

GENERAL NOTES

1. IN THE INTERPRETATION OF THE DRAWING, INDICATED DIMENSIONS SHALL GOVERN AND DISTANCES AND SIZES SHALL NOT BE SCALED FOR CONSTRUCTION PURPOSES.
2. IN REFERENCE TO OTHER DRAWINGS, SEE ARCHITECTURAL DRAWINGS FOR DEPRESSIONS IN FLOOR SLABS, OPENINGS IN THE WALLS AND SLABS, INTERIOR PARTIONS, LOCATION OF DRAINS ETC.
3. IN CASE OF DISCREPANCIES AS TO THE LAYOUT, DIMENSIONS, AND ELEVATIONS BETWEEN THE STRUCTURAL PLANS, AND ARCHITECTURAL DRAWINGS, THE CONTRACTOR SHALL NOTIFY BOTH THE STRUCTURAL ENGINEER AND THE ARCHITECT.
4. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH THE ACI.318 _95_ BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE AND ALL STRUCTURAL STEEL WORK ACCORDING WITH AISC SPECIFICATION (9th EDITION) IN SO FAR AS THEY DO NOT CONFLICT WITH THE LOCAL BUILDING CODE REQUIREMENT.
5. ACI REFERS TO AMERICAN CONCRETE INSTITUTE, AISC TO AMERICAN INSTITUTE OF STEEL CONSTRUCTION AND ASTM TO AMERICAN SOCIETY FOR TESTING MATERIALS.
6. CONSTRUCTION NOTES AND TYPICAL DETAILS APPLY TO ALL DRAWINGS UNLESS OTHERWISE SHOWN OR NOTED. MODIFY TYPICAL DETAILS AS DIRECTED TO MEET SPECIAL CONDITIONS.
7. SHOP DRAWINGS WITH ERECTION AND PLACING DIAGRAMS OF ALL STRUCTURAL STEELS, MISCELLANEOUS IRON, PRE-CAST CONCRETE, ETC. SHALL BE SUBMITTED FOR ENGINEERS APPROVAL BEFORE FABRICATION.
8. CONTRACTOR SHALL NOTE AND PROVIDE ALL MISCELLANEOUS CURBS, SILLS, STOOLS, EQUIPMENT'S AND MECHANICAL BASES THAT ARE REQUIRED BY THE ARCHITECTURAL, ELECTRICAL, AND MECHANICAL DRAWINGS.
9. ALL RESULTS OF MATERIAL TESTING FOR CONCRETE, REINFORCING BARS, & STRUCTURAL STEEL MUST BE NOTED & APPROVED BY THE STRUCTURAL DESIGNER.

NOTES ON CONCRETE MIXES & PLACING

1. ALL CONCRETE SHALL DEVELOP A MIN. COMPRESSIVE STRENGTH AT THE END OF TWENTY EIGHT (28) DAYS W/ CORRESPONDING MAXIMUM SIZE AGGREGATE & SLUMPS AS FOLLOWS.

| LOCATION | 28 DAYS STRENGTH | MAX. SIZE OF AGGREGATE | MAX. SLUMP |
|--|---------------------|------------------------|------------|
| ALL OTHERS, INCLUDING SUSPENDED SLABS, | 4000 PSI (27.6 MPa) | 20mm | 100mm |
| COLUMNS | 4000 PSI (27.6 MPa) | 20mm | 100mm |
| BEAMS, SLABS | 4000 PSI (27.6 MPa) | 20mm | 100mm |
| SLAB ON FILL | 4000 PSI (27.6 MPa) | 20mm | 100mm |

2. MAINTAIN MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS FOLLOWS.

| | |
|---|------|
| SUSPENDED SLABS | 20mm |
| SLAB ON GRADE | 40mm |
| WALLS ABOVE GRADE | 25mm |
| BEAM STIRRUPS AND COLUMN TIES | 40mm |
| WHERE CONCRETE IS EXPOSED TO EARTH BUT POURED AGAINST FORMS | 50mm |
| WHERE CONCRETE IS DEPOSITED DIRECTLY AGAINST EARTH | 75mm |
3. CONCRETE SHALL BE DEPOSITED IN ITS FINAL POSITION WITHOUT SEGREGATION. RE-HAND LING OR PLACING SHALL BE DONE PREFERABLY WITH BUGGIES, BUCKETS OR WHEELBARROWS, NO CHUTES WILL BE ALLOWED EXCEPT TO TRANSFER CONCRETE FROM HOPPERS TO BUGGIES, WHEELBARROWS OR BUCKETS IN WHICH CASE THEY SHALL NOT EXCEED SIX (6) METERS IN AGGREGATE LENGTH.
4. NO DEPOSITING OF CONCRETE SHALL BE ALLOWED WITHOUT THE USE OF VIBRATORS UNLESS AUTHORIZED IN WRITING BY THE DESIGNERS AND ONLY FOR UNUSUAL CONDITIONS WHERE VIBRATIONS ARE EXTREMELY DIFFICULT TO ACCOMPLISH.
5. ALL ANCHOR BOLTS, DOWELS, AND OTHER INSERTS, SHALL BE PROPERLY POSITIONED & SECURED IN PLACE PRIOR TO PLACING OF CONCRETE.
6. ALL CONCRETE SHALL BE KEPT MOIST FOR A MINIMUM OF SEVEN CONSECUTIVE DAYS IMMEDIATELY AFTER POURING BY THE USE OF WET BURLAP, FOG SPRAYING, CURING COMPOUNDS OR OTHER APPROVED METHODS.
7. STRIPPING OF FORMS AND SHORES:

| | |
|---|---------|
| FOUNDATION | 24 HRS. |
| SUSPENDED SLAB EXCEPT WHEN ADDITIONAL LOADS ARE IMPOSED | 8 DAYS |
| WALLS | 21 DAYS |
| BEAMS | 14 DAYS |
| COLUMNS | 21 DAYS |
8. THE CONTRACTOR SHALL SUBMIT THE SCHEDULE OF POURING AND THE LOCATION OF THE CONSTRUCTION JOINTS TO THE STRUCTURAL ENGINEER AT LEAST (4) DAYS PRIOR TO THE POURING FOR APPROVAL.
9. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ADEQUATE FORMS AND SHORINGS UNTIL THE CONCRETE MEMBERS HAVE ATTAINED THEIR WORKING CONDITION AND STRENGTH.

NOTES ON FOOTINGS

1. FOOTINGS ARE DESIGNED FOR AN ALLOWABLE SOIL BEARING PRESSURE OF 96 KPa (2000 psf). CONTRACTOR SHALL REPORT TO THE ENGINEER, IN WRITING, THE ACTUAL SOIL CONDITIONS UNCOVERED AND CONFIRM ACTUAL BEARING CAPACITY OF SOIL BEFORE DEPOSITING CONCRETE.
2. FOOTING SHALL REST AT LEAST 1500mm BELOW NATURAL GRADE LINE UNLESS OTHERWISE INDICATED IN PLANS. NO FOOTING SHALL REST ON FILL.
3. MINIMUM CONCRETE PROTECTION FOR REINFORCEMENTS SHALL BE 75mm CLEAR FOR CONCRETE DEPOSITED THE GROUND AND 50mm FOR CONCRETE DEPOSITED AGAINST A FORMWORK.

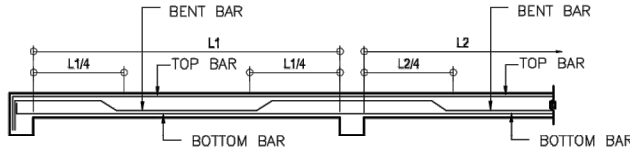
NOTES ON REINFORCEMENT

1. UNLESS OTHERWISE NOTED IN PLANS, THE YIELD STRENGTH OF REINFORCING BARS SHALL BE:

| | |
|--|-------------------------------|
| A. FOOTINGS, FOOTING BEAMS AND GIRDERS | fy = 275 MPa (40,000 psi) |
| B. COLUMNS AND SHEAR WALLS | fy = 275 MPa (40,000 psi) |
| C. BEAMS AND GIRDER | fy = 275 MPa (40,000 psi) |
| D. NON-LOAD BEARING WALL PARTITIONS, BEDDED SLABS, FLOOR & ROOF SLABS, PARAPETS, CATCH BASIN, SIDE WALK. | fy = 227.5 MPa (33,000 psi) |
2. ALL REINFORCING BARS SIZE 10mm OR LARGER SHALL BE DEFORMED IN ACCORDANCE WITH ASTM A 706. BARS SMALLER THAN 10mm MAY BE PLAIN.
3. SPLICES SHALL BE SECURELY WIRED TOGETHER & SHALL LAP OR EXTEND IN ACCORDANCE W/ TABLE A & TABLE B (TABLE OF LAP SPlice & ANCHORAGE LENGTH) UNLESS OTHERWISE SHOWN ON DRAWINGS. SPLICES SHALL BE STAGGERED WHENEVER POSSIBLE.

