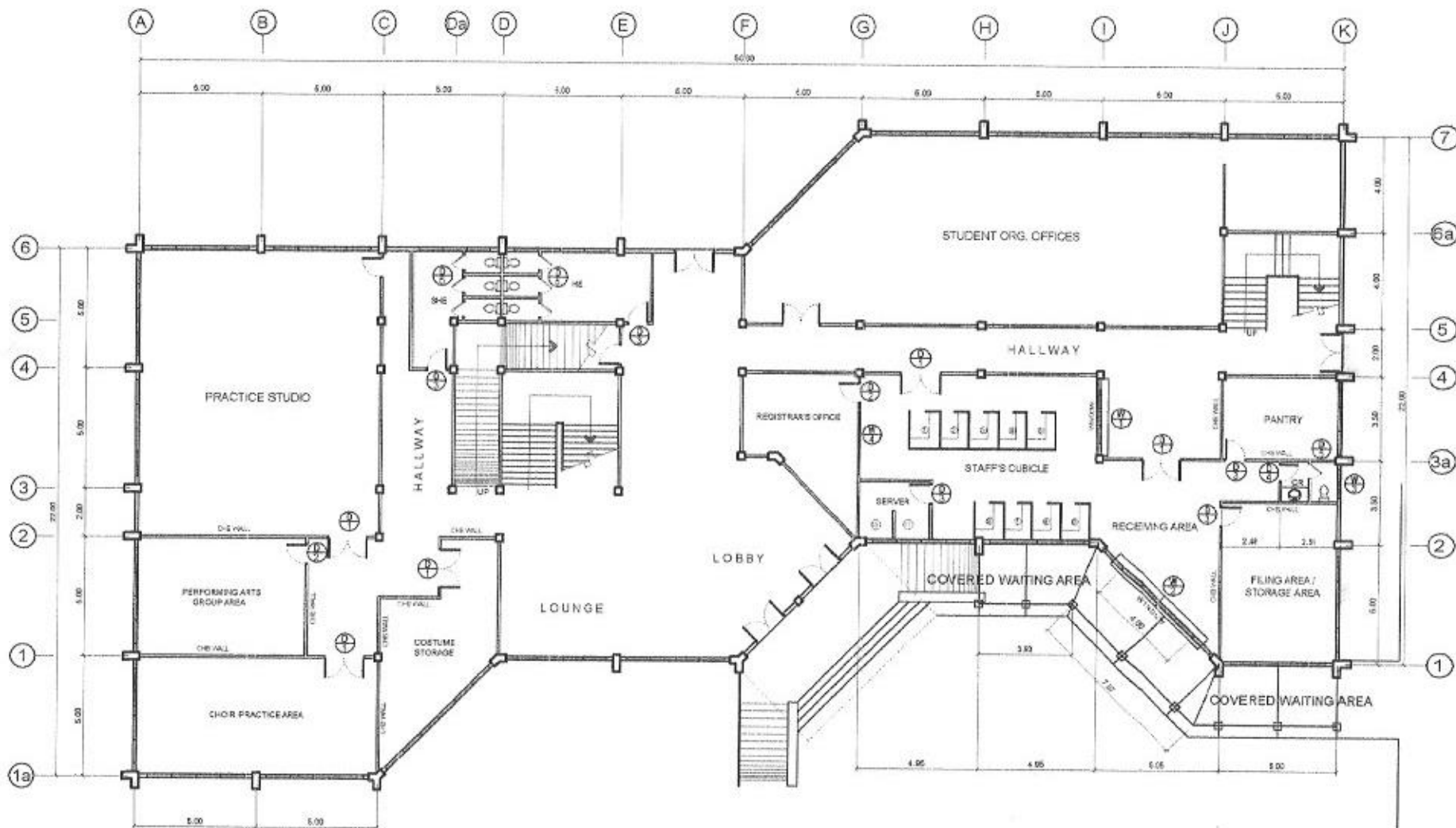




GROUND FLOOR PLAN

SCALE

1: 250 M.

