



UNIVERSITY OF SCIENCE AND TECHNOLOGY OF SOUTHERN PHILIPPINES
 CLAYTON DRIVE DAVAO CITY
 INFRASTRUCTURE PLANNING AND FACILITY DEVELOPMENT UNIT
 CLAYTON DRIVE DAVAO CITY
 TELEPHONE & CORDON: 71-46-55 / 71-46-57 / 71-46-58 / 71-46-59 / 71-46-60 / 71-46-61 / 71-46-62 / 71-46-63 / 71-46-64 / 71-46-65 / 71-46-66 / 71-46-67 / 71-46-68 / 71-46-69 / 71-46-70 / 71-46-71 / 71-46-72 / 71-46-73 / 71-46-74 / 71-46-75 / 71-46-76 / 71-46-77 / 71-46-78 / 71-46-79 / 71-46-80 / 71-46-81 / 71-46-82 / 71-46-83 / 71-46-84 / 71-46-85 / 71-46-86 / 71-46-87 / 71-46-88 / 71-46-89 / 71-46-90 / 71-46-91 / 71-46-92 / 71-46-93 / 71-46-94 / 71-46-95 / 71-46-96 / 71-46-97 / 71-46-98 / 71-46-99 / 71-46-100

PROFESSIONAL ELECTRONICS ENGINEER
 REG. NO. _____
 DATE _____
 PAGE _____

PROJECT: PROPOSED 21ST CENTURY 5 STOREY CLASSROOM BUILDING
 LOCATION: USTP WILANAYAN CAMPUS, NAKANG GENERAL
 OWNER: UNIVERSITY OF SCIENCE AND TECHNOLOGY OF SOUTHERN PHILIPPINES

RECOMMENDING ENGINEER:
 AR. FERDINAND ALBERTA
 DIRECTOR, USTP

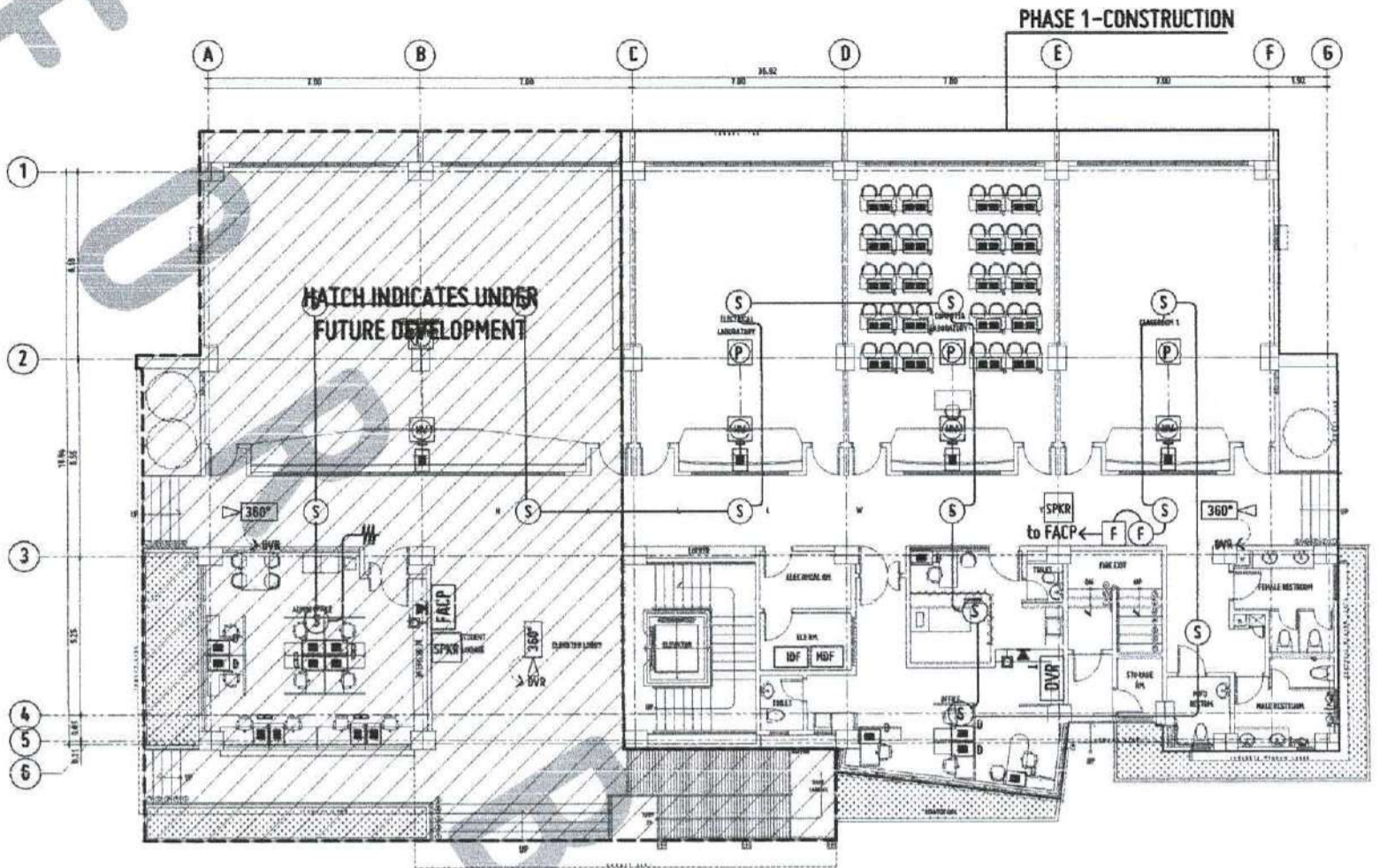
RECOMMENDING ENGINEER:
 ATTY. EDWARD B. BUCOR
 USTP