NOTES ON CONCRETE SLABS

1. ALL SLAB REINFORCEMENTS SHALL BE 20mm CLEAR MINIMUM FROM BOTTOM AND FROM THE TOP OF SLAB.
2. UNLESS OTHERWISE SHOWN, REINFORCEMENT IN CONTINUOUS ELEVATED SLAB SHALL BE CUT AS FOLLOWS:

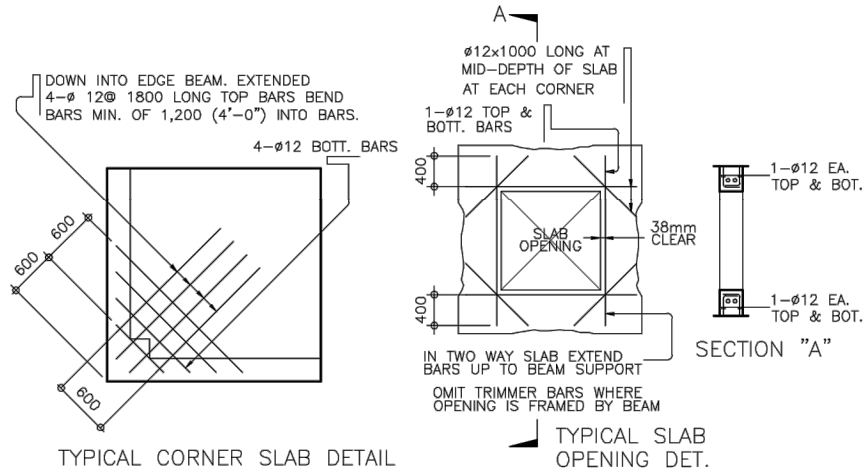


TYPICAL BAR BENDING AND CUTTING DETAILS FOR SLABS

3. IF SLABS ARE REINFORCED BOTHWAYS BARS ALONG THE SHORTER SPAN SHALL BE PLACED BELOW THOSE ALONG THE LONG SPAN AT THE CENTER AND OVER THE LONGER SPAN FOR REINFORCING BARS NEAR THE SUPPORTS. THE SPACING OF THE BARS AT THE COLUMN STRIPS SHALL NOT BE MORE THAN ONE AND A HALF (1 1/2) SLAB THICKNESS
4. TEMPERATURE BARS FOR SLAB SHALL BE GENERALLY PLACED NEAR THE FACE IN TENSION AND SHALL NOT BE LESS THAN 0.0025 x GROSS CROSS-SECTIONAL AREA (Ag) OF THE SLAB (SEE SCHEDULE BELOW)

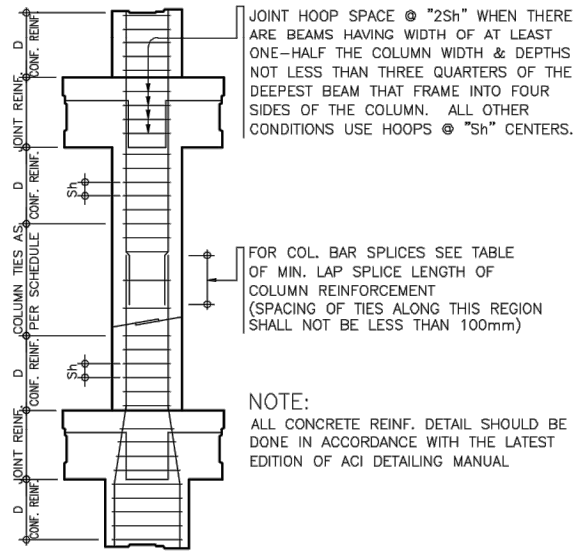
| SCHEDULE OF MINIMUM SLAB REINFORCEMENT | |
|--|-------------------------------|
| THICKNESS | MINIMUM TEMPERATURE BARS |
| 100 mm | 10 mm ϕ @ 250mm EACH WAY |
| 125 mm | 10 mm ϕ @ 225mm EACH WAY |
| 150 mm | 10 mm ϕ @ 185mm EACH WAY |
| 175 mm | 10 mm ϕ @ 150mm EACH WAY |
| 200 mm | 10 mm ϕ @ 140mm EACH WAY |

5. UNLESS OTHERWISE NOTED IN THE PLANS ALL BEDDED SLABS SHALL BE REINFORCED WITH 10mm ϕ AT 250mm O.C EACH WAY TO CENTER OF SLAB AND CONSTRUCTION JOINTS FOR SAME SHALL NOT BE LESS THAN 3.65 METER APART
6. PROVIDE EXTRA REINFORCEMENTS FOR CORNER SLAB (TWO ADJACENT DISCONTINUOUS EDGES) AS SHOWN BELOW.
7. CONCRETE SLAB REINFORCEMENTS SHALL BE PROPERLY SUPPORTED WITH 10mm ϕ STEEL CHAIR OR APPROVED EQUIVALENT SPACED AT 1.0 METER ON CENTER BOTHWAYS




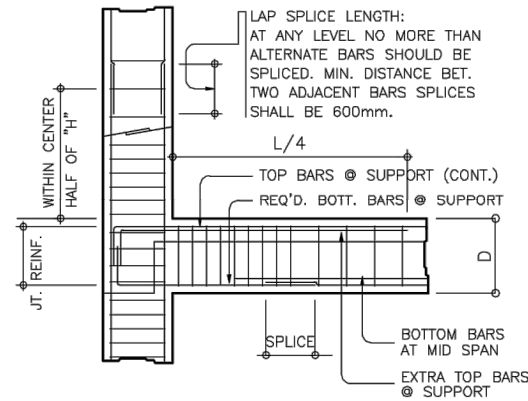
NOTES ON COLUMNS

1. PROVIDE EXTRA SETS OF TIES AT 100mm O.C. FOR TIED COLUMN REINFORCEMENT ABOVE AND BELOW BEAM-COLUMN CONNECTIONS FOR A DISTANCE FROM FACE OF CONNECTION EQUAL TO THE GREATER OF THE OVERALL THICKNESS OF COLUMN, 1/6 THE CLEAR HEIGHT OF COLUMN OR 450mm.
2. COLUMN TIES SHALL BE PROTECTED EVERYWHERE BY A COVERING OF CONCRETE CAST MONOLITHICALLY WITH THE CORE WITH THE MINIMUM THICKNESS OF 40mm AND NOT LESS THAN 40 TIMES THE MAXIMUM SIZE OF COARSE AGGREGATE IN MILLIMETERS.
3. WHERE COLUMNS CHANGE IN SIZE, VERTICAL REINFORCEMENTS SHALL BE OFFSET AT A SLOPE OF NOT MORE THAN 1 IN 6 AND EXTRA 10mm TIES AT 100mm SHALL BE PROVIDED THRU OUT THE OFFSET REGION.
4. UNLESS OTHERWISE INDICATED IN THE PLANS, LAP SPLICES FOR VERTICAL COLUMN REINFORCEMENT SHALL BE MADE WITHIN THE CENTER HALF OF COLUMN HEIGHT, AND THE SPLICE LENGTH SHALL NOT BE LESS THAN 40 BAR DIAMETERS. WELDING OR APPROVED MECHANICAL DEVICES MAY BE USED PROVIDED THAT NOT MORE THAN ALTERNATE BARS ARE WELDED OR MECHANICALLY SPLICED AT ANY LEVEL AND THE VERTICAL DISTANCES BETWEEN THESE WELDS OR SPLICES OF ADJACENT BARS IS NOT LESS THAN 600mm.



TYPICAL COLUMN ELEV. SHOWING DOWELS AND TIES SPACING

| | | | | | | | | | | |
|---|--|--|---|---|--|--|------------------------|-----------------|---------------------|-----------|
|  | | PROJECT NAME AND LOCATION: | SHEET CONTENTS: | DRAFTED: | REVIEWED: | SUBMITTED: | RECOMMENDING APPROVAL: | APPROVED: | SET NO. | SHEET NO. |
| REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS | | CONSTRUCTION (COMPLETION OF | GENERAL CONSTRUCTION NOTES | MARLON ROY M. BAUTISTA ENGINEERING AIDE (A) | | | | | | |
| PREPARED BY: | | ENGINEER: | R.A.9266 DRAWINGS AND SPECIFICATION DULY SIGNED, STAMPED AND SEALED, AS INSTRUMENTS OF SERVICE, ARE THE PROPERTY AND DOCUMENT OF THE ARCHITECT WHETHER THE OBJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. IT SHALL BE UNLAWFUL FOR ANY PERSON WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT TO DUPLICATE OR MAKE COPIES OF THIS DOCUMENT OF THE WHOLE OR IN PART. | PROJECT TITLE: | RECOMMENDING APPROVAL: | APPROVED BY: | SHEET CONTENT: | PROJECT ID NO. | SHEET NO. | |
| PPIDO (PHYSICAL PLANT AND INFRASTRUCTURE DEVELOPMENT OFFICE) | | ENGR. GABINO C. HILVANO, DTM ENGINEER | | CONSTRUCTION OF THREE (3) STOREY EVSU BURAEN ACADEMIC BUILDING | AR. BERNIE G. TUDIO, UAP Planning Officer III | DR. DENNIS C. DE PAZ University President | AS SHOWN | | <div>S 19</div> | |
| PRC NO. | | DT. ISS. | | LOCATION: EVSU BURAEN CAMPUS, BURAEN LEYTE | | | | REV. No.: _____ | | |
| PTR. NO. | | PL. ISS. | | | | | | DATE SUBMITTED: | | |



TYP. DETAIL OF COL. LAP SPlice & EXT. GIRDER TO COL. CONNECT.

NOTES ON BEAMS AND GIRDERS

- UNLESS , OTHERWISE NOTED IN PLANS, CAMBER ALL BEAMS AND GIDER AT LEAST 6mmφ FOR EVERY 4.50M OF SPAN , EXCEPT CANTILEVERS FOR WHICH THE CAMBER SHALL BE AS NOTED IN PLANS OR AS ORDERED BY THE ENGINEER BUT IN NO CASE LESS THAN 20mm FOR EVERY 3.0M OF FREE SPAN.
- TYPICAL BARS BENDING AND CUTTING DETAILS FOR BEAMS SHALL BE AS SHOWN IN FIG. B-1.

