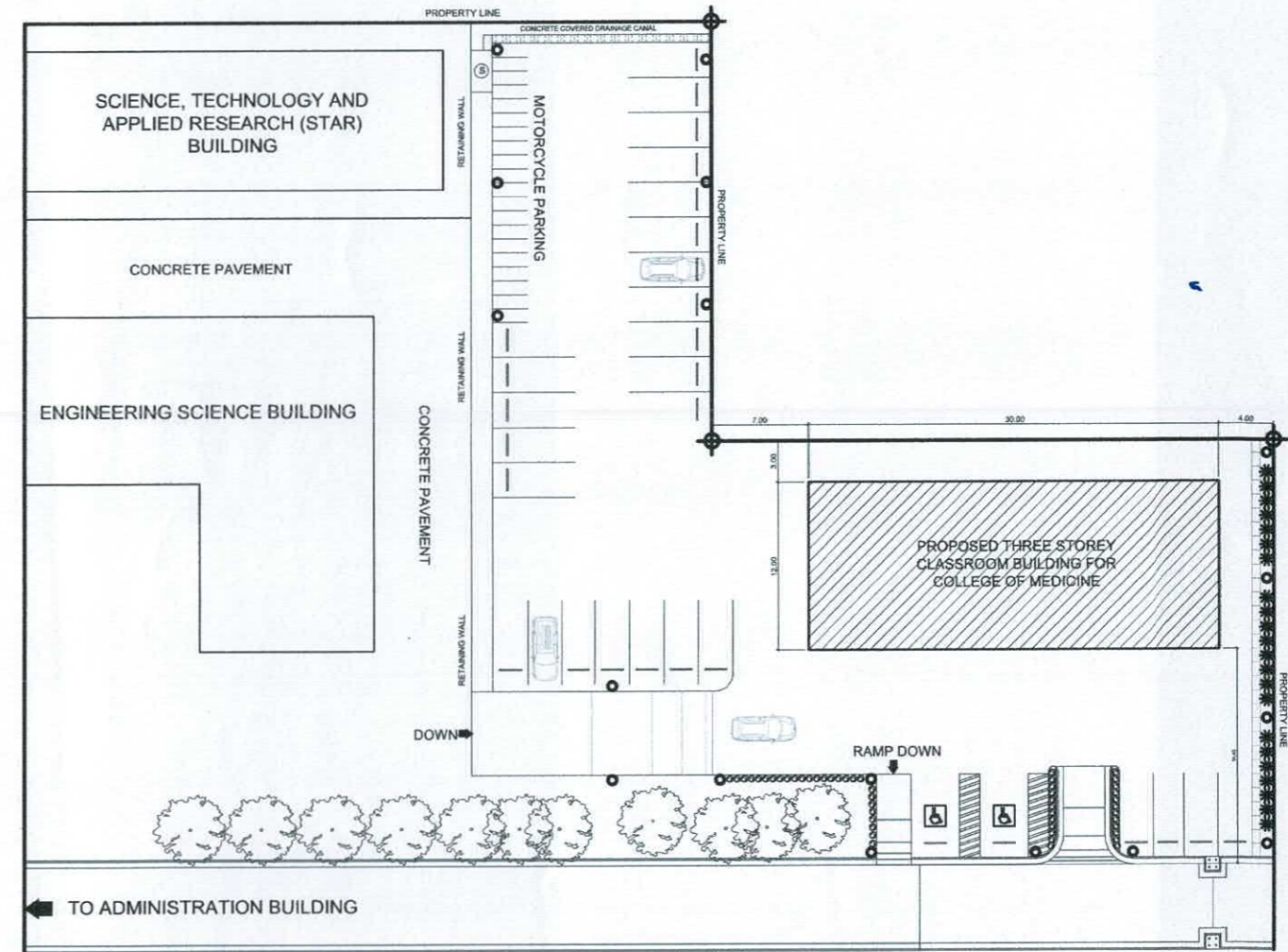






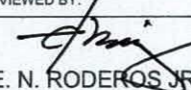

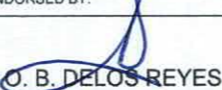


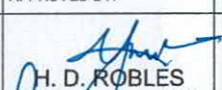
**1**  
A1 SCALE N. T. S.  
**PERSPECTIVE**



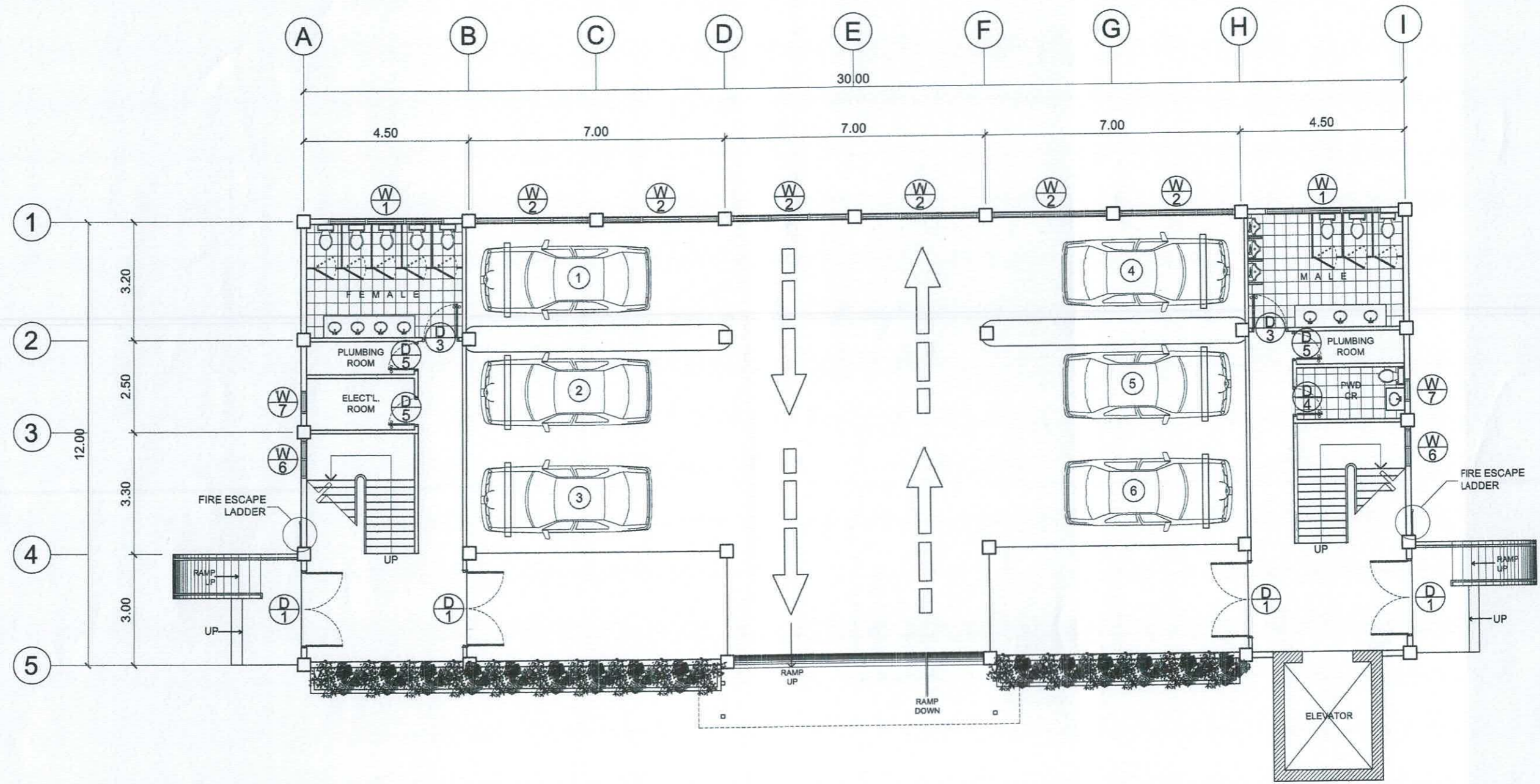
**2**  
A1 SCALE N. T. S.  
**VICINITY MAP**



**3**  
A1 SCALE 1 : 500 MTS.  
**SITE DEVELOPMENT PLAN**

PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:	
 J. D. ESCANO PDU OVPPE	 E. J. GALVEZ DEAN COM	 E. N. RODEROS JR. ARCHITECT	 S. B. BAYOT JR. HEAD PDU	 O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	 A. G. MAGCAWAS VPPD CVSU	 J. X. B. NEPOMUCENO VPASS CVSU	 H. D. ROBLES PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS	CAVITE STATE UNIVERSITY A - 1

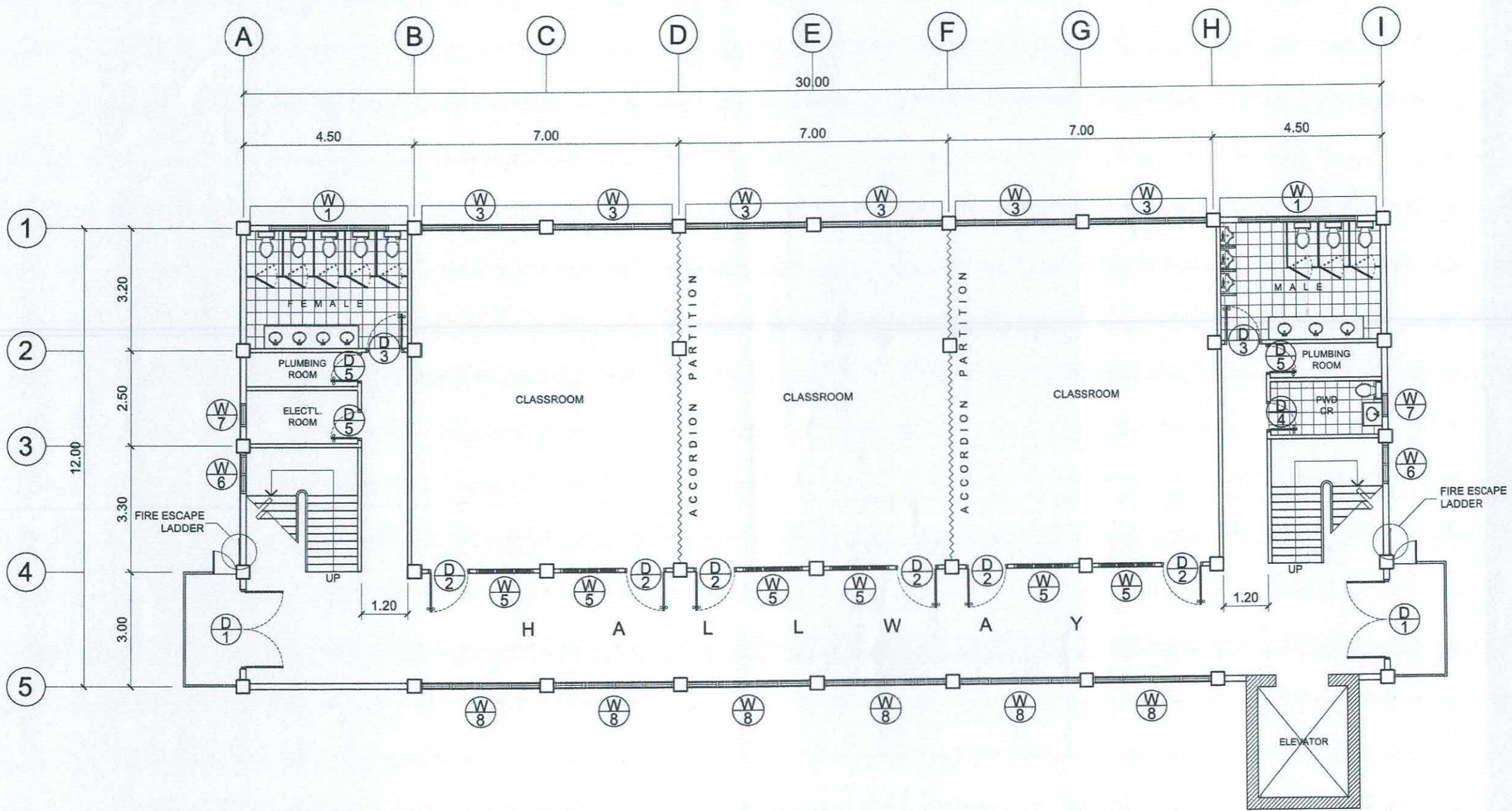




1  
A/2
**GROUND FLOOR PLAN**  
 SCALE 1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:	
	 <b>J. D. ESCANO</b> <small>PDU OVPPD</small>	 <b>E. J. GALVEZ</b> <small>DEAN COM</small>	 <b>E. M. RODEROS JR.</b> <small>ARCHITECT</small>	 <b>S. B. BAYOT JR.</b> <small>HEAD PDU</small>	 <b>O. B. DELOS REYES</b> <small>DIRECTOR PLANNING AND DEVT. OFFICE</small>	 <b>A. G. MAGCAWAS</b> <small>VPPD CVSU</small>	 <b>J. X. B. NERONMUCENO</b> <small>VPASS CVSU</small>	 <b>H. D. ROBLES</b> <small>FRES CVSU</small>	<b>CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY</b> <small>CAVITE STATE UNIVERSITY MAIN CAMPUS</small>	<b>CAVITE STATE UNIVERSITY</b>

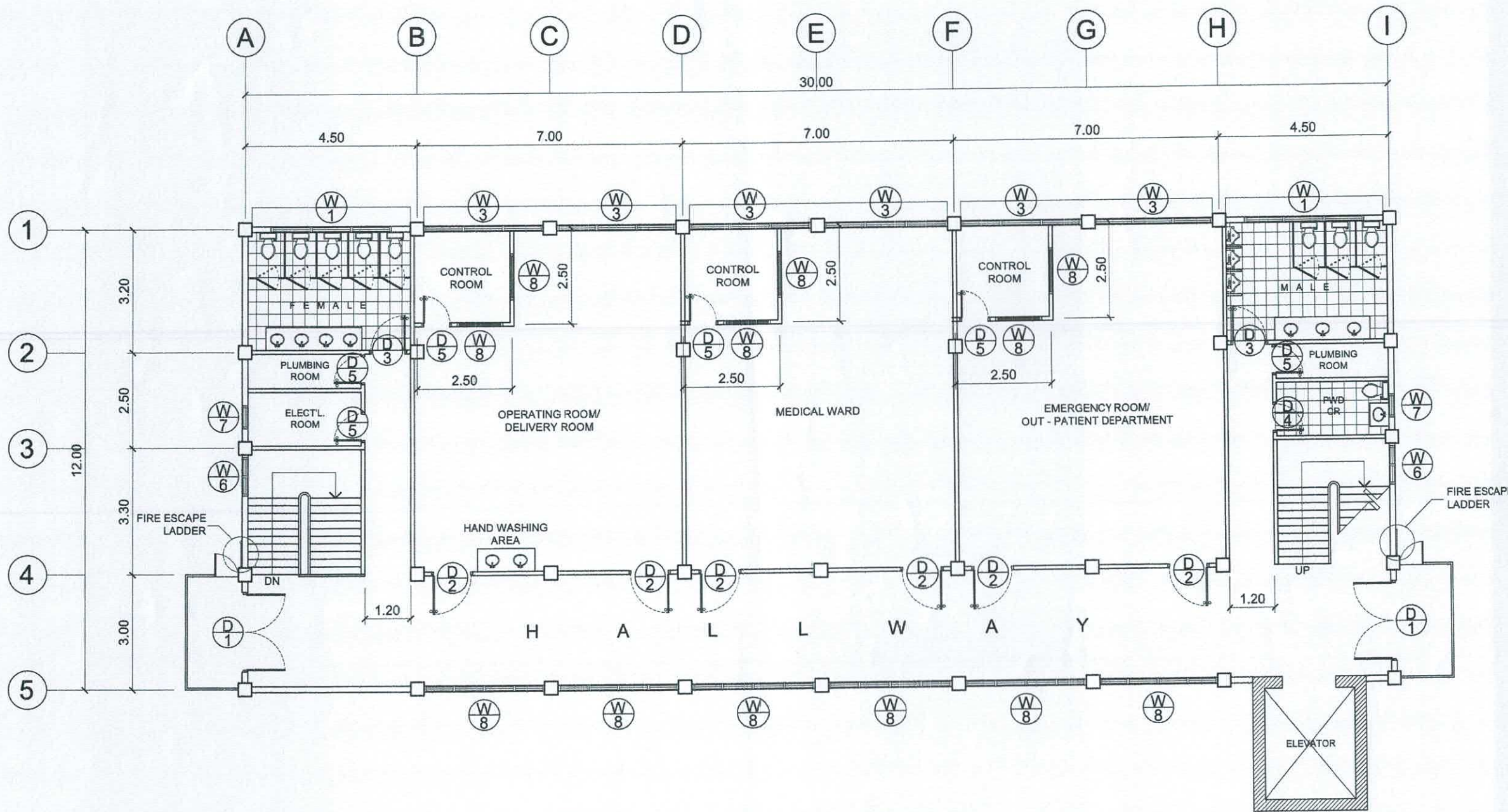





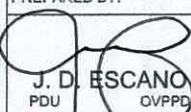
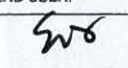
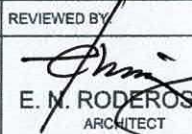

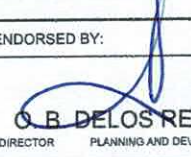
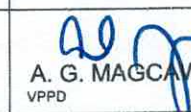
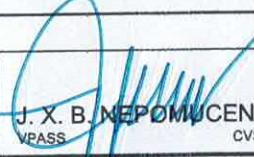

1  
A 3
**SECOND FLOOR PLAN**  
 SCALE 1 : 125 MTS.

	PREPARED BY: J. D. ESCANO <small>PDU OVPPD</small>	END USER: E. J. GALVEZ <small>DEAN COM</small>	REVIEWED BY: E. N. RODRIGOS JR. <small>ARCHITECT</small>	ENDORSED BY: S. B. BAYOT JR. <small>HEAD PDU</small>	REC. APPROVAL: O. B. DELOS REYES <small>DIRECTOR PLANNING AND DEVT. OFFICE</small>	APPROVED BY: A. G. MAGCAYAS <small>VPPD CVSU</small>	APPROVED BY: J. X. B. NEROMUCENO <small>VPASS CVSU</small>	APPROVED BY: H. D. ROBLES <small>PRES CVSU</small>	PROJECT TITLE/ LOCATION: CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY <small>CAVITE STATE UNIVERSITY MAIN CAMPUS</small>	IMPLEMENTING AGENCY: CAVITE STATE UNIVERSITY	SHT NO: A - 3
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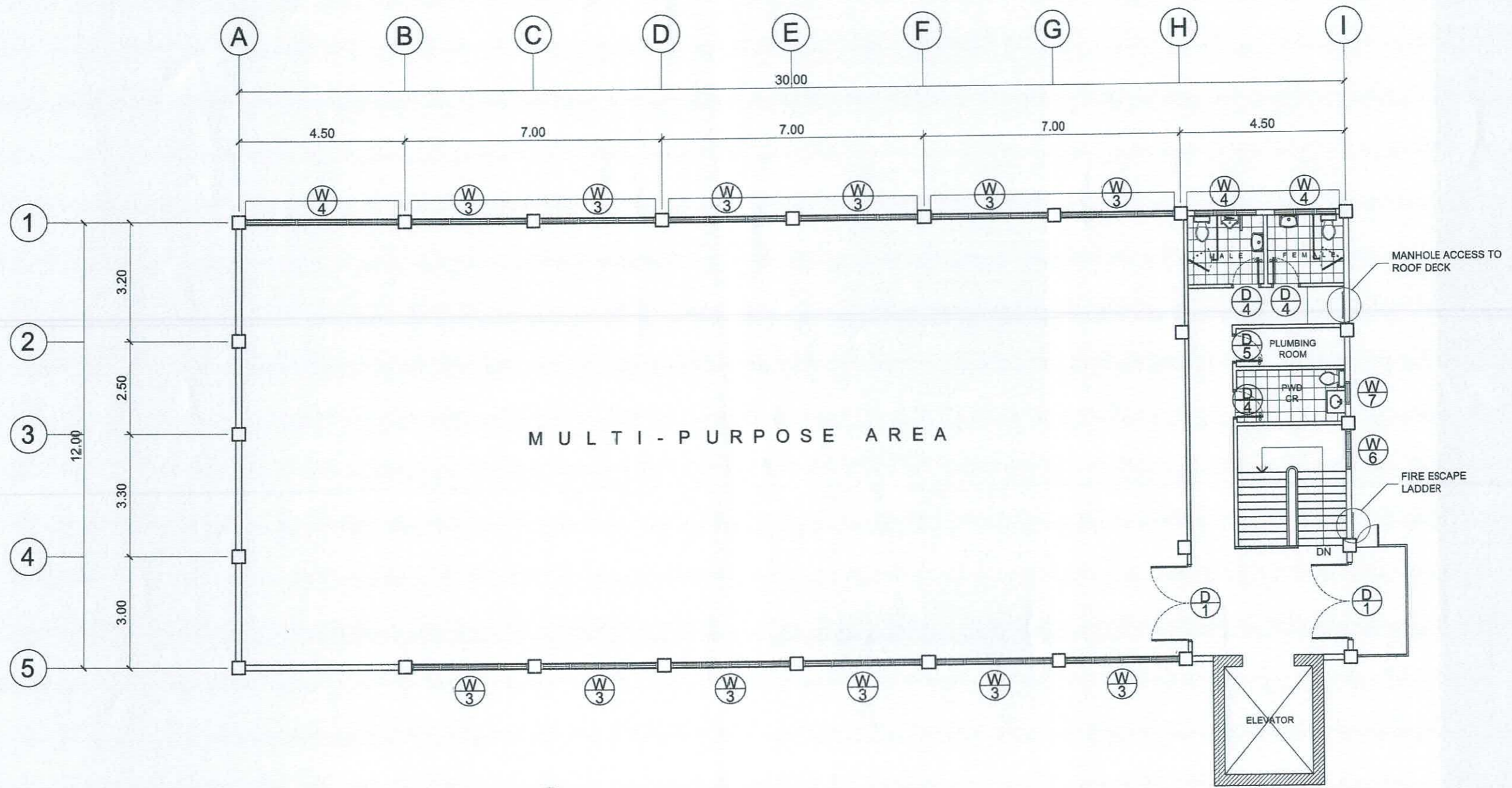




1  
A/4
**THIRD FLOOR PLAN**  
 SCALE 1 : 125 MTS.

	PREPARED BY:  J. D. ESCANO <small>PDU OVPPD</small>	END USER:  E. J. GALVEZ <small>DEAN COM</small>	REVIEWED BY:  E. M. RODEROS JR. <small>ARCHITECT</small>	ENDORSED BY:  S. B. BAYOT JR. <small>HEAD PDU</small>	ENDORSED BY:  O. B. DELOS REYES <small>DIRECTOR PLANNING AND DEVT. OFFICE</small>	REC. APPROVAL:  A. G. MAGCAWAS <small>VPPD CVSU</small>	REC. APPROVAL:  J. X. B. NEPOMUCENO <small>VPASS CVSU</small>	APPROVED BY:  H. D. ROBLES <small>PRES CVSU</small>	PROJECT TITLE/ LOCATION: CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY <small>CAVITE STATE UNIVERSITY MAIN CAMPUS</small>	IMPLEMENTING AGENCY: CAVITE STATE UNIVERSITY	SHT NO: A - 4
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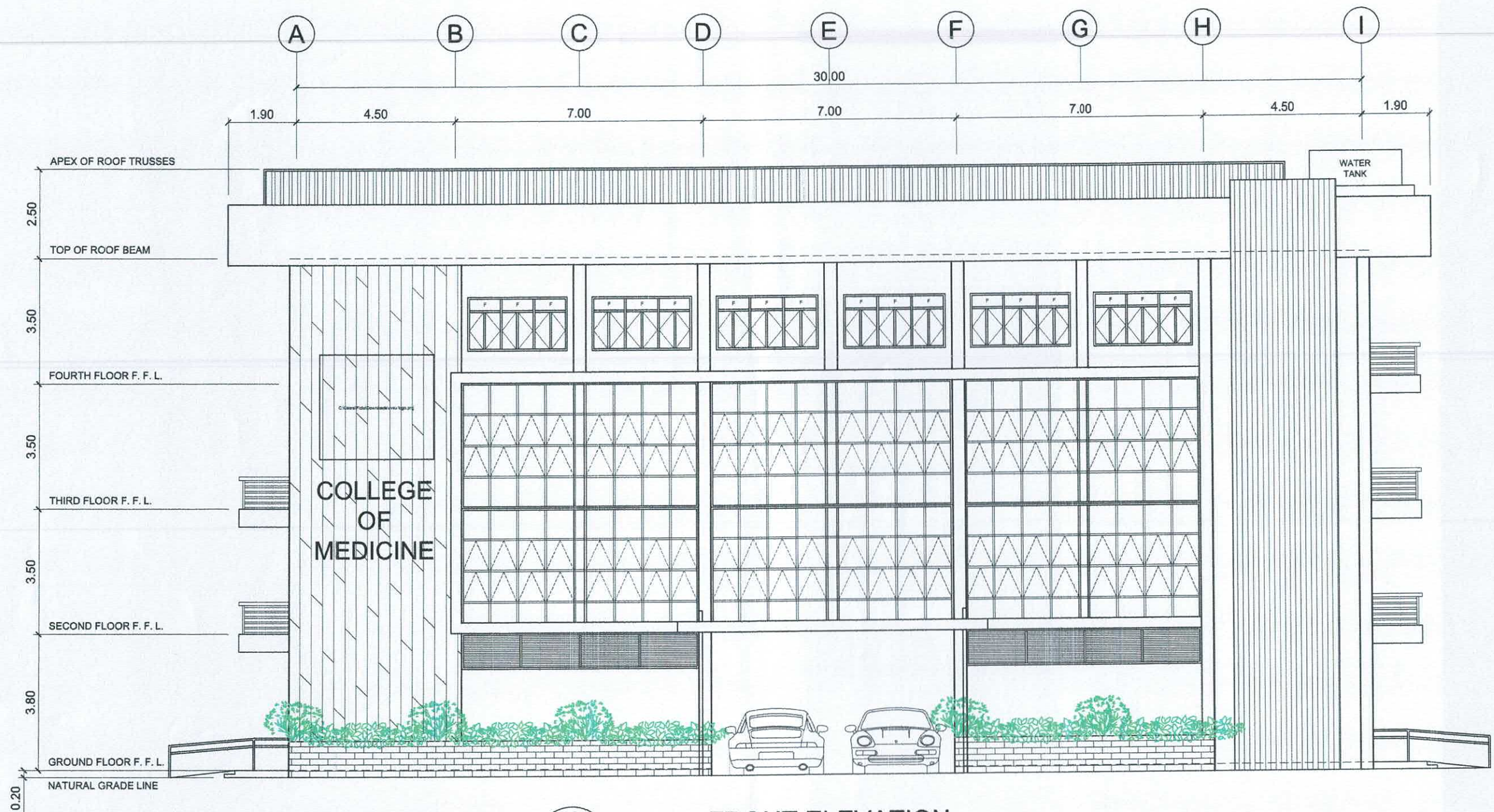





1  
A/5
**ROOF DECK PLAN**  
 SCALE 1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:	
	 J. D. ESCANO <small>PDU OVPD</small>	 E. J. GALVEZ <small>DEAN COM</small>	 E. N. RODEROS JR. <small>ARCHITECT</small>	 S. B. BAYOT JR. <small>HEAD PDU</small>	 S. B. DELOS REYES <small>DIRECTOR PLANNING AND DEVT. OFFICE</small>	 A. G. MAGCAWAS <small>VPPD CVSU</small>	 J. X. B. NEROMUCENO <small>VPASS CVSU</small>	 H. D. ROBLES <small>PRES CVSU</small>	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY <small>CAVITE STATE UNIVERSITY MAIN CAMPUS</small>	CAVITE STATE UNIVERSITY

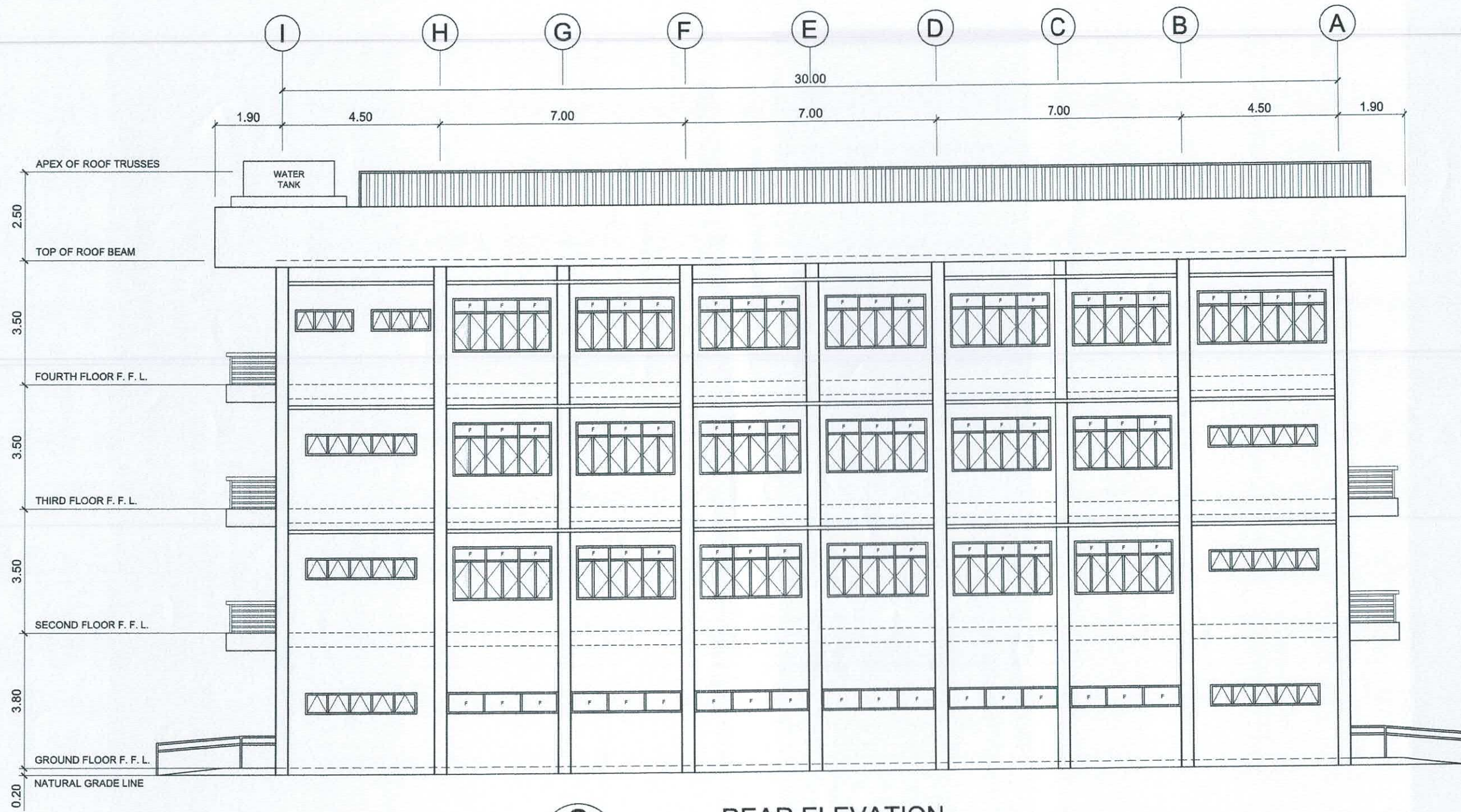




1  
A6
SCALE
1 : 125 MTS.

	PREPARED BY: <i>J. D. ESCANO</i> PDU OVPD	END USER: <i>E. J. GALVEZ</i> DEAN COM	REVIEWED BY: <i>E. N. RODEROS JR.</i> ARCHITECT	ENDORSED BY: <i>S. B. BAYOT JR.</i> HEAD PDI	ENDORSED BY: <i>Q. B. DELOS REYES</i> DIRECTOR PLANNING AND DEVT. OFFICE	REC. APPROVAL: <i>A. G. MAGAWAS</i> VPPD CVSU	APPROVED BY: <i>J. X. B. NEPOMUCENO</i> VPASS CVSU	APPROVED BY: <i>H. D. ROBLES</i> PRES CVSU	PROJECT TITLE/ LOCATION: CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS	IMPLEMENTING AGENCY: CAVITE STATE UNIVERSITY	SHT NO: A - 6
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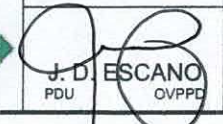
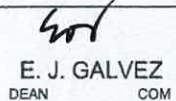

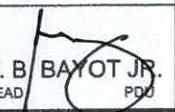

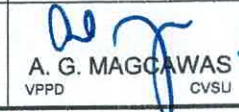

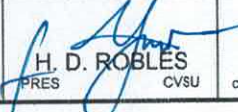


2  
A7

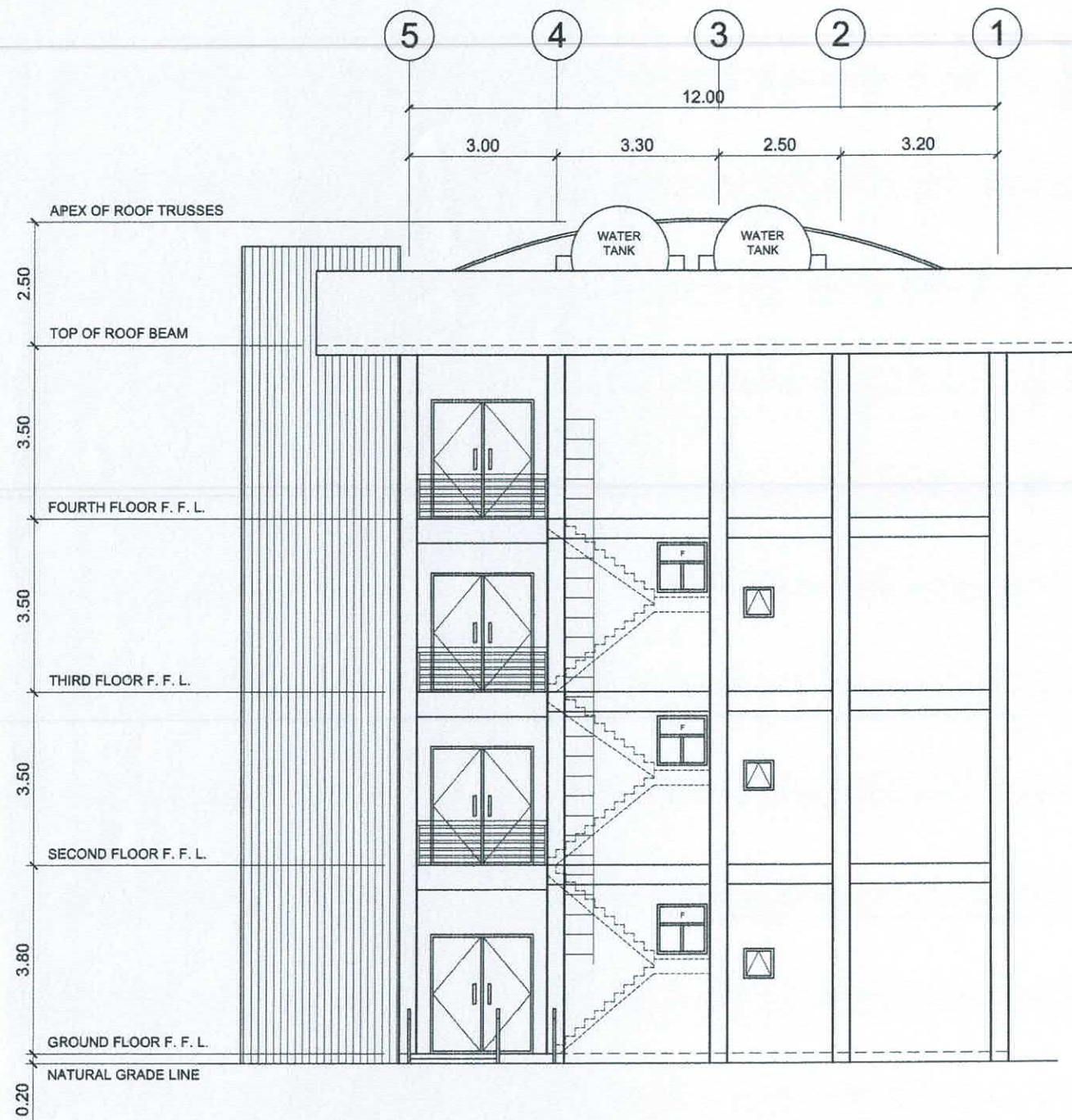
REAR ELEVATION

SCALE

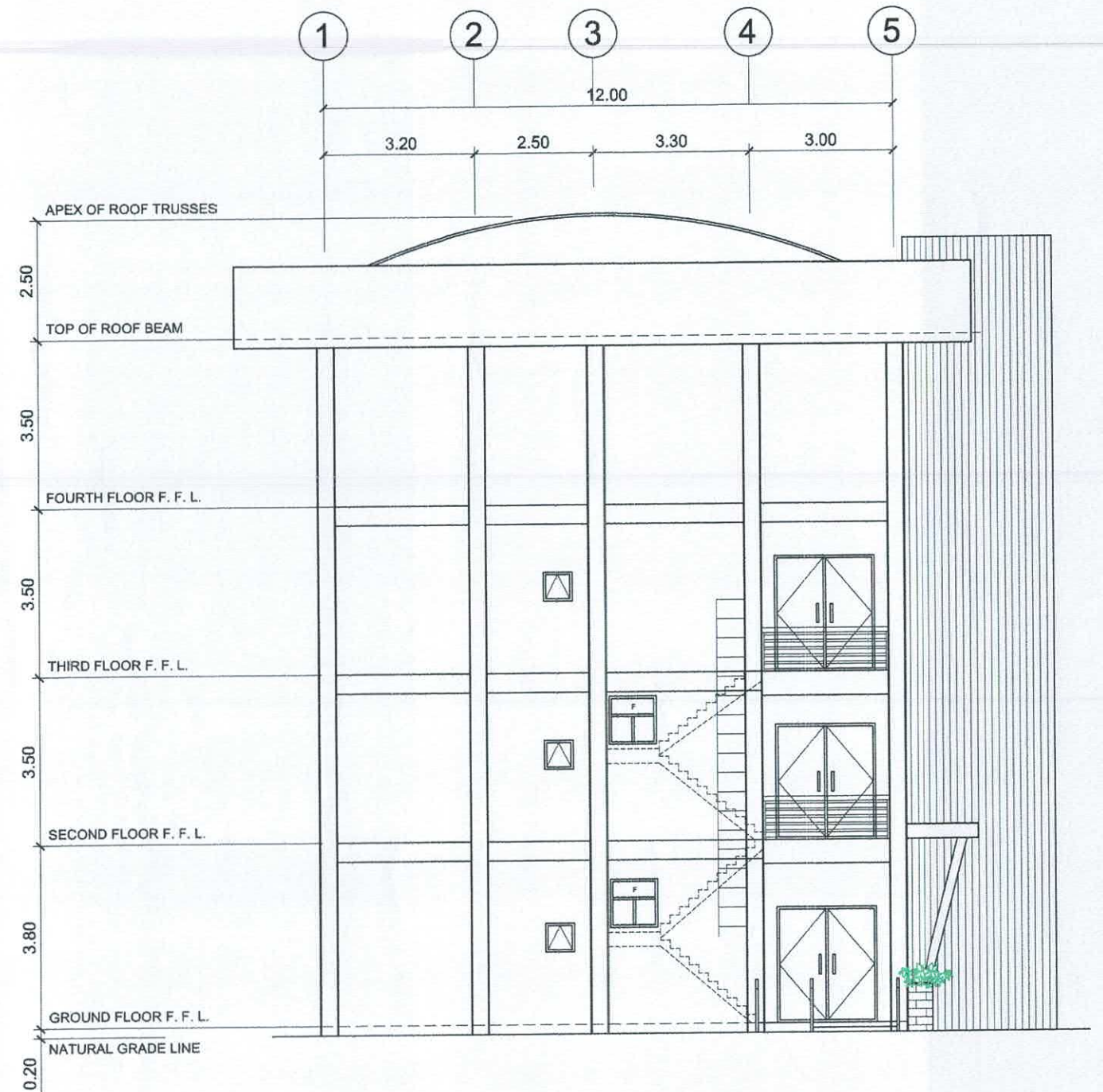
1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO:
	 J. D. ESCANO <small>PDU OVPPD</small>	 E. J. GALVEZ <small>DEAN COM</small>	 E. N. RODEROS JR. <small>ARCHITECT</small>	 S. B. BAYOT JR. <small>HEAD PDU</small>	 O. B. DELOS REYES <small>DIRECTOR PLANNING AND DEVT. OFFICE</small>	 A. G. MAGCAWAS <small>VPPD CVSU</small>	 J. X. B. NEPOMUCENO <small>VPASS CVSU</small>	 H. D. ROBLES <small>PRES CVSU</small>	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY <small>CAVITE STATE UNIVERSITY MAIN CAMPUS</small>





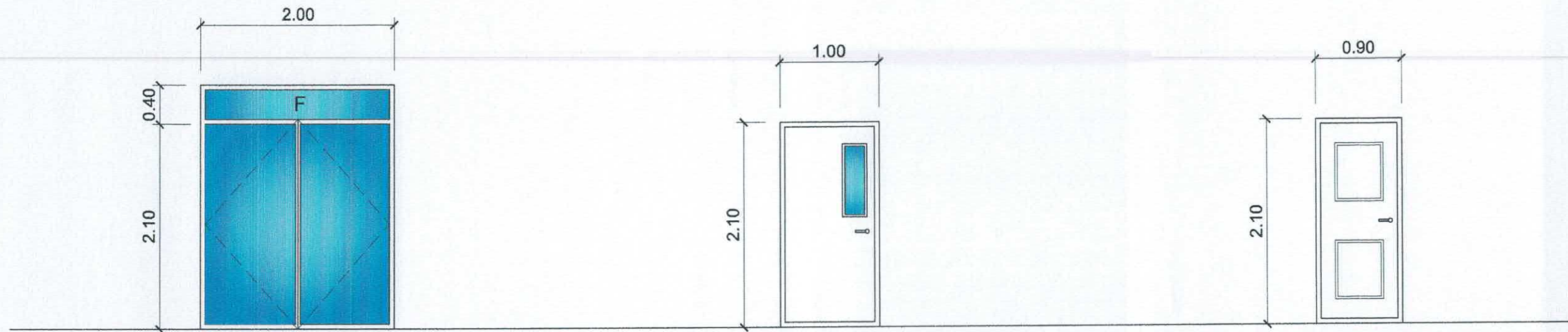
**1**  
**A8** SCALE 1 : 125 MTS.



