

BILL OF QUANTITIES

Project: SUPPLY AND INSTALLATION OF 1.5 MVA DISTRIBUTION TRANSFORMER FOR THE OCA ASEANA BUILDING

Duration: 250 Calendar Days

ITEM NO.		QTY.	UNIT	DIRECT COST				TOTAL COST	
				MATERIAL	LABOR	EQUIPMENT	UNIT COST		
I GENERAL REQUIREMENTS									
	A.	Mobilization/ Demobilization	1	lot				0	0
	B.	Temporary Facilities (Offices, work shops, storage, office supplies and workmen accomodation for contractor)	1	lot				0	0
	C.	Processing of necessary Permits, Clearances, and Certificates	1	lot				0	0
	D.	Taxes, Fees and Charges (includuing importation tax, fees and other charges applicable)	1	lot				0	0
	E.	Bonds, Sureties & Insurances	1	lot				0	0
	F.	Produce and print Bill of Materials, Bill of Quantities and Five (5) sets signed and sealed As-Built Drawings in blueprint and A3 size of papers, shop drawings, and a copy in PDF and CAD files, and weekly progress reports	1	lot				0	0
	G.	Safety Gears/Personal Protective Equipment and other safety Paraphernalia	1	lot				0	0
	H.	Safety Requirements againts COVID19 under DPWH DO.39	1	lot				0	0
	I.	Heavy Equipment Rental	1	lot				0	0
								DIRECT COST	0
								MARK-UP (8%)	0
								VAT (5%)	0
								SUB-TOTAL I	0
II ELECTRICAL WORKS									
	A.	Construction/Installation of First Private Pole (34.5 KV incoming). This includes complete supply of labor and materials for civil and electrical work	1	lot				0	0
	1	First Private Pole, 34.5KV complete with Load Break Switch (LBS), Automatic Circuit Recloser (ACR), and Lightning Arrester							
	2	Excavation/backfilling works, Hauling and Pole Erection							
	3	Pole Line Hardware and Accessories							
	4	Bare Copper Wire							
	5	Messenger Wire							
	6	Copper-Clad Grounding Rod							
	7	Grounding Cable							
	8	Grounding Mat							
	9	Equipment Rental							
	10	Miscellaneous and Consumables							
		SUB TOTAL A							0

B	Supply, delivery, setting and installation of 1.5MVA Pad Mounted Transformer 34.5KV/230V,3Ph, 60hz with complete accessories	1	lot				0	0
SUB TOTAL B								0
C	Supply, delivery,and installation of New Main Distribution Panel, 230V,3Ph, 60hz System in NEMA-1 Enclosure with Digital Multi-meters & LED power indicators: Main : (To be sized based on the size of New Transformer) Branches : 1 - 3200AT/3200AF, 3P, 500V, 60hz, ACB 1 - 500AT/600AF, 3P, 500V, 60hz, MCCB	1	Assy.				0	0
SUB TOTAL C								0
D	Supply, delivery,and installation of additional Sub-Distribution Panel, 230V,3Ph, 60hz System in NEMA-1 enclosure: Main : 1 - 500AT/600AF, 3P, 500V, 60hz, MCCB Branches : 4 - 100AT/150AF, 3P, 500V, 60hz, MCCB	1	Assy.				0	0
SUB TOTAL D								0
E	Wire and Cabling Works for Equipments (Transformer, New MDP, Sub-DP and Existing MDP)	1	lot				0	0
	1 Supply and installation of HV Cables, Cu.XLPE/PVC							
	2 Supply and installation Termination Kit							
	3 Supply and installation LV Cables							
	4 Wiring Accessories and Supports							
	5 Supply and installation Conduits, Accessories and Supports							
	6 Supply and installation of various Cable Ladder with and without Covers (Hot-Dipped Galvanized and Powdercoated)							
	7 Cable Ladder accessories and Hanger Supports							
	8 Earthing Materials							
	9 Miscellaneous and Consumables							
SUB TOTAL E								0
F	Supply and installation of Grounding System at Transformer Area	1	lot				0	0
	1 Earth Terminal Panel							
	2 Wires and Cables							
	3 Wiring Accessories and Supports							
	4 Grounding Rod							
	5 Conduits, Fittings, Supports and Accessories							
	6 Miscellaneous and Supporting Materials							
SUB TOTAL F								0
G	Testing and Commissioning	1	lot				0	0
SUB TOTAL G								0
H	Provision for Temporary Power (As needed)	1	lot				0	0
SUB TOTAL H								0
							DIRECT COST	0
							MARK-UP (16%)	0
							VAT (5%)	0
							SUB-TOTAL II	0