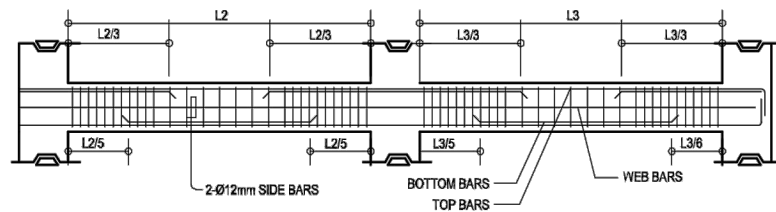


FIG. B-1

| TABLE 'A' TENSION BARS EMBEDMENT LENGTHS AND LAPPED SPLICED IN MILLIMETERS | | | | |
|---|------------------------------------|--------|------------------------------------|--------|
| BAR SIZE (DEFORMED) | f _c '= 20.7MPa(3000psi) | | f _c '= 27.6MPa(4000psi) | |
| | EMBEDMENT | LAPPED | EMBEDMENT | LAPPED |
| 10mm φ | 300 | 300 | 300 | 300 |
| 12mm φ | 300 | 300 | 300 | 300 |
| 16mm φ | 300 | 400 | 300 | 400 |
| 20mm φ | 400 | 550 | 350 | 500 |
| 25mm φ | 600 | 800 | 550 | 750 |
| 28mm φ | 750 | 1000 | 650 | 850 |
| 32mm φ | 950 | 1300 | 850 | 1100 |

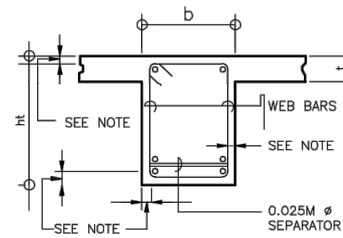
NOTE : TOP PLAIN BARS , MULTIPLY VALUE BY 2

| TABLE 'B' COMPRESSION BARS EMBEDMENT LENGTHS AND LAPPED SPLICED IN MILLIMETERS | | | | |
|---|------------------------------------|--------|------------------------------------|--------|
| BAR SIZE (DEFORMED) | f _c '= 20.7MPa(3000psi) | | f _c '= 27.6MPa(4000psi) | |
| | EMBEDMENT | LAPPED | EMBEDMENT | LAPPED |
| 10mm φ | 225 | 300 | 200 | 300 |
| 12mm φ | 275 | 300 | 250 | 300 |
| 16mm φ | 350 | 400 | 325 | 400 |
| 20mm φ | 450 | 500 | 475 | 500 |
| 25mm φ | 550 | 625 | 550 | 625 |
| 28mm φ | 625 | 675 | 625 | 675 |
| 32mm φ | 700 | 775 | 700 | 775 |

NOTE : TOP PLAIN BARS , MULTIPLY VALUE BY 2
VALUES GIVEN ABOVE CAN ALSO BE USED
FOR COLUMNS.

- IF THE BEAM REINFORCING BARS END IN A WALL THE CLEAR DISTANCE FROM THE BAR TO THE FARTHER FACE OF THE WALL NOT BE LESS THAN 25mm. EMBEDMENT LENGTH SHALL BE AS SHOWN IN A TABLE 'A' FOR TENSION BARS AND TABLE 'B' FOR COMPRESSION BARS UNLESS SPECIFIED IN PLAN. TOP BAR SHALL NOT BE SPLICED WITHIN THE COLUMN OR WITHIN A DISTANCE TWICE THE MEMBER DEPTH FROM THE FACE OF THE COLUMN. AT LEAST TWO STIRRUPS SHALL BE PROVIDED AT ALL SPLICES.

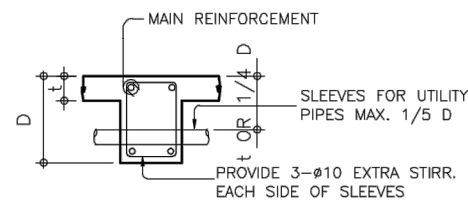
- IF THERE ARE TWO OR MORE LAYERS OF REINFORCING BARS, USE 25mmφ BAR SEPARATORS SPACED AT 1.0M ON CENTER. IN NO CASE SHALL THERE BE LESS THAN TWO (2) SEPARATORS BETWEEN TWO LAYERS OF BARS.
- MINIMUM CONCRETE PROTECTION FOR REINFORCING BARS OR STEEL SHAPES SHALL BE AS SHOWN IN FIG. B-2 UNLESS SPECIFIED ELSEWHERE.



NOTE 1

20 mm CLEAR FOR JOIST
40 mm CLEAR FOR BEAMS
AND GIRDERS

FIG. B-2



TYP. DET. FOR SLEEVES THRU CONCRETE BEAM

FIG. B-3

- WHEN A BEAM CROSSES A GIRDER, REST BEAM ON TOP OF GIRDER BARS, BEAM REINF--FORCING BAR SHALL BE SYMMETRICAL ABOUT CENTER LINE WHENEVER POSSIBLE.
- GENERALLY NO SPLICES SHALL BE PERMITTED AT POINTS WHERE CRITICAL BENDING STRESSES OCCUR, SPLICES WHERE SO PERMITTED SHALL BE INDICATED IN THE TABLE 'A' AND 'B'. WELDED SPLICES SHALL DEVELOP IN TENSION AT LEAST 125 % OF THE SPECIFIED YIELD STRENGTH OF THE BAR. NOT MORE THAN 50% OF THE BARS AT ANY ONE SECTION IS ALLOWED TO BE SPLICED THEREIN.

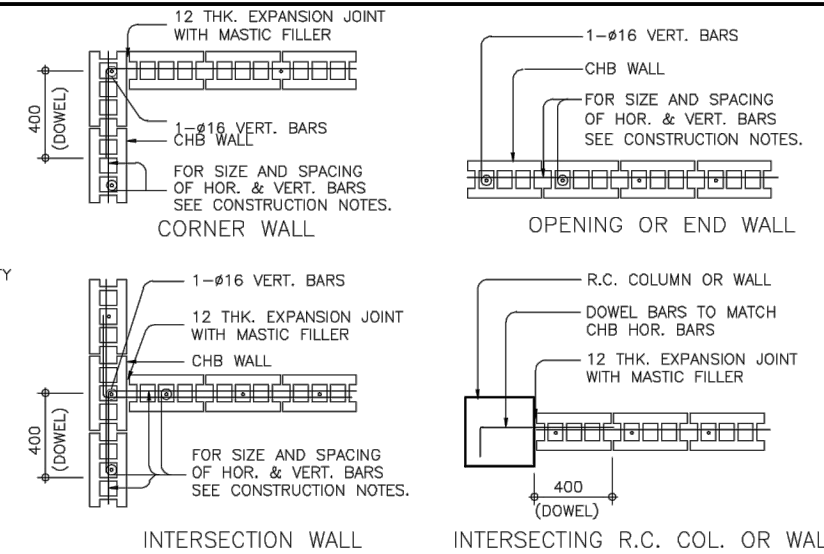
NOTES ON CONCRETE HOLLOW BLOCK WALLS

- UNLESS OTHERWISE SHOWN IN PLANS ALL CONCRETE HOLLOW BLOCKS AND CERAMIC BLOCKS SHALL BE REINFORCED AS SHOWN IN THE SCHEDULE OF CONCRETE HOLLOW BLOCKS AND CERAMIC BLOCK REINFORCEMENT.
- PROVIDE 150mm x 300mm STIFFENER COLUMN REINFORCED WITH 4-12mm WITH 6mmφ TIES AT 150mm ON CENTER WHERE CONCRETE HOLLOW BLOCK TERMINATES AND AT EVERY 3.0M LENGTH OF CONCRETE HOLLOW BLOCK WALLS UNLESS NOTED IN STRUCTURAL PLANS.

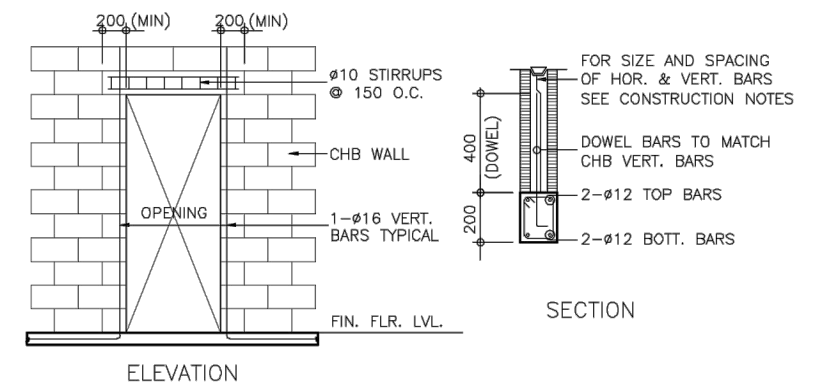
| SCHEDULE OF CONCRETE HOLLOW BLOCK AND CERAMIC BLOCK REINFORCEMENT | | | | | |
|---|--------------------|--------------------|---|--|--|
| BLOCK THICKNESS | REINFORCEMENT | | NOTES | | |
| | HORIZONTAL | VERTICAL | | | |
| 75 mm | 10mmφ @ 600mm O.C. | 10mmφ @ 600mm O.C. | A. MINIMUM LAPS AT SPLICE = 0.25M B. PROVIDE RIGHT ANGLED REINFORCEMENT AT CORNERS 0.92M LONG C. WHERE CHB OR CER. BLK. WALL DOWELS JOIN COL. R.C. BEAMS AND WALL DOWELS WITH THE SAME SIZE AS VERT. OR HOR. REINFORCEMENTS SHALL BE PROVIDED | | |
| 125 mm | 10mmφ @ 600mm O.C. | 10mmφ @ 600mm O.C. | | | |
| 150 mm | 10mmφ @ 600mm O.C. | 10mmφ @ 600mm O.C. | | | |
| 200 mm | 12mmφ @ 600mm O.C. | 12mmφ @ 600mm O.C. | | | |

