



Project No. 2024-004

Republic of the Philippines
Department of Education

NATIONAL CAPITAL REGION
SCHOOLS DIVISION OFFICE OF MUNTINLUPA CITY

Invitation to Bid for the Upgrading of Electrical System

- The **Schools Division Office-Muntinlupa City**, through the **DepEd Memorandum from Epimaco V. Densing III, Undersecretary for School Infrastructure and Facilities** with the subject **“Conduct of 2024 Early Procurement Activities (EPA) for the Various Sub-Project Components of the Basic Education Facilities Fund and Last Mile Schools Program”** intends to apply the sum of **Twenty-Two Million Two Hundred Fifty-One Thousand Nine Hundred Seventy Pesos and 63/100 (P22,251,970.63)** being the Approved Budget for the Contract (ABC) to payments under the contract for **Upgrading of Electrical System/ Project No. 2024-004**. Bids received in excess of the ABC for the lot shall be automatically rejected at bid opening.

Lot No.	Project Description	Name of School/s	ABC (PhP)	Contract Duration
1	Upgrading of Electrical System	Muntinlupa NHS	P 22,251,970.63	185 CD

- The **Schools Division Office-Muntinlupa City** now invites bids for the above Procurement Project. Completion of the Works is required **185 Calendar Days**. Bidders should have completed a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).
- Bidding will be conducted through open competitive bidding procedures using non-discretionary **“pass/fail”** criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
- Interested bidders may obtain further information from the **Schools Division Office-Muntinlupa City** and inspect the Bidding Documents at the address given below from **8:00 am – 5:00 pm**.
- A complete set of Bidding Documents may be acquired by interested Bidders on **May 8, 2024**, from the **BAC Secretariat at the Student Center for Life Skills Building (SCLS), Centennial Avenue, Laguerta, Tunasan, Muntinlupa** and the **website of the Procuring Entity** and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest guidelines issued by the GPPB, in the amount of **Twenty-Five Thousand Pesos (P25,000.00)**. The Procuring entity shall allow the bidder to present its proof of payment for the fees **in person**.



Student Center for Life Skills Bldg., Centennial Ave, Brgy. Tunasan, Muntinlupa City
8805-9935, 8805-9940
sdo.muntinlupa@gmail.com
deped-muntinlupa.com

The Schedule and Venue of the procuring activities are as follows:

Activity	Date	Venue
Posting	May 8-15, 2024	PhilGEPS Procuring Entity's Website
Issuance of Bidding Documents	May 8 - 28, 2024 (8:00 am to 5:00 pm – Regular Office Hours)	Schools Division Office Muntinlupa City or thru the official email of SDO- Muntinlupa BAC
Pre-Bid Conference	May 16, 2024, Thursday, 1:30 pm	Invitation shall be sent by the BAC Secretariat-to the email address of the bidders
Submission and Opening of Bids	May 29, 2024, Wednesday, 1:30 pm	Schools Division Office Muntinlupa City- (SCLS Bldg. 4th floor Activity Center)

6. The **Schools Division Office-Muntinlupa City** will hold a Pre-Bid Conference¹ on **May 16, 2024, Thursday, 1:30 pm** via **blended modality (face-to-face and online)**, which shall be open to prospective bidders. Prospective Bidders shall obtain the Microsoft Teams ID from the authorized personnel of SDO-Muntinlupa City Bids and Awards Committee Secretariat.
7. Bids (in printed copies) must be duly received by the BAC Secretariat through manual submission to the office address as indicated below, or thru any courier on or before **May 29, 2024, Wednesday, 1:30 pm**. Late bids shall not be accepted.
8. All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 16.
9. Bid opening (face-to-face) shall be on **May 29, 2024, Wednesday, 1:30 pm** at **Schools Division Office-Muntinlupa City (SCLS Bldg. 4th floor Activity Center), Centennial Ave., Laguerta, Tunasan, Muntinlupa**. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.

¹ May be deleted in case the ABC is less than One Million Pesos (PhP1,000,000) where the Procuring Entity may not hold a pre-bid conference.

10. The procuring entity is requiring the contractors/bidders for the procurement of the **Upgrading of Electrical System** to be a licensed contractor of the Philippine Contractors Accreditation Board (PCAB)-General Engineering B and General Building – Specialty-Electrical Works – Small B.

An Additional requirement before the sale of bidding document is to secure the Site Inspection Certificate signed by the Principal or School Physical Facilities Coordinator.

11. The **Schools Division Office-Muntinlupa City** reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised Implementing Rules and Regulations (IRR) of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.
12. For further information, please refer to:

Ms. Phoebe R. Arroyo
BAC Secretariat-Chair
SDO Muntinlupa City
Centennial Avenue, Laguerta, Tunasan, Muntinlupa City
(02) 8829-2308 loc. 120
sdomuntinlupabacsec@gmail.com

Ms. Lourdes V. Rodilla
BAC Secretariat-Member
SDO Muntinlupa City
Centennial Avenue, Laguerta, Tunasan, Muntinlupa City
(02) 8829-2308 loc. 129
sdomuntinlupabacsec@gmail.com

Mr. Joseph D. Nilo
BAC Secretariat-Member
SDO Muntinlupa City
Centennial Avenue, Laguerta, Tunasan, Muntinlupa City
(02) 8829-2308 loc. 120
sdomuntinlupabacsec@gmail.com

13. You may visit the website: <http://deped-muntinlupa.com> for the downloading of the Bidding Documents.


MADELINE ANN L. DIAZ
BAC Vice Chair
May 8, 2024



PURCHASE REQUEST
 Department of Education
 National Capital Region
 DepEd - Muntinlupa City

Entity Name: **SDO - CITY OF MUNTINLUPA**

		PR No.: PR-PB-2024-05-0001 Responsibility Center Code: 70010813008	Date: <u>5/3/2024</u>		
Stock/ Property No.	Unit	Item Description	Quantity	Unit Cost	Total Cost
	lot	UPGRADING OF ELECTRICAL SYSTEM AT MUNTINLUPA NATIONAL HIGH SCHOOL COMPLETION PERIOD: 185 CALENDAR DAYS	1	₱ 22,251,970.63	₱ 22,251,970.63
		MINIMUM REQUIRED MANPOWER:			
		Electrical Engineer, REE			
		Master Electrician			
		Electrician			
		General Foreman			
		Welder			
		Carpenter			
		Helper			
		Mason			
		Painter			
		MINIMUM REQUIRED EQUIPMENT			
		Hand Tools			
		Welding Machine			
		Clamp Tester			
		Crimping Tools			
		TEMPORARY FACILITIES OF ENGINEER			
		-Temporary Facilities			
		OTHER GENERAL REQUIREMENTS			
		-Project Billboard/Signage			
		-Construction Safety and Health			
		-Security/ Bill Deposit (Distribution Utility Application)			
		-Testing and Commissioning			
		MOBILIZATION AND DEMOBILIZATION			
		-Mobilization and Demobilization			
		SERVICE ENTRANCE CONCRETE PEDESTAL, PANEL BOARD CONCRETE PEDESTALS, ELECTRICAL DUCTBANKS, ELECTRICAL HANDHOLES			
		-Earthworks			
		*Cleaning and Grubbing			
		*Structural Excavation			
		*Backlifting of Excavated Materials			
		-Concreting Works			
		*Structural Concrete (Footing and Slab on Fill)			
		*Structural Concrete (Footing Tie Beam, Column, Suspended Slab, Girder / Beam)			
		-Rebar Works			
		*Reinforcing Steel Bar, Grade 40			
		-Formworks			
		*Installation and Removal of Formworks			
		-Finishing Works			
		*Plain Cement Plaster Finish			
		-Painting Works			
		*Masonry Painting			
		ELECTRICAL WORKS			
		-Panel Board and Circuit Protections			
		-Wires and Wiring Devices			
		-Conduit Works, Boxes & Fittings			
		SEE THE ATTACHED PROGRAM OF WORKS			
		TOTAL			₱ 22,251,970.63

Purpose: UPGRADING OF ELECTRICAL SYSTEM AT MUNTINLUPA NATIONAL HIGH SCHOOL
 Source of Fund: DepEd Memorandum: Conduct of 2024 Early Procurement Activities (EPA) for the Various Sub-Project Components of the Basic Education Facilities Fund and Last Mile Schools Program

Requested by: 
 Signature: _____
 Printed Name: **RENANTE L. TEJADA**
 Designation: **Engineer III**

Approved by: 
 Signature: _____
 Printed Name: **VIOLETA M. GONZALES CESO VI**
 Designation: **Assistant Schools Division Superintendent
 Officer-In-Charge
 Office of the Schools Division Superintendent**

for Public Bidding

PROGRAM OF WORKS

BILL OF QUANTITIES

ELEC 2024 - NCR - MUNTINLUPA CITY - 001

School : Muntinlupa NHS	Date:
School I.D. : 305468	Budget Allocation: 22,251,970.63
Region : National Capital Region (NCR)	Engineering and Administrative Overhead: 0.00
Division : Muntinlupa City	Approved Budget for the Contract: 22,251,970.63
Project Title : <b style="text-align: center;">Upgrading of Electrical System	Completion Period:
	Minimum Required Manpower:
	Electrical Engineer, REE Master Electrician Electrician
	General Foreman Welder Carpenter
Location : Poblacion, Muntinlupa City	Helper Mason Painter
	Minimum Required Equipment:
	Hand Tools Welding Machine
	Clamp Tester Crimping Tools