APPROVED BY:
 DR. AMBRASO C. CULTURA II
 PERSONAL, USTP SPEECH

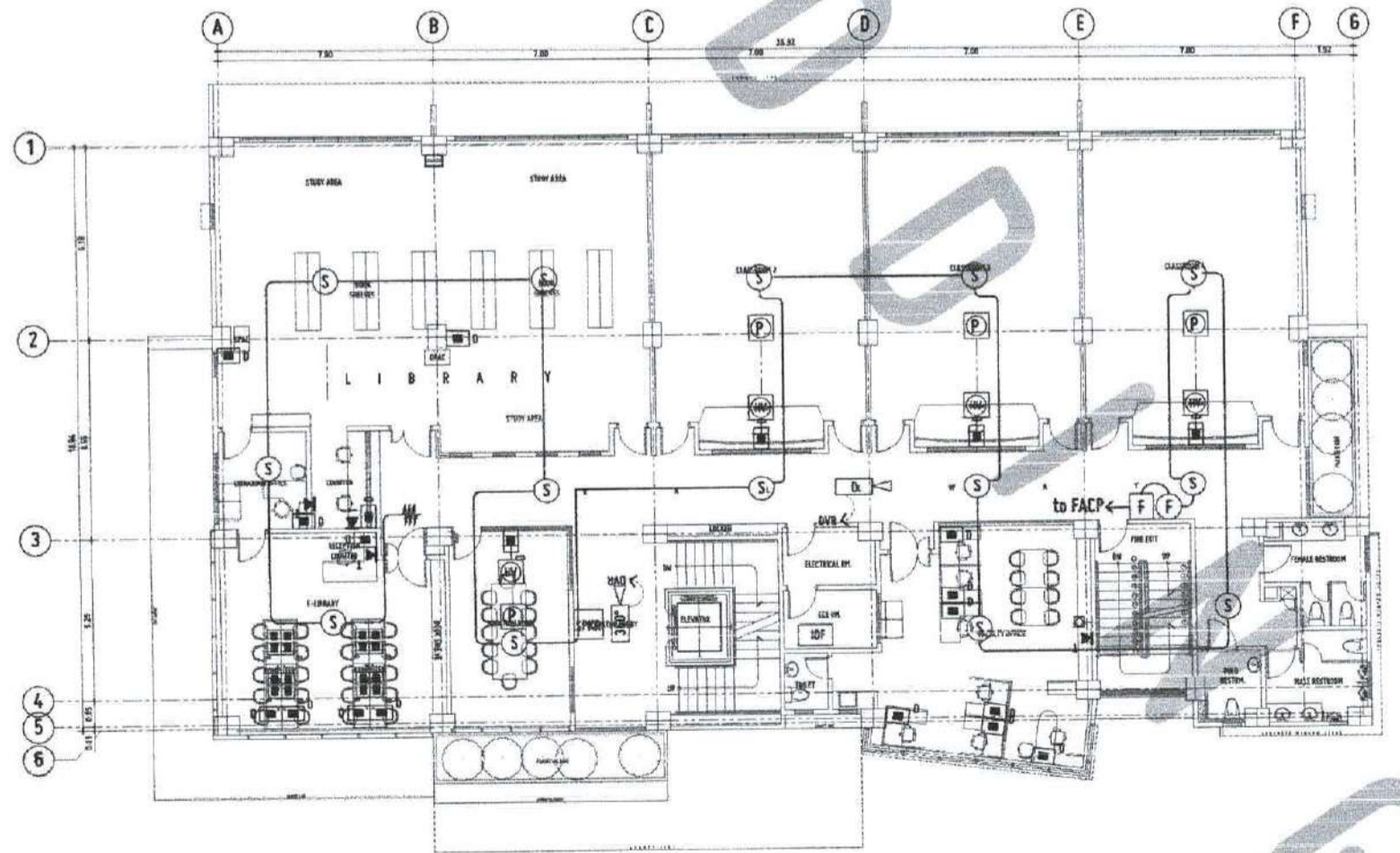
SHEET CONTENTS:
 SECOND FLOOR - ECE LAYOUT PLAN
 SECOND FLOOR - ECE LAYOUT PLAN

DATE DRAWN: _____
 DATE CHECKED: _____
 DATE APPROVED: _____

AUX1



ECE 1 1 GROUND FLOOR - ECE LAYOUT PLAN-under phase 1 development
 SCALE: 1:100 MTS



ECE 1 2 SECOND FLOOR - ECE LAYOUT PLAN-for future development
 SCALE: 1:100 MTS

APPROVED BY:
 OFFICE OF THE BUILDING OFFICIAL
 WILANAYAN, NAKANG GENERAL



REPUBLIC OF THE PHILIPPINES
 UNIVERSITY OF SCIENCE AND TECHNOLOGY OF SOUTHERN PHILIPPINES
 INDIANAPOLIS PLANNING AND FACILITY DEVELOPMENT UNIT
 CLAYTON, SOUTH AVENUE, CANTON, CALAPAN CITY, COMPOST VALLEY
 TELEPHONE: (0832) 71-44-44 / (0832) 71-44-45 / (0832) 71-44-46 / (0832) 71-44-47
 WEBSITE: www.ustip.edu.ph

PROFESSIONAL ELECTRONICS ENGINEER
 REG. NO. _____
 DATE _____
 PLACE _____

PROJECT: PROPOSED 21ST CENTURY 5 STOREY CLASSROOM BUILDING
 LOCATION: USTP WILANGA CAMPUS, MINDANAO ORIENTAL
 OWNER: UNIVERSITY OF SCIENCE AND TECHNOLOGY OF SOUTHERN PHILIPPINES