REINFORCING CONCRETE LINTEL BEAM IN CONCRETE BLOCK WALLS

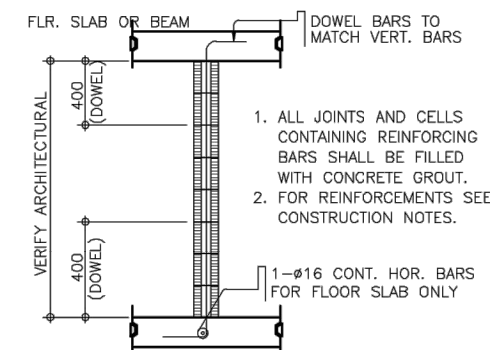
| LINTELS IN BLOCK WALLS | | | | | | |
|------------------------|------------------------|-----------------------------|-----------------------|---------------|-------|---------------|
| CLEAR SPAN ("L") | TOTAL LENGTH (L+0.40M) | MIN. f _c ' (MPa) | HEIGHT OF LINTEL (MM) | REINFORCEMENT | | |
| | | | | BOTTOM | TOP | STIRRUPS |
| 1.20M | 1.60M | 14.0 | 200 | 1-φ10 | 1-φ10 | φ6mm @ 200mm |
| 1.50M | 1.90M | | 200 | 1-φ10 | 1-φ10 | φ6mm @ 200mm |
| 1.80M | 2.20M | | 200 | 1-φ12 | 1-φ10 | φ6mm @ 200mm |
| 2.10M | 2.50M | 17.0 | 250 | 1-φ12 | 1-φ10 | φ6mm @ 200mm |
| 2.40M | 2.90M | | 250 | 1-φ12 | 1-φ10 | φ6mm @ 200mm |
| 2.70M | 3.10M | | 250 | 1-φ16 | 1-φ12 | φ10mm @ 200mm |
| 3.00 | 3.40M | 20.0 | 300 | 1-φ16 | 1-φ12 | φ10mm @ 200mm |
| 3.30 | 3.70M | | 300 | 1-φ16 | 1-φ12 | φ10mm @ 200mm |
| 3.60 | 4.00 | | 300 | 1-φ20 | 1-φ12 | φ10mm @ 200mm |



TYPICAL CONNECTION DETAIL OF MASONRY WALL



TYP. DET. OF LINTEL BEAM AT CHB WALL OPENING



TYP. SECTION OF MASONRY PARTITION REINFORCEMENTS

| | | | | | | | | | | | | | | | |
|-----------------------------|---|--|---|--|--|-----------|--|------------|--|------------------------|----------------|-----------|-----------------------|---------|--|
| PROJECT NAME AND LOCATION: | | SHEET CONTENTS: | | DRAFTED: | | REVIEWED: | | SUBMITTED: | | RECOMMENDING APPROVAL: | | APPROVED: | | SET NO. | SHEE |
| REPUBLIC OF THE PHILIPPINES | | | | MARLON ROY M. BAUTISTA | | | | | | | | | | | |
| | PREPARED BY: | ENGINEER: | R.A. 9266 DRAWINGS AND SPECIFICATION DULY SIGNED, STAMPED AND SEALED, AS INSTRUMENTS OF SERVICE, ARE THE PROPERTY AND DOCUMENT OF THE ARCHITECT WHETHER THE OBJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. IT SHALL BE UNLAWFUL FOR ANY PERSON WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT TO DUPLICATE OR MAKE COPIES OF THIS DOCUMENT OF THE WHOLE OR IN PART. | | PROJECT TITLE: | | RECOMMENDING APPROVAL: | | APPROVED BY: | | SHEET CONTENT: | | PROJECT ID NO. | | SHEET NO. |
| | PPIDO (PHYSICAL PLANT AND INFRASTRUCTURE DEVELOPMENT OFFICE) | ENGR. SABINO C. HILVANO, DTM ENGINEER | | | CONSTRUCTION OF THREE (3) STOREY EVSU BURAEN ACADEMIC BUILDING | | AR. BERNIE G. TUDIO, UAP Planning Officer III | | DR. DENNIS C. DE PAZ University President | | AS SHOWN | | | | <div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> <div style="text-align: center;">S 2 9</div> </div> |
| | PRC NO. | DT. ISS. | | | | | | | | | | | REV. No.: _____ | | |
| | PTR. NO. | PL. ISS. | | | | | | | | | | | DATE SUBMITTED: _____ | | |
| | | | | LOCATION: EVSU BURAEN CAMPUS, BURAEN LEYTE | | | | | | | | | | | |

A. CODES AND STANDARDS

1. GOVERNING CODES
ACI 318M-14

BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE,
AMERICAN CONCRETE INSTITUTE
UNIFORM BUILDING CODE
NATIONAL STRUCTURAL CODE OF THE PHILIPPINES, VOLUME I
MANUAL OF STEEL CONSTRUCTION,
ALLOWABLE STRESS DESIGN,
AMERICAN INSTITUTE OF STEEL CONSTRUCTION

UBC 1997 EDITION
NSCP 2015 EDITION
AISC 9TH EDITION

2. GOVERNING STANDARDS

ASTM A36
ASTM 611
ASTM 615 / PNS 49
ASTM C33 / PNS 18
ASTM C39
ASTM C94 / PNS 46
ASTM C150 / PNS 07
PNS 16
SG 671

STRUCTURAL STEEL
STEEL SHEET, CARBON, COLD-ROLLED STRUCTURAL ALLOY
SPECIFICATION FOR STEEL BARS FOR STEEL REINFORCEMENT
STANDARD SPECIFICATION FOR CONCRETE AGGREGATES
STANDARD TEST METHOD FOR COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMENS
STANDARD SPECIFICATION FOR READY-MIXED CONCRETE
STANDARD SPECIFICATION FOR PORTLAND CEMENT
PHILIPPINE NATIONAL STANDARD FOR CONCRETE HOLLOW BLOCKS
SPECIFICATION FOR THE DESIGN OF COLD-FORMED STRUCTURAL STEEL MEMBERS BY AMERICAN IRON AND STEEL INSTITUTE

B. DESIGN LOADS

1. ROOF DEAD LOAD

ROOF SLAB 2,800 PA
M.E.P. 100 PA
CEILING 100 PA
ALL FIXTURES 100 PA

2. ROOF LIVE LOAD

SLAB 600 PA

3. FLOOR DEAD LOAD

SLAB 2,800 PA
FLOOR TILES 1,100 PA
MASONRY WALLS (150mm CHB) 3,110 PA (PER M. HEIGHT)
MASONRY WALLS (100mm CHB) 2,980 PA (PER M. HEIGHT)

4. FLOOR LIVE LOAD

ROOMS 1,900 PA
OFFICE 2,400 PA
CORRIDOR 3,800 PA

5. WIND LOAD

A. BASIC WIND SPEED (REFER TO FIGURE 207 A.5-1C OF NSCP 2015)
DESIGN WIND SPEED 310 KPH

B. EXPOSURE

EXPOSURE B
HAS TERRAIN WITH BUILDINGS, FOREST OR SURFACE IRREGULARITIES, 6.0 METERS OR MORE IN HEIGHT, COVERING AT LEAST 20 % OF THE AREA EXTENDING 1.50 KM OR MORE FROM SITE.

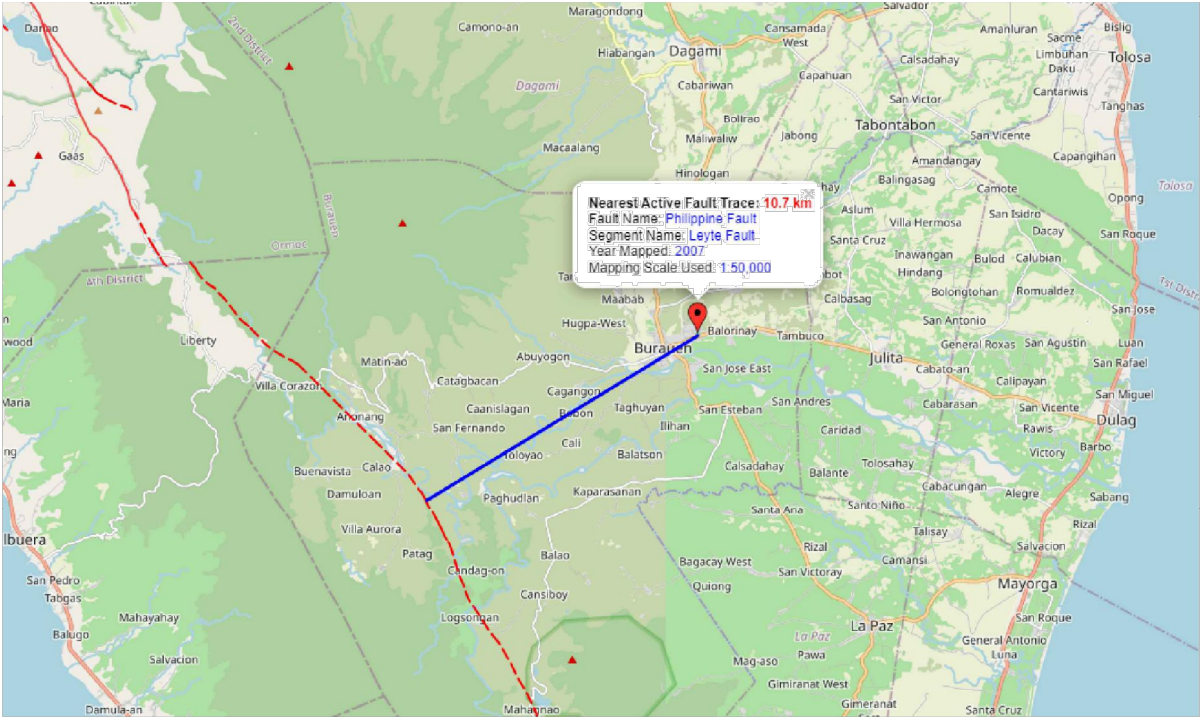
C. BUILDING CATEGORY

BUILDING CLASSIFICATION CATEGORY CATEGORY I (ESSENTIAL FACILITIES)

