

FROM THE OFFICE:
PHYSICAL PLANNING AND DEVELOPMENT OFFICE
 ROOM 202 FEM HALL, MARIANO MARCOS STATE UNIVERSITY
 City of Batang, 2908 Ilocos Norte
 Telefax: +63 (77) 792-3191

DRAWN BY:
Dave Clark E. Pascua
DAVE CLARK E. PASCUA
 DRAFTSMAN II
 CHECKED AND REVIEWED BY:
Aida V. Cabano
AIDA V. CABANO
 CHIEF, PHYSICAL PLANNING

PROJECT TITLE:
**REFURBISHMENT OF TISSUE
 CULTURE LABORATORY OFFICE**
 LOCATION: MMSU CR1, CITY OF BATANG, ILOCOS NORTE

CONFORME:
Marissa L. Atis
MARISSA L. ATIS
 PROJECT LEADER
 RECOMMENDING APPROVAL:
Romeo B. Duldalo
ROMEO B. DULDALO
 DIRECTOR, PDDO

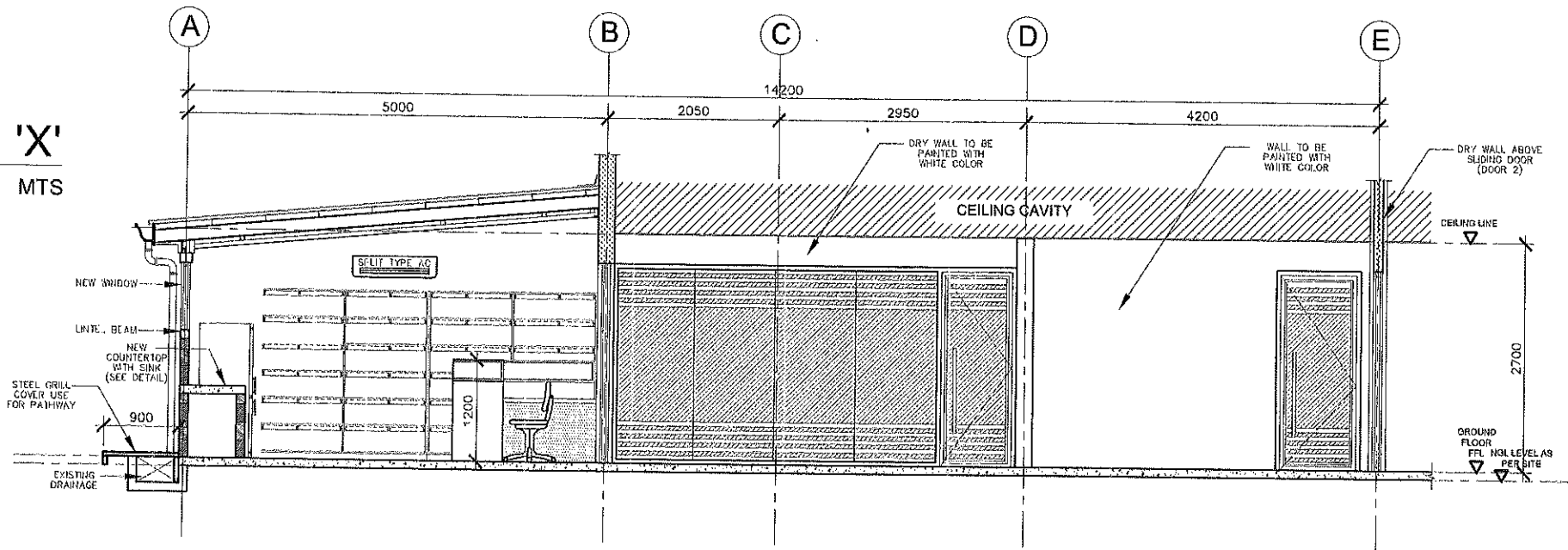
APPROVED BY:
Smiley C. Arupis
SMILEY C. ARUPIS
 UNIVERSITY PRESIDENT

SHEET CONTENTS:
 AS SHOWN
 REVISION AND DATE:

SHEET NO:
 A-1
 1 13

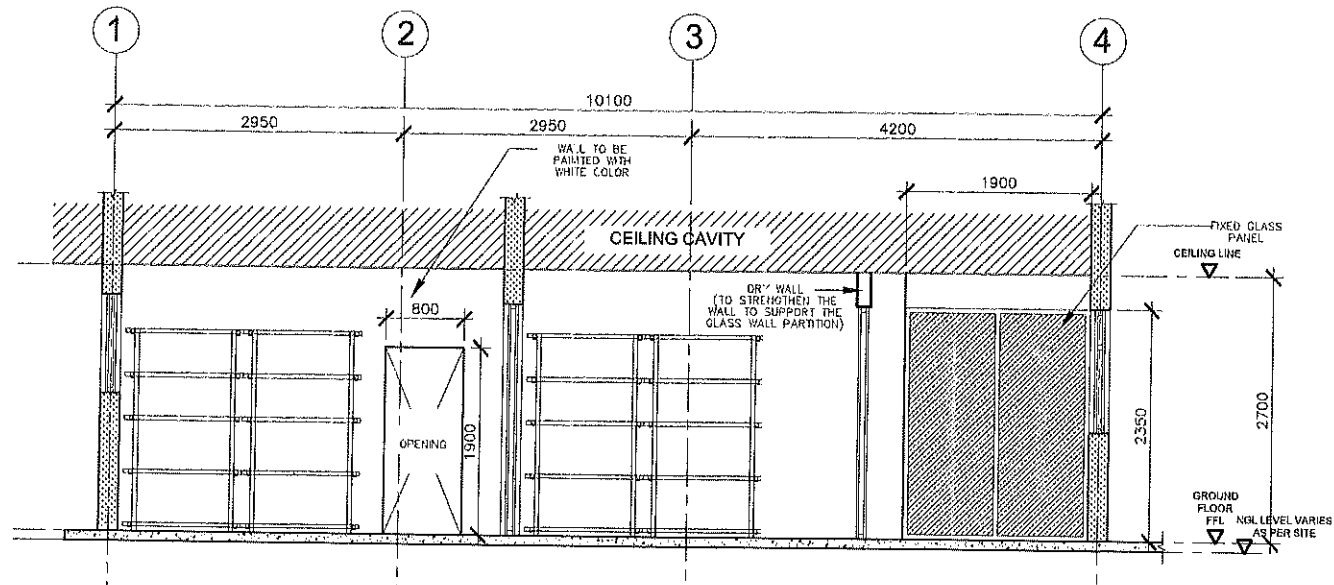
SECTION 'X'

SCALE 1:75 MTS



SECTION 'Y'

SCALE 1:75 MTS



FROM THE OFFICE:
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 ROOM 202 FEM HALL, MARIANO MARCOS STATE UNIVERSITY
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Aida V. Cabang
AIDA V. CABANG
 CHIEF, PHYSICAL PLANNING

PROJECT TITLE:
REFURBISHMENT OF TISSUE CULTURE LABORATORY OFFICE
 LOCATION: I/MSU CR1, CITY OF BATANG, ILOCOS NORTE

CONFORME:
Marissa I. Atis
MARISSA I. ATIS
 PROJECT LEADER
 RECOMMENDING APPROVAL:
Romeo R. Dululao
ROMEO R. DULULAO
 DIRECTOR, PPDO

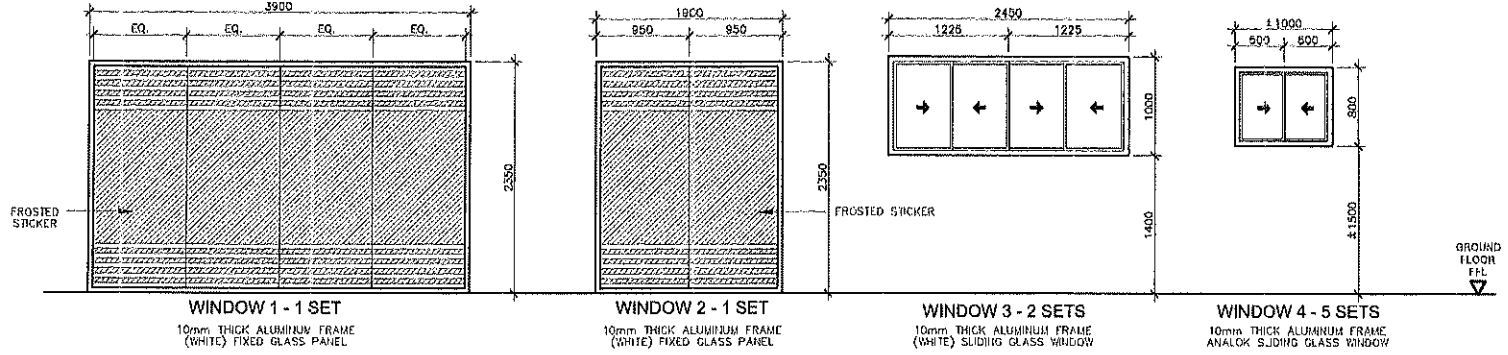
APPROVED BY:
Shirley C. Grupis
SHIRLEY C. GRUPIS
 UNIVERSITY RESIDENT

| SHEET CONTENTS: |
|--------------------|
| AS SHOWN |
| REVISION AND DATE: |
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SHEET NO:
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 2 | 13