RECOMMENDING ARCHITECT:
 MR. FERDINAND A. OLIVERA
 DIRECTOR, FPD

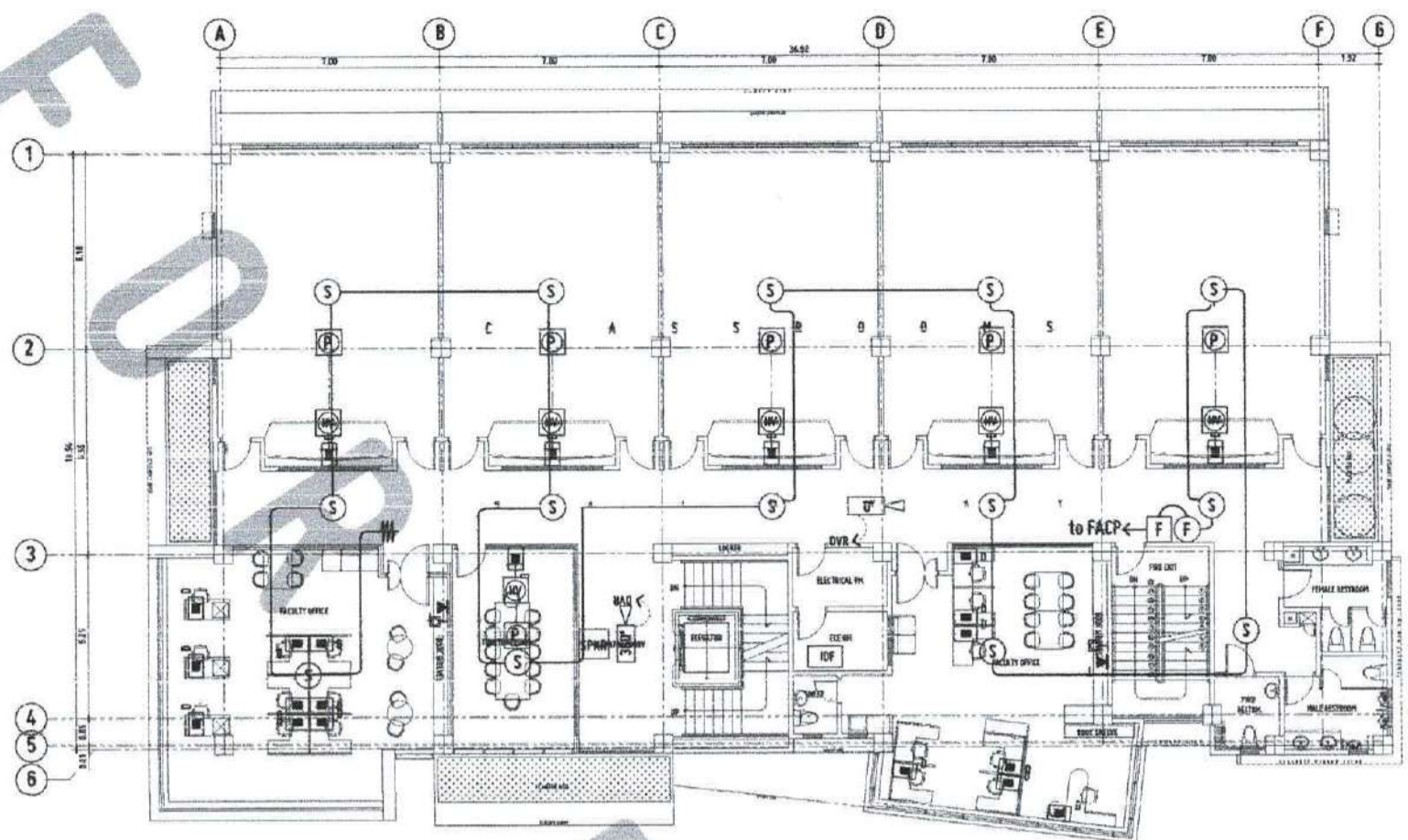
RECOMMENDING APPROVAL:
 ATTY. ERWIN B. BUCIO
 DIR.-CP FOR ADMINISTRATIVE AFFAIRS

APPROVED BY:
 DR. AMBROSIO B. CULTURA II
 PRESIDENT, USTP SYSTEM

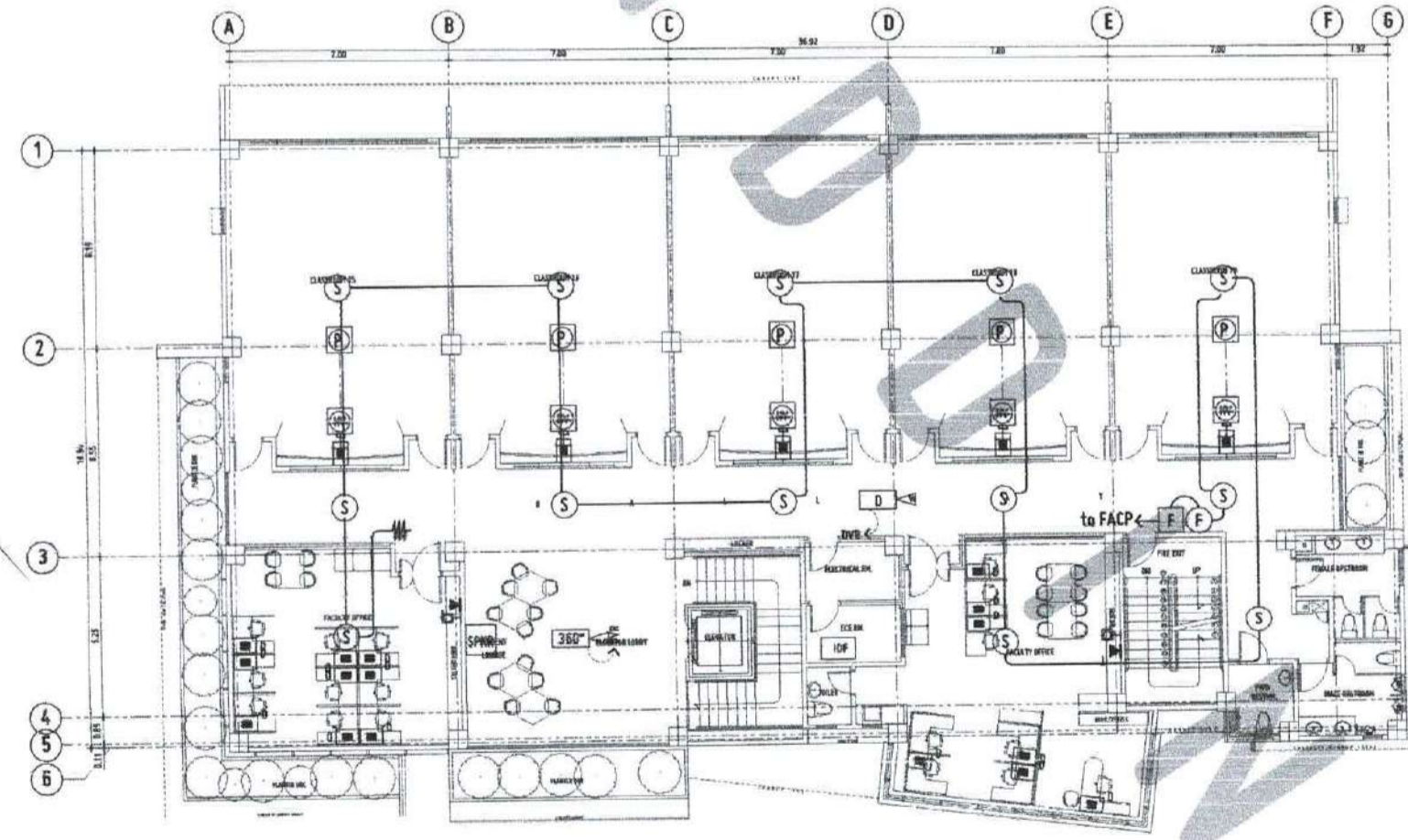
SHEET CONTENTS:
 FLOOR PLAN - CLASSROOM PLAN
 FLOOR PLAN - LAB PLAN
 FLOOR PLAN - LAB PLAN