III	CIVIL WORKS								
A.	Related Civil works for the concrete pedestal, duct bank, concrete pads for transformer and Distribution Panels and grounding system		1	lot			0	0	
	1	Concrete Foundation and Pads (Transformer and Panelboards)							
	2	Construction of Concrete Pedestal							
	3	Construction of Duct Bank							
	4	Cable Trench with Cover							
	5	Concrete Breaking, Excavation and Back Filling Works							
	6	Hauling and Disposal of Debris							
	7	Compaction and Form Works							
	8	Scaffolding Works							
	9	Supporting Materials (Seismic Anchorage and J-Bolts)							
	10	Equipment Rental (Hauling Truck, Concrete Mixer and Demolition)							
	11	Miscellaneous and Consumables							
	SUB TOTAL A							0	
B.	Construction and/or improvements of Transformer Room		1	lot			0	0	
	1	Supply and installation of Metal Louvers for door and window/wall							
	2	Re-roofing, ceiling, and electrical (provision for lighting and power layout) works							
	3	CHB and plastering works							
	4	Danger Signage							
	5	Demolition of existing wall and slab							
	6	Fire Resistant Painting Materials							
	7	Miscellaneous Materials							
	SUB TOTAL B							0	
C.	Overall Restoration Works		1	lot			0	0	
	SUB TOTAL C							0	
								DIRECT COST	
								0	
								MARK-UP (16%)	
								0	
								VAT (5%)	
								0	
								SUB-TOTAL III	
								0	
	GRAND TOTAL (I + II + III)								0

PREPARED BY: (PINTED NAME AND SIGNATURE)

DATE:

DETAILED UNIT PRICE ANALYSIS (DUPA)

Project : Supply and Installation of 1.5 MVA Distribution Transformer for the OCA Aseana Building
Item No./ Description : Mobilization/ Demobilization
Unit of Measurement : lot
Output per hour : 1

	Designation	No. of Person/s	No. of Hours	Hourly Rate	Amount (Php)
A.	Labor				
	Sub-Total for A				0
	Name of Capacity	No. of Unit/s	No. of Hour/s	Hourly Rate	Amount (Php)
B.	Equipment				
	Trailer truck	1			
	Sub-Total for B				0
C.	Total (A+B)				0
D.	Output per Hour =		1.00		
E.	Direct Unit Cost (C+D)				0
	Name of Specification	Unit	Quantity	Unit Cost	Amount (Php)
F.	Materials				
	Sub-Total for F				0
G.	Direct Unit Cost (E + F)				0
H.	Overhead, Contingencies & Miscellaneous (OCM) Expenses			4% of G	0
I.	Contractor's Profit (CP)			4% of G	0
J.	Value Added Tax (VAT)			5% of (G+H+I)	0
K.	Total Unit Cost			(G+H+I+J)	0

DETAILED UNIT PRICE ANALYSIS (DUPA)

Project : Supply and Installation of 1.5 MVA Distribution Transformer for the OCA Aseana Building
Item No./ Description : Temporary Facilities (Offices, work shops, storage, office supplies and workmen accomodation for contractor)
Unit of Measurement : lot
Output per hour : 1

	Designation	No. of Person/s	No. of Hours	Hourly Rate	Amount (Php)
A.	Labor				
	Sub-Total for A				0.00
	Name of Capacity	No. of Unit/s	No. of Hour/s	Hourly Rate	Amount (Php)
B.	Equipment				
	Printer	1			
	Personal Computer	1			
	Sub-Total for B				0
C.	Total (A+B)				0.00
D.	Output per Hour =		1.00		
E.	Direct Unit Cost (C+D)				0.00
	Name of Specification	Unit	Quantity	Unit Cost	Amount (Php)
F.	Materials				
	Temporary Facilities (Offices, work shop, storage, office supplies and workmen accomodation for contractor)	days	250.00		
	Sub-Total for F				0
G.	Direct Unit Cost (E + F)				0.00
H.	Overhead, Contingencies & Miscellaneous (OCM) Expenses		4% of G		0.00
I.	Contractor's Profit (CP)		4% of G		0.00
J.	Value Added Tax (VAT)		5% of (G+H+I)		0.00
K.	Tota Unit Cost		(G+H+I+J)		0.00

DETAILED UNIT PRICE ANALYSIS (DUPA)

Project : Supply and Installation of 1.5 MVA Distribution Transformer for the OCA Aseana Building
 Item No./ Description : Processing of necessary Permits, Clearances, and Certificates
 Unit of Measurement : lot
 Output per hour : 1

