

BILL OF QUANTITIES

PROJECT : UPGRADING OF ELECTRICAL SYSTEM & INSTALLATION OF 1 - 37.5 KVA TRANSFORMER
 SCHOOL : ZARAGOZA NATIONAL HIGH SCHOOL
 LOCATION : BRGY. ZARAGOZA, SURIGAO CITY

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT COST		TOTAL COST		GRAND TOTAL
				MATERIAL	LABOR	MATERIAL	LABOR	
GENERAL REQUIREMENTS								
a.1	Mobilization / Utilities and Services / Demobilization / Standard Billboard DepEd & COA.	lot	1.00					
a.2	Electrical Layout/Plan, Professional Fee (PEE, REE, etc), Electrical Permit, BFP Certificate/Clearances & other documents/fees, BWE Assessment.	lot	1.00					
a.3	Safety and Health Program <i>(from NOA to project completed)</i>	lot	1.00					
a.4	Hauling, Freight & Handling, Double-Handling	lot	1.00					
a.5	Others:							
	a.5.1 Energy Deposit	lot	1.00					
	Computed Load = 39.2 kW							
	8 Hours							
	30 days							
	PhP 7.3788 / kWh							
	a.5.2 Demand Charge = kW x Pesos/kW	lot	1.00					
	Computed Load = 39.2 kW							
	PhP 586.828 / kW							
	a.5.3 Meter Registration	lot	1.00					
	a.5.4 Meter Calibration	lot	1.00					
	a.5.5 Transformer Calibration	lot	1.00					
	Sub-total							
B. INSTALLATION OF 1 - 37.5 KVA TRANSFORMER								
b.1.	Bolt, Thimble Eye, 5/8" x 9", Angle Type	pc.	1.00					
b.2.	Bolt, Oval Eye, 5/8" x 9"	pc.	4.00					
b.3.	Bolt, Oval Eye, 5/8" x 10"	pc.	1.00					
b.4.	Bolt, Oval Eye, 5/8" x 18"	pc.	1.00					
b.5.	Bracket, Transformer	pc.	2.00					
b.6.	Clamp, Hotline, # 2 - # 4/0 ACSR Main to # 2 - # 4/0	pc.	2.00					
b.7.	Clamp, Anchor Rod Bonding, Single Eye	pc.	1.00					
b.8.	Clamp, Loop Deadend, # 2 ACSR - # 1/0	pc.	4.00					
b.9.	Clamp, Deadend Strain, # 2 ACSR	pc.	2.00					
b.10.	Clamp, Guy Straight, 3 Bolt, Heavy Duty Steel	pc.	2.00					
b.11.	Clevis, Secondary Swinging Without Spool	pc.	3.00					
b.12.	Shackle, Anchor, Forged Steel, Galvanized	pc.	1.00					
b.13.	Conductor, Bare, ACSR # 1, AWG 6/1	m.	400.00					
b.14.	Conductor, Insulated, ACSR, # 1, AWG 6/1	m.	8.00					
b.15.	Connector, Compression, # 6 - # 4 ACSR Run to # 6 - # 4	pc.	2.00					
b.16.	Connector, Compression, YHO 150	pc.	10.00					
b.17.	Connector, Ground Rod (Clamp) For 5/8" Steel Rod	pc.	1.00					
b.18.	Cutout and Arrester Combination 15KV, 100 AMPS	set	1.00					
b.19.	Insulator, Spool, 1-3/4", ANSI, Class 53-2	pc.	2.00					
b.20.	Insulator, Spool, 3", ANSI, Class 53-4	pc.	1.00					
b.21.	Insulator, Suspension, 6", Clevis Type	pc.	4.00					
b.22.	Link, Fuse, Universal, Bottom Head, Type K, 6 Amperes	pc.	1.00					
b.23.	Nut, Eye, 5/8", Conventional	pc.	1.00					
b.24.	Nut, Lock, Mf Type, 5/8"	pc.	6.00					
b.25.	Rod, Anchor, Threaded, Single Eye, 5/8" x 7'	pc.	1.00					