**2**  
**A8** SCALE 1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
	 <b>J. D. ESCANO</b> PDU OVPD	 <b>E. J. GALVEZ</b> DEAN COM	 <b>E. N. RODEROS JR.</b> ARCHITECT	 <b>S. B. BAYOT JR.</b> HEAD PDU	 <b>O. B. DELOS REYES</b> DIRECTOR PLANNING AND DEVT. OFFICE	 <b>A. G. MAGCAWAS</b> VPPD CVSU	 <b>J. X. B. NEPOMUCENO</b> VPASS CVSU	 <b>H. D. ROBLES</b> PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS

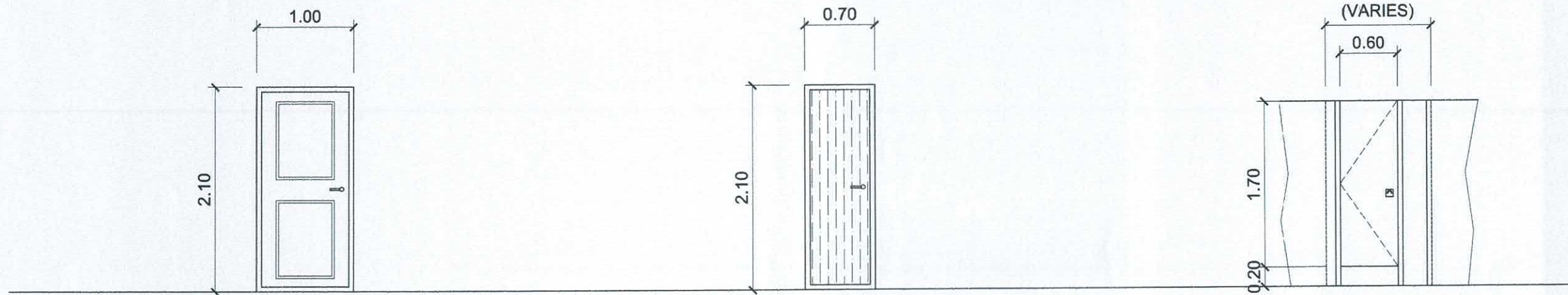




**D**  
**1** TEN (10) SETS  
2.00m x 2.50m DOUBLE SWING GLASS DOOR W/ 1/4" THK. REFLECTIVE GLASS ON A WHITE POWDER COATED ALUMINUM FRAME COMPLETE W/ HEAVY DUTY ACCESSORIES AND DOOR HANDLE

**D**  
**2** TWELVE (12) SETS  
1.00m x 2.10m SOLID STEEL PANEL DOOR WITH 0.20m x 0.70m x 1/4" THK. CLEAR PEEPING GLASS COMPLETE WITH HEAVY DUTY ACCESSORIES, DOOR JAMB AND LEVER TYPE DOOR KNOB

**D**  
**3** SIX (6) SETS  
0.90m x 2.10m SOLID STEEL PANEL DOOR COMPLETE WITH HEAVY DUTY ACCESSORIES, DOOR JAMB AND LEVER TYPE DOOR KNOB



**D**  
**4** SIX (6) SETS  
1.00m x 2.10m SOLID STEEL PANEL DOOR COMPLETE WITH HEAVY DUTY ACCESSORIES, DOOR JAMB AND LEVER TYPE DOOR KNOB

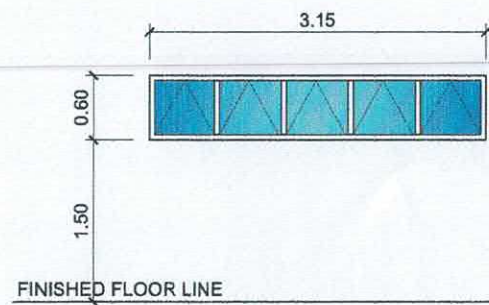
**D**  
**5** THIRTEEN (13) SETS  
0.70m x 2.10m STEEL DOOR COMPLETE WITH HEAVY DUTY ACCESSORIES, DOOR JAMB AND LEVER TYPE DOOR KNOB

**D**  
**6** TWENTY - SIX (26) SETS  
0.60m x 2.10m PHENOLIC DOOR PANEL AND PARTITION COMPLETE WITH ALL ACCESSORIES, DOOR LOCK WITH INDICATOR

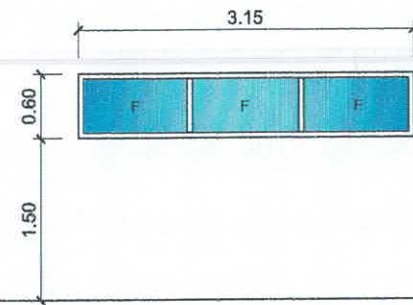
**1**  
**A 9** SCALE 1 : 50 MTS.  
**SCHEDULE OF DOORS**

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO:	
	 <b>J. D. ESCANO</b> <small>PDU OVPPD</small>	 <b>E. J. GALVEZ</b> <small>DEAN COM</small>	 <b>E. N. RODEROS JR.</b> <small>ARCHITECT</small>	 <b>S. B. BAYOT JR.</b> <small>HEAD PDU</small>	 <b>O. B. DELOS REYES</b> <small>DIRECTOR PLANNING AND DEVT. OFFICE</small>	 <b>A. G. MAGCAWAS</b> <small>VPPD CVSU</small>	 <b>J. X. B. NEPOMUCENO</b> <small>VPASS CVSU</small>	 <b>H. D. ROBLES</b> <small>PRES CVSU</small>	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY <small>CAVITE STATE UNIVERSITY MAIN CAMPUS</small>	<b>CAVITE STATE UNIVERSITY</b>

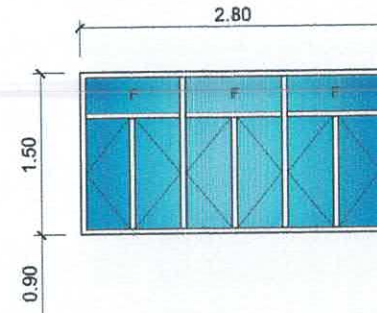




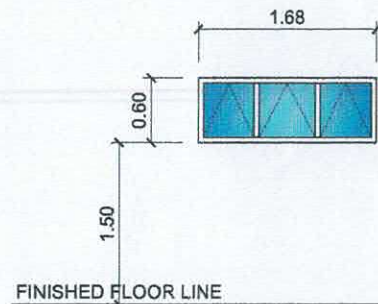
3.15m x 0.60m AWNING - TYPE WINDOW ON A WHITE POWDER COATED ALUMINUM FRAME WITH 1/2" THK. TINTED GLASS  
**W 1** SIX (6) SETS



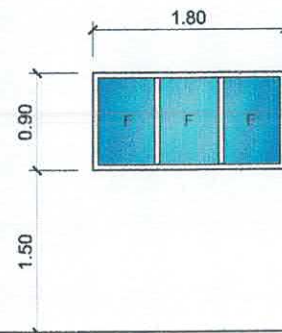
3.15m x 0.60m FIXED GLASS WINDOW ON A WHITE POWDER COATED ALUMINUM FRAME WITH 1/2" THK. TINTED GLASS  
**W 2** SIX (6) SETS



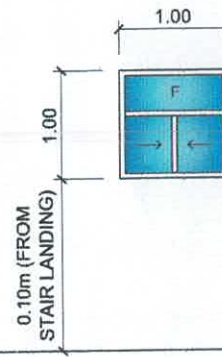
2.80m x 1.50m CASEMENT - TYPE WINDOW WITH FIXED GLASS ON A WHITE POWDER COATED ALUMINUM FRAME WITH 1/2" THK. TINTED GLASS  
**W 3** TWENTY - FOUR (24) SETS



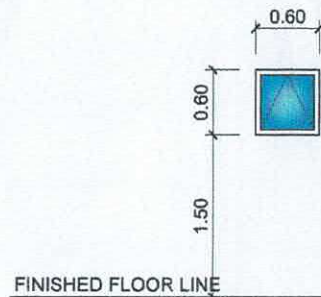
1.68m x 0.60m AWNING - TYPE WINDOW ON A WHITE POWDER COATED ALUMINUM FRAME WITH 1/2" THK. TINTED GLASS  
**W 4** THREE (3) SETS



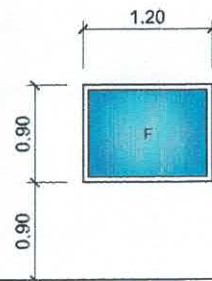
1.80m x 0.90m FIXED GLASS WINDOW ON A WHITE POWDER COATED ALUMINUM FRAME WITH 1/2" THK. CLEAR GLASS  
**W 5** SIX (6) SETS



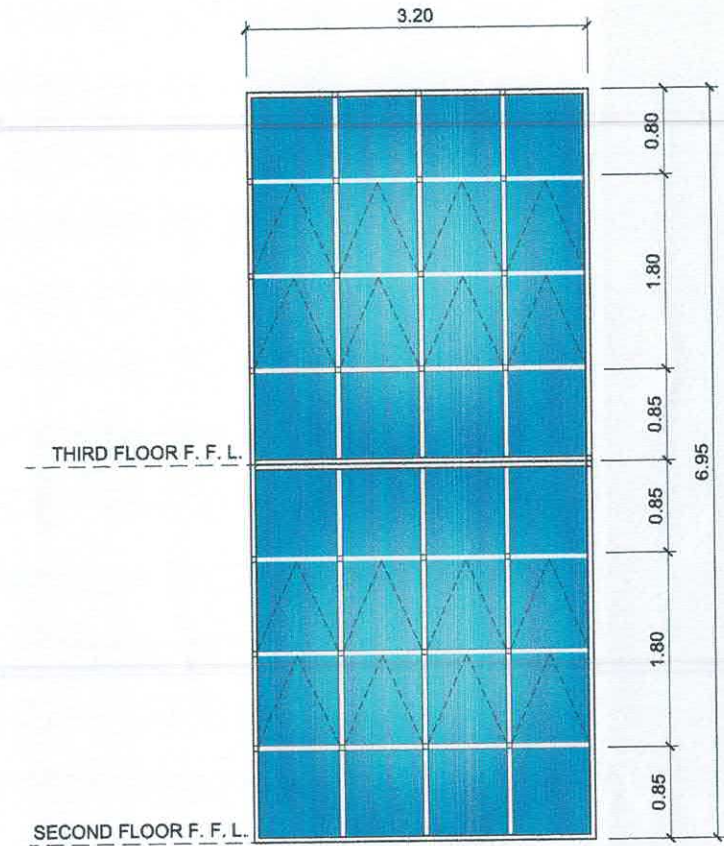
1.00m x 1.00m SLIDING WINDOW WITH FIXED GLASS ON A WHITE POWDER COATED ALUMINUM FRAME WITH 1/2" THK. TINTED GLASS  
**W 6** FIVE (5) SETS



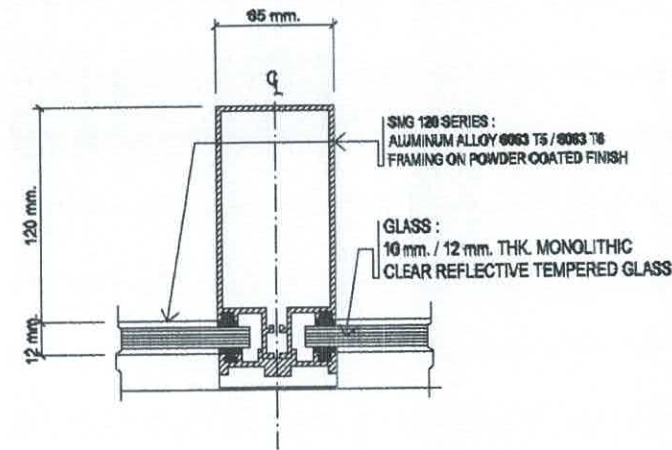
0.60m x 0.80m AWNING - TYPE WINDOW ON A WHITE POWDER COATED ALUMINUM FRAME WITH 1/2" THK. TINTED GLASS  
**W 7** SIX (6) SETS



1.20m x 0.90m FIXED VIEWING WINDOW ON A WHITE POWDER COATED ALUMINUM FRAME WITH 1/2" THK. TINTED GLASS  
**W 8** SIX (6) SETS



3.20m (W) CURTAIN WALL FIXED PANEL GLASS WINDOW WITH AWNING WINDOW IN AN ALUMINUM ALLOY FRAMING ON WHITE POWDER COAT FINISH AND MONOLITHIC CLEAR REFLECTIVE TEMPERED GLASS  
**W 8** SIX (6) SETS



**CURTAIN WALL SPECIFICATION :**  
 (ALUMINUM FRAMED CURTAIN WALL STICK TYPE)  
 SMG 120 SERIES :  
 ALUMINUM ALLOY 6063 T5 / 6063 T6 FRAMING ON POWDER COATED FINISH  
 GLASS :  
 10 mm. / 12 mm. THK. MONOLITHIC CLEAR REFLECTIVE TEMPERED GLASS  
 INCLUDING NEEDED HARDWARE & ACCESSORIES WITH BEAM / SLAB SUPPORT AT EVERY FLOOR

**2** DET. SECTION OF CURTAIN WALL  
 A/10 SCALE N. T. S.

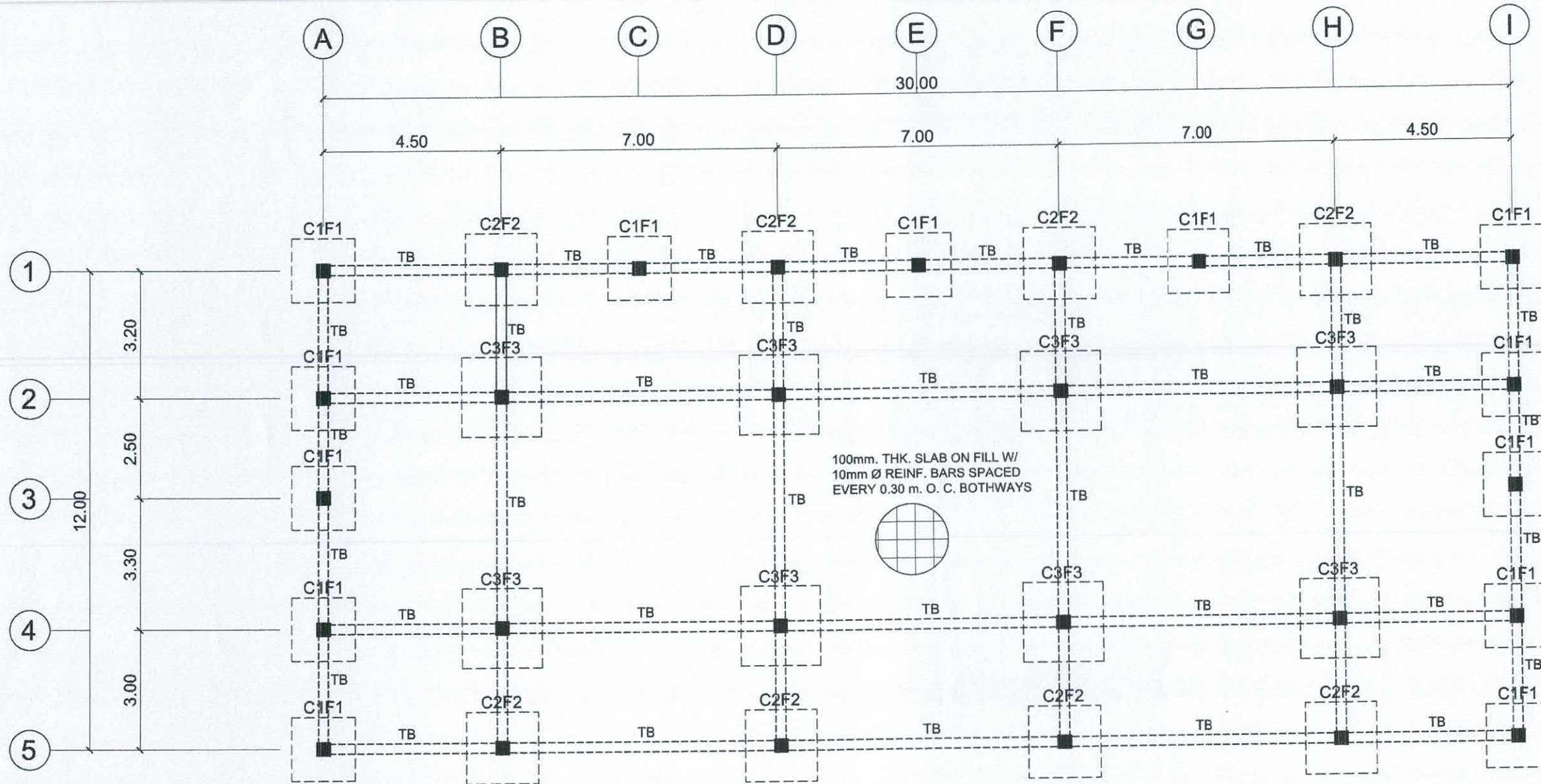
**1** SCHEDULE OF WINDOWS  
 A/10 SCALE 1 : 70 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
	 J. D. ESCANO PDU CVPFD	 E. J. GALVEZ DEAN COM	 E. N. RODEROS JR. ARCHITECT	 S. B. BAYOT JR. HEAD PDU	 O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	 A. G. MAGCAWAS VPPD CVSU	 J. X. B. NEPOMUCENO VPASS CVSU	 H. D. ROBLES PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS






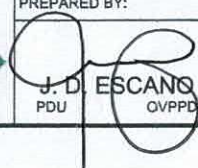
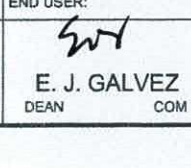
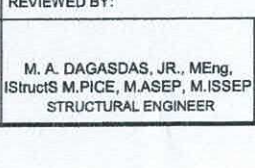
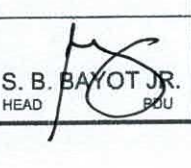

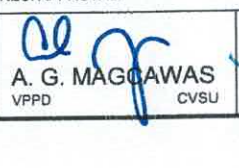
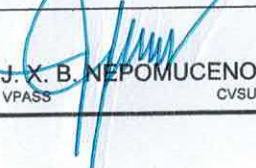
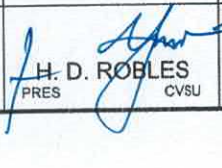




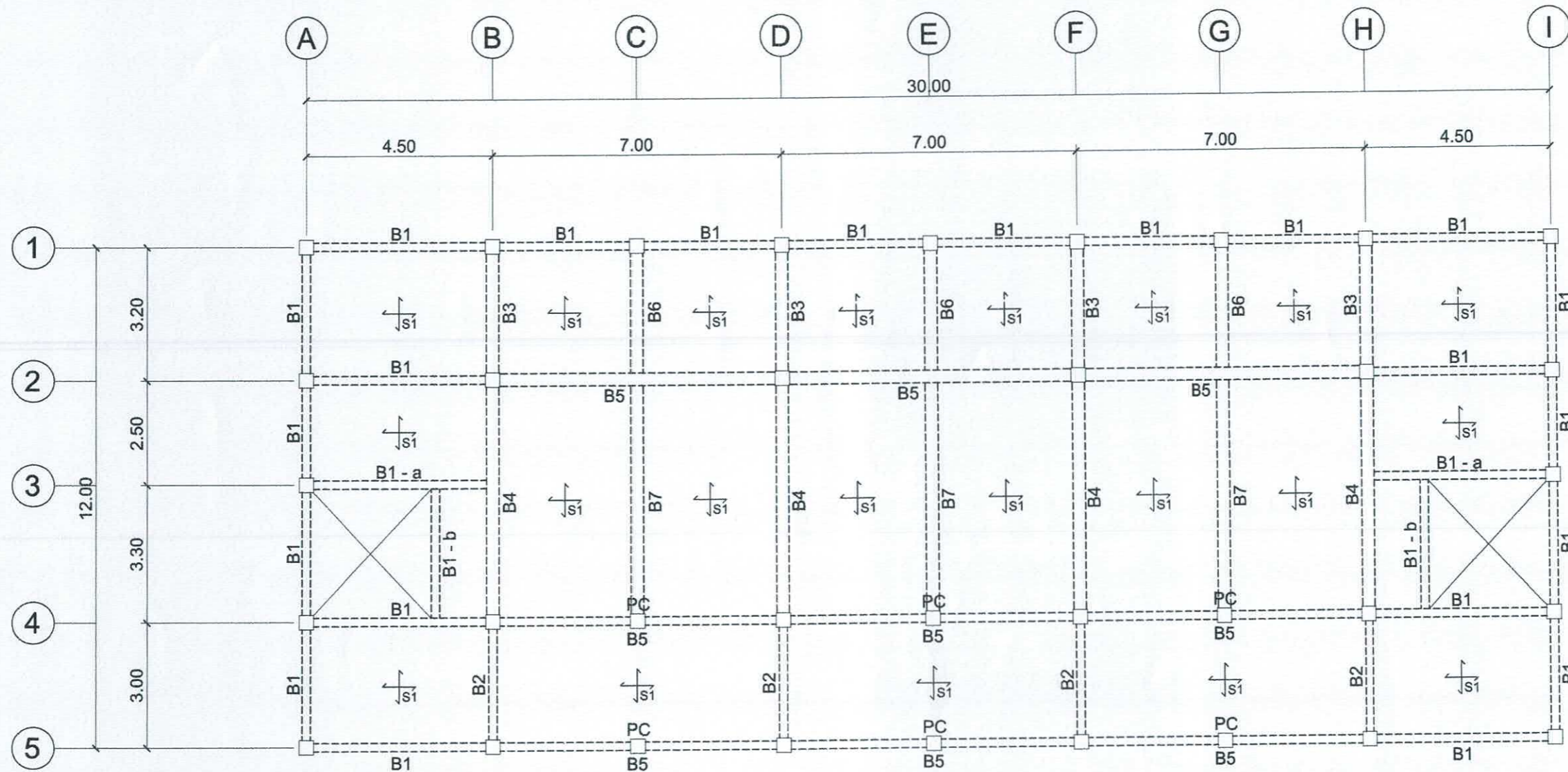
1  
S2 SCALE

FOUNDATION PLAN

1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO:	
	 <b>J. D. ESCANO</b> <small>PDU OVPPD</small>	 <b>E. J. GALVEZ</b> <small>DEAN COM</small>	 <b>M. A. DAGASDAS, JR., MEng.</b> <small>ISTRUCTOR M.PICE, M.ASEP, M.ISSEP</small> <small>STRUCTURAL ENGINEER</small>	 <b>S. B. BAYOT JR.</b> <small>HEAD DOU</small>	 <b>O. B. DE LOS REYES</b> <small>DIRECTOR PLANNING AND DEVT. OFFICE</small>	 <b>A. G. MAGCAWAS</b> <small>VPPD CVSU</small>	 <b>J. X. B. NEPOMUCENO</b> <small>VPASS CVSU</small>	 <b>H. D. ROBLES</b> <small>PRES CVSU</small>	<b>CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY</b> <small>CAVITE STATE UNIVERSITY MAIN CAMPUS</small>	<b>CAVITE STATE UNIVERSITY</b>




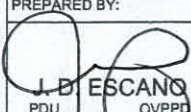
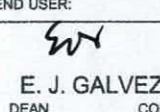
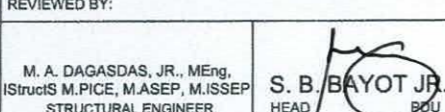

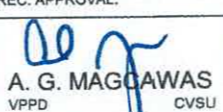




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S3

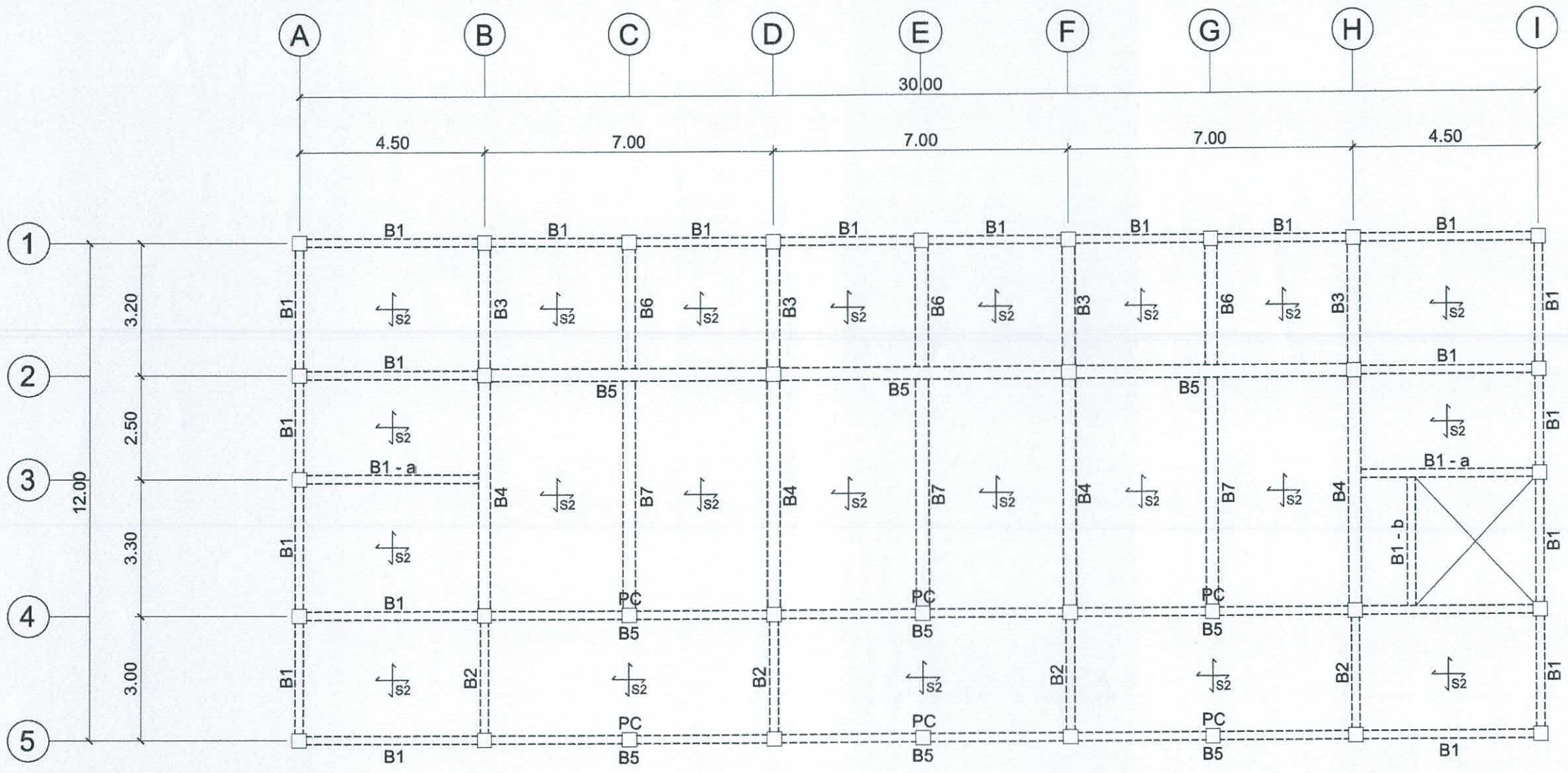
TYP. 2ND - 3RD FLR. BEAM FRAMING PLAN

SCALE

1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
	 <b>J. B. ESCANO</b> PDU OVPD	 <b>E. J. GALVEZ</b> DEAN COM	M. A. DAGASDAS, JR., MEng, IStructS M.PICE, M.ASEP, M.ISSEP STRUCTURAL ENGINEER	 <b>S. B. BAYOT JR.</b> HEAD PDU	 <b>O. B. DELOS REYES</b> DIRECTOR PLANNING AND DEVT. OFFICE	 <b>A. G. MAGAWAS</b> VPPD CVSU	 <b>J. X. B. NEPOMUCENO</b> VPASS CVSU	 <b>H. D. ROBLES</b> PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS




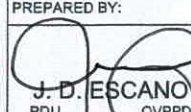
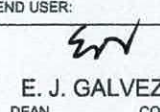
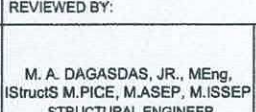
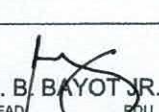

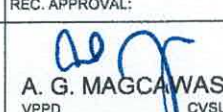
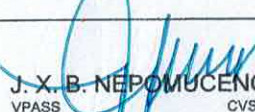
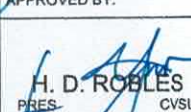


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S4

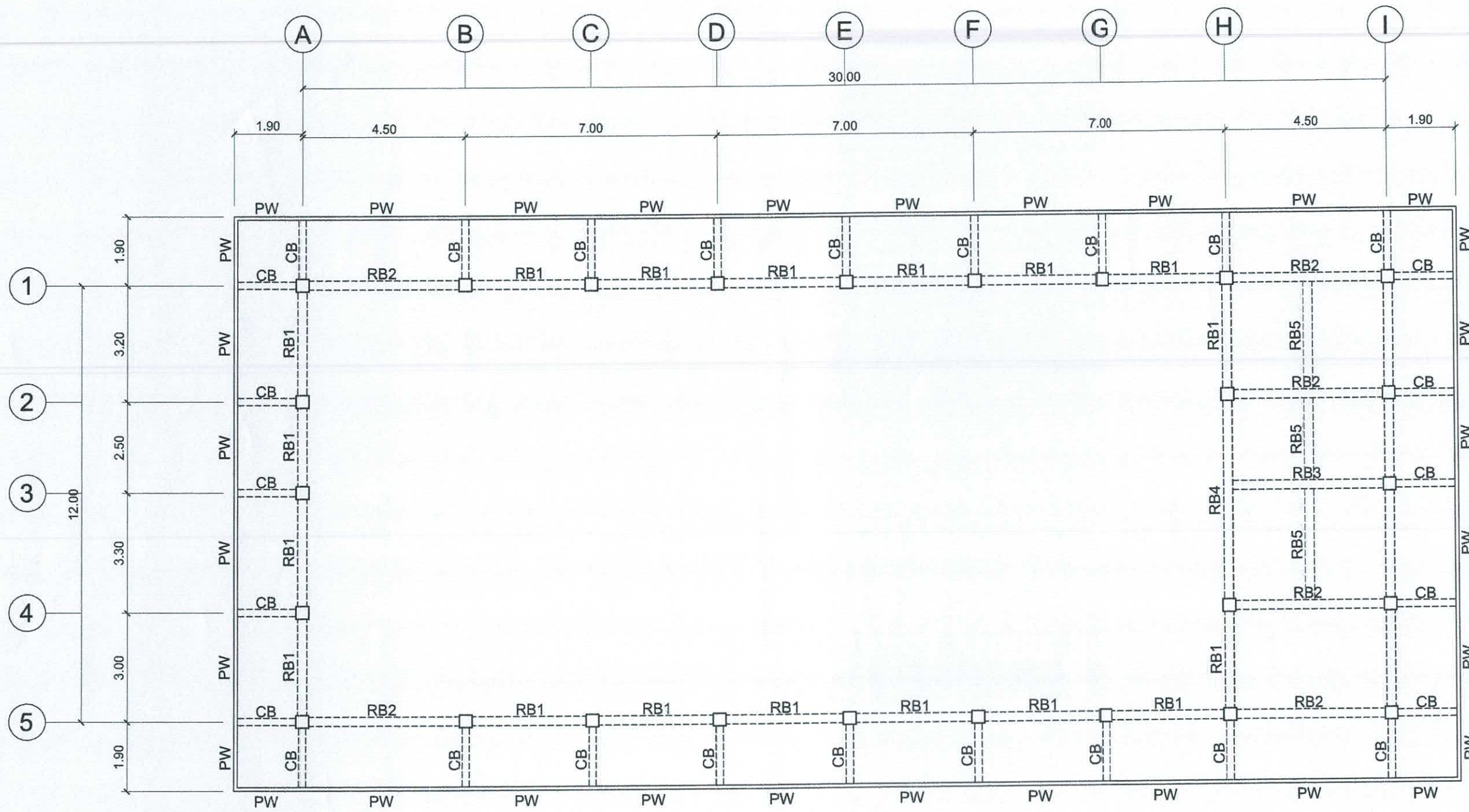
ROOF DECK BEAM FRAMING PLAN

SCALE

1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:	
	 <b>J. D. ESCANO</b> PDU OVPPD	 <b>E. J. GALVEZ</b> DEAN COM	 <b>M. A. DAGASDAS, JR., MEng,</b> IStructS M.PICE, M.ASEP, M.ISSEP STRUCTURAL ENGINEER	 <b>S. B. BAYOT JR.</b> HEAD PDU	 <b>Q. B. DELOS REYES</b> DIRECTOR PLANNING AND DEVT. OFFICE	 <b>A. G. MAGCAWAS</b> VPPD CVSU	 <b>J. X. B. NEPOMUCENO</b> VPASS CVSU	 <b>H. D. ROBLES</b> PRES- CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS	<b>CAVITE STATE UNIVERSITY</b>

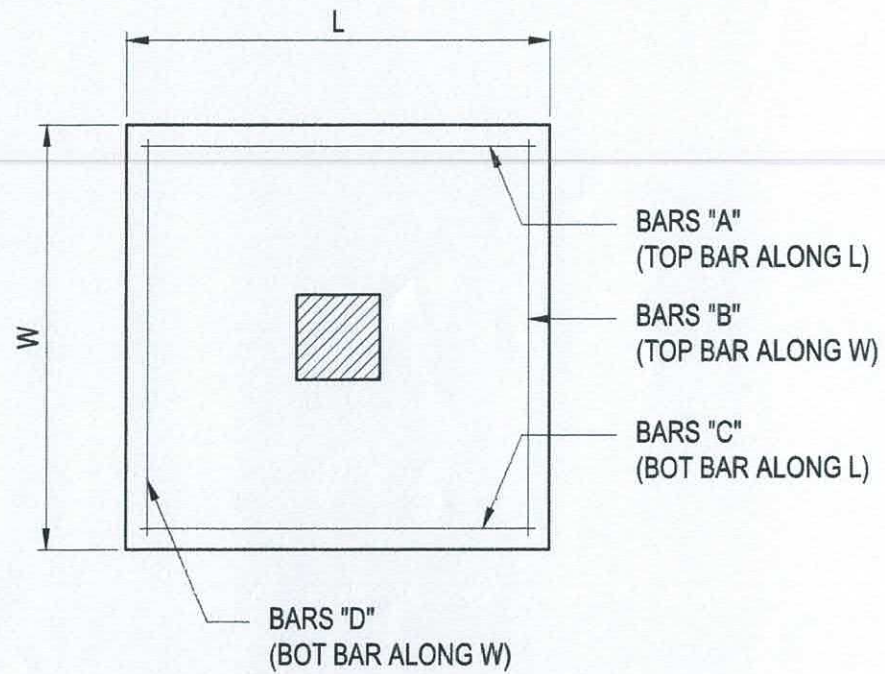




1
ROOF BEAM FRAMING PLAN  
S5
SCALE
1 : 125 MTS.

	PREPARED BY:  <b>J. D. ESCANO</b> <small>PDU OVPD</small>	END USER:  <b>E. J. GALVEZ</b> <small>DEAN COM</small>	REVIEWED BY:  <small>M. A. DAGASDAS, JR., MEng. IStructE M.PICE, M.ASEP, M.ISSEP</small> <b>STRUCTURAL ENGINEER</b>	ENDORSED BY:  <b>S. B. BAYOT JR.</b> <small>HEAD PDU</small>	ENDORSED BY:  <b>Q. B. DELOS REYES</b> <small>DIRECTOR PLANNING AND DEVT. OFFICE</small>	REC. APPROVAL:  <b>A. G. MAGCAWAS</b> <small>VPPD CVSU</small>	APPROVED BY:  <b>J. X. B. NEPOMUCENO</b> <small>VPASS CVSU</small>	APPROVED BY:  <b>H. D. ROBLES</b> <small>PRES CVSU</small>	PROJECT TITLE/ LOCATION: CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY <small>CAVITE STATE UNIVERSITY MAIN CAMPUS</small>	IMPLEMENTING AGENCY: <b>CAVITE STATE UNIVERSITY</b>	SHT NO: <b>S - 5</b>
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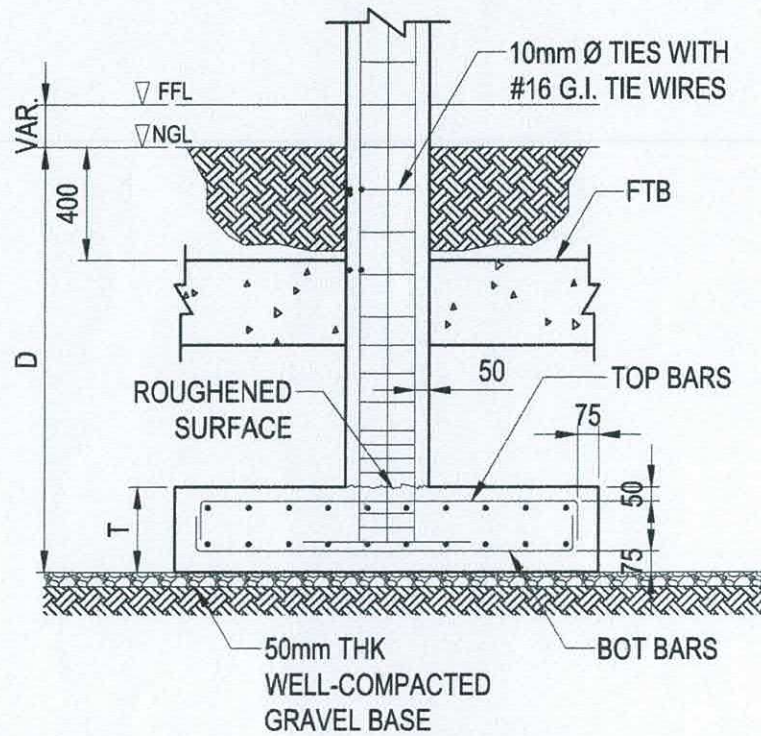
PLAN

### SCHEDULE OF FOOTING

MARK	D (DEPTH) (mm)	T (THICKNESS) (mm)	L (LENGTH) (mm)	W (WIDTH) (mm)	REINFORCEMENT				REMARKS
					TOP		BOTTOM		
					"A"	"B"	"C"	"D"	
F1	2000	300	1600	1600	—	—	10 - 16 mm Ø	10 - 16 mm Ø	
F2	2000	300	1800	1800	—	—	12 - 16 mm Ø	12 - 16 mm Ø	
F3	2000	400	2000	2000	—	—	14 - 16 mm Ø	14 - 16 mm Ø	

### SCHEDULE OF COLUMNS

LEVEL	C1	C2	C3	PC	LATERAL TIES
FOOTING TO SECOND FLOOR	0.40 12 - 16 mm Ø R.S.B. GRADE 40	0.40 12 - 20 mm Ø R.S.B. GRADE 40	0.40 12 - 25 mm Ø R.S.B. GRADE 40		10mm Ø R. S. B. TIES @ 2-50mm, 4-75mm, 6-100mm, REST @ 200mm O.C.
SECOND FLOOR TO ROOF DECK	0.40 12 - 16 mm Ø R.S.B. GRADE 40	0.40 8 - 20 mm Ø R.S.B., 4 - 16 mm Ø R.S.B. GRADE 40	0.40 12 - 20 mm Ø R.S.B. GRADE 40	0.30 8 - 16 mm Ø R.S.B. GRADE 40	
ROOF DECK TO TOP OF ROOF BEAM	0.40 12 - 16 mm Ø R.S.B. GRADE 40	0.40 12 - 16 mm Ø R.S.B. GRADE 40	0.40 12 - 16 mm Ø R.S.B. GRADE 40	0.30 8 - 16 mm Ø R.S.B. GRADE 40	



SECTION

1  
S6

### SCH. OF COLUMN AND COLUMN FOOTING

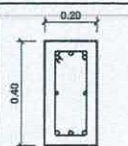
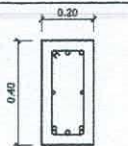
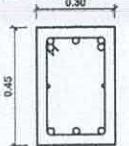
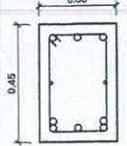
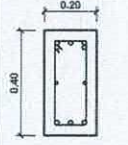
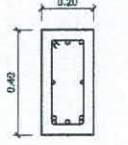
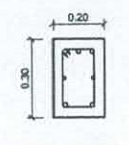
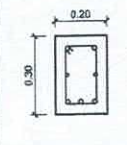
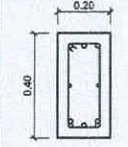
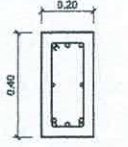
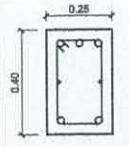
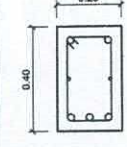
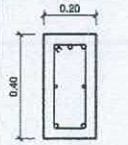
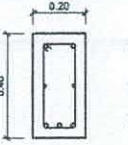
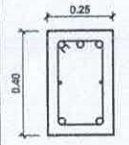
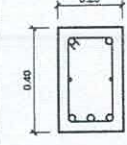
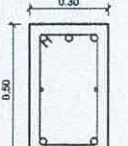
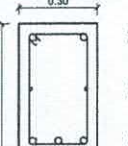
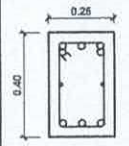
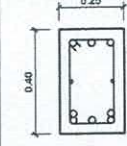
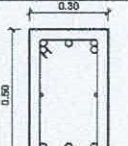
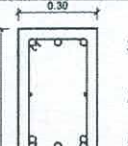
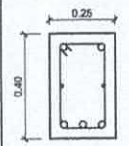
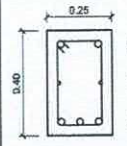
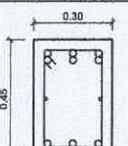
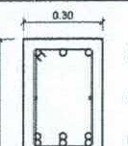
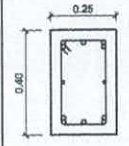
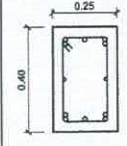
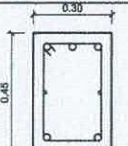
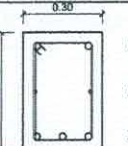
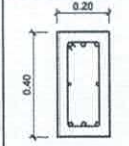
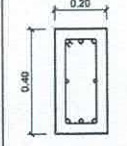
SCALE

N. T. S.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
	J. D. ESCANO PDU	E. J. GALVEZ DEAN	M. A. DAGASDAS, JR., MEng, STRUCTURAL ENGINEER	S. B. BAYOT JR. HEAD	O. B. DELOS REYES DIRECTOR	A. G. MAGAWAS VPPD	J. X. B. NEROMUCENO VPASS	H. D. ROBLES PRES	CAVITE STATE UNIVERSITY MAIN CAMPUS



## SCHEDULE OF BEAMS

SECTION	END - SECT. BARS	MID - SECT. BARS	SPACING OF STIRRUPS	SECTION	END - SECT. BARS	MID - SECT. BARS	SPACING OF STIRRUPS
B - 1	 5 - 16 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 3 - 16 mm Ø D.R.B.	 3 - 16 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 5 - 16 mm Ø D.R.B.	10 mm. Ø STIRRUPS 4 - 50mm, 6 - 75mm, 6 - 100mm REST @ 200mm O.C.	B - 7	 5 - 25 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 3 - 25 mm Ø D.R.B.	 FREE END 3 - 25 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 5 - 25 mm Ø D.R.B.	-DO-
B1 - a	 5 - 16 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 3 - 16 mm Ø D.R.B.	 FREE END 3 - 16 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 5 - 16 mm Ø D.R.B.	-DO-	RB - 1	 3 - 16 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 2 - 16 mm Ø D.R.B.	 3 - 16 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 2 - 16 mm Ø D.R.B.	-DO-
B1 - b	 FREE END 3 - 16 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 5 - 16 mm Ø D.R.B.	 FREE END 3 - 16 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 5 - 16 mm Ø D.R.B.	-DO-	RB - 2	 3 - 25 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 2 - 25 mm Ø D.R.B.	 2 - 25 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 3 - 25 mm Ø D.R.B.	-DO-
B - 2	 3 - 16 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 2 - 16 mm Ø D.R.B.	 2 - 16 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 3 - 16 mm Ø D.R.B.	-DO-	RB - 3	 3 - 25 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 2 - 25 mm Ø D.R.B.	 FREE END 2 - 25 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 3 - 25 mm Ø D.R.B.	-DO-
B - 3	 3 - 25 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 2 - 25 mm Ø D.R.B.	 2 - 25 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 3 - 25 mm Ø D.R.B.	-DO-	RB - 4	 5 - 25 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 3 - 25 mm Ø D.R.B.	 3 - 25 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 5 - 25 mm Ø D.R.B.	-DO-
B - 4	 5 - 25 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 3 - 25 mm Ø D.R.B.	 3 - 25 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 5 - 25 mm Ø D.R.B.	-DO-	RB - 5	 FREE END 2 - 25 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 3 - 25 mm Ø D.R.B.	 FREE END 2 - 25 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 3 - 25 mm Ø D.R.B.	-DO-
B - 5	 6 - 25 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 3 - 25 mm Ø D.R.B.	 3 - 25 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 6 - 25 mm Ø D.R.B.	-DO-	TB	 5 - 16 mm Ø D.R.B. 5 - 10 mm Ø D.R.B. 5 - 16 mm Ø D.R.B.	 5 - 16 mm Ø D.R.B. 5 - 10 mm Ø D.R.B. 5 - 16 mm Ø D.R.B.	-DO-
B - 6	 3 - 25 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 2 - 25 mm Ø D.R.B.	 FREE END 2 - 25 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 3 - 25 mm Ø D.R.B.	-DO-	SECTION	SUPP. - SECT BARS	END - SECT BARS	SPACING OF STIRRUPS
				CB	 3 - 16 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 3 - 16 mm Ø D.R.B.	 3 - 16 mm Ø D.R.B. 2 - 10 mm Ø D.R.B. 3 - 16 mm Ø D.R.B.	10 mm. Ø STIRRUPS 4 - 50mm, 6 - 75mm, 6 - 100mm REST @ 200mm O.C.

