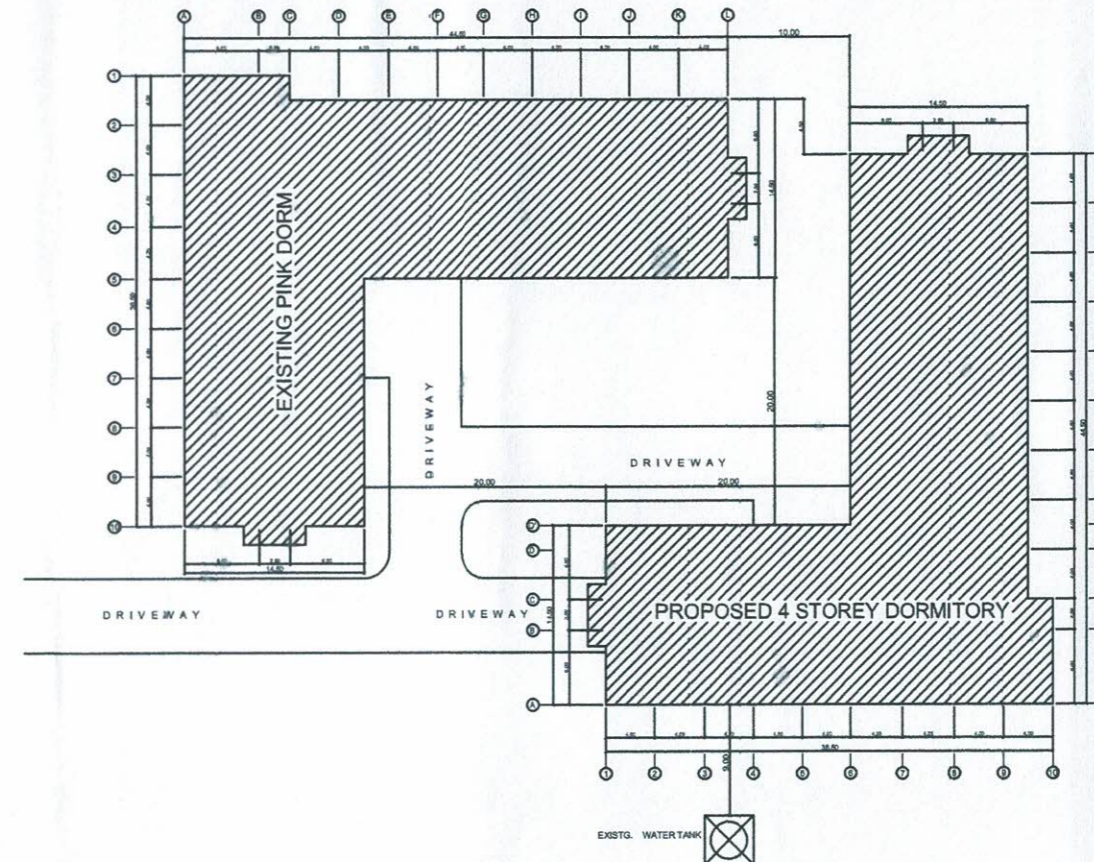


GENERAL NOTES AND SPECIFICATIONS:

1. ALL WORK HEREIN SHALL BE DONE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
2. ELECTRICAL WORKS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, MUNICIPAL/CITY LAWS AND ORDINANCES AND THE REGULATIONS OF THE LOCAL POWER AND TELEPHONE COMPANY.
3. THE JOB SHALL BE EXECUTED IN THE MOST THOROUGH PROMPT AND WORKMANLIKE MANNER EMPLOYING STANDARD TOOLS, EQUIPMENT, METHODS AND GOOD ENGINEERING PRACTICE. THE JOB SHALL BE DONE IN ALL ASPECTS AS REQUIRED PER PLANS AND SPECIFICATIONS AND READY FOR OPERATION.
4. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO PRESENT A GENERAL LAYOUT AND BROAD OUTLINE/DESCRIPTION OF THE PROJECT, BUT DO NOT NECESSARILY INDICATE OR DESCRIBE ACTUAL LOCATIONS, LEVELS AND DISTANCES OF THE EQUIPMENT. THE CONTRACTOR IS HEREBY REQUIRED TO MAKE SUCH ADJUSTMENTS AT THE JOBSITE THAT ARE GOVERNED BY ACTUAL FIELD CONDITION.
5. SERVICE VOLTAGE TO THE BUILDING FROM THE POWER SOURCE SHALL BE 230V.
6. SERVICE ENTRANCE WIRING SHALL BE RIGID STEEL CONDUIT (RSC).
7. FEEDER WIRING SHALL BE ELECTRICAL METALLIC TUBING (EMT).
8. BRANCH CIRCUIT WIRING ELECTRICAL METALLIC TUBING (EMT).
9. BRANCH CIRCUIT WIRING EMBEDDED IN CONCRETE SHALL BE IN PVC PIPE WITH ADEQUATE GROUND WIRE FOR EQUIPMENT GROUNDING.
10. LIGHT SWITCHES SHALL BE 15A, 230VAC.
11. ALL MATERIALS SHALL BE BRAND NEW AND OF APPROVED TYPE FOR LOCATION AND PURPOSE INTENDED.
12. DEVICES, FIXTURES LOCATED OUTDOOR SHALL BE WEATHERPROOF TYPE.
13. MOUNTING HEIGHTS ARE:

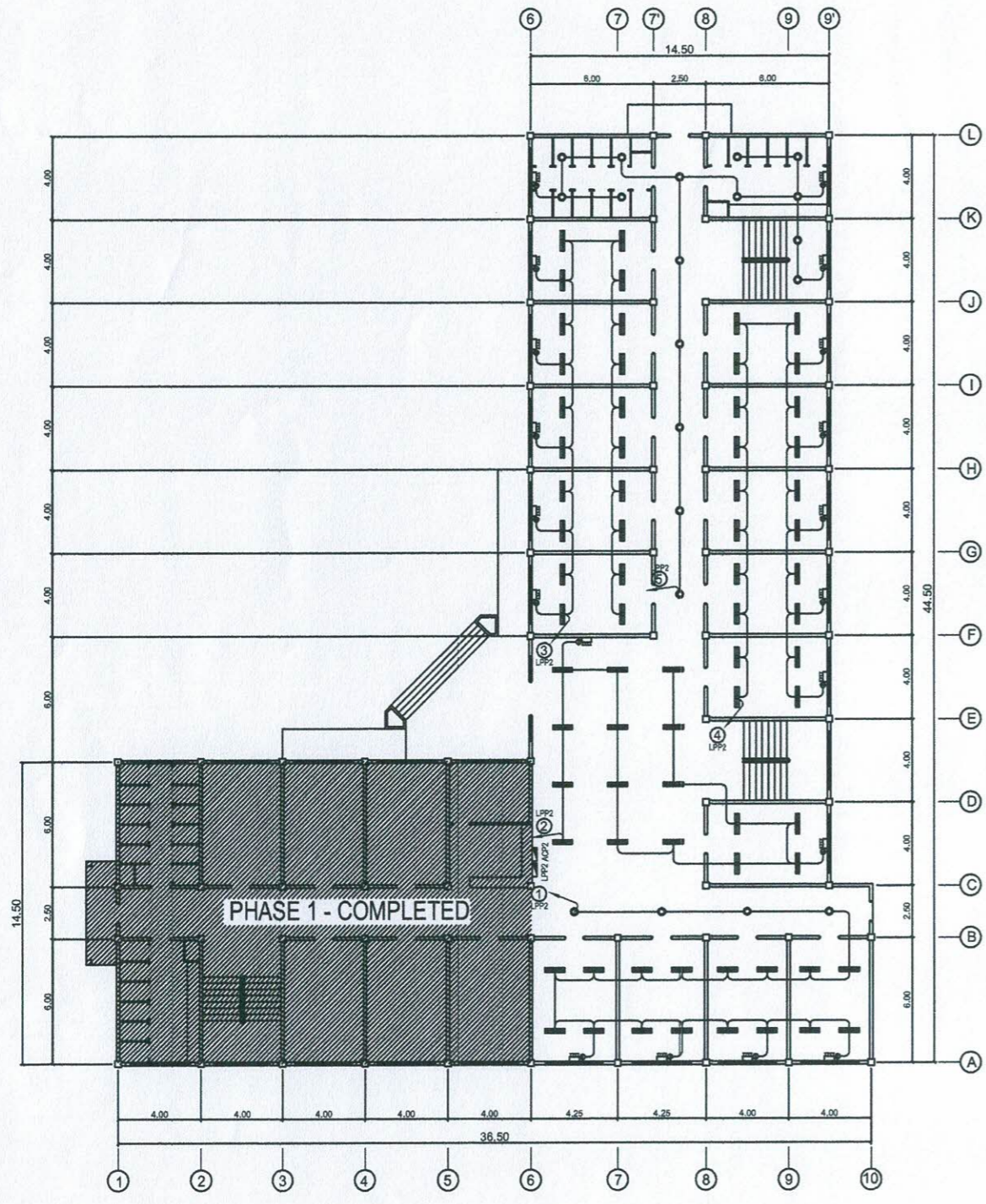
A. LIGHT SWITCHES	1.40M ABOVE FLOOR FINISH
B. CONVENIENCE OUTLETS	0.30M ABOVE FLOOR FINISH
C. COUNTER TOP C.O,	0.40M TO .50M ABOVE THE COUNTER
D. TELEPHONE OUTLETS	0.30M ABOVE FLOOR FINISH
E. PANEL BOARD	1.50M ABOVE FLOOR FINISH
F. EMERGENCY LIGHT	0.30M BELOW CEILING LINE
14. ANY DISCREPANCY BETWEEN THE PLANS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION OR DECISION.
15. THE ENTIRE WORK SHALL BE DONE UNDER THE DIRECT SUPERVISION OF DULY REGISTERED ELECTRICAL ENGINEER.
16. REFER TO SHEETS E-2 TO E-3 FOR EXACT NUMBER AND LOCATION OF DEVICES/EQUIPMENT FOR ELECTRICAL SYSTEM. ANY CONFLICT ON QUANTITY AND/OR LAYOUT MUST BE VERIFIED AND CONFIRMED TO DESIGNER/CONSULTANT.
17. REFER TO LOAD SCHEDULE FOR THE RATING OF INDIVIDUAL ENCL, ACB'S IN NEMA-3R.
18. ALL ELECTRICAL CONDUITS AND TELEPHONE SERVICE ENTRANCE THAT INSTALLED BELOW THE GROUND SHALL BE IN CONCRETE ENCASEMENT.
19. ANY DEVICES OR EQUIPMENT NOT REFLECTED OR SHOWN ON PLANS BUT REQUIRED TO COMPLETE THE SYSTEM MUST BE INCLUDED ON SCOPE OF WORK.
20. REQUEST FOR TEMPORARY POWER INTERRUPTION SHOULD BE COORDINATED TO OWNER'S REPRESENTATIVE OR DESIGNER.
21. THE SIZE OF GENERATOR IS 40% OF THE TOTAL VA LOAD. THIS IS INTENDED TO SUPPLY ELECTRIC POWER FOR LIGHTINGS AND OTHER IMPORTANT APPLIANCES DURING THE POWER INTERRUPTION OF MAIN POWER SOURCE.