| | | | | | | | | | | | |
|---------------|---|---------------|--|---------------|---|---------------|---|-----------------|--|-----------------|--|
| ALUMINUM DOOR | D1 | ALUMINUM DOOR | D2 | ALUMINUM DOOR | D3 | ALUMINUM DOOR | D4 | | | | |
| | | | | | | | | | | | |
| | FRAME/DOOR TYPE | | 10mm THICK GLASS ALUMINUM FRAME (WHITE) DOUBLE SWING DOOR WITH 8mm THK FIXED GLASS PANEL AND TRANSOM | | FRAME/DOOR TYPE | | 10mm THICK GLASS ALUMINUM FRAME (WHITE) DOUBLE SWING DOOR | FRAME/DOOR TYPE | 10mm THICK GLASS ALUMINUM FRAME (WHITE) SWING DOOR | FRAME/DOOR TYPE | 10mm THICK GLASS ALUMINUM FRAME (WHITE) SWING DOOR |
| | OPEN TYPE | | FLOOR HINGED, DOUBLE LEAVES | | OPEN TYPE | | FLOOR HINGED, DOUBLE LEAVES | OPEN TYPE | FLOOR HINGED, SINGLE LEAF | OPEN TYPE | FLOOR HINGED, SINGLE LEAF |
| | FIRE RATING | | AS PER FIRE CODE REQUIREMENT | | FIRE RATING | | AS PER FIRE CODE REQUIREMENT | FIRE RATING | AS PER FIRE CODE REQUIREMENT | FIRE RATING | AS PER FIRE CODE REQUIREMENT |
| LOCATION | MAIN DOOR | LOCATION | STAFF/PREPARATION AREA | LOCATION | CORRIDOR TO PREPARATION AREA | LOCATION | CULTURE ROOM/INOCULATION ROOM | | | | |
| REMARKS | DOOR SPECIALIST TO PROVIDE DETAILED SHOP DRAWINGS | REMARKS | DOOR SPECIALIST TO PROVIDE DETAILED SHOP DRAWINGS | REMARKS | DOOR SPECIALIST TO PROVIDE DETAILED SHOP DRAWINGS | REMARKS | DOOR SPECIALIST TO PROVIDE DETAILED SHOP DRAWINGS | | | | |

| | | |
|---------------|---|--|
| ALUMINUM DOOR | D5 | |
| | | |
| | FRAME/DOOR TYPE | 10mm THICK GLASS ALUMINUM FRAME (WHITE) SWING DOOR |
| | OPEN TYPE | FLOOR HINGED, SINGLE LEAF |
| | FIRE RATING | AS PER FIRE CODE REQUIREMENT |
| LOCATION | CULTURE ROOM | |
| REMARKS | DOOR SPECIALIST TO PROVIDE DETAILED SHOP DRAWINGS | |

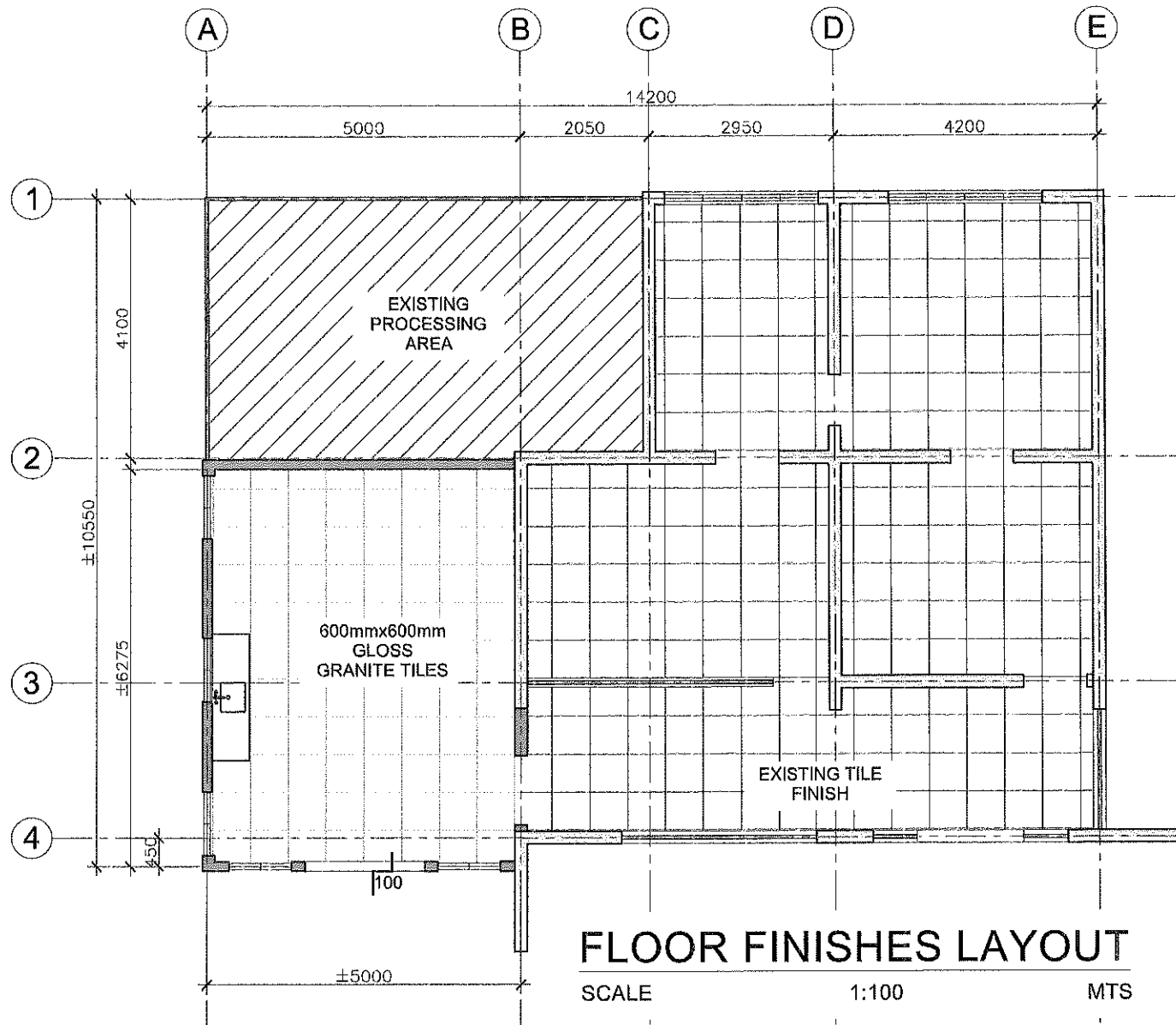


NOTE:
DOOR OPENING ARE SUBJECT FOR VERIFICATION AT SITE EXISTING OPENING.