DATE DRAWN: _____
 THE: _____

AUX2



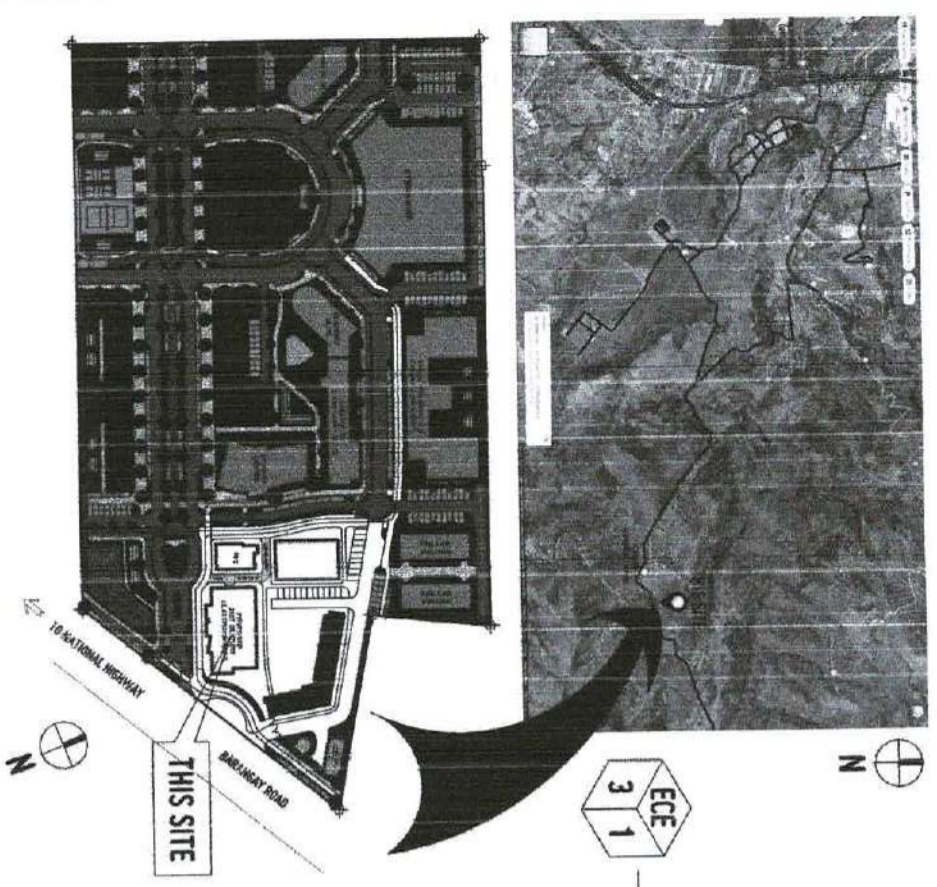
TYPICAL FLOOR - ECE LAYOUT PLAN
THIRD FLOOR & FOURTH FLOOR - for future development
 SCALE: 1:100 MTS



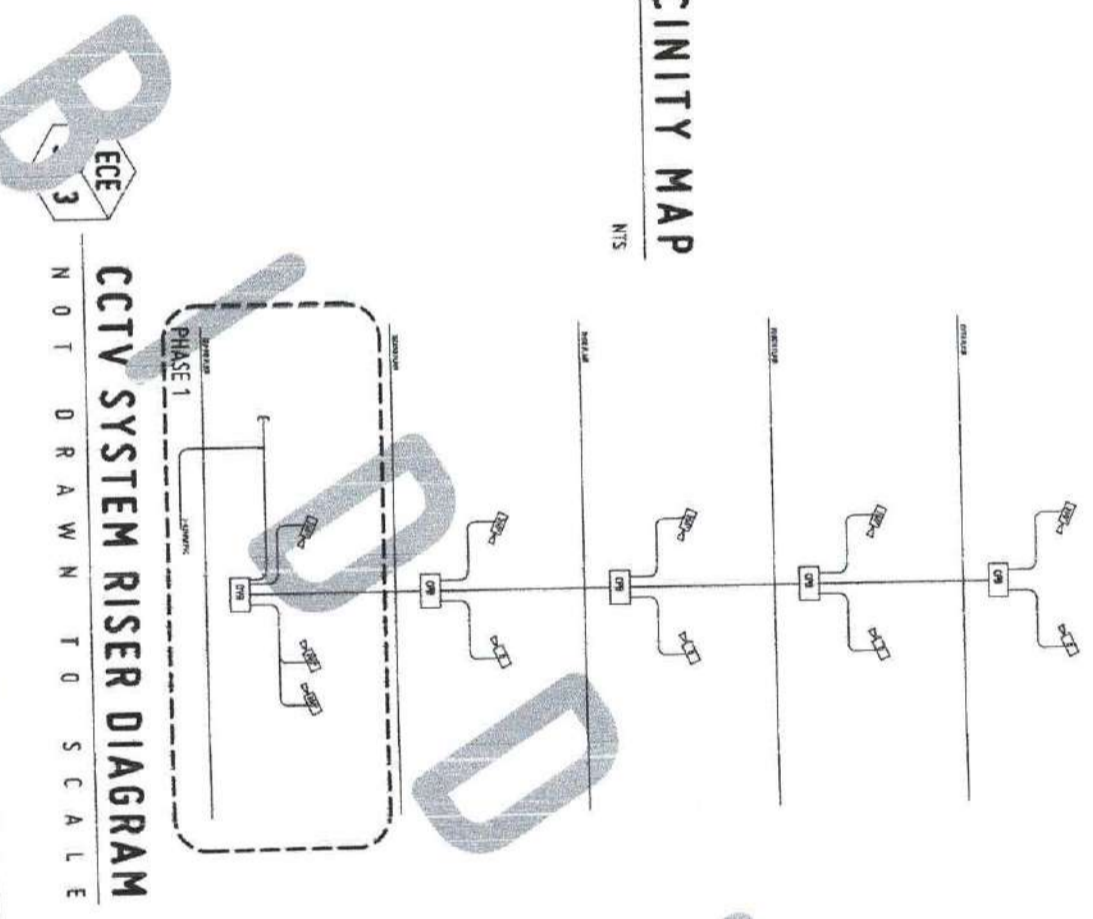
FIFTH FLOOR - ECE LAYOUT PLAN - for future development
 SCALE: 1:100 MTS