LEGEND AND SYMBOLS :			
	LED DOWNLIGHT, VERTICAL RECESSED, ROUND 7W w/ 8" CASING FIXTURE		CIRCUIT BREAKER WITH NEMA 3R METAL ENCLOSURE
	1-0W LIGHT TUBE, TB w/ FIXTURES 2 FT. LENGTH (FL)		ACU CONDENSER OUT DOOR UNIT WITH NEMA 3R CIRCUIT BREAKER
	2-0W LIGHT TUBE, TB w/ FIXTURES 2 FT. LENGTH (FL)		ACU WALL/FLOOR MOUNTED, SPLIT TYPE, INDOOR UNIT
	1-18W LIGHT TUBE, TB w/ FIXTURES 4 FT. LENGTH (FL)		2.0 mm² THHN
	2-18W LIGHT TUBE, TB w/ FIXTURES 4 FT. LENGTH (FL)		3.5 mm² THHN
	EMERGENCY LIGHT (EL)		CIRCUIT HOMERUN
	ONE GANG SWITCH		CIRCUIT NUMBER
	TWO GANG SWITCH		PANEL BOARD
	THREE GANG SWITCH		SERVICE ENTRANCE
	THREE WAY SWITCH		KILOWATT HOUR METER
	TWO GANG CONVENIENCE OUTLET		CONCRETE ENCASEMENT
	CEILING FAN OUTLET		CABLE CHAMBER
	TWO GANG CONVENIENCE OUTLET (FLOOR MOUNTED)		DISTRIBUTION TRANSFORMER
	TWO GANG SPECIAL POWER OUTLET (FLOOR MOUNTED)		PRIMARY CONCRETE POLE
	THREE PIN ACU OUTLET		SERVICE ENTRANCE PEDESTAL WITH DISCONNECTING SWITCH
	ACU WINDOW TYPE		SECONDARY LINE