Item No.	Description	% of Total	Unit	Quantity	Direct Cost		Adjusted Unit Cost (8) / (5)	Adjusted Total Cost (9)
					Total Cost (6)	Unit Cost (7) (6) / (5)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
A	Temporary Facilities of Engineer							
A.1	Temporary Facilities		Month	6.18				-
B	Other General Requirements							
SPL.1	Project Billboard / Signage		Each	1.00				-
SPL.2	Construction Safety and Health		Month	6.18				-
B.2	Security/ Bill Deposit (Distribution Utility Application)		Ls	1.00				-
B.3	Testing and Commissioning		Ls	1.00				-
C	Mobilization and Demobilization							
	Mobilization and Demobilization		Ls	1.00				-
D	Service Entrance Concrete Pedestal, Panel Board Concrete Pedestals, Electrical DuctBanks, Electrical Handholes							
1	Earthworks							
1 (a)	Clearing and Grubbing		sq.m	312.19				-
1 (b)	Structural Excavation		cu m	207.29				-
1 (c)	Backfilling of Excavated Materials		cu m	128.49				-
2	Concreting Works (3000 psi)							
2 (b)	Structural Concrete (Footing and Slab on Fill)		cu m	3.45				-
2 (c)	Structural Concrete (Footing Tie Beam, Column, Suspended Slab, Girder/ Beam)		cu m	81.08				-
3	Rebar Works							
3 (a)	Reinforcing Steel Bar, Grade 40		kg	1,285.16				-
4	Formworks							
4 (a)	Installation and Removal of Formworks		sq.m	69.67				-
	Finishing Works							
5 (d)	Plain Cement Plaster Finish		sq.m	35.40				-
	Painting Works							
13 (a)	Masonry Painting		sq.m	35.40				-
F	Electrical Works							
E 10 (j)	Panel Board and Circuit Protections		Ls	1.00				-
E 10 (i)	Wires and Wiring Devices		Ls	1.00				-
E 10 (k)	Conduit Works, Boxes & Fittings		Ls	1.00				-
		100.00%					Total Construction Cost	

Prepared by:

Contractor's Representative

PROGRAM OF WORKS

DETAILED COST ESTIMATE

(TOTAL CONSTRUCTION COST/ ABC)
ELEC 2024 - NCR - MUNTINLUPA CITY - 001

PROJECT: **Upgrading of Electrical System**
 SCHOOL: **Muntinlupa NHS**
 LOCATION: **Poblacion, Muntinlupa City**
 OWNER: **DEPARTMENT OF EDUCATION**

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CONTRACT DURATION : **185 CD**

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	ESTIMATED DIRECT COST	MARK-UPS IN PERCENT		TOTAL MARK-UP		VAT (5%)	TOTAL INDIRECT COST	ADJUSTED TOTAL COST	ADJUSTED UNIT COST
					OCM	PROFIT	%	VALUE				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) (6) + (7)	(9) (5) x (8)	(10) 5% [(5) + (9)]	(11) (9) + (10)	(12) (5) + (11)	(13) (12) / (3)
4 (a)	Installation and Removal of Formworks	69.67	sq.m	-			-	-	-	-	-	-
	Finishing Works											
5 (d)	Plain Cement Plaster Finish	35.40	sq.m	-			-	-	-	-	-	-
	Painting Works											
13 (a)	Masonry Painting	35.40	sq.m	-			-	-	-	-	-	-
F	Electrical Works											
E 10 (j)	Panel Board and Circuit Protections	1.00	Ls	-			-	-	-	-	-	-
E 10 (i)	Wires and Wiring Devices	1.00	Ls	-			-	-	-	-	-	-
E 10 (k)	Conduit Works, Boxes & Fittings	1.00	Ls	-			-	-	-	-	-	-
	TOTAL CONSTRUCTION COST										-	

Prepared by:

Contractor's Representative



DEPARTMENT OF EDUCATION
EDUCATION FACILITIES DIVISION
 DepEd Complex, Meralco Avenue, Pasig City



DETAILED UNIT PRICE ANALYSIS

Project : Upgrading of Electrical System

Location: Muntinlupa NHS, Muntinlupa City

Item: 1 (a)

Description: Clearing and Grubbing

Quantity: 312.19
Output per hour: 500.00
Unit: sq.m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount	
	Construction Foreman	1.00	0.62			
	Unskilled Laborer	2.00	0.62			
Sub-Total (Labor)					Php	-
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount	
	Dump Truck (12 cu.yd.)	2	0.62			
	Payloader (1.5 cu.m.)	1	0.62			
	Bulldozer (155 Hp)	1	0.62			
Sub-Total (Equipment)					Php	-
C.		Unit	Quantity	Unit Cost	Amount	
Sub-Total (Materials)						Php
D.	Direct Cost (A+B+C)				Php	
E.	Overhead,Contingencies and Miscellaneous (OCM)				0% of D.	
F.	Contractor's Profit				0% of D.	
G.	Value Added Tax (VAT)				5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php	
I.	Adjusted Unit Cost (H/Quantity)				Php	



DETAILED UNIT PRICE ANALYSIS

Project : Upgrading of Electrical System

Location: Muntinlupa NHS, Muntinlupa City

Item: 1 (b)

Description: Structural Excavation

Quantity: 207.29
Output per hour: 20.00
Unit: cu m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1.00	10.36		
	Unskilled Laborer	3.00	10.36		
Sub-Total (Labor)					Php -
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Backhoe (0.80 cu.m.)	1	10.36		
	Dump Truck (12 cu.yd.)	2	10.36		
Sub-Total (Equipment)					Php -
C.		Unit	Quantity	Unit Cost	Amount
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)				0% of D.
F.	Contractor's Profit				0% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php



DEPARTMENT OF EDUCATION
EDUCATION FACILITIES DIVISION
 DepEd Complex, Meralco Avenue, Pasig City



DETAILED UNIT PRICE ANALYSIS

Project : Upgrading of Electrical System

Location: Muntinlupa NHS, Muntinlupa City

Item: 1 (c)

Description: Backfilling of Excavated Materials

Quantity: 128.49
Output per hour: 9.84
Unit: cu m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1.00	13.06		
	Unskilled Laborer	3.00	13.06		
Sub-Total (Labor)					Php -
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Plate Compactor (5hp)	1	13.06		
	Backhoe (0.80 cu.m.)	2	13.06		
Sub-Total (Equipment)					Php -
C.		Unit	Quantity	Unit Cost	Amount
Sub-Total (Materials)					
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)				0% of D.
F.	Contractor's Profit				0% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php



DETAILED UNIT PRICE ANALYSIS

Project : Upgrading of Electrical System

Location: Muntinlupa NHS, Muntinlupa City

Item: 2 (b)

Description: Structural Concrete (Footing and Slab on Fill)

Quantity: 3.45
Output per hour: 0.36
Unit: cu m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1.00	9.65		
	Skilled Laborer	1.00	9.65		
	Unskilled Laborer	4.00	9.65		
Sub-Total (Labor)					Php -
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	One - bagger Mixer	1	9.65		
Sub-Total (Equipment)					Php -
C.		Unit	Quantity	Unit Cost	Amount
	Portland Cement	cu.m	31.01		
	Washed Sand	bag	1.72		
	Crushed Gravel 3/4"	cu.m	3.45		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)				0% of D.
F.	Contractor's Profit				0% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php



DETAILED UNIT PRICE ANALYSIS

Project : Upgrading of Electrical System

Location: Muntinlupa NHS, Muntinlupa City

Item: 2 (c)

Description: Structural Concrete (Footing Tie Beam, Column, Suspended Slab, Girder/ Beam)

Quantity: 81.08
Output per hour: 0.27
Unit: cu m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1.00	300.30		
	Skilled Laborer	1.00	300.30		
	Unskilled Laborer	4.00	300.30		
Sub-Total (Labor)					Php -
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	One - bagger Mixer	1	300.30		
Sub-Total (Equipment)					Php -
C.		Unit	Quantity	Unit Cost	Amount
	Portland Cement	cu.m	729.73		
	Washed Sand	bag	40.54		
	Crushed Gravel 3/4"	cu.m	81.08		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)				0% of D.
F.	Contractor's Profit				0% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php



DETAILED UNIT PRICE ANALYSIS

Project : Upgrading of Electrical System

Location: Muntinlupa NHS, Muntinlupa City

Item: 3 (a)

Description: Reinforcing Steel Bar, Grade 40

Quantity: 1285.16
Output per hour: 143.44
Unit: kg

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1.00	8.96		
	Skilled Laborer	3.00	8.96		
	Unskilled Laborer	12.00	8.96		
Sub-Total (Labor)					Php -
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Bar Cutter	1	8.96		
	Bar Bender	1	8.96		
Sub-Total (Equipment)					Php -
C.		Unit	Quantity	Unit Cost	Amount
	#16 G.I. Tie Wire	cu.m	25.70		
	Deformed Round Bars, Grade 40	kg	1,285.16		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)				0% of D.
F.	Contractor's Profit				0% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php



DETAILED UNIT PRICE ANALYSIS

Project : Upgrading of Electrical System

Location: Muntinlupa NHS, Muntinlupa City

Item: 4 (a)

Description: Installation and Removal of Formworks

Quantity: 69.67
Output per hour: 3.24
Unit: sq.m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Installation				
	Construction Foreman	1.00	21.50		
	Skilled Laborer	2.00	21.50		
	Unskilled Laborer	4.00	21.50		
	Stripping				
	Construction Foreman	1.00	8.82		
	Unskilled Laborer	6.00	8.82		
Sub-Total (Labor)					Php -
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php -
C.		Unit	Quantity	Unit Cost	Amount
	Coco Lumber	bd. ft	500.90		
	Plywood Ordinary, 1/4" x 4' x 8'	pc	24.17		
	CWN, Assorted	kg	14.63		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)				0% of D.
F.	Contractor's Profit				0% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php



DETAILED UNIT PRICE ANALYSIS

Project : Upgrading of Electrical System

Location: Muntinlupa NHS, Muntinlupa City

Item: 5 (d)

Description: Plain Cement Plaster Finish

Quantity: 35.40
Output per hour: 7.13
Unit: sq.m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1.00	4.97		
	Skilled Laborer	2.00	4.97		
	Unskilled Laborer	4.00	4.97		
Sub-Total (Labor)					Php -
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php -
C.		Unit	Quantity	Unit Cost	Amount
	Portland Cement	cu.m	11.68		
	Washed Sand	bag	0.96		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)			Php	
E.	Overhead,Contingencies and Miscellaneous (OCM)			0% of D.	
F.	Contractor's Profit			0% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)			Php	
I.	Adjusted Unit Cost (H/Quantity)			Php	



DETAILED UNIT PRICE ANALYSIS

Project : Upgrading of Electrical System

Location: Muntinlupa NHS, Muntinlupa City

Item: 13 (a)