APPROVED BY:
 REPUBLIC OF THE PHILIPPINES
 OFFICE OF THE BUILDING OFFICIAL
 WILANGA, MINDANAO ORIENTAL

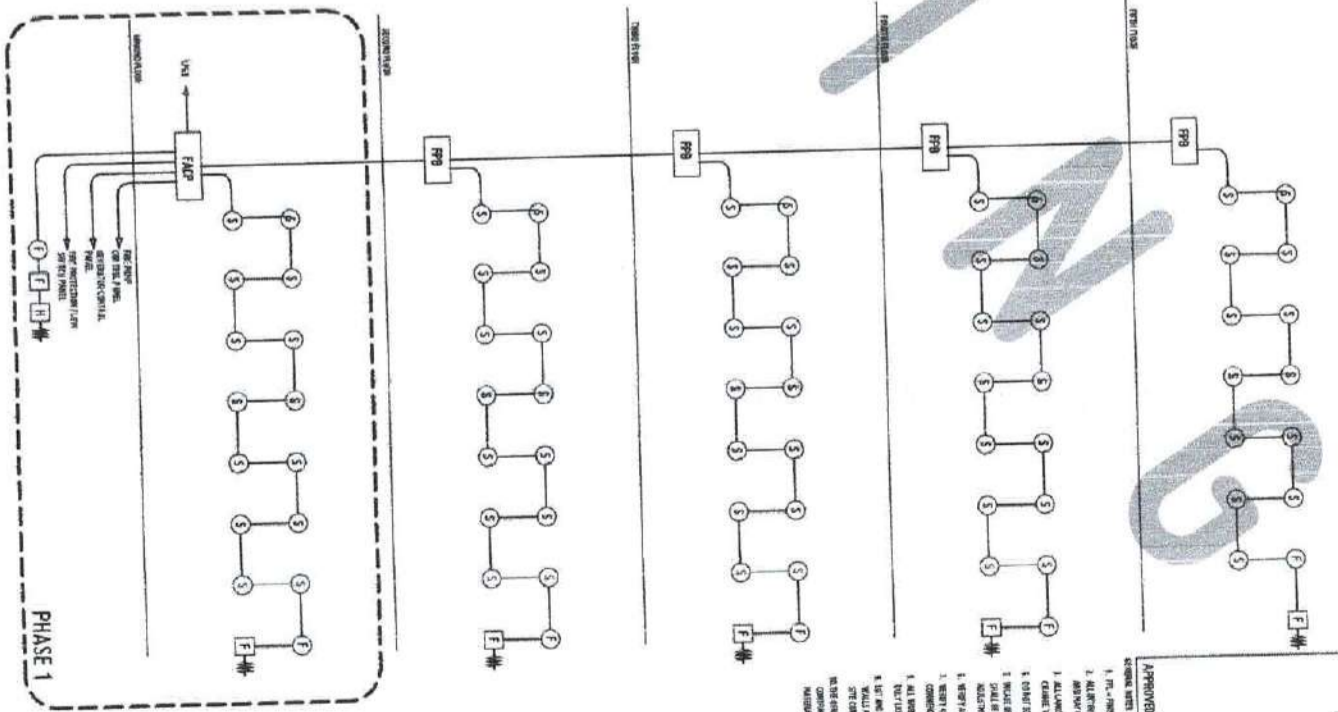
- APPROVED BY:
1. IN-CHARGE OF THE PROJECT
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VICINITY MAP
SCALE: 1:1500 MTS



CCTV SYSTEM RISER DIAGRAM
NOT A DRAWING TO SCALE



FIRE ALARM SYSTEM RISER DIAGRAM
NOT A DRAWING TO SCALE

FOR

LOCATION PLAN
SCALE: 1:1500 MTS

LEGEND:

- 1. SINGLE TELEPHONE WALL MOUNTED ORIENT.
- 2. SINGLE TELEPHONE FLOOR MOUNTED ORIENT.
- 3. SINGLE TELEPHONE DATA WALL MOUNTED ORIENT.
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- 50. SINGLE TELEPHONE DATA WALL MOUNTED ORIENT.