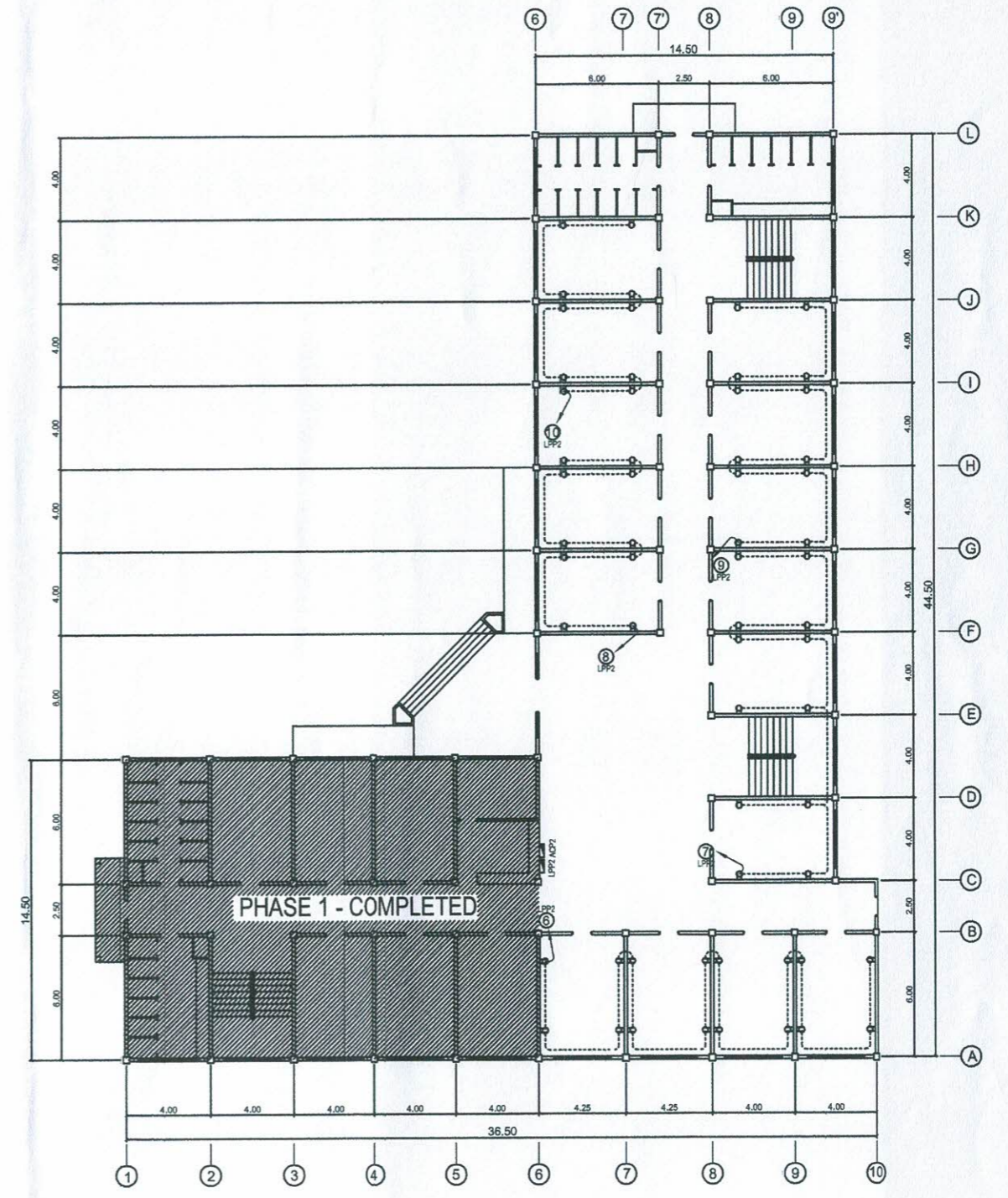


1
E1
SITE DEVELOPMENT PLAN
 SCALE 1 : 600 MTS.

PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
 R. J. R. SANCHEZ <small>PDU</small>	 V. C. COSTA <small>DIRECTOR BARG</small>	 R. P. PENA <small>PROFESSIONAL ELECTRICAL ENGINEER</small>	 S. B. BAYOT JR. <small>HEAD PDU</small>	 O. B. DELOS REYES <small>DIRECTOR PLANNING AND DEVT. OFFICE</small>	 M. J. D. TEPORA <small>VPPD CVSU</small>	 H. D. ROBLES <small>PRES CVSU</small>	REVISED ELECTRICAL PLAN OF CONSTRUCTION OF FOUR STOREY DORMITORY PHASE 2 CAVITE STATE UNIVERSITY MAIN CAMPUS	CAVITE STATE UNIVERSITY E - 1

