

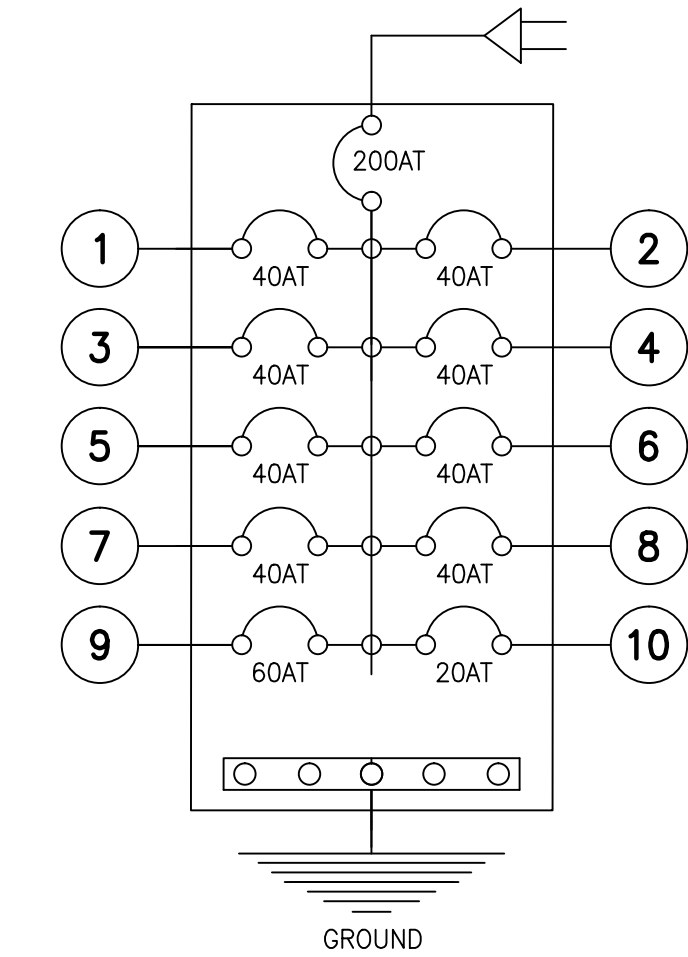
GENERAL ELECTRICAL NOTES
AND SPECIFICATION :