NOTES:

1. SYMBOL
2. MINIMUM CONDUIT SHALL BE 20MM (3/4") USE PVC FOR ALL EXPOSED CONDUIT ON INSIDE WALL AND PVC FOR ALL CONCEALED CONDUIT
3. VERIFY EXACT NUMBER OF CITY CAMERA WITH LAYOUT
4. VERIFY AND/OR CORRECT WITH OWNER OVER THE EXACT LOCATION OF EACH CAMERA TO LAYOUT OF CONDUIT
5. BOND ALL CONDUIT CABLE TRAY USING 6.3MM² GROUND WIRE AND BOND TO GROUND
6. CCTV SYSTEM AND WORKING SCHEDULE

C	CONDUIT SIZE (MM ²)	NO. OF CONDUIT
1	20	25 (3/4")
2	20	25 (3/4")
3	25	32 (1")
4	32	40 (1-1/4")
5	40	50 (1-1/2")
6	50	63 (2")



REPUBLIC OF THE PHILIPPINES
UNIVERSITY OF SCIENCE AND TECHNOLOGY OF SOUTHERN PHILIPPINES
CALAPAN DE DEO CAMPUS
INFRASTRUCTURE PLANNING AND FACILITY DEVELOPMENT UNIT
CLAY H. DEO AVENUE, LAMPAY, CALAPAN DE DEO CITY, 8000
TELEPHONE: (8092) 71-48-28 / (8092) 884-1738 / 884-1739 | FAX: (8092) 884-1841
WEBSITE: www.ustip.edu.ph

PROFESSIONAL ELECTRICIAN'S ENGINEER
PROJECT LOCATION
OWNER

PROPOSED 21ST CENTURY 5 STOREY CLASSROOM BUILDING
USTP WILLOWAY CAMPUS, MISAMIS ORIENTAL
UNIVERSITY OF SCIENCE AND TECHNOLOGY OF SOUTHERN PHILIPPINES

RECOMMENDING APPROVAL
AR. FERDINAND A. QUIRAN
DIRECTOR

RECOMMENDING APPROVAL
ATTY. ERWIN B. BUCIO
DIRECTOR

APPROVED BY:
DR. AMBRASIO C. CULTURA II
PROFESSOR

SHEET CONTENTS
DATE DRAWN
DATE CHECKED

AUX3

APPROVED BY:
 1. M. ANTONIO
 2. M. ANTONIO
 3. M. ANTONIO
 4. M. ANTONIO
 5. M. ANTONIO
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 7. M. ANTONIO
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 10. M. ANTONIO
 11. M. ANTONIO

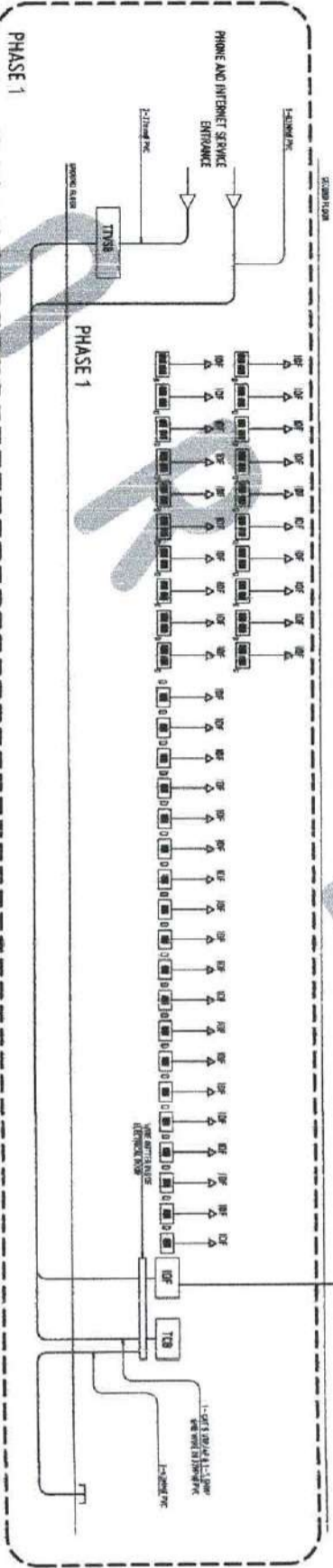
- GENERAL NOTE:
1. ALL ELECTRICAL WORKS HEREIN SHALL BE DONE ACCORDING WITH THE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, THE RULES AND REGULATIONS OF THE LOCAL ENGINEERING AUTHORITIES AND THE REQUIREMENTS OF THE UTILITY REGULATORY COMPANY. ALL ELECTRICAL WORKS HEREIN SHALL BE DONE BY A LICENSED ELECTRICAL ENGINEER.
 2. ALL ELECTRICAL WORKS UNDER THE DIRECT SUPERVISION OF A LICENSED ELECTRICAL ENGINEER SHALL BE NEATLY PLACED, BEHIND FASTENED AND PROPERLY FINISHED.
 3. THE CONTRACTOR SHALL VERIFY AND ORIENT THE ACTUAL LOCATION OF THE TAPPING POINT FOR CONNECTION TO CONDUITATION SYSTEM.
 4. ALL MATERIALS SHALL BE BRAND NEW AND SHALL COMPLY WITH THE PROVISIONS OF THE UNDER MENTIONED STANDARDS: IN EVERY CASE WHERE SUCH A STANDARD HAS BEEN SPECIFIED.
 5. ALL CONDUITS MUST BE PROTECTED AGAINST DAMAGES BY THE ENTRANCE OF THE WATER AND FOREIGN MATTER IN ANY CONDUIT. ALL ENDS OF CONDUITS SHALL BE PLUGGED TO EXCLUDE MOISTURE AND MUST BE INSTALLED IMMEDIATELY AFTER THE CONDUITS ARE PLACED.
 6. UNLESS OTHERWISE SPECIFIED, ALL ELECTRICAL INSTALLATION SHALL BE DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE REQUIREMENT. REFER TO THE PHILIPPINE ELECTRICAL CODE FOR THE MINIMUM SIZE OF CONDUIT TO BE USED.
 7. ALL SPACINGS, WALL AND FLOOR PENETRATIONS SHALL BE PROVIDED WITH FIRE RESISTIVE MATERIALS.
 8. ALL OUTLETS SHALL BE GALVANIZED GALV. 18 GAGE TYPE WITH THE FACTORY FINISH. ALL OUTLETS SHALL BE USED WHEN APPLICABLE FOR EASY PULLING OF WIRES AND SHALL BE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE REQUIREMENT. REFER TO THE PHILIPPINE ELECTRICAL CODE FOR THE MINIMUM SIZE OF CONDUIT TO BE USED.
 9. ALL SPACINGS, WALL AND FLOOR PENETRATIONS SHALL BE PROVIDED WITH FIRE RESISTIVE MATERIALS.
 10. ALL SPACINGS SHALL BE GALVANIZED GALV. 18 GAGE TYPE WITH THE FACTORY FINISH.
 11. ALL SPACINGS SHALL BE GALVANIZED GALV. 18 GAGE TYPE WITH THE FACTORY FINISH.
 12. THE PLANS AS DRAWN ARE BASED UPON THE ARCHITECTURAL PLANS AND THE DETAILS AND SHOWING INFORMATION AS ACCURATE AS POSSIBLE TO INDICATE THE FITTING NECESSARY TO FIT TO THE BUILDING CONDITIONS. THE LOCATIONS OF OUTLETS, APPARATUS AND APPLIANCES SHOWN ON THESE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THEIR PROPER LOCATION AND TO MAKE THEM FIT WITH THE ARCHITECTURAL DETAILS AND RESTRICTIONS FROM THE ENGINEER'S REPRESENTATIVE AT THE SITE.