1  
S 7

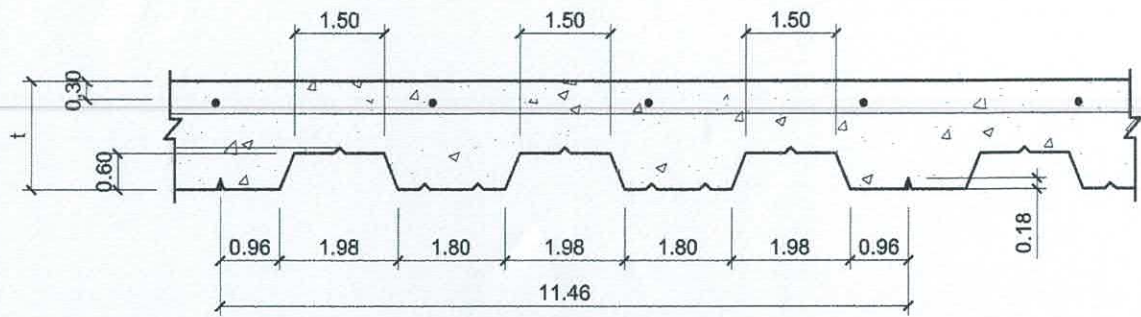
### SCHEDULE OF BEAMS

SCALE

N. T. S.

	PREPARED BY:  J. D. ESCANO PDU OVPDP	END USER:  E. J. GALVEZ DEAN COM	REVIEWED BY: M. A. DAGASDAS, JR., MEng. STRUCTURAL ENGINEER S. B. BAYOT, JR. HEAD PDU	ENDORSED BY:  O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	REC. APPROVAL:  A. G. MAGCAWAS VPPD CVSU	APPROVED BY:  J. X. B. NEPOMUCENO VPASS CVSU	APPROVED BY:  H. D. ROBLES PRES CVSU	PROJECT TITLE/ LOCATION: CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS	IMPLEMENTING AGENCY: CAVITE STATE UNIVERSITY	SHT NO: S - 7
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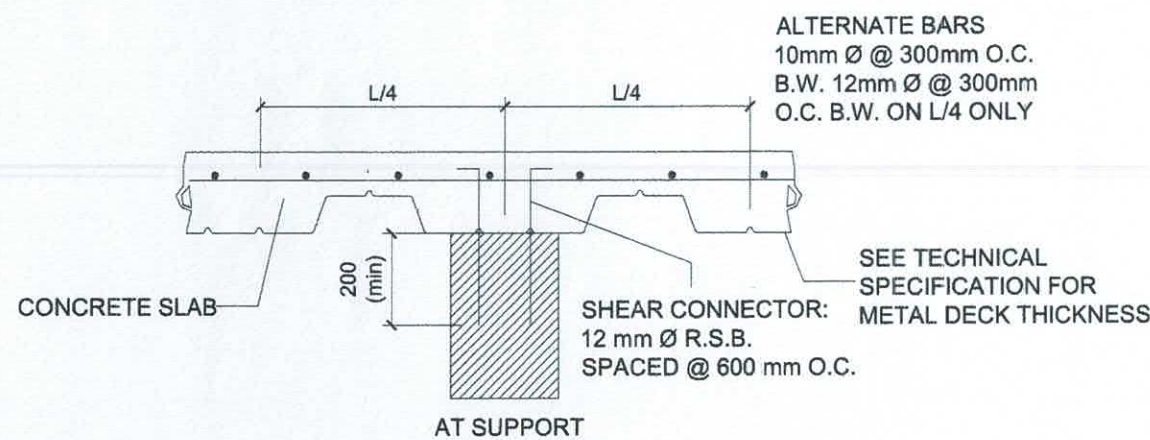




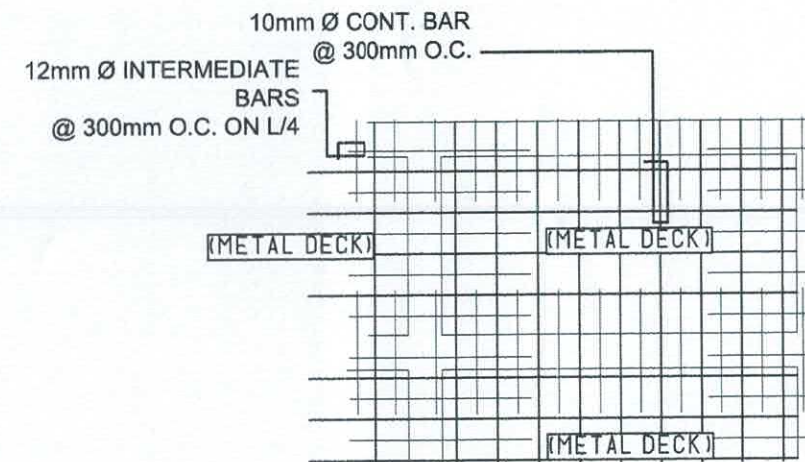
**RIBDECK DETAIL**

**TECHNICAL SPECIFICATION FOR METAL DECK**

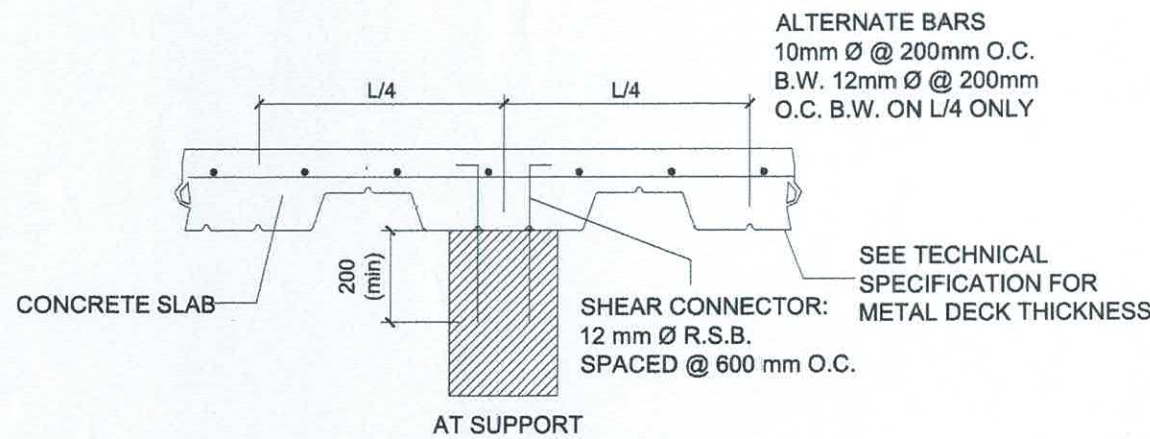
SLAB LABEL	SLAB THICKNESS	METAL DECK THICKNESS	SUPERIMPOSED LIVELOAD	REMARKS
S1	100 mm	0.80 mm Fy = 80,000psi	2.40 kPa	FOR OFFICES & CLASSROOMS
S2	150 mm	1.00 mm Fy = 80,000psi	4.80 kPa	FOR PUBLIC USE/ASSEMBLY



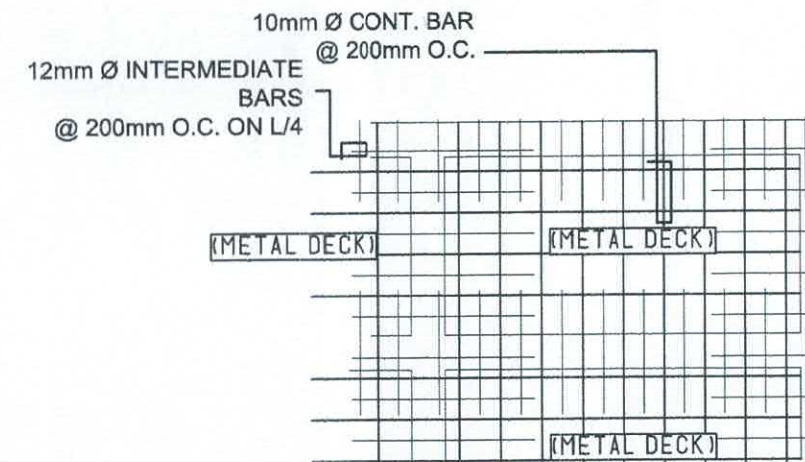
**SLAB DETAILS (S1)**



**RIBDECK REINFORCEMENTS (S1)**



**SLAB DETAILS (S2)**



**RIBDECK REINFORCEMENTS (S2)**

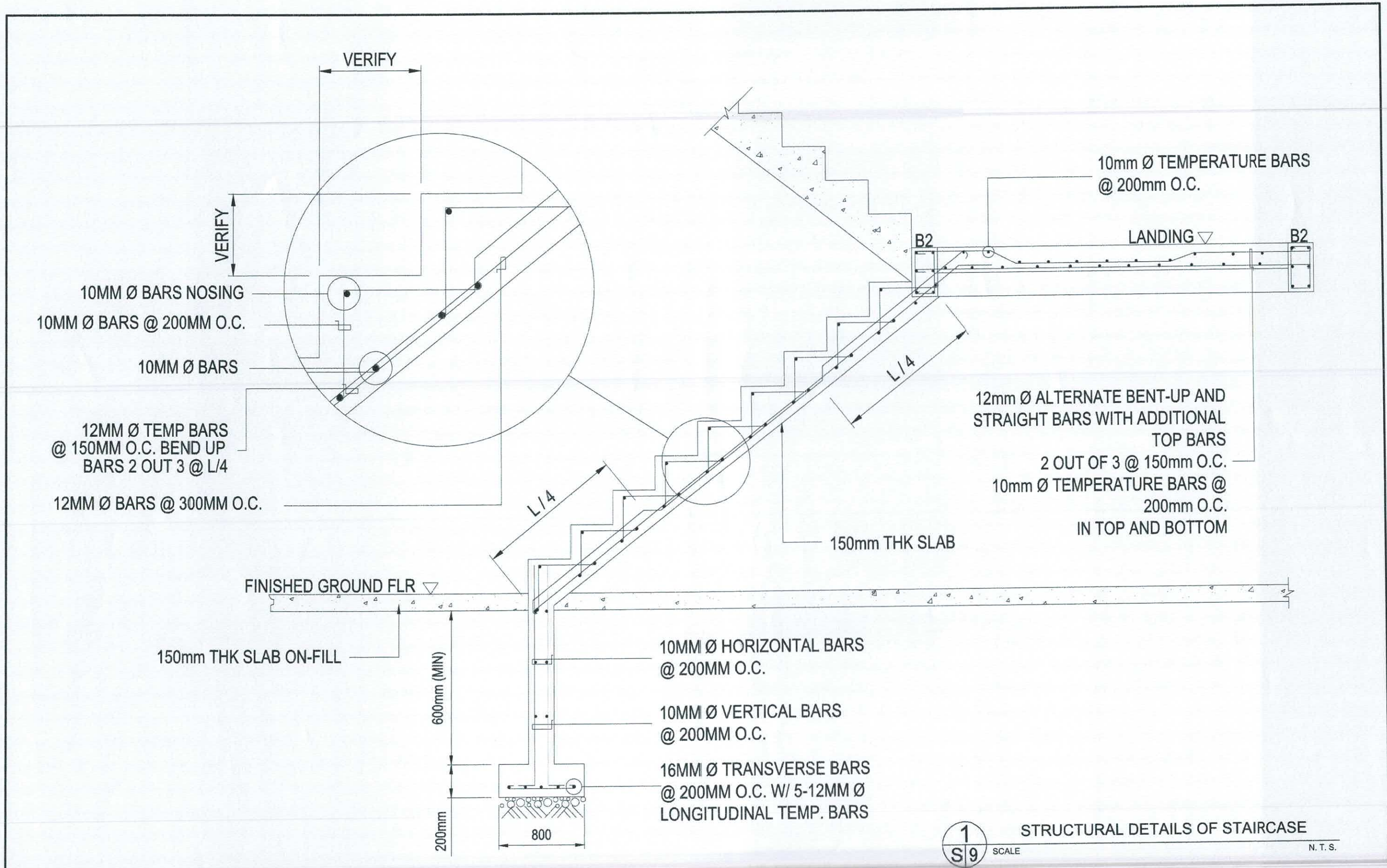
1  
S/8 SCALE

**STRUC. DETAILS OF METAL DECKING**







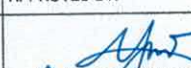
N. T. S.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO:	
	 <b>J. D. ESCANO</b> PDU OVPD	 <b>E. J. GALVEZ</b> DEAN COM	 <b>M. A. DAGASDAS, JR., MEng,</b> IStructS M.PICE, M.ASEP, M.ISSEP STRUCTURAL ENGINEER	 <b>S. B. BAYOT JR.</b> HEAD PDU	 <b>O. B. DELOS REYES</b> DIRECTOR PLANNING AND DEVT. OFFICE	 <b>A. G. MAGCAWAS</b> VPPD CVSU	 <b>J. X. B. NEROMUGENO</b> VPASS CVSU	 <b>H. D. ROBLES</b> PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS	<b>CAVITE STATE UNIVERSITY</b>

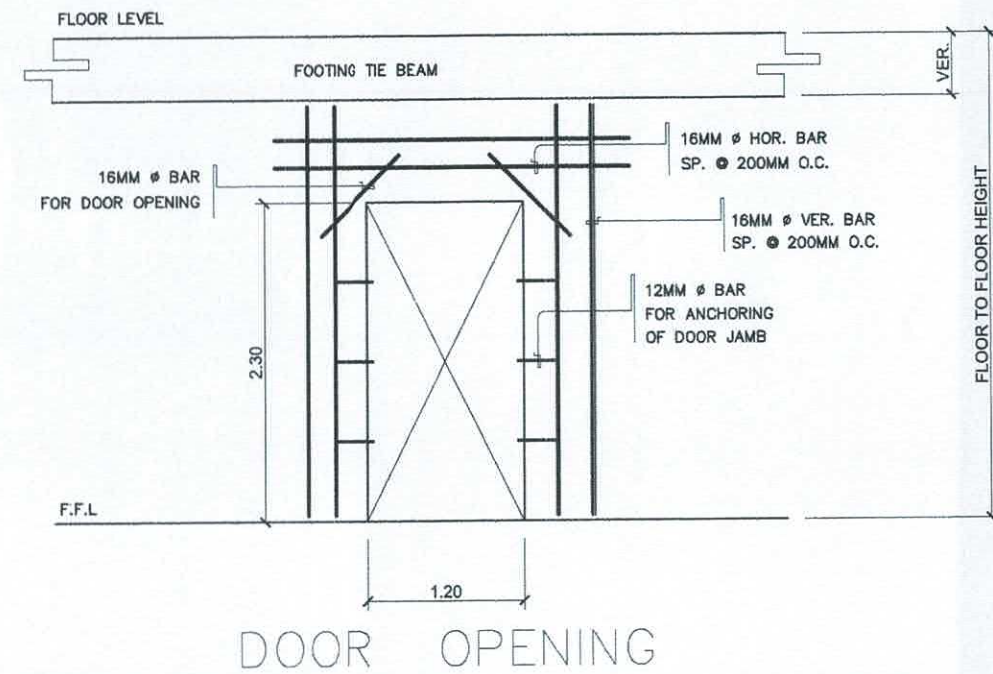
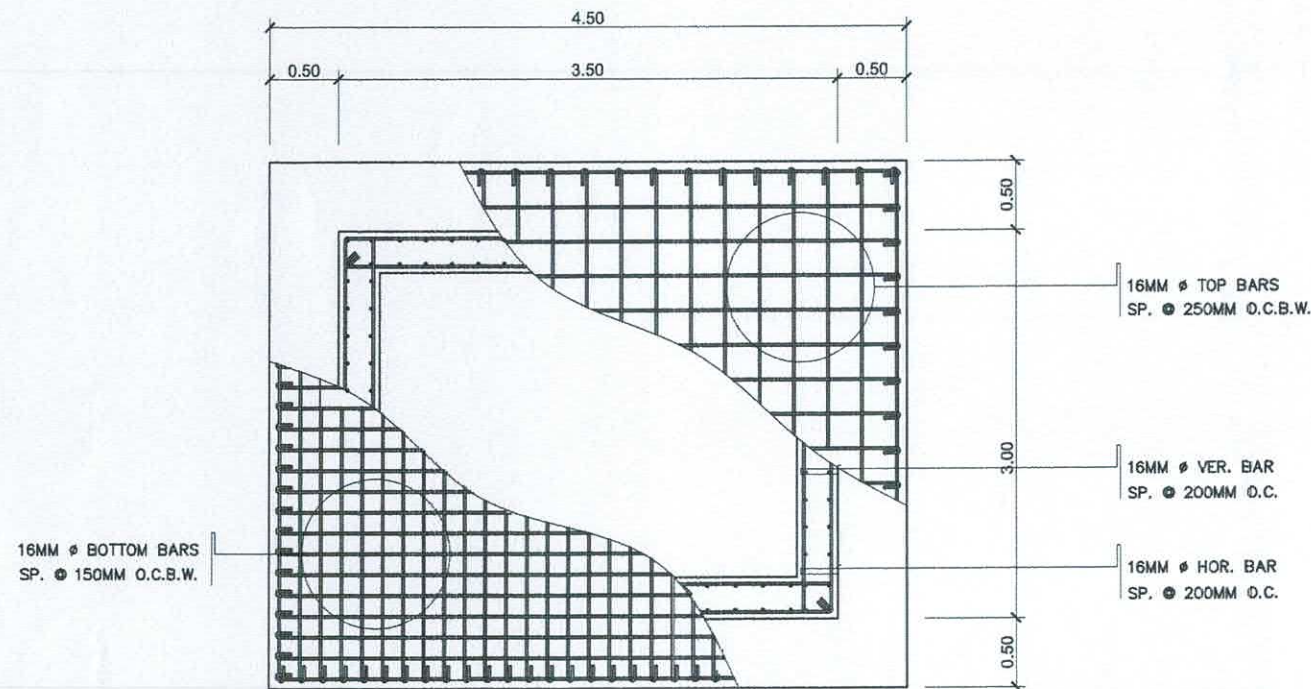
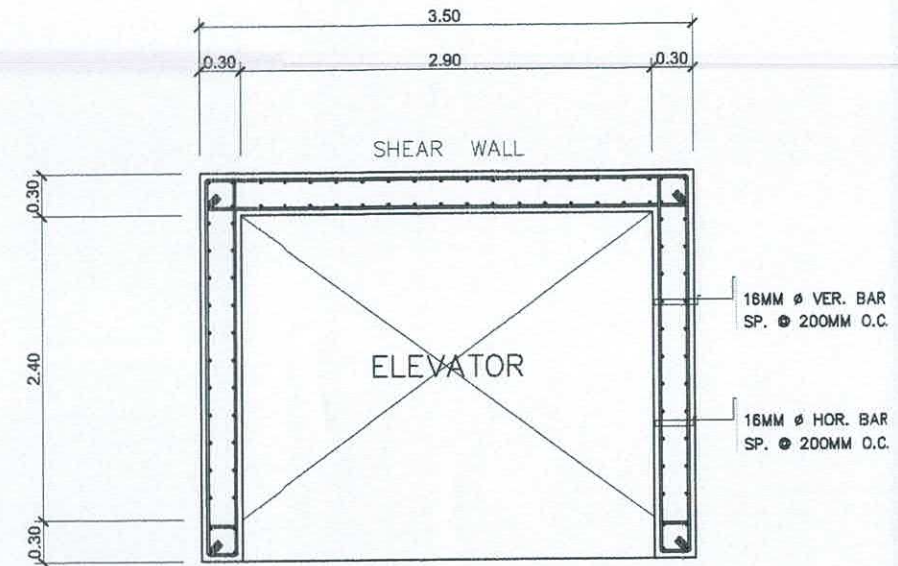
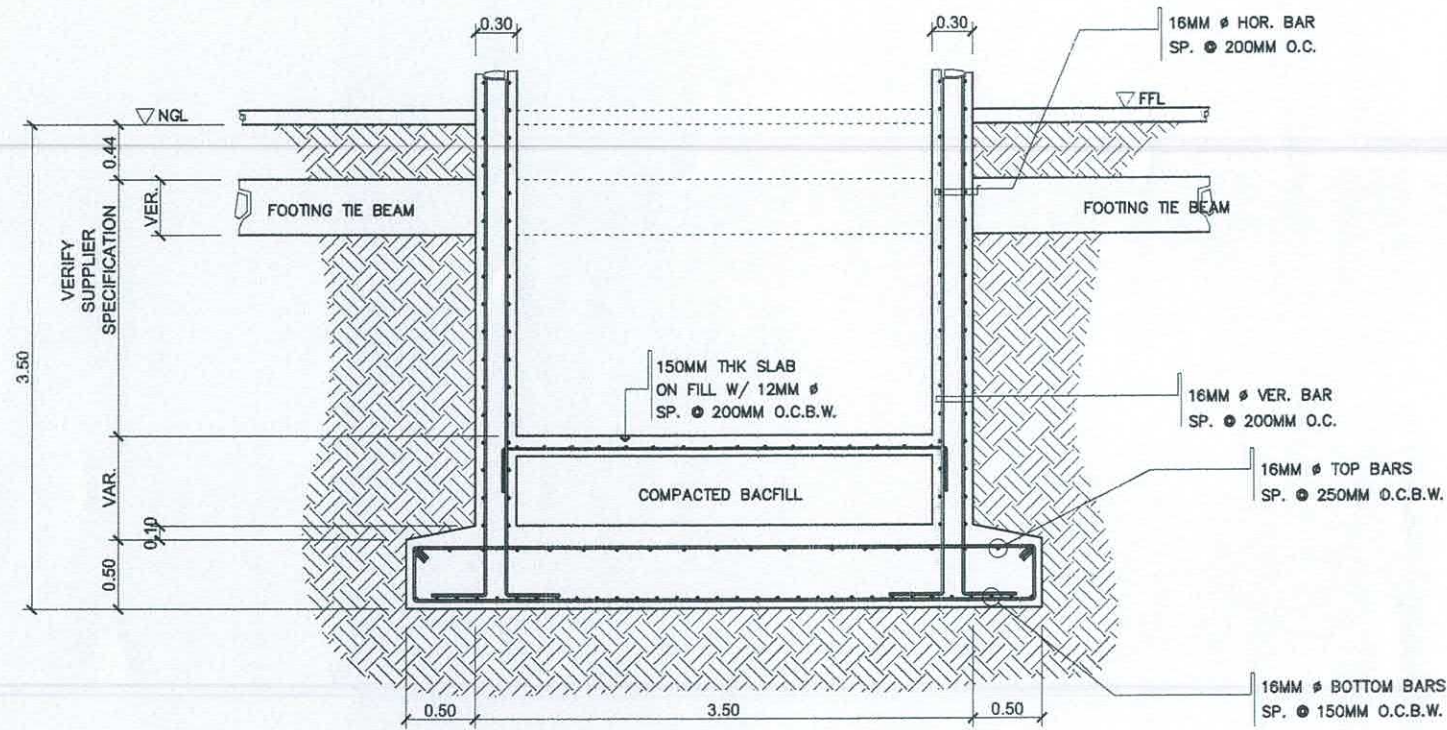




1  
S9 SCALE STRUCTURAL DETAILS OF STAIRCASE  
N. T. S.

PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO:	
 J. D. ESCANO PDU OVPD	 E. J. GALVEZ DEAN COM	M. A. DAGASDAS, JR., MEng, IStructS M.PICE, M.ASEP, M.ISSEP STRUCTURAL ENGINEER	 S. B. BAYOT JR. HEAD PDU	 O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	 A. G. MAGAWAS VPPD CVSU	 J. X. B. NEPOMUCENO VPASS CVSU	 H. D. ROBLES PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS	CAVITE STATE UNIVERSITY S - 9



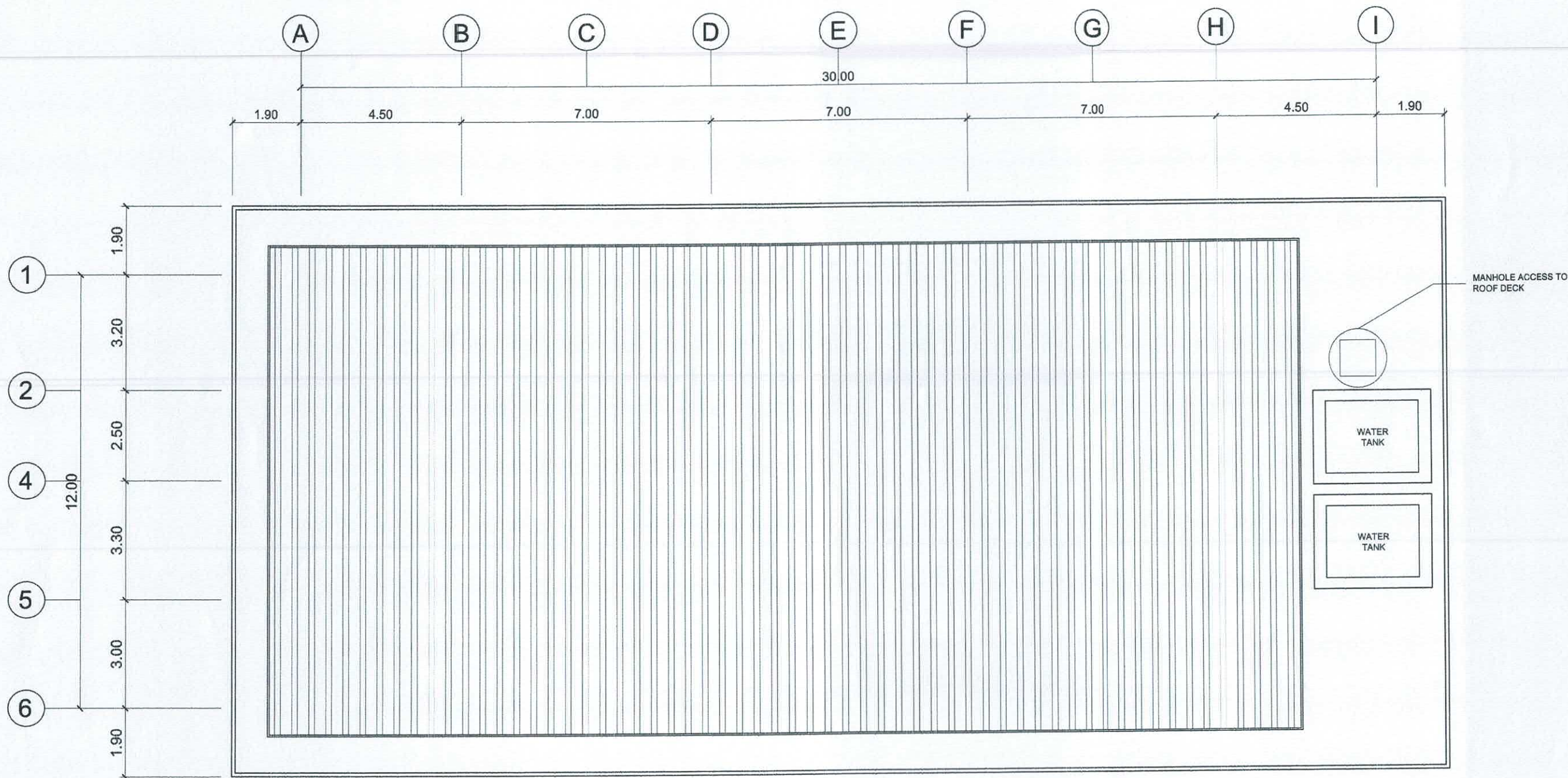


NOTE: ELEVATOR DESIGN MAY VARY WITH THE ELEVATOR SUPPLIER/DISTRIBUTOR, PLEASE VERIFY THE DESIGN WITH THE SUB-CONTRACTOR OF ELEVATOR.

**1**  
S/10  
SCALE N. T. S.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:	
	 <b>J. D. ESCANO</b> PDU OVPDP	 <b>E. J. GALVEZ</b> DEAN COM	 <b>M. A. DAGASDAS, JR., MEEng,</b> IStruct M.PICE, M.ASEP, M.ISSEP STRUCTURAL ENGINEER	 <b>S. B. BAYOT, JR.</b> HEAD PDU	 <b>O. B. DELOS REYES</b> DIRECTOR PLANNING AND DEVT. OFFICE	 <b>A. G. MAGCAWAS</b> VPPD CVSU	 <b>J. X. B. NEROMUCENO</b> VPASS CVSU	 <b>A. D. ROBLES</b> PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS	<b>CAVITE STATE UNIVERSITY</b>



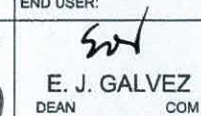
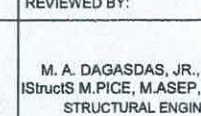
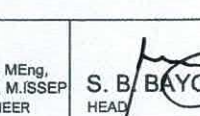
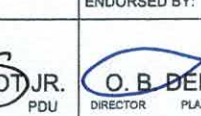

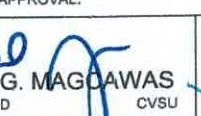




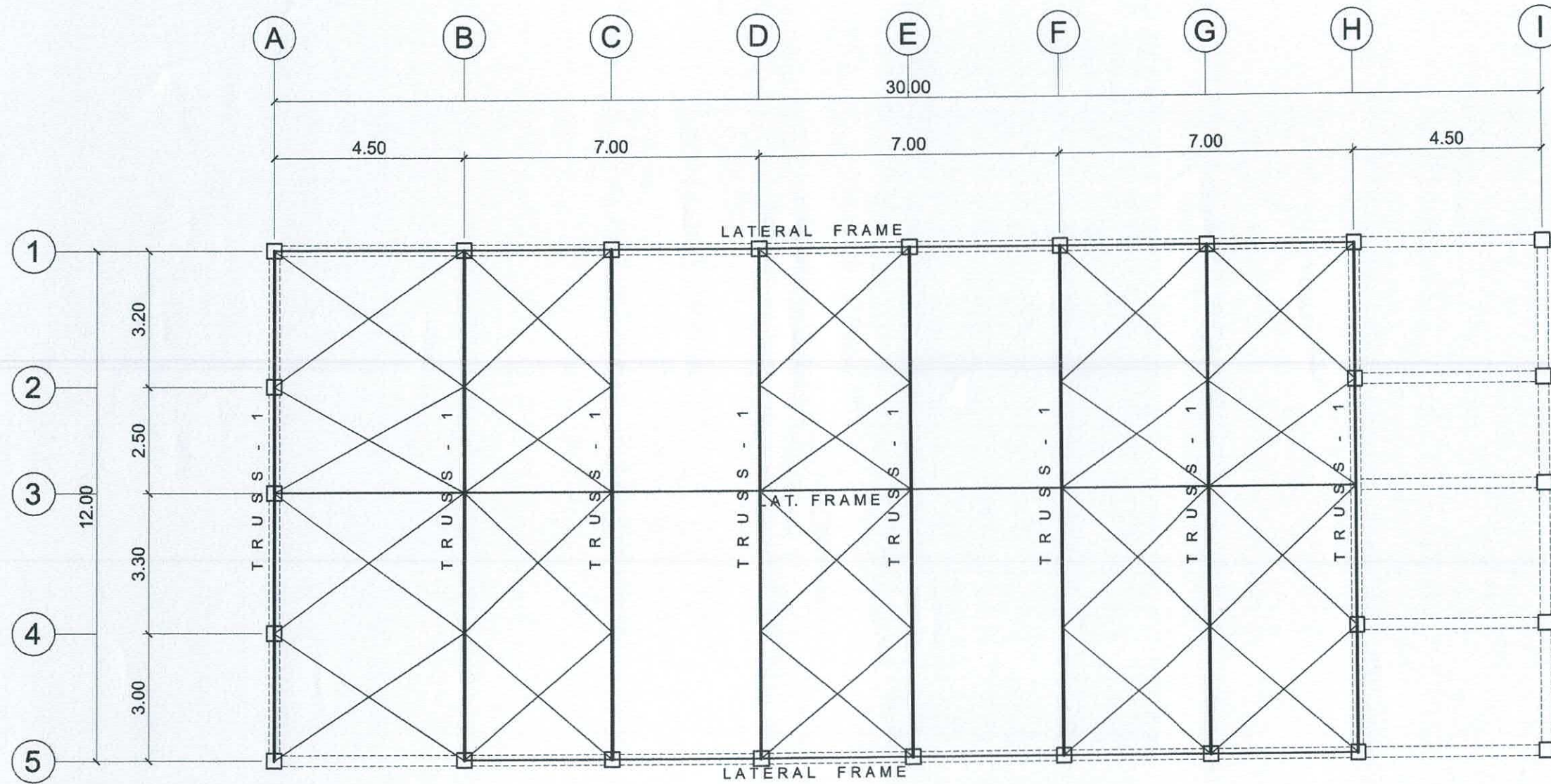
1  
S 11 SCALE

ROOF PLAN

1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO:
	 <b>J. D. ESCANO</b> PDU OVPDP	 <b>E. J. GALVEZ</b> DEAN COM	M. A. DAGASDAS, JR., MEng, IStructS M. PICE, M.ASEP, M.ISSEP STRUCTURAL ENGINEER	 <b>S. B. BAYOT JR.</b> HEAD PDU	 <b>O. B. DELOS REYES</b> DIRECTOR PLANNING AND DEVT. OFFICE	 <b>A. G. MAGAWAS</b> VPPD CVSU	 <b>J. X. B. NEPOMUCENO</b> VPASS CVSU	 <b>H. D. ROBLES</b> PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS




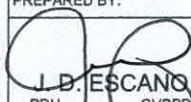
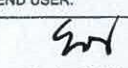
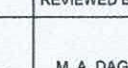
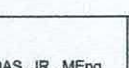
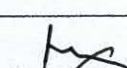
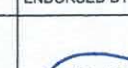

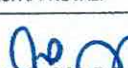


1  
S 12

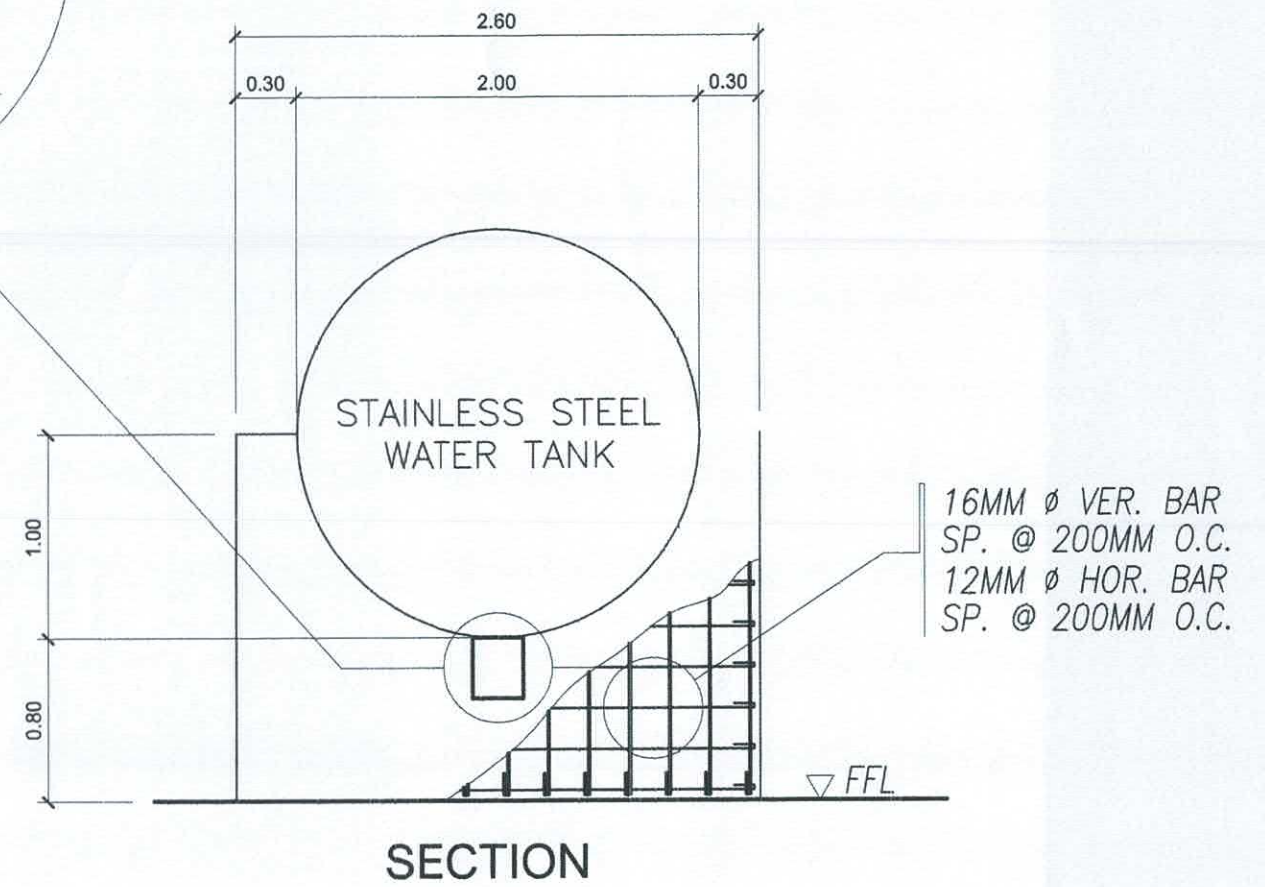
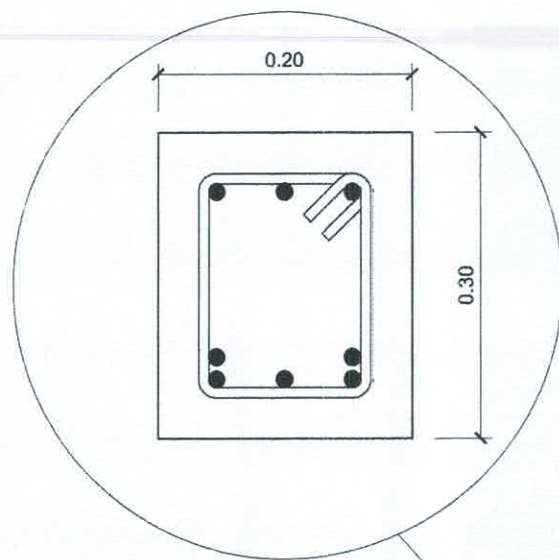
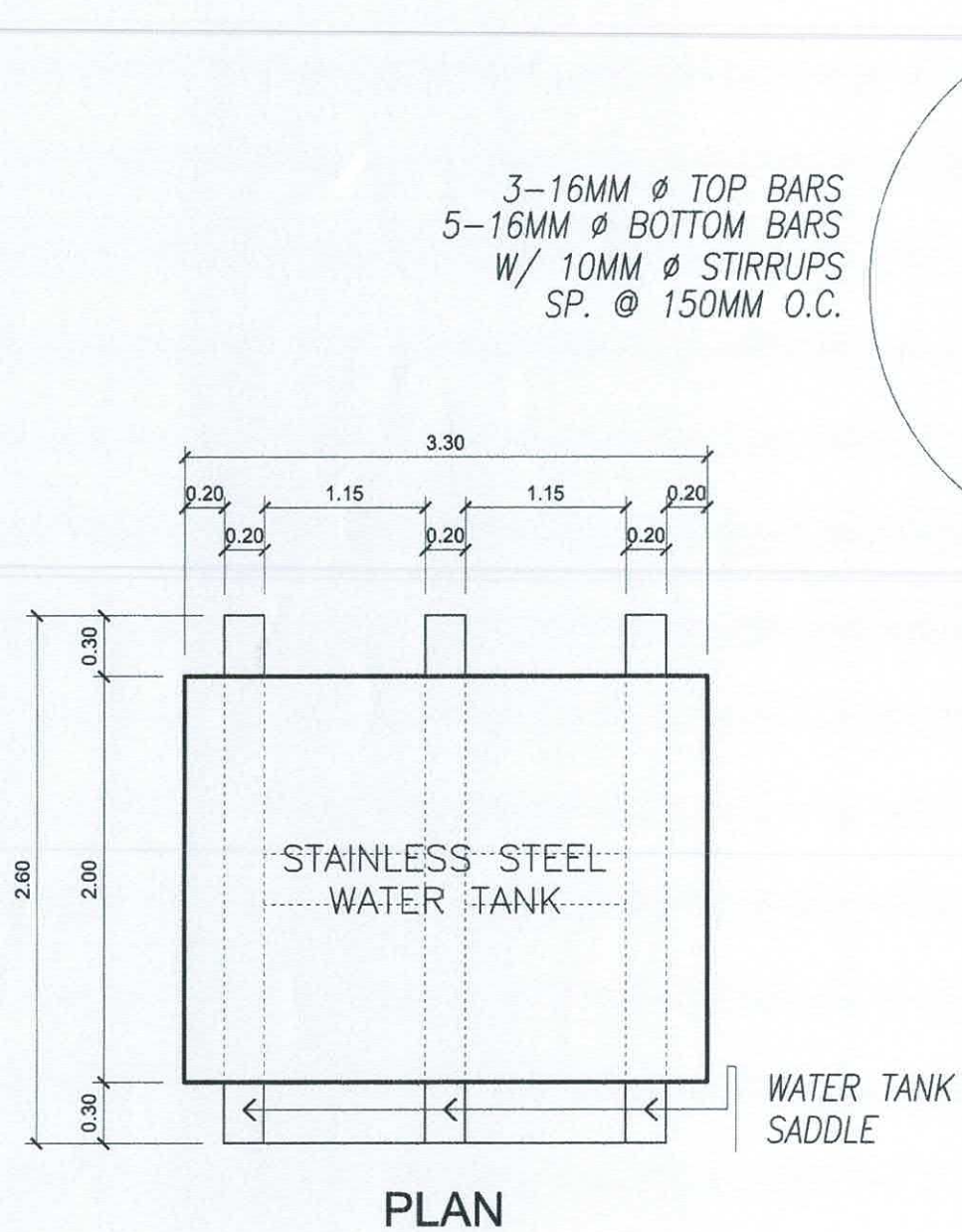
ROOF FRAMING PLAN

SCALE

1 : 125 MTS.

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	 <b>J. D. ESCANO</b> PDU OVPD	 <b>E. J. GALVEZ</b> DEAN COM	 <b>M. A. DAGASDAS, JR., MEng.</b> INSTRUCT. M. PICE, M. ASEP, M. ISSEP STRUCTURAL ENGINEER	 <b>S. B. BAYOT JR.</b> HEAD PDU	 <b>Q. B. DELOS REYES</b> DIRECTOR PLANNING AND DEVT. OFFICE	 <b>A. G. MAGDAWAS</b> VPPD CVSU	 <b>J. X. B. NEPOMUCENO</b> VPASS CVSU	 <b>H. D. ROBLES</b> PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS	<b>CAVITE STATE UNIVERSITY</b>





1  
 S 13

DET. OF WATER TANK SADDLE

SCALE

N. T. S.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO:
	J. D. ESCANO PDU OVPPD	E. J. GALVEZ DEAN COM	M. A. DAGASDAS, JR., MEng. S. M. PICE, M.ASEP, M.ISSEP STRUCTURAL ENGINEER	S. B. BAYOT JR. HEAD PDU	O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	A. G. MAGCAWAS VPPD CVSU	J. X. B. NEPOMUCENO VRASS CVSU	H. D. ROBLES PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS



**NOTES:**

USE THE FOLLOWING:

TOP CHORDS - 2" Ø SCHED. 40 G.I PIPE

BOTTOM CHORDS - 2 1/2" Ø SCHED. 40 G.I PIPE

WEB MEMBERS - 1 1/2" Ø SCHED. 40 G.I PIPE

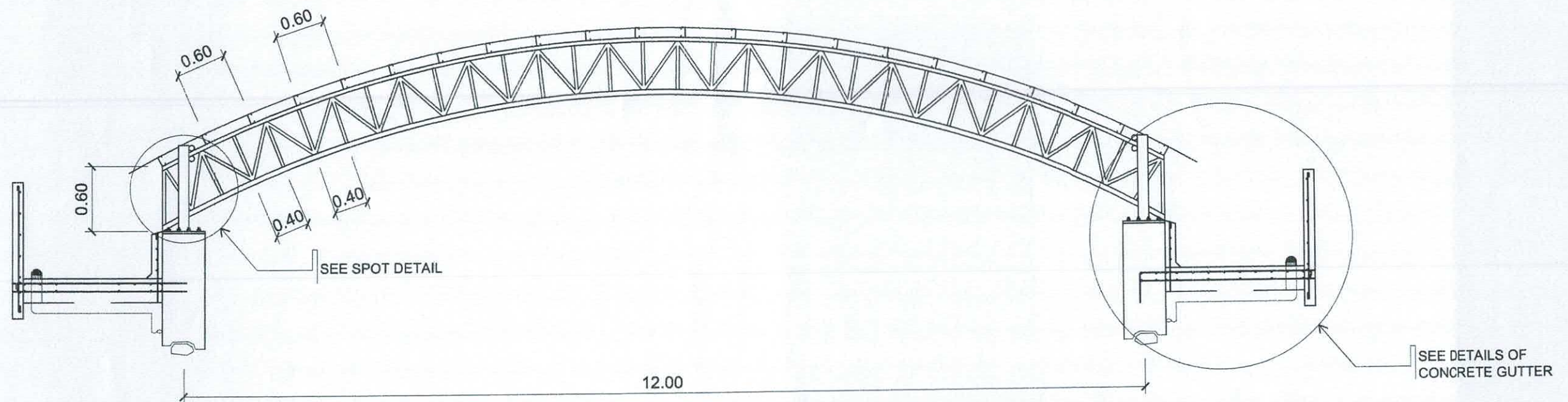
2" x 5" X 1.5mm THK. CEE PURLINS SPACED @ 600 mm. O. C.

2" x 2" x 1/4" CLEATS

20 mm. Ø CROSS BRACING W/ TURN BUCKLE

12 mm. Ø SAG ROD @ MIDDLE

ALL JOINTS ARE FULLY WELDED


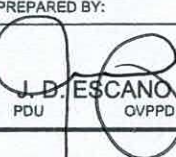

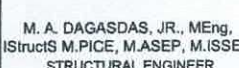

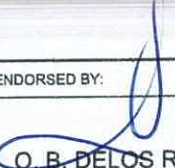


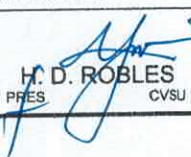


1  
S 14

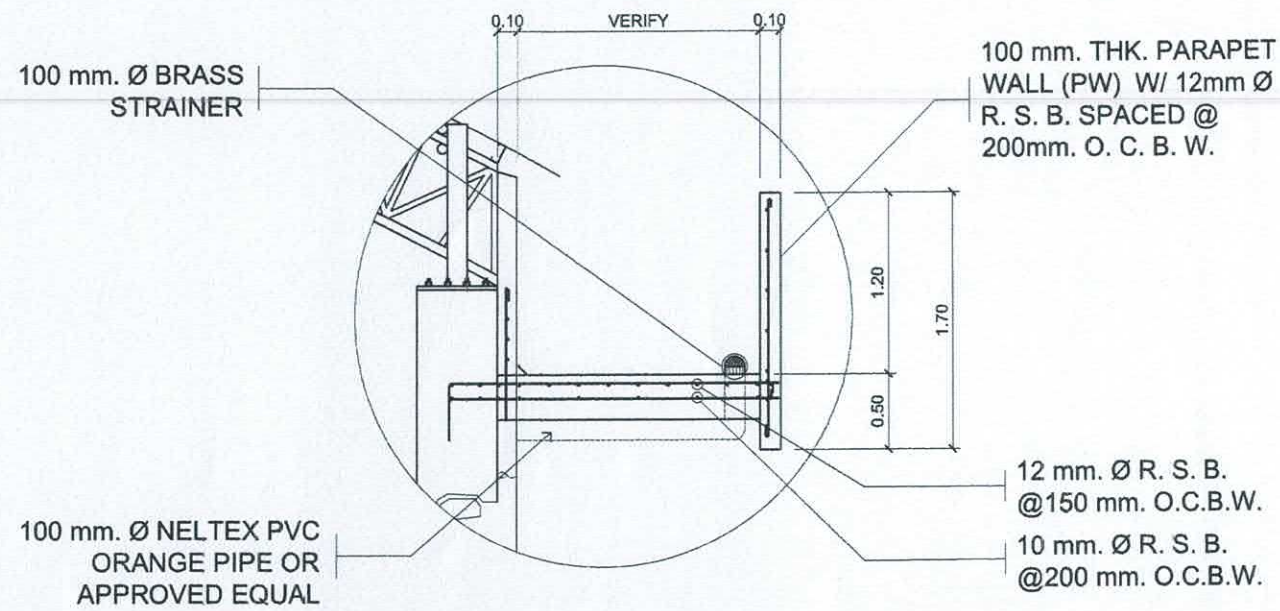
**DET. OF ROOF TRUSSES**

SCALE

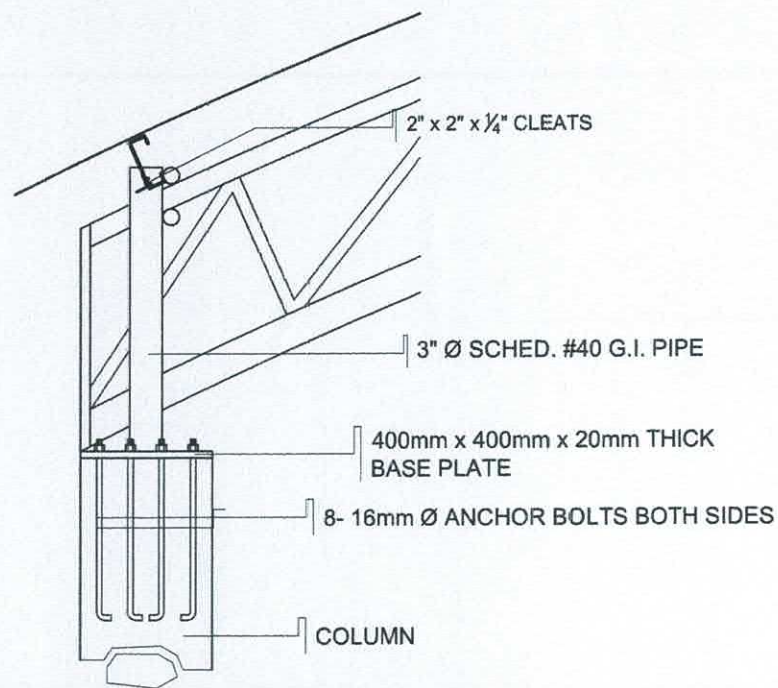
1 : 100 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO:	
	J. D. ESCANO PDU 	E. J. GALVEZ DEAN 	M. A. DAGASDAS, JR., MEng. INSTRUCT M. PICE, M.ASEP, M.ISSEP STRUCTURAL ENGINEER 	S. B. BAYOT JR. HEAD 	O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE 	A. G. MAGCAWAS VPPD 	J. X. B. NEPOMUCENO VPASS 	H. D. ROBLES PRES CVSU 	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS	CAVITE STATE UNIVERSITY

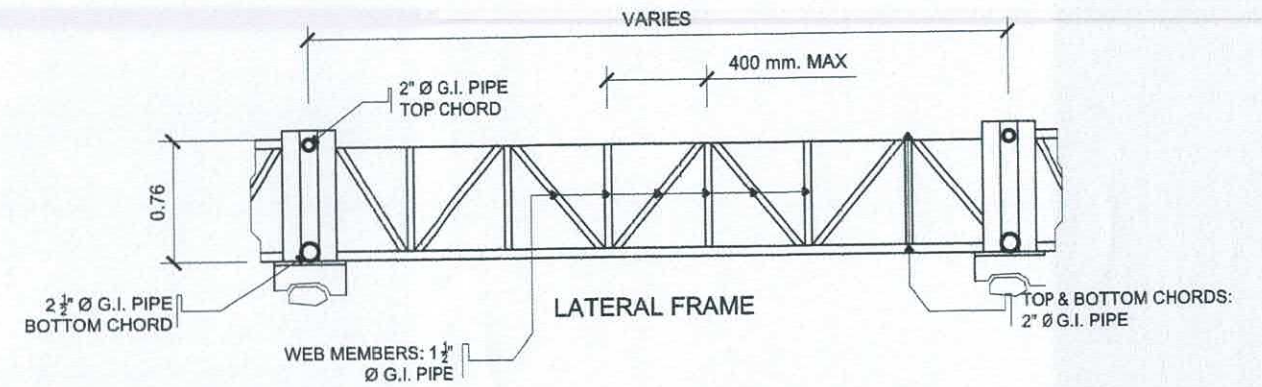




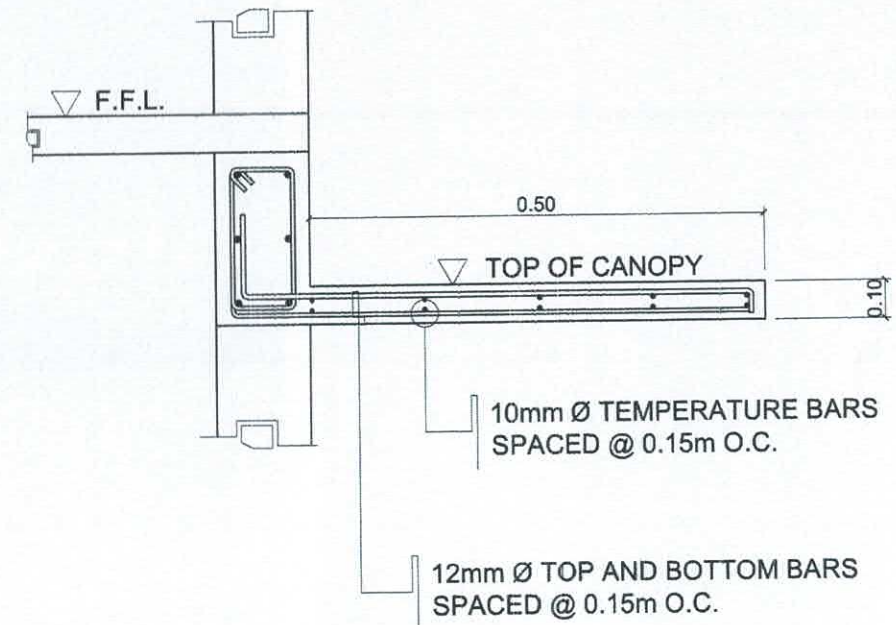
**1**  
S 15 SCALE N. T. S.  
**DET. OF CONC. GUTTER**