SCHEDULE OF DOORS AND WINDOWS



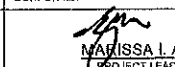
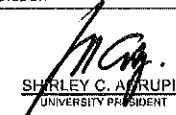
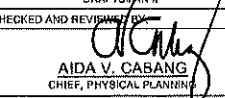
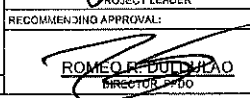
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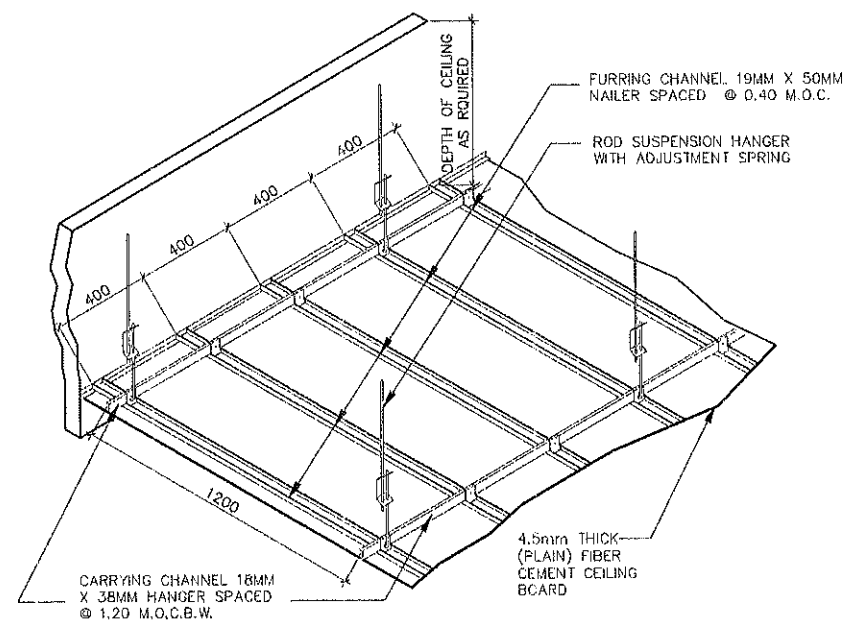
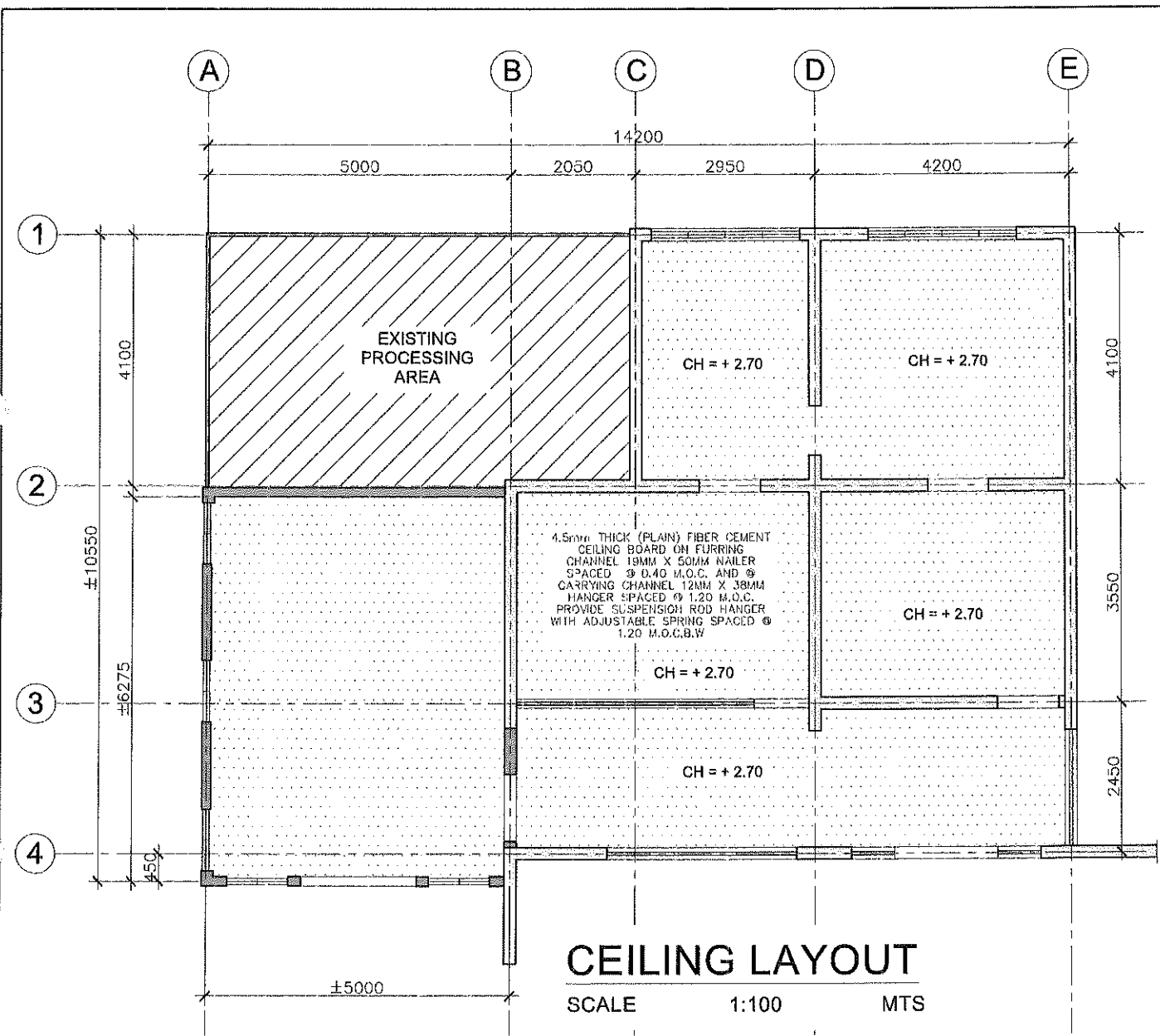
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|---|---|---|--|---|---|-----------------------------|----------------------------|
| <p>PHYSICAL PLANNING AND DEVELOPMENT OFFICE ROOM 202 FEM HALL, MARIANO MARCOS STATE UNIVERSITY City of Batang, 2905 Ilocos Norte Telafax: +63 (77) 792-3181</p> | FROM THE OFFICE: | DRAWN BY: <i>Dave Clark E. Pascua</i> DAVE CLARK E. PASCUA DRAFTSMAN II | PROJECT TITLE: REFURBISHMENT OF TISSUE CULTURE LABORATORY OFFICE | CONFORME: <i>Mariessa I. Atis</i> MARISSA I. ATIS PROJECT LEADER | APPROVED BY: <i>Shirley C. Abrupis</i> SHIRLEY C. ABRUPIS UNIVERSITY PRESIDENT | SHEET CONTENTS: AS SHOWN | SHEET NO. A-3 3 13 |
| | CHECKED AND REVIEWED BY: <i>Aida V. Cabang</i> AIDA V. CABANG CHIEF, PHYSICAL PLANNING | RECOMMENDING APPROVAL: <i>Romeo R. Dulod</i> ROMEO R. DULOD DIRECTOR, PPDO | LOCATION: KMSU CR1, CITY OF BATANG, ILOCOS NORTE | REVISION AND DATE: | | | |
| | | | | | | | |
| | | | | | | | |



FLOOR FINISHES LAYOUT

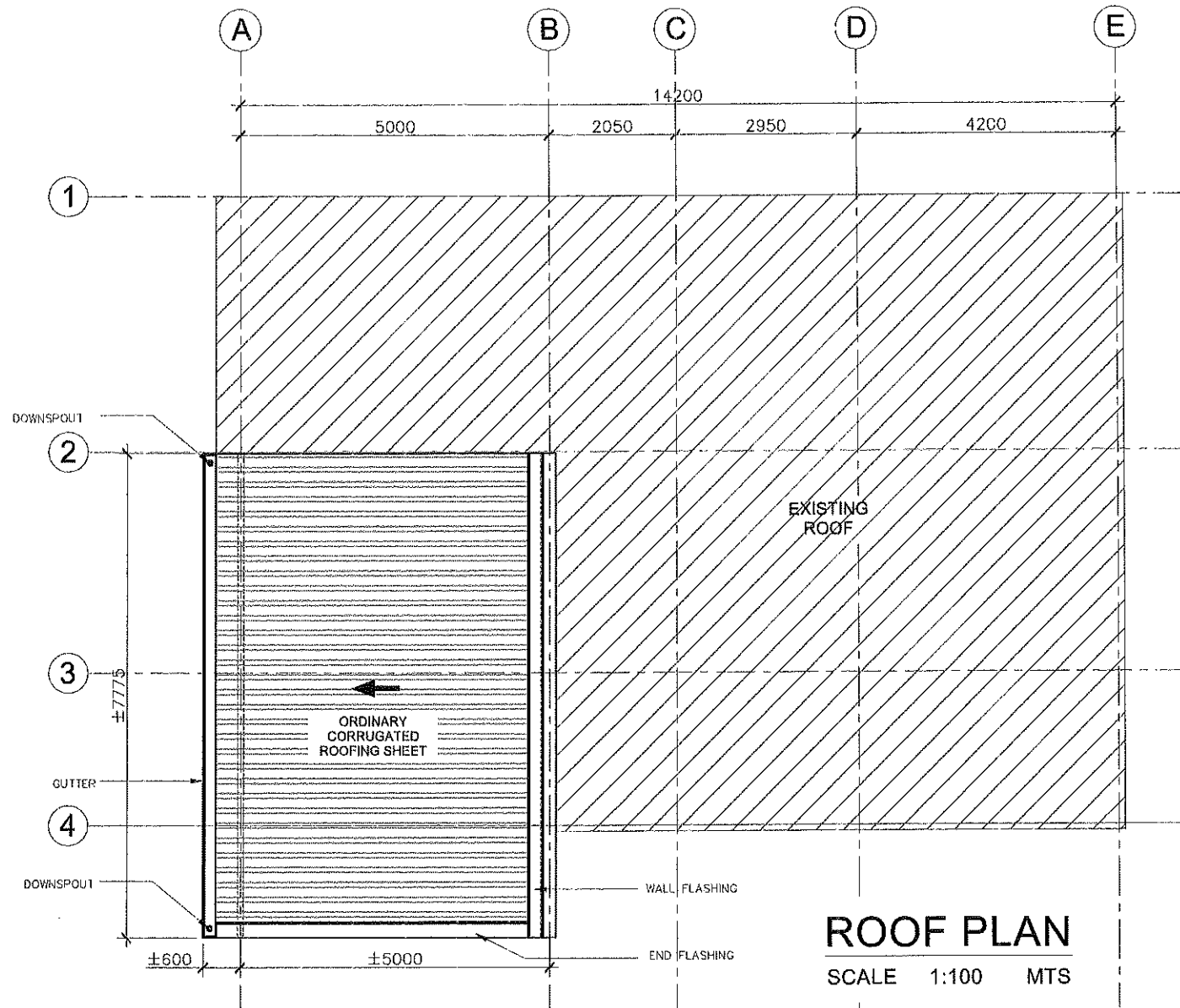
SCALE 1:100 MTS

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|---|--|---|---|---|--|--|--|
|  | FROM THE OFFICE: PHYSICAL PLANNING AND DEVELOPMENT OFFICE ROOM 202 FEM HALL, MARIANO MARCOS STATE UNIVERSITY City of Batac, 2906 Ilocos Norte Telefax: +63 (77) 792-3181 | DRAWN BY:  DAVE CLARK E. PASCUA CRAFTSMAN II | PROJECT TITLE: REFURBISHMENT OF TISSUE CULTURE LABORATORY OFFICE | CONFORME:  MARISSA L. ATIS PROJECT LEADER | APPROVED BY:  SHIRLEY C. ARUPIS UNIVERSITY PRESIDENT | SHEET CONTENTS: AS SHOWN REVISION AND DATE: | SHEET NO: <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;"> A-4 4 13 </div> |
| | CHECKED AND REVIEWED BY:  AIDA V. CASANG CHIEF, PHYSICAL PLANNING | LOCATION: MMSU-CRL, CITY OF BATAC, ILOCOS NORTE | RECOMMENDING APPROVAL:  ROMEO R. DULUYAN DIRECTOR, P-DO | | | | |