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE LATEST EDITION THE PHILIPPINE ELECTRICAL CODE, TO THE RULES AND REGULATIONS OF LOCAL AND NATIONAL AUTHORITIES CONCERNED AND THE REQUIREMENTS OF LOCAL UTILITY COMPANIES.
2. ALL PIPE EMBEDDED IN CONCRETE SHALL BE POLYVINYL CHLORIDE (PVC) AND ALL EXPOSED SHALL BE ELECTRICAL METALLIC CONDUIT (EMT).
3. MINIMUM SIZE OF WIRE AND CONDUIT SHALL BE 2.0 mm THHN AND 20MM (1/2") NOMINAL DIA. RESPECTIVELY. UNLESS OTHERWISE SPECIFIED ON PLANS.
4. NO BRANCH CIRCUIT WIRING IN LIGHTING AND POWER SHALL HAVE A LOAD MORE THAN 80% OF ITS RATING.
5. LIGHT CONTROL SWITCHES SHALL BE RATED 16 AMPERES, 230 Vac.
6. UNLESS OTHERWISE SPECIFIED PULLBOXES OR JUNCTION BOXES SHALL BE PROVIDED WHENEVER REQUIRED AND NECESSARY, ALTHOUGH SUCH BOXES ARE NOT INDICATED ON PLANS.
7. FOR EACH SPARE CIRCUIT IN PANELBOARD, PROVIDE AN EMPTY CONDUIT 20MM (3/4") DIA. TERMINATING TO A COVERED SQUARE BOX.
8. ALL MATERIALS AND EQUIPMENT TO BE USED SHALL BE BRAND NEW AND OF APPROVED TYPE FOR BOTH LOCATION AND PURPOSES.
9. ALL METAL FRAMES SHALL BE PROPERLY AND ADEQUATELY GROUNDED. GROUND WIRE SHALL BE PROVIDED ON ALL EQUIPMENT FEEDER.
10. MOUNTING HEIGHTS SHALL BE AS FOLLOWS:
- | | | |
|-----------------------------|-------|----------------------------------|
| a. LIGHT SWITCHES | _____ | 1.40m A.F.F. AT CENTER |
| b. RECEPTACLES | _____ | 0.30m A.F.F. |
| c. COUNTER TOP OUTLET | _____ | 1.10m A.F.F. |
| d. RANGEHOOD OUTLET | _____ | 1.30m A.F.F. |
| e. PANELBOARDS | _____ | AS REQUIRED UNDERFIELD CONDITION |
| f. GROUND FAULT INTERRUPTER | _____ | 1.10m A.F.F. |
| g. RANGE OUTLET | _____ | 0.50m A.F.F. |
| h. REFRIGERATOR OUTLET | _____ | 0.50m A.F.F. |
| i. ACU's (WINDOW TYPE) | _____ | AS REQUIRED UNDERFIELD CONDITION |
11. OUTLET BOXES SHALL BE AS FOLLOWS:
- | | | |
|---------------------------------------------------|-------|----------------------------------------------------------------------------------------|
| LIGHT OUT | _____ | 1-1/2" DEEP, 4" OCTAGONAL BOX 1 OR 2 WAY ENTRIES |
| RECEPTACLES AND TELEVISION ANT. AND TELEPHONE OUT | _____ | 2-1/8" DEEP, 4" OCTAGONAL BOX 3 OR 4 WAY ENTRIES |
| | _____ | 2-1/8" DEEP, 2"x4" UTILITY BOX 1 OR 2 RACEWAY ENTRIES |
| | _____ | 1-1/2" DEEP, 4" SQUARE BOX WITH 1-GANG RAISED PLASTIC COVER FOR 3 OR 4 RACEWAY ENTRIES |
12. ALL FLUORESCENT LAMPS SHALL BE PROVIDED WITH POLYESTER FILLED PRE-HEAT THERMALLY PROTECTED HIGH POWER BALLAST.
13. DUPLEX RECEPTACLES SHALL BE RATED 10 AMP, 250 VOLTS, ROUNDED SLOT FOR 220 VOLTS AND SPECIAL OUTLETS SHALL BE RATED 15AMP, 250 VOLTS AS REQUIRED.
14. THE CONTRACTOR SHALL SECURE ALL PERMITS AND PAY FEES REQUIRED FOR THE WORKS, AND SHALL FURNISH THE OWNER THROUGH THE ENGINEER'S FINAL CERTIFICATE OF INSPECTION AND APPROVAL FROM PROPER GOVERNMENT AUTHORITIES FOR COMPLETE WORKS.
15. EXPOSED CONDUIT RUN SHALL BE INSTALLED PARALLEL TO OR PERPENDICULAR WITH THE FLOOR AND SUPPORTED BY CLAMPS EVERY 152.4 CM, DIAGONAL RUN SHALL NOT BE ACCEPTED. (THIS IS ALSO APPLICABLE TO CONDUITS RUNNING OVERHEAD INSIDE CEILING).
16. ALL 30-AMPERES CIRCUIT HOMERUN TO PANELBOARD MORE THAN 30 METERS IN LENGTH SHALL BE 5.5mm THHN (#10 AWG), UNLESS OTHERWISE SPECIFIED ON PLANS.
17. ADDITIONAL MATERIALS SPECIFICATIONS:
- | | | |
|-------------------------------------|-------|------------------------------------------|
| a. WIRES AND CABLES | _____ | PHILFLEX OR APPROVED EQUAL |
| b. CIRCUIT BREAKER (BOLT-ON TYPE) | _____ | MITSUBISHI/SQUARE D/ABB/SIEMENS |
| c. WIRING DEVICES | _____ | CLIPSAL C-CONCEPT / NATIONAL WIDE SERIES |
| d. POLYVINYL CHLORIDE CONDUIT (PVC) | _____ | CROWN SUPREME SCH. 40 |
| e. JUNCTION / UTILITY BOX GA.16 | _____ | FUMACO |
18. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE PROPER IDENTIFICATION AND LABELING OF ALL CIRCUIT BREAKER. EACH PANEL WILL BE PROVIDED WITH A TYPEWRITTEN CIRCUIT DIRECTORY.
19. THE JOB SHALL BE EXECUTED IN THE MOST THROUGH PROMPT AND WORKMAN LIKE MANNER, EMPLOYING STANDARD TOOLS, EQUIPMENT, METHODS AND GOOD ENGINEERING PRACTICES. THE JOB SHALL BE DONE COMPLETE IN ALL ASPECTS AS REQUIRED IN PLANS AND SPECIFICATION AND READY FOR OPERATION.
20. THE DRAWING AND SPECIFICATIONS ARE INTENDED TO PRESENT A GENERAL LAYOUT AND BROAD OUTLINE AND DISTANCES OF EQUIPMENT. THE CONTRACTOR IS HEREBY REQUIRED TO MAKE ADJUSTMENT AT THE JOBSITE AS LOCATIONS, LEVELS AND DISTANCES ARE GOVERNED BY ACTUAL FIELD CONDITIONS.
21. WIRES SHALL BE COLOR CODED:
- | | | | | | |
|--------------|-------|--------------|-----|--------------|-------|
| LINE 1 ----- | BLACK | LINE 2 ----- | RED | GROUND ----- | GREEN |
|--------------|-------|--------------|-----|--------------|-------|
22. THERE SHALL BE ONLY ONE SERVICE DROP TO THE PROPOSED BUILDING. SECONDARY SERVICE ENTRANCE SHALL BE 230 VOLTS. SINGLE-PHASE, 2WIRE+GROUND, 60Hz.
23. NO REVISION IN THE DESIGN SHALL BE DONE WITHOUT THE PRIOR KNOWLEDGE AND APPROVAL OF THE DESIGNER AND THE OWNER. ANY SUCH REVISION DONE WITHOUT THE APPROVAL SHALL CAUSE RESPONSIBILITY OF THE DESIGNER TO CEASED AS A WHOLE.
24. ALL WEATHER-EXPOSED INSTALLATIONS SHALL USE WEATHERPROOF TYPE MATERIALS, ESPECIALLY WEATHERPROOF CONVENIENCE OUTLET, CAST-BOXES, JUNCTION BOXES SUBMIT SAMPLE FOR APPROVAL.
25. ALL EQUIPMENT WIRE, ROYAL CORDS, SPECIAL TYPE PLUGS AND RECEPTACLE AS REQUIRED SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
26. ALL ELECTRICAL WORKS SHALL BE DONE UNDER THE DIRECT SUPERVISION OF A DULY LICENSED ELECTRICAL ENGINEER AND / OR MASTER ELECTRICIAN.