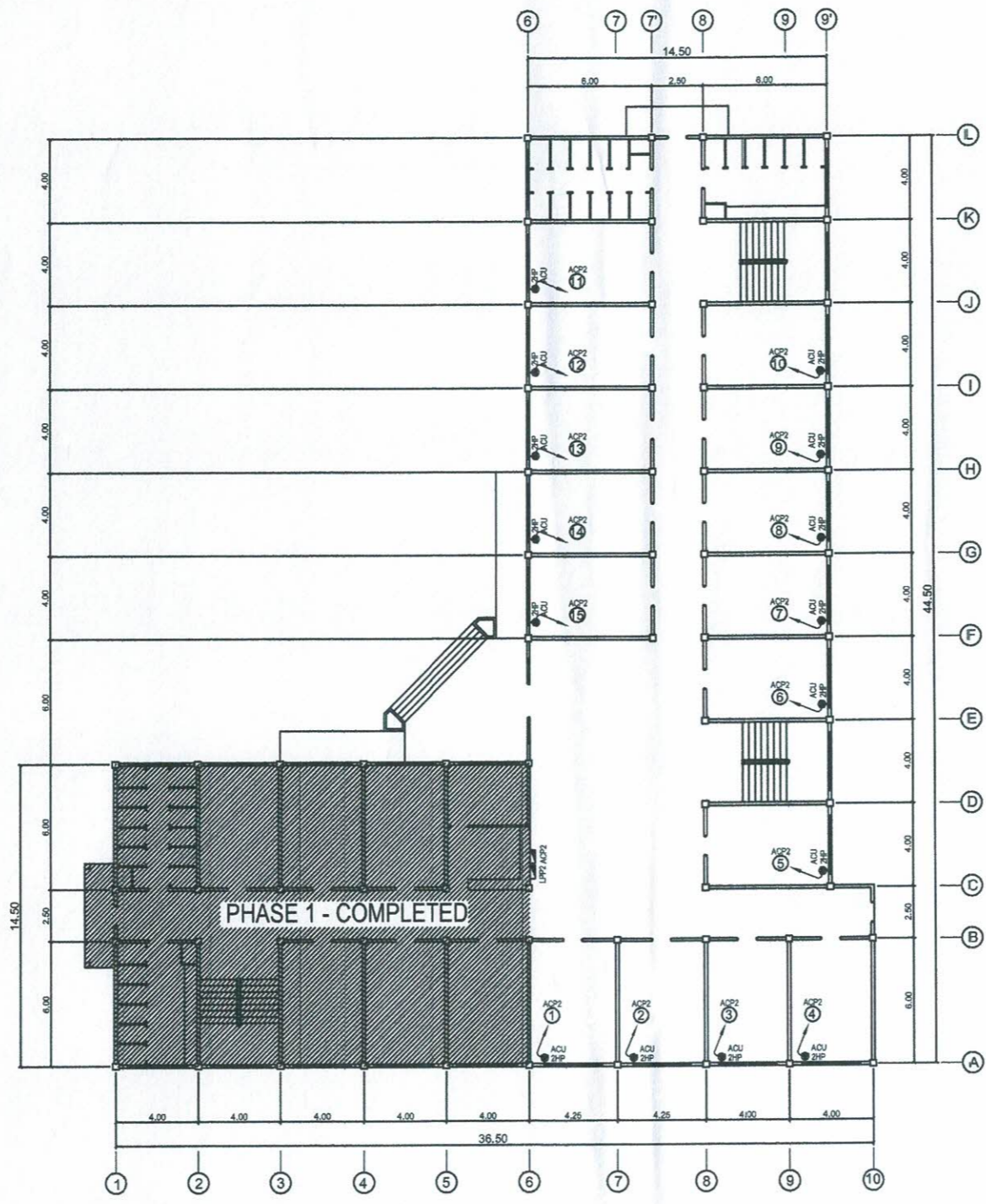


1
E/2 SCALE 1 : 300 MTS.
GROUND FLOOR LIGHTING LAYOUT


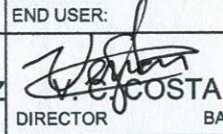
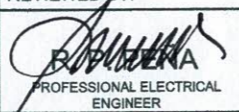
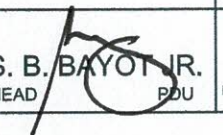
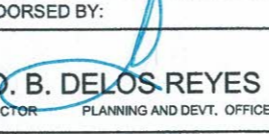

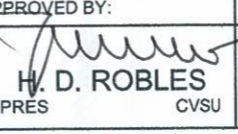


2
E/2 SCALE 1 : 300 MTS.
GROUND FLOOR POWER OUTLET LAYOUT

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
	 R. J. R. SANCHEZ PDU COVPPD	 V. C. COSTA DIRECTOR BARG	 R. P. PENA PROFESSIONAL ELECTRICAL ENGINEER	 S. B. BAYOT JR. HEAD PDU	 O. B. DE LOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	 M. J. D. TEPORA VPPD CVSU	 H. D. ROBLES PRES CVSU	REVISED ELECTRICAL PLAN OF CONSTRUCTION OF FOUR STOREY DORMITORY PHASE 2 CAVITE STATE UNIVERSITY MAIN CAMPUS	CAVITE STATE UNIVERSITY



1 GROUND FLOOR ACU POWER OUTLET LAYOUT
E3 SCALE 1 : 300 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
	R. J. R. SANCHEZ PDU OVPPD	 V. ESCOSA DIRECTOR BARG	 R. DELOS REYES PROFESSIONAL ELECTRICAL ENGINEER	 S. B. BAYOT JR. HEAD PDU	 Q. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	 M. J. D. TEPORA VPPD CVSU	 H. D. ROBLES PRES CVSU	REVISED ELECTRICAL PLAN OF CONSTRUCTION OF FOUR STOREY DORMITORY PHASE 2 CAVITE STATE UNIVERSITY MAIN CAMPUS	CAVITE STATE UNIVERSITY

SCHEDULE OF LOADS AND COMPUTATIONS:

PANEL : LPP2 (LIGHTING & POWER PANEL 2)		CABLE: 3 - 14.0 SQMM THHN+ 1 - 8.0 SQMM THW		MAIN: 60AT, 100AF, 3P, 230V, MCCB							
PHASE: 3		CONDUIT: IMC, 25 MM DIA.		ENCLOSURE : NEMA 1							
VOLTS: 230		LOCATION: GROUND FLOOR		MOUNTING: SURFACE							
CKT NO.	CIRCUIT DESCRIPTION	Volts	Amp	LOAD IN RATING				CIRCUIT PROTECTION	Size of Conductor		Color Code
				AMPERES					CIRCUIT BREAKER RATING	SQ. MM THHN STRANDED CU. WIRE	
				3φ	AB	CA	BC				
1	LIGHTING OUTLET	24	2400	230	10.43			15AT, 2P, 230V, MCCB	2 - 2.0	PVC, 20	1R,1B
2	LIGHTING OUTLET	18	1800	230	7.83			15AT, 2P, 230V, MCCB	2 - 2.0	PVC, 20	1R,1B
3	LIGHTING OUTLET	25	2500	230		10.87		15AT, 2P, 230V, MCCB	2 - 2.0	PVC, 20	1B,1Y
4	LIGHTING OUTLET	25	2500	230			10.87	15AT, 2P, 230V, MCCB	2 - 2.0	PVC, 20	1B,1Y
5	LIGHTING OUTLET	16	1600	230			6.96	15AT, 2P, 230V, MCCB	2 - 2.0	PVC, 20	1Y,1R
6	CONVENIENCE OUTLET	16	3200	230			13.91	20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0	PVC, 20	1Y,1R,G
7	CONVENIENCE OUTLET	12	2400	230	10.43			20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0	PVC, 20	1R,1B,G
8	CONVENIENCE OUTLET	10	2000	230	8.70			20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0	PVC, 20	1R,1B,G
9	CONVENIENCE OUTLET	12	2400	230		10.43		20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0	PVC, 20	1B,1Y,G
	SPARE										
10	CONVENIENCE OUTLET	10	2000	230			8.70	20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0	PVC, 20	1Y,1R,G
	SPARE										
TOTAL		22800	230		37	32	30	60AT, 3P, 230V, MCCB	3 - 14.0 + G 8.0	IMC, 25	1R,1B,1Y,G