6. EARTHQUAKE LOAD

$V = (2.5C_a * I * W) / R$

SEISMIC ZONE, Z = 0.40
IMPORTANCE FACTOR, I = 1.50
SEISMIC RESPONSE MODIFICATION FACTOR, R = 8.50
NEAR SOURCE FACTOR, N_a = 1.00
NEAR SOURCE FACTOR, N_v = 1.00
SOIL PROFILE TYPE = 4



SEISMIC FAULT DISTANCE

C. MATERIAL SPECIFICATIONS

A. CONCRETE

| ELEMENT | 28 DAYS COMPRESSIVE STRENGTH, fc' | MAX. SIZE OF AGGREGATE | MAX. SLUMP |
|----------------------------------|-----------------------------------|------------------------|------------|
| ALL OTHERS, INC. SUSPENDED SLABS | 21 MPa | 20 MM | 100 MM |
| FOOTINGS | 21 MPa | 20 MM | 100 MM |
| COLUMNS | 21 MPa | 20 MM | 100 MM |
| BEAMS, STAIRS | 21 MPa | 20 MM | 100 MM |
| SLAB ON FILL / GROUND | 21 MPa | 20 MM | 100 MM |

B. REINFORCING STEEL

| ELEMENT | YIELD STRENGTH, f _y | |
|----------------------------------|--------------------------------|-----------|
| | MAIN | SECONDARY |
| ALL OTHERS, INC. SUSPENDED SLABS | 230 MPa | |
| FOOTINGS | 275 MPa | 230 MPa |
| COLUMNS | 275 MPa | 230 MPa |
| BEAMS, STAIRS | 275 MPa | 230 MPa |
| SLAB ON FILL / GROUND | 230 MPa | |

C. SOIL BEARING CAPACITY

SOIL BEARING CAPACITY = 135 KPa



PREPARED BY:

ENGINEER:

PPIDO
(PHYSICAL PLANT AND
INFRASTRUCTURE DEVELOPMENT
OFFICE)

ENGR. CABINO C. HILVANO, DTM
ENGINEER

PRC NO.

DT. ISS.

PTR. NO.

PL. ISS.

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PROJECT TITLE:

CONSTRUCTION OF THREE (3) STOREY EVSU
BURAEN ACADEMIC BUILDING

LOCATION: EVSU BURAEN CAMPUS, BURAEN LEYTE

RECOMMENDING APPROVAL:

APR. BERNIE G. TUDIO, UAP
Planning Officer III

APPROVED BY:

DR. DENNIS C. DE PAZ
University President

SHEET CONTENT:

AS SHOWN

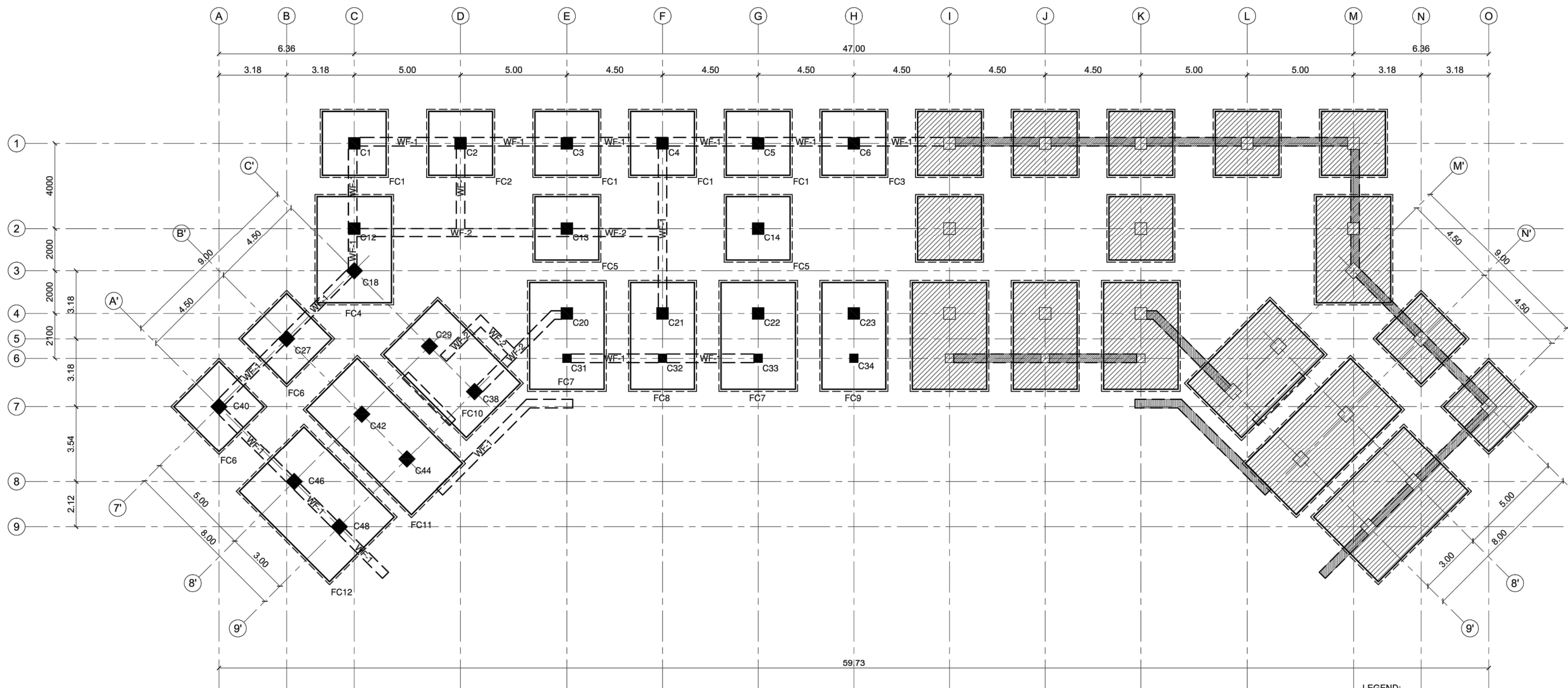
PROJECT ID NO.

REV. No.: _____

DATE SUBMITTED:

SHEET NO.

S
3 9



FOUNDATION PLAN

SCALE

1 : 115

LEGEND:

PHASE 1



PPIDO
(PHYSICAL PLANT AND
INFRASTRUCTURE DEVELOPMENT
OFFICE)

ENGINEER:

ENGR. CABINO C. HILVANO, DTM
ENGINEER

PRC NO.

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PROJECT TITLE:

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BUREAU ACADEMIC BUILDING

LOCATION: EVSU BUREAU CAMPUS, BUREAUEN LEYTE

RECOMMENDING APPROVAL:

AR. BERNIE G. TUDIO, UAP
Planning Officer III

APPROVED BY:

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University President

SHEET CONTENT:

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PROJECT ID NO.

REV. No.: _____

DATE SUBMITTED: _____

SHEET NO.

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4 9

| FOOTING NUMBERS | COLUMN NUMBERS | FOOTING TYPE | DIMENSION | | | REINFORCEMENT | | | | REMARKS |
|-----------------|--------------------|--------------|-----------|------|-----|---------------|------------|------------|------------|---------|
| | | | L | B | D1 | BOTTOM | | TOP | | |
| | | | | | | ALONG X | ALONG Y | ALONG X | ALONG Y | |
| FC1 | C1, C3, C4, C5, | Isolated | 3000 | 3000 | 500 | 12 - 20mmØ | 12 - 20mmØ | 10 - 20mmØ | 10 - 20mmØ | - |
| FC2 | C2 | Isolated | 3000 | 3000 | 500 | 12 - 20mmØ | 12 - 20mmØ | -- | -- | - |
| FC3 | C6 | Isolated | 3000 | 3000 | 500 | 11 - 20mmØ | 11 - 20mmØ | 10 - 20mmØ | 10 - 20mmØ | - |
| FC4 | C12-C18 | Combined | 5000 | 3500 | 500 | 13 - 20mmØ | 12 - 25mmØ | 13 - 20mmØ | 12 - 25mmØ | - |
| FC5 | C13, C14 | Isolated | 3000 | 3000 | 500 | 13 - 20mmØ | 13 - 20mmØ | -- | -- | - |
| FC6 | C40, C27 | Isolated | 3000 | 3000 | 500 | 11 - 20mmØ | 11 - 20mmØ | 11 - 20mmØ | 11 - 20mmØ | - |
| | | | | | | | | | | |
| FC7 | C20-C31 C22-C33 | Combined | 5000 | 3500 | 500 | 24 - 20mmØ | 10 - 25mmØ | 5 - 20mmØ | 10 - 25mmØ | - |
| FC8 | C21-C32 | Combined | 5000 | 3000 | 500 | 16 - 20mmØ | 8 - 25mmØ | 5 - 20mmØ | 8 - 25mmØ | - |
| FC9 | C23-C34 | Combined | 5000 | 3000 | 500 | 16 - 20mmØ | 8 - 25mmØ | 5 - 20mmØ | 18 - 25mmØ | - |
| FC10 | C29-C38 | Combined | 5500 | 3600 | 500 | 29 - 20mmØ | 10 - 25mmØ | 5 - 20mmØ | 10 - 25mmØ | - |
| FC11 | C42-C44 | Combined | 7000 | 3400 | 500 | 27 - 20mmØ | 12 - 25mmØ | 8 - 20mmØ | 12 - 25mmØ | - |
| FC12 | C46-C48 | Combined | 6000 | 4300 | 500 | 24 - 20mmØ | 12 - 25mmØ | 7 - 20mmØ | 12 - 25mmØ | - |