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT COST		TOTAL COST		GRAND TOTAL
				MATERIAL	LABOR	MATERIAL	LABOR	
b.26.	Rod, Tapping, Preformed, # 2 ACSR	set	2.00					
b.27.	Rod, Ground Steel, Galvanized, 5/8" x 10'	pc.	1.00					
b.28.	Lug, Terminal, # 2 ACSR	pc.	1.00					
b.29.	Lug, Terminal, Wire, Ground, HGS, 3/8", Galvanized	pc.	1.00					
b.30.	Transformer, Pole Type, Conventional, 37.50 KVA	unit	1.00					
b.31.	Washer, Square, Flat, 2-1/4" x 2-1/4" x3/16", 13/16 Diameter	pc.	6.00					
b.32.	Washer, Square, Flat, 4 x 4" x 1/2" with, 7/8" Diameter Hole	pc.	1.00					
b.33.	Wire, Tape, Armor, Aluminum Alloy, 0.5" x 0.30"	ft.	3.00					
b.34.	Wire, Grounding, Aluminum Alloy, 3 Strand, # 4 AWG	ft.	35.00					
b.35.	Wire, Guy, Steel, 3/8", 7 Strand	ft.	75.00					
b.36.	Pole, Steel, 35', Standard	pc.	1.00					
b.37.	Block Anchor, 8" x 4' Concrete	pc.	1.00					
b.38.	KWH Meter Box, 4 Jaws, Milbank	pc.	1.00					
b.39.	Clamp, Pole, Single Support	set	2.00					
b.40.	RSC Pipe, 2" x 10'	L	1.00					
b.41.	Entrance Cap, 2"	pc.	1.00					
b.42.	Insulated Copper Wire, # 2 AWG	m.	50.00					
b.43.	KWH Meter, G.E. KV2C, FM1S, CL200	unit	1.00					
b.44.	Conductor, Duplex, # 2 (From Pole to Service Entrance)	m.	200.00					
b.45.	Current Transformer 200:5 600V	pc.	1.00					
b.46.	CTR Box, Aluminum	pc.	1.00					
b.47.	Socket Base	pc.	1.00					
b.48.	Circuit Breaker, 150AT, 2P (NEMA 3R)	pc.	1.00					
	Sub-total							
C.	EXTENSION OF SECONDARY LINE							
c.1.	Bolt, Thimble Eye, 5/8" x 9", Angle Type	pc.	4.00					
c.2.	Bolt, Double Upset, 5/8" X 10"	pc.	3.00					
c.3.	Bolt, Oval Eye, 5/8" x 10"	pc.	4.00					
c.4.	Bolt, Machine, 5/8" x 10"	pc.	6.00					
c.5.	Bracket, Clevis Deadend Without Spool	pc.	6.00					
c.6.	Clamp, Anchor Rod Bonding, Single Eye	pc.	8.00					
c.7.	Clamp, Loop Deadend, # 2 ACSR - # 1/0	pc.	2.00					
c.8.	Clamp, Guy Straight, 3 Bolt, Heavy Duty Steel	pc.	3.00					
c.9.	Clevis, Secondary Swinging Without Spool	pc.	3.00					
c.10.	Conductor, Duplex, # 2, AWG 6/1	m.	1,000.00					
c.11.	Connector, Compression, # 2 - # 4/0 ACSR Run to # 6 - # 2	pc.	26.00					
c.12.	Connector, Compression, YHO 150	pc.	22.00					
c.13.	Connector, Ground Rod (Clamp) For 5/8" Steel Rod	pc.	4.00					
c.14.	Insulator, Spool, 1-3/4", ANSI, Class 53-2	pc.	4.00					
c.15.	Insulator, Spool, 3", ANSI, Class 53-4	pc.	4.00					
c.16.	Nut, Eye, 5/8", Conventional	pc.	8.00					
c.17.	Nut, Lock, Mf Type, 5/8"	pc.	8.00					
c.18.	Rod, Anchor, Threaded, Single Eye, 5/8" x 7'	pc.	4.00					
c.19.	Rod, Armor, Preformed, # 3/0 ACSR, Single Support	set	6.00					
c.20.	Rod, Ground Steel, Galvanized, 5/8" x 10'	pc.	4.00					
c.21.	Washer, Square, Flat, 2-1/4" x 2-1/4" x3/16", 13/16 Diameter	pc.	8.00					
c.22.	Washer, Square, Flat, 4 x 4" x 1/2" with, 7/8" Diameter Hole	pc.	8.00					
c.23.	Wire, Tie, Aluminum Alloy, Soft, # 4 AWG	ft.	18.00					
c.24.	Wire, Tape, Armor, Aluminum Alloy, 0.5" x 0.30"	ft.	10.00					
c.25.	Wire, Grounding, Aluminum Alloy, 3 Strand, # 4 AWG	ft.	150.00					
c.26.	Wire, Guy, Steel, 3/8", 7 Strand	ft.	200.00					
c.27.	Pole, Steel, 30', Standard	pc.	4.00					
c.28.	Block Anchor, 8" x 4' Concrete	pc.	4.00					
c.29.	Flood Light 50W IP66	set	4.00					
c.30.	Conductor, Duplex, # 4, AWG 6/1	m.	100.00					
c.31.	2-Gang Switch with Plate	pc.	5.00					
c.32.	2.0mm2 THHN	m.	600.00					
c.33.	3.5mm2 THHN	m.	600.00					
c.34.	15AT Circuit Breaker	pc.	10.00					
c.35.	20AT Circuit Breaker	pc.	10.00					

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT COST		TOTAL COST		GRAND TOTAL
				MATERIAL	LABOR	MATERIAL	LABOR	
c.36.	Flexible Hose 3/4"	m.	300.00					
c.37.	Clip 3/4"	pc.	400.00					
c.38.	Utility Box	pc.	5.00					
	Sub-total							
D	Panelboard & Circuit Breaker							
d.1.	Panel Box, Flush Type, 4 Branches	set	3.00					
d.2.	Circuit Breaker, 30AT,2P	set	3.00					
d.3.	Circuit Breaker, 60AT,2P	set	3.00					
d.4.	Electrical Tape	roll	10.00					
	Sub-total							
I.	DIRECT COST							
II.	INDIRECT COST 22% of (I)							
III.	TAX 5% of (I + II)							
IV.	TOTAL CONSTRUCTION COST (I + II + III)							

Prepared by:

Contractor's Representative