MAIN FEEDER and CURRENT PROTECTION COMPUTATION:

NOTE: $I_{FL} = (37 \times 1.732) \times DF = 51.27$ Amperes
 $I_{CB} = (37 \times 1.732) \times DF = 51.27$ Amperes

G - Means Ground Wire
 1R - Color RED
 1B - Color BLACK
 1Y - Color YELLOW
 1G - Color GREEN

This Electrical Design is good only for the above connected loads.
 Any additional electrical load connection in the future is not allowed,
 Except redesign of electrical load system will be done.

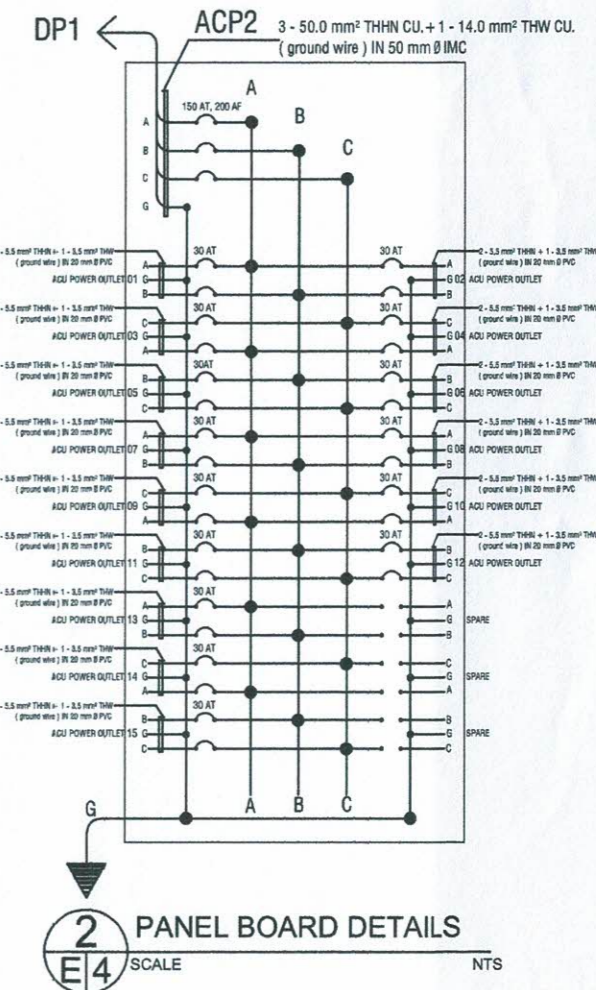
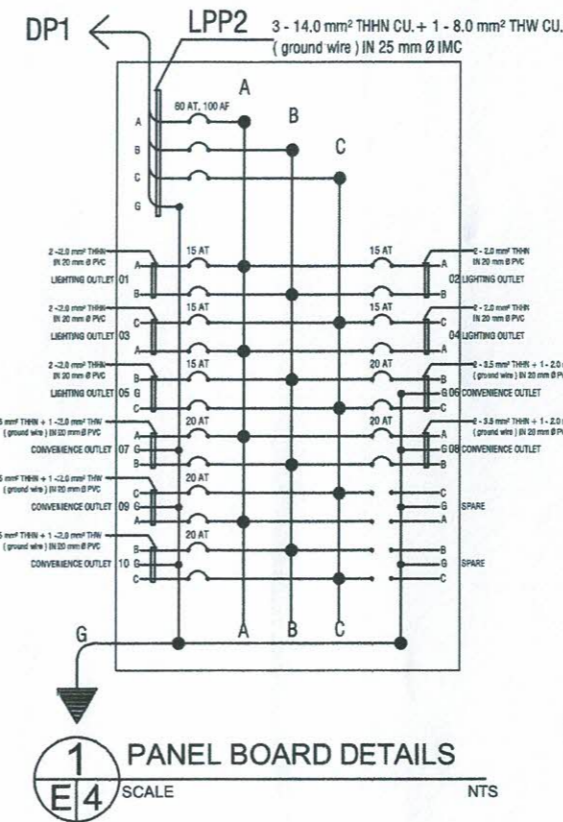
PANEL : ACP2 (AIR CONDITIONING UNIT PANEL 2)		CABLE: 3 - 50.0 SQMM THHN+ 1 - 14.0 SQMM THW		MAIN: 150AT, 200AF, 3P, 230V, MCCB							
PHASE: 3		CONDUIT: IMC, 50 MM DIA.		ENCLOSURE : NEMA 1							
VOLTS: 230		LOCATION: GROUND FLOOR		MOUNTING: SURFACE							
CKT NO.	CIRCUIT DESCRIPTION	Volts	Amp	LOAD IN RATING				CIRCUIT PROTECTION	Size of Conductor		Color Code
				AMPERES					CIRCUIT BREAKER RATING	SQ. MM THHN STRANDED CU. WIRE	
				3φ	AB	CA	BC				
1	AIR CONDITIONING UNIT 2.0 HP	1	1500	230	12.00			30AT, 2P, 230V, MCCB	2 - 5.5 + G 3.5	PVC, 20	1R,1B,G
2	AIR CONDITIONING UNIT 2.0 HP	1	1500	230	12.00			30AT, 2P, 230V, MCCB	2 - 5.5 + G 3.5	PVC, 20	1R,1B,G
3	AIR CONDITIONING UNIT 2.0 HP	1	1500	230		12.00		30AT, 2P, 230V, MCCB	2 - 5.5 + G 3.5	PVC, 20	1B,1Y,G
4	AIR CONDITIONING UNIT 2.0 HP	1	1500	230			12.00	30AT, 2P, 230V, MCCB	2 - 5.5 + G 3.5	PVC, 20	1B,1Y,G
5	AIR CONDITIONING UNIT 2.0 HP	1	1500	230			12.00	30AT, 2P, 230V, MCCB	2 - 5.5 + G 3.5	PVC, 20	1Y,1R,G
6	AIR CONDITIONING UNIT 2.0 HP	1	1500	230			12.00	30AT, 2P, 230V, MCCB	2 - 5.5 + G 3.5	PVC, 20	1Y,1R,G
7	AIR CONDITIONING UNIT 2.0 HP	1	1500	230	12.00			30AT, 2P, 230V, MCCB	2 - 5.5 + G 3.5	PVC, 20	1R,1B,G
8	AIR CONDITIONING UNIT 2.0 HP	1	1500	230	12.00			30AT, 2P, 230V, MCCB	2 - 5.5 + G 3.5	PVC, 20	1R,1B,G
9	AIR CONDITIONING UNIT 2.0 HP	1	1500	230		12.00		30AT, 2P, 230V, MCCB	2 - 5.5 + G 3.5	PVC, 20	1B,1Y,G
10	AIR CONDITIONING UNIT 2.0 HP	1	1500	230			12.00	30AT, 2P, 230V, MCCB	2 - 5.5 + G 3.5	PVC, 20	1B,1Y,G
11	AIR CONDITIONING UNIT 2.0 HP	1	1500	230			12.00	30AT, 2P, 230V, MCCB	2 - 5.5 + G 3.5	PVC, 20	1Y,1R,G
12	AIR CONDITIONING UNIT 2.0 HP	1	1500	230			12.00	30AT, 2P, 230V, MCCB	2 - 5.5 + G 3.5	PVC, 20	1Y,1R,G
13	AIR CONDITIONING UNIT 2.0 HP	1	1500	230	12.00			30AT, 2P, 230V, MCCB	2 - 5.5 + G 3.5	PVC, 20	1R,1B,G
	SPARE										
14	AIR CONDITIONING UNIT 2.0 HP	1	1500	230		12.00		30AT, 2P, 230V, MCCB	2 - 5.5 + G 3.5	PVC, 20	1B,1Y,G
	SPARE										
15	AIR CONDITIONING UNIT 2.0 HP	1	1500	230			12.00	30AT, 2P, 230V, MCCB	2 - 5.5 + G 3.5	PVC, 20	1Y,1R,G
	SPARE										
TOTAL		22500	230		60	60	60	150AT, 3P, 230V, MCCB	3 - 50.0 + G 14.0	IMC, 50	1R,1B,1Y,G