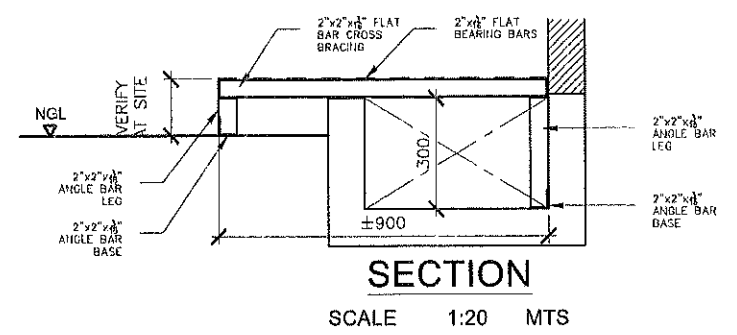
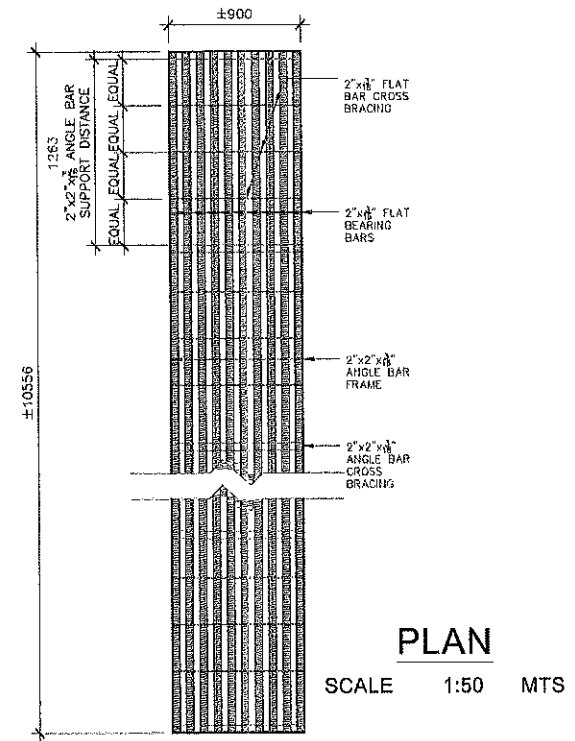
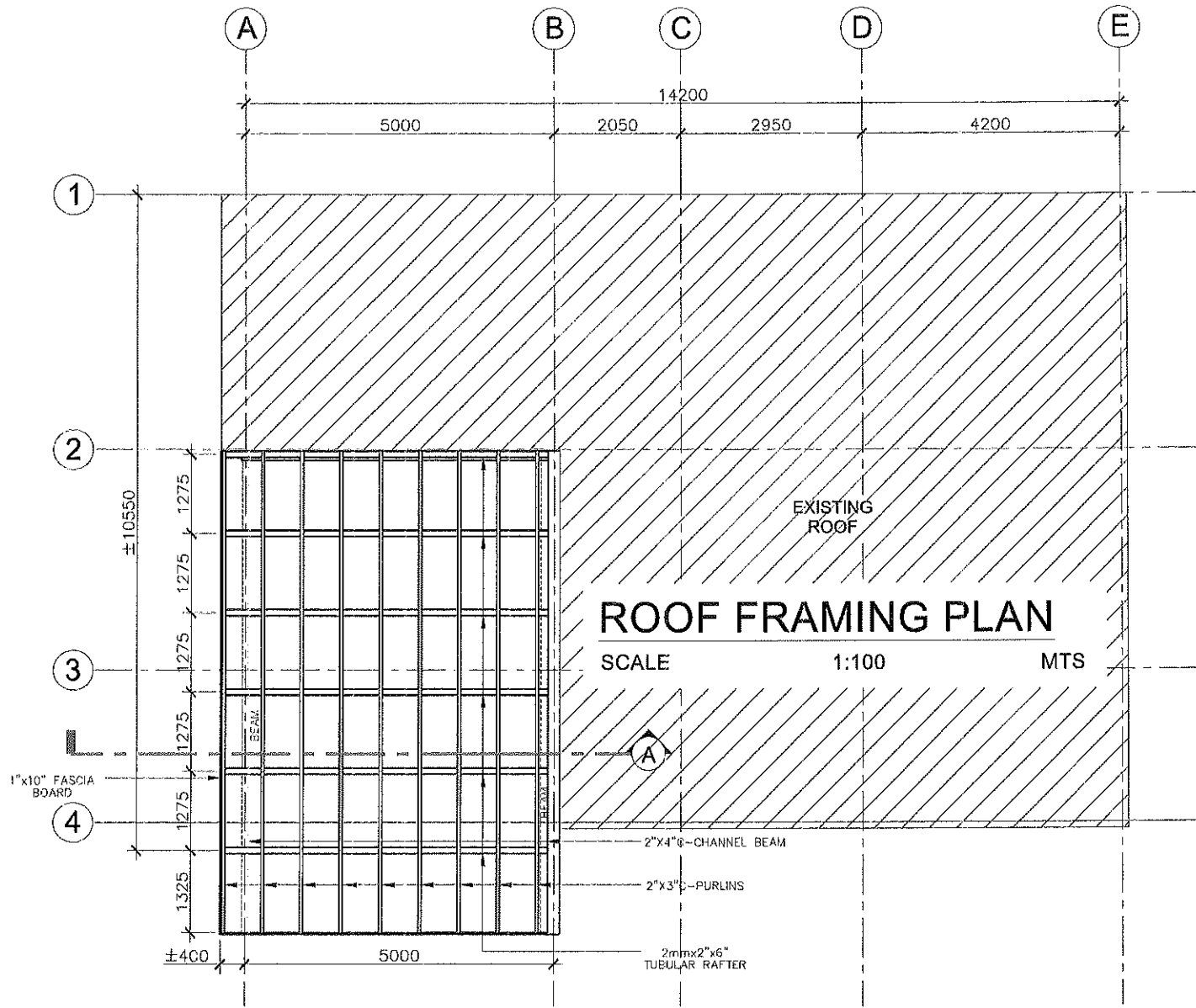
NOTE:
TO ADD / STRENGTHEN SUPPORT ON CEILING AREAS WITH HEAVY LIGHT FIXTURES AND OTHER CEILING AREAS REQUIRED STRENGTHENING.

| | | | | | | | |
|--|---|---|--|--|--|---|----------------------------|
| | FROM THE OFFICE: PHYSICAL PLANNING AND DEVELOPMENT OFFICE ROOM 202 FEM HALL, MARIANO MARCOS STATE UNIVERSITY City of Batac, 2906 Ilocos Norte Telefax: +63 (77) 792-3191 | DRAWN BY: <i>Dave Clark E. Pascua</i> DAVE CLARK E. PASCUA DRAFTSMAN II CHECKED AND REVIEWED BY: <i>Aida V. Cabang</i> AIDA V. CABANG CHIEF, PHYSICAL PLANNING | PROJECT TITLE: REFURBISHMENT OF TISSUE CULTURE LABORATORY OFFICE | CONFORME: <i>Marissa I. Atis</i> MARISSA I. ATIS PROJECT LEADER RECOMMENDING APPROVAL: <i>Romeo R. Quebula</i> ROMEO R. QUEBULA DIRECTOR, BPH | APPROVED BY: <i>Shirley C. Agrupis</i> SHIRLEY C. AGRUPIS UNIVERSITY PRESIDENT | SHEET CONTENTS: AS SHOWN REVISION AND DATE: | SHEET NO: A-5 5 13 |
| | LOCATION: MMSU-CRL, CITY OF BATAC, ILOCOS NORTE | | | | | | |