	Designation	No. of Person/s	No. of Hours	Hourly Rate	Amount (Php)
A.	Labor				
	Liason Officer	1			
	Sub-Total for A				0
	Name of Capacity	No. of Unit/s	No. of Hour/s	Hourly Rate	Amount (Php)
B.	Equipment				
	Sub-Total for B				0
C.	Total (A+B)				0
D.	Output per Hour =	1.00			
E.	Direct Unit Cost (C+D)				0
	Name of Specification	Unit	Quantity	Unit Cost	Amount (Php)
F.	Materials				
	Building Permits	lot	1.00		
	Permits fromm ABPEA and Meralco	lot	1.00		
	Inspection Certificate	lot	1.00		
	Installation Certificate	lot	1.00		
	Permit to Operate	lot	1.00		
	Clearances	lot	1.00		
	Sub-Total for F				0
G.	Direct Unit Cost (E + F)				0
H.	Overhead, Contingencies & Miscellaneous (OCM) Expenses		4% of G		0
I.	Contractor's Profit (CP)		4% of G		0
J.	Value Added Tax (VAT)		5% of (G+H+I)		0
K.	Tota Unit Cost		(G+H+I+J)		0

DETAILED UNIT PRICE ANALYSIS (DUPA)

Project : Supply and Installation of 1.5 MVA Distribution Transformer for the OCA Aseana Building
 Item No./ Description : Taxes, Fees and Charges (including importation tax, fees and other charges applicable)
 Unit of Measurement : lot
 Output per hour : 1

	Designation	No. of Person/s	No. of Hours	Hourly Rate	Amount (Php)
A.	Labor				
	Sub-Total for A				0
	Name of Capacity	No. of Unit/s	No. of Hour/s	Hourly Rate	Amount (Php)
B.	Equipment				
	Sub-Total for B				0
C.	Total (A+B)				0
D.	Output per Hour =		1.00		
E.	Direct Unit Cost (C+D)				0
	Name of Specification	Unit	Quantity	Unit Cost	Amount (Php)
F.	Materials				
	Imporation Tax and Charges	lot	1.00		
	Local Taxes and Charges	lot	1.00		
	Meralco and ABPEA Fees and Charges	lot	1.00		
	Sub-Total for F				0
G.	Direct Unit Cost (E + F)				0
H.	Overhead, Contingencies & Miscellaneous (OCM) Expenses			4% of G	0
I.	Contractor's Profit (CP)			4% of G	0
J.	Value Added Tax (VAT)			5% of (G+H+I)	0
K.	Tota Unit Cost			(G+H+I+J)	0

DETAILED UNIT PRICE ANALYSIS (DUPA)

Project : Supply and Installation of 1.5 MVA Distribution Transformer for the OCA Aseana Building
 Item No./ Description : Bonds, Sureties & Insurances
 Unit of Measurement : lot
 Output per hour : 1

	Designation	No. of Person/s	No. of Hours	Hourly Rate	Amount (Php)
A.	Labor				
	Liason Officer	1			
	Sub-Total for A				0
	Name of Capacity	No. of Unit/s	No. of Hour/s	Hourly Rate	Amount (Php)
B.	Equipment				
	Sub-Total for B				0
C.	Total (A+B)				0
D.	Output per Hour =		1.00		
E.	Direct Unit Cost (C+D)				0
	Name of Specification	Unit	Quantity	Unit Cost	Amount (Php)
F.	Materials				
	Performance Bond	lot	1.00		
	Guarantee and Surety Bonds	lot	1.00		
	Contractor's All Risk Insurance/ Bonds	lot	1.00		
	Warranty Bonds	lot	1.00		
	Sub-Total for F				0
G.	Direct Unit Cost (E + F)				0
H.	Overhead, Contingencies & Miscellaneous (OCM) Expenses			4% of G	0
I.	Contractor's Profit (CP)			4% of G	0
J.	Value Added Tax (VAT)			5% of (G+H+I)	0
K.	Tota Unit Cost			(G+H+I+J)	0

DETAILED UNIT PRICE ANALYSIS (DUPA)

Project : Supply and Installation of 1.5 MVA Distribution Transformer for the OCA Aseana Building

Item No./ Description : Produce and print Bill of Materials, Bill of Quantities and Five (5) sets signed and sealed As-Built Drawings in blueprint and A3 size of papers, shop drawings and a copy in PDF and CAD files, and weekly progress reports

Unit of Measurement : lot

Output per hour : 1

	Designation	No. of Person/s	No. of Hours	Hourly Rate	Amount (Php)
A.	Labor				
	Professional Electrical Engineer	1			
	CAD Operator	1			
	Staff	1			
	Sub-Total for A				0
	Name of Capacity	No. of Unit/s	No. of Hour/s	Hourly Rate	Amount (Php)
B.	Equipment				
	Printer Machine/s				
	Personal Computer/s				
	Sub-Total for B				0
C.	Total (A+B)				0
D.	Output per Hour =		1.00		
E.	Direct Unit Cost (C+D)				0
	Name of Specification	Unit	Quantity	Unit Cost	Amount (Php)
F.	Materials				
	A0-A4 Sizes of Paper	lot	1.00		
	Flashdrive	pc	1.00		
	Blue Print Signed and Sealed As-Built Plan (20x30) inches	set	5.00		
	Signed and Sealed As-Built Plan in A3 size of paper	set	5.00		
	Signed and Sealed Shop Drawings	lot	1.00		
	Weekly Progress Reports	lot	1.00		
	BOQ	lot	1.00		
	BOM	lot	1.00		
	Sub-Total for F				0
G.	Direct Unit Cost (E + F)				0.00
H.	Overhead, Contingencies & Miscellaneous (OCM) Expenses		4% of G		0.00
I.	Contractor's Profit (CP)		4% of G		0.00
J.	Value Added Tax (VAT)		5% of (G+H+I)		0.00
K.	Tota Unit Cost		(G+H+I+J)		0.00