CADD BY:
E. N. RODEROS JR.
PPU

END USER
S. M. ISIP
OIC CSA

END USER
E. O. RODEROS
UNIVERSITY REGISTRAR

ENDORSED BY
R. B. CUBILLA
DIRECTOR PLANNING OFFICE

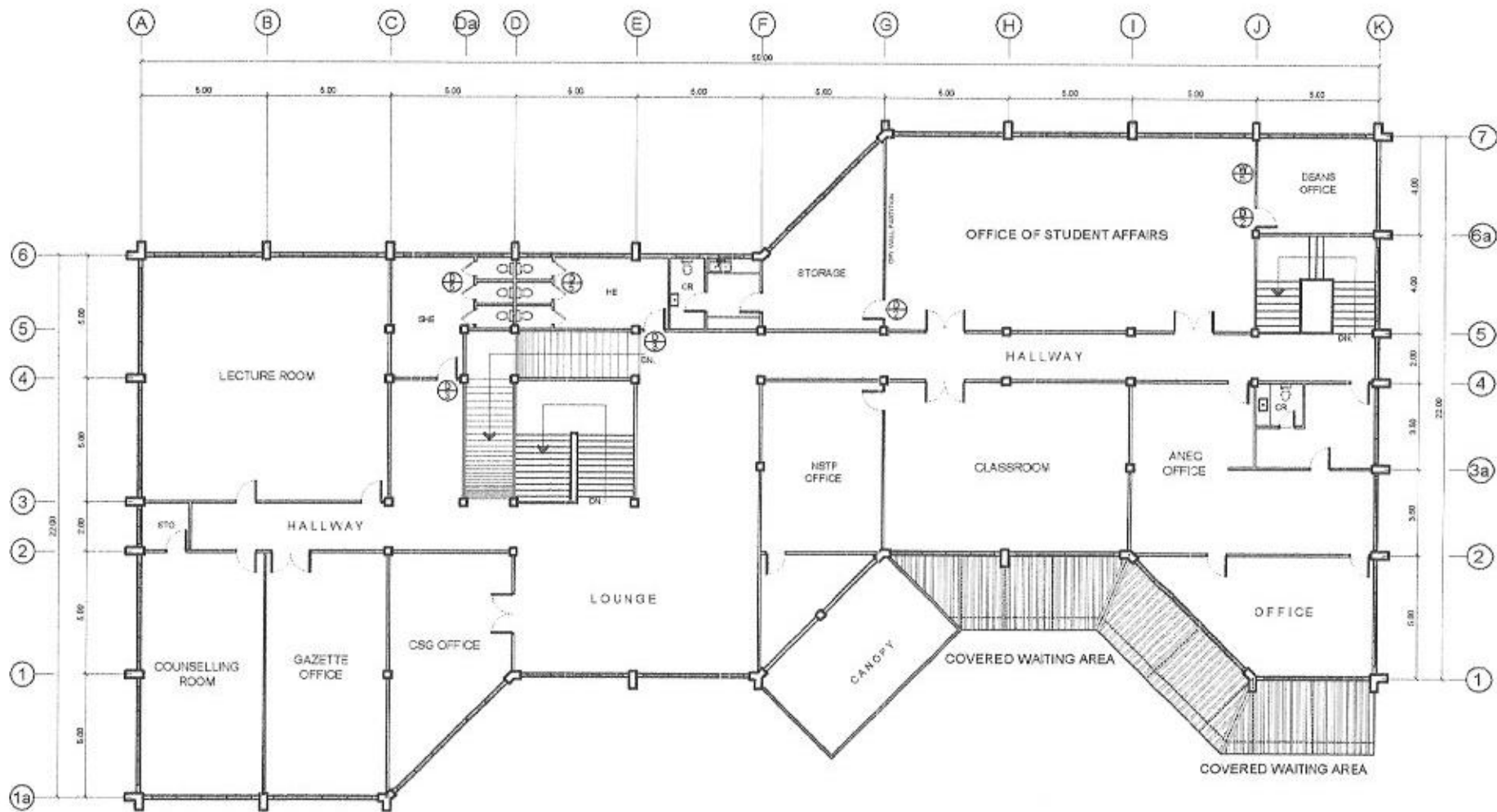
REC. APPROVAL
H. O. GARCIA
VPASS CUSU

APPROVED BY
H. D. ROBLES
PRES CUSU

PROJECT TITLE/LOCATION
IMPROVEMENT OF STUDENT UNION BUILDING
& RELOCATION OF REGISTRAR'S OFFICE
CVSU MAIN CAMPUS

IMPLEMENTING AGENCY
CAVITE STATE UNIVERSITY

SHT NO.
A - 1



SECOND FLOOR PLAN

SCALE

1: 250 M.

CADD BY:
E. N. RODEROS JR.
PPU

END USER:
S. M. ISP
OIC OSA

END USER:
E. O. RODEROS
UNIVERSITY REGISTRAR

ENDORSED BY:
R. B. CUBILLA
DIRECTOR PLANNING OFFICE

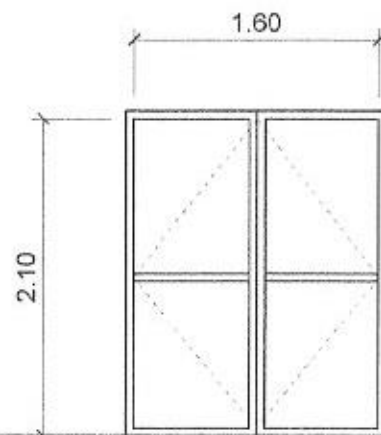
REC. APPROVAL:
H. O. GARCIA
VP/ASS CUSU

APPROVED BY:
H. D. ROBLES
PRES CUSU

PROJECT TITLE/LOCATION:
IMPROVEMENT OF STUDENT UNION BUILDING
& RELOCATION OF REGISTRAR'S OFFICE
CUSU MAIN CAMPUS

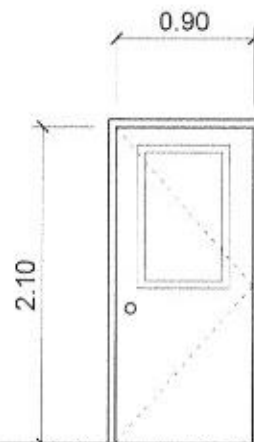
IMPLEMENTING AGENCY:
CAVITE STATE UNIVERSITY

SHT NO.:
A - 2



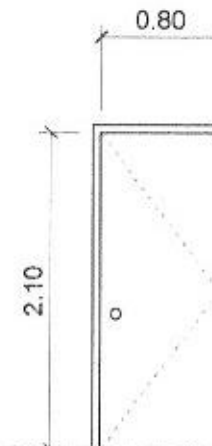
D
1

ALUMINUM FRAME DOOR COMPLETE W/
ALL ACCESSORIES W/ $\frac{3}{8}$ " THK CLEAR GLASS
ON COLORED POWDER COATED FINISH
ALUMINUM FRAMING
4 SETS