Description: **Masonry Painting**

Quantity: 35.40
Output per hour: 2.10
Unit: sq.m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1.00	16.86		
	Skilled Laborer	2.00	16.86		
	Unskilled Laborer	1.00	16.86		
Sub-Total (Labor)					Php -
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php -
C.		Unit	Quantity	Unit Cost	Amount
	Neutralizer	cu.m	0.71		
	Latex, Flat	bag	2.83		
	Masonry Putty	cu.m	1.77		
	Latex, Semi Gloss	cu.m	2.83		
	Acri Color	pc	0.18		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)				0% of D.
F.	Contractor's Profit				0% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php



DETAILED UNIT PRICE ANALYSIS

Project : Upgrading of Electrical System

Location: Muntinlupa NHS, Muntinlupa City

Item: E 10 (j)

Description: Panel Board and Circuit Protections

Quantity: 1.00
Output: 1.00
Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	526.58		
	Skilled Laborer	1	526.58		
	Unskilled Laborer	1	526.58		
Sub-Total (Labor)					Php -
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Electric Drill	1	526.58		
Sub-Total (Equipment)					Php -
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	MSB [SHS] (NEMA - 3R with Ground Terminal bus/Lugs) in NEMA - 3R Enclosure including BusBar & Accessories & Mechanical Lugs	set	1.00		
	DPB2 [SHS] (NEMA - 1 with Ground Terminal bus/Lugs) in NEMA - 1 Enclosure including BusBar & Accessories & Mechanical Lugs	set	1.00		
	DPB3 [SHS] (NEMA - 1 with Ground Terminal bus/Lugs) in NEMA - 1 Enclosure including BusBar & Accessories & Mechanical Lugs	set	1.00		
	DPB6 [SHS] (NEMA - 1 with Ground Terminal bus/Lugs) in NEMA - 1 Enclosure including BusBar & Accessories & Mechanical Lugs	set	1.00		
	MSB [JHS] (NEMA - 3R with Ground Terminal bus/Lugs) in NEMA - 3R Enclosure including BusBar & Accessories & Mechanical Lugs	set	1.00		
	MDPB1 [JHS] (NEMA - 3R with Ground Terminal bus/Lugs) in NEMA - 3R Enclosure including BusBar & Accessories & Mechanical Lugs	set	1.00		
	MDPB2 [JHS] (NEMA - 3R with Ground Terminal bus/Lugs) in NEMA - 3R Enclosure including BusBar & Accessories & Mechanical Lugs	set	1.00		
	DPB7 [JHS] (NEMA - 1 with Ground Terminal bus/Lugs) in NEMA - 1 Enclosure including BusBar & Accessories & Mechanical Lugs	set	1.00		
	DPB11 [JHS] (NEMA - 1 with Ground Terminal bus/Lugs) in NEMA - 1 Enclosure including BusBar & Accessories & Mechanical Lugs	set	1.00		
	DPB13 [JHS] (NEMA - 1 with Ground Terminal bus/Lugs) in NEMA - 1 Enclosure including BusBar & Accessories & Mechanical Lugs	set	1.00		
	Busbar Gutter (NEMA 3R), 1600A, 3p, 3ph, 230V with mechanical lugs & complete accessories	set	1.00		
	Busbar Gutter (NEMA 3R), 1000A, 3p, 3ph, 230V with mechanical lugs & complete accessories	set	1.00		
	DPB9 [JHS] (NEMA - 1 with Ground Terminal bus/Lugs) in NEMA - 1 Enclosure including BusBar & Accessories & Mechanical Lugs	set	1.00		
	1600A, 3P Molded Case Circuit Breaker	set	1.00		
	1000A, 3P Molded Case Circuit Breaker	set	1.00		
	600A, 3P Molded Case Circuit Breaker	set	4.00		
	400A, 3P Molded Case Circuit Breaker	set	1.00		
	200A, 3P Molded Case Circuit Breaker	set	4.00		
	160A, 3P Molded Case Circuit Breaker	set	9.00		



DEPARTMENT OF EDUCATION
EDUCATION FACILITIES DIVISION
 DepEd Complex, Meralco Avenue, Pasig City



DETAILED UNIT PRICE ANALYSIS

Project : Upgrading of Electrical System

Location: Muntinlupa NHS, Muntinlupa City

	125A, 3P Molded Case Circuit Breaker	set	3.00	
	250A, 2P Molded Case Circuit Breaker	set	1.00	
	225A, 2P Molded Case Circuit Breaker	set	4.00	
	200A, 2P Molded Case Circuit Breaker	set	2.00	
	160A, 2P Molded Case Circuit Breaker	set	1.00	
	100A, 2P Molded Case Circuit Breaker	set	1.00	
	80A, 2P Molded Case Circuit Breaker	set	2.00	
	75A, 2P Molded Case Circuit Breaker	set	1.00	
	Grounding Rod, 3.0m x 25mm dia.	pc	11.00	
Sub-Total (Materials)				Php
D.	Direct Cost (A+B+C)			Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			0% of D.
F.	Contractor's Profit			0% of D.
G.	Value Added Tax (VAT)			5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)			Php
I.	Adjusted Unit Cost (H/Quantity)			Php



DETAILED UNIT PRICE ANALYSIS

Project : Upgrading of Electrical System

Location: Muntinlupa NHS, Muntinlupa City

Item: E 10 (i)

Description: Wires and Wiring Devices

Quantity: 1.00
Output: 1.00
Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	586.92		
	Skilled Laborer	2	586.92		
	Unskilled Laborer	1	586.92		
Sub-Total (Labor)					Php -
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Electric Drill	1	586.92		
	Cable Puller/Tensioner	1	586.92		
Sub-Total (Equipment)					Php -
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	14 mm ² , Wire, Copper, Insulated, Stranded 600 Volts, THHN/THWN-2	m	301.20		
	22 mm ² , Wire, Copper, Insulated, Stranded 600 Volts, THHN/THWN-2	m	722.74		
	30 mm ² , Wire, Copper, Insulated, Stranded 600 Volts, THHN/THWN-2	m	1,837.80		
	38 mm ² , Wire, Copper, Insulated, Stranded 600 Volts, THHN/THWN-2	m	602.41		
	50 mm ² , Wire, Copper, Insulated, Stranded 600 Volts, THHN/THWN-2	m	759.64		
	80 mm ² , Wire, Copper, Insulated, Stranded 600 Volts, THHN/THWN-2	m	2,143.22		
	100 mm ² , Wire, Copper, Insulated, Stranded 600 Volts, THHN/THWN-2	m	1,083.06		
	125 mm ² , Wire, Copper, Insulated, Stranded 600 Volts, THHN/THWN-2	m	1,718.25		
	150 mm ² , Wire, Copper, Insulated, Stranded 600 Volts, THHN/THWN-2	m	1,561.36		
	175 mm ² , Wire, Copper, Insulated, Stranded 600 Volts, THHN/THWN-2	m	868.33		
	200 mm ² , Wire, Copper, Insulated, Stranded 600 Volts, THHN/THWN-2	m	1,035.62		
	250 mm ² , Wire, Copper, Insulated, Stranded 600 Volts, THHN/THWN-2	m	321.30		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)				0% of D.
F.	Contractor's Profit				0% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php



DETAILED UNIT PRICE ANALYSIS

Project : Upgrading of Electrical System

Location: Muntinlupa NHS, Muntinlupa City

Item: E 10 (k)

Description: Conduit Works, Boxes & Fittings

Quantity: 1.00
Output: 1.00
Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	430.92		
	Skilled Laborer	2	430.92		
	Unskilled Laborer	1	430.92		
Sub-Total (Labor)					Php -
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Electric Drill	1	430.92		
	Electric Grinder	1	430.92		
Sub-Total (Equipment)					Php -
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	80 mm Ø x 3m, Socket Type PVC	pc	130.00		
	50 mm Ø x 3m, Socket Type PVC	pc	1,015.00		
	40 mm Ø x 3m, Socket Type PVC	pc	116.00		
	80 mm Ø, PVC Adapter	pc	2.00		
	50 mm Ø, PVC Adapter	pc	31.00		
	40 mm Ø, PVC Adapter	pc	13.00		
	40 mm Ø, PVC Locknut & Bushing	pc	13.00		
	50 mm Ø, PVC Locknut & Bushing	pc	154.00		
	80 mm Ø, PVC Locknut & Bushing	pc	6.00		
	100 mm Ø x 3m, Rigid Steel Conduit (RSC)	pc	40.00		
	Entrance Cap 100 mm Ø (Diecast Aluminum)	pc	10.00		
	100 mm Ø, RSC Locknut & Bushing	pc	10.00		
	100 mm Ø, RSC Coupling	pc	40.00		



DETAILED UNIT PRICE ANALYSIS

Project : Upgrading of Electrical System

Location: Muntinlupa NHS, Muntinlupa City

	100 mm Ø, U-bolt with nut	pc	80.00		
	Steel Angle Bar 6mm x 3" x 3" x 6m	pc	7.00		
	Anchor bolt	pc	80.00		
	Electrical Warning Tape, RED "DANGER" Color	roll	4.00		
	Duct Bank Spacer	pc	558.00		
	Duct seal	pack	43.00		
	5/8" Ø Oval Eyebolt galvanized	pc	2.00		
	5/8" Ø Machine bolt galvanized fully threaded w/ nut and washers	pc	4.00		
Sub-Total (Materials)				Php	-
D.	Direct Cost (A+B+C)			Php	
E.	Overhead,Contingencies and Miscellaneous (OCM)			0% of D.	
F.	Contractor's Profit			0% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)			Php	
I.	Adjusted Unit Cost (H/Quantity)			Php	



DETAILED UNIT PRICE ANALYSIS

Project : Upgrading of Electrical System

Location: Muntinlupa NHS, Muntinlupa City

Item: A.1

Description: Temporary Facilities

Quantity: 6.18
Output : 1.00
Unit: Month

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
Sub-Total (Labor)					Php -
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php -
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Rental of Office/ Storage House (including light and water)	Month	6.18		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (Ocm)				0% of D.
F.	Contractor's Profit				0% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php