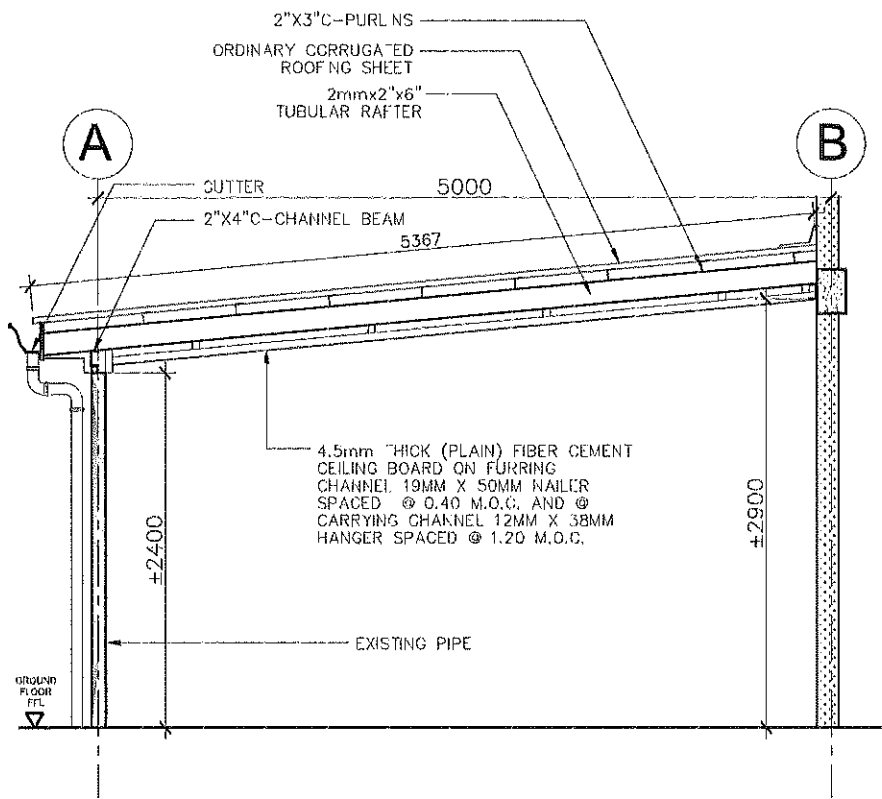
ROOF PLAN
SCALE 1:100 MTS

| | | | | | | | |
|---|--|---|--|---|--|--|---|
|  | FROM THE OFFICE: PHYSICAL PLANNING AND DEVELOPMENT OFFICE ROOM 202 FEM HALL, MARIANO MARCOS STATE UNIVERSITY City of Batang, 2906 Ilocos Norte Telefax: +63 (77) 792-3191 | DRAWN BY: <i>Dave Clark E. Pascua</i> DAVE CLARK E. PASCUA DRAFTSMAN II CHECKED AND REVISION BY: <i>Aida V. Cabang</i> AIDA V. CABANG CHIEF, PHYSICAL PLANNING | PROJECT TITLE: REFURBISHMENT OF TISSUE CULTURE LABORATORY OFFICE LOCATION: #MSU CHL, CITY OF BATANG, ILOCOS NORTE | CONFORME: <i>Marissa I. Atis</i> MARISSA I. ATIS PROJECT LEADER RECOMMENDING APPROVAL: <i>Romeo R. De Quiro</i> ROMEO R. DE QUIRO DIRECTOR, PPDO | APPROVED BY: <i>Shirley C. Grupis</i> SHIRLEY C. GRUPIS UNIVERSITY PRESIDENT | SHEET CONTENTS: AS SHOWN REVISION AND DATE: _____ _____ _____ | SHEET NO: <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> A-6 6 / 13 </div> |
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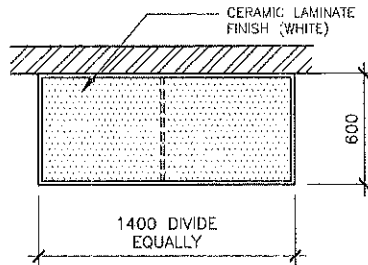
DETAIL OF STEEL GRATING PATHWAY

| | | | | | | | |
|--|---|--|--|---|--|---|----------------------------|
| | FROM THE OFFICE: PHYSICAL PLANNING AND DEVELOPMENT OFFICE ROOM 202 PEM HALL, MARIANO MARCOS STATE UNIVERSITY City of Batac, 2406 Ilocos Norte Telefax: +63 (77) 782-3181 | DRAWN BY: <i>Dave Clark E. Pascua</i> DAVE CLARK E. PASCUA CRAFTSMAN II | PROJECT TITLE: REFURBISHMENT OF TISSUE CULTURE LABORATORY OFFICE | CONFORME: <i>Marissa L. Atis</i> MARISSA L. ATIS PROJECT LEADER | APPROVED BY: <i>Shirley C. Agrupis</i> SHIRLEY C. AGRUPIS UNIVERSITY PRESIDENT | SHEET CONTENTS: AS SHOWN REVISION AND DATE: | SHEET NO. A-7 7 / 13 |
| | CHECKED AND REVIEWED BY: <i>Aida V. Cabang</i> AIDA V. CABANG CHIEF, PHYSICAL PLANNING | RECOMMENDING APPROVAL: <i>Romeo R. Dulbocao</i> ROMEO R. DULBOCAO DIRECTOR, 2000 | LOCATION: MVSU CRL, CITY OF BATAC, ILOCOS NORTE | | | | |



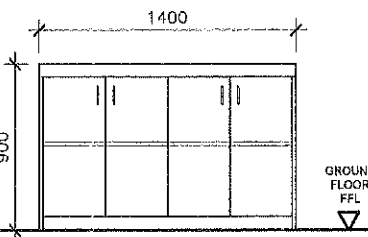
SECTION A

SCALE 1:50 MTS



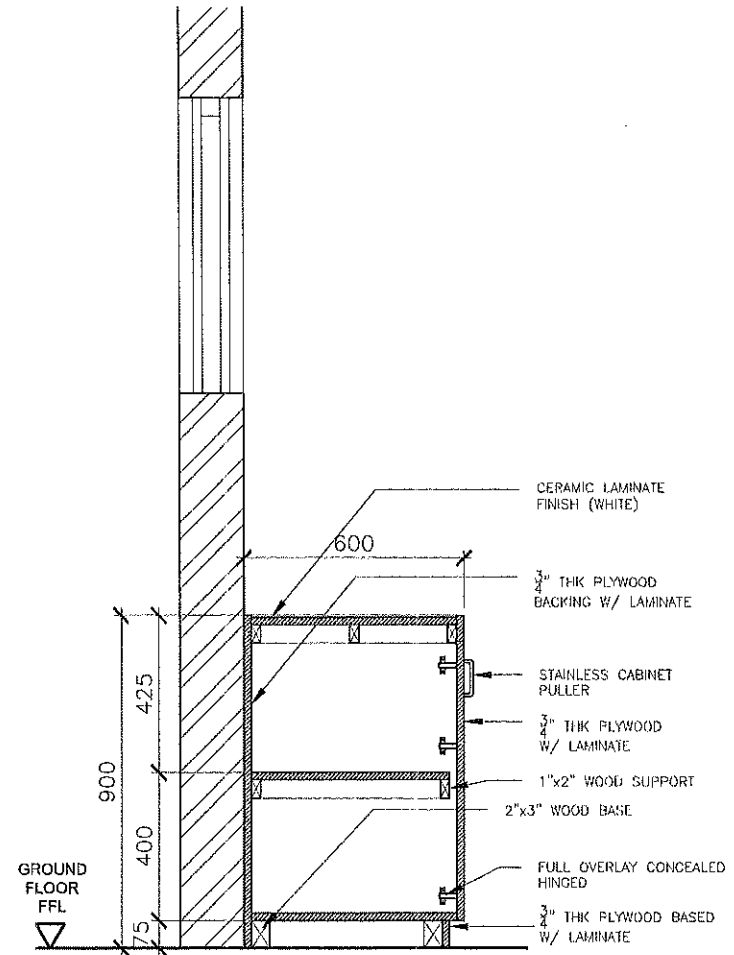
PLAN

SCALE 1:40 MTS



ELEVATION


SCALE 1:40 MTS

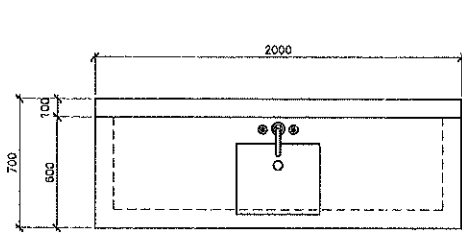


SECTION

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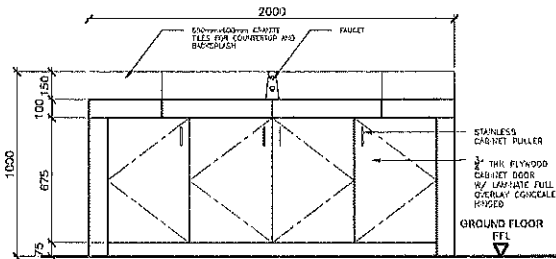
DETAIL OF WORKING COUNTER WITH CABINET

| | | | | | | | |
|---|---|--|--|--|--|---|--------------------------|
|  | FROM THE OFFICE: PHYSICAL PLANNING AND DEVELOPMENT OFFICE ROOM 202 FEM HALL, MARIANO MARCOS STATE UNIVERSITY City of Batang, Ilocos Norte Telefax: +63 (77) 702-3191 | DRAWN BY: <i>Dave Clark E. Pascua</i> DAVE CLARK E. PASCUA DRAFTSMAN II | PROJECT TITLE: REFURBISHMENT OF TISSUE CULTURE LABORATORY OFFICE | CONFORME: <i>Mariessa I. Atis</i> MARISSA I. ATIS PROJECT LEADER | APPROVED BY: <i>Shirley C. Arupis</i> SHIRLEY C. ARUPIS UNIVERSITY PRESIDENT | SHEET CONTENTS: AS SHOWN REVISION AND DATE: | SHEET NO. A-8 B 13 |
| | CHECKED AND REVIEWED BY: <i>Aida V. Cabang</i> AIDA V. CABANG CHIEF, PHYSICAL PLANNING | RECOMMENDING APPROVAL: <i>Romeo R. DelaLlana</i> ROMEO R. DELALLANA CHIEF, PPD | LOCATION: MMSU-CRL, CITY OF BATANG, ILOCOS NORTE | | | | |



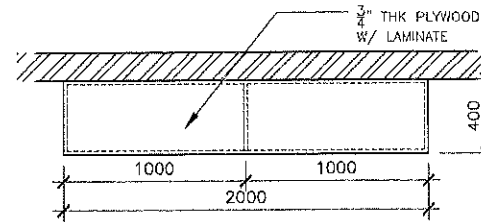
PLAN

SCALE 1:40 MTS



ELEVATION

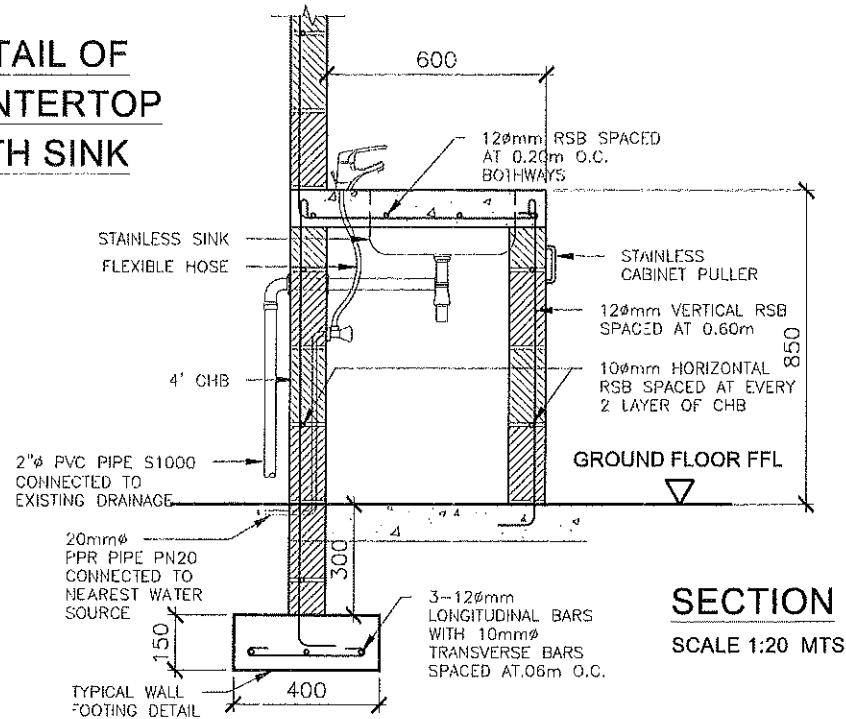
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PLAN