DETAILED UNIT PRICE ANALYSIS (DUPA)

Project : Supply and Installation of 1.5 MVA Distribution Transformer for the OCA Aseana Building
Item No./ Description : Safety Gears/Personal Protective Equipment and other safety Paraphernalia
Unit of Measurement : lot
Output per hour : 1

	Designation	No. of Person/s	No. of Hours	Hourly Rate	Amount (Php)
A.	Labor				
	Sub-Total for A				0
	Name of Capacity	No. of Unit/s	No. of Hour/s	Hourly Rate	Amount (Php)
B.	Equipment				
	Sub-Total for B				0
C.	Total (A+B)				0
D.	Output per Hour =		1.00		
E.	Direct Unit Cost (C+D)				0
	Name of Specification	Unit	Quantity	Unit Cost	Amount (Php)
F.	Materials				
	Hard Hat	lot	1.00		
	Dusk Mask	lot	1.00		
	Vest	lot	1.00		
	Body Harness and Landyards	lot	1.00		
	Eye google	lot	1.00		
	Welding Mask	lot	1.00		
	Gloves	lot	1.00		
	Safety shoes	lot	1.00		
	Safety and Caution signages	lot	1.00		
	Barriers	lot	1.00		
	Sub-Total for F				0
G.	Direct Unit Cost (E + F)				0.00
H.	Overhead, Contingencies & Miscellaneous (OCM) Expenses			4% of G	0.00
I.	Contractor's Profit (CP)			4% of G	0.00
J.	Value Added Tax (VAT)			5% of (G+H+I)	0.00
K.	Tota Unit Cost			(G+H+I+J)	0.00

DETAILED UNIT PRICE ANALYSIS (DUPA)

Project : Supply and Installation of 1.5 MVA Distribution Transformer for the OCA Aseana Building
 Item No./ Description : Safety Requirements Againsts COVID19 under DPWH DO. 39
 Unit of Measurement : lot
 Output per hour : 1

	Designation	No. of Person/s	No. of Hours	Hourly Rate	Amount (Php)
A.	Labor				
	Sub-Total for A				0
	Name of Capacity	No. of Unit/s	No. of Hour/s	Hourly Rate	Amount (Php)
B.	Equipment				
	Sub-Total for B				0
C.	Total (A+B)				0
D.	Output per Hour =		1.00		
E.	Direct Unit Cost (C+D)				0
	Name of Specification	Unit	Quantity	Unit Cost	Amount (Php)
F.	Materials				
	Facemask	lot	1.00		
	Ethyl alcohol	lot	1.00		
	Liquid hand soap	lot	1.00		
	Vitamins (Vitamins C with Zinc)	lot	1.00		
	Paracetamol	lot	1.00		
	RT-PCR Swab Test (As needed)	lot	1.00		
	Sub-Total for F				0
G.	Direct Unit Cost (E + F)				0.00
H.	Overhead, Contingencies & Miscellaneous (OCM) Expenses			4% of G	0.00
I.	Contractor's Profit (CP)			4% of G	0.00
J.	Value Added Tax (VAT)			5% of (G+H+I)	0.00
K.	Tota Unit Cost			(G+H+I+J)	0.00

DETAILED UNIT PRICE ANALYSIS (DUPA)

Project : Supply and Installation of 1.5 MVA Distribution Transformer for the OCA Aseana Building
 Item No./ Description : Heavy Equipment Rental
 Unit of Measurement : lot
 Output per hour : 1

	Designation	No. of Person/s	No. of Hours	Hourly Rate	Amount (Php)
A.	Labor				
	Driver/Operator	2			
	Sub-Total for A				0
	Name of Capacity	No. of Unit/s	No. of Hour/s	Hourly Rate	Amount (Php)
B.	Equipment				
	Hauling Truck	1			
	Lifting Equipment	1			
	Welding Machine	1			
	Boom Truck	1			
	Sub-Total for B				0
C.	Total (A+B)				0
D.	Output per Hour =	1.00			
E.	Direct Unit Cost (C+D)				0
	Name of Specification	Unit	Quantity	Unit Cost	Amount (Php)
F.	Materials				
	Sub-Total for F				0
G.	Direct Unit Cost (E + F)				0.00
H.	Overhead, Contingencies & Miscellaneous (OCM) Expenses		4% of G		0.00
I.	Contractor's Profit (CP)		4% of G		0.00
J.	Value Added Tax (VAT)		5% of (G+H+I)		0.00
K.	Tota Unit Cost		(G+H+I+J)		0.00