**2**  
S 15 SCALE N. T. S.  
**SPOT DETAILS**



**3**  
S 15 SCALE N. T. S.  
**DET. OF LATERAL FRAME**



**4**  
S 15 SCALE N. T. S.  
**DET. OF CONCRETE CANOPY**

PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:	
J. D. ESCANO PDU	E. J. GALVEZ DEAN COM	M. A. DAGASDAS, JR., MEng, IStructS M.PICE, M.ASEP, M.ISSEP STRUCTURAL ENGINEER	S. B. BAYOT, JR. HEAD PDU	O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	A. G. MAGCAWAS VP CVSU	J. X. B. NEPOMUCENO VPASS CVSU	H. D. ROBLES PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS	CAVITE STATE UNIVERSITY S - 15



GENERAL NOTES AND SPECIFICATIONS:

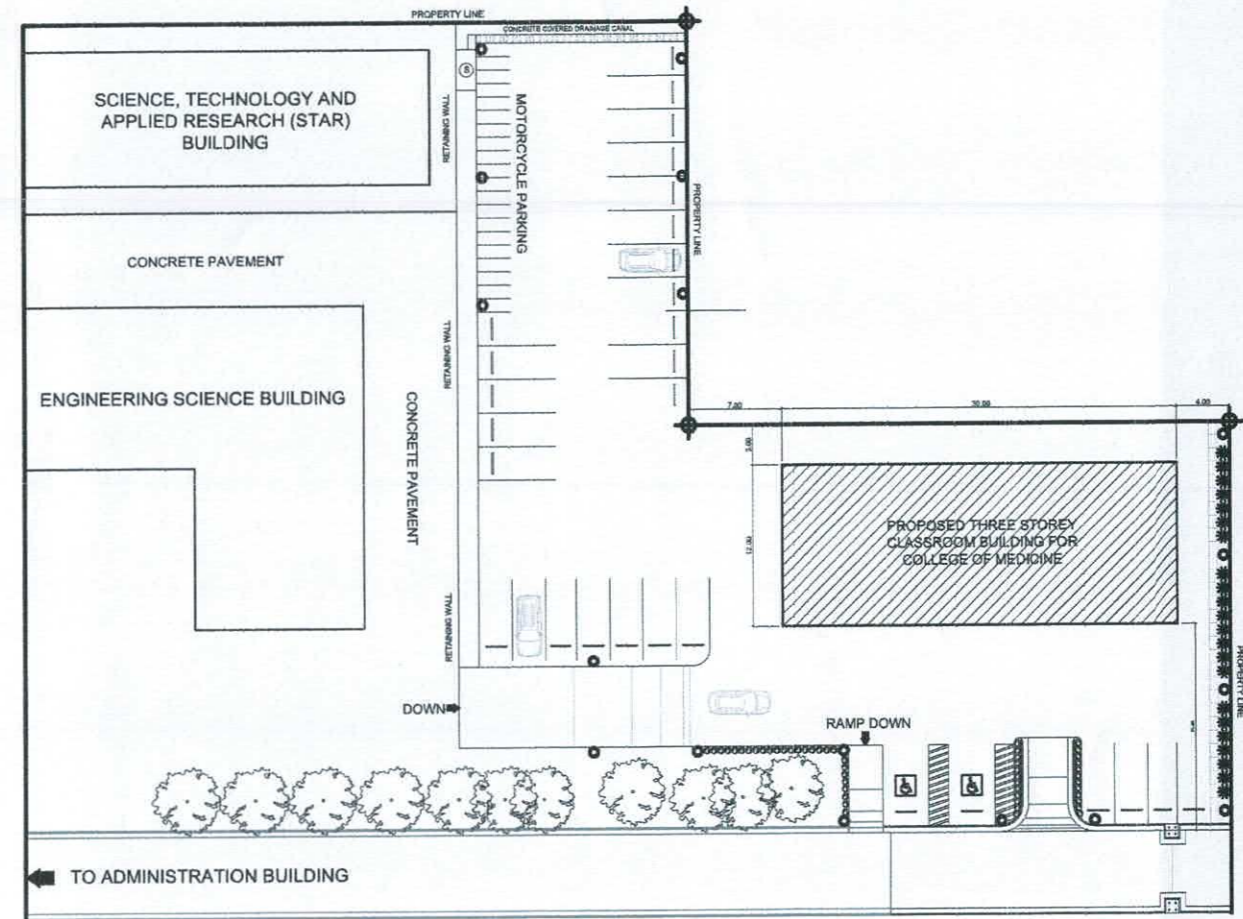
1. ALL WORK HEREIN SHALL BE DONE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
2. ELECTRICAL WORKS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, MUNICIPAL/CITY LAWS AND ORDINANCES AND THE REGULATIONS FO THE LOCAL POWER AND TELEPHONE COMPANY.
3. THE JOB SHALL BE 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 PERSENT 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
G. C.O. LOCATED AT PARKING AREAS	0.40M TO .50M ABOVE FLOOR FINISH
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-4 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 ENCASUREMENT.
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 BULB, SURFACE MOUNTED, ROUND 12W w/ 6" DIAMETER CASING FIXTURE		CIRCUIT BREAKER WITH NEMA 3R METAL ENCLOSURE (2 POLE/ 3 POLE CIRCUIT BREAKER)
	1-9W LED LIGHT TUBE WITH DIFFUSER 2 FT. LENGTH (FL)		ACU CONDENSER OUT DOOR UNIT WITH NEMA 3R CIRCUIT BREAKER
	2-9W LED LIGHT TUBE WITH DIFFUSER 2 FT. LENGTH (FL)		ACU WALL/FLOOR MOUNTED, SPLIT TYPE, INDOOR UNIT
	1-18W LED LIGHT TUBE WITH DIFFUSER 4 FT. LENGTH (FL)		2.0 mm² THHN
	2-18W LED LIGHT TUBE WITH DIFFUSER 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 ENCASMENT
	WEATHER-PROOF 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



PHYSICAL PLANT SERVICES AREA



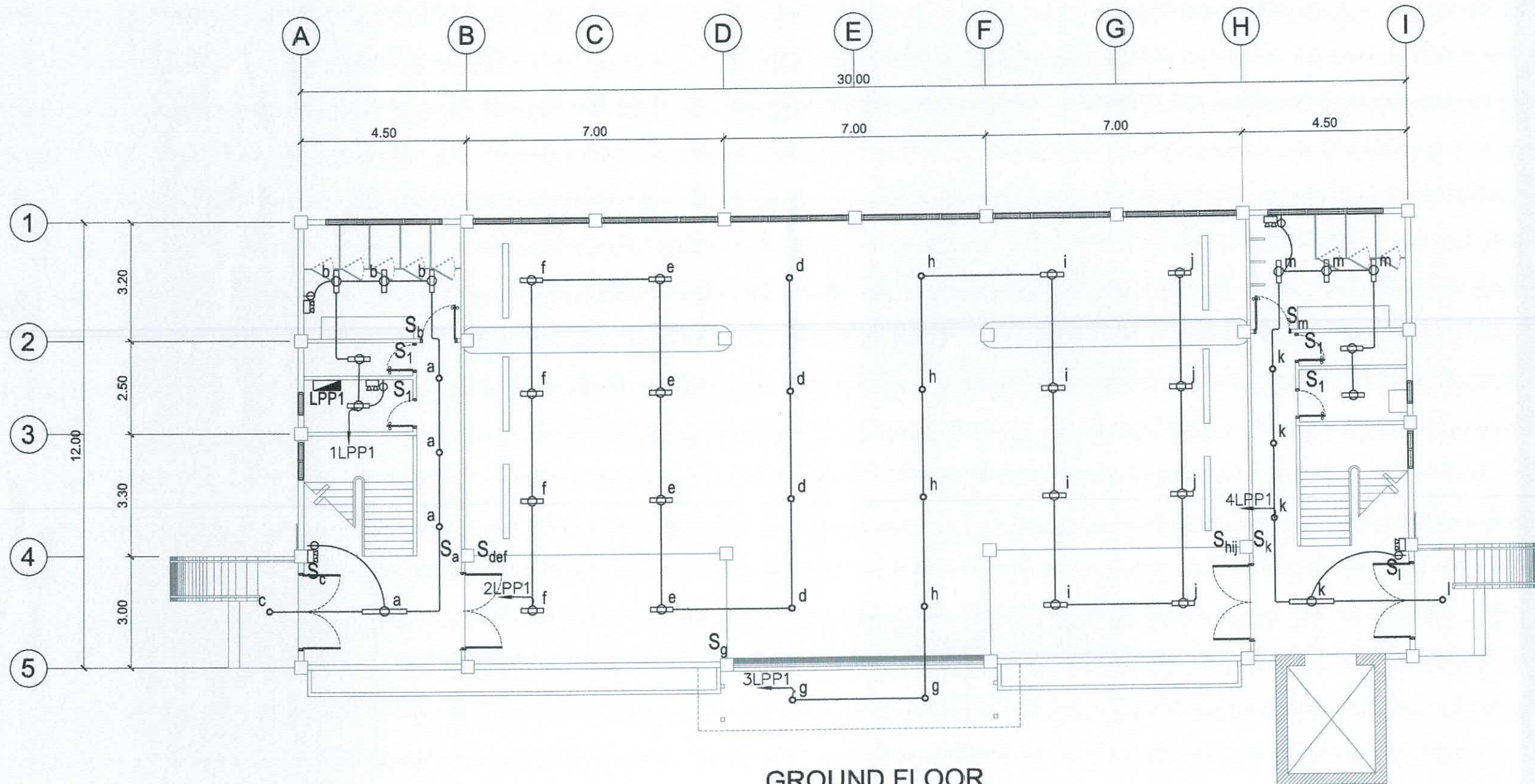
SITE DEVELOPMENT PLAN

SCALE

1 : 550 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	E. J. GALVEZ DEAN COM	R. P. PEÑA PROF. ELEC. ENGINEER	S. B. BAYOT JR. HEAD PDU	O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	A. G. MAGCAYAS VPPD CVSU	J. X. B. NEROMUCENO VPASS CVSU	H. D. ROBLES PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS






**GROUND FLOOR LIGHTING LAYOUT**

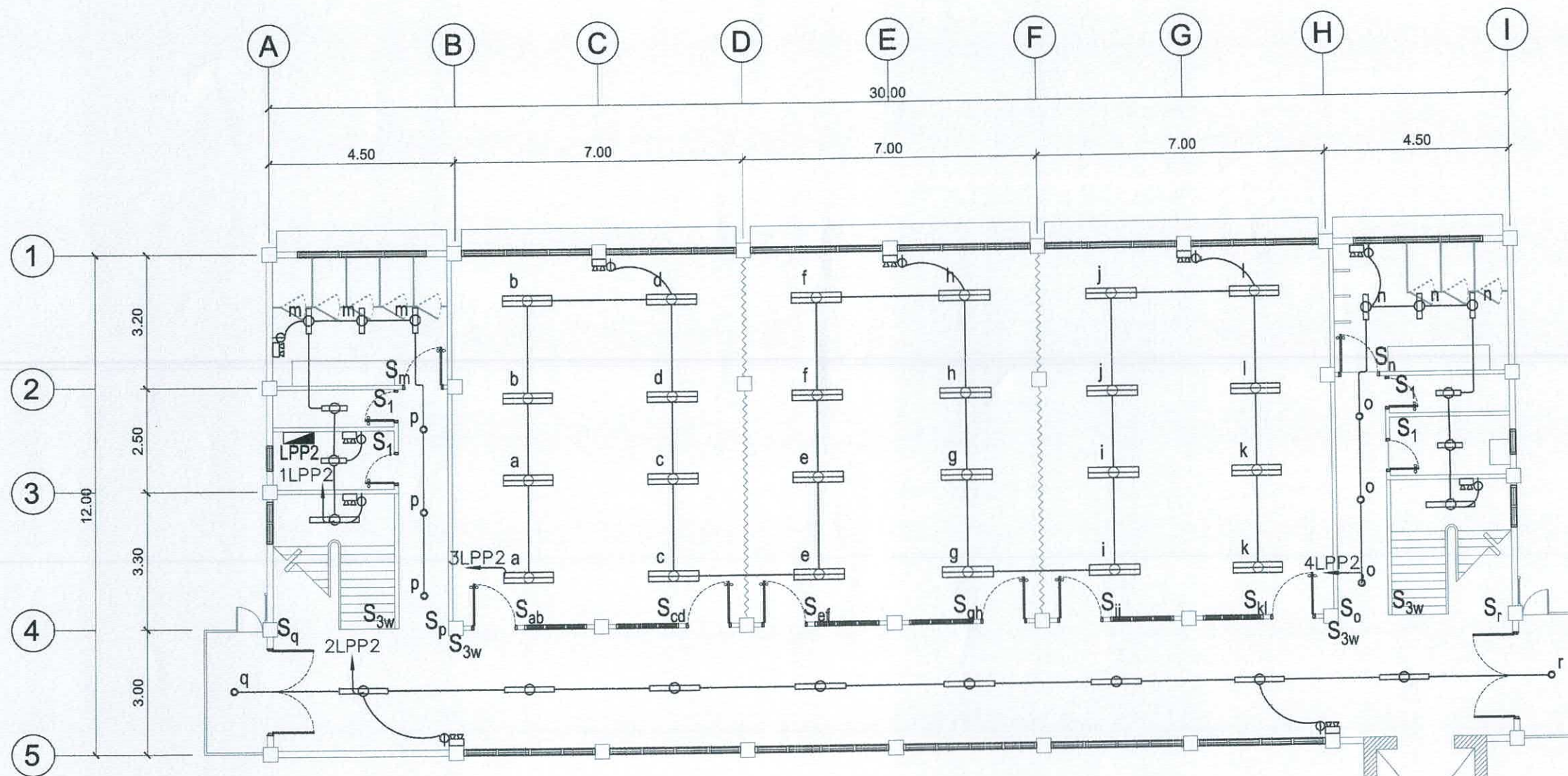
1  
E/2

SCALE

1 : 125 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 <i>[Signature]</i>	E. J. GALVEZ DEAN COM <i>[Signature]</i>	R. P. DENA PROF. ELEC. ENGINEER <i>[Signature]</i>	S. B. BAYOT JR. HEAD PDU <i>[Signature]</i>	O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE <i>[Signature]</i>	A. G. MAGCAWAS VPPD CVSU <i>[Signature]</i>	J. X. B. NEPOMUCENO VPASS CVSU <i>[Signature]</i>	H. D. ROBLES PRES CVSU <i>[Signature]</i>	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS





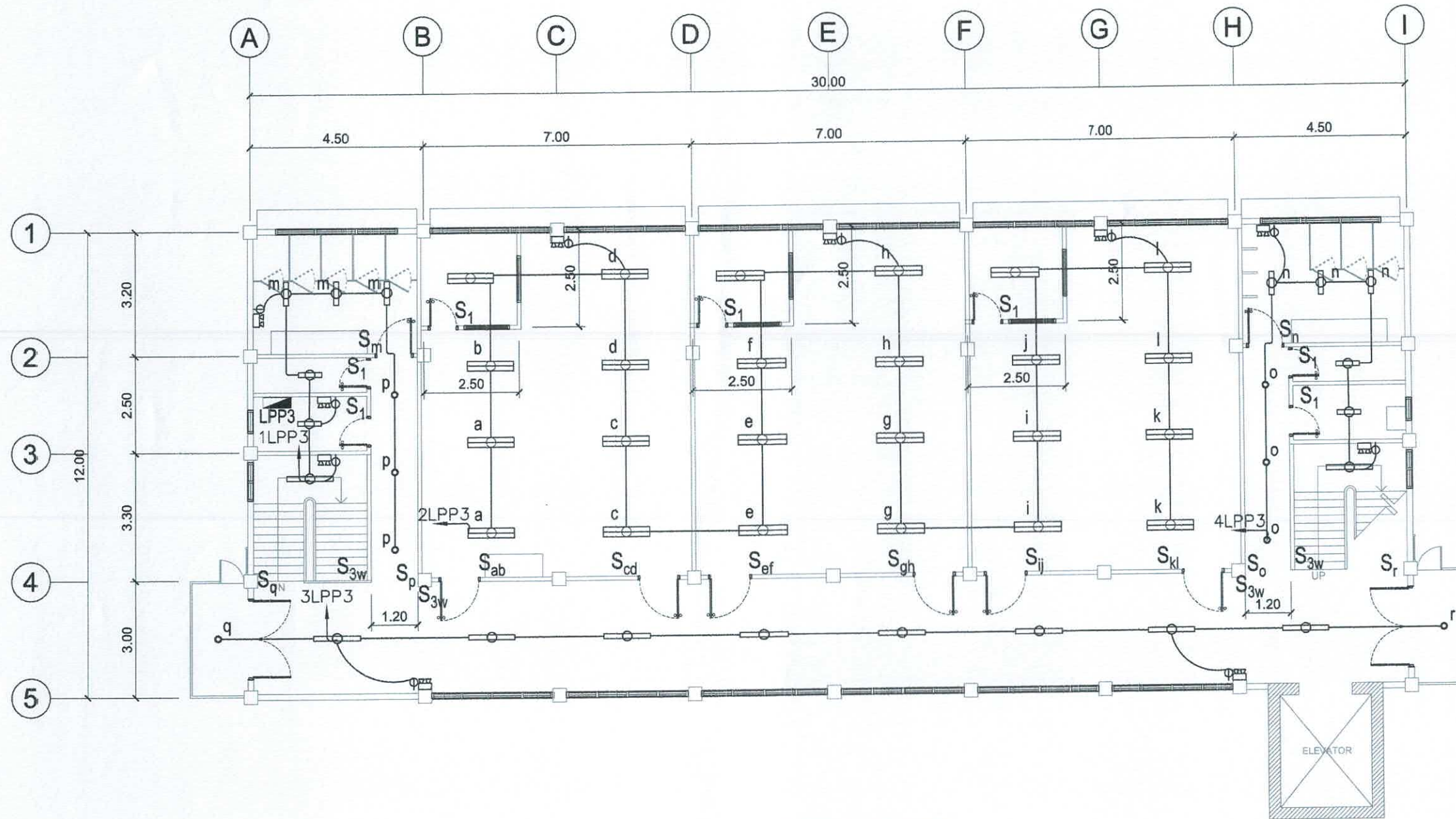
SECOND FLOOR  
LIGHTING LAYOUT

1  
E 3 SCALE

1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO:	
	 R. J. R. SANCHEZ BOU VPPD	 E. J. GALVEZ DEAN COM	 R. P. PEÑA PROF. ELEC. ENGINEER	 S. B. BAYOT JR. HEAD PDU	 O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	 A. G. MAGCAWAS VPPD CVSU	 J. X. B. NEPOMUCENO VPASS CVSU	 H. D. ROBLES PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS	CAVITE STATE UNIVERSITY






1  
E3

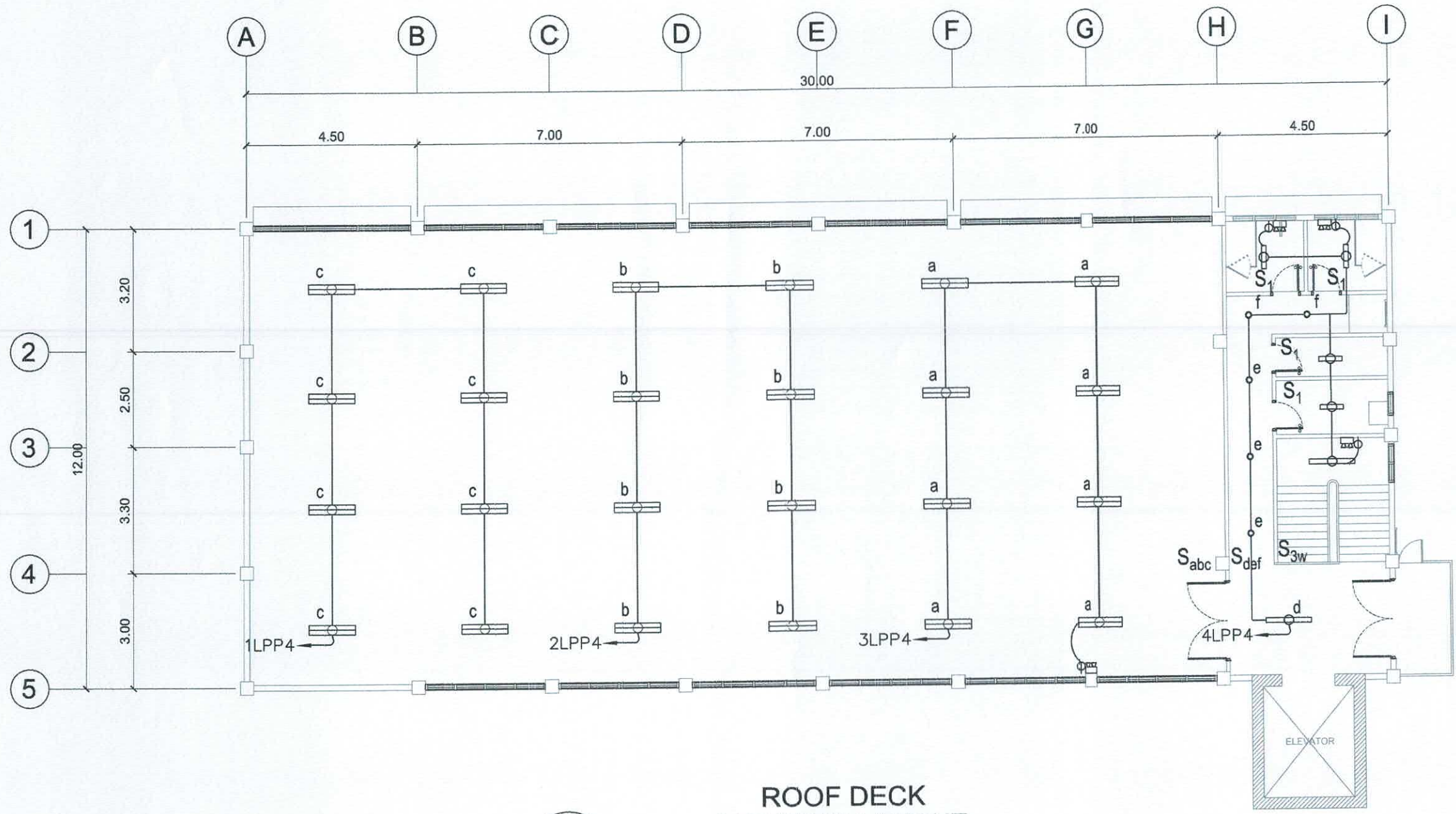
THIRD FLOOR  
LIGHTING LAYOUT

SCALE

1 : 125 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 VPDP	E. J. GALVEZ DEAN COM	R. A. DENA PROF. ELEC. ENGINEER	S. B. BAYOT JR. HEAD PDU	O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	A. G. MASCAYAS CVSU VPPD	J. X. B. NEPOMUCENO CVSU VPASS	H. D. ROBLES PRES CVSU CAVITE STATE UNIVERSITY MAIN CAMPUS	CAVITE STATE UNIVERSITY





ROOF DECK LIGHTING LAYOUT

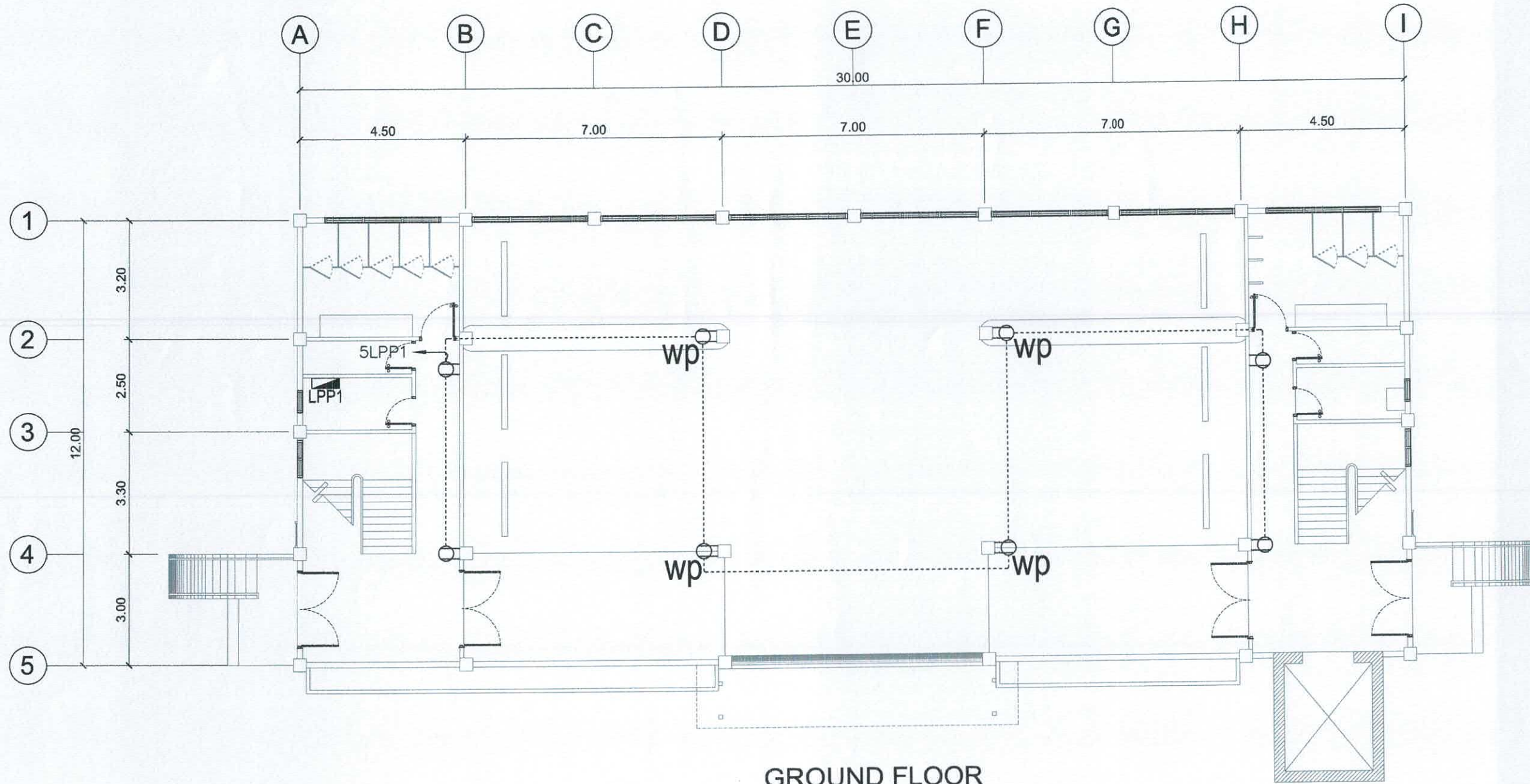
1  
E/4

SCALE


1 : 125 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>FDU VPPD</small>	E. J. GALVEZ <small>DEAN COM</small>	R. V. PENA <small>PROF. ELEC. ENGINEER</small>	S. B. BAYOT JR. <small>HEAD FDU</small>	O. B. DELOS REYES <small>DIRECTOR PLANNING AND DEVT. OFFICE</small>	A. G. MAGCAWAS <small>VPPD CVSU</small>	J. X. B. NEPOMUCENO <small>VPASS CVSU</small>	H. D. ROBLES <small>PRES CVSU</small>	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY <small>CAVITE STATE UNIVERSITY MAIN CAMPUS</small>

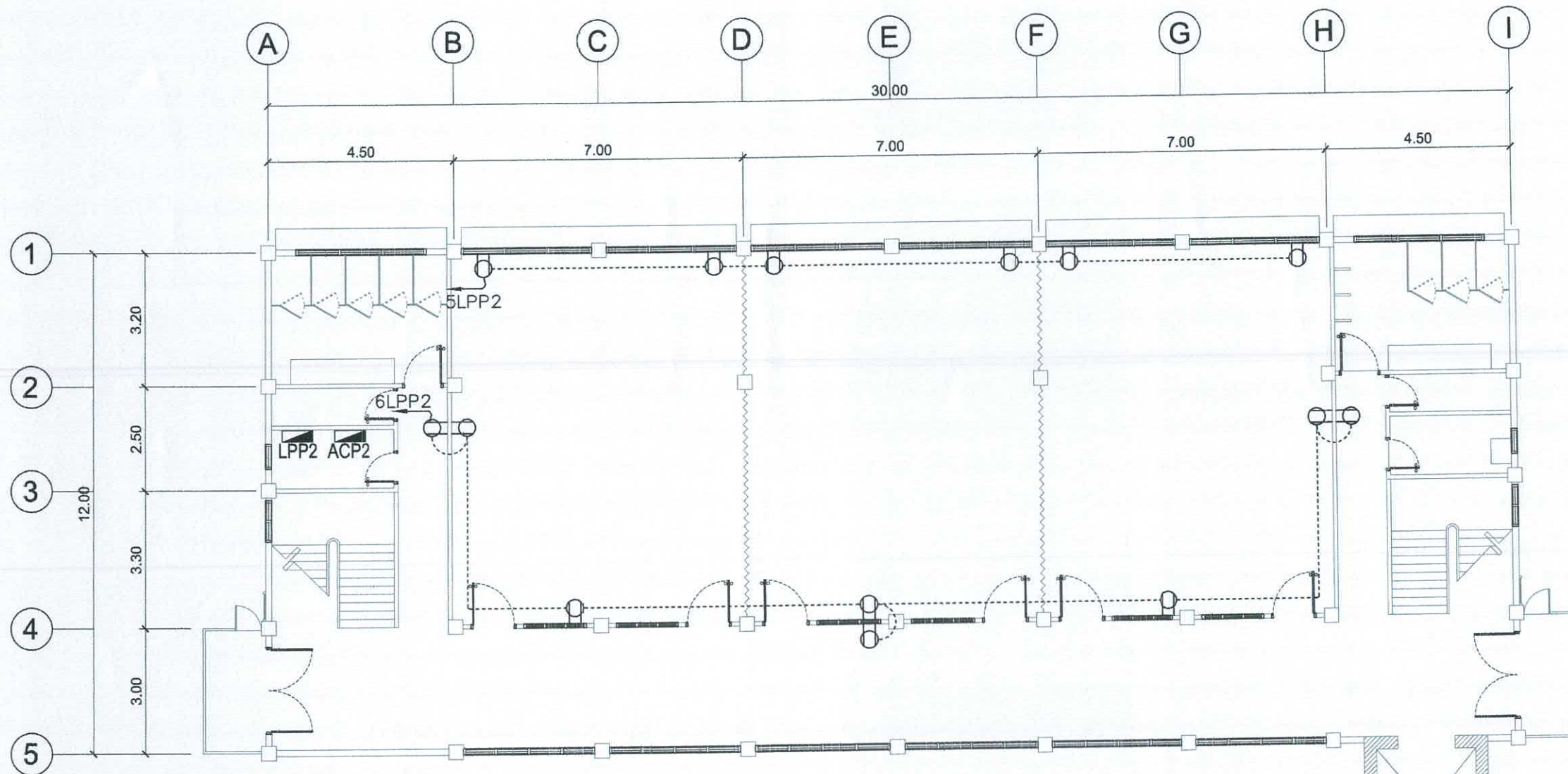





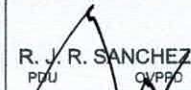
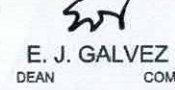



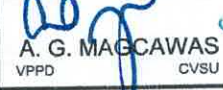

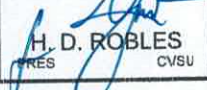
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**E/5** SCALE 1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
	<i>R. J. R. Sanchez</i> R. J. R. SANCHEZ <small>PDU OVPD</small>	<i>E. J. Galvez</i> E. J. GALVEZ <small>DEAN COM</small>	<i>R. Peña</i> R. PEÑA <small>PROF. ELEC. ENGINEER</small>	<i>S. B. Bayot Jr.</i> S. B. BAYOT JR. <small>HEAD PDU</small>	<i>O. B. De los Reyes</i> O. B. DELOS REYES <small>DIRECTOR PLANNING AND DEVT. OFFICE</small>	<i>A. G. Magcawas</i> A. G. MAGCAWAS <small>VPPD CVSU</small>	<i>J. X. B. Nepomuceno</i> J. X. B. NEPOMUCENO <small>VRASS CVSU</small>	<i>H. D. Robles</i> H. D. ROBLES <small>PRES CVSU</small>	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY <small>CAVITE STATE UNIVERSITY MAIN CAMPUS</small>

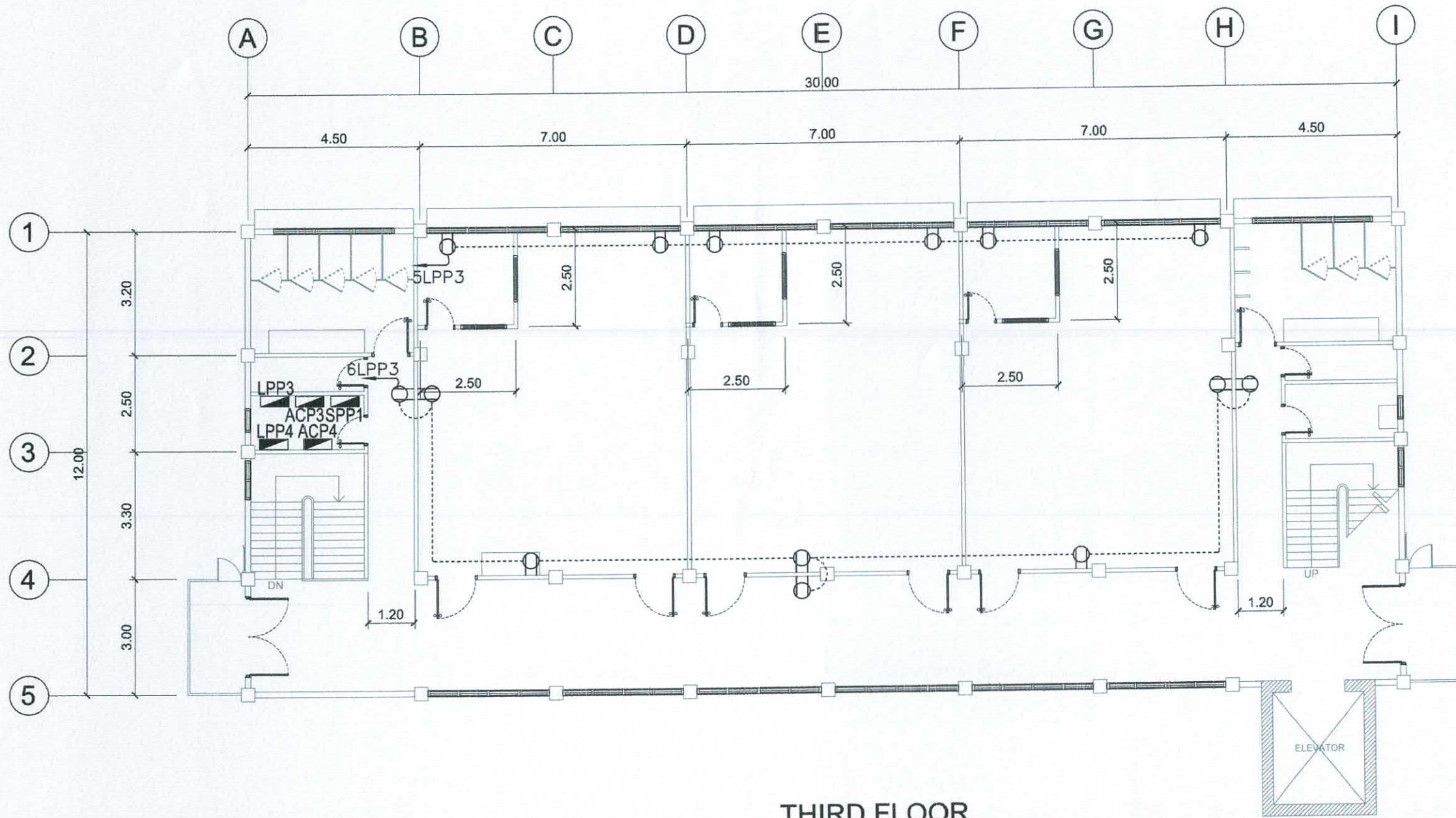





**1**  
**E6** SCALE 1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:	
	 <b>R. J. R. SANCHEZ</b> <small>PIU</small>	 <b>E. J. GALVEZ</b> <small>DEAN</small>	 <b>R. P. PENA</b> <small>PROF. ELEC. ENGINEER</small>	 <b>S. B. BAYOT JR.</b> <small>HEAD</small>	 <b>Q. B. DELOS REYES</b> <small>DIRECTOR</small>	 <b>A. G. MAGCAWAS</b> <small>VPPD</small>	 <b>J. X. B. NEPOMUCENO</b> <small>VPASS</small>	 <b>H. D. ROBLES</b> <small>TRES</small>	<b>CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY</b> <small>CAVITE STATE UNIVERSITY</small>	<b>CAVITE STATE UNIVERSITY</b> <small>MAIN CAMPUS</small>

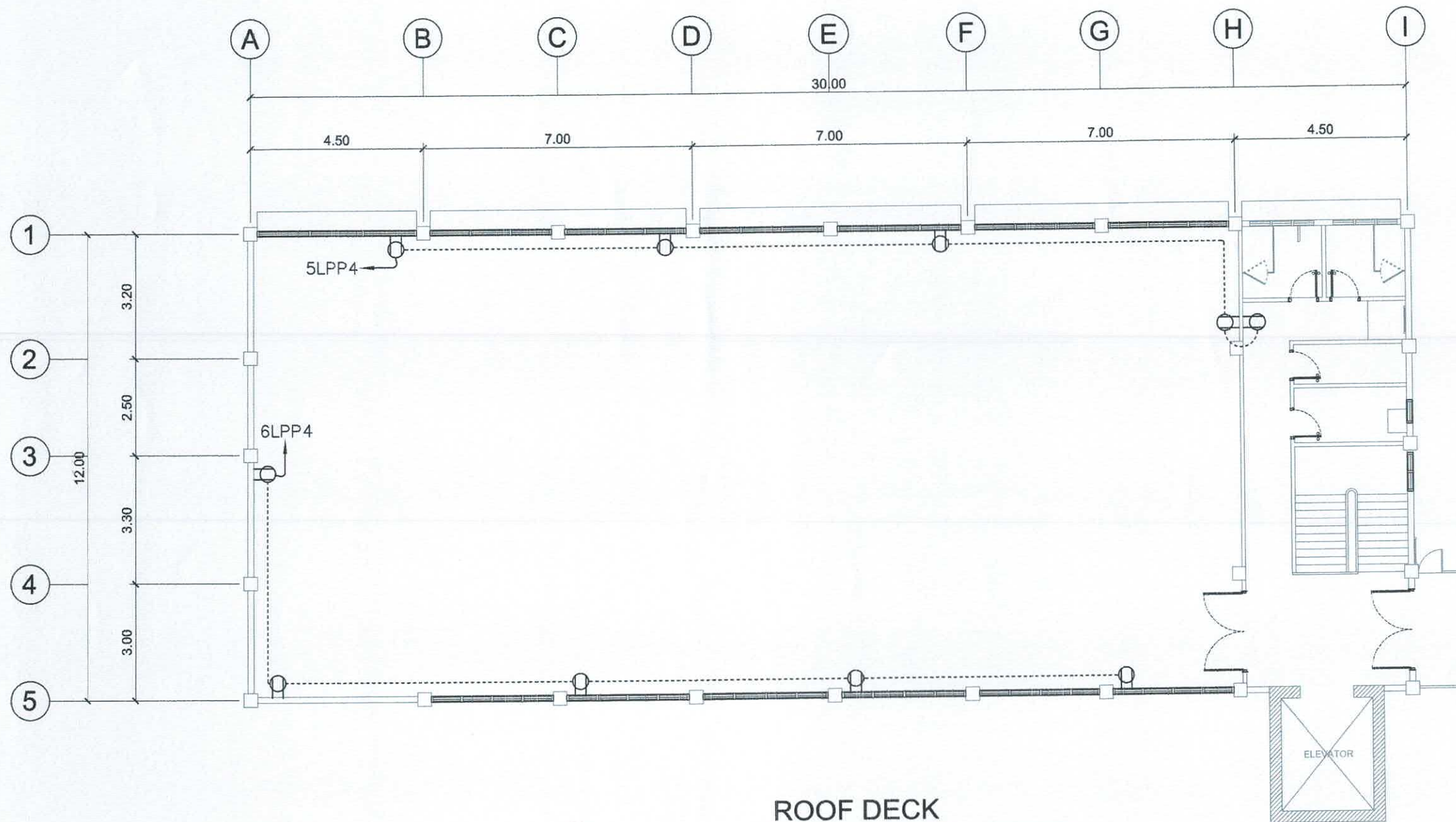




**1**  
**E7** SCALE 1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
	R. J. R. SANCHEZ PDU	E. J. GALVEZ DEAN	R. P. PERA COM PROF. ELEC. ENGINEER	S. B. BAYOT JR. PDU HEAD	O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	A. G. MAGCAWAS CVSU VPPD	J. X. B. NEFOMUCENO CVSU VPASS	H. D. ROBLES PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS






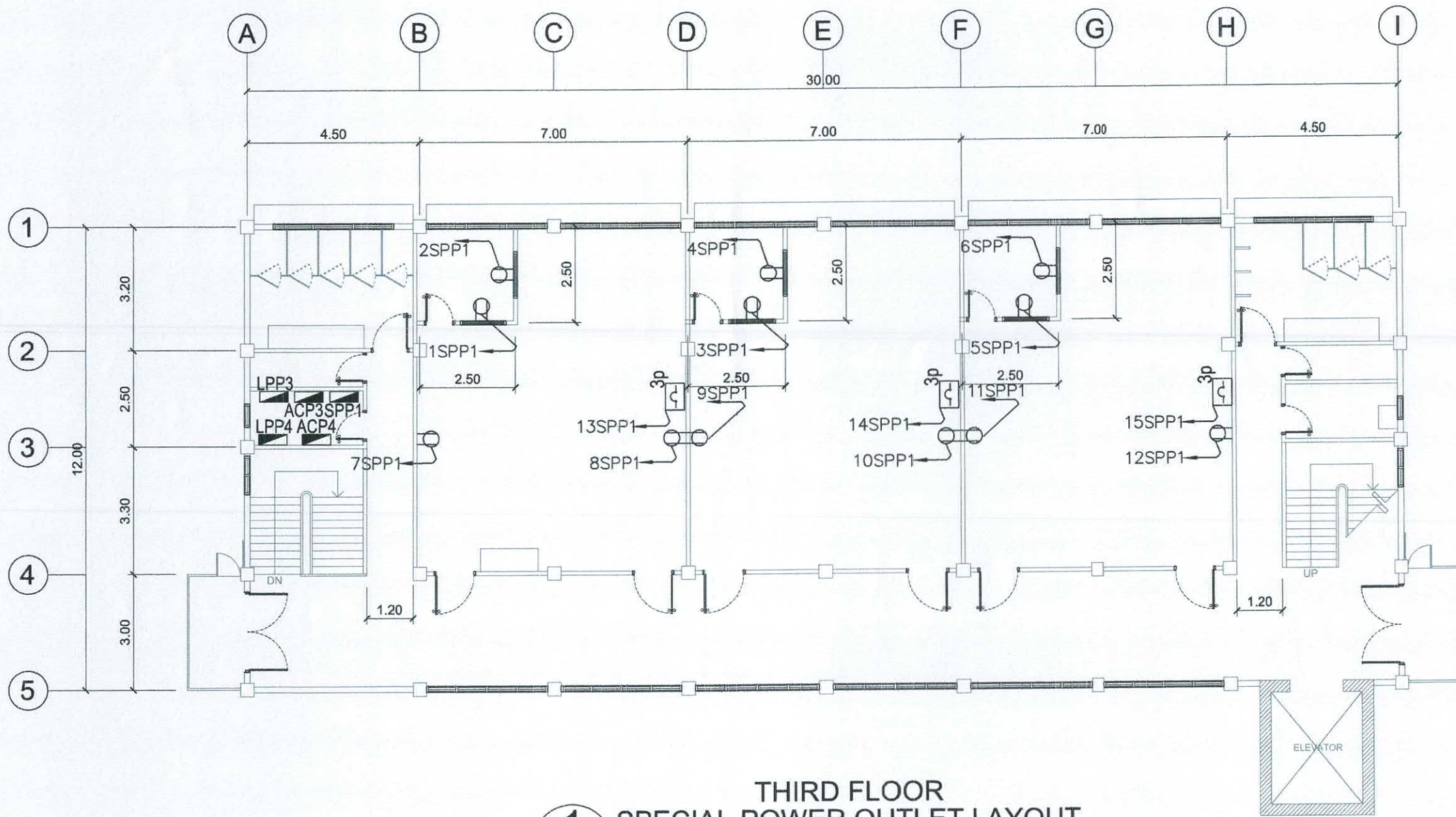
**1**  
**E 8**

**ROOF DECK  
CONVENIENCE OUTLET LAYOUT**


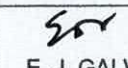
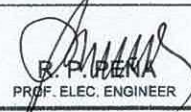
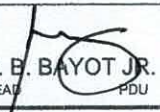


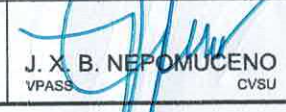

SCALE 1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
	<i>R. J. R. Sanchez</i> R. J. R. SANCHEZ <small>PDU OYPPD</small>	<i>E. J. Galvez</i> E. J. GALVEZ <small>DEAN COM</small>	<i>R. P. Pena</i> R. P. PENA <small>PROF. ELEC. ENGINEER</small>	<i>S. B. Bayot Jr.</i> S. B. BAYOT JR. <small>HEAD PDU</small>	<i>O. B. DeLos Reyes</i> O. B. DELOS REYES <small>DIRECTOR PLANNING AND DEVT. OFFICE</small>	<i>A. G. Magcawas</i> A. G. MAGCAWAS <small>VPPD CVSU</small>	<i>J. X. B. Nepomuceno</i> J. X. B. NEPOMUCENO <small>VPASS CVSU</small>	<i>A. D. Robles</i> A. D. ROBLES <small>PRES CVSU</small>	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY <small>CAVITE STATE UNIVERSITY MAIN CAMPUS</small>