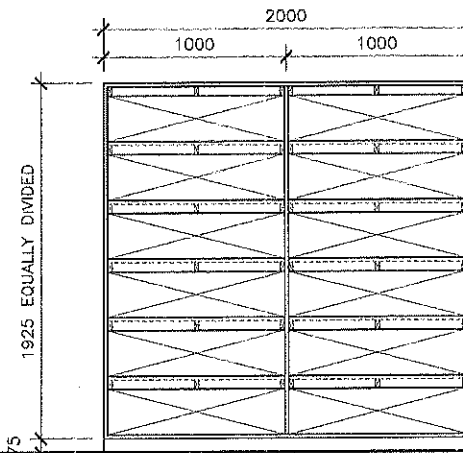
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DETAIL OF COUNTERTOP WITH SINK



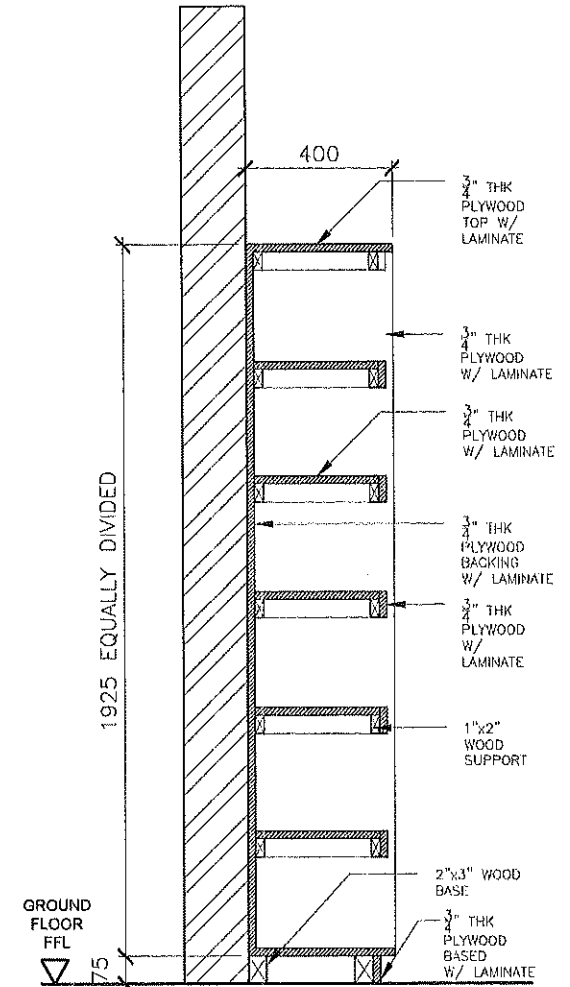
SECTION

SCALE 1:20 MTS



ELEVATION

SCALE 1:40 MTS



SECTION

SCALE 1:20 MTS

DETAIL OF CABINET 1



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DRAWN BY:
DAVE CLARK E. PASCUA
 DRAFTSMAN II
 CHECKED AND REVIEWED BY:
AIDA V. CABANG
 CHIEF, PHYSICAL PLANNING

PROJECT TITLE:
REFURBISHMENT OF TISSUE CULTURE LABORATORY OFFICE
 LOCATION: JMSU CRG, CITY OF BATANG, ILOCOS NORTE


CONFORME:
MARISSA I. ATIS
 PROJECT LEADER
 RECOMMENDING APPROVAL:
ROMEO R. DULBUALO
 DIRECTOR


APPROVED BY:
SHIRLEY C. GRUPI
 UNIVERSITY PRESIDENT


SHEET CONTENTS:
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LEGEND:

 40W LED PANEL LIGHT, 6500K DAYLIGHT, 3200 LM, 1200mmx300mm


 20W LED PANEL LIGHT 3500K DAYLIGHT, 1440LM, 300mmx300mm

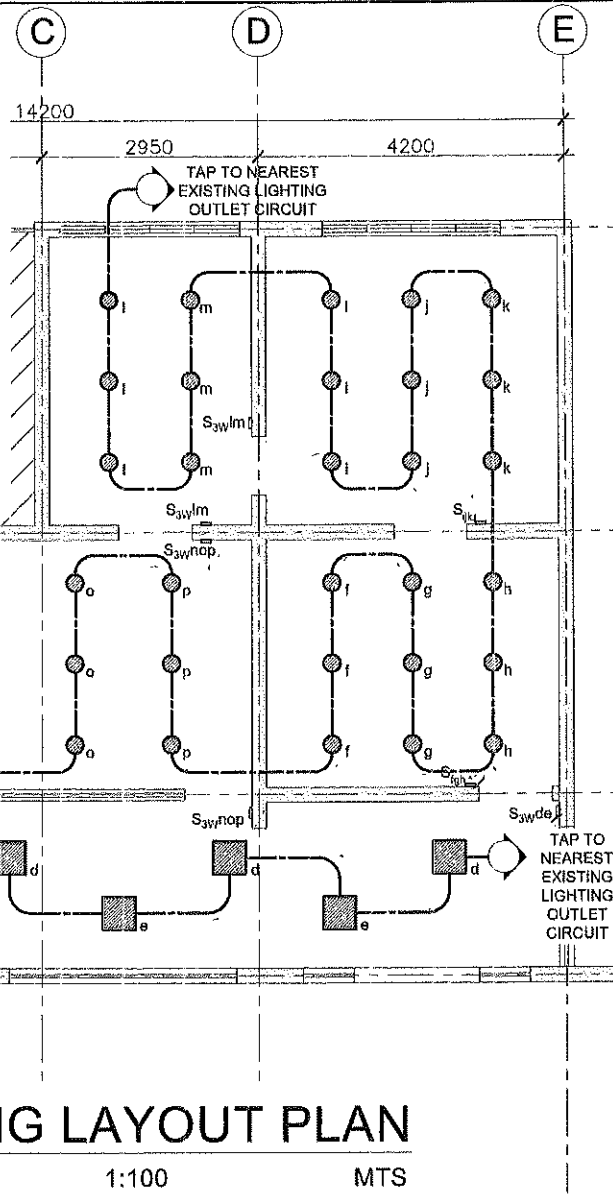
 10W LED RECESSED CIRCULAR DOWNLIGHT, 6500K DAYLIGHT, 850LM, ϕ 110mm

 3W LED MINI DOWNLIGHT ROUND SWIVEL, 6500K DAYLIGHT, 220LM, ϕ 77mm

 SWITCH

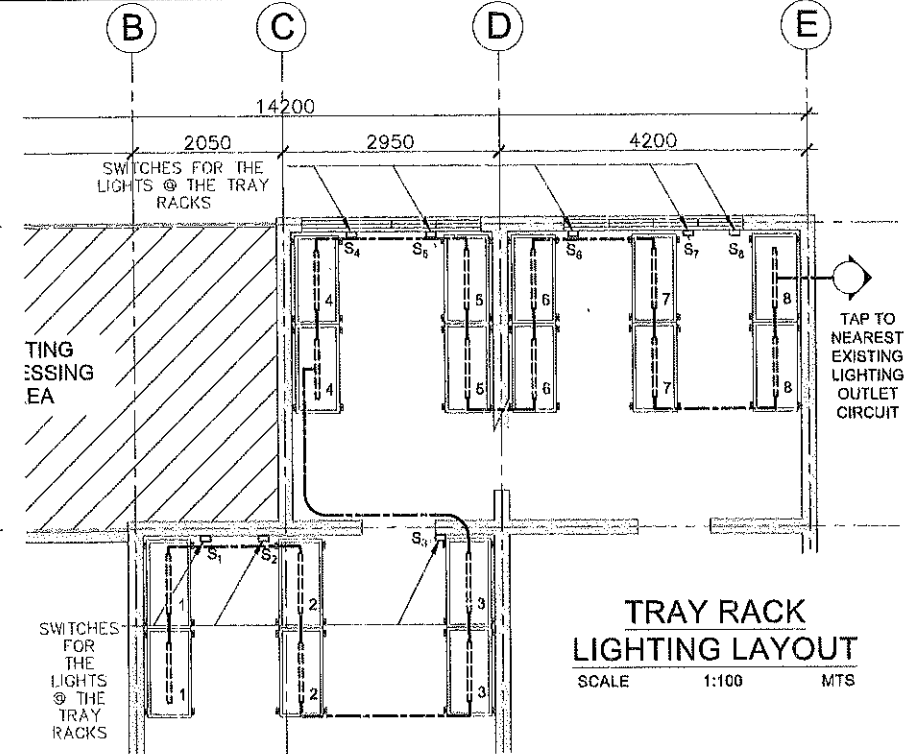
 CIRCUIT HOMERUN

 CIRCUIT LINE



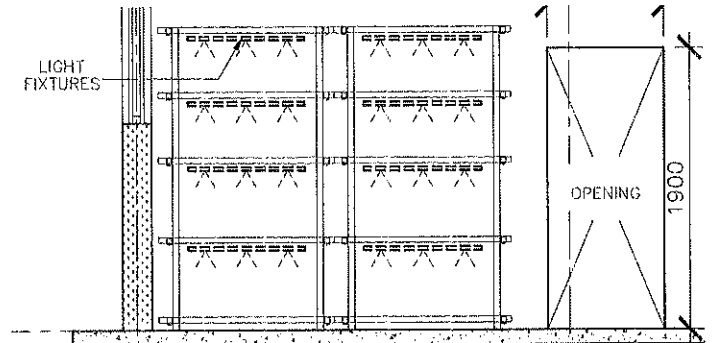
LIGHTING LAYOUT PLAN

SCALE 1:100 MTS



TRAY RACK LIGHTING LAYOUT

SCALE 1:100 MTS





TYPICAL SECTION OF TRAY RACK

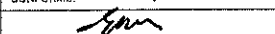
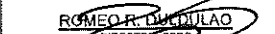
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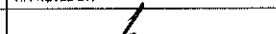