NOTES:

1. FIRE ALARM SYSTEM SHALL BE CONVENTIONAL TYPE.
2. MINIMUM CONDUIT SIZE SHALL BE 20MM (3/4") ONE ONE FOR ALL EXPOSED CONDUIT OR INSIDE ONLY WALL AND PVC CONCRETE EMBEDDED.
3. ALL WIRING SHALL BE IN PVC PROVIDE SLOPE OF 2% GRADE.
4. EASY WIRING AND CONDUIT SCHEDULE.

CONDUIT SIZE (MM Ø)	NUMBER OF WIRING (E.L. CABLE TYPE)	CONDUIT SIZE (IN Ø)	NUMBER OF WIRING (E.L. CABLE TYPE)
20	20	3/4"	20
25	25	1"	25
32	32	1 1/4"	32
40	40	1 3/4"	40
50	50	2"	50

- A - #18/2 AWG CONDUIT IN TUBULAR (C) CABLE TYPE (D) LISTED BRAND
- ① FIRE ALARM CONTROL PANEL, UL LISTED BRAND
- ② SMOKE DETECTOR - CEILING MOUNTED
- ③ HEAT DETECTOR - WALL MOUNTED
- ④ FIRE ALARM STROKE AND HORN, UL LISTED BRAND
- ⑤ FIRE ALARM MANUAL PULL STATION, UL LISTED BRAND
- ⑥ END OF LINE RESISTOR
- ⑦ FIRE ALARM SYSTEM WIRING PULL BOX
- ⑧ PROVIDE SUPERVISORY WIRES TO THE FOLLOWING:
- A. ELEVATOR/S
 - B. FIRE PROTECTION FLOW SWITCH CONTROL PANEL
 - C. STAND PRESSURIZATION BLOWERS IN FAN/EX VEHICULAR EXHAUST
 - D. SMOKE VENTILATION SYSTEM AND/OR SMOKE CONTROL SYSTEM
 - E. FIRE FIGHT CONTROL PANEL
7. PROVIDE WIRING FROM FAC TO GENERATOR CONTROL PANEL TO MONITOR THE FOLLOWING CONDITIONS:
- A. GENERATOR RUNNING
 - B. GENERATOR FAULT
 - C. GENERATOR SWITCH IN NON-AUTOMATIC POSITION/MODE
8. FINAL WIRING SHALL BE AS PER MANUFACTURER'S STANDARDS.