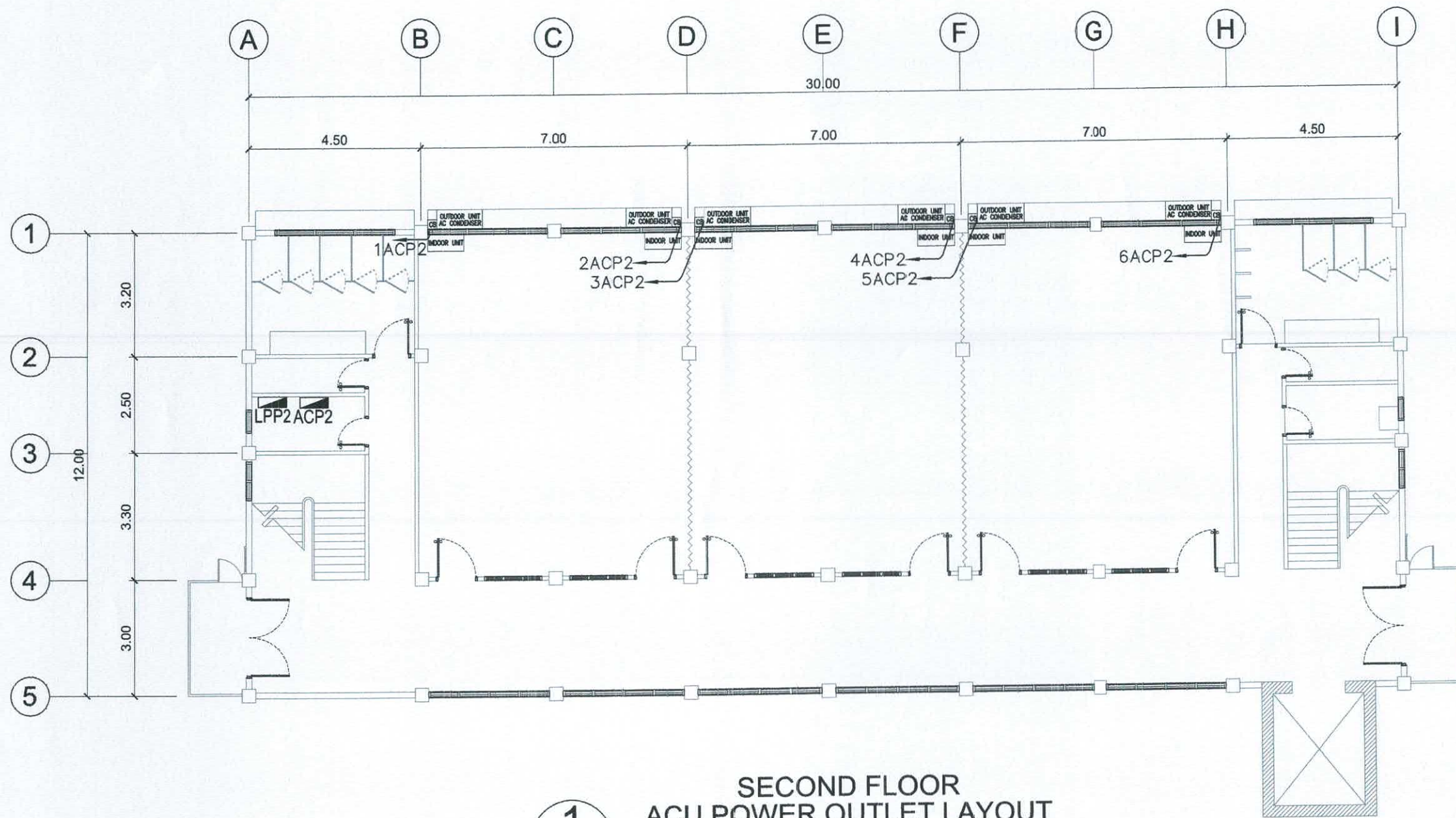




**1**  
**E9** **THIRD FLOOR**  
**SPECIAL POWER OUTLET LAYOUT**  
SCALE 1 : 125 MTS.

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>	 E. J. GALVEZ <small>DEAN</small>	 R. P. PERIK <small>PROF. ELEC. ENGINEER</small>	 S. B. BAYOT JR. <small>HEAD</small>	 O. B. DELOS REYES <small>DIRECTOR</small>	 A. G. MAGCAWAS <small>VPPD</small>	 J. X. B. NEPOMUCENO <small>VPASS</small>	 H. D. ROBLES <small>RES</small>	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY <small>CAVITE STATE UNIVERSITY</small>	CAVITE STATE UNIVERSITY <small>MAIN CAMPUS</small>	E - 9

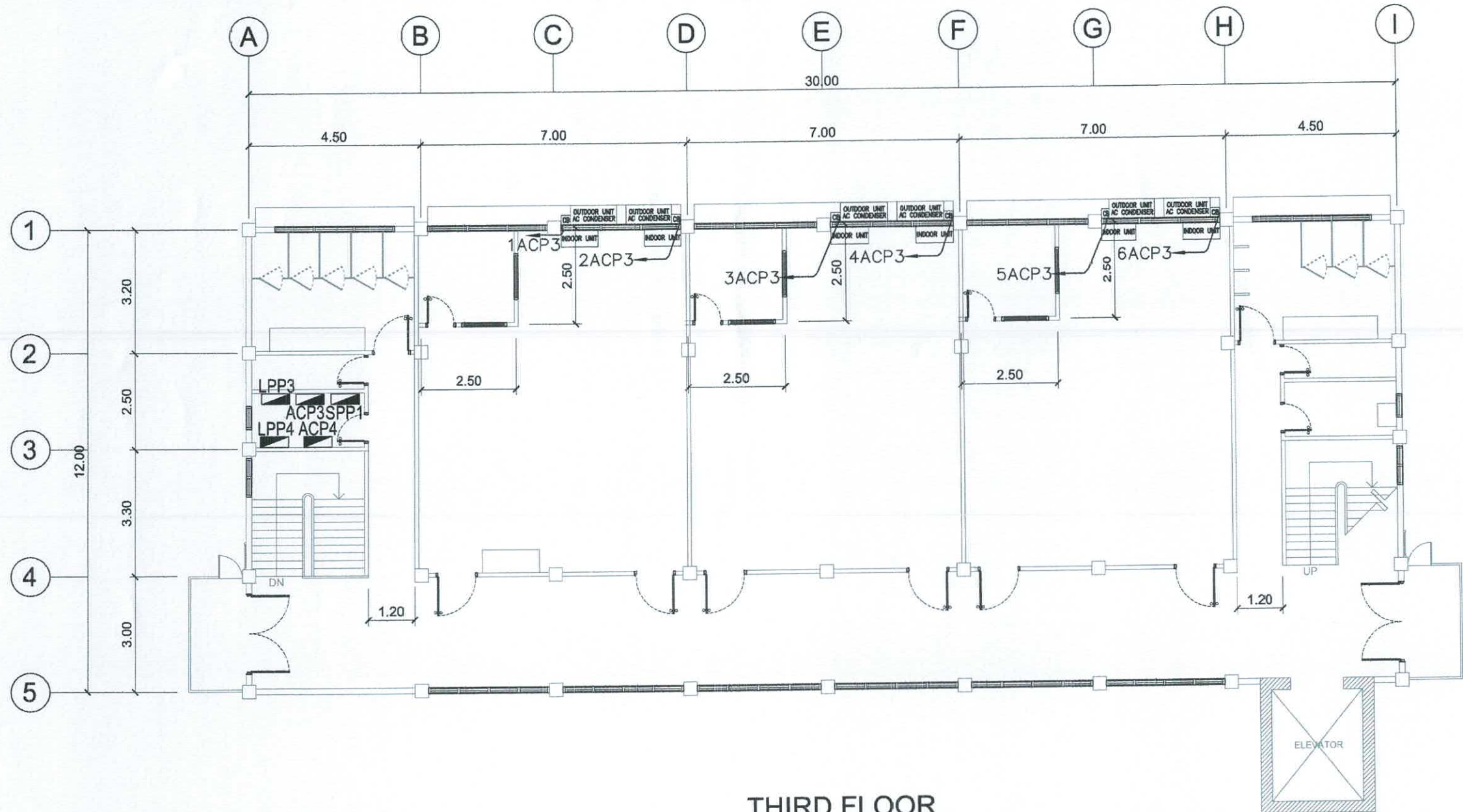





**1**  
**E10** SCALE 1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
	R. J. R. SANCHEZ PDU VP	E. J. GALVEZ DEAN COM	E. P. PENA PROF. ELEC. ENGINEER	S. B. BAYOT JR. HEAD PDU	O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	A. G. MAGCAWAS VPPD CVSU	J. X. B. NEPOMUCENO VPASS CVSU	H. D. ROBLES PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS

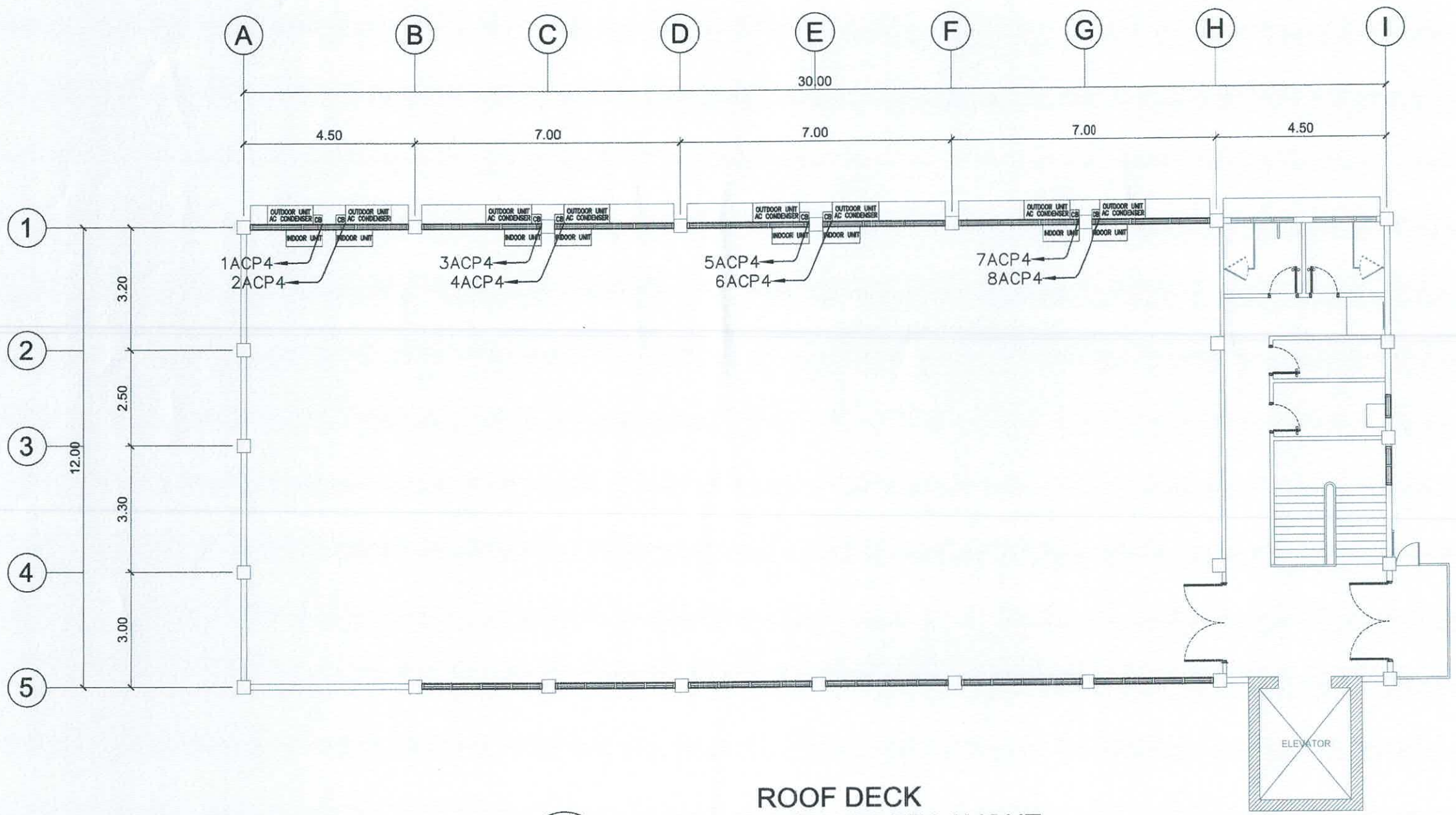





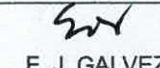

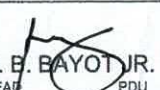




**1**  
**E11** SCALE 1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
	<i>R. J. R. Sanchez</i> <small>R. J. R. SANCHEZ PDI</small>	<i>E. J. Galvez</i> <small>E. J. GALVEZ DEAN COM</small>	<i>R. P. Pena</i> <small>R. P. PENA PROF. ELEC. ENGINEER</small>	<i>S. B. Bayot Jr.</i> <small>S. B. BAYOT JR. HEAD PDU</small>	<i>O. B. Delos Reyes</i> <small>O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE</small>	<i>A. G. Magcawas</i> <small>A. G. MAGCAWAS VP CVSU</small>	<i>J. X. B. Nefomuceno</i> <small>J. X. B. NEFOMUCENO VPASS CVSU</small>	<i>H. D. Robles</i> <small>H. D. ROBLES PRES CVSU</small>	<small>CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY</small> <small>CAVITE STATE UNIVERSITY MAIN CAMPUS</small>





**1**  
**E12** SCALE 1 : 125 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 / VPPD	 E. J. GALVEZ DEAN / COM	 R. R. REINA PROF. ELEC. ENGINEER	 S. B. BAYOT JR. HEAD / PDU	 O. B. DELOS REYES DIRECTOR / PLANNING AND DEVT. OFFICE	 A. G. MAGCAWAS VPPD / CVSU	 J. X. B. NEPOMUCENO VPASS / CVSU	 H. D. ROBLES PRES / CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY / MAIN CAMPUS	CAVITE STATE UNIVERSITY E - 12



# SCHEDULE OF LOADS AND PANEL BOARD DETAILS

**PANEL : LPP1 (LIGHTING AND POWER PANEL 1)**      **CABLE: 3 - 8.0 SQMM THHN+ 1 - 5.5 SQMM THW**      **MAIN: 50 AT, 100 AF, 3P, 230V, MCCB**  
**CONDUIT: PVC, 25 MM DIA.**      **ENCLOSURE : NEMA 1**  
**PHASE: 3**      **LOCATION: ELECTRICAL ROOM, GROUND FLOOR**      **MOUNTING: SURFACE**  
**VOLTS: 230**

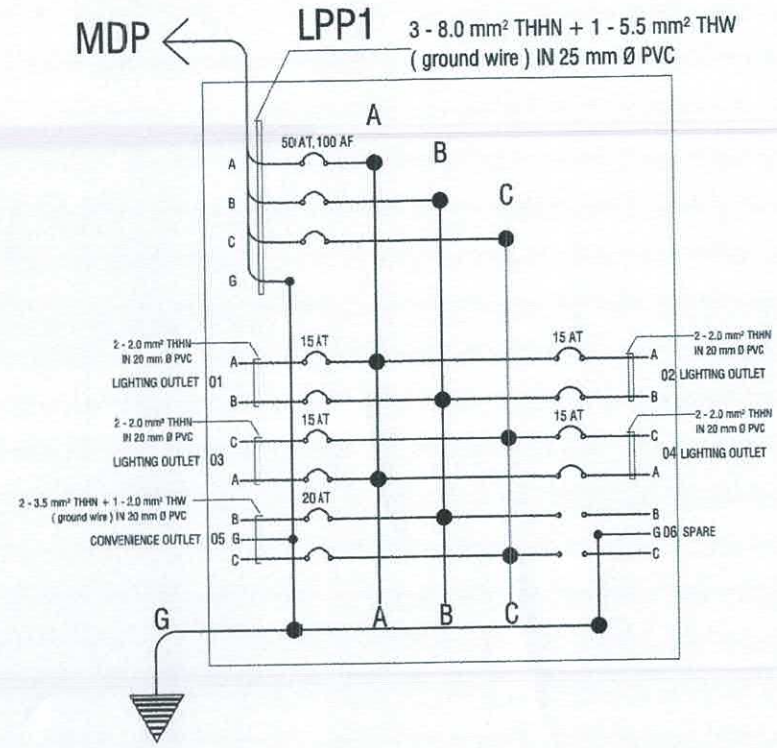
CKT NO.	CIRCUIT DESCRIPTION	NO OF OUTLET	LOAD IN RATING				CIRCUIT PROTECTION	Size of Conductor		Size Of Conduit in MM ø	Color Code		
			WATTAGE	VOLTAGE	AMPERES				SQ. MM THHN			SQ. MM THW(G)	
					3 ø	AB		CA					BC
1	LIGHTING OUTLET	13	1300	230			5.65			15AT, 2P, 230V, MCCB	2 - 2.0	PVC, 20	1R,1B,G
2	LIGHTING OUTLET	12	1200	230			5.22			15AT, 2P, 230V, MCCB	2 - 2.0	PVC, 20	1R,1B,G
3	LIGHTING OUTLET	14	1400	230				6.09		15AT, 2P, 230V, MCCB	2 - 2.0	PVC, 20	1B,1Y,G
4	LIGHTING OUTLET	12	1200	230			5.22			15AT, 2P, 230V, MCCB	2 - 2.0	PVC, 20	1B,1Y,G
5	CONVENIENCE OUTLET	8	1800	230				6.96		20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0	PVC, 20	1Y,1R,G
	SPARE												
	TOTAL		6700	230	0	11	11	7		50 AT, 3P, 230V, MCCB	3 - 8.0 + G 5.5	PVC, 25	1R,1B,1Y,G

**MAIN FEEDER and CURRENT PROTECTION COMPUTATION:**

NOTE:  $I_{R} = \frac{[(11 \times 1.732) \times DF]}{1.732} = 15.24$  Amperes  
 $I_{CB} = \frac{[(11 \times 1.732) \times DF]}{1.732} = 15.24$  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 : LPP2 (LIGHTING AND POWER PANEL 2)**      **CABLE: 3 - 8.0 SQMM THHN+ 1 - 5.5 SQMM THW**      **MAIN: 50 AT, 100 AF, 3P, 230V, MCCB**  
**CONDUIT: PVC, 25 MM DIA.**      **ENCLOSURE : NEMA 1**  
**PHASE: 3**      **LOCATION: ELECTRICAL ROOM, SECOND FLOOR**      **MOUNTING: SURFACE**  
**VOLTS: 230**

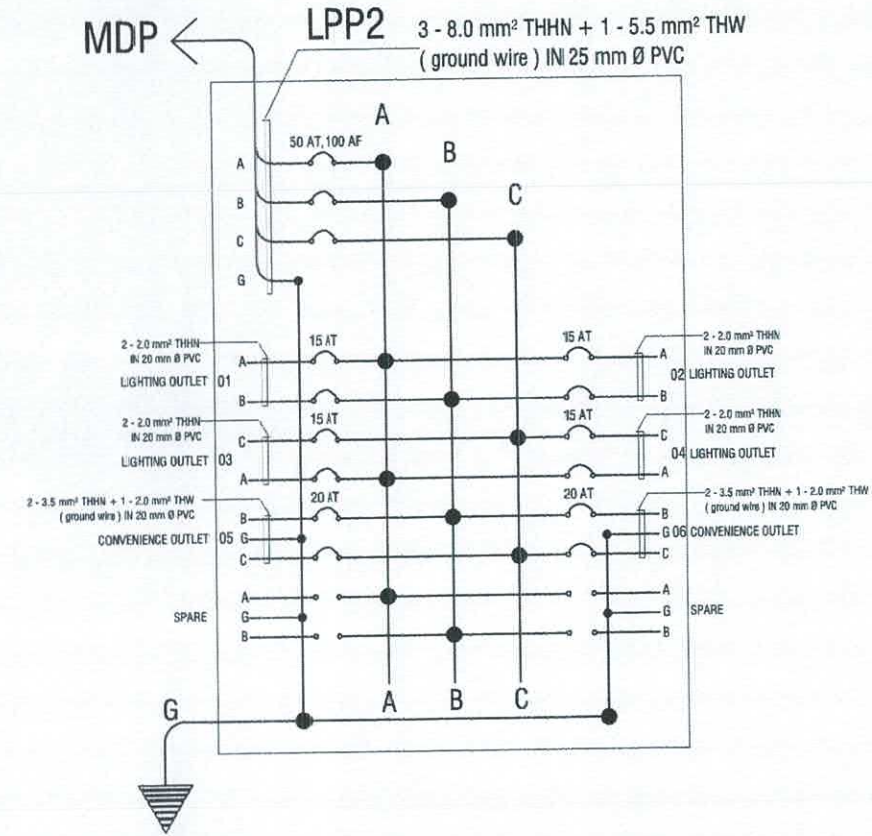
CKT NO.	CIRCUIT DESCRIPTION	NO OF OUTLET	LOAD IN RATING				CIRCUIT PROTECTION	Size of Conductor		Size Of Conduit in MM ø	Color Code		
			WATTAGE	VOLTAGE	AMPERES				SQ. MM THHN			SQ. MM THW(G)	
					3 ø	AB		CA					BC
1	LIGHTING OUTLET	12	1200	230			5.22			15AT, 2P, 230V, MCCB	2 - 2.0	PVC, 20	1R,1B,G
2	LIGHTING OUTLET	12	1200	230			5.22			15AT, 2P, 230V, MCCB	2 - 2.0	PVC, 20	1R,1B,G
3	LIGHTING OUTLET	27	2700	230				11.74		15AT, 2P, 230V, MCCB	2 - 2.0	PVC, 20	1B,1Y,G
4	LIGHTING OUTLET	11	1100	230				4.78		15AT, 2P, 230V, MCCB	2 - 2.0	PVC, 20	1B,1Y,G
5	CONVENIENCE OUTLET	6	1200	230				5.22		20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0	PVC, 20	1Y,1R,G
6	CONVENIENCE OUTLET	8	1800	230				6.96		20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0	PVC, 20	1Y,1R,G
	SPARE												
	SPARE												
	TOTAL		9000	230	0	10	17	12		50 AT, 3P, 230V, MCCB	3 - 8.0 + G 5.5	PVC, 25	1R,1B,1Y,G

**MAIN FEEDER and CURRENT PROTECTION COMPUTATION:**

NOTE:  $I_{R} = \frac{[(17 \times 1.732) \times DF]}{1.732} = 23.56$  Amperes  
 $I_{CB} = \frac{[(17 \times 1.732) \times DF]}{1.732} = 23.56$  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.*



**1** PANEL BOARD DETAILS  
 SCALE N T S

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
	R. J. R. SANCHEZ PDU	E. J. GALVEZ DEAN	R. T. PENA PROF. ELEC. ENGINEER	S. B. BAYOT JR. HEAD	O. B. DELOS REYES DIRECTOR	A. G. MAGCAWAS VPPD	J. X. B. NEROMUCENO VPASS	F. D. ROBLES CVSU	CAVITE STATE UNIVERSITY MAIN CAMPUS



PANEL : LPP3 (LIGHTING AND POWER PANEL 3) CABLE: 3 - 8.0 SQMM THHN+ 1 - 5.5 SQMM THW CONDUIT: PVC, 25 MM DIA. MAIN: 50 AT, 100 AF, 3P, 230V, MCCB ENCLOSURE : NEMA 1 MOUNTING: SURFACE

PHASE: 3  
VOLTS: 230

LOCATION: ELECTRICAL ROOM, THIRD FLOOR

CKT NO.	CIRCUIT DESCRIPTION	NO OF OUTLET	WATTAGE	VOLTAGE	LOAD IN RATING				CIRCUIT PROTECTION	Size of Conductor		Size Of Conduit In MM ø	Color Code
					AMPERES					CIRCUIT BREAKER RATING	SQ. MM THHN		
					3 ø	AB	CA	BC					
1	LIGHTING OUTLET	12	1200	230		5.22			15AT, 2P, 230V, MCCB	2 - 2.0		PVC, 20	1R,1B,G
2	LIGHTING OUTLET	27	2700	230		11.74			15AT, 2P, 230V, MCCB	2 - 2.0		PVC, 20	1R,1B,G
3	LIGHTING OUTLET	12	1200	230			5.22		15AT, 2P, 230V, MCCB	2 - 2.0		PVC, 20	1B,1Y,G
4	LIGHTING OUTLET	11	1100	230			4.78		15AT, 2P, 230V, MCCB	2 - 2.0		PVC, 20	1B,1Y,G
5	CONVENIENCE OUTLET	6	1200	230				5.22	20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0		PVC, 20	1Y,1R,G
6	CONVENIENCE OUTLET	8	1800	230				6.96	20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0		PVC, 20	1Y,1R,G
	SPARE												
	SPARE												
TOTAL			8000	230	0	17	10	12	50 AT, 3P, 230V, MCCB	3 - 8.0 + G 5.5	PVC, 25	1R,1B,1Y,G	

MAIN FEEDER and CURRENT PROTECTION COMPUTATION:

NOTE:  $I_{FL} = \frac{[(17 \times 1.732) \times DF]}{1} = 23.56$  Amperes  
 $I_{CB} = \frac{[(17 \times 1.732) \times DF]}{1} = 23.56$  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 : LPP4 (LIGHTING AND POWER PANEL 4) CABLE: 3 - 8.0 SQMM THHN+ 1 - 5.5 SQMM THW CONDUIT: PVC, 25 MM DIA. MAIN: 50 AT, 100 AF, 3P, 230V, MCCB ENCLOSURE : NEMA 1 MOUNTING: SURFACE

PHASE: 3  
VOLTS: 230

LOCATION: ELECTRICAL ROOM, THIRD FLOOR

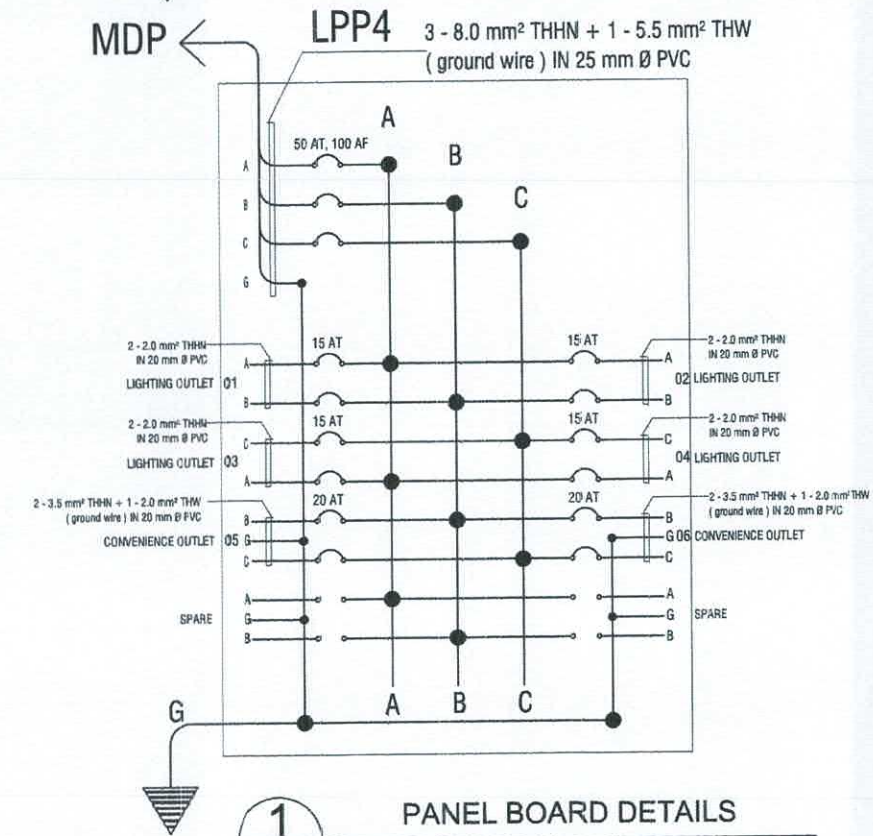
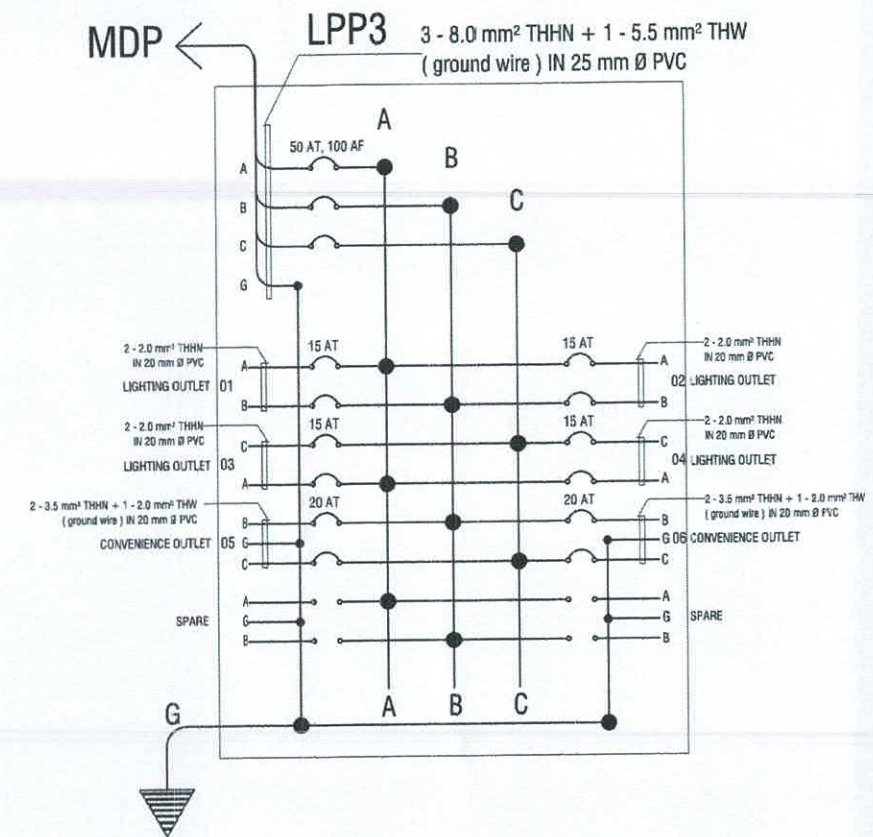
CKT NO.	CIRCUIT DESCRIPTION	NO OF OUTLET	WATTAGE	VOLTAGE	LOAD IN RATING				CIRCUIT PROTECTION	Size of Conductor		Size Of Conduit In MM ø	Color Code
					AMPERES					CIRCUIT BREAKER RATING	SQ. MM THHN		
					3 ø	AB	CA	BC					
1	LIGHTING OUTLET	8	800	230		3.48			15AT, 2P, 230V, MCCB	2 - 2.0		PVC, 20	1R,1B,G
2	LIGHTING OUTLET	8	800	230		3.48			15AT, 2P, 230V, MCCB	2 - 2.0		PVC, 20	1R,1B,G
3	LIGHTING OUTLET	9	900	230			3.91		15AT, 2P, 230V, MCCB	2 - 2.0		PVC, 20	1B,1Y,G
4	LIGHTING OUTLET	14	1400	230			6.09		15AT, 2P, 230V, MCCB	2 - 2.0		PVC, 20	1B,1Y,G
5	CONVENIENCE OUTLET	5	1000	230				4.35	20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0		PVC, 20	1Y,1R,G
6	CONVENIENCE OUTLET	5	1000	230				4.35	20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0		PVC, 20	1Y,1R,G
	SPARE												
	SPARE												
TOTAL			5900	230	0	7	10	9	50 AT, 3P, 230V, MCCB	3 - 8.0 + G 5.5	PVC, 25	1R,1B,1Y,G	

MAIN FEEDER and CURRENT PROTECTION COMPUTATION:

NOTE:  $I_{FL} = \frac{[(10 \times 1.732) \times DF]}{1} = 13.86$  Amperes  
 $I_{CB} = \frac{[(10 \times 1.732) \times DF]}{1} = 13.86$  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.



1 E14 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	E. J. GALVEZ DEAN COM	R. P. PEÑA PROF. ELEC. ENGINEER	S. B. BAYOT, JR. HEAD PDU	O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	A. G. MAGCAYAS VPPD CVSU	J. X. B. NEPOMUCENO VPASS CVSU	H. D. ROBLES PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS



PANEL : ACP 2 ( AIR CONDITIONING UNIT PANEL 2 ) CABLE : 3 - 30.0 SQMM THHN+ 1 - 8.0 SQMM THW  
 CONDUIT : PVC, 32 MM DIA. MAIN: 100 AT, 200 AF, 3P, 230V, MCCB ENCLOSURE : NEMA 1 MOUNTING : SURFACE

PHASE: 3 LOCATION: ELECTRICAL ROOM, SECOND FLOOR

CKT NO.	CIRCUIT DESCRIPTION	NO OF OUTLET	WATTAGE	VOLTAGE	LOAD IN RATING				CIRCUIT BREAKER RATING	Size of Conductor		Size of Conduit in MM φ	Color Code
					3 φ	AB	CA	BC		SQ. MM THHN	SQ. MM THW/G		
1	A/C UNIT ( 2.5 HP )	1	900	230		15.00			40AT, 2P, 230V, MCCB	2-5.5 + G 3.5	PVC, 25	1R, 1B, G	
2	A/C UNIT ( 2.5 HP )	1	900	230		15.00			40AT, 2P, 230V, MCCB	2-5.5 + G 3.5	PVC, 25	1R, 1B, G	
3	A/C UNIT ( 2.5 HP )	1	900	230			15.00		40AT, 2P, 230V, MCCB	2-5.5 + G 3.5	PVC, 25	1B, 1Y, G	
4	A/C UNIT ( 2.5 HP )	1	900	230			15.00		40AT, 2P, 230V, MCCB	2-5.5 + G 3.5	PVC, 25	1B, 1Y, G	
5	A/C UNIT ( 2.5 HP )	1	900	230				15.00	40AT, 2P, 230V, MCCB	2-5.5 + G 3.5	PVC, 25	1Y, 1R, G	
6	A/C UNIT ( 2.5 HP )	1	900	230				15.00	40AT, 2P, 230V, MCCB	2-5.5 + G 3.5	PVC, 25	1Y, 1R, G	
SPARE													
SPARE													
TOTAL			11400	230	0	30	30	30	100 AT, 3P, 230V, MCCB	3-30.0 + G 8.0	PVC, 32	1R, 1B, 1Y, G	

MAIN FEEDER and CURRENT PROTECTION COMPUTATION:  
 NOTE:  $I_{FL} = \frac{[30 \times 1.732] + (1.25\% \times 15)}{0.8} = 70.71$  Amperes  
 $I_{CB} = \frac{[30 \times 1.732] + (250\% \times 15)}{0.8} = 89.46$  Amperes  
 use : 3 - 30.0 SQMM THHN+ 1 - 8.0 SQMM THW IN 32 MM DIA. PVC  
 use : 100 AT, 200AF, 3P, 230V, MCCB

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 : ACP 3 ( AIR CONDITIONING UNIT PANEL 3 ) CABLE : 3 - 30.0 SQMM THHN+ 1 - 8.0 SQMM THW  
 CONDUIT : PVC, 32 MM DIA. MAIN: 100 AT, 200 AF, 3P, 230V, MCCB ENCLOSURE : NEMA 1 MOUNTING : SURFACE

PHASE: 3 LOCATION: ELECTRICAL ROOM, THIRD FLOOR

CKT NO.	CIRCUIT DESCRIPTION	NO OF OUTLET	WATTAGE	VOLTAGE	LOAD IN RATING				CIRCUIT BREAKER RATING	Size of Conductor		Size of Conduit in MM φ	Color Code
					3 φ	AB	CA	BC		SQ. MM THHN	SQ. MM THW/G		
1	A/C UNIT ( 2.5 HP )	1	1500	230		15.00			40AT, 2P, 230V, MCCB	2-5.5 + G 3.5	PVC, 25	1R, 1B, G	
2	A/C UNIT ( 2.5 HP )	1	1500	230		15.00			40AT, 2P, 230V, MCCB	2-5.5 + G 3.5	PVC, 25	1R, 1B, G	
3	A/C UNIT ( 2.5 HP )	1	1500	230			15.00		40AT, 2P, 230V, MCCB	2-5.5 + G 3.5	PVC, 25	1B, 1Y, G	
4	A/C UNIT ( 2.5 HP )	1	1500	230			15.00		40AT, 2P, 230V, MCCB	2-5.5 + G 3.5	PVC, 25	1B, 1Y, G	
5	A/C UNIT ( 2.5 HP )	1	1500	230				15.00	40AT, 2P, 230V, MCCB	2-5.5 + G 3.5	PVC, 25	1Y, 1R, G	
6	A/C UNIT ( 2.5 HP )	1	1500	230				15.00	40AT, 2P, 230V, MCCB	2-5.5 + G 3.5	PVC, 25	1Y, 1R, G	
SPARE													
SPARE													
TOTAL			11400	230	0	30	30	30	100 AT, 3P, 230V, MCCB	3-30.0 + G 8.0	PVC, 32	1R, 1B, 1Y, G	

MAIN FEEDER and CURRENT PROTECTION COMPUTATION:  
 NOTE:  $I_{FL} = \frac{[30 \times 1.732] + (1.25\% \times 15)}{0.8} = 70.71$  Amperes  
 $I_{CB} = \frac{[30 \times 1.732] + (250\% \times 15)}{0.8} = 89.46$  Amperes  
 use : 3 - 30.0 SQMM THHN+ 1 - 8.0 SQMM THW IN 32 MM DIA. PVC  
 use : 100 AT, 200AF, 3P, 230V, MCCB

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 : ACP 4 ( AIR CONDITIONING UNIT PANEL 4 ) CABLE : 3 - 80.0 SQMM THHN+ 1 - 22.0 SQMM THW  
 CONDUIT : PVC, 50 MM DIA. MAIN: 200 AT, 300 AF, 3P, 230V, MCCB ENCLOSURE : NEMA 1 MOUNTING : SURFACE

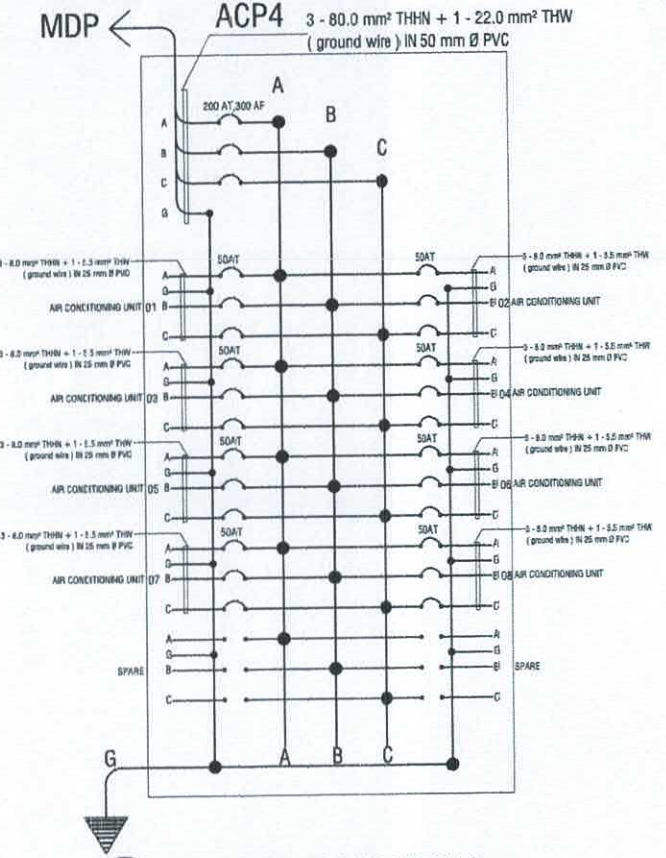
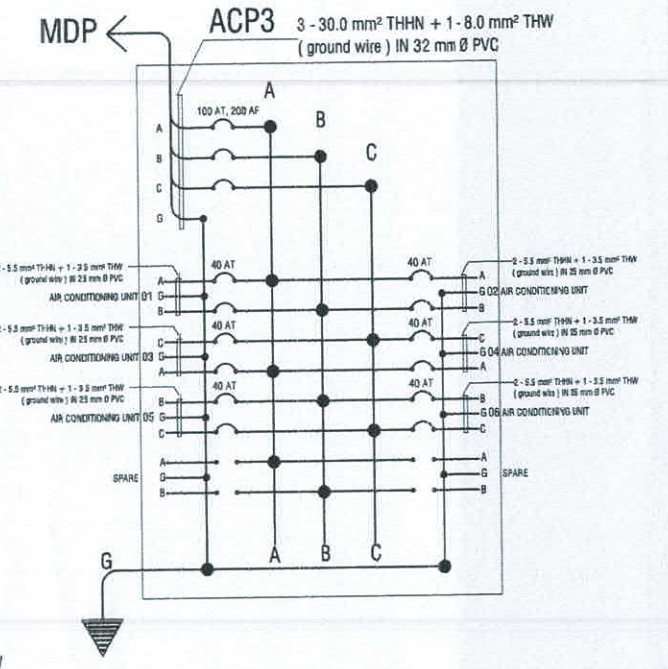
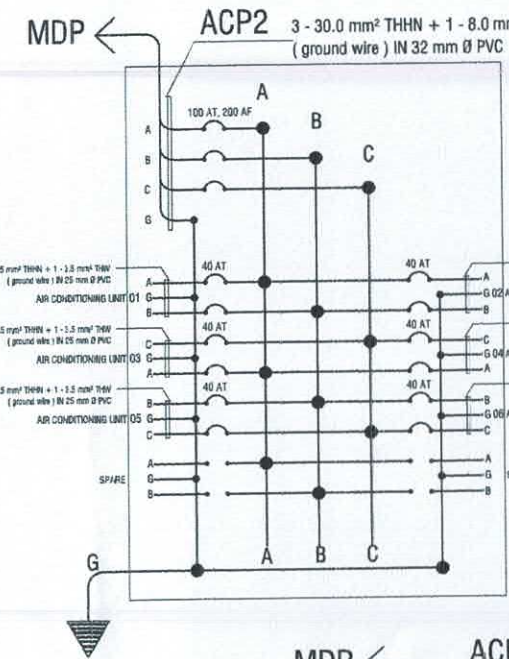
PHASE: 3 LOCATION: ELECTRICAL ROOM, THIRD FLOOR

CKT NO.	CIRCUIT DESCRIPTION	NO OF OUTLET	WATTAGE	VOLTAGE	LOAD IN RATING				CIRCUIT BREAKER RATING	Size of Conductor		Size of Conduit in MM φ	Color Code
					3 φ	AB	CA	BC		SQ. MM THHN	SQ. MM THW/G		
1	A/C UNIT ( 6 HP )	1	5500	230	1.8				50AT, 3P, 230V, MCCB	3-8.0 + G 5.5	PVC, 25	1R, 1B, 1Y, G	
2	A/C UNIT ( 6 HP )	1	5500	230	1.8				50AT, 3P, 230V, MCCB	3-8.0 + G 5.5	PVC, 25	1R, 1B, 1Y, G	
3	A/C UNIT ( 6 HP )	1	5500	230	1.8				50AT, 3P, 230V, MCCB	3-8.0 + G 5.5	PVC, 25	1R, 1B, 1Y, G	
4	A/C UNIT ( 6 HP )	1	5500	230	1.8				50AT, 3P, 230V, MCCB	3-8.0 + G 5.5	PVC, 25	1R, 1B, 1Y, G	
5	A/C UNIT ( 6 HP )	1	5500	230	1.8				50AT, 3P, 230V, MCCB	3-8.0 + G 5.5	PVC, 25	1R, 1B, 1Y, G	
6	A/C UNIT ( 6 HP )	1	5500	230	1.8				50AT, 3P, 230V, MCCB	3-8.0 + G 5.5	PVC, 25	1R, 1B, 1Y, G	
7	A/C UNIT ( 6 HP )	1	5500	230	1.8				50AT, 3P, 230V, MCCB	3-8.0 + G 5.5	PVC, 25	1R, 1B, 1Y, G	
8	A/C UNIT ( 6 HP )	1	5500	230	1.8				50AT, 3P, 230V, MCCB	3-8.0 + G 5.5	PVC, 25	1R, 1B, 1Y, G	
SPARE													
SPARE													
TOTAL			44000	230	144	0	0	0	200 AT, 3P, 230V, MCCB	3-80.0 + G 22.0	PVC, 50	1R, 1B, 1Y, G	

MAIN FEEDER and CURRENT PROTECTION COMPUTATION:  
 NOTE:  $I_{FL} = \frac{[144 + (1.25\% \times 15)]}{0.8} = 166.50$  Amperes  
 $I_{CB} = \frac{[144 + (250\% \times 15)]}{0.8} = 189.00$  Amperes  
 use : 3 - 80.0 SQMM THHN+ 1 - 22.0 SQMM THW IN 50 MM DIA. PVC  
 use : 200 AT, 300AF, 3P, 230V, MCCB

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.



1 E15 SCALE NTS

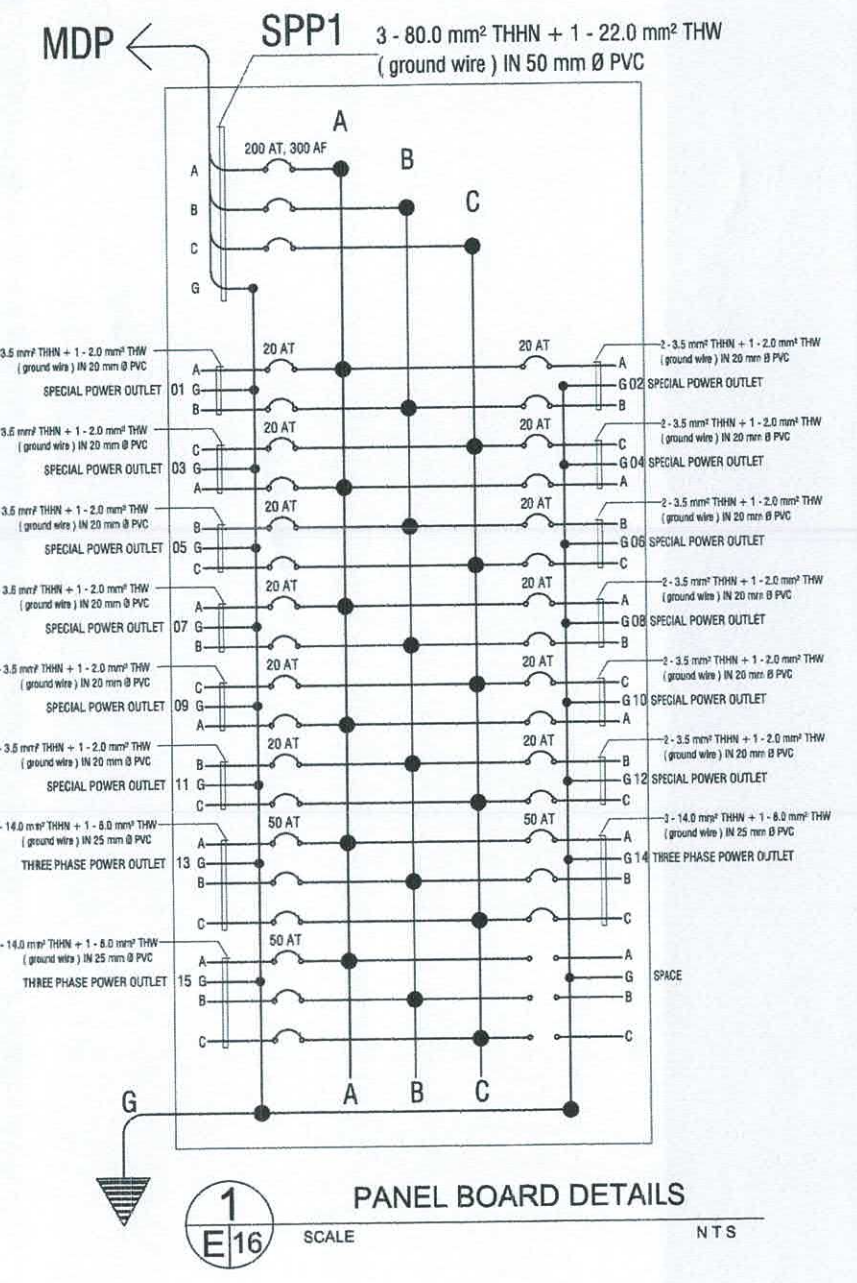
PREPARED BY: R. J. R. SANCHEZ PDU	END USER: E. J. GALVEZ DEAN COM	REVIEWED BY: R. P. BENA PROF. ELEC. ENGINEER	ENDORSED BY: S. B. BAYOT JR. HEAD PDU	REC. APPROVAL: O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	APPROVED BY: A. G. MAGCAWAS VPPD CVSU	APPROVED BY: J. X. B. NEPOMUCENO VPASS CVSU	APPROVED BY: H. D. ROBLES PRES CVSU	PROJECT TITLE/ LOCATION: CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS	IMPLEMENTING AGENCY: CAVITE STATE UNIVERSITY	SHT NO: E - 15
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PANEL : SPP1 (SPECIAL POWER PANEL 1) CABLE: 3 - 80.0 SQMM THHN+ 1 - 22.0 SQMM THW MAIN: 200 AT, 300 AF, 3P, 230V, MCCB  
 PHASE: 3 ENCLOSURE : NEMA 1  
 VOLTS: 230 CONDUIT: PVC, 50 MM DIA. MOUNTING: SURFACE

CKT NO.	CIRCUIT DESCRIPTION	NO OF OUTLET	LOAD IN RATING				CIRCUIT PROTECTION	Size of Conductor		Size Of Conduit In MM ø	Color Code	
			WATTAGE	VOLTAGE	AMPERES							
					3 ø	AB		CA	BC			
1	SPECIAL POWER OUTLET	1	3000	230		13.04			20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0	PVC, 20	1R,1B,G
2	SPECIAL POWER OUTLET	1	3000	230		13.04			20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0	PVC, 20	1R,1B,G
3	SPECIAL POWER OUTLET	1	3000	230			13.04		20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0	PVC, 20	1B,1Y,G
4	SPECIAL POWER OUTLET	1	3000	230			13.04		20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0	PVC, 20	1B,1Y,G
5	SPECIAL POWER OUTLET	1	3000	230				13.04	20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0	PVC, 20	1Y,1R,G
6	SPECIAL POWER OUTLET	1	3000	230				13.04	20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0	PVC, 20	1Y,1R,G
7	SPECIAL POWER OUTLET	1	3000	230		13.04			20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0	PVC, 20	1R,1B,G
8	SPECIAL POWER OUTLET	1	3000	230		13.04			20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0	PVC, 20	1R,1B,G
9	SPECIAL POWER OUTLET	1	3000	230			13.04		20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0	PVC, 20	1B,1Y,G
10	SPECIAL POWER OUTLET	1	3000	230			13.04		20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0	PVC, 20	1B,1Y,G
11	SPECIAL POWER OUTLET	1	3000	230				13.04	20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0	PVC, 20	1Y,1R,G
12	SPECIAL POWER OUTLET	1	3000	230				13.04	20AT, 2P, 230V, MCCB	2 - 3.5 + G 2.0	PVC, 20	1Y,1R,G
13	3 PHASE POWER OUTLET	1	5000	230	22				50AT, 3P, 230V, MCCB	3 - 14.0 + G 8.0	PVC, 25	1R,1B,1Y,G
14	3 PHASE POWER OUTLET	1	5000	230	22				50AT, 3P, 230V, MCCB	3 - 14.0 + G 8.0	PVC, 25	1R,1B,1Y,G
15	3 PHASE POWER OUTLET	1	5000	230	22				50AT, 3P, 230V, MCCB	3 - 14.0 + G 8.0	PVC, 25	1R,1B,1Y,G
	SPACE											
	SPACE											
	TOTAL		51000	230	66	52	52	52	200 AT, 3P, 230V, MCCB	3 - 80.0 + G 22.0	PVC, 50	1R,1B,1Y,G

MAIN FEEDER and CURRENT PROTECTION COMPUTATION:  
 NOTE:  $I_{FL} = \frac{[(66 + (52 \times 1.732))] \times DF}{\sqrt{3}} = 156.06$  Amperes  
 $I_{CB} = \frac{[(66 + (52 \times 1.732))] \times DF}{\sqrt{3}} = 156.06$  Amperes  
 G - Means Ground Wire  
 1R- Color RED  
 1B- Color BLACK  
 1Y- Color YELLOW  
 1G- Color GREEN  
 use: 3 - 80.0 SQMM THHN+ 1 - 22.0 SQMM THW IN 50 MM DIA. PVC  
 use: 200 AT, 300AF, 3P, 230V, MCCB  
 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.