DETAILED UNIT PRICE ANALYSIS (DUPA)

Project : Supply and Installation of 1.5 MVA Distribution Transformer for the OCA Aseana Building
Item No./ Description : Construction/Installation of First Private Pole (34.5 KV incoming). This includes complete supply of labor and materials for civil and electrical works
Unit of Measurement : lot
Output per hour : 1

	Designation	No. of Person/s	No. of Hours	Hourly Rate	Amount (Php)
A.	Labor				
	Professional Electrical Engineer	1			
	Electrical Engineer	1			
	Safety Officer	1			
	Electrical Foreman	1			
	Skilled Laborer	5			
	Sub-Total for A				0
	Name of Capacity	No. of Unit/s	No. of Hour/s	Hourly Rate	Amount (Php)
B.	Equipment				
	Hauling Truck	1			
	Lifting Equipment	1			
	Excavation Tools and Equipment	1			
	Sub-Total for B				0
C.	Total (A+B)				0
D.	Output per Hour =	1.00			
E.	Direct Unit Cost (C+D)				0
	Name of Specification	Unit	Quantity	Unit Cost	Amount (Php)
F.	Materials				
	First Private Pole, 34.5KV complete with Load Break Switch, Automatic Circuit Recloser, and Lightning Arrester	Assy.	1.00		
	Pole Line Hardware and Accessories	lot	1.00		
	Bare Copper Wire	lot	1.00		
	Messenger Wire	lot	1.00		
	Copper-Clad Grounding Rod	lot	1.00		
	Grounding Cable	lot	1.00		
	Grounding Mat	lot	1.00		
	Miscellaneous and Consumables	lot	1.00		
	Sub-Total for F				0
G.	Direct Unit Cost (E + F)				0.00
H.	Overhead, Contingencies & Miscellaneous (OCM) Expenses		8% of G		0.00
I.	Contractor's Profit (CP)		8% of G		0.00
J.	Value Added Tax (VAT)		5% of (G+H+I)		0.00
K.	Tota Unit Cost		(G+H+I+J)		0.00

DETAILED UNIT PRICE ANALYSIS (DUPA)

Project : Supply and Installation of 1.5 MVA Distribution Transformer for the OCA Aseana Building
Item No./ Description : Supply, delivery, setting and installation of 1.5MVA Pad Mounted Transformer 34.5KV/230V,3Ph, 60hz with complete accessories
Unit of Measurement : lot
Output per hour : 1

	Designation	No. of Person/s	No. of Hours	Hourly Rate	Amount (Php)
A.	Labor				
	Professional Electrical Engineer	1			
	Electrical Engineer	1			
	Safety Officer	1			
	Electrical Foreman	1			
	Skilled Laborer	5			
	Sub-Total for A				0
	Name of Capacity	No. of Unit/s	No. of Hour/s	Hourly Rate	Amount (Php)
B.	Equipment				
	Hauling Truck	1			
	Lifting Equipment	1			
	Sub-Total for B				0
C.	Total (A+B)				0
D.	Output per Hour =		1.00		
E.	Direct Unit Cost (C+D)				0
	Name of Specification	Unit	Quantity	Unit Cost	Amount (Php)
F.	Materials				
	Supply, delivery, setting and installation of 1.5MVA Pad Mounted Transformer 34.5KV/230V,3Ph, 60hz with complete accessories	Assy	1.00		
	Sub-Total for F				0
G.	Direct Unit Cost (E + F)				0.00
H.	Overhead, Contingencies & Miscellaneous (OCM) Expenses		8% of G		0.00
I.	Contractor's Profit (CP)		8% of G		0.00
J.	Value Added Tax (VAT)		5% of (G+H+I)		0.00
K.	Tota Unit Cost		(G+H+I+J)		0.00

DETAILED UNIT PRICE ANALYSIS (DUPA)

Project : Supply and Installation of 1.5 MVA Distribution Transformer for the OCA Aseana Building
Item No./ Description : Supply, delivery, and installation of New Main Distribution Panel, 230V, 3Ph, 60hz System in NEMA-1 Enclosure with Digital Multi-meters & LED power indicators
Unit of Measurement : Assy
Output per hour : 1