MAIN FEEDER and CURRENT PROTECTION COMPUTATION:

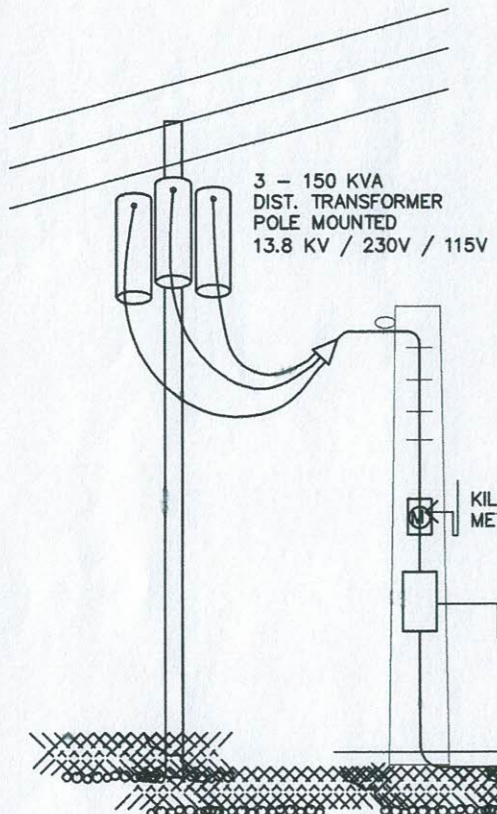
NOTE: $I_{FL} = ((60 \times 1.732) + (125\% \times 60)) \times DF = 118.92$ Amperes
 $I_{CB} = ((60 \times 1.732) + (250\% \times 60)) \times DF = 133.92$ Amperes

G - Means Ground Wire
 1R - Color RED
 1B - Color BLACK
 1Y - Color YELLOW
 1G - Color GREEN

This Electrical Design is good only for the above connected loads.
 Any additional electrical load connection in the future is not allowed,
 Except redesign of electrical load system will be done.