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DRAWN BY:

DAVE CLARK E. PASCUA
 DRAFTSMAN II
 PREPARED AND CHECKED BY:

LEMUEL JOSEPH BAGAYAS
 ELECTRICAL ENGINEER

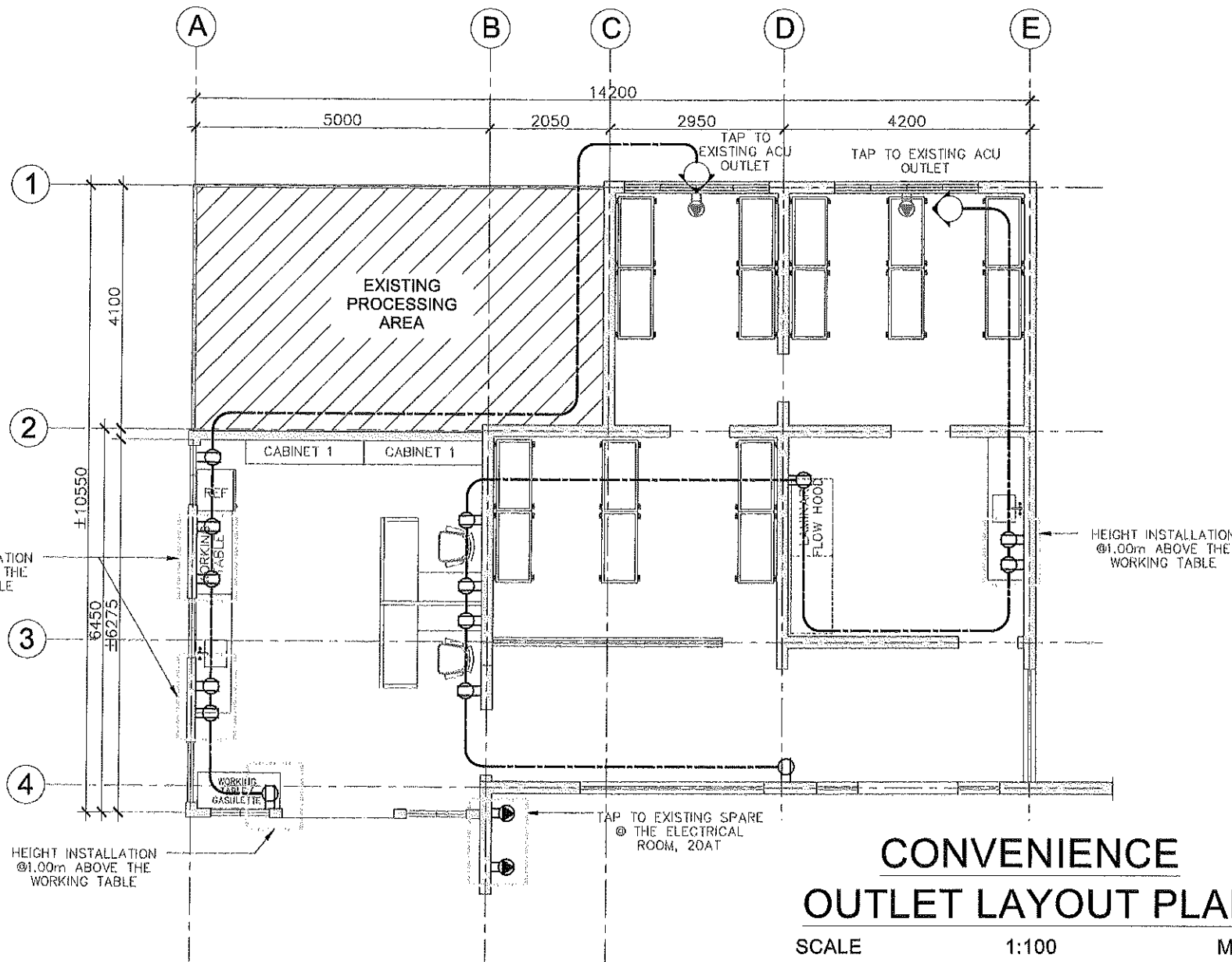
PROJECT TITLE:
REFURBISHMENT OF TISSUE CULTURE LABORATORY OFFICE
 LOCATION: MNSU GRG, CITY OF BATAC, ILOCOS NORTE

CONFORME:

MARISSA I. ATIS
 PROJECT LEADER
 RECOMMENDING APPROVAL:

ROMEO R. DELALLAO
 DIRECTOR, PPDP

APPROVED BY:

SHIRLEY C. ARUPIS
 UNIVERSITY PRESIDENT

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 10 | 13



**CONVENIENCE
OUTLET LAYOUT PLAN**
SCALE 1:100 MTS



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CRAFTSMAN II
PREPARED AND CHECKED BY:
LEMUEL JOSHUA P. BAGAYAS
ELECTRICAL ENGINEER

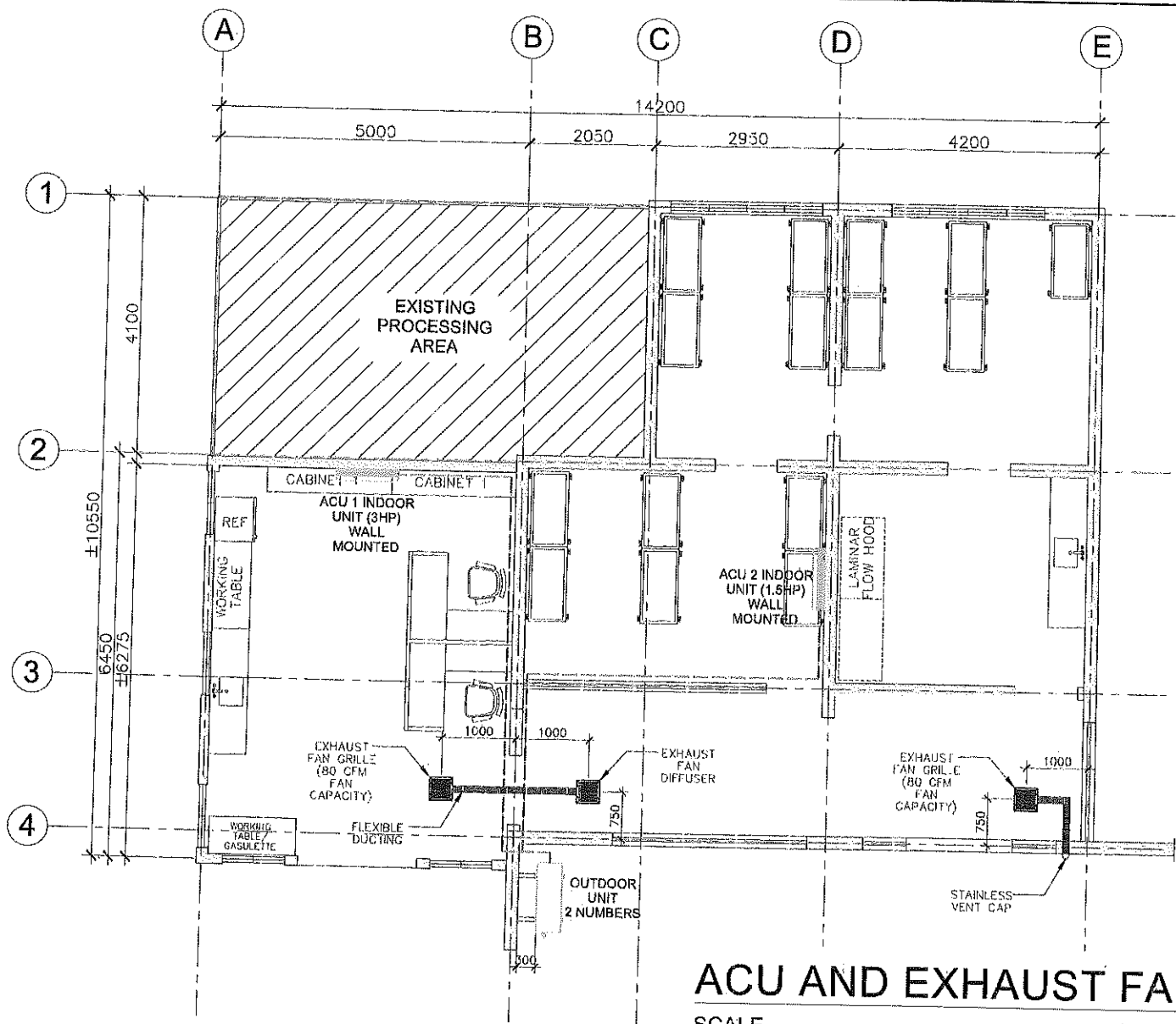
PROJECT TITLE:
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CULTURE LABORATORY OFFICE**
LOCATION: MVSU CRL, CITY OF BATAC, ILOCOS NORTE