	Designation	No. of Person/s	No. of Hours	Hourly Rate	Amount (Php)
A.	Labor				
	Electrical Engineer	1			
	Safety Officer	1			
	Electrical Foreman	1			
	Skilled Laborer	2			
	Sub-Total for A				0
	Name of Capacity	No. of Unit/s	No. of Hour/s	Hourly Rate	Amount (Php)
B.	Equipment				
	Hauling Truck	1			
	Lifting Equipment	1			
	Sub-Total for B				0
C.	Total (A+B)				0
D.	Output per Hour =		1.00		
E.	Direct Unit Cost (C+D)				0
	Name of Specification	Unit	Quantity	Unit Cost	Amount (Php)
F.	Materials				
	Supply, delivery, and installation of New Main Distribution Panel, 230V, 3Ph, 60hz System in NEMA-1 Enclosure with Digital Multi-meters & LED power indicators:				
	Main : To be sized based on the size of New Transformer	Assy	1.00		
	Branches :				
	1 - 3200AT/3200AF, 3P, 500V, 60hz, ACB				
	1 - 500AT/600AF, 3P, 500V, 60hz, MCCB				
	Sub-Total for F				0
G.	Direct Unit Cost (E + F)				0.00
H.	Overhead, Contingencies & Miscellaneous (OCM) Expenses			8% of G	0.00
I.	Contractor's Profit (CP)			8% of G	0.00
J.	Value Added Tax (VAT)			5% of (G+H+I)	0.00
K.	Total Unit Cost			(G+H+I+J)	0.00

DETAILED UNIT PRICE ANALYSIS (DUPA)

Project : Supply and Installation of 1.5 MVA Distribution Transformer for the OCA Aseana Building
Item No./ Description : Supply, delivery, and installation of additional Sub-Distribution Panel, 230V, 3Ph, 60hz System in NEMA-1 enclosure
Unit of Measurement : Assy
Output per hour : 1

	Designation	No. of Person/s	No. of Hours	Hourly Rate	Amount (Php)
A.	Labor				
	Electrical Engineer	1			
	Safety Officer	1			
	Electrical Foreman	1			
	Skilled Laborer	2			
	Sub-Total for A				0
	Name of Capacity	No. of Unit/s	No. of Hour/s	Hourly Rate	Amount (Php)
B.	Equipment				
	Hauling Truck	1			
	Lifting Equipment	1			
	Sub-Total for B				0
C.	Total (A+B)				0
D.	Output per Hour =		1.00		
E.	Direct Unit Cost (C+D)				0
	Name of Specification	Unit	Quantity	Unit Cost	Amount (Php)
F.	Materials				
	Supply, delivery, and installation of additional Sub-Distribution Panel, 230V, 3Ph, 60hz System in NEMA-1 enclosure				
	Main :				
	1 - 500AT/600AF, 3P, 500V, 60hz, MCCB	Assy	1.00		
	Branches :				
	4 - 100AT/150AF, 3P, 500V, 60hz, MCCB				
	Sub-Total for F				0
G.	Direct Unit Cost (E + F)				0.00
H.	Overhead, Contingencies & Miscellaneous (OCM) Expenses			8% of G	0.00
I.	Contractor's Profit (CP)			8% of G	0.00
J.	Value Added Tax (VAT)			5% of (G+H+I)	0.00
K.	Tota Unit Cost			(G+H+I+J)	0.00

DETAILED UNIT PRICE ANALYSIS (DUPA)

Project : Supply and Installation of 1.5 MVA Distribution Transformer for the OCA Aseana Building
Item No./ Description : Wire and Cabling Works for Equipments (Transformer, New MDP, Sub-DP and Existing MDP)
Unit of Measurement : lot
Output per hour : 1

	Designation	No. of Person/s	No. of Hours	Hourly Rate	Amount (Php)
A.	Labor				
	Professional Electrical Engineer	1			
	Electrical Engineer	1			
	Safety Officer	1			
	Electrical Foreman	1			
	Skilled Laborer	5			
	Sub-Total for A				0
	Name of Capacity	No. of Unit/s	No. of Hour/s	Hourly Rate	Amount (Php)
B.	Equipment				
	Sub-Total for B				0
C.	Total (A+B)				0
D.	Output per Hour =		1.00		
E.	Direct Unit Cost (C+D)				0
	Name of Specification	Unit	Quantity	Unit Cost	Amount (Php)
F.	Materials				
	HV Cables, Cu.XLPE/PVC	lot	1.00		
	Termination Kit	lot	1.00		
	LV Cables	lot	1.00		
	Wiring Accessories and Supports	lot	1.00		
	Conduits, Accessories and Supports	lot	1.00		
	Cable Ladder with and without Covers (Hot-Dipped Galvanized and Powdercoated)	lot	1.00		
	Cable Ladder accessories and Hanger Supports	lot	1.00		
	Earthing Materials	lot	1.00		
	Miscellaneous and Consumables	lot	1.00		
	Sub-Total for F				0
G.	Direct Unit Cost (E + F)				0.00
H.	Overhead, Contingencies & Miscellaneous (OCM) Expenses		8% of G		0.00
I.	Contractor's Profit (CP)		8% of G		0.00
J.	Value Added Tax (VAT)		5% of (G+H+I)		0.00
K.	Tota Unit Cost		(G+H+I+J)		0.00

DETAILED UNIT PRICE ANALYSIS (DUPA)