1 PANEL BOARD DETAILS  
 E16 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 COVPPD	 E. J. GALVEZ DEAN COM	 R. J. R. SANCHEZ PROF. ELEC. ENGINEER	 S. B. BAYOT JR. HEAD PDU	 S. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	 A. G. MAGCAWAS VPPD CVSU	 J. X. B. NEPOMUCENO VPASS CVSU	 H. D. ROBLES PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS



PANEL : MDP (MAIN DISTRIBUTION PANEL)		CABLE: 3 - 2 - 175.0 SQMM THHN+ 3 - 80.0 SQMM THW				MAIN: 600 AT, 700AF, 3P, 230V, MCCB							
PHASE: 3		CONDUIT: RSC, 3-80 MM DIA.				ENCLOSURE : NEMA 1							
VOLTS: 230		LOCATION: ELECTRICAL ROOM, GROUND FLOOR				MOUNTING: SURFACE							
CKT NO.	CIRCUIT DESCRIPTION	*****	LOAD IN RATING				CIRCUIT PROTECTION	Size of Conductor		Size Of Conduit in MM ø	Color Code		
			Volt- Amp	VOLT	AMPERES				SQ. MM THHN			SQ. MM THW(G)	
			3 ø	AB	CA	BC	CIRCUIT BREAKER RATING						
1	LIGHTING AND POWER PANEL 1	LPP1	6700	230	0	11	11	7	50 AT, 3P, 230V, MCCB	3 - 8.0	+ G 5.5	PVC, 25	1R,1B,1Y,G
2	LIGHTING AND POWER PANEL 2	LPP2	9000	230	0	10	17	12	50 AT, 3P, 230V, MCCB	3 - 8.0	+ G 5.5	PVC, 25	1R,1B,1Y,G
3	LIGHTING AND POWER PANEL 3	LPP3	9000	230	0	17	10	12	50 AT, 3P, 230V, MCCB	3 - 8.0	+ G 5.5	PVC, 25	1R,1B,1Y,G
4	LIGHTING AND POWER PANEL 4	LPP4	5900	230	0	7	10	9	50 AT, 3P, 230V, MCCB	3 - 8.0	+ G 5.5	PVC, 25	1R,1B,1Y,G
5	AIR CONDITIONING UNIT PANEL 2	ACP2	11400	230	0	30	30	30	100 AT, 3P, 230V, MCCB	3 - 30.0	+ G 8.0	PVC, 32	1R,1B,1Y,G
6	AIR CONDITIONING UNIT PANEL 3	ACP3	11400	230	0	30	30	30	100 AT, 3P, 230V, MCCB	3 - 30.0	+ G 8.0	PVC, 32	1R,1B,1Y,G
7	AIR CONDITIONING UNIT PANEL 4	ACP4	44000	230	144	0	0	0	200 AT, 3P, 230V, MCCB	3 - 80.0	+ G 22.0	PVC, 50	1R,1B,1Y,G
8	SPECIAL POWER PANEL 1	SPP1	51000	230	66	52	52	52	200 AT, 3P, 230V, MCCB	3 - 80.0	+ G 22.0	PVC, 50	1R,1B,1Y,G
9	ELEVATOR PANEL	ELP	7460	230	28				50 AT, 3P, 230V, MCCB	3 - 14.0	+ G 8.0	PVC, 25	1R,1B,1Y,G
10	FIRE DETECTION ALARM SYSTEM	FDAS	500	230	0	2			15 AT, 3P, 230V, MCCB	2 - 2.0		PVC, 20	1R,1B
11	BOOSTER PUMP PANEL 1.0 HP	WPP	2300	230	0		8.00		40 AT, 3P, 230V, MCCB	2 - 8.0	+ G 5.5	PVC, 25	1B, 1Y,G
12	WATER PUMP PANEL 3.0 HP	WPP	2300	230	0			17.00	40 AT, 3P, 230V, MCCB	2 - 8.0	+ G 5.5	PVC, 25	1Y,1R,G
	SPARE												
	SPARE												
TOTAL			160960	230	238	159	168	169	600AT, 3P, 230V, MCCB	3-2- 175.0	+ G 3-80.0	RSC, 3-80	1R,1B,1Y, G

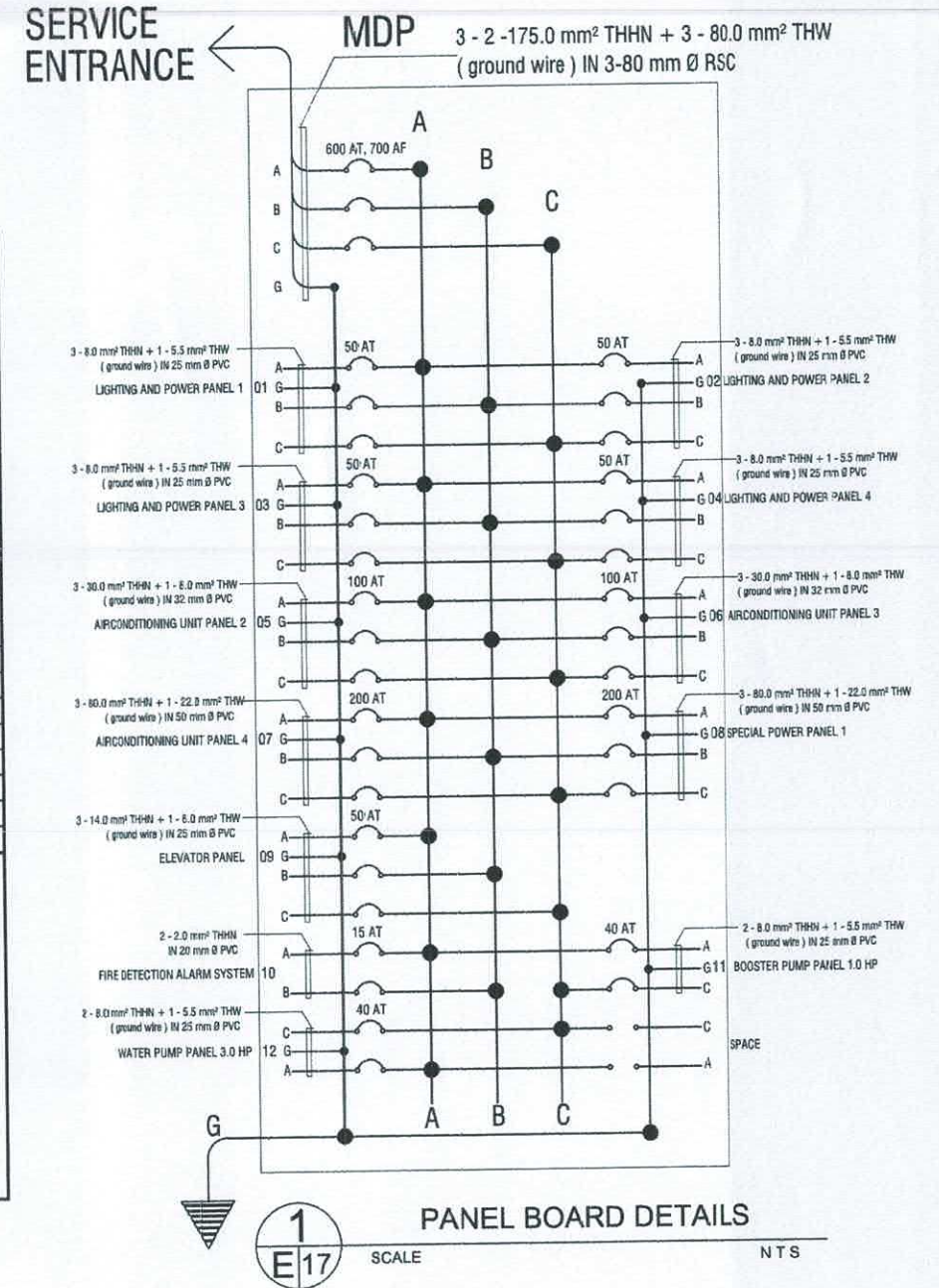
MAIN FEEDER and CURRENT PROTECTION COMPUTATION:

NOTE:  $I_{FL} = \frac{[(238 + (169 \times 1.732))]}{\sqrt{3}} \times DF = 530.71 \text{ Amperes}$   
 $I_{CB} = \frac{[(238 + (169 \times 1.732))]}{\sqrt{3}} \times DF = 530.71 \text{ Amperes}$

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

use: 3 - 2 - 175.0 SQMM THHN+ 3-80.0 SQMM THW IN 3 - 80 MM DIA. RSC  
 use: 600 AT, 700AF, 3P, 230V, MCCB

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.



1 PANEL BOARD DETAILS  
 E17 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	 E. J. GALVEZ DEAN COM	 R. J. R. SANCHEZ PROF. ELEC. ENGINEER	 S. B. BAYOT JR. HEAD PDU	 O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	 A. G. MAGCAWAS VPPD CVSU	 J. X. B. NEPOMUCENO VPASS CVSU	 H. D. ROBLES PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS



3-167 KVA POLE MOUNTED DISTRIBUTION TRANSFORMERS

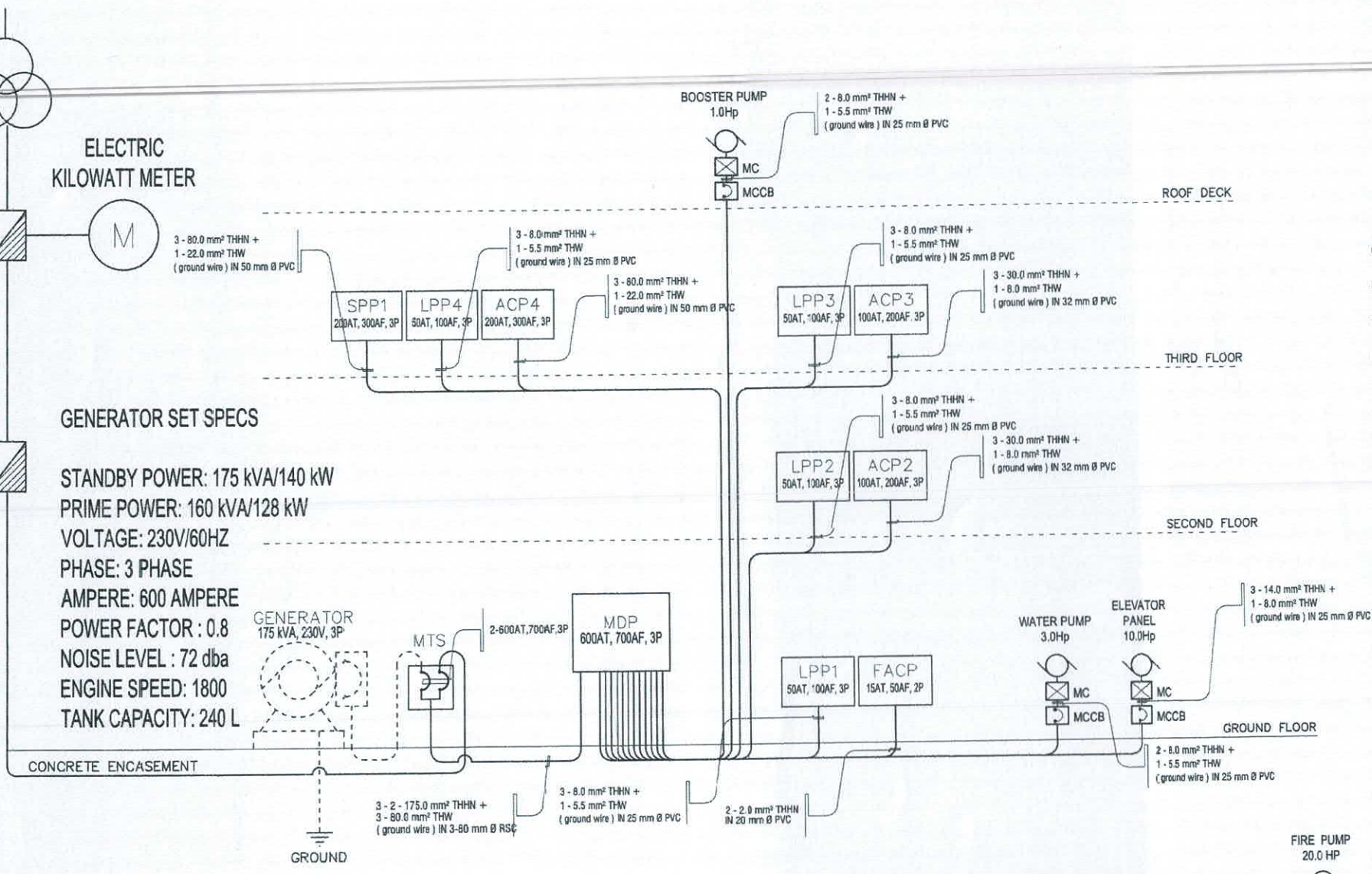
ELECTRIC KILOWATT METER

OUTDOOR CURRENT TRANSFORMER CABINET

DISCONNECTING SWITCH (CIRCUIT BREAKER WITH NEMA 3R PANEL ENCLOSURE)

GENERATOR SET SPECS

STANDBY POWER: 175 KVA/140 KW  
 PRIME POWER: 160 KVA/128 KW  
 VOLTAGE: 230V/60HZ  
 PHASE: 3 PHASE  
 AMPERE: 600 AMPERE  
 POWER FACTOR : 0.8  
 NOISE LEVEL : 72 dba  
 ENGINE SPEED: 1800  
 TANK CAPACITY: 240 L



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NOTE:  
 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  
E18

SINGLE LINE DIAGRAM

SCALE

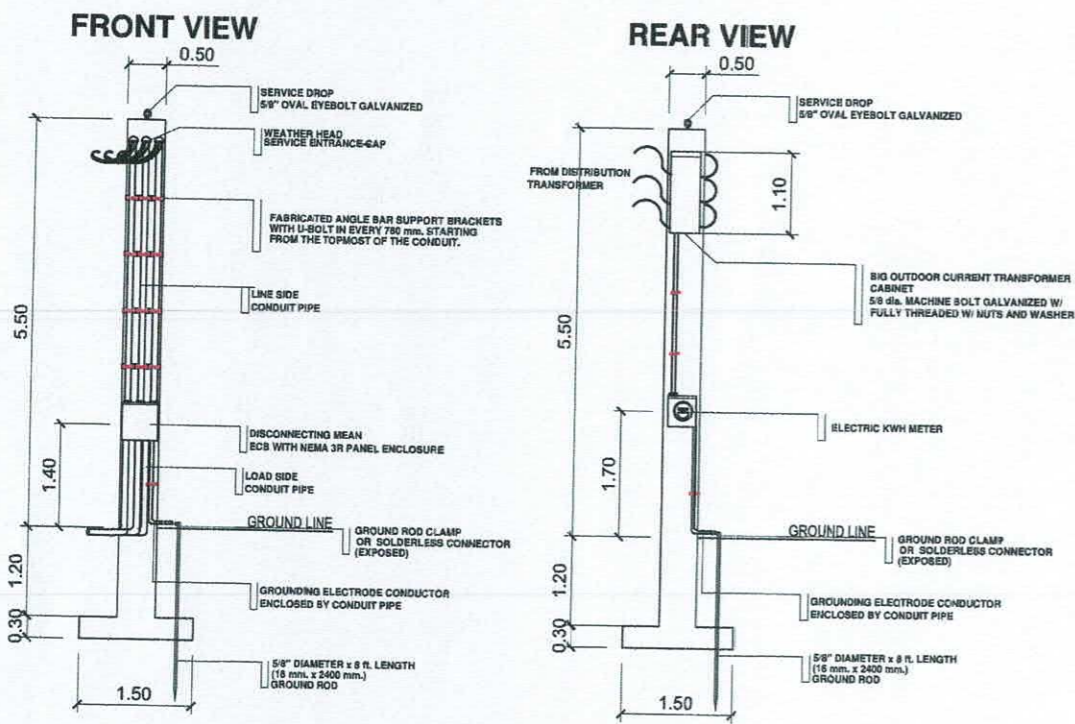
NTS

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO:
	R. J. R. SANCHEZ PDU VPPD	E. J. GALVEZ DEAN COM	R. P. REINA PROF. ELEC. ENGINEER	S. B. BAYOT JR. HEAD PDU	O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	A. G. MAGCAYAS VPPD CVSU	J. X. B. NEPOMUCENO VPASS CVSU	H. D. ROBLES PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS







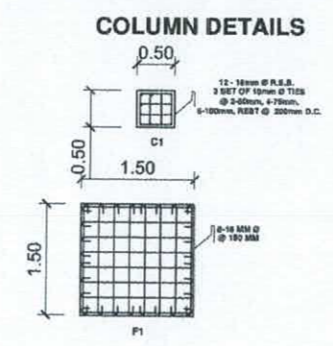


1 SERVICE ENTRANCE CONCRETE PEDESTAL DETAILS  
E/20 SCALE 1:40

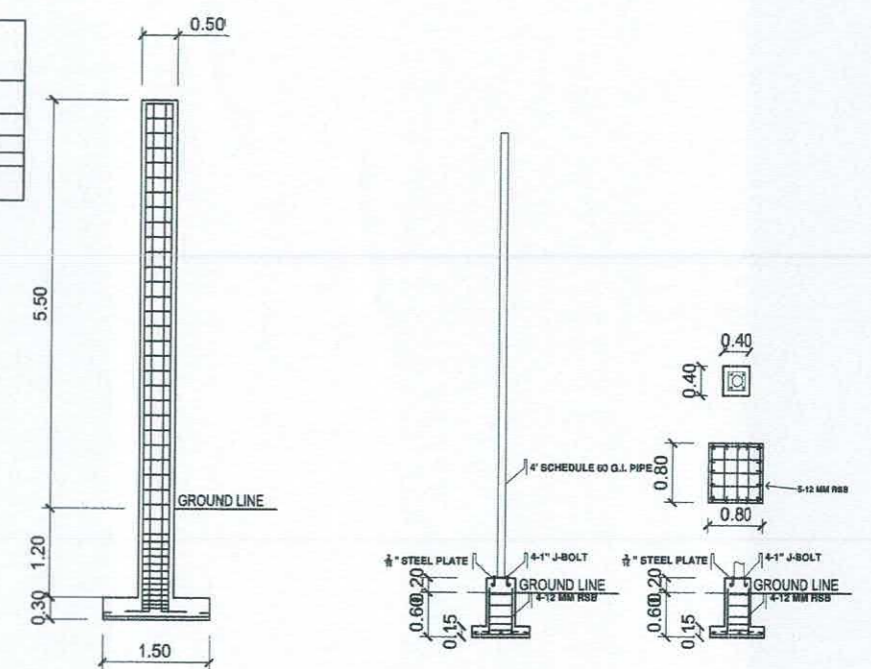
SCHEDULE OF FOOTINGS						
NAME	TYPE	THICKNESS	SIZE (LxW)	DEPTH	REINFORCEMENT	
					ALONG L	ALONG W
F1	ISOLATED	300 MM	1500 x 1500 MM	1500 MM	4-16 MM @ 200 MM	4-16 MM @ 200 MM

COLUMN	DIMENSION	REINFORCEMENT	NO. OF TIES & SPACING
C1	500 MM X 600 MM	12 - 16mm @ R.S.B.	3 SET OF 16mm @ TIES @ 2-60mm, 4-75mm, 6-100mm, REST @ 200mm O.C.



2 SERVICE ENTRANCE CONCRETE PEDESTAL (COLUMN AND FOOTING DETAILS)  
E/20 SCALE 1:40

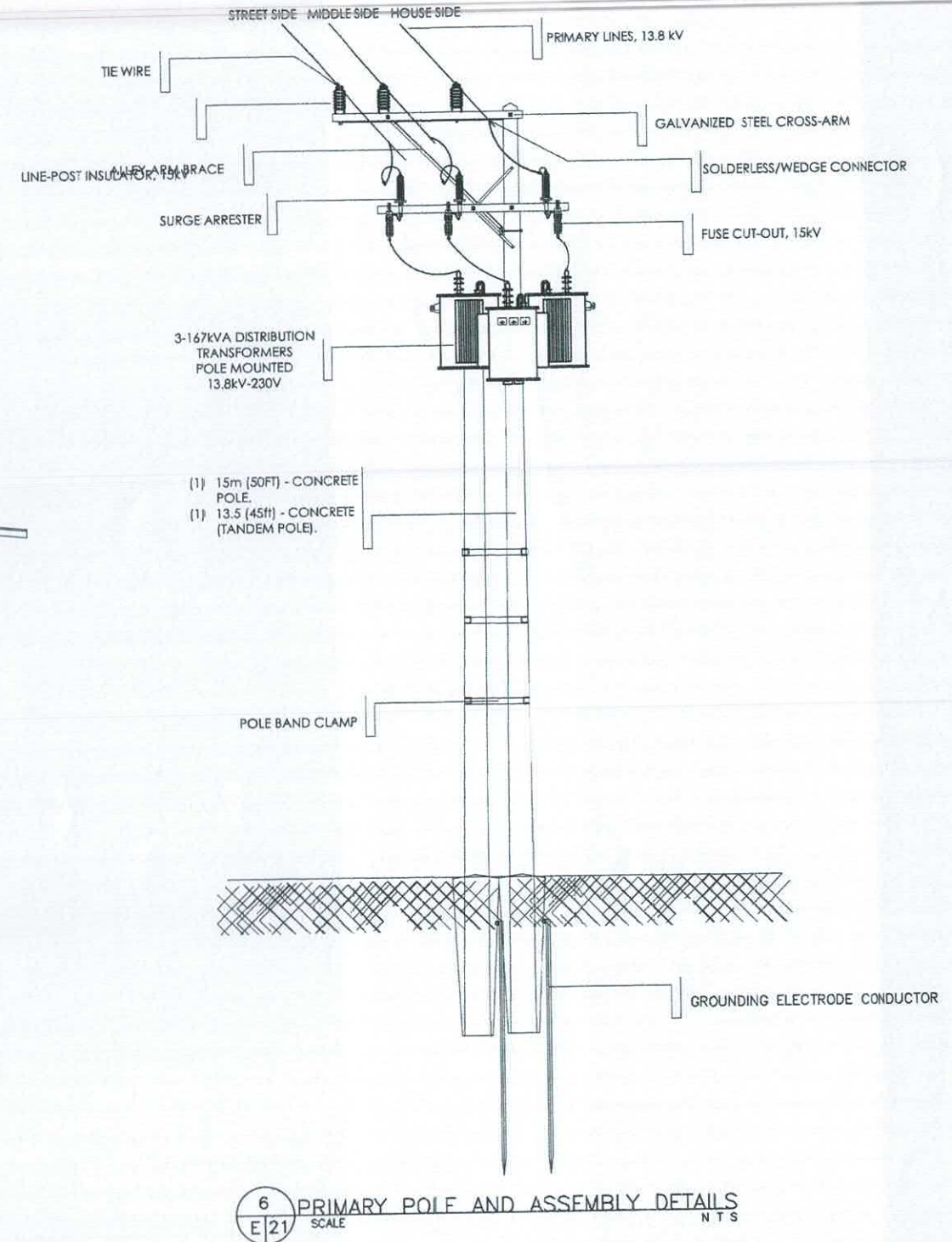
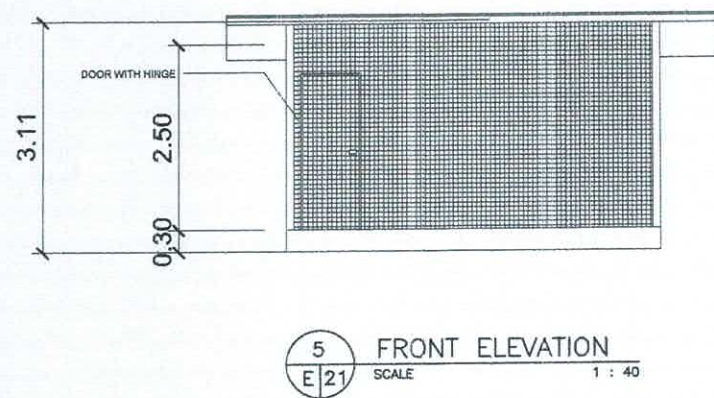
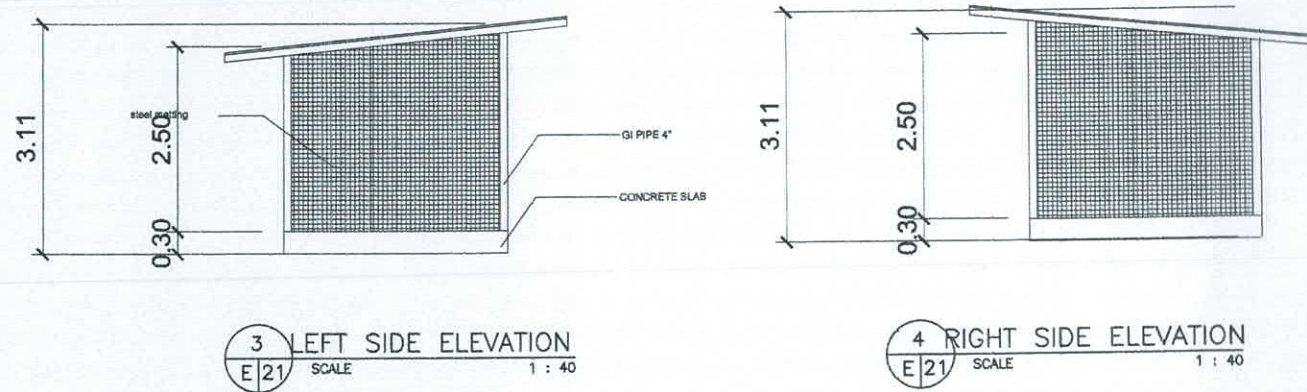
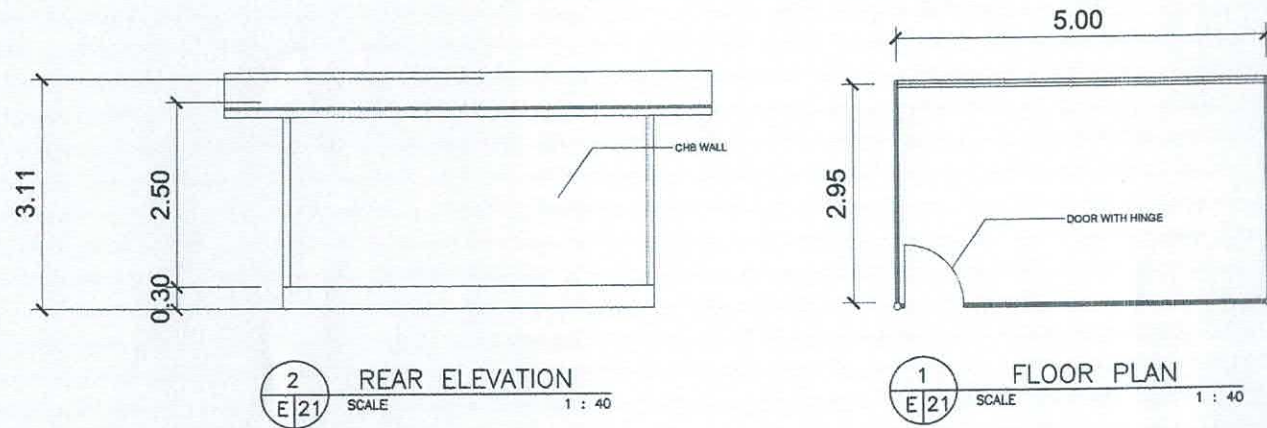


3 STEEL POST AND PEDESTAL DETAILS  
E/20 SCALE 1:40

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
	R. J. R. SANCHEZ PDU	E. J. GALVEZ DEAN COM	B. P. PIENA PROF. ELEC. ENGINEER	S. B. BAYOT JR. HEAD PDU	O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	A. G. MAGCAYAS VPPD CVSU	J. X. B. NEPOMUCENO VPASS CVSU	H. D. ROBLES PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS

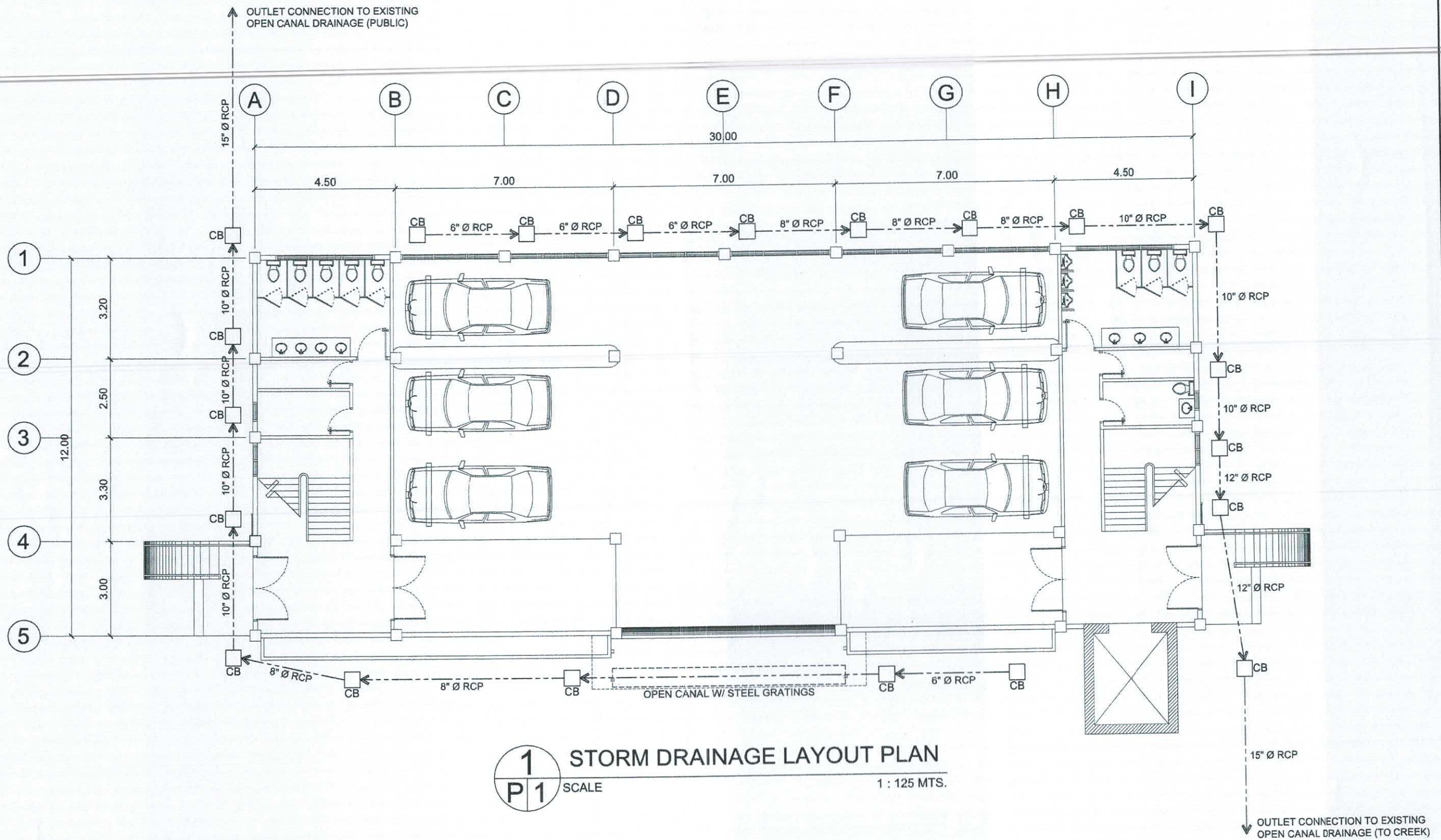


# GENERATOR SET HOUSING




	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO:
	R. J. R. SANCHEZ PDU	E. J. GALVEZ DEAN COM	R. P. PERA PROF. ELEC. ENGINEER	S. B. BAYOT JR. HEAD PDU	O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	A. G. MAGCAWAS VPPD CVSU	J. X. B. NEPOMUCENO VPASS CVSU	H. D. ROBLES BRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS

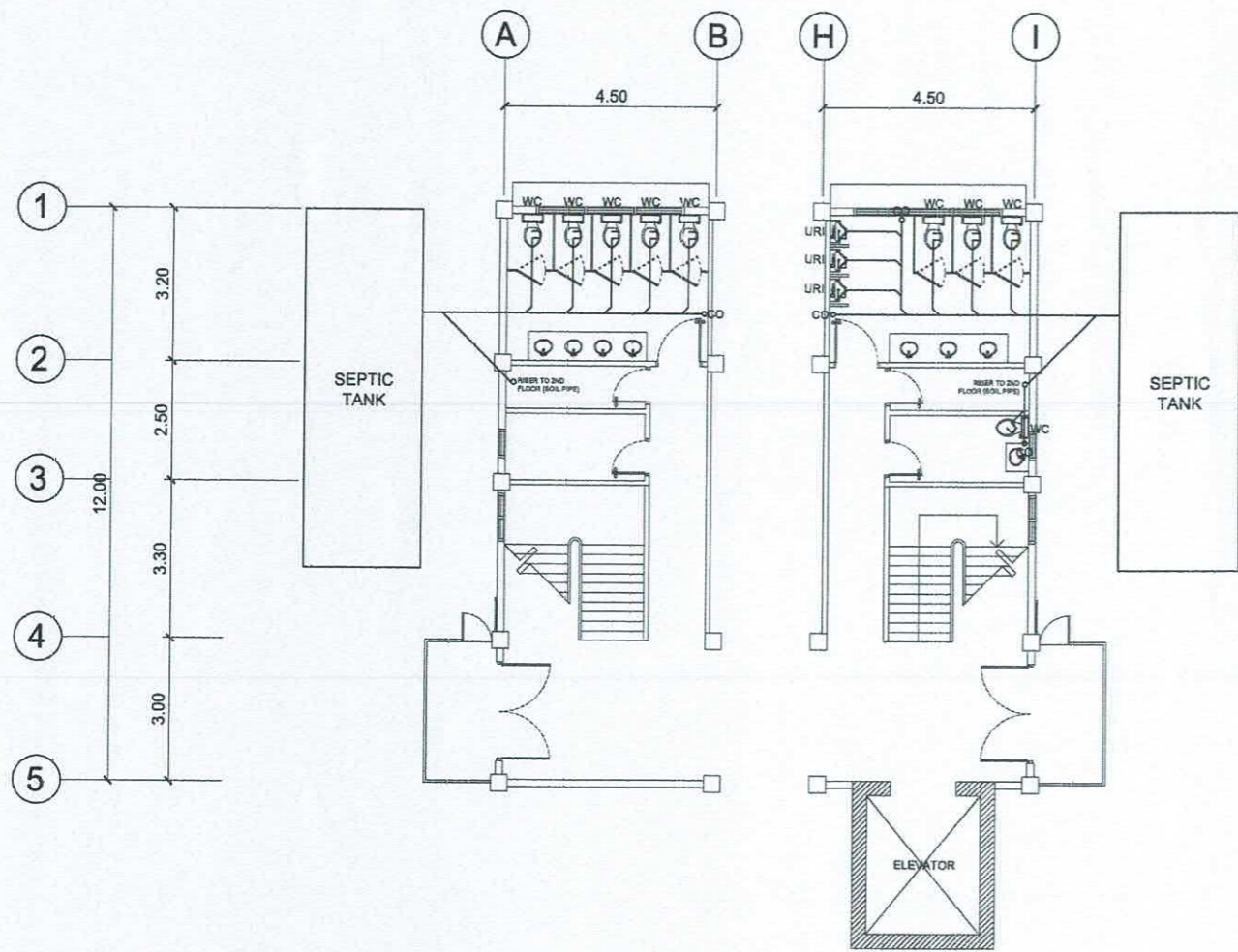




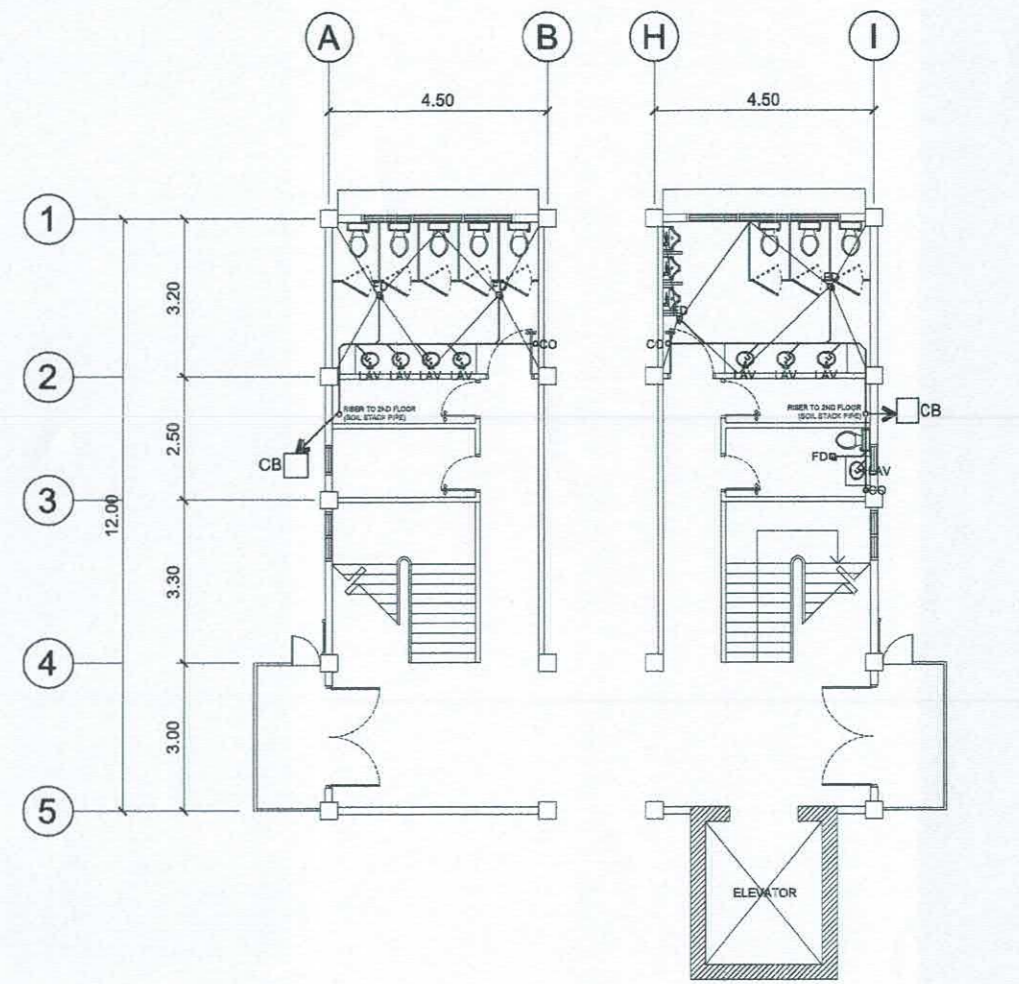
**1** STORM DRAINAGE LAYOUT PLAN  
 SCALE 1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO:
	J. D. ESCANO PDU <i>[Signature]</i>	E. J. GALVEZ DEAN <i>[Signature]</i>		S. B. BAYOT JR. HEAD PDU <i>[Signature]</i>	Q. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE <i>[Signature]</i>	A. G. MAGCAWAS VPPD <i>[Signature]</i>	J. X. B. NEPOMUCENO CVSU VPASS <i>[Signature]</i>	H. D. ROBLES CVSU PRES <i>[Signature]</i>	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS





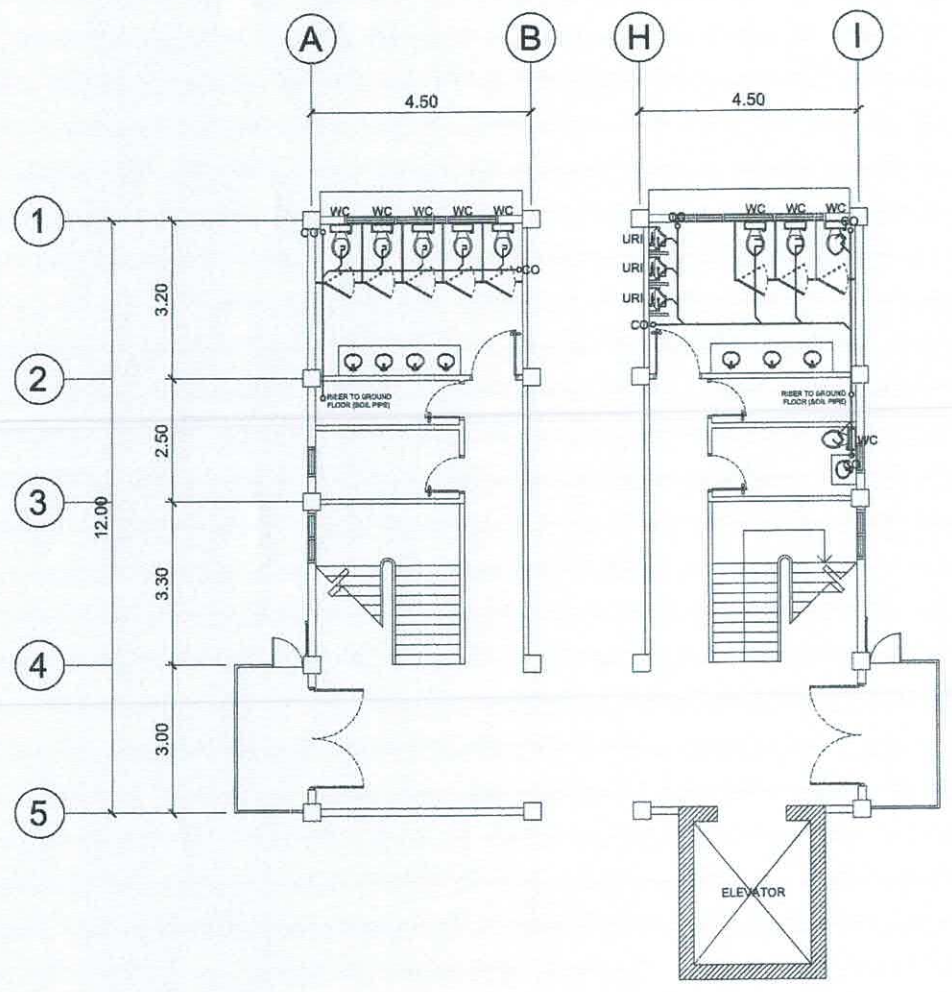
**1**  
P2  
SCALE 1: 150 MTS.  
GROUND FLOOR SANITARY SEWER LINE LAYOUT



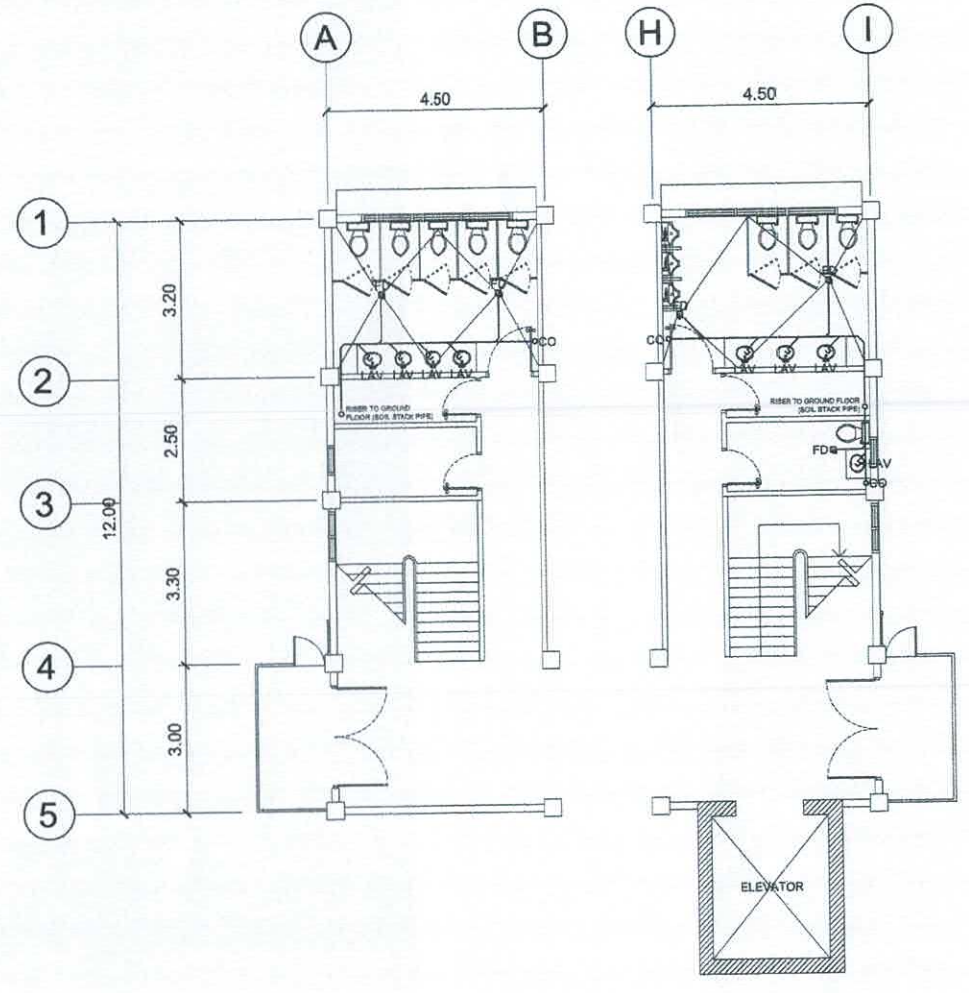
**2**  
P2  
SCALE 1: 150 MTS.  
GROUND FLOOR SEWER LINE DRAINAGE LAYOUT

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
	 <b>J. D. ESCANO</b> PDU OVPPD	 <b>E. J. GALVEZ</b> DEAN COM		 <b>S. B. BAYOT JR.</b> HEAD PDU	 <b>O. B. DELOS REYES</b> DIRECTOR PLANNING AND DEVT. OFFICE	 <b>A. G. MAGCAWAS</b> VPPD CVSU	 <b>J. X. B. NEPOMUCENO</b> VPASS CVSU	 <b>H. D. ROBLES</b> PDES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS


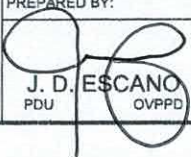
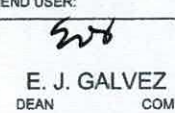
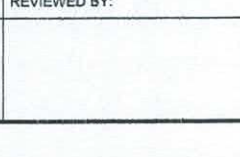
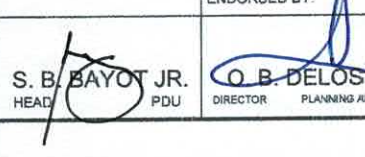
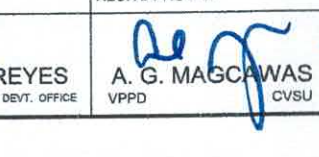
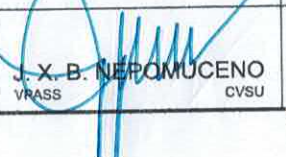
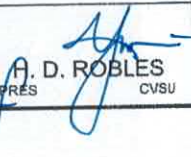




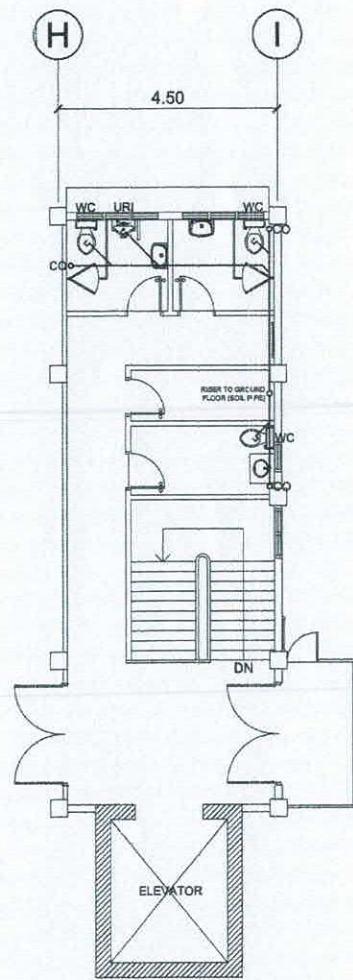
**1** TYP. 2ND & 3RD FLOOR SANITARY SEWER LAYOUT  
 P3 SCALE 1 : 150 MTS.