DEPARTMENT OF EDUCATION
EDUCATION FACILITIES DIVISION
 DepEd Complex, Meralco Avenue, Pasig City



DETAILED UNIT PRICE ANALYSIS

Project : Upgrading of Electrical System

Location: Muntinlupa NHS, Muntinlupa City

Item: SPL.1

Description: Project Billboard

Quantity: 1.00
Output: 1.00
Unit: Each

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount	
	Construction Foreman	1	4.00			
	Skilled Laborer	1	4.00			
	Unskilled Laborer	1	4.00			
Sub-Total (Labor)					Php	-
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount	
Sub-Total (Equipment)					Php	-
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount	
	8' x 8' Tarpaulin, 2 sets	sq ft	64.00			
	Good Lumber (Frames)	bd.ft	48.00			
	Assorted CW Nails	kg	1.00			
Sub-Total (Materials)					Php	
D.	Direct Cost (A+B+C)			Php		
E.	Overhead,Contingencies and Miscellaneous (Ocm)			0% of D.		
F.	Contractor's Profit			0% of D.		
G.	Value Added Tax (VAT)			5% of (D+E+F)		
H.	Adjusted Total Cost (D+E+F+G)			Php		
I.	Adjusted Unit Cost (H/Quantity)			Php		



DEPARTMENT OF EDUCATION
EDUCATION FACILITIES DIVISION
 DepEd Complex, Meralco Avenue, Pasig City



DETAILED UNIT PRICE ANALYSIS

Project : Upgrading of Electrical System

Location: Muntinlupa NHS, Muntinlupa City

Item: SPL.2

Description: Construction Safety and Health

Quantity: 6.18
Output : 1.00
Unit: Month

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount	
	Safety Officer	1	1482.71			
	First Aider	1	1482.71			
Sub-Total (Labor)					Php	-
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount	
Sub-Total (Equipment)					Php	-
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount	
	First Aid Kit	Ls	1			
	Personal Protective equipment (PPE)					
	Safety Helmet	man - days	10			
	Safety Shoes	man - days	10			
	Safety Gloves	man - days	25			
	Signages and Barricades					
	PPE Signage (4' x 8')	set	1			
	Safety First (4' x 4')	set	1			
	Warning Signs (2' x 3')	set	1			
	Caution Tape, 100 ft	roll	1			
Sub-Total (Materials)					Php	
D.	Direct Cost (A+B+C)				Php	
E.	Overhead,Contingencies and Miscellaneous (Ocm)			0% of D.		
F.	Contractor's Profit			0% of D.		
G.	Value Added Tax (VAT)			5% of (D+E+F)		
H.	Adjusted Total Cost (D+E+F+G)				Php	
I.	Adjusted Unit Cost (H/Quantity)				Php	



DETAILED UNIT PRICE ANALYSIS

Project : Upgrading of Electrical System

Location: Muntinlupa NHS, Muntinlupa City

Item: B.2

Description: Security/ Bill Deposit (Distribution Utility Application)

Quantity: 1.00
Output: 1.00
Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
Sub-Total (Labor)					Php -
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php -
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Security/ Bill Deposit	Ls	1.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)				0% of D.
F.	Contractor's Profit				0% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php



DETAILED UNIT PRICE ANALYSIS

Project : Upgrading of Electrical System

Location: Muntinlupa NHS, Muntinlupa City

Item: B.3

Description: Testing and Commissioning

Quantity: 1.00
Output: 1.00
Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	8.00		
	Skilled Laborer	1	8.00		
	Unskilled Laborer	1	8.00		
Sub-Total (Labor)					Php -
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Megger Tester (Certified and Calibrated)	1	8.00		
Sub-Total (Equipment)					Php -
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)				0% of D.
F.	Contractor's Profit				0% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php



DEPARTMENT OF EDUCATION
EDUCATION FACILITIES DIVISION
 DepEd Complex, Meralco Avenue, Pasig City



DETAILED UNIT PRICE ANALYSIS

Project : Upgrading of Electrical System

Location: Muntinlupa NHS, Muntinlupa City

Item: C.1

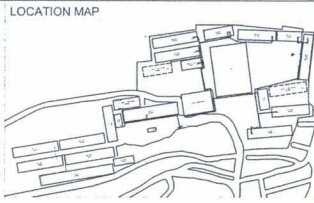
Description: Mobilization and Demobilization

Quantity: 1.00

Output : 1.00

Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
Sub-Total (Labor)					Php -
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Self Loading Truck and Accessories	1	24		
Sub-Total (Equipment)					Php -
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)			Php	
E.	Overhead,Contingencies and Miscellaneous (Ocm)			0% of D.	
F.	Contractor's Profit			0% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)			Php	
I.	Adjusted Unit Cost (H/Quantity)			Php	



- GENERAL NOTES:
- ALL ELECTRICAL WORKS SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE PHILIPPINES ELECTRICAL CODE (PEC), EXISTING APPLICABLE LOCAL ORDINANCES, RULES AND REGULATIONS OF THE LOCAL GOVERNMENT AND LOCAL POWER COMPANY.
 - POWER SUPPLY SHALL BE 230V, 3Ø, 3P, 3 WIRES + GROUNDING, 60 HERTZ.
 - THE CONTRACTOR SHALL COORDINATE WITH THE LOCAL POWER COMPANY ON THE FINAL LOCATION OF SERVICE ENTRANCE AND/OR SERVICE DROP ROUTE.
 - PULL OR JUNCTION BOXES SHALL BE INSTALLED AT CONVENIENT AND INCONSPICUOUS LOCATION ALTHOUGH SUCH BOXES ARE NOT SHOWN ON THE PLANS.
 - ADEQUATE AND EFFECTIVE GROUNDING SHALL BE PROVIDED IN ACCORDANCE WITH THE PEC.
 - ALL ELECTRICAL WORKS HERE UNDER SHALL BE DONE UNDER THE DIRECT SUPERVISION OF A REGISTERED ELECTRICAL ENGINEER OR MASTER ELECTRICIAN.
 - MATERIALS AND EQUIPMENT TO BE USED SHALL BE APPROVED TYPE FOR BOTH LOCATION & PURPOSE.
 - MOUNTING HEIGHT OF WIRING DEVICES SHALL BE AS FOLLOWS:

a. LIGHT SWITCH	- 1.20 M
b. CONVENIENCE OUTLET	- 0.30 M
c. PANEL BOARD	- 1.80 M
d. FIRE ALARM STATION OUTLET	- 1.50 M
e. PUSH BUTTON OUTLET	- 1.20 M
f. FIRE ALARM & VIBRATING BELL	- 0.30 M

SITE ELECTRICAL LAY OUT
SCALE: _____ NTS



 REPUBLIC OF THE PHILIPPINES DepEd DEPARTMENT OF EDUCATION EDUCATION FACILITIES DIVISION 1000 BRUNNEN DRIVE, PASAY CITY, PHILIPPINES	DRAWN BY: ERWIN P. PLUMA ELECTRICAL ENGINEER	CHECKED BY: SIGMUND SANCHEZ PROFESSIONAL ELECTRICAL ENGINEER	RECOMMENDING APPROVAL: MA. REGAEL A. OLARTE Education Program Supervisor OIC Chief, S600	APPROVED BY: VIOLETA M. GONZALES Assistant Schools Division Superintendent OIC office of the SDE	PROJECT TITLE: MUNTINLUPA NATIONAL HIGH SCHOOL (JUNIOR HIGH SCHOOL) ELECTRICAL PLAN MUNTINLUPA CITY	PROJECT CODE: 	OWNER: DEPARTMENT OF EDUCATION DepED	SHEET NO: E - 1 5
	SHEET CONTENTS: AS SHOWN							

NOTES: 1. ALL ELECTRICAL WORKS SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE PHILIPPINES ELECTRICAL CODE (PEC), EXISTING APPLICABLE LOCAL ORDINANCES, RULES AND REGULATIONS OF THE LOCAL GOVERNMENT AND LOCAL POWER COMPANY.

SINGLE LINE DIAGRAM



NTS

PLACES GOVERNMENT (Normal loads)
 TOTAL KVA = 100,800 kVA (200 x 1.5)
 TOTAL KVA = 254,400 kVA
 USE 3 x 180 KVA Transformers

PLACES GOVERNMENT (Emergency loads)
 TOTAL KVA = 60,000 kVA (200 x 1.5)
 TOTAL KVA = 151,200 kVA
 USE 3 x 180 KVA Transformers