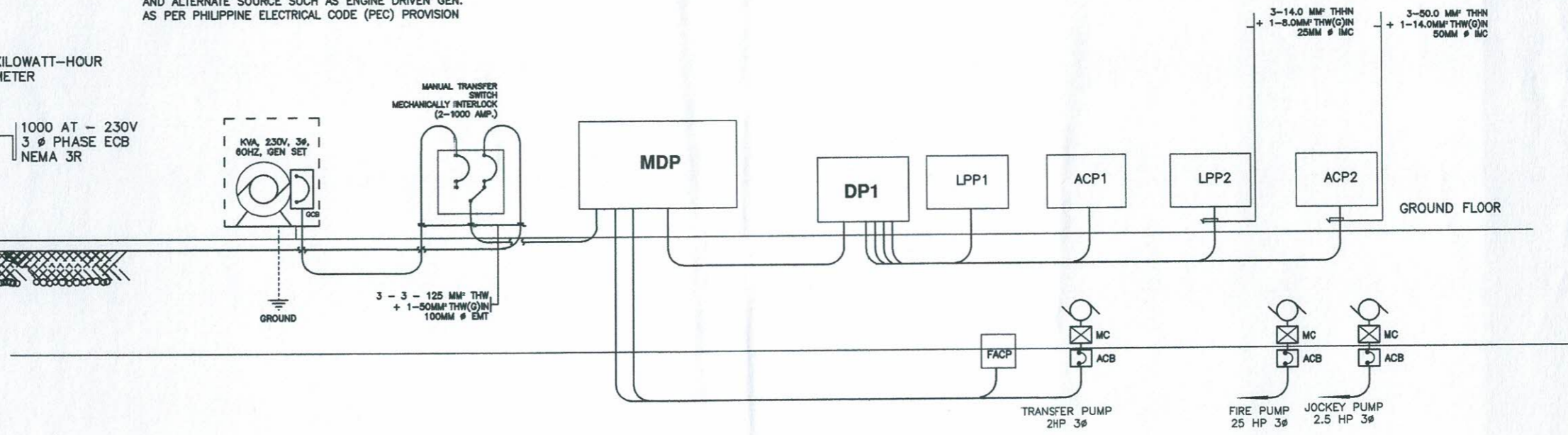
	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
	 R. J. R. SANCHEZ PDU	 V. C. COSTA DIRECTOR BARG	 PROFESSIONAL ELECTRICAL ENGINEER	 S. B. BAYOT, JR. HEAD PDU	 O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	 M. J. D. TEPORA VPPD	 H. D. ROBLES PRES CVSU	REVISED ELECTRICAL PLAN OF CONSTRUCTION OF FOUR STOREY DORMITORY PHASE 2 CAVITE STATE UNIVERSITY MAIN CAMPUS	CAVITE STATE UNIVERSITY



NOTE:

1. PROVIDE CABLE/ WIRE GUTTER BELOW AND ABOVE THE PANEL BOARDS INSIDE ALL THE ELECTRICAL ROOM.
2. ALL ELECTRICAL CONDUITS AND TELEPHONE SERVICE ENTRANCE THAT INSTALLED BELOW THE GROUND SHALL BE IN CONCRETE ENCASEMENT.
3. REFER/ VERIFY TO THE OTHER TRADE FOR THE EXACT RATING AND LOCATION OF THEIR EQUIPMENT.
4. PROVIDE SIGNAGE "ELECTRICAL ROOM" POSTED TO ALL ELECTRICAL ROOM DOORS.
5. REFER TO LOAD SCHEDULE FOR THE RATING OF INDIVIDUAL ENCL, ACB'S IN NEMA-3R.

FIRE PUMP AND JOCKEY SHOULD HAVE A SEPARATE ELECTRICAL SERVICE SUPPLY, COMING FROM MERALCO AND ALTERNATE SOURCE SUCH AS ENGINE DRIVEN GEN. AS PER PHILIPPINE ELECTRICAL CODE (PEC) PROVISION



1 SINGLE LINE DIAGRAM
E5 SCALE NTS

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO:
	R. J. R. SANCHEZ PDU OVPPD	V. C. COSTA DIRECTOR BARG	E. P. MORA PROFESSIONAL ELECTRICAL ENGINEER	S. B. BAYOT JR. HEAD PDU	O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	M. J. DATEPORA VPPD CVSU	H. D. ROBLES PRES CVSU	REVISED ELECTRICAL PLAN OF CONSTRUCTION OF FOUR STOREY DORMITORY PHASE 2 CAVITE STATE UNIVERSITY MAIN CAMPUS	CAVITE STATE UNIVERSITY