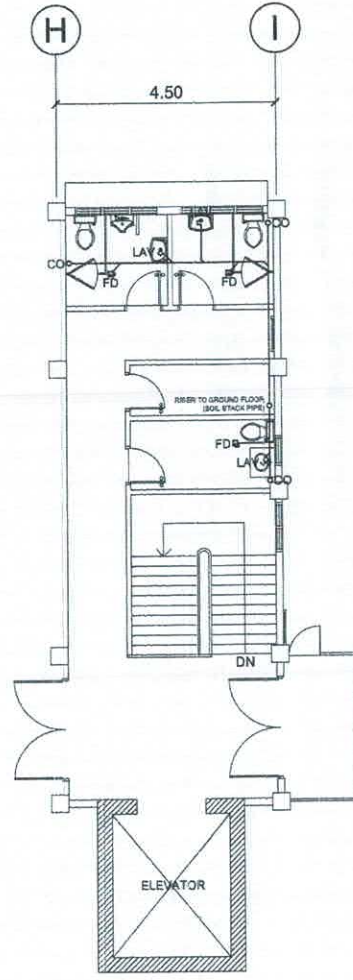
**2** TYP. 2ND & 3RD FLOOR SEWER LINE DRAINAGE LAYOUT  
 P3 SCALE 1 : 150 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO:
	J. D. ESCANO PDU 	E. J. GALVEZ DEAN 		S. B. BAYOT JR. HEAD 	O. B. DELOSREYES DIRECTOR 	A. G. MAGCAWAS VPPD 	J. X. B. NEPOMUCENO VRASS 	A. D. ROBLES PRES 	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS

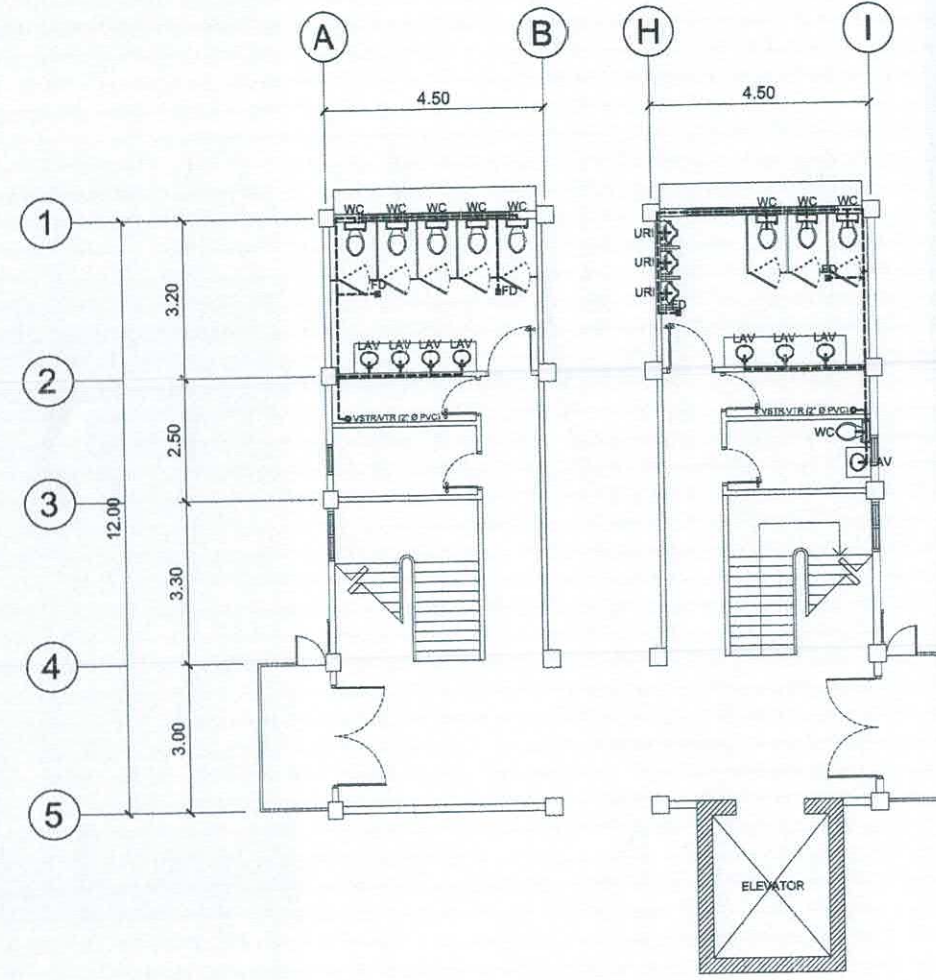





**1**  
P4 SCALE 1: 150 MTS.  
ROOF DECK SANITARY SEWER LAYOUT



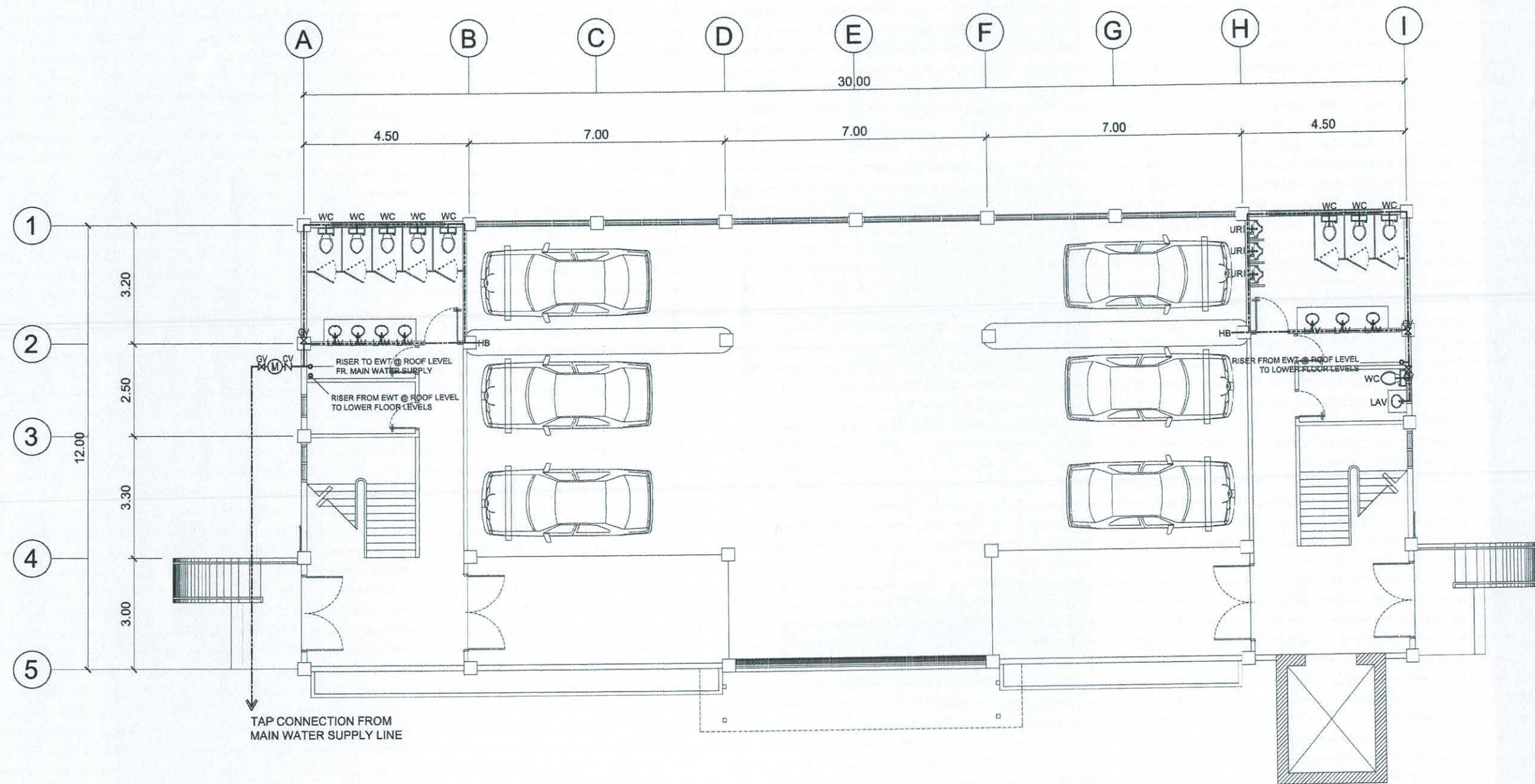
**2**  
P4 SCALE 1: 150 MTS.  
ROOF DECK SEWER LINE DRAINAGE LAYOUT



**3**  
P4 SCALE 1: 150 MTS.  
VENTILATION LINE LAYOUT (TYPICAL PLAN)

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO:
	J. D. ESCANO PDU OVPPD	E. J. GALVEZ DEAN COM		S. B. BAYOT JR. HEAD PDU	O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	A. G. MAGCAWAS VPPD CVSU	J. X. B. NEFOMUCENO VPASS CVSU	H. D. ROBLES PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS





1  
P5

GROUND FLOOR WATER SUPPLY LAYOUT





SCALE

1 : 125 MTS.

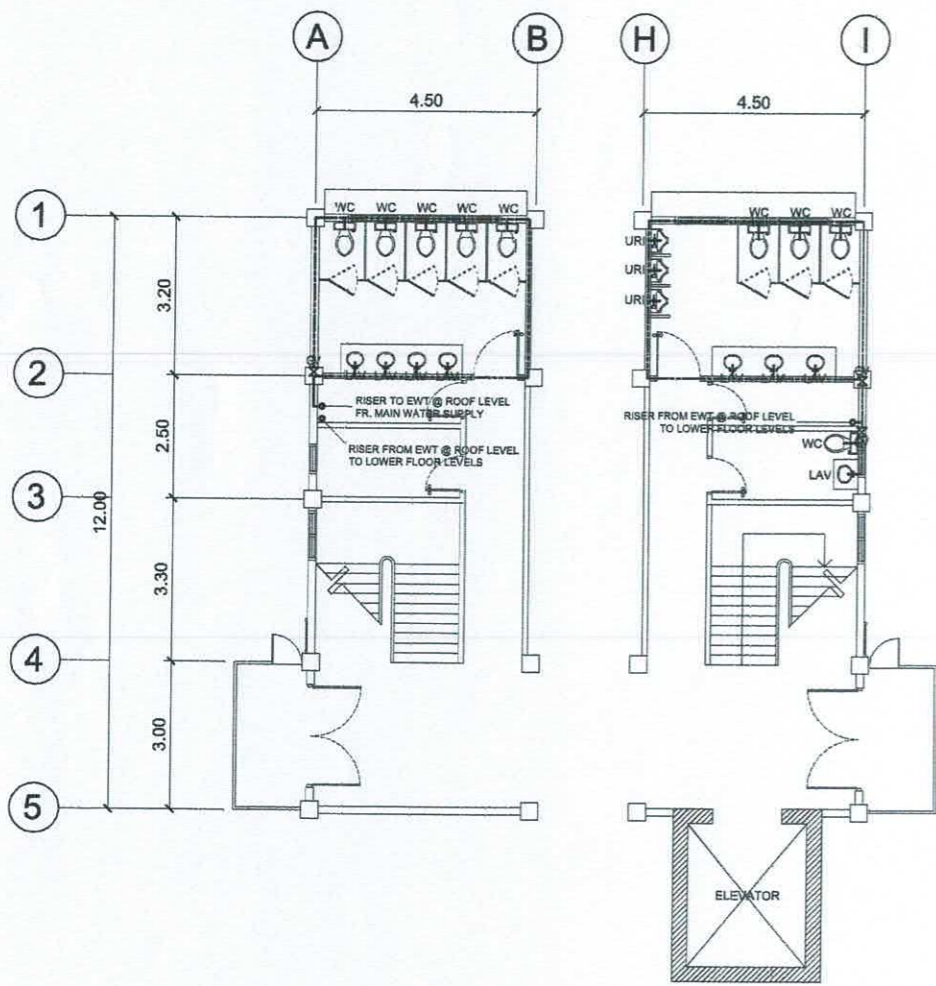
	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO:
	 <b>J. D. ESCANO</b> PDU OVPPD	 <b>E. J. GALVEZ</b> DEAN COM		 <b>S. B. BAYOT JR.</b> HEAD PDU	 <b>O. B. DELOS REYES</b> DIRECTOR PLANNING AND DEVT. OFFICE	 <b>A. G. MAGCAWAS</b> VPPD CVSU	 <b>J. X. B. NEROMUCENO</b> VPASS CVSU	 <b>H. D. ROBLES</b> PDEP CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS



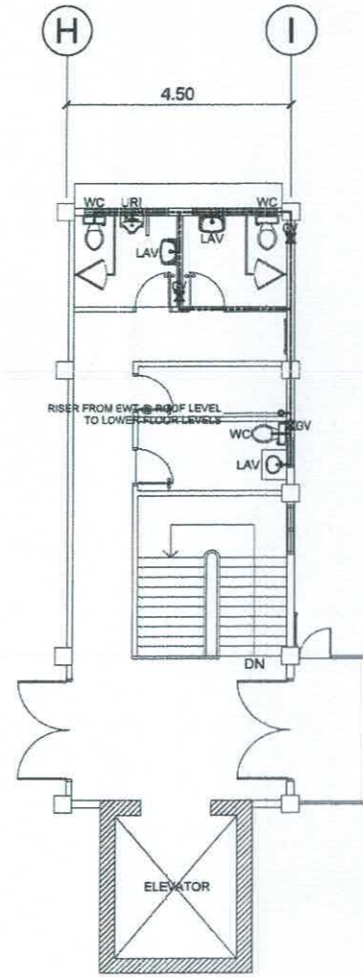
# PLUMBING LEGENDS

-  PVC ORANGE PIPE WASTE LINE
-  PVC ORANGE PIPE DRAINAGE LINE
-  PPR PIPE COLD WATER LINE
-  CONCRETE PIPE DRAINAGE LINE
- WC** WATER CLOSET W/ HAND HELD BIDET SPRAY
- LAV** COUNTER TOP LAVATORY

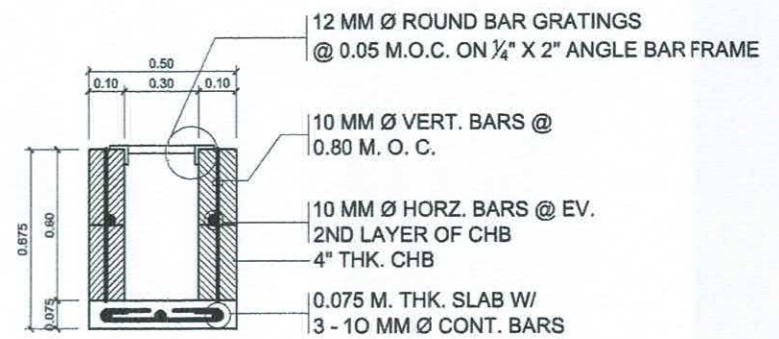
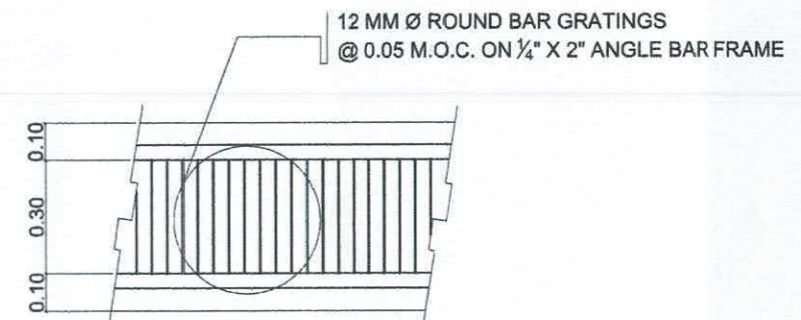
- URI** WATER URINAL
- HB** HOSE BIBB
- CB** CATCH BASIN
- CO** CLEAN OUT
- FD** FLOOR DRAIN
- GV** GATE VALVE
- CV** CHECK VALVE
- M** WATER METER




**1** TYP. 2ND & 3RD FLOOR WATER SUPPLY LAYOUT  
**P/6** SCALE 1: 150 MTS.



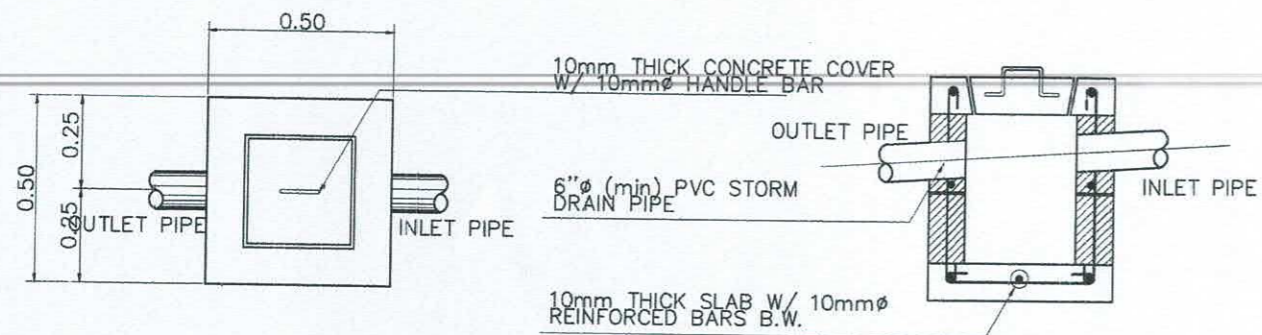
**2** ROOF DECK WATER SUPPLY LAYOUT  
**P/6** SCALE 1: 150 MTS.



**3** DETAILS OF OPEN CANAL W/ STEEL GRATINGS  
**P/6** SCALE N. T. S.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
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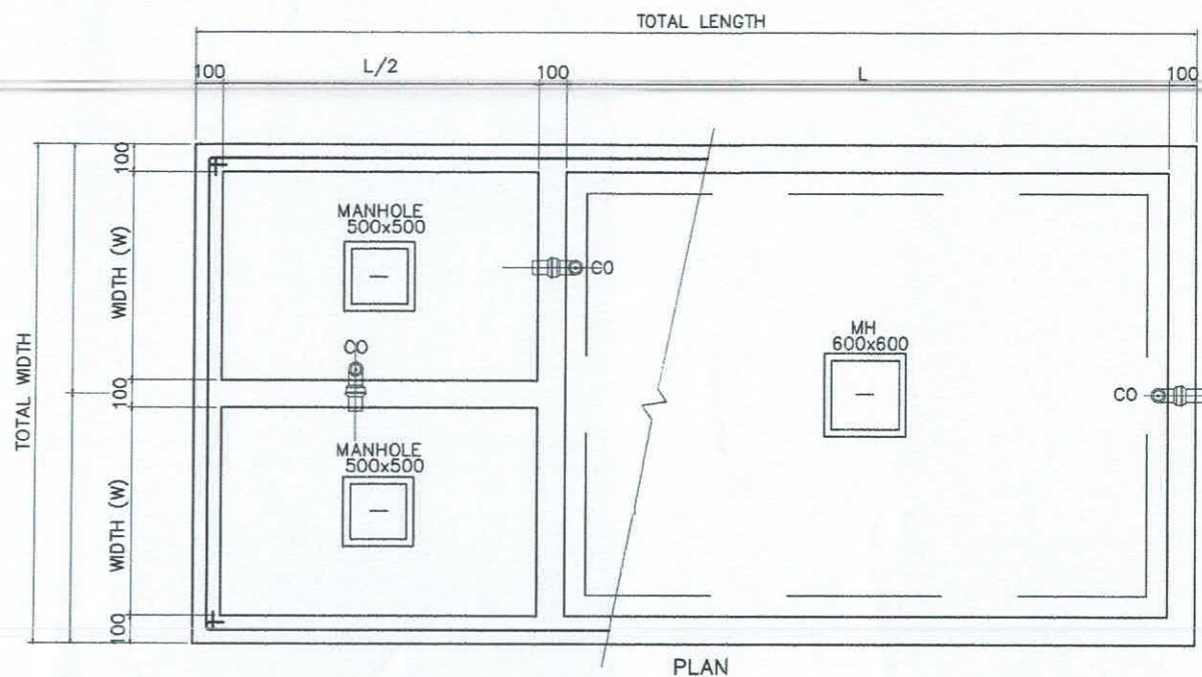


1  
P7

**CATCH BASIN/JUNCTION BOX DETAILS**

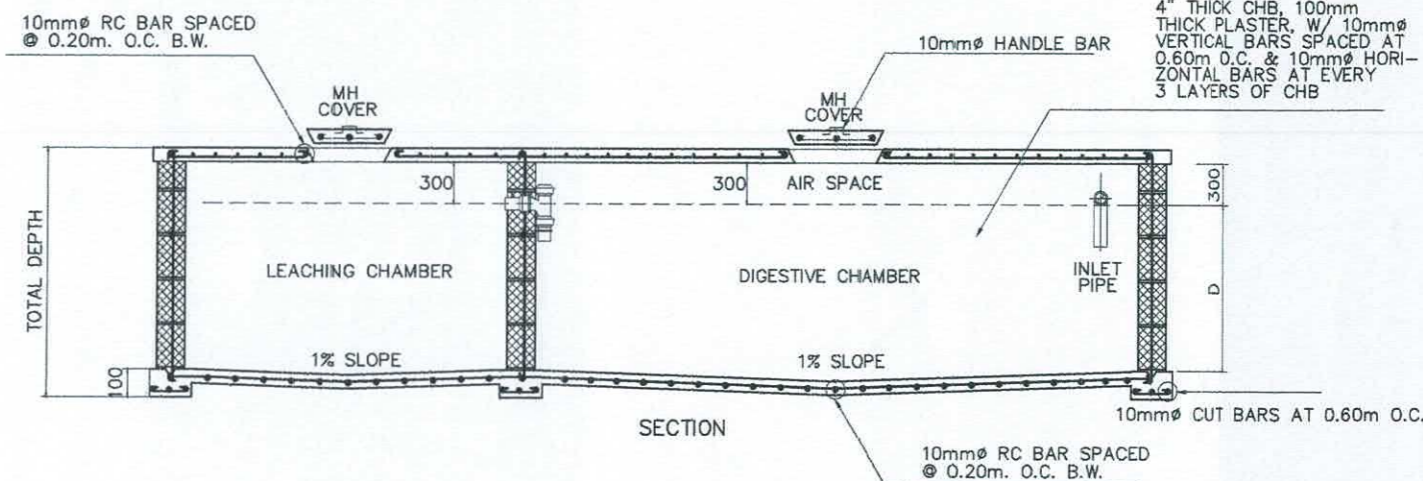
SCALE

N. T. S.



PLAN

1. ALL PLUMBING WORKS INCLUDED HEREIN SHALL BE EXECUTED ACCORDING TO THE PROVISIONS OF THE PHIL. PLUMBING CODE. THE NATIONAL PLUMBING CODE & THE RULES & REGULATIONS OF INDANG , CAVITE.
2. COORDINATE THE DRAWING WITH OTHER RELATED DRAWINGS AND SPECIFICATION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DICREPANCY FOUND THEREIN.
3. ALL PIPES SHALL BE INSTALLED AS INDICATED ON PLANS. ANY RELOCATIONS REQUIRED FOR PROPER EXECUTION OF OTHER TRADE SHALL BE WITH PRIOR APPROVAL OF THE ARCHITECHT OR ENGINEER.
4. PROPOSED SANITARY UTILITIES SHALL CONFORM TO THE ACTUAL LOCATION, DEPTH AND INVERT ELEVATION OF ALL EXISTING PIPES AND STRUCTURES AS VERIFIED BY THE CONTRACTOR. APPROVED EQUAL.
5. ALL SLOPES FOR HORIZONTAL DRAINAGE SHALL MAINTAIN 1% UNLESS OTHERWISE SPECIFIED.
6. SIZE OF WATER SUPPLY PIPES TO FIXTURES SHALL BE IN ACCORDANCE WITH WITH THE MANUFACTURER'S INSTRUCTIONS.
7. THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES AT SITE, COORDINATE THE WORKS WITH THE SEWER LINE EFFLUENT DISPOSAL POINT AND WATER LINE SERVICE CONNECTING POINT UNLESS OTHERWISE SPECIFIED.
8. ALL PIPE SIZES ARE IN MILLIMETERS AND ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.



SECTION

SEPTIC TANK DIMENSION					
LENGTH (L)	L/2	TOTAL LENGTH	WIDTH (W)	TOTAL WIDTH	DEPTH (D)
5000 MM	2500 MM	7500 MM	1250 MM	2500 MM	1500 MM

2  
P7

**PLUMBING NOTES**

SCALE

N. T. S.

3  
P7

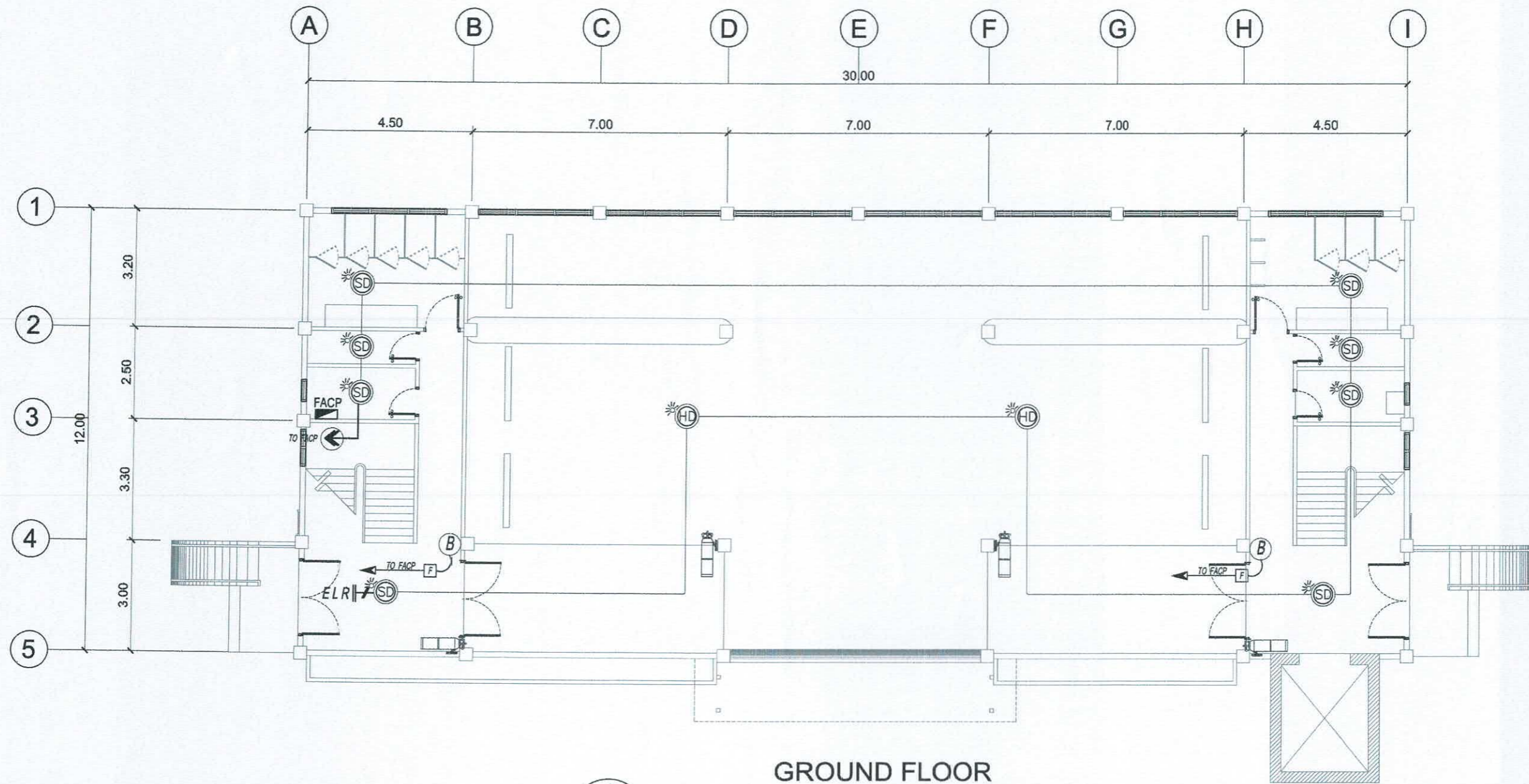
**DETAILS OF SEPTIC TANK**

SCALE

N. T. S.

PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:	
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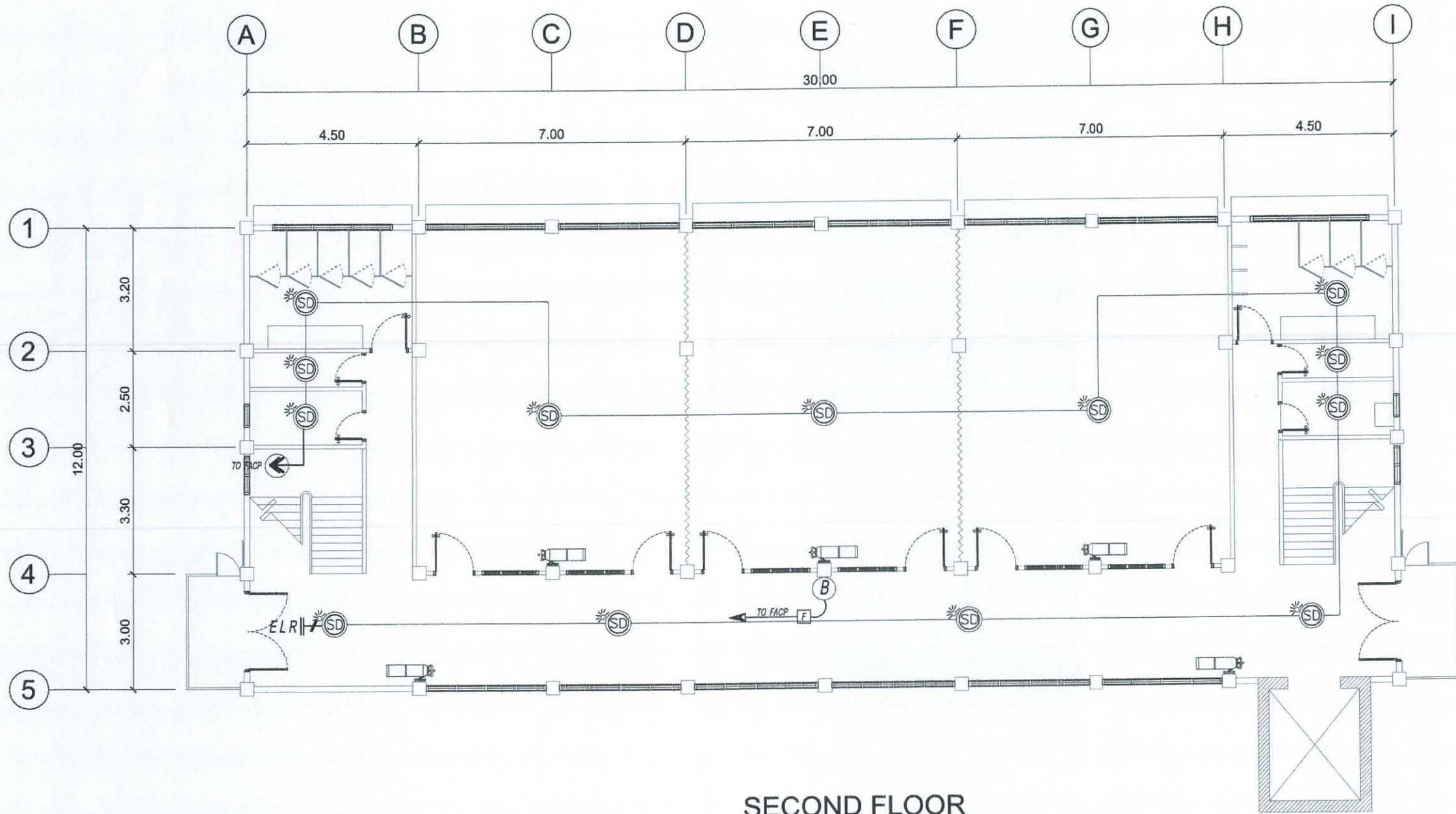






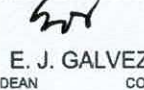
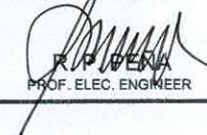
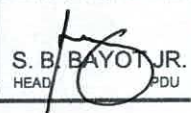
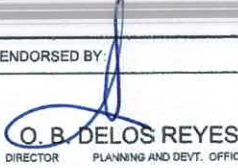

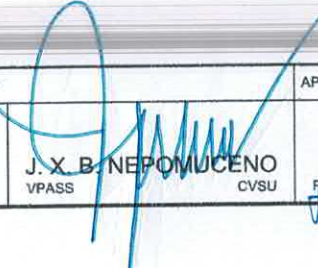

**GROUND FLOOR**  
**1 FIRE DETECTION AND ALARM SYSTEM**  
 EC 1 SCALE 1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO:
	J. D. ESCANO PDU	E. J. GALVEZ DEAN COM	R. P. PEÑA PROF. ELEC. ENGINEER	S. B. BAYOT JR. HEAD PDU	O. B. DELLOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	A. G. MAGCAWAS VPPD CVSU	J. X. B. NEPOMUCENO VPASS CVSU	H. D. ROBLES PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS

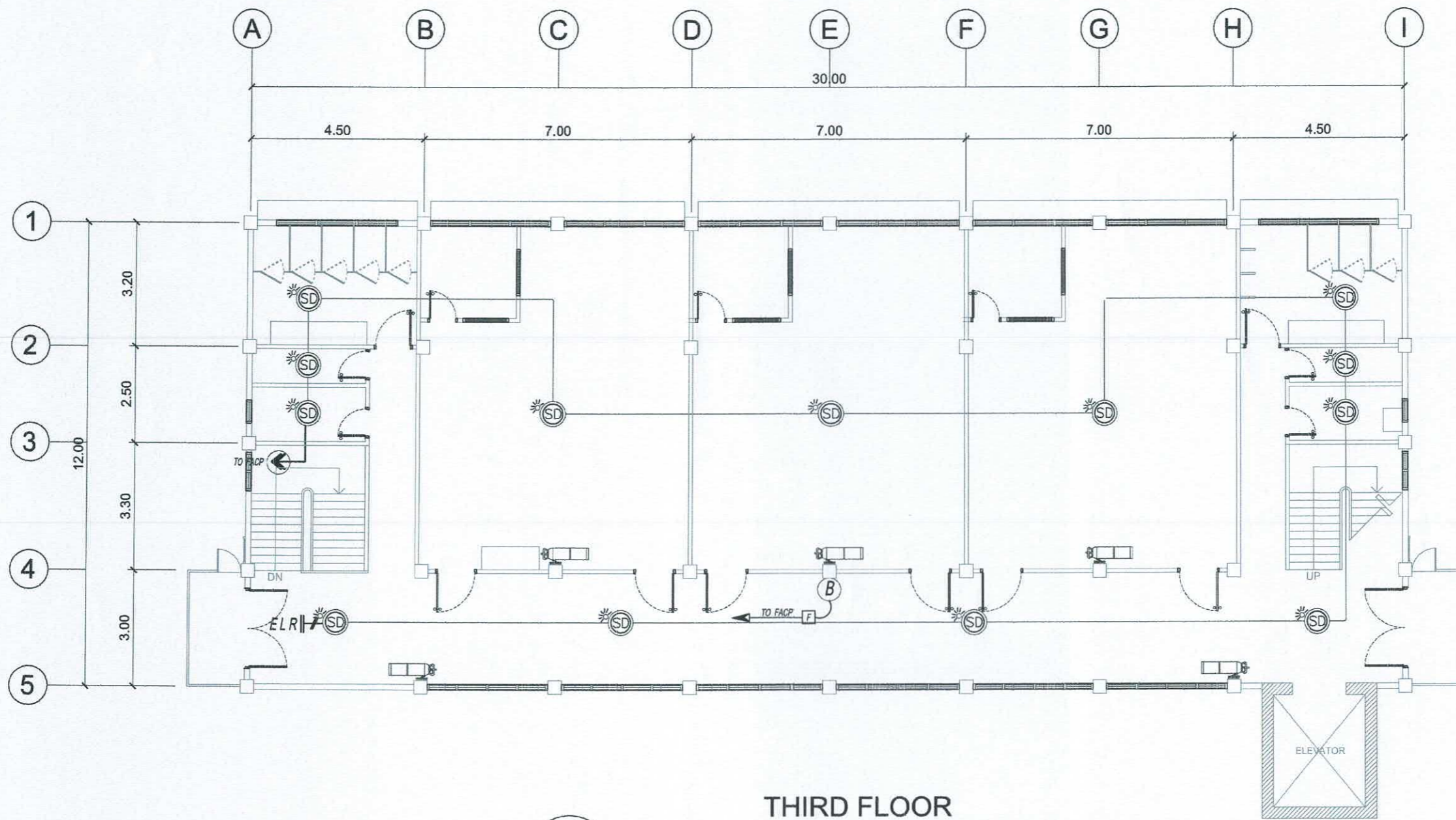




**1**  
**SECOND FLOOR**  
**FIRE DETECTION AND ALARM SYSTEM**  
 EC 2 SCALE 1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
	 <b>J. D. ESCANO</b> PDU OVPPD	 <b>E. J. GALVEZ</b> DEAN COM	 <b>R. P. VERA</b> PROF. ELEC. ENGINEER	 <b>S. B. BAYOT JR.</b> HEAD PDU	 <b>O. B. DELOS REYES</b> DIRECTOR PLANNING AND DEVT. OFFICE	 <b>A. G. MAGCAWAS</b> VPPD CVSU	 <b>J. X. B. NEPOMUCENO</b> VPASS CVSU	 <b>H. D. ROBLES</b> PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS

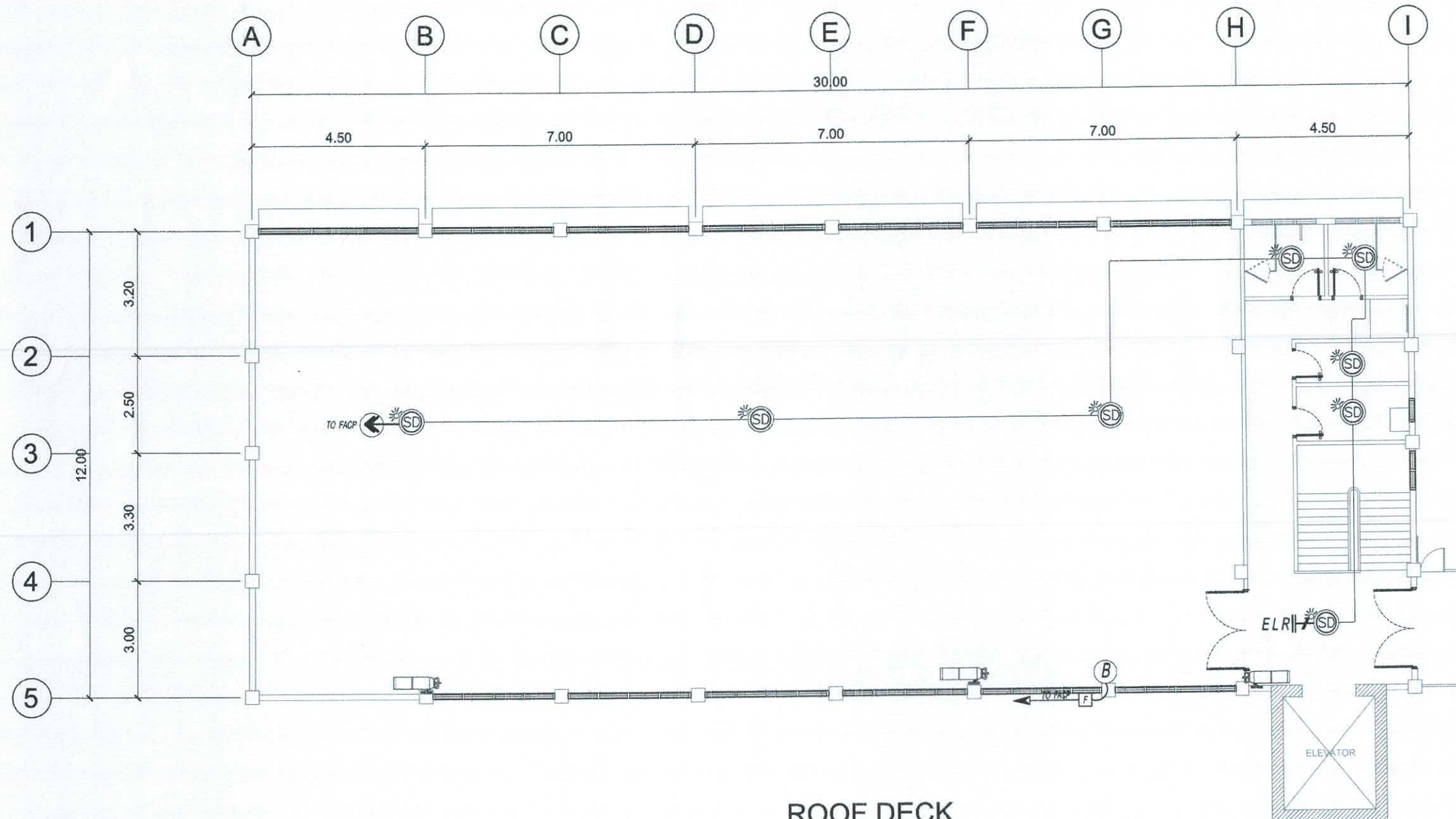




**1**  
**THIRD FLOOR**  
**FIRE DETECTION AND ALARM SYSTEM**  
 EC 3 SCALE 1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO:
	J. D. ESCANO PDU	E. J. GALVEZ DEAN COM	R. P. PEÑA PROF. ELEC. ENGINEER	S. B. BAYOT JR. HEAD PDU	O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	A. G. MAGCAYAS VPPD CVSU	J. X. B. NEPOMUCENO VPASS CVSU	H. D. ROBLES PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS





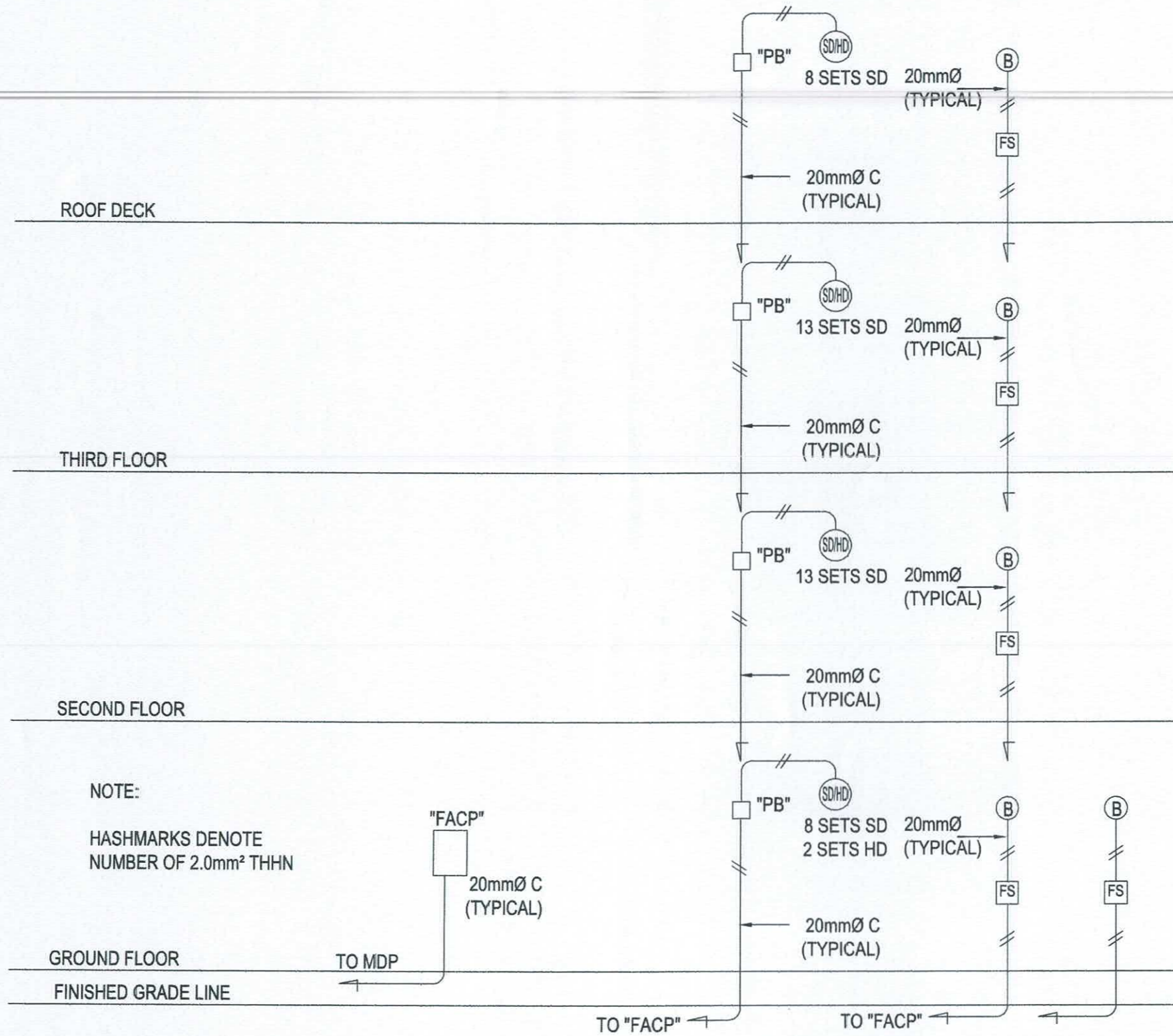
**1**  
EC 4

**ROOF DECK  
FIRE DETECTION AND ALARM SYSTEM**

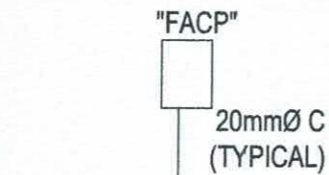
SCALE 1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
	J. D. ESCANO PDU OVPPD	E. J. GALVEZ DEAN COM	R. P. BERA PROF. ELEC. ENGINEER	S. B. BAYOT JR. HEAD PDU	O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	A. G. MAGCAYAS VPPD CVSU	J. X. B. NEPOMUCENO VPASS CVSU	H. D. ROBLES PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS





NOTE:  
HASHMARKS DENOTE  
NUMBER OF 2.0mm<sup>2</sup> THHN



1  
EC 5

**FIRE ALARM SYSTEM RISER DIAGRAM (FDAS)**  
(SHOWING MANUAL STATIONS, BELLS AND SMOKE DETECTORS)

SCALE

NTS

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	 <b>J. D. ESCANO</b> PDU OVPPD	 <b>E. J. GALVEZ</b> DEAN COM	 <b>R. P. PEÑA</b> PROF. ELEC. ENGINEER	 <b>S. B. BAYOT JR.</b> HEAD PDU	 <b>O. B. DELOS REYES</b> DIRECTOR PLANNING AND DEVT. OFFICE	 <b>A. G. MAGCAWAS</b> VPPD CVSU	 <b>J. X. B. NEPOMUCENO</b> VRASS CVSU	 <b>H. D. ROBLES</b> PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS



**GENERAL NOTES AND SPECIFICATIONS:**

FIRE ALARM SYSTEM SHALL BE FULLY ADDRESSABLE TYPE WITH CLASS A WIRING FOR RISER.