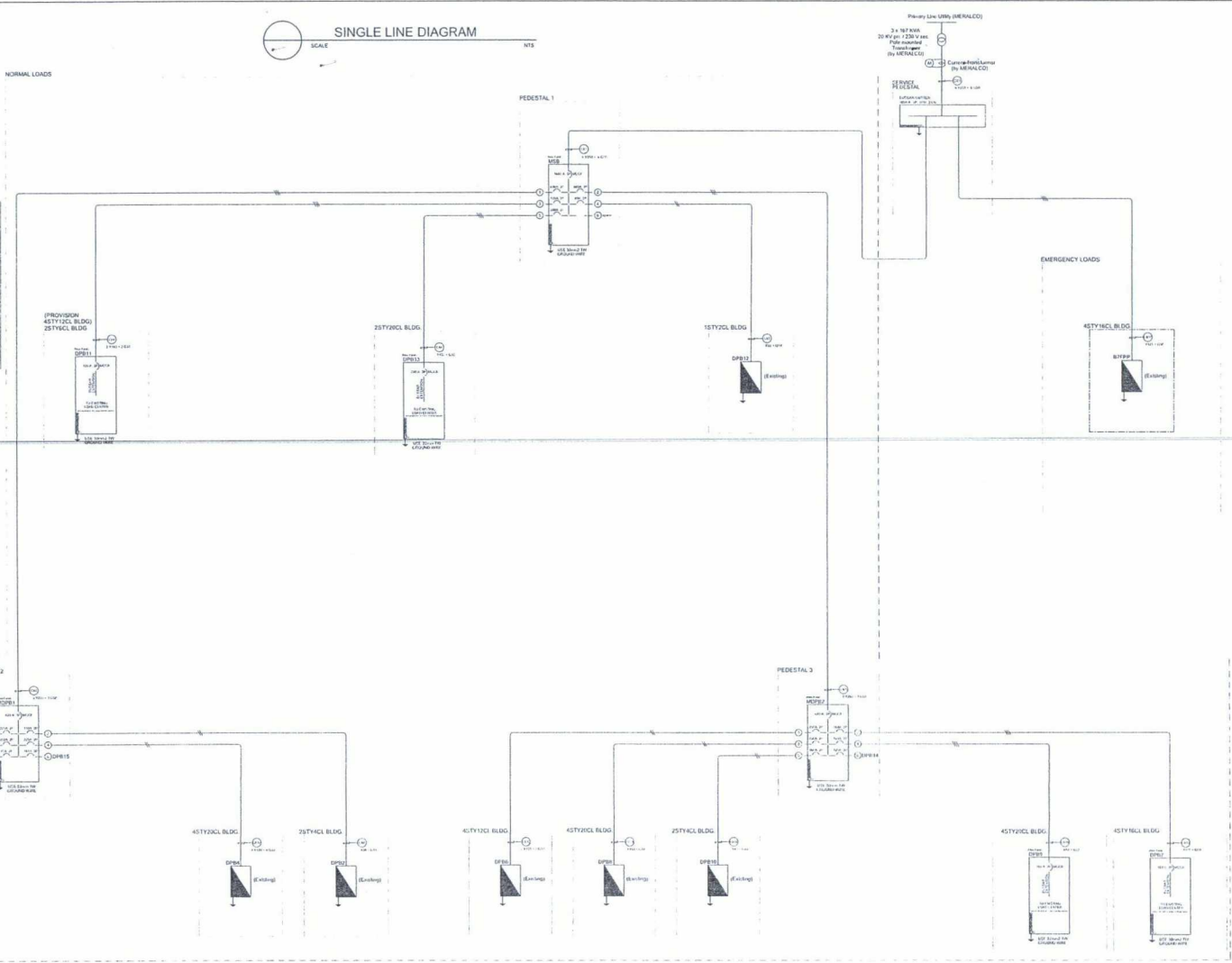
Normal loads - Emergency loads
 Transformer Size 3 x 180 KVA Transformers

CABLE & CONDUIT SCHEDULE

CABLE / CONDUIT NUMBER	TYPE / SIZE	FROM	TO	DISTANCE (m)	CONDUIT TYPE	VOLTAGE	SIZE	TYPE	REMARKS
CB1	230	TRNSFR	MB1	30	4" PVC	15KV	100mm	TR	15KV TR
CB2	230	MB1	MB2	50	4" PVC	15KV	100mm	TR	15KV TR
CB3	230	MB2	MB3	100	4" PVC	15KV	100mm	TR	15KV TR
CB4	230	MB3	MB4	150	4" PVC	15KV	100mm	TR	15KV TR
CB5	230	MB4	MB5	200	4" PVC	15KV	100mm	TR	15KV TR
CB6	230	MB5	MB6	250	4" PVC	15KV	100mm	TR	15KV TR
CB7	230	MB6	MB7	300	4" PVC	15KV	100mm	TR	15KV TR
CB8	230	MB7	MB8	350	4" PVC	15KV	100mm	TR	15KV TR
CB9	230	MB8	MB9	400	4" PVC	15KV	100mm	TR	15KV TR
CB10	230	MB9	MB10	450	4" PVC	15KV	100mm	TR	15KV TR
CB11	230	MB10	MB11	500	4" PVC	15KV	100mm	TR	15KV TR
CB12	230	MB11	MB12	550	4" PVC	15KV	100mm	TR	15KV TR
CB13	230	MB12	MB13	600	4" PVC	15KV	100mm	TR	15KV TR
CB14	230	MB13	MB14	650	4" PVC	15KV	100mm	TR	15KV TR
CB15	230	MB14	MB15	700	4" PVC	15KV	100mm	TR	15KV TR
CB16	230	MB15	MB16	750	4" PVC	15KV	100mm	TR	15KV TR
CB17	230	MB16	MB17	800	4" PVC	15KV	100mm </tr		

POWER WIRING LEGEND

THREE PHASE	SINGLE PHASE
1.2 mm ² - 1.2 mm ² (1.2 mm ² - 1.2 mm ²)	1.2 mm ² - 1.2 mm ² (1.2 mm ² - 1.2 mm ²)
1.5 mm ² - 1.5 mm ² (1.5 mm ² - 1.5 mm ²)	1.5 mm ² - 1.5 mm ² (1.5 mm ² - 1.5 mm ²)
2.0 mm ² - 2.0 mm ² (2.0 mm ² - 2.0 mm ²)	2.0 mm ² - 2.0 mm ² (2.0 mm ² - 2.0 mm ²)
2.5 mm ² - 2.5 mm ² (2.5 mm ² - 2.5 mm ²)	2.5 mm ² - 2.5 mm ² (2.5 mm ² - 2.5 mm ²)
3.0 mm ² - 3.0 mm ² (3.0 mm ² - 3.0 mm ²)	3.0 mm ² - 3.0 mm ² (3.0 mm ² - 3.0 mm ²)
3.5 mm ² - 3.5 mm ² (3.5 mm ² - 3.5 mm ²)	3.5 mm ² - 3.5 mm ² (3.5 mm ² - 3.5 mm ²)
4.0 mm ² - 4.0 mm ² (4.0 mm ² - 4.0 mm ²)	4.0 mm ² - 4.0 mm ² (4.0 mm ² - 4.0 mm ²)
4.5 mm ² - 4.5 mm ² (4.5 mm ² - 4.5 mm ²)	4.5 mm ² - 4.5 mm ² (4.5 mm ² - 4.5 mm ²)
5.0 mm ² - 5.0 mm ² (5.0 mm ² - 5.0 mm ²)	5.0 mm ² - 5.0 mm ² (5.0 mm ² - 5.0 mm ²)
5.5 mm ² - 5.5 mm ² (5.5 mm ² - 5.5 mm ²)	5.5 mm ² - 5.5 mm ² (5.5 mm ² - 5.5 mm ²)
6.0 mm ² - 6.0 mm ² (6.0 mm ² - 6.0 mm ²)	6.0 mm ² - 6.0 mm ² (6.0 mm ² - 6.0 mm ²)
6.5 mm ² - 6.5 mm ² (6.5 mm ² - 6.5 mm ²)	6.5 mm ² - 6.5 mm ² (6.5 mm ² - 6.5 mm ²)
7.0 mm ² - 7.0 mm ² (7.0 mm ² - 7.0 mm ²)	7.0 mm ² - 7.0 mm ² (7.0 mm ² - 7.0 mm ²)
7.5 mm ² - 7.5 mm ² (7.5 mm ² - 7.5 mm ²)	7.5 mm ² - 7.5 mm ² (7.5 mm ² - 7.5 mm ²)
8.0 mm ² - 8.0 mm ² (8.0 mm ² - 8.0 mm ²)	8.0 mm ² - 8.0 mm ² (8.0 mm ² - 8.0 mm ²)
8.5 mm ² - 8.5 mm ² (8.5 mm ² - 8.5 mm ²)	8.5 mm ² - 8.5 mm ² (8.5 mm ² - 8.5 mm ²)
9.0 mm ² - 9.0 mm ² (9.0 mm ² - 9.0 mm ²)	9.0 mm ² - 9.0 mm ² (9.0 mm ² - 9.0 mm ²)
9.5 mm ² - 9.5 mm ² (9.5 mm ² - 9.5 mm ²)	9.5 mm ² - 9.5 mm ² (9.5 mm ² - 9.5 mm ²)
10.0 mm ² - 10.0 mm ² (10.0 mm ² - 10.0 mm ²)	10.0 mm ² - 10.0 mm ² (10.0 mm ² - 10.0 mm ²)
10.5 mm ² - 10.5 mm ² (10.5 mm ² - 10.5 mm ²)	10.5 mm ² - 10.5 mm ² (10.5 mm ² - 10.5 mm ²)


