms, Grd-4th flr offices, Fixtures and Pipes at common CRs from GF-5th Flr)		sq.m	5,757.00				
b.5	Removal of Existing Walls/Dry Walls @ CRs		lot	1.00				
b.6	Removal of existing flooring (5th floor) and damaged floor joist		sq.m	756.00				
b.7	Removal of existing windows (grd-5th floor)		sq.ft	14,642.41				
<b>C. Hauling and Clearing Works</b>								
c.1	Clearing and Hauling of Debris (Non-Usable Materials)		lot	1.00				
c.2	Hauling of salvaged material to kasipagan area - Usable Materials (Beside DepEd Complex)		lot	1.00				
<b>D. Roofing Works</b>								
d.1	Long-span Metal Roofing		sq.m	192.40				
<b>E. Steel Works</b>								
e.1	Truss at Utility deck (including provision of access to utility deck)		lot	1.00				
<b>F. Carpentry Works</b>								
f.1	Ceiling Carpentry (Eaves, corridor of 5th Flr, 4th floor Offices, Comfort rooms from GF-5th flr)		sq.m	1,768.98				
<b>G. Repair of Flooring (5th floor)</b>								
g.1	Installation of new flooring and replacement of damaged floor joist		sq.m	756.00				
<b>H. Electrical Works</b>								
h.1	Conduit, Boxes and Fitting		lot	1.00				
h.2	Wires and Wiring Devices		lot	1.00				
h.3	Lighting Fixture / Fixture		lot	1.00				
<b>I. Plumbing and Sanitary Works</b>								
i.1	Drainage Line Works		lot	1.00				
i.2	Water Line Works		lot	1.00				
i.3	Sewer Line Works		lot	1.00				
i.4	Fixtures, Partitions and Accessories		lot	1.00				
i.5	Rain Water Collector		lot	1.00				
<b>J. Windows</b>								
j.1	Windows		sq.ft	14,642.41				

<b>K.</b>	<b>Painting Works</b>							
k.1	Painting		sq.m	14,202.23				
<b>L.</b>	<b>Tile Works</b>							
l.1	Tile Works (at common Cr's Floors & Walls from Grd-5th Flr, and Grd-4th floor offices)		sq.m	5,757.00				
<b>Part II - Retrofitting</b>								
<b>M.</b>	<b>Dismantling, Restoration / Re-installation Works</b>							
m.1	Acoustic Ceiling (2nd, 3rd, 4th and 5th floor)		sq.m	1,354.50				
m.2	Surface Preparation For Repair of Crack & Spalling Concrete		sq.m	4.90				
m.3	Repair of Crack (Plastering with Paint finish) - Slab and Walls		l.m	49.00				
m.4	Spalling Concrete (Slab-Canopy and Beam)		sq.m	342.35				
m.5	CHB/Partition/Glass Partition to be Chipped off (Totally Wrapped CFRP) - Grd, 2nd, 3rd and 4th floor		sq.m	62.64				
m.6	Chipping-off Existing Concrete Slab/ CHB Wall to Expose Existing Rebars/ Plaster-Grd to 4th floor		sq.m	954.60				
<b>N.</b>	<b>Retrofitting of Columns</b>							
n.1	Surface Preparation		sq.m	1,162.66				
n.2	Application of Carbon Fiber Reinforcement (t=.333mm, Wt=600gsm)-Grd, 2nd, 3rd and 4th floor		sq.m	1,146.24				
n.3	Application of Steel Jacketing (Fy=248 MPa)- Grd floor		kgs	459.30				
<b>O.</b>	<b>Retrofitting of Beams</b>							
o.1	Surface Preparation		sq.m	3,140.95				
o.2	Application of Carbon Fiber Reinforcement (t=.333mm, Wt=600gsm)-2nd, 3rd, 4th and 5th floor		sq.m	1,822.65				
o.3	Application of Steel Jacketing (Fy=248 MPa)- 2nd, 3rd and 4th floor		kgs	64,584.15				
<b>P.</b>	<b>Retrofitting of Slab</b>							
p.1	Additional support for flooring system on 5th Floor		kgs	17,767.80				
<b>Q.</b>	<b>Retrofitting of I-Beams</b>							
q.1	Additional Steel Plates for I-beams		kgs	15,531.75				
<b>R.</b>	<b>Retrofitting of Footing</b>							
r.1	Surface Preparation		sq.m	488.46				
r.2	Excavation, Backfilling and Compaction		cu.m	693.64				
r.3	Concreting		cu.m	103.40				
r.4	Steel Reinforcement		kgs	8,755.19				
r.5	Injectable Mortar		pcs	526.00				
<b>S.</b>	<b>Repair of Fire Exits and Damaged Railings</b>							
s.1	Repair of Fire Exits		lot	1.00				
s.2	Repair of damaged railing at corridors (Grd-5th flr)		lot	1.00				
<b>T.</b>	<b>Scaffolding</b>							
t.1	Scaffolding		lot	1.00				
<b>TOTAL CONSTRUCTION COST</b>			<b>%</b>					<b>Php</b>

Signed by:

\_\_\_\_\_  
Name and Signature of Bidder's Authorized Representative

\_\_\_\_\_  
Position

\_\_\_\_\_  
Name of Bidder

\_\_\_\_\_  
Date