1. NO FOOTING SHOULD REST ON BACKFILLED MATERIALS. IF THE SPECIFIED DEPTHS ON FILL, EXCAVATION CONTINUES UNTIL A SOUND OR GOOD LAYER IS REACH AS APPROVED BY THE SUPERVISING ENGINEER.
2. IN CASE THE SOIL CONDITION AT THE FOUNDING LEVEL OF THE FOOTING CAN'T BE ASCERTAINED, THE CONTRACTOR MUST CONSULT A SOIL EXPERT OR A GEOTECHNICAL ENGINEER AND EXPLORE THE SOIL CONDITION. SOIL BEARING PRESSURE OF THE AREA AS CONDUCTED BY SOLAR SURVEYING CORPORATION WAS FOUND TO BE AN AVERAGE OF 1,260 Psf (60.0 KPa) TO 2,940 Psf (140 KPa) BEARING CAPACITY.
3. FOUNDING LEVEL OF FOOTING LOCATED AT THE CISTERN AREA MAY BE ADJUSTED TO ACCOMMODATE THE DEPTH REQUIREMENT OF THE CISTERN.




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LOCATION: EVSU BURAUEN CAMPUS, BURAUEN LEYTE

AR. **VERNIE C. TUDIO, UAP**
Planning Officer III


DR. DENNIS C. DE PAZ
University President

AS SHOWN

DATE SUBMITTED

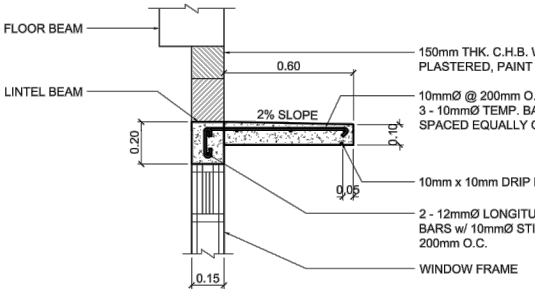
| | | | | | | | | | | | | | | | | | | |
|-----------------------------------|--------------------------------------|--|--|---------|--|--|----------|--|--|---|-----------|----------|----------|--|--|----------|--|--|
| FOURTH FLOOR TO ROOF DECK | | | | | | | | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 510 MM | | | | | | | | |
| | | | | | | | | | | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | | | | | | |
| FOURTH FLOOR TO PARAPET | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| THIRD FLOOR TO FOURTH FLOOR | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| SECOND FLOOR TO THIRD FLOOR | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| GRADE BEAM TO SECOND FLOOR | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| FOUNDATION TO GRADE BEAM | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| COLUMN MARKED | C1, C3, C4, C5, C6, C7, C8, C9, C11, | | | C2, C10 | | | C12, C17 | | | C13, C14, C15, C16 | | | C18, C19 | | | C20, C26 | | |

COLUMN SCHEDULE

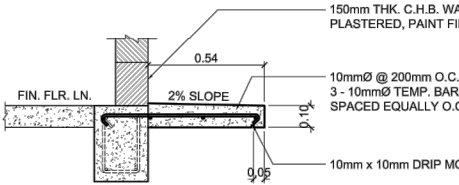
(SCALE 1:25)

NOTES:

1. BE = BOUNDARY ELEMENT AS PER NSCP C101 - 2015. PROVIDE CONFINING REINFORCEMENT ACROSS ENTIRE HEIGHT OF WALL IN THE BOUNDARY ELEMENT
2. Z1 = SPECIAL CONFINING ZONE AS PER NSCP C101 - 2015, Z2 = REMAINING ZONES AS PER NSCP C101 - 2015
3. (M) - STEEL GRADE FOR MAIN REINFORCEMENT
4. (S) - STEEL GRADE FOR SHEAR REINFORCEMENT/LINKS



SPOT DETAIL
WINDOW CANOPY
SCALE 1 : 20



SPOT DETAIL
SLAB CANOPY
SCALE 1 : 20

| | | | | | | | | | |
|--|---|--|--|---|--|--|----------------|-----------------|---|
| | PREPARED BY: | ENGINEER: | R.A.9266 DRAWINGS AND SPECIFICATION DULY SIGNED, STAMPED AND SEALED, AS INSTRUMENTS OF SERVICE, ARE THE PROPERTY AND DOCUMENT OF THE ARCHITECT. WHETHER THE OBJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT, IT SHALL BE UNLAWFUL FOR ANY PERSON WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT TO DUPLICATE OR MAKE COPIES OF THIS DOCUMENT OF THE WHOLE OR IN PART. | PROJECT TITLE: | RECOMMENDING APPROVAL: | APPROVED BY: | SHEET CONTENT: | PROJECT ID NO. | SHEET NO. |
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| | PRC NO. | DT. ISS. | | LOCATION: EVSU BURAEN CAMPUS, BURAEN LEYTE | | | | DATE SUBMITTED: | |
| | PTR. NO. | PL. ISS. | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|-----------|-----------|---|-----------|-----------|---|-----------|-----------|---|-----------|-----------|---|-----------|-----------|---|-----------|-----------|---|-----------|-----------|
| FOURTH FLOOR TO ROOF DECK | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 510 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 510 MM | | | | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 520 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 510 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 510 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 510 MM | | |
| | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | | | | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS |
| | #10 @ 50 | #10 @ 50 | #10 @ 175 | #10 @ 75 | #10 @ 75 | #10 @ 200 | | | | #10 @ 50 | #10 @ 50 | #10 @ 175 | #10 @ 50 | #10 @ 50 | #10 @ 175 | #10 @ 75 | #10 @ 75 | #10 @ 200 | #10 @ 50 | #10 @ 50 | #10 @ 175 |
| | | | | | | | | | | | | | | | | | | | | | |
| | 4-#16 + 8-#12 | | | 12-#16 | | | | | | 4-#16 + 8-#12 | | | 4-#16 + 8-#12 | | | 12-#16 | | | 4-#16 + 8-#12 | | |
| FOURTH FLOOR TO PARAPET | | | | | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 450 MM | | | | | | | | | | | | | | |
| | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | | | | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | | | | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | | | |
| | | | | | | | #10 @ 50 | --- | #10 @ 125 | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | 4-#16 | | | | | | | | | | | | | | |
| THIRD FLOOR TO FOURTH FLOOR | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 500 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 500 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 510 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 570 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 500 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 495 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 495 MM | | |
| | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS |
| | #10 @ 50 | #10 @ 50 | #10 @ 175 | #10 @ 75 | #10 @ 75 | #10 @ 250 | #10 @ 50 | #10 @ 50 | #10 @ 175 | #10 @ 50 | #10 @ 50 | #10 @ 175 | #10 @ 50 | #10 @ 50 | #10 @ 175 | #10 @ 75 | #10 @ 75 | #10 @ 200 | #10 @ 50 | #10 @ 50 | #10 @ 175 |
| | | | | | | | | | | | | | | | | | | | | | |
| | 4-#16 + 8-#12 | | | 4-#20 + 8-#16 | | | 4-#16 + 8-#12 | | | 4-#16 + 8-#12 | | | 4-#16 + 8-#12 | | | 4-#16 + 8-#12 | | | 12-#16 | | |
| SECOND FLOOR TO THIRD FLOOR | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 550 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 550 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 510 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 550 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 550 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 550 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 550 MM | | |
| | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS |
| | #10 @ 75 | #10 @ 75 | #10 @ 250 | #10 @ 75 | #10 @ 75 | #10 @ 250 | #10 @ 50 | #10 @ 50 | #10 @ 175 | #10 @ 75 | #10 @ 75 | #10 @ 250 | #10 @ 75 | #10 @ 75 | #10 @ 250 | #10 @ 75 | #10 @ 75 | #10 @ 250 | #10 @ 75 | #10 @ 75 | #10 @ 250 |
| | | | | | | | | | | | | | | | | | | | | | |
| | 16-#16 | | | 4-#20 + 12-#16 | | | 4-#16 + 8-#12 | | | 16-#16 | | | 16-#16 | | | 16-#16 | | | 16-#16 | | |
| GRADE BEAM TO SECOND FLOOR | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 670 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 670 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 675 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 675 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 675 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 670 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 670 MM | | |
| | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS |
| | #10 @ 75 | #10 @ 75 | #10 @ 250 | #10 @ 75 | #10 @ 75 | #10 @ 250 | #10 @ 50 | #10 @ 50 | #10 @ 175 | #10 @ 75 | #10 @ 75 | #10 @ 200 | #10 @ 75 | #10 @ 75 | #10 @ 250 | #10 @ 75 | #10 @ 75 | #10 @ 250 | #10 @ 75 | #10 @ 75 | #10 @ 250 |
| | | | | | | | | | | | | | | | | | | | | | |
| | 16-#16 | | | 4-#20 + 12-#16 | | | 4-#16 + 8-#12 | | | 12-#16 | | | 16-#16 | | | 16-#16 | | | 16-#16 | | |
| FOUNDATION TO GRADE BEAM | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 550 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 550 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 525 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 550 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 550 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 550 MM | | | C21 : Fy276 (M) : Fy227 (S) , COVER = 40mm CONFINING ZONE = 550 MM | | |
| | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS | Z1 MAIN LINK | Z1 OTHERS | Z2 LINKS |
| | #10 @ 75 | #10 @ 75 | #10 @ 250 | #10 @ 75 | #10 @ 75 | #10 @ 250 | #10 @ 50 | #10 @ 50 | #10 @ 175 | #10 @ 75 | #10 @ 75 | #10 @ 200 | #10 @ 75 | #10 @ 75 | #10 @ 250 | #10 @ 75 | #10 @ 75 | #10 @ 250 | #10 @ 75 | #10 @ 75 | #10 @ 250 |
| | | | | | | | | | | | | | | | | | | | | | |
| | 16-#16 | | | 4-#20 + 12-#16 | | | 4-#16 + 8-#12 | | | 12-#16 | | | 16-#16 | | | 16-#16 | | | 16-#16 | | |
| COLUMN MARKED | C27, C28 | | | C29, C30 | | | C31, C32, C33, C35, C36, C37 | | | C34 | | | C38, C39, C44, C45, C48, C49 | | | C40, C41 | | | C42,43 | | |