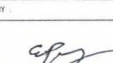





REPUBLIC OF THE PHILIPPINES DEPARTMENT OF EDUCATION DIVISION OFFICE - MARIKINA CITY	DRAWN BY: ERWIN P. PAJAY ELECTRICAL ENGINEER	CHECKED BY: SIEGHARD SANCHEZ PROFESSIONAL ELECTRICAL ENGINEER	RECOMMENDING APPROVAL: MA. REGALE A. OLARTE Education Program Supervisor DIB Chief, 5600	APPROVED BY: VIOLETA M. GONZALES Assistant Schools Division Superintendent DIB Office, 5600	PROJECT TITLE: MUNTINLUPA NATIONAL HIGH SCHOOL (JUNIOR HIGH SCHOOL) ELECTRICAL PLAN MUNTINLUPA CITY	PROJECT CODE: DEPARTMENT OF EDUCATION DIVISION OFFICE - MARIKINA CITY	OWNER: DEPARTMENT OF EDUCATION DepEd	SHEET NO.: E - 2 5
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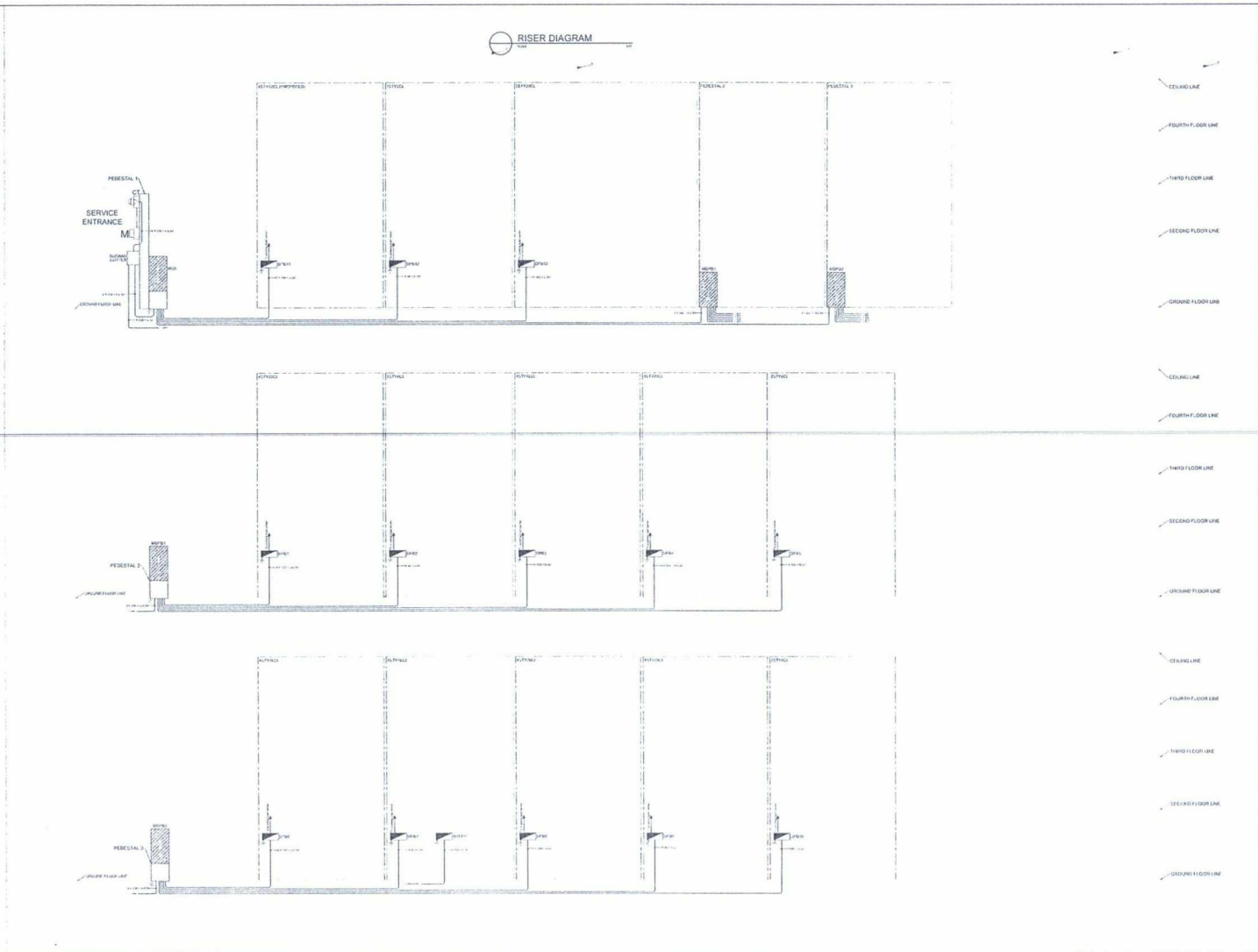
NOTES:
 1. All work shall be done in accordance with the National Electrical Code (NEC) and the Philippine Electrical Code (PEC).
 2. All materials and equipment shall be of the highest quality and shall be approved by the Bureau of Fire Protection (BFP).
 3. All work shall be done in accordance with the approved plans and specifications.

<p>Continuation 800</p> <p>Panel No. 800-1</p> <p>Panel Name: 800-1</p> <p>Panel Type: 800-1</p> <p>Panel Location: 800-1</p> <p>Panel Description: 800-1</p> <p>Panel Details: 800-1</p> <p>Panel Components: 800-1</p> <p>Panel Connections: 800-1</p> <p>Panel Notes: 800-1</p>	<p>Continuation 801</p> <p>Panel No. 801-1</p> <p>Panel Name: 801-1</p> <p>Panel Type: 801-1</p> <p>Panel Location: 801-1</p> <p>Panel Description: 801-1</p> <p>Panel Details: 801-1</p> <p>Panel Components: 801-1</p> <p>Panel Connections: 801-1</p> <p>Panel Notes: 801-1</p>	<p>Continuation 802</p> <p>Panel No. 802-1</p> <p>Panel Name: 802-1</p> <p>Panel Type: 802-1</p> <p>Panel Location: 802-1</p> <p>Panel Description: 802-1</p> <p>Panel Details: 802-1</p> <p>Panel Components: 802-1</p> <p>Panel Connections: 802-1</p> <p>Panel Notes: 802-1</p>	<p>Continuation 803</p> <p>Panel No. 803-1</p> <p>Panel Name: 803-1</p> <p>Panel Type: 803-1</p> <p>Panel Location: 803-1</p> <p>Panel Description: 803-1</p> <p>Panel Details: 803-1</p> <p>Panel Components: 803-1</p> <p>Panel Connections: 803-1</p> <p>Panel Notes: 803-1</p>	<p>Continuation 804</p> <p>Panel No. 804-1</p> <p>Panel Name: 804-1</p> <p>Panel Type: 804-1</p> <p>Panel Location: 804-1</p> <p>Panel Description: 804-1</p> <p>Panel Details: 804-1</p> <p>Panel Components: 804-1</p> <p>Panel Connections: 804-1</p> <p>Panel Notes: 804-1</p>	<p>Continuation 805</p> <p>Panel No. 805-1</p> <p>Panel Name: 805-1</p> <p>Panel Type: 805-1</p> <p>Panel Location: 805-1</p> <p>Panel Description: 805-1</p> <p>Panel Details: 805-1</p> <p>Panel Components: 805-1</p> <p>Panel Connections: 805-1</p> <p>Panel Notes: 805-1</p>	<p>Continuation 806</p> <p>Panel No. 806-1</p> <p>Panel Name: 806-1</p> <p>Panel Type: 806-1</p> <p>Panel Location: 806-1</p> <p>Panel Description: 806-1</p> <p>Panel Details: 806-1</p> <p>Panel Components: 806-1</p> <p>Panel Connections: 806-1</p> <p>Panel Notes: 806-1</p>	<p>Continuation 807</p> <p>Panel No. 807-1</p> <p>Panel Name: 807-1</p> <p>Panel Type: 807-1</p> <p>Panel Location: 807-1</p> <p>Panel Description: 807-1</p> <p>Panel Details: 807-1</p> <p>Panel Components: 807-1</p> <p>Panel Connections: 807-1</p> <p>Panel Notes: 807-1</p>	<p>Continuation 808</p> <p>Panel No. 808-1</p> <p>Panel Name: 808-1</p> <p>Panel Type: 808-1</p> <p>Panel Location: 808-1</p> <p>Panel Description: 808-1</p> <p>Panel Details: 808-1</p> <p>Panel Components: 808-1</p> <p>Panel Connections: 808-1</p> <p>Panel Notes: 808-1</p>	<p>Continuation 809</p> <p>Panel No. 809-1</p> <p>Panel Name: 809-1</p> <p>Panel Type: 809-1</p> <p>Panel Location: 809-1</p> <p>Panel Description: 809-1</p> <p>Panel Details: 809-1</p> <p>Panel Components: 809-1</p> <p>Panel Connections: 809-1</p> <p>Panel Notes: 809-1</p>	<p>Continuation 810</p> <p>Panel No. 810-1</p> <p>Panel Name: 810-1</p> <p>Panel Type: 810-1</p> <p>Panel Location: 810-1</p> <p>Panel Description: 810-1</p> <p>Panel Details: 810-1</p> <p>Panel Components: 810-1</p> <p>Panel Connections: 810-1</p> <p>Panel Notes: 810-1</p>
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SCHEDULE OF LOADS

 <p>REPUBLIC OF THE PHILIPPINES DepEd DEPARTMENT OF EDUCATION DIVISION OFFICE - MUNTINLUPA CITY</p>	<p>DRIVEN BY: </p> <p>PROFESSIONAL ELECTRICAL ENGINEER</p>	<p>CHECKED BY: </p> <p>SEBASTIAN SANCHEZ PROFESSIONAL ELECTRICAL ENGINEER</p>	<p>RECOMMENDING APPROVAL: </p> <p>MA. REGAILE A. LARTE Education Program Supervisor OIC-Chief, S600</p>	<p>APPROVED BY: </p> <p>VIOLETA M. GONZALES Assistant Schools Division Superintendent OIC Office of the SDO</p>	<p>PROJECT TITLE: MUNTINLUPA NATIONAL HIGH SCHOOL (JUNIOR HIGH SCHOOL) ELECTRICAL PLAN</p> <p>PROJECT CODE: MUNTINLUPA CITY</p>	<p>OWNER: DEPARTMENT OF EDUCATION DepEd</p> <p>SHEET CONTENTS: AS SHOWN</p>	<p>SHEET NO. E-3 5</p>
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Panel No.	Panel Name	Location	Panel Type	Panel Size	Panel Area	Panel Volume	Panel Weight	Panel Cost
1	Panel 1	Room 101	Panel 1	1.00m x 1.00m	1.00	1.00	1.00	1.00
2	Panel 2	Room 102	Panel 2	1.00m x 1.00m	1.00	1.00	1.00	1.00
3	Panel 3	Room 103	Panel 3	1.00m x 1.00m	1.00	1.00	1.00	1.00
4	Panel 4	Room 104	Panel 4	1.00m x 1.00m	1.00	1.00	1.00	1.00
5	Panel 5	Room 105	Panel 5	1.00m x 1.00m	1.00	1.00	1.00	1.00
6	Panel 6	Room 106	Panel 6	1.00m x 1.00m	1.00	1.00	1.00	1.00
7	Panel 7	Room 107	Panel 7	1.00m x 1.00m	1.00	1.00	1.00	1.00
8	Panel 8	Room 108	Panel 8	1.00m x 1.00m	1.00	1.00	1.00	1.00
9	Panel 9	Room 109	Panel 9	1.00m x 1.00m	1.00	1.00	1.00	1.00
10	Panel 10	Room 110	Panel 10	1.00m x 1.00m	1.00	1.00	1.00	1.00