THE COMPLETE FIRE ALARM SYSTEM SHALL BE FURNISHED/INSTALLED BY FIRE ALARM CONTRACTOR COMPLETE SYSTEM FOR OPERATION INCLUDING EQUIPMENT AND WIRINGS.

- a. SMOKE DETECTION ( RECONFIRMATION )
- b. MANUAL PULL STATION.

THE FIRE ALARM RISER DIAGRAM CAN BE MODIFY BY CONTRACTOR/SUPPLIER TO SUIT WITH THE SUPPLIED EQUIPMENT. ADDITIONAL SMOKE DETECTOR SHALL BE PROVIDED BY TENANT WHICH WILL INCLUDE WIRING AND CONDUIT FOR ADDITIONAL ADDRESSABLE CONTROL DEVICES IN THE FDAS CONTROL PANEL.

FDAS SUPPLIER/CONTRACTOR SHALL BE PROPERLY COORDINATED IN ANY CHANGES IN THE SMOKE DETECTOR LAYOUT AS WELL AS WIRING CONNECTIONS.

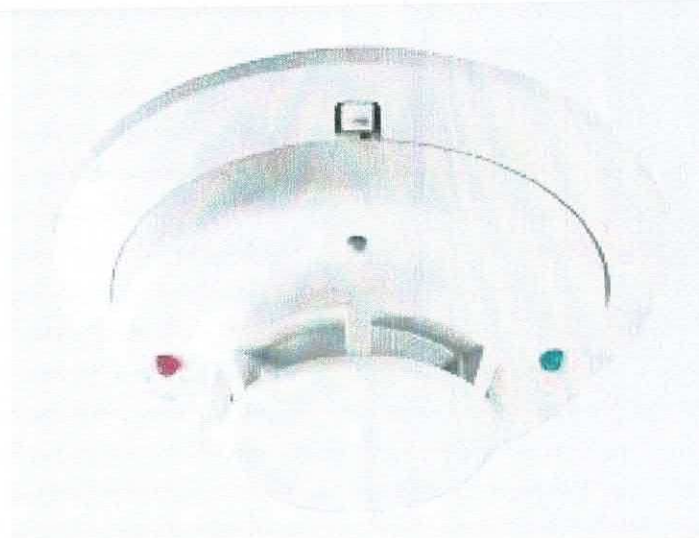
WIRING SHALL BE UNSHIELDED 2.0mm<sup>2</sup> THHN FDAS CABLE IN 20mm $\phi$  PVC PIPE.



**LEGEND AND SYMBOLS:**

SYMBOL	DESCRIPTIONS
	SMOKE DETECTOR
	HEAT DETECTOR
	FIRE ALARM MANUAL STATION
	FIRE ALARM BELL OUTLET
	HOMERUN TO FACP
	END OF LINE RESISTOR - ELR
	FIRE ALARM CONTROL PANEL
	2-2.0 mm <sup>2</sup> , THHN 20 mm $\phi$ C.

**1 FIRE ALARM BELL**  
EC 6 SCALE NTS

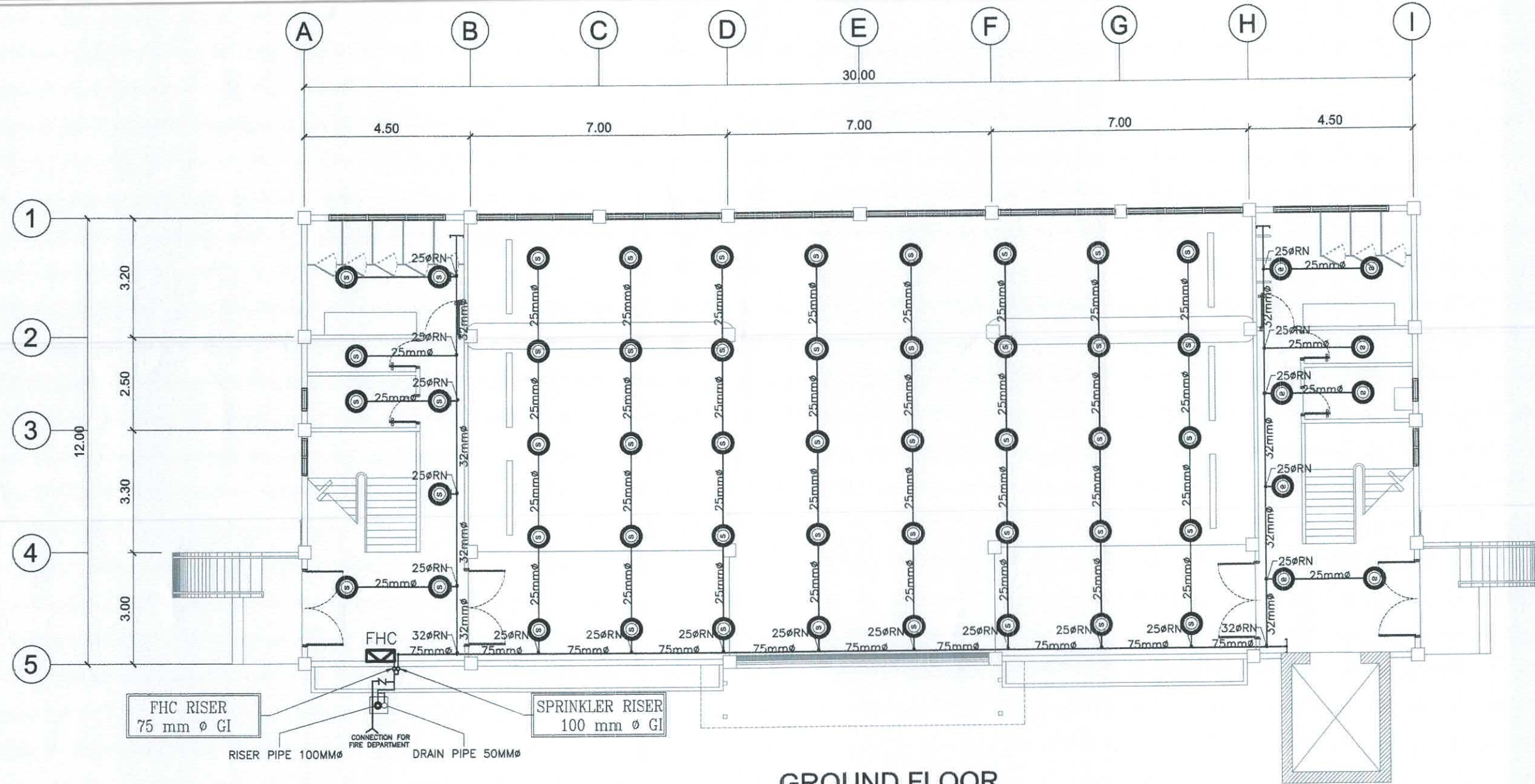


**3 FIRE ALARM MANUAL STATION (FS)**  
EC 6 SCALE NTS

**2 SMOKE DETECTOR**  
EC 6 SCALE NTS

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	J. D. ESCANO PDU	E. J. GALVEZ DEAN	R. P. PERA PROF. ELEC. ENGINEER	S. E. BAYOT JR. HEAD PDU	O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	A. G. MAGCAWAS VPPD	J. X. B. NEPOMUCENO VPASS	H. B. ROBLES PRES	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS





**GROUND FLOOR  
SPRINKLER AND FHC LAYOUT**

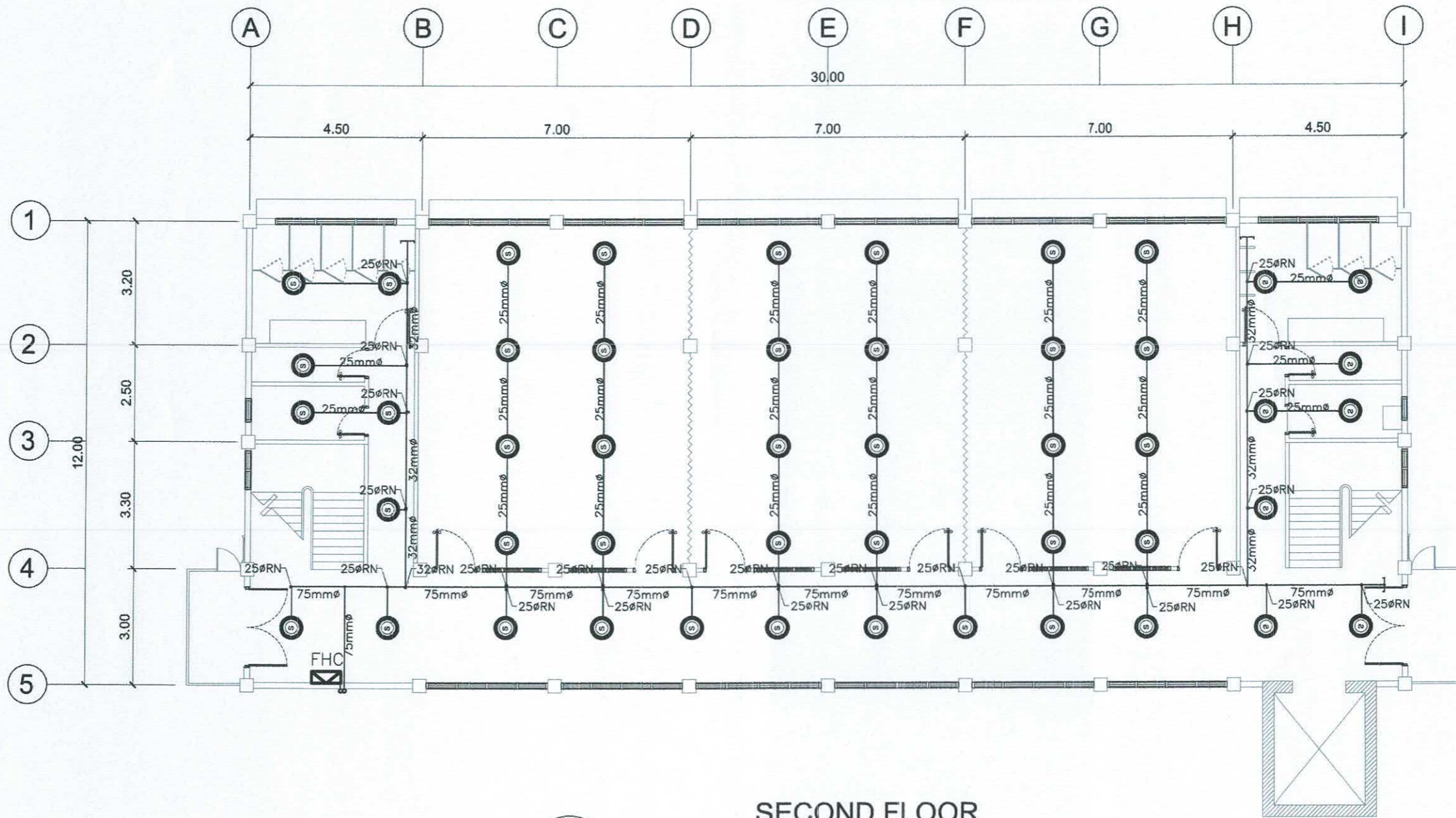


SCALE

1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:	
	 <b>J. D. ESCANO</b> <small>PDU OVPPD</small>	 <b>E. J. GALVEZ</b> <small>DEAN COM</small>	 <b>R. P. PENA</b> <small>PROF. ELEC. ENGINEER</small>	 <b>S. B. BAYOT JR.</b> <small>HEAD PDU</small>	 <b>O. B. DELOS REYES</b> <small>DIRECTOR PLANNING AND DEVT. OFFICE</small>	 <b>A. G. MAGCAWAS</b> <small>VPPD CVSU</small>	 <b>J. X. B. NEPOMUCENO</b> <small>VPASS CVSU</small>	 <b>H. D. ROBLES</b> <small>PRES CVSU</small>	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY <small>CAVITE STATE UNIVERSITY MAIN CAMPUS</small>	<b>CAVITE STATE UNIVERSITY</b>





1  
M 2

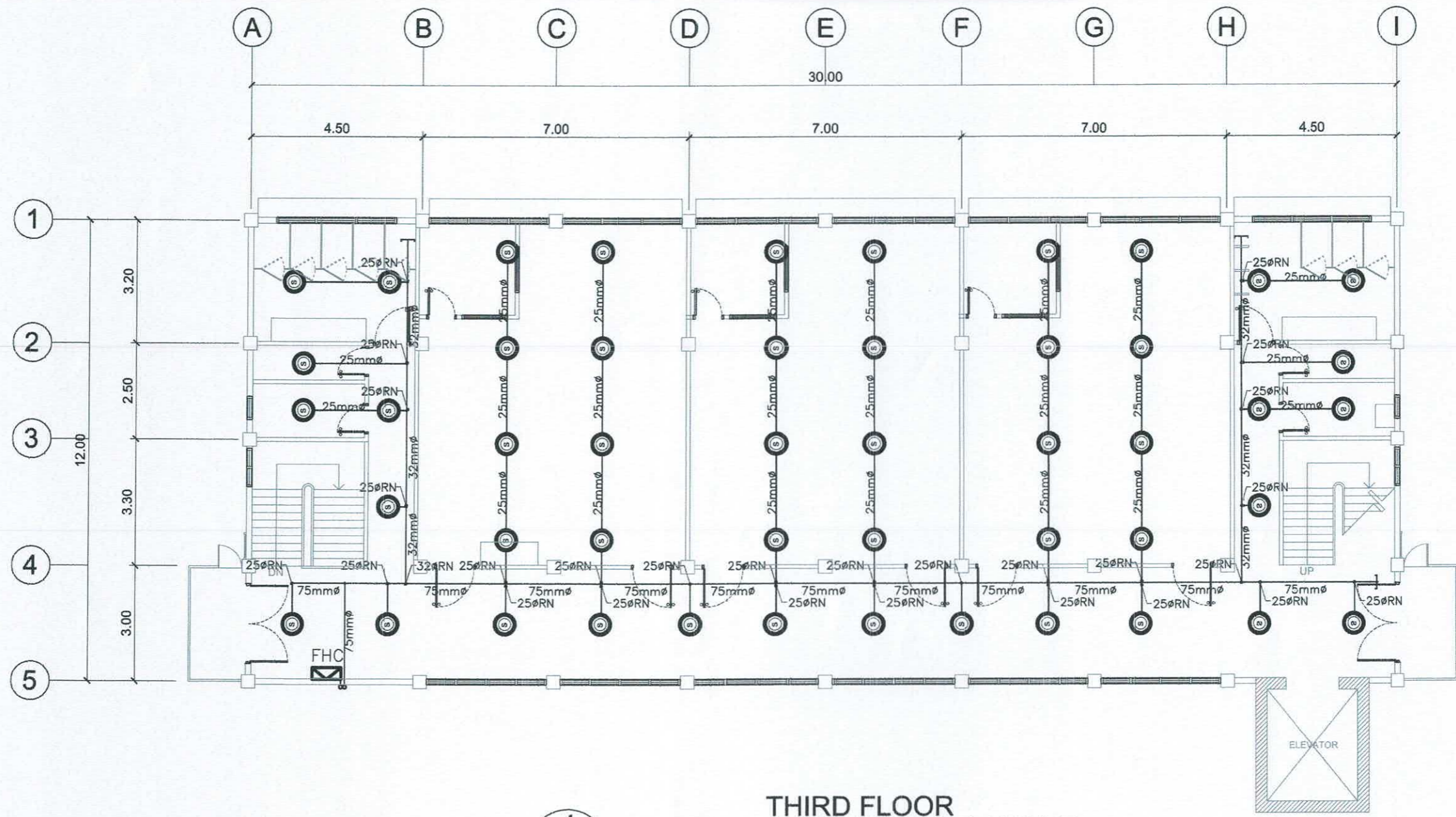
SECOND FLOOR  
SPRINKLER AND FHC LAYOUT

SCALE

1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:	
	 <b>J. D. ESCANO</b> PDU OVPPD	 <b>E. J. GALVEZ</b> DEAN COM	 <b>R. P. PERNA</b> PROF. ELEC. ENGINEER	 <b>S. B. BAYOT JR.</b> HEAD PDU	 <b>O. B. DELOS REYES</b> DIRECTOR PLANNING AND DEVT. OFFICE	 <b>A. G. MAGCAWAS</b> VPPD CVSU	 <b>J. X. B. NEPOMUCENO</b> VPASS CVSU	 <b>H. D. ROBLES</b> PRES. CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS	<b>CAVITE STATE          UNIVERSITY</b>





1  
M 3

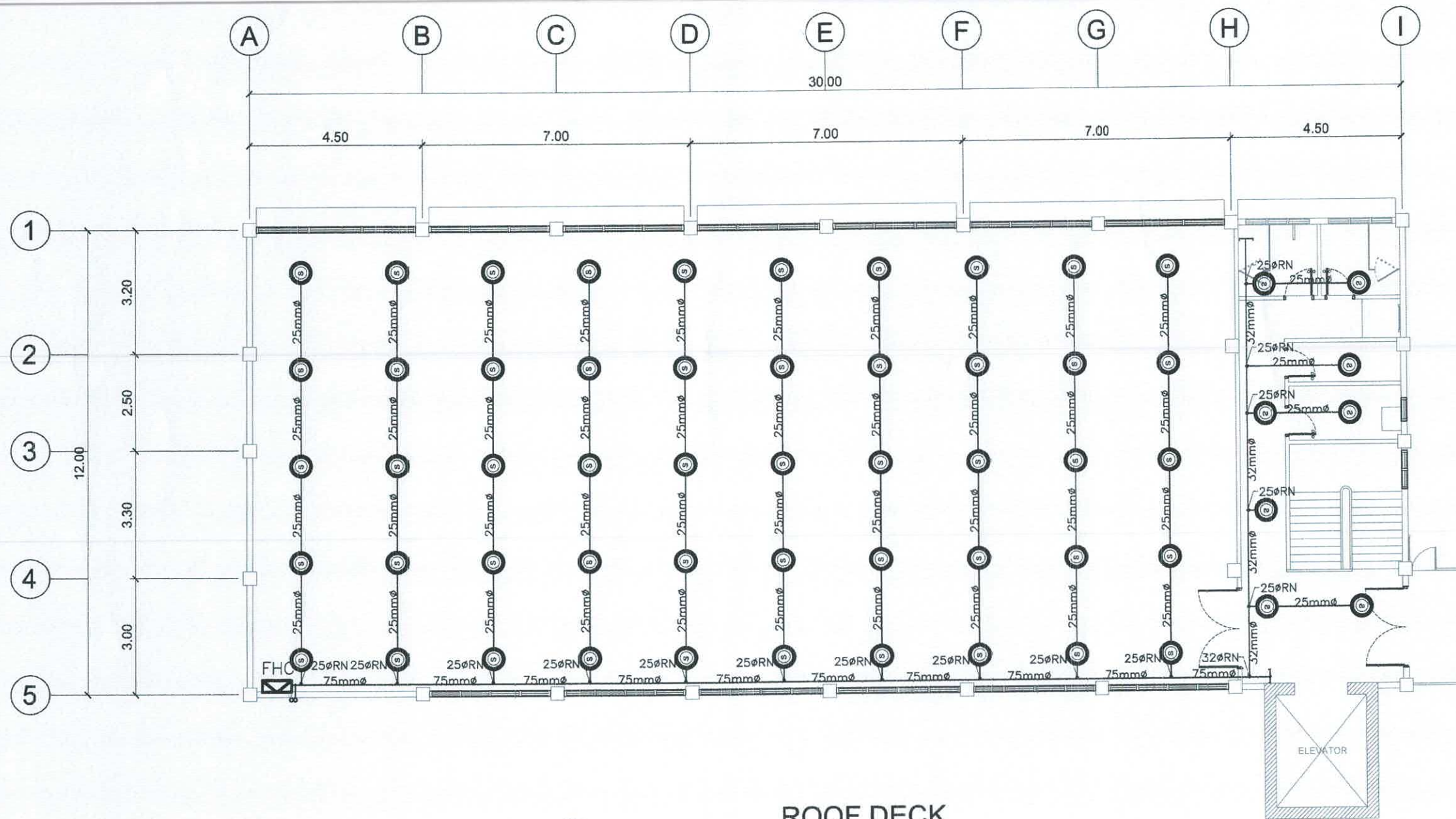
THIRD FLOOR  
SPRINKLER AND FHC LAYOUT

SCALE

1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO:	
	 <b>J. D. ESCANO</b> <small>PDU OVPPD</small>	 <b>E. J. GALVEZ</b> <small>DEAN COM</small>	 <b>R. P. PENA</b> <small>PROF. ELEC. ENGINEER</small>	 <b>S. B. BAYOT JR.</b> <small>HEAD PDU</small>	 <b>O. B. DELOS REYES</b> <small>DIRECTOR PLANNING AND DEVT. OFFICE</small>	 <b>A. G. MAGCAWAS</b> <small>VPPD CVSU</small>	 <b>J. X. B. NEPOMUCENO</b> <small>VPRASS CVSU</small>	 <b>H. D. ROBLES</b> <small>PRES CVSU</small>	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY <small>CAVITE STATE UNIVERSITY MAIN CAMPUS</small>	<b>CAVITE STATE UNIVERSITY</b>





1  
M 4

ROOF DECK  
SPRINKLER AND FHC LAYOUT

SCALE

1 : 125 MTS.

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
	J. D. ESCANO PDU OVPPD	E. J. GALVEZ DEAN COM	R. P. DE VERA PROF. ELEC. ENGINEER	S. B. BAYOT JR. HEAD PDU	O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	A. G. MAGCAYAS VPPD CVSU	J. X. B. NEPOMUCENO VPASS CVSU	H. D. ROBLES PRES CVSU CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS	CAVITE STATE UNIVERSITY



**GENERAL NOTES:**

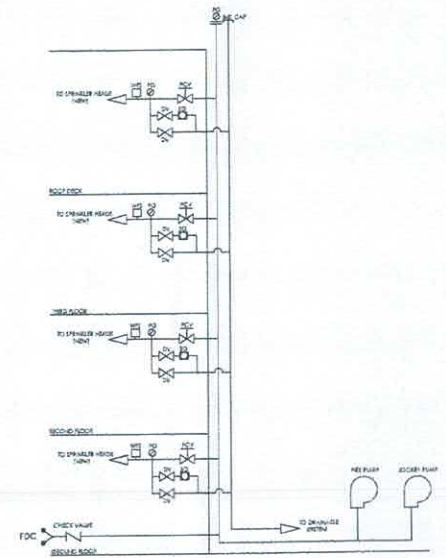
- INSTALLATION OF FIRE SPRINKLER SYSTEM SHALL CONFORM TO NFPA-13 REQUIREMENTS.
- COORDINATE WITH OTHER WORKS, INCLUDING THE PLUMBING PIPING AS NECESSARY TO INTERFACE COMPONENTS OF FIRE PROTECTION PIPING PROPERLY WITH OTHER WORKS
- SPRINKLER SHALL BE SPACED NOT LESS THAN 6 FT (1.8 M) ON CENTERS.
- PROVIDE 10 LBS HALOTRON PORTABLE FIRE EXTINGUISHERS TO ALL ELECTRICAL ROOM AND TO OTHER ROOM OF THE SAME USAGE.
- ALL PIPES SHALL BE PROVIDED WITH THE PIPE SLEEVE THROUGH BEAMS, WALL AND FLOORS.
- PROVIDE AT LEAST ONE (1) HANGER BETWEEN EACH TWO (2) BRANCH LINES.
- LATERAL AND LONGITUDINAL SWAY BRACES SPACED AT MAXIMUM OF 12.2 M AND 24 M ON CENTER RESPECTIVELY SHALL BE PROVIDED AT ALL PIPE LINES WITH DIAMETER OF 150 MM AND LARGER.
- PROVIDE FLANGE CONNECT AT MAXIMUM INTERVAL OF 12 METERS.
- ALL PORTABLE FIRE EXTINGUISHERS INSIDE FIRE HOSE CABINET (FHC) SHALL BE CLASS "ABC" DRY CHEMICAL UNLESS OTHERWISE SPECIFIED.
- PROVIDE 50 LBS WHEELED TYPE HALOTRON PORTABLE FIRE EXTINGUISHER IN TRANSFORMER VAULTS.
- WHERE SPRINKLER PASSES THROUGH SEISMIC SEPARATION ASSEMBLIES, FLEXIBLE SHALL BE PROVIDED.
- PROVIDE AUXILIARY DRAIN FOR TRAPPED SECTION AS REQUIRED BY NFPA-13.
- THE DISTANCE BETWEEN THE HANGER AND CENTER OF LINE OF AN UPRIGHT SPRINKLER HEAD SHALL NOT BE LESS THAN 76 MM.
- PROVIDE NECESSARY EARTHQUAKE PROTECTION AS REQUIRED UNDER NFPA-13 AND APPLICABLE BUILDING CODE.
- PIPING SHALL BE CONCEALED IN AREAS WITH DROP CEILING.
- INSTALL IRON PIPE SLEEVES OF AMPLE DIAMETER AT ALL POINTS WHERE PIPES PENETRATE BEAMS, FLOOR OR WALLS. SIZE AND INSTALL SO THAT THE PIPES ARE NOT STRESSED.
- SLEEVES SHALL BE INSTALLED PRIOR TO CONSTRUCTION OF WALLS OR POURING OF CONCRETE. INSTALL SLEEVES FLUSH WITH ALL SURFACES.
- THE CONTRACTOR MUST SUBMIT SHOP DRAWING INDICATING ACTUAL DIMENSIONAL SIZES, OPERATING WEIGHTS, AND SUFFICIENT CLEARANCES TO FACILITATE NORMAL SERVICE AND MAINTENANCE. HOWEVER, SHOULD ACTUAL EQUIPMENT PHYSICALLY DIFFER FROM THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHOULD NOTIFY THE ARCHITECT IN WRITING.
- ALL MECHANICAL WORKS SHALL BE DONE IN ACCORDANCE WITH THE RULES AND REGULATION OF THE LATEST EDITION OF THE PHILIPPINE MECHANICAL CODE.
- ALL MECHANICAL WORKS SHALL BE DONE UNDER THE DIRECT AND IMMEDIATE SUPERVISOR OF A DULY LICENSED REGISTERED MECHANICAL ENGINEER.

**MATERIAL SPECIFICATIONS:**

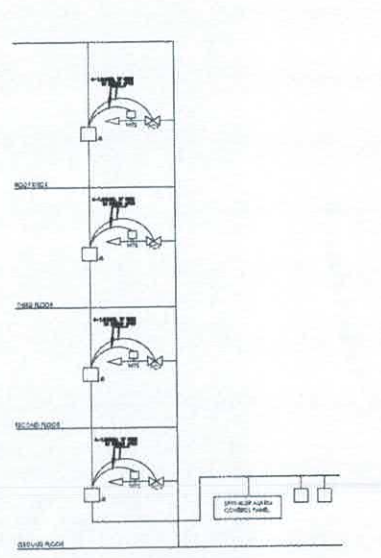
- FIRE LINES** - SHALL BE GALVANIZED IRON (GI) PIPES, SCHEDULE 40 CONFORMING TO ASTM A53, PACIFIC PIPES OR APPROVED BRAND.
- GATE VALVES** - SHALL BE OUTSIDE SCREW AND YOKE (OSY), CHECK AND GLOBE VALVES TO ASTM B-62.
- SPRINKLER HEADS** - ALL SPRINKLER HEADS (CONCEALED, UPRIGHT & SIDEWALL) SHALL BE RATED 74° C (165° F), EXCEPT ON KITCHEN SHALL BE 100° C (212° F).

**NOTES:**

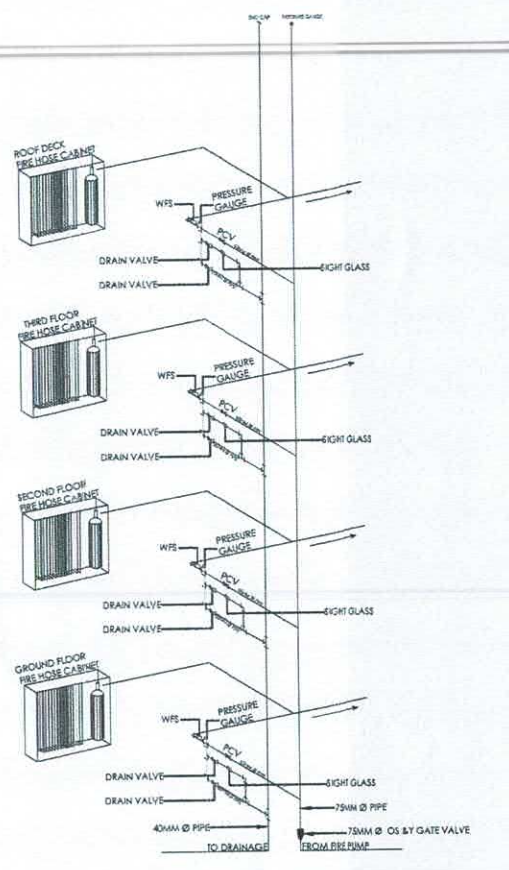
- ALL PIPES SHALL HAVE A STRENGTH EQUIVALENT TO SCHEDULE 40
- ALL PIPES SHALL BE PAINTED WITH EPOXY PRIMER PAINT AND WITH A RED PAINT AS FINAL COATING.
- ALL CONNECTIONS SHALL BE LEAK PROOF AND SHALL BE ABLE TO RESIST HIGH PRESSURE.
- USE PENDENT TYPE SPRINKLER HEADS FOR PORTIONS WITH CEILING.
- USE SIDE WALL TYPE SPRINKLER HEADS IN STAIRCASES.
- SPRINKLER SYSTEM WILL BE TAPPED TO EXISTING RISER AND DRAIN PIPES



1 RISER DIAGRAM OF FIRE SPRINKLER SYSTEM  
SCALE: 1/8" = 1'-0" NTS



2 RISER DIAGRAM OF SPRINKLER ALARM MONITORING SYSTEM  
SCALE: 1/8" = 1'-0" NTS



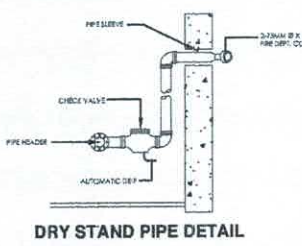
3 FIRE HOUSE CABINET RISER DIAGRAM  
SCALE: 1/8" = 1'-0" NTS

**LEGEND AND SYMBOLS:**

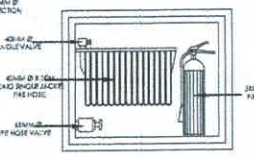
- GATE VALVE
- CHECK VALVE
- WATER FLOW SWITCH
- TEE CONNECTION
- ELBOW CONNECTION
- OS & Y GATE VALVE WITH MONITOR SWITCH
- END CAP
- C.I. CONCENTRIC INCREASER, OPTIONAL
- ER ECCENTRIC REDUCER, OPTIONAL
- RN RISER NIPPLE
- BFV BUTTERFLY VALVE, WAFER TYPE
- GV GATE VALVE, RISING STEM
- GV GATE VALVE, RISING STEM
- WCV WAFER TYPE CHECK VALVE
- CV SWING TYPE CHECK VALVE
- PIPING SYSTEM
- PRESSURE RELIEF VALVE
- PENDENT/UPRIGHT SPRINKLER
- SIDE WALL SPRINKLER
- FIRE EXTINGUISHER
- SMOKE DETECTOR
- EAGLE HCFC 123 (dichlorodifluoromethane) Ceiling Type Fire Extinguisher, Stored Pressure type
- WFS WATER FLOW SWITCH
- PRV PRESSURE REDUCING VALVE
- FP FIRE PUMP
- JP JOCKEY PUMP
- FA FIRE ALARM
- B BELL
- SG SIGHT GLASS
- PG PRESSURE GAUGE
- PCV PRESSURE CONTROL VALVE W/ SUPERVISORY SWITCH
- FDC FIRE DEPARTMENT CONNECTION
- DV DRAIN VALVE

**EQUIPMENT SPECIFICATION**

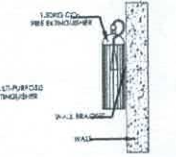
DESIGNATION	QTY.	CAPACITY (GPM)	TYPE	RPM	WORKING PRESSURE	MOTOR RATING				REMARKS	
						KW (HP)	EFF.	VOLTS	PHASE HERTZ		
FIRE PUMP	1	500	HORIZONTAL SPLIT CASE	3650	120 PSL	45 (60HP)	85 %	220	3	60	ELECTRIC DRIVING FIRE PUMP
JOCKEY PUMP	1	20	HORIZONTAL MULTI STAGE	3600	125 PSL	3.75 (5 HP)	85 %	220	3	60	ELECTRIC DRIVING JOCKEY PUMP



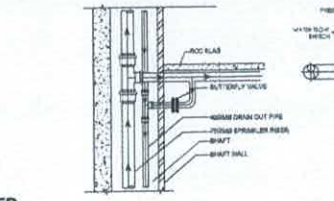
DRY STAND PIPE DETAIL



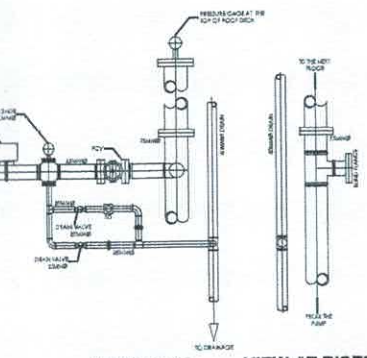
FIRE HOSE CABINET DETAIL



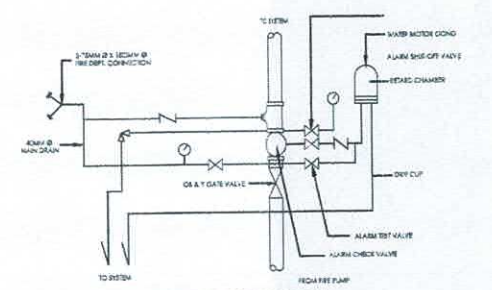
WALL MOUNTED FIRE EXTINGUISHER DETAIL



DRAIN OUT PIPE SECTION



ELEVATION VIEW AT RISER SUPERVISORY FLOOR CONTROL VALVE ASSEMBLY

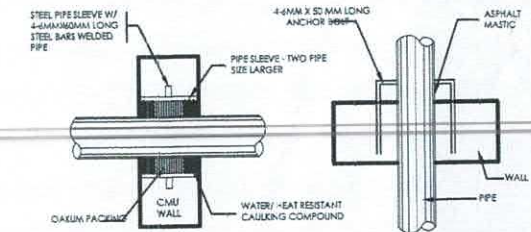
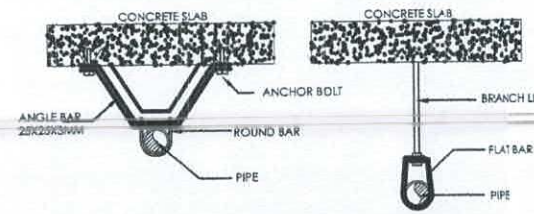
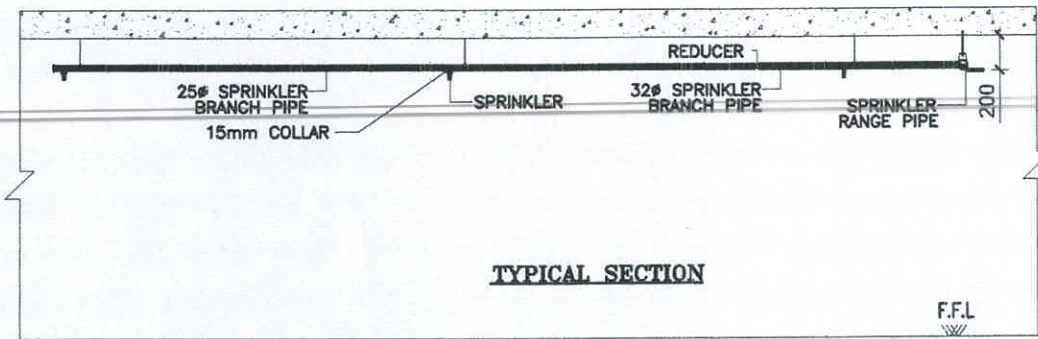


ALARM CHECK VALVE SCHEMATIC DIAGRAM

4 FIRE PROTECTION DETAILS  
SCALE: 1/8" = 1'-0" NTS

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
	J. D. ESCANO PDU OVPPD	E. J. GALVEZ DEAN COM	R. [Signature] PROF. ELEC. ENGINEER	S. B. BAYOT JR. HEAD PDU	O. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	A. G. MAGCAWAS VPPD CVSU	J. X. B. NEPOMUCENO VPASS CVSU	H. D. ROBLES PRES CVSU	CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS

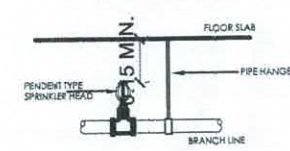
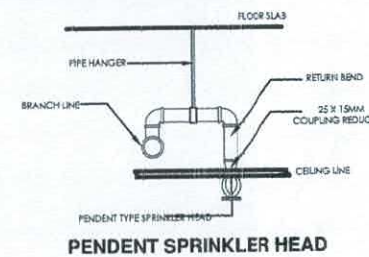




TWO-WAY BRACE/PIPE HANGER

PIPE SLEEVE

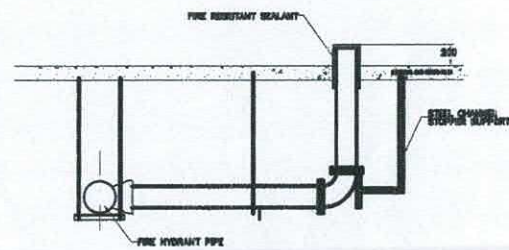
FOUR WAY BRACE



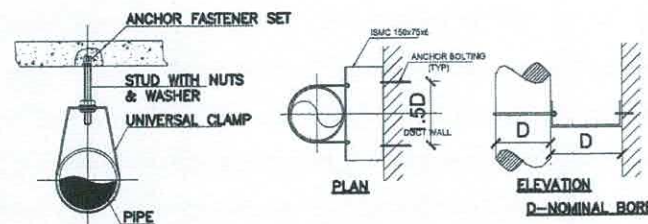
PENDENT SPRINKLER HEAD

UPRIGHT SPRINKLER HEAD

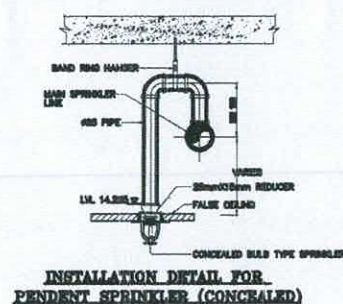
1 M 6 SCALE FIRE PROTECTION DETAILS NTS



FIRE HYDRANT



SUPPORTING DETAIL FOR RISERS



INSTALLATION DETAIL FOR PENDENT SPRINKLER (CONCEALED)



DETAIL FOR HORIZONTAL SIDEWALL SPRINKLER



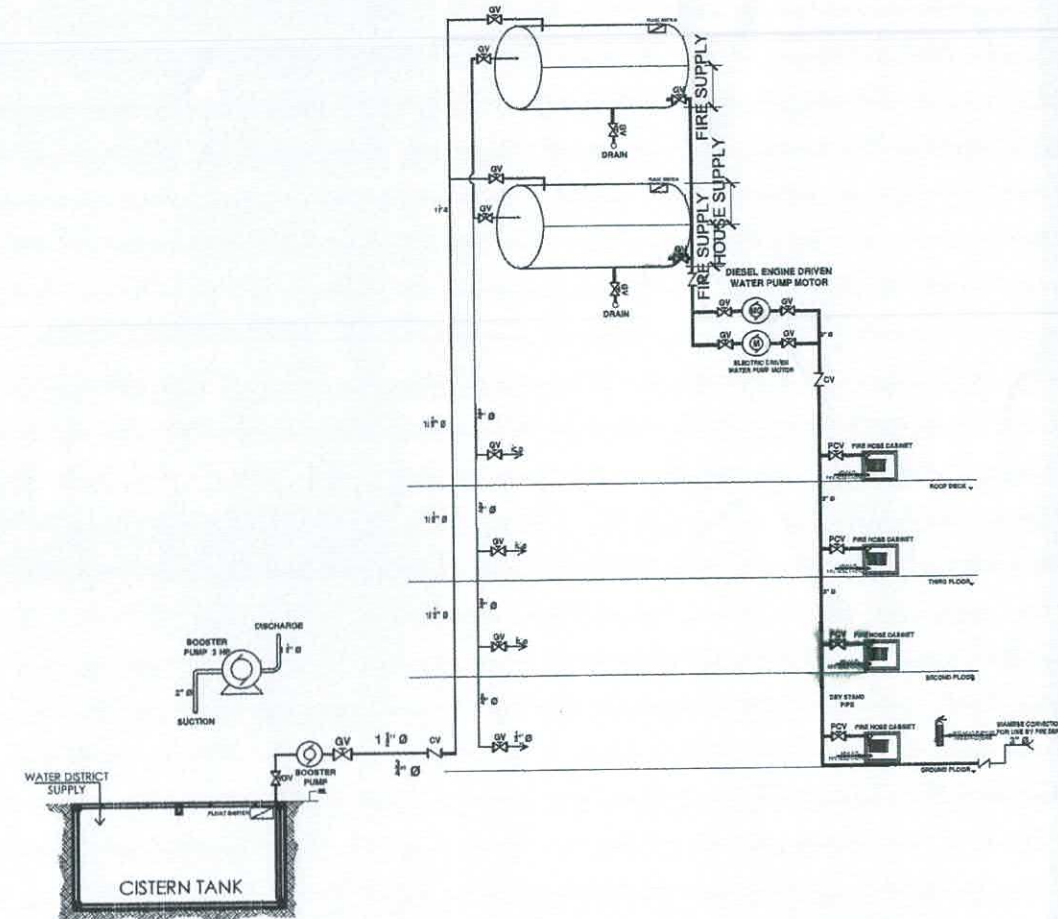
Ceiling Type HCFC 123 Automatic Fire Extinguisher

PIPE SUPPORT DETAILS

PIPE SIZE	DISTANCE BETWEEN HANGERS
25 MMØ	3.0 M.
32 MMØ	3.0 M.
40 MMØ	3.0 M.
50 MMØ	3.0 M.
65 MMØ	3.0 M.
80 MMØ	3.0 M.
100 MMØ	4.0 M.
150 MMØ	4.0 M.

STUD ROD SIZES

PIPE SIZE	DIA. OF ROD
25 MMØ	10 MM.
32 MMØ	10 MM.
40 MMØ	10 MM.
50 MMØ	10 MM.
65 MMØ	10 MM.
80 MMØ	10 MM.
100 MMØ	10 MM.
150 MMØ	12.7 MM.



2 M 6 SCALE WATER SUPPLY AND FIRE PROTECTION SYSTEM SCHEMATIC DIAGRAM NTS

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
	 J. D. ESCANO PDU OVPPD	 E. J. GALVEZ DEAN COM	 R. P. PENIA PROF. ELEC. ENGINEER	 S. B. BAYOT JR. HEAD PDU	 Q. B. DELOS REYES DIRECTOR PLANNING AND DEVT. OFFICE	 A. G. MAGCAWAS VPPD CVSU	 J. X. B. NEPOMUCENO VPASS CVSU	 H. D. ROBLES PRES CVSU CONSTRUCTION OF ACADEMIC BUILDING FOR COLLEGE OF MEDICINE TO INCREASE CARRYING CAPACITY CAVITE STATE UNIVERSITY MAIN CAMPUS	CAVITE STATE UNIVERSITY