COLUMN SCHEDULE

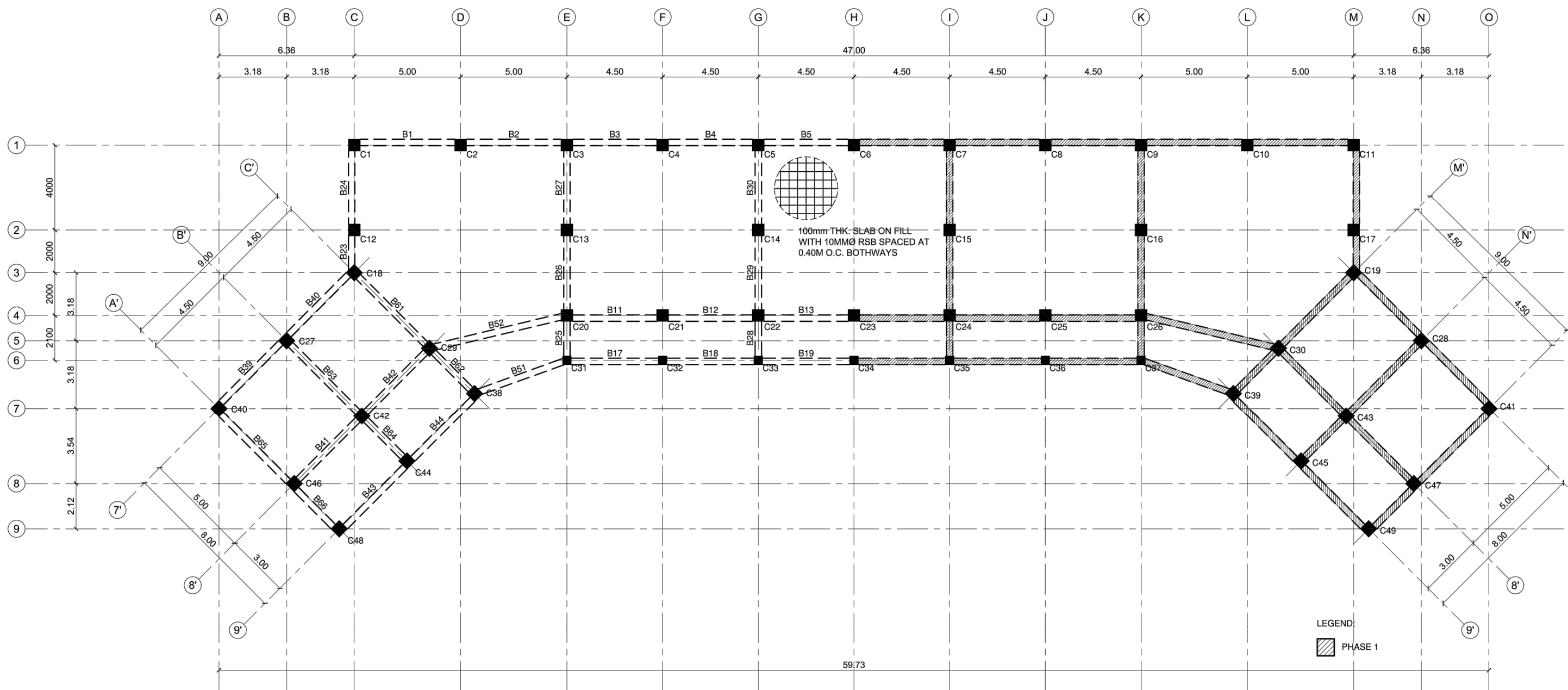
(SCALE 1:25)

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3. (M) - STEEL GRADE FOR MAIN REINFORCEMENT
4. (S) - STEEL GRADE FOR SHEAR REINFORCEMENT/LINKS



| | | | | | | | | | | |
|---|---|---|--|--|---|----------------|-----------------|--------------------------------------|--|-----------------|
| PREPARED BY: | ENGINEER: | R.A.9266 DRAWINGS AND SPECIFICATION DULY SIGNED, STAMPED AND SEALED, AS INSTRUMENTS OF SERVICE, ARE THE PROPERTY AND DOCUMENT OF THE ARCHITECT WHETHER THE OBJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. IT SHALL BE UNLAWFUL FOR ANY PERSON WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT TO DUPLICATE OR MAKE COPIES OF THIS DOCUMENT OF THE WHOLE OR IN PART. | PROJECT TITLE: | RECOMMENDING APPROVAL: | APPROVED BY: | SHEET CONTENT: | PROJECT ID NO. | SHEET NO. | | |
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| | PRC NO. | | | | | | DT. ISS. | | | DATE SUBMITTED: |
| | PTR. NO. | | | | | | PL. ISS. | | | |
| | LOCATION: EVSU BURAUEN CAMPUS, BURAUEN LEYTE | | | | | | | | | |



GRADE BEAM PLAN

SCALE

1 : 115



PPIDO
(PHYSICAL PLANT AND
INFRASTRUCTURE DEVELOPMENT
OFFICE)

ENGINEER:

ENGR. GABINO C. HILVANO, DTM
ENGINEER

PRC NO.

DT. ISS.

PTR. NO.

PL. ISS.

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BURAEN ACADEMIC BUILDING

LOCATION: EVSU BURAEN CAMPUS, BURAEN LEYTE

RECOMMENDING APPROVAL:

AR. BEATrice G. JUDIO, UAP
Planning Officer III

APPROVED BY:

DR. DENNIS C. DE PAZ
University President

SHEET CONTENT:

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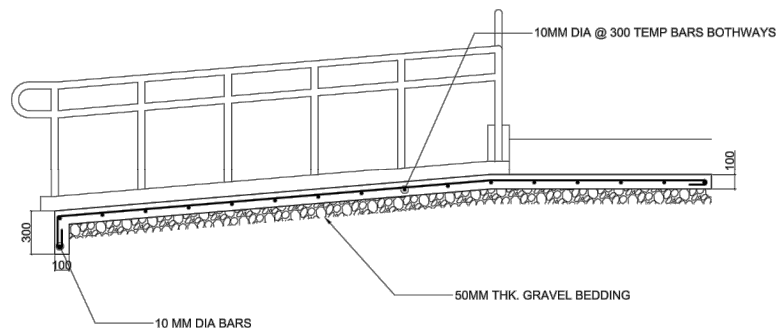
PROJECT ID NO.

REV. No.: _____

DATE SUBMITTED:

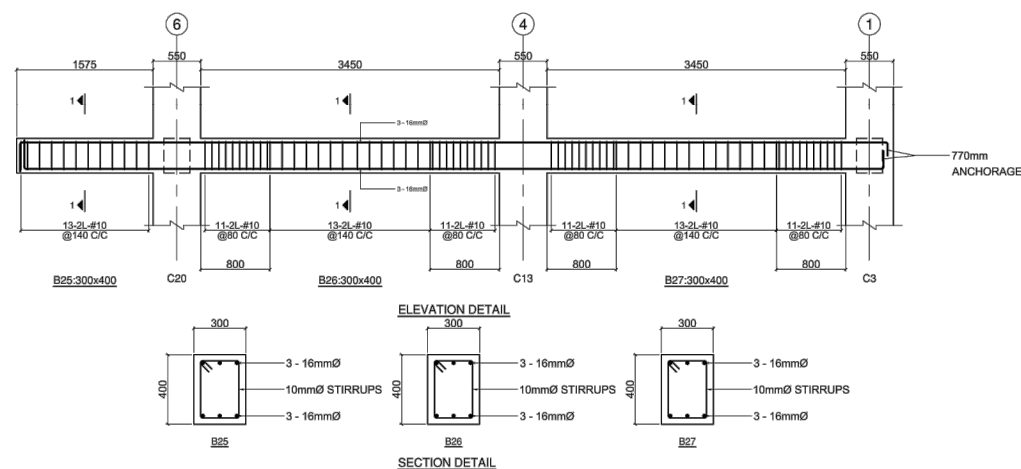
SHEET NO.