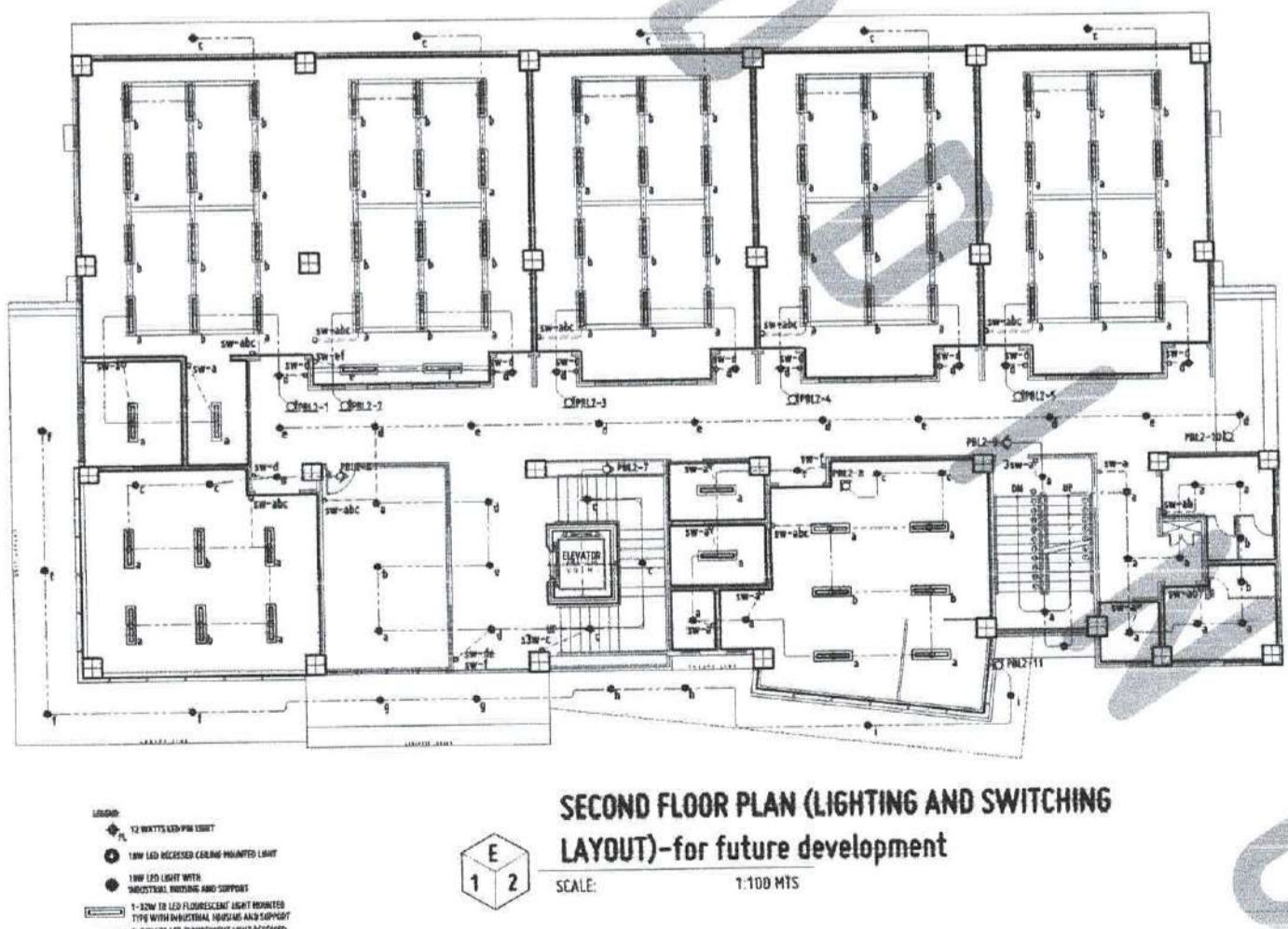
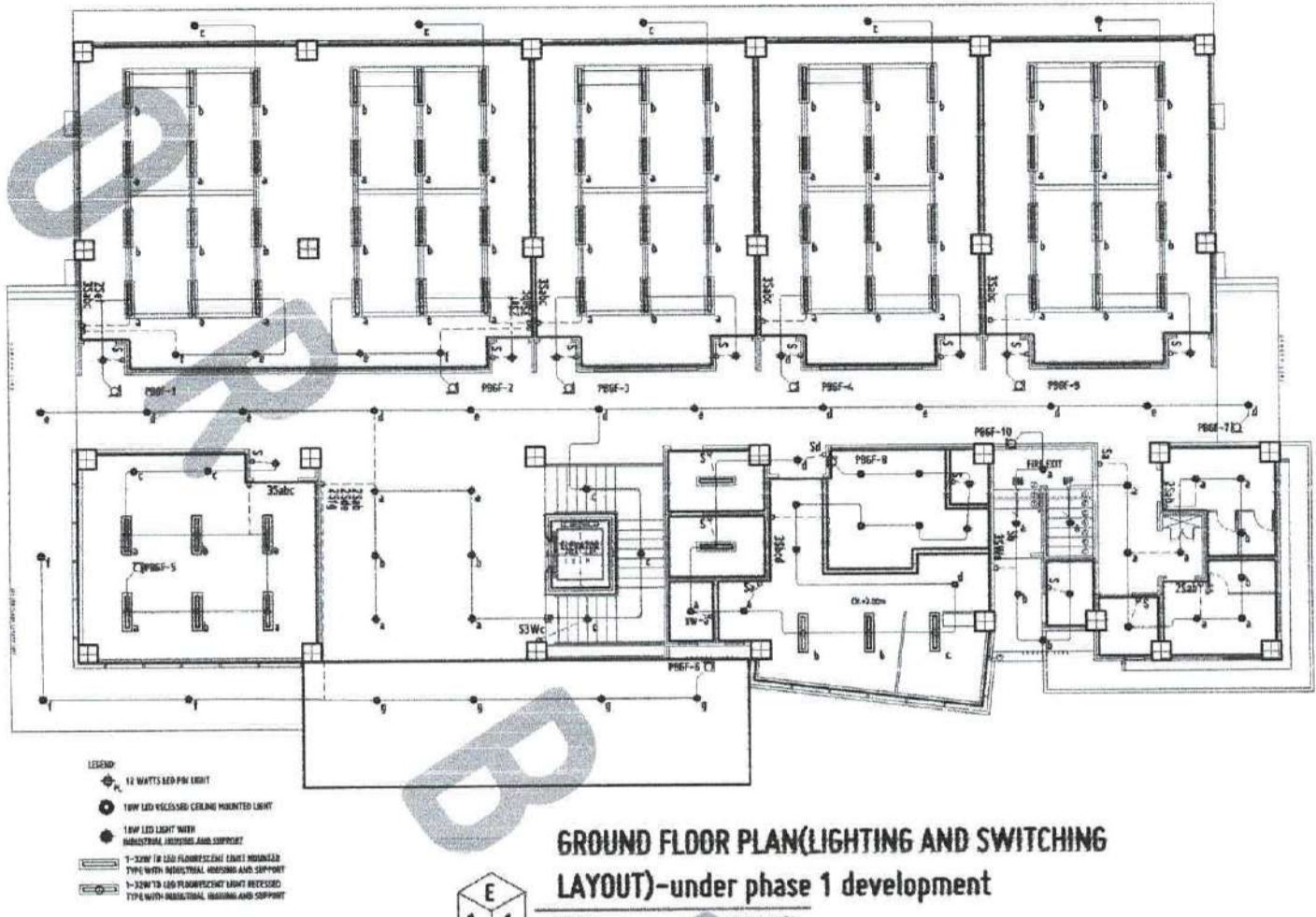


TELEPHONE AND INTERNET RISER DIAGRAM
 ORAWN NOT TO SCALE



UNIVERSITY OF THE PHILIPPINES
 OFFICE OF THE BUILDING OFFICIAL
 MILWAUKEE, WISCONSIN (USA)

RECOMMENDING ENGINEER: **DR. AR. FERDINAND A. TORRES**, DIRECTOR, PFD
 RECOMMENDING ENGINEER: **ATTY. ERWIN B. BODOL**, DUC-LEGAL ADMINISTRATION & LEGAL AFFAIRS
 APPROVED BY: **DR. AMBRASIA S. CULITRA II**, PRESIDENT, PESTB
 SHEET CONTAINS: TELEPHONE AND INTERNET RISER DIAGRAM
 DATE DRAWN: _____
 TITLE: _____
AUX4



APPROVED BY:
OFFICE OF THE BUILDING OFFICIAL,
VILAMBAIA, MANDALAY ORIENTAL