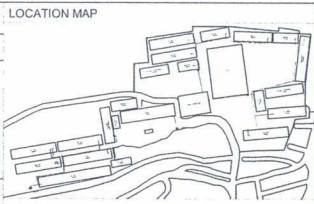


SCHEDULE OF LOADS

TYPE OF LOAD	UNITS	VALUES
1.20m x 1.20m	1.20m x 1.20m	1.20m x 1.20m
1.50m x 1.50m	1.50m x 1.50m	1.50m x 1.50m
2.00m x 2.00m	2.00m x 2.00m	2.00m x 2.00m
2.50m x 2.50m	2.50m x 2.50m	2.50m x 2.50m
3.00m x 3.00m	3.00m x 3.00m	3.00m x 3.00m
3.50m x 3.50m	3.50m x 3.50m	3.50m x 3.50m
4.00m x 4.00m	4.00m x 4.00m	4.00m x 4.00m
4.50m x 4.50m	4.50m x 4.50m	4.50m x 4.50m
5.00m x 5.00m	5.00m x 5.00m	5.00m x 5.00m
5.50m x 5.50m	5.50m x 5.50m	5.50m x 5.50m
6.00m x 6.00m	6.00m x 6.00m	6.00m x 6.00m
6.50m x 6.50m	6.50m x 6.50m	6.50m x 6.50m
7.00m x 7.00m	7.00m x 7.00m	7.00m x 7.00m
7.50m x 7.50m	7.50m x 7.50m	7.50m x 7.50m
8.00m x 8.00m	8.00m x 8.00m	8.00m x 8.00m
8.50m x 8.50m	8.50m x 8.50m	8.50m x 8.50m
9.00m x 9.00m	9.00m x 9.00m	9.00m x 9.00m
9.50m x 9.50m	9.50m x 9.50m	9.50m x 9.50m
10.00m x 10.00m	10.00m x 10.00m	10.00m x 10.00m

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF EDUCATION DIVISION OFFICE - MANTALUPA CITY	DRAWN BY: ELECTRICAL ENGINEER	CHECKED BY: SEMIARD SANCHEZ PROFESSIONAL ELECTRICAL ENGINEER	RECOMMENDING APPROVAL: MA. REGARLE A. OLARTE Education Program Support OIG Chief, SGO	APPROVED BY: VIOLETA M. GONZALES Assistant Schools Division Superintendent	PROJECT TITLE: MUNTALUPA NATIONAL HIGH SCHOOL (JUNIOR HIGH SCHOOL) ELECTRICAL PLAN LOCATION: MUNTALUPA CITY	PROJECT CODE: OWNER: DEPARTMENT OF EDUCATION DepEd SHEET CONTENTS: AS SHOWN	SHEET NO.: E-5 5
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1. This drawing is the property of the Department of Education, Division Office - Mantalupa City. It is to be used only for the project specified and no part of it is to be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of the Department of Education, Division Office - Mantalupa City.



- GENERAL NOTES:**
1. ALL ELECTRICAL WORKS SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE PHILIPPINES ELECTRICAL CODE (PEC), EXISTING APPLICABLE LOCAL ORDINANCES, RULES AND REGULATIONS OF THE LOCAL GOVERNMENT AND LOCAL POWER COMPANY.
 2. POWER SUPPLY SHALL BE 230V, 3Ø, 3P, 3 WIRES + GROUNDING, 60 HERTZ.
 3. THE CONTRACTOR SHALL COORDINATE WITH THE LOCAL POWER COMPANY ON THE FINAL LOCATION OF SERVICE ENTRANCE AND/OR SERVICE DROP ROUTE.
 4. PULL OR JUNCTION BOXES SHALL BE INSTALLED AT CONVENIENT AND INCONSPICUOUS LOCATION ALTHOUGH SUCH BOXES ARE NOT SHOWN ON THE PLANS.
 5. ADEQUATE AND EFFECTIVE GROUNDING SHALL BE PROVIDED IN ACCORDANCE WITH THE PEC.
 6. ALL ELECTRICAL WORKS HERE UNDER SHALL BE DONE UNDER THE DIRECT SUPERVISION OF A REGISTERED ELECTRICAL ENGINEER OR MASTER ELECTRICIAN.
 7. MATERIALS AND EQUIPMENT TO BE USED SHALL BE APPROVED TYPE FOR BOTH LOCATION & PURPOSE.
 8. MOUNTING HEIGHT OF WIRING DEVICES SHALL BE AS FOLLOWS:

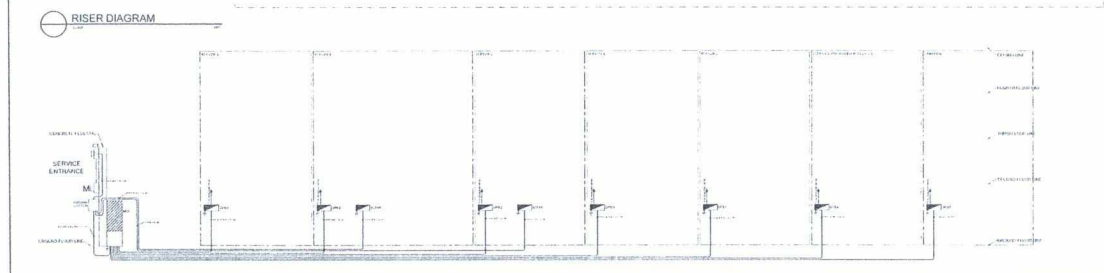
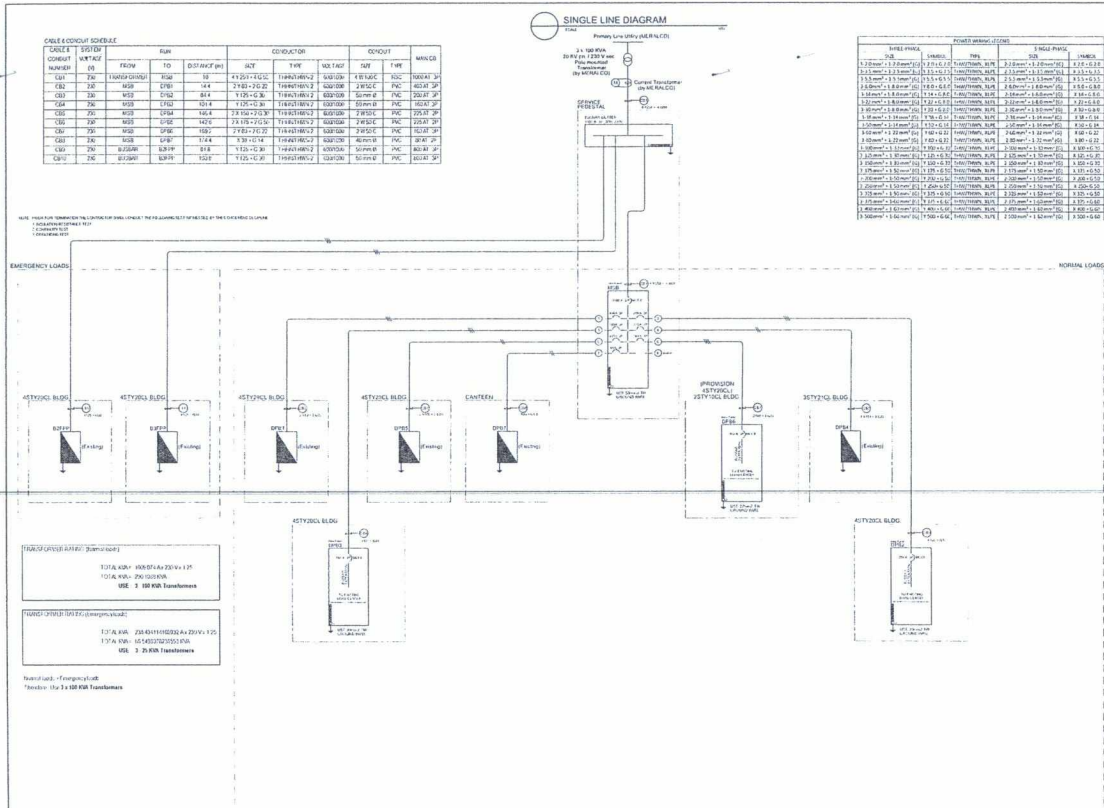
a. LIGHT SWITCH	-	1.20 M
ABOVE FINISH FLOOR		
b. CONVENIENCE OUTLET	-	0.30 M
ABOVE FINISH FLOOR		
c. PANEL BOARD	-	1.80 M
ABOVE FINISH FLOOR		
d. FIRE ALARM STATION OUTLET	-	1.50 M
ABOVE FINISH FLOOR		
e. PUSH BUTTON OUTLET	-	1.20 M
ABOVE FINISH FLOOR		
f. FIRE ALARM & VIBRATING BELL	-	0.30 M
ABOVE FINISH FLOOR		

SITE ELECTRICAL LAY OUT
SCALE _____ NTS

- LEGENDS AND SYMBOLS:**
- ⊥ - SERVICE ENTRANCE
 - ⊥ - SERVICE ENTRANCE PEDESTAL
 - - DISTRIBUTION/FEEDER LINES
 - DPB-05 - DISTRIBUTION PANEL BOARD
 - ⊥ - ELECTRICAL HAND HOLE

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF EDUCATION DIVISION OFFICE - MUNTINLUPA CITY	DRAWN BY: Emyr M. Manzano ELECTRICAL ENGINEER	CHECKED BY: SIEGMAR SANCHEZ PROFESSIONAL ELECTRICAL ENGINEER	RECOMMENDING APPROVAL: MA. REGALIA A. OLANTA Education Program Supervisor	APPROVED BY: VIOLETA M. GONZALES Assistant Schools Division Superintendent	PROJECT TITLE: MUNTINLUPA NATIONAL HIGH SCHOOL (SENIOR HIGH SCHOOL) ELECTRICAL PLAN	PROJECT CODE: 	OWNER: DEPARTMENT OF EDUCATION DepED	SHEET NO.: E - 1 3
	SHEET CONTENTS: AS SHOWN							

THIS DRAWING IS THE PROPERTY OF THE ARCHITECT OR ENGINEER WHO PREPARED IT. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT OR ENGINEER.