CONFORME:
Marissa I. Atis
MARISSA I. ATIS
PROJECT LEADER
RECOMMENDING APPROVAL:
Romeo R. Duldulao
ROMEO R. DULDULAO
DIRECTOR, PPDO


APPROVED BY:
Shirley C. Agrupis
SHIRLEY C. AGRUPIS
UNIVERSITY PRESIDENT

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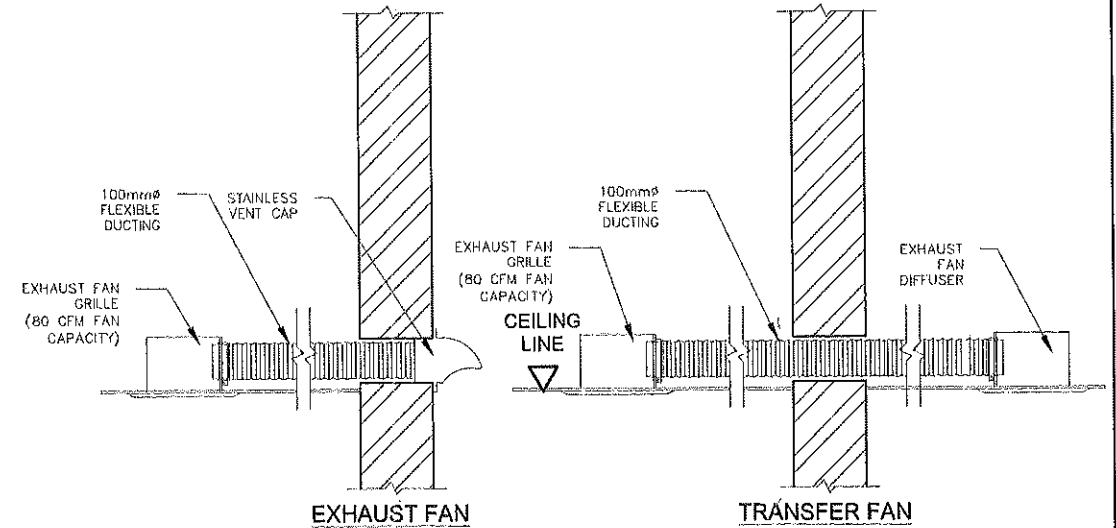


ACU AND EXHAUST FAN LAYOUT PLAN
 SCALE 1:100 MTS

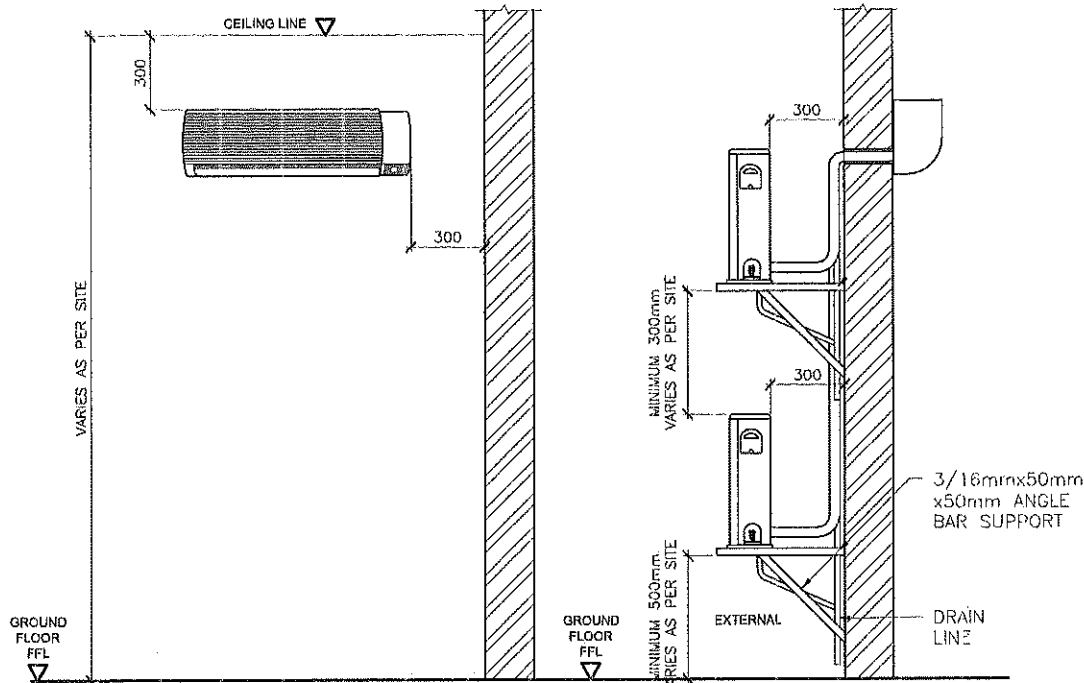
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|--|---|---|--|-----------------------------------|---|------------------------------------|----------------|
|  <p>PHYSICAL PLANNING AND DEVELOPMENT OFFICE ROOM 202 FEM HALL, MARIANO MARCOS STATE UNIVERSITY City of Batac, 2905 Ilocos Norte Telefax: +63 (77) 792-3191</p> | FROM THE OFFICE: | DRAWN BY: DAVE CLARK E. PASCUA DRAFTSMAN II | PROJECT TITLE: REFURBISHMENT OF TISSUE CULTURE LABORATORY OFFICE | CONFORME: | APPROVED BY: | SHEET CONTENTS: AS SHOWN | SHEET NO.: |
| | PREPARED AND CHECKED BY: DENNIS CLYDE G. ACANTILADO MECHANICAL ENGINEER | LOCATION: M/MSU ORL, CITY OF BATAC, ILOCOS NORTE | RECOMMENDING APPROVAL: ROMEO R. BULDIPAO MECHANICAL ENGINEER | PROJECT LEADER: MARISA L. ATIS | UNIVERSITY PRESIDENT: SHIRLEY C. AGUIPIS | REVISION AND DATE: MAY 25, 2022 | M-1 12 / 13 |

SPECIFICATIONS

| ITEM | DESCRIPTION | SPACE or ZONE | QTY | RATED COOLING CAPACITY | | | | HP | V | Hz | PH |
|------|--|------------------|-----|------------------------|-----------|-----------|------|-------|--------|-------|----|
| | | | | KW | BTU/HR | KJ/HR | TR | | | | |
| ACU1 | WALL MOUNTED SPLIT TYPE - VFD - INVERTER | PREPARATION AREA | 1 | 8.50 | 27,000.00 | 28,485.00 | 2.25 | 3.00' | 220.00 | 60.00 | 1 |
| ACU2 | WALL MOUNTED SPLIT TYPE - VFD - INVERTER | CULTURE ROOM 1 | 1 | 3.50 | 12,953.00 | 13,730.18 | 1.08 | 1.50' | 220.00 | 60.00 | 1 |

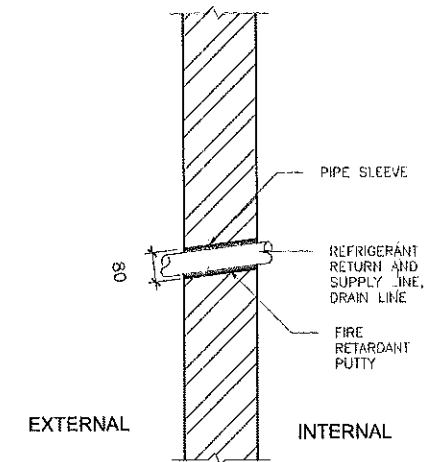


TYPICAL EXHAUST FAN SECTION DETAIL
SCALE 1:20 MTS.




INDOOR UNIT DETAIL
SCALE 1:40 MTS.

OUTDOOR UNIT DETAIL
SCALE 1:40 MTS.



PIPE THROUGH WALL DETAIL
SCALE 1:20 MTS.

| | | | | | | | |
|---|--|---|--|---|---|---|---------------------------|
|  | FROM THE OFFICE: PHYSICAL PLANNING AND DEVELOPMENT OFFICE ROOM 202 FEM HALL, MARIANO MARCOS STATE UNIVERSITY City of Batang, 2906 Ilocos Norte Telefax: +63 (77) 792-3191 | DRAWN BY: DAVE CLARK E. PASCUA DRAFTSMAN II PREPARED BY: [Signature] CHECKED BY: [Signature] DENNIS CLYDE G. ACANTILADO MECHANICAL ENGINEER | PROJECT TITLE: REFURBISHMENT OF TISSUE CULTURE LABORATORY OFFICE LOCATION: HMBU-CRL, CITY OF BATANG, ILOCOS NORTE | CONFORME: MARISDA L. ATIS PROJECT LEADER RECOMMENDING APPROVAL: ROMEO A. BONDILAO DIRECTOR, PPDO | APPROVED BY: [Signature] SHIRLEY C. AGUIPIS UNIVERSITY PRESIDENT | SHEET CONTENTS: AS SHOWN REVISION AND DATE: | SHEET NO: M-2 13 13 |
| | LOCATION: HMBU-CRL, CITY OF BATANG, ILOCOS NORTE | | | | | | |