SCHEDULE AND LOAD COMPUTATION						
PB-1 TO PB-8						
NO.	DESCRIPTION	NO. OUTLET	VOLTS	VA	AMP PER CKT	PROTECTION PER CKT
1	LIGHTING OUTLET	4	230	400	1.74	15 AT
2	CONVENIENCE OULET	4	230	1440	6.26	20 AT
3	ACU	1	230	2760	12.00	30 AT
4	SPARE	1	230	0.00	0.00	20 AT
TOTAL				4,600	20.00	40 AT

SCHEDULE AND LOAD COMPUTATION						
PB COMMON AREAS						
NO.	DESCRIPTION	NO. OUTLET	VOLTS	VA	AMP PER CKT	PROTECTION PER CKT
1	LIGHTING OUTLET	8	230	800	3.48	15 AT
2	LIGHTING OUTLET	8	230	800	3.48	15 AT
3	LIGHTING OUTLET	11	230	1,100	4.78	15 AT
4	CONVENIENCE OULET	2	230	720	3.13	20 AT
5	CONVENIENCE OULET	2	230	720	3.13	20 AT
6	CONVENIENCE OULET	2	230	720	3.13	20 AT
7	SPARE	1	230	1500	6.52	20 AT
TOTAL				6,360	27.65	60 AT

SCHEDULE AND LOAD COMPUTATION						
MPB						
NO.	DESCRIPTION	NO. OUTLET	VOLTS	VA	AMP PER CKT	PROTECTION PER CKT
1	PB1	1	230	4,600	20.00	40 AT
2	PB2	1	230	4,600	20.00	40 AT
3	PB3	1	230	4,600	20.00	40 AT
4	PB4	1	230	4,600	20.00	40 AT
5	PB5	1	230	4,600	20.00	40 AT
6	PB6	1	230	4,600	20.00	40 AT
7	PB7	1	230	4,600	20.00	40 AT
8	PB8	1	230	4,600	20.00	40 AT
9	PBCA	1	230	5,140	22.78	60 AT
10	SPARE	1	230	1500	6.52	20 AT
TOTAL				43,440	189.3	200 AT



E
E-1 E-1
RISER DIAGRAM
SCALE : NTS

E
E-1 E-1
SCHEDULE AND LOAD COMPUTATION
SCALE : NTS

LEGEND

- S, Sa TUMBLER SWITCH, SINGLE POLE
- Sab TUMBLER SWITCH, 2-GANG
- Sabc TUMBLER SWITCH, 3-GANG
- S3ab... TUMBLER SWITCH, 3-WAY
- ⊖ DUPLEX CONVENIENCE OUTLET
- ⊖ WPO WEATHERPROOF C.O.