Panel No.	Equipment	Rating	Manufacturer	Notes
Panel No. 01	21.6KV R/A Bus	21.6KV	ABB	21.6KV R/A Bus
Panel No. 02	13.8KV Bus	13.8KV	ABB	13.8KV Bus
Panel No. 03	Emergency Loads	Various	Various	Emergency Loads
Panel No. 04	Normal Loads	Various	Various	Normal Loads
Panel No. 05	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 06	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 07	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 08	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 09	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 10	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 11	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 12	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 13	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 14	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 15	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 16	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 17	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 18	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 19	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 20	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 21	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 22	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 23	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 24	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 25	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 26	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 27	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 28	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 29	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG
Panel No. 30	457Y210V BLDG	457Y210V	ABB	457Y210V BLDG

REPUBLIC OF THE PHILIPPINES

DepEd

Division Office - Muntinlupa

PROJECT TITLE: MUNTINLUPA NATIONAL HIGH SCHOOL (SENIOR HIGH SCHOOL) ELECTRICAL PLAN

PROJECT CODE: _____

OWNER: DEPARTMENT OF EDUCATION DepEd

SHEET NO.: E-2

AS SHOWN

DRAWN BY: _____

CHECKED BY: SEDIANO SANCHEZ, PROFESSIONAL ELECTRICAL ENGINEER

RECOMMENDING APPROVAL: MA. REGALBA A. CLARTE, Education Program Supervisor

APPROVED BY: VIOLETA M. GONZALES, Assistant Schools Division Superintendent

PROJECT LOCATION: MUNTINLUPA CITY

<p>TABLE NO. 1</p> <p>TABLE NO. 2</p> <p>TABLE NO. 3</p> <p>TABLE NO. 4</p> <p>TABLE NO. 5</p> <p>TABLE NO. 6</p> <p>TABLE NO. 7</p> <p>TABLE NO. 8</p> <p>TABLE NO. 9</p> <p>TABLE NO. 10</p> <p>TABLE NO. 11</p> <p>TABLE NO. 12</p> <p>TABLE NO. 13</p> <p>TABLE NO. 14</p> <p>TABLE NO. 15</p> <p>TABLE NO. 16</p> <p>TABLE NO. 17</p> <p>TABLE NO. 18</p> <p>TABLE NO. 19</p> <p>TABLE NO. 20</p> <p>TABLE NO. 21</p> <p>TABLE NO. 22</p> <p>TABLE NO. 23</p> <p>TABLE NO. 24</p> <p>TABLE NO. 25</p> <p>TABLE NO. 26</p> <p>TABLE NO. 27</p> <p>TABLE NO. 28</p> <p>TABLE NO. 29</p> <p>TABLE NO. 30</p> <p>TABLE NO. 31</p> <p>TABLE NO. 32</p> <p>TABLE NO. 33</p> <p>TABLE NO. 34</p> <p>TABLE NO. 35</p> <p>TABLE NO. 36</p> <p>TABLE NO. 37</p> <p>TABLE NO. 38</p> <p>TABLE NO. 39</p> <p>TABLE NO. 40</p> <p>TABLE NO. 41</p> <p>TABLE NO. 42</p> <p>TABLE NO. 43</p> <p>TABLE NO. 44</p> <p>TABLE NO. 45</p> <p>TABLE NO. 46</p> <p>TABLE NO. 47</p> <p>TABLE NO. 48</p> <p>TABLE NO. 49</p> <p>TABLE NO. 50</p> <p>TABLE NO. 51</p> <p>TABLE NO. 52</p> <p>TABLE NO. 53</p> <p>TABLE NO. 54</p> <p>TABLE NO. 55</p> <p>TABLE NO. 56</p> <p>TABLE NO. 57</p> <p>TABLE NO. 58</p> <p>TABLE NO. 59</p> <p>TABLE NO. 60</p> <p>TABLE NO. 61</p> <p>TABLE NO. 62</p> <p>TABLE NO. 63</p> <p>TABLE NO. 64</p> <p>TABLE NO. 65</p> <p>TABLE NO. 66</p> <p>TABLE NO. 67</p> <p>TABLE NO. 68</p> <p>TABLE NO. 69</p> <p>TABLE NO. 70</p> <p>TABLE NO. 71</p> <p>TABLE NO. 72</p> <p>TABLE NO. 73</p> <p>TABLE NO. 74</p> <p>TABLE NO. 75</p> <p>TABLE NO. 76</p> <p>TABLE NO. 77</p> <p>TABLE NO. 78</p> <p>TABLE NO. 79</p> <p>TABLE NO. 80</p> <p>TABLE NO. 81</p> <p>TABLE NO. 82</p> <p>TABLE NO. 83</p> <p>TABLE NO. 84</p> <p>TABLE NO. 85</p> <p>TABLE NO. 86</p> <p>TABLE NO. 87</p> <p>TABLE NO. 88</p> <p>TABLE NO. 89</p> <p>TABLE NO. 90</p> <p>TABLE NO. 91</p> <p>TABLE NO. 92</p> <p>TABLE NO. 93</p> <p>TABLE NO. 94</p> <p>TABLE NO. 95</p> <p>TABLE NO. 96</p> <p>TABLE NO. 97</p> <p>TABLE NO. 98</p> <p>TABLE NO. 99</p> <p>TABLE NO. 100</p>	<p>TABLE NO. 101</p> <p>TABLE NO. 102</p> <p>TABLE NO. 103</p> <p>TABLE NO. 104</p> <p>TABLE NO. 105</p> <p>TABLE NO. 106</p> <p>TABLE NO. 107</p> <p>TABLE NO. 108</p> <p>TABLE NO. 109</p> <p>TABLE NO. 110</p> <p>TABLE NO. 111</p> <p>TABLE NO. 112</p> <p>TABLE NO. 113</p> <p>TABLE NO. 114</p> <p>TABLE NO. 115</p> <p>TABLE NO. 116</p> <p>TABLE NO. 117</p> <p>TABLE NO. 118</p> <p>TABLE NO. 119</p> <p>TABLE NO. 120</p> <p>TABLE NO. 121</p> <p>TABLE NO. 122</p> <p>TABLE NO. 123</p> <p>TABLE NO. 124</p> <p>TABLE NO. 125</p> <p>TABLE NO. 126</p> <p>TABLE NO. 127</p> <p>TABLE NO. 128</p> <p>TABLE NO. 129</p> <p>TABLE NO. 130</p> <p>TABLE NO. 131</p> <p>TABLE NO. 132</p> <p>TABLE NO. 133</p> <p>TABLE NO. 134</p> <p>TABLE NO. 135</p> <p>TABLE NO. 136</p> <p>TABLE NO. 137</p> <p>TABLE NO. 138</p> <p>TABLE NO. 139</p> <p>TABLE NO. 140</p> <p>TABLE NO. 141</p> <p>TABLE NO. 142</p> <p>TABLE NO. 143</p> <p>TABLE NO. 144</p> <p>TABLE NO. 145</p> <p>TABLE NO. 146</p> <p>TABLE NO. 147</p> <p>TABLE NO. 148</p> <p>TABLE NO. 149</p> <p>TABLE NO. 150</p> <p>TABLE NO. 151</p> <p>TABLE NO. 152</p> <p>TABLE NO. 153</p> <p>TABLE NO. 154</p> <p>TABLE NO. 155</p> <p>TABLE NO. 156</p> <p>TABLE NO. 157</p> <p>TABLE NO. 158</p> <p>TABLE NO. 159</p> <p>TABLE NO. 160</p> <p>TABLE NO. 161</p> <p>TABLE NO. 162</p> <p>TABLE NO. 163</p> <p>TABLE NO. 164</p> <p>TABLE NO. 165</p> <p>TABLE NO. 166</p> <p>TABLE NO. 167</p> <p>TABLE NO. 168</p> <p>TABLE NO. 169</p> <p>TABLE NO. 170</p> <p>TABLE NO. 171</p> <p>TABLE NO. 172</p> <p>TABLE NO. 173</p> <p>TABLE NO. 174</p> <p>TABLE NO. 175</p> <p>TABLE NO. 176</p> <p>TABLE NO. 177</p> <p>TABLE NO. 178</p> <p>TABLE NO. 179</p> <p>TABLE NO. 180</p> <p>TABLE NO. 181</p> <p>TABLE NO. 182</p> <p>TABLE NO. 183</p> <p>TABLE NO. 184</p> <p>TABLE NO. 185</p> <p>TABLE NO. 186</p> <p>TABLE NO. 187</p> <p>TABLE NO. 188</p> <p>TABLE NO. 189</p> <p>TABLE NO. 190</p> <p>TABLE NO. 191</p> <p>TABLE NO. 192</p> <p>TABLE NO. 193</p> <p>TABLE NO. 194</p> <p>TABLE NO. 195</p> <p>TABLE NO. 196</p> <p>TABLE NO. 197</p> <p>TABLE NO. 198</p> <p>TABLE NO. 199</p> <p>TABLE NO. 200</p>
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SCHEDULE OF LOADS

<p>REPUBLIC OF THE PHILIPPINES</p> <p>DEPARTMENT OF EDUCATION</p> <p>DIVISION OFFICE - MARIKINA</p>	<p>DRAWN BY</p> <p><i>[Signature]</i></p> <p>ERNESTO M. JIMENEZ</p> <p>ELECTRICAL ENGINEER</p>	<p>CHECKED BY</p> <p><i>[Signature]</i></p> <p>SEBASTIAN SANCHEZ</p> <p>PROFESSIONAL ELECTRICAL ENGINEER</p>	<p>RECOMMENDING APPROVAL</p> <p><i>[Signature]</i></p> <p>MA. REGAELA A. OLARTE</p> <p>Education Program Supervisor</p>	<p>APPROVED BY</p> <p><i>[Signature]</i></p> <p>VIOLETA M. GONZALES</p> <p>Assistant Schools Division Superintendent</p>	<p>PROJECT TITLE</p> <p>MUNTINLUPA NATIONAL HIGH SCHOOL (SENIOR HIGH SCHOOL)</p> <p>ELECTRICAL PLAN</p>	<p>PROJECT CODE</p> <p></p>	<p>OWNER</p> <p>DEPARTMENT OF EDUCATION</p> <p>DepEd</p>	<p>SHEET NO.</p> <p align="center">E - 3</p> <p align="center">3</p>
	<p>SHEET CONTENTS</p> <p>AS SHOWN</p>					<p>MUNTINLUPA CITY</p>		

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