Project : Supply and Installation of 1.5 MVA Distribution Transformer for the OCA Aseana Building
Item No./ Description : Supply and installation of Grounding System at Transformer Area
Unit of Measurement : lot
Output per hour : 1

	Designation	No. of Person/s	No. of Hours	Hourly Rate	Amount (Php)
A.	Labor				
	Electrical Engineer	1			
	Safety Officer	1			
	Electrical Foreman	1			
	Skilled Laborer	3			
	Sub-Total for A				0
	Name of Capacity	No. of Unit/s	No. of Hour/s	Hourly Rate	Amount (Php)
B.	Equipment				
	Sub-Total for B				0
C.	Total (A+B)				0
D.	Output per Hour =		1.00		
E.	Direct Unit Cost (C+D)				0
	Name of Specification	Unit	Quantity	Unit Cost	Amount (Php)
F.	Materials				
	Earth Terminal Panel	Assy	1.00		
	Wires and Cables	lot	1.00		
	Wiring Accessories and Supports	lot	1.00		
	Grounding Rod	lot	1.00		
	Conduits, Fittings, Supports and Accessories	lot	1.00		
	Miscellaneous and Supporting Materials	lot	1.00		
	Sub-Total for F				0
G.	Direct Unit Cost (E + F)				0.00
H.	Overhead, Contingencies & Miscellaneous (OCM) Expenses			8% of G	0.00
I.	Contractor's Profit (CP)			8% of G	0.00
J.	Value Added Tax (VAT)			5% of (G+H+I)	0.00
K.	Total Unit Cost			(G+H+I+J)	0.00

DETAILED UNIT PRICE ANALYSIS (DUPA)

Project : Supply and Installation of 1.5 MVA Distribution Transformer for the OCA Aseana Building
 Item No./ Description : Testing and Commissioning
 Unit of Measurement : lot
 Output per hour : 1

	Designation	No. of Person/s	No. of Hours	Hourly Rate	Amount (Php)
A.	Labor				
	Professional Electrical Engineer	1			
	Electrical Engineer	1			
	Safety Officer	1			
	Electrical Foreman	1			
	Sub-Total for A				0
	Name of Capacity	No. of Unit/s	No. of Hour/s	Hourly Rate	Amount (Php)
B.	Equipment				
	Various Electrical Test Tools	1			
	Sub-Total for B				0
C.	Total (A+B)				0
D.	Output per Hour =		1.00		
E.	Direct Unit Cost (C+D)				0
	Name of Specification	Unit	Quantity	Unit Cost	Amount (Php)
F.	Materials				
	Submission of Various Test Results	lot	1.00		
	Switching Assembly Calibration	lot	1.00		
	HV and LV Tests	lot	1.00		
	Applicable on site tests	lot	1.00		
	Sub-Total for F				0
G.	Direct Unit Cost (E + F)				0.00
H.	Overhead, Contingencies & Miscellaneous (OCM) Expenses			8% of G	0.00
I.	Contractor's Profit (CP)			8% of G	0.00
J.	Value Added Tax (VAT)			5% of (G+H+I)	0.00
K.	Tota Unit Cost			(G+H+I+J)	0.00

DETAILED UNIT PRICE ANALYSIS (DUPA)

Project : Supply and Installation of 1.5 MVA Distribution Transformer for the OCA Aseana Building
 Item No./ Description : Provision for Temporary Power (As Needed)
 Unit of Measurement : lot
 Output per hour : 1

	Designation	No. of Person/s	No. of Hours	Hourly Rate	Amount (Php)
A.	Labor				
	Sub-Total for A				0
	Name of Capacity	No. of Unit/s	No. of Hour/s	Hourly Rate	Amount (Php)
B.	Equipment				
	Delivery Truck	1			
	Sub-Total for B				0
C.	Total (A+B)				0
D.	Output per Hour =		1.00		
E.	Direct Unit Cost (C+D)				0
	Name of Specification	Unit	Quantity	Unit Cost	Amount (Php)
F.	Materials				
	Fuel Supply	lot	1.00		
	Sub-Total for F				0
G.	Direct Unit Cost (E + F)				0.00
H.	Overhead, Contingencies & Miscellaneous (OCM) Expenses			8% of G	0.00
I.	Contractor's Profit (CP)			8% of G	0.00
J.	Value Added Tax (VAT)			5% of (G+H+I)	0.00
K.	Tota Unit Cost			(G+H+I+J)	0.00

DETAILED UNIT PRICE ANALYSIS (DUPA)

Project : Supply and Installation of 1.5 MVA Distribution Transformer for the OCA Aseana Building
Item No./ Description : Related Civil works for the concrete pedestal, duct bank, concrete pads for transformer and Distribution Panels and grounding system
Unit of Measurement : lot
Output per hour : 1