- ACU AIRCONDITIONING UNIT OUTLET
- PINLIGHT WITH LED BULB
- ① CIRCUIT HOMERUN
- ▤ PANEL BOARD
- ⬇ WALL LIGHT

- Ⓜ KILOWATT-HOUR METER
- ⚡ SERVICE ENTRANCE, 2-WIRE
- ⚡ TELEPHONE ENTRANCE
- SERVICE ENTRANCE TO PANEL



BATAAN PENINSULA STATE UNIVERSITY
TECHNICAL WORKING GROUP FOR INFRASTRUCTURE

CAPITOL COMPOUND, BRGY. TENEJERO, CITY OF BALANGA, BATAAN,
E-MAIL: bpsu.twginfo2016@gmail.com/ bpsupes2017@gmail.com
TELEPHONE NO. : (0477) 237-15-98

FLOOR FINISH SCHEDULE

F-1	POLISHED CONCRETE EXPOSED AGGREGATES RESIN 3000 WITH SEALER
F-2	POLISHED CONCRETE SALT AND PEPPER RESIN 3000 WITH SEALER
F-3	3000 X 3000 & 3000 X 6000 CERAMIC TILES NON-SKID
F-4	SMOOTH FINISH CEMENT WITH WATER-PROOFING

WALL FINISH SCHEDULE

PARTITION SCHEDULE

PROJECT TITLE:

CONSTRUCTION OF TWO-STOREY
DORMITORY FOR STUDENTS AT
ORANI CAMPUS

LOCATION:

BATAAN PENINSULA STATE UNIVERSITY,
ORANI CAMPUS

STRUCTURAL ENGINEER

REG. NO. :

PIR. NO. :

PLACE :

TIN NO. :

MASTER PLUMBER/SANITARY ENGINEER

REG. NO. :

PIR. NO. :

PLACE :

TIN NO. :

PROFESSIONAL ELECTRICAL ENGINEER

REG. NO. :

PIR. NO. :

PLACE :

TIN NO. :

PROFESSIONAL MECHANICAL ENGINEER

REG. NO. :

PIR. NO. :

PLACE :

TIN NO. :

REVISION

NO.	DESCRIPTION	DATE
2		

PREPARED BY:

AR. ROXETTE S. UMEREZ

ARCHITECT 1, BPSU TWG

REG. NO. :

PIR. NO. :

PLACE :

CHECKED BY:

AR. JO-ANA Z. TANEGA

ARCHITECT 1, PPES OFFICE

REG. NO. :

PIR. NO. :

PLACE :

REVIEWED BY:

AR. DANILO Y. GALURA

ARCHITECT II, TWG CONSULTANT

RECOMMENDED BY:

DR. EDMUNDO C. TUNGOL

VICE PRESIDENT ADMIN. & FINANCE

APPROVED BY:

DR. GREGORIO J. RODIS

UNIVERSITY PRESIDENT

REPUBLIC ACT 9266.

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SHEET CONTENT:

GENERAL ELECTRICAL NOTES &
SPECIFICATION
SCHEDULE AND LOAD COMPUTATION
LEGEND

SHEET NUMBER:

E1



	FLOOR FINISH SCHEDULE	WALL FINISH SCHEDULE	PARTITION SCHEDULE
Y	F-1	POLISHED CONCRETE EXPOSED AGGREGATES RESIN 3000 WITH SEALER	
	F-2	POLISHED CONCRETE SALT AND PEPPER RESIN 3000 WITH SEALER	
	F-3	3000 X 3000 & 3000 X 6000 CERAMIC TILES NON-SKID	
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LOCATION:		
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MASTER PLUMBER/SANITARY ENGINEER		
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PLACE :		
TIN NO. :		
PROFESSIONAL ELECTRICAL ENGINEER		
REG. NO. :		
PTR. NO. :		
PLACE :		
TIN NO. :		
PROFESSIONAL MECHANICAL ENGINEER		
REG. NO. :		
PTR. NO. :		
PLACE :		
TIN NO. :		
REVISION		
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SHEET CONTENT:		SHEET NUMBER:
SECOND LIGHTING LAYOUT		E3