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8 9



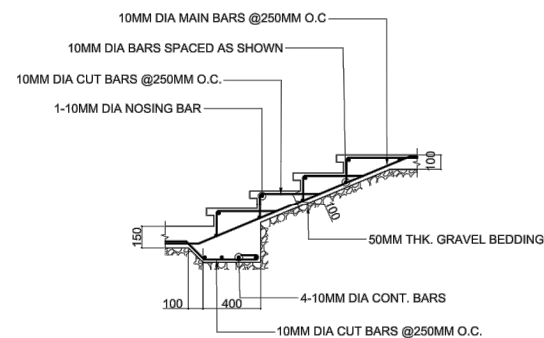
TYP. RAMP DETAIL

SCALE 1 : 40



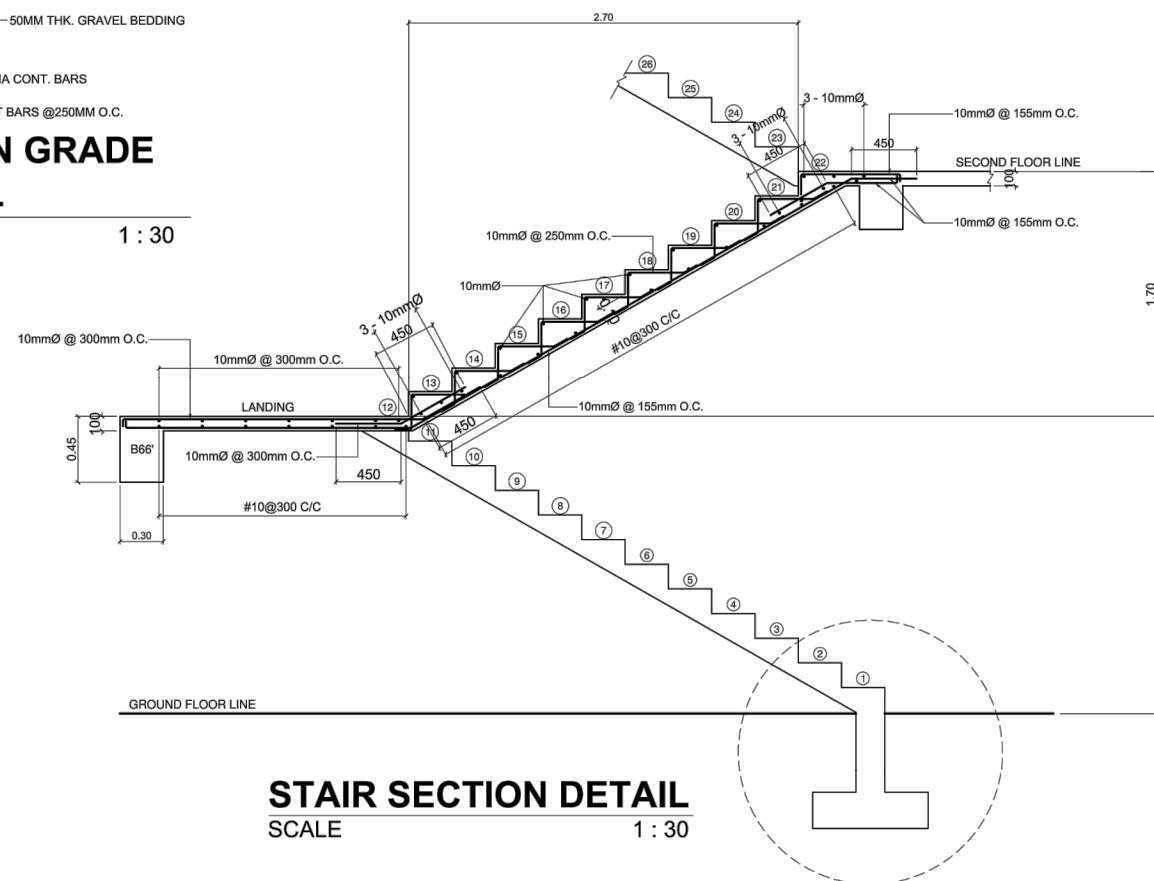
TYP. GRADE BEAM DETAIL

SCALE 1 : 50



TYP. STAIRS ON GRADE DETAIL

SCALE 1 : 30

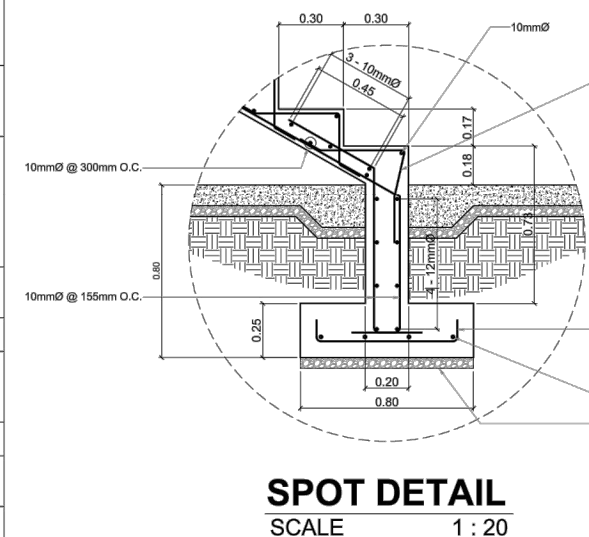


STAIR SECTION DETAIL

SCALE 1 : 30

GRADE BEAM SCHEDULE (C21 : Fy276 (MAIN) : Fy227 (SHEAR)) (LEVEL: 3.15 m)

| BEAM NUMBERS | SIZE | | BOTTOM REINFORCEMENT | | | TOP REINFORCEMENT | | | SHEAR STIRRUPS | | | SFR | DIAGONAL | REMARKS |
|---|------|-----|----------------------|----------|-------|-------------------|----------|---------------|------------------|-------------------|------------------|-----|----------|---------|
| | B | D | LEFT | MID SPAN | RIGHT | LEFT | MID SPAN | RIGHT | LEFT | MID SPAN | RIGHT | | | |
| B1,B2 ,B61,B63 ,B65 | 300 | 400 | 3-#16 | 3-#16 | 3-#16 | 3-#16 | 3-#16 | 3-#16 | 11-2L-#10@80 C/C | 20-2L-#10@140 C/C | 11-2L-#10@80 C/C | - | - | - |
| B3,B4,B5 ,B11,B12,B13 ,B39,B40 ,B41,B42,B43,B44 | 300 | 400 | 3-#16 | 3-#16 | 3-#16 | 3-#16 | 3-#16 | 3-#16 | 11-2L-#10@80 C/C | 16-2L-#10@140 C/C | 11-2L-#10@80 C/C | - | - | - |
| B17,B18,B19 ,B51 | 300 | 400 | 3-#16 | 3-#16 | 3-#16 | 3-#16 | 3-#16 | 3-#16 | 11-2L-#10@80 C/C | 17-2L-#10@140 C/C | 11-2L-#10@80 C/C | - | - | - |
| B23 | 300 | 400 | 3-#16 | 3-#16 | 3-#16 | 3-#16 | 3-#16 | 3-#16 | 10-2L-#12@80 C/C | - | 10-2L-#12@80 C/C | - | - | - |
| B24,B26,B27,B29 ,B30 | 300 | 400 | 3-#16 | 3-#16 | 3-#16 | 3-#16 | 3-#16 | 3-#16 | 11-2L-#10@80 C/C | 13-2L-#10@140 C/C | 11-2L-#10@80 C/C | - | - | - |
| B25,B28 | 300 | 400 | 3-#16 | 3-#16 | 3-#16 | 3-#16 | 3-#16 | 3-#16 | 5-2L-#10@140 C/C | 3-2L-#10@140 C/C | 5-2L-#10@140 C/C | - | - | - |
| ,B62 ,B64,B66 | 300 | 400 | 3-#16 | 3-#16 | 3-#16 | 3-#16 | 3-#16 | 3-#16 | 11-2L-#10@80 C/C | 6-2L-#10@140 C/C | 11-2L-#10@80 C/C | - | - | - |
| B52 | 300 | 400 | 3-#16 | 3-#16 | 3-#16 | 4-#16 + 2-#16 | 4-#16 | 4-#16 + 2-#16 | 11-2L-#10@80 C/C | 38-2L-#10@115 C/C | 11-2L-#10@80 C/C | - | - | - |



SPOT DETAIL

SCALE 1 : 20



PPIDO
(PHYSICAL PLANT AND
INFRASTRUCTURE DEVELOPMENT
OFFICE)

ENGINEER:

ENGR. GABRIEL C. HILVANO, DTM
ENGINEER

PRC NO.

DT. ISS.

PTR. NO.

PL. ISS.

R.A.9266
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PROJECT TITLE:

CONSTRUCTION OF THREE (3) STOREY EVSU
BURAEN ACADEMIC BUILDING

LOCATION: EVSU BURAEN CAMPUS, BURAEN LEYTE

RECOMMENDING APPROVAL:

AR. BERNIE G. TUDIO, UAP
Planning Officer III

APPROVED BY:

DR. DENNIS C. DE PAZ
University President

SHEET CONTENT:

AS SHOWN

PROJECT ID NO.

REV. No.: _____

DATE SUBMITTED:

SHEET NO.

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9 9