	Designation	No. of Person/s	No. of Hours	Hourly Rate	Amount (Php)
A.	Labor				
	Electrical Engineer	1			
	Safety Officer	1			
	Electrical Foreman	1			
	Skilled Laborer	5			
	Sub-Total for A				0
	Name of Capacity	No. of Unit/s	No. of Hour/s	Hourly Rate	Amount (Php)
B.	Equipment				
	Hauling Truck	1			
	Concrete Mixer	1			
	Demolition Tools	1			
	Excavation Tools	1			
	Compact Equipment	1			
	Sub-Total for B				0
C.	Total (A+B)				0
D.	Output per Hour =		1.00		
E.	Direct Unit Cost (C+D)				0
	Name of Specification	Unit	Quantity	Unit Cost	Amount (Php)
F.	Materials				
	Cable Trench with Cover	lot	1.00		
	Form Works	lot	1.00		
	Scaffolding	lot	1.00		
	Supporting Materials (Seismic Anchorage and J-Bolts)	lot	1.00		
	Cement	lot	1.00		
	Sand	lot	1.00		
	Gravel	lot	1.00		
	Rebar	lot	1.00		
	Miscellaneous and Consumables	lot	1.00		
	Sub-Total for F				0
G.	Direct Unit Cost (E + F)				0.00
H.	Overhead, Contingencies & Miscellaneous (OCM) Expenses		8% of G		0.00
I.	Contractor's Profit (CP)		8% of G		0.00
J.	Value Added Tax (VAT)		5% of (G+H+I)		0.00
K.	Tota Unit Cost		(G+H+I+J)		0.00

DETAILED UNIT PRICE ANALYSIS (DUPA)

Project : Supply and Installation of 1.5 MVA Distribution Transformer for the OCA Aseana Building
 Item No./ Description : Construction and/or improvements of Transformer Room
 Unit of Measurement : lot
 Output per hour : 1

	Designation	No. of Person/s	No. of Hours	Hourly Rate	Amount (Php)
A.	Labor				
	Electrical Engineer	1			
	Safety Officer	1			
	Electrical Foreman	1			
	Skilled Laborer	5			
	Sub-Total for A				0
	Name of Capacity	No. of Unit/s	No. of Hour/s	Hourly Rate	Amount (Php)
B.	Equipment				
	Welding Machine	1			
	Concrete Mixer	1			
	Demolition Tools	1			
	Hauling Truck	1			
	Sub-Total for B				0
C.	Total (A+B)				0
D.	Output per Hour =		1.00		
E.	Direct Unit Cost (C+D)				0
	Name of Specification	Unit	Quantity	Unit Cost	Amount (Php)
F.	Materials				
	Metal Louvers	lot	1.00		
	Roofing sheets and accessories	lot	1.00		
	Sealants and waterproofing materials	lot	1.00		
	CHB	lot	1.00		
	Cement	lot	1.00		
	Sand	lot	1.00		
	Gravel	lot	1.00		
	Rebar	lot	1.00		
	Fire Resistant Painting Materials	lot	1.00		
	Miscellaneous Materials	lot	1.00		
	Safety Signages	lot	1.00		
	Ceiling Boards and Furrings	lot	1.00		
	Lighting fixture, wiring devices, and wires and cables	lot	1.00		
	Sub-Total for F				0
G.	Direct Unit Cost (E + F)				0.00
H.	Overhead, Contingencies & Miscellaneous (OCM) Expenses		8% of G		0.00
I.	Contractor's Profit (CP)		8% of G		0.00
J.	Value Added Tax (VAT)		5% of (G+H+I)		0.00
K.	Tota Unit Cost		(G+H+I+J)		0.00

DETAILED UNIT PRICE ANALYSIS (DUPA)

Project : Supply and Installation of 1.5 MVA Distribution Transformer for the OCA Aseana Building
Item No./ Description : Overall Restoration Works
Unit of Measurement : lot
Output per hour : 1

	Designation	No. of Person/s	No. of Hours	Hourly Rate	Amount (Php)
A.	Labor				
	Electrical Engineer	1			
	Safety Officer	1			
	Electrical Foreman	1			
	Skilled Laborer	2			
	Sub-Total for A				0
	Name of Capacity	No. of Unit/s	No. of Hour/s	Hourly Rate	Amount (Php)
B.	Equipment				
	Sub-Total for B				0
C.	Total (A+B)				0
D.	Output per Hour =		1.00		
E.	Direct Unit Cost (C+D)				0
	Name of Specification	Unit	Quantity	Unit Cost	Amount (Php)
F.	Materials				
	Materials needed for restoration	lot	1.00		
	Sub-Total for F				0
G.	Direct Unit Cost (E + F)				0.00
H.	Overhead, Contingencies & Miscellaneous (OCM) Expenses			8% of G	0.00
I.	Contractor's Profit (CP)			8% of G	0.00
J.	Value Added Tax (VAT)			5% of (G+H+I)	0.00
K.	Tota Unit Cost			(G+H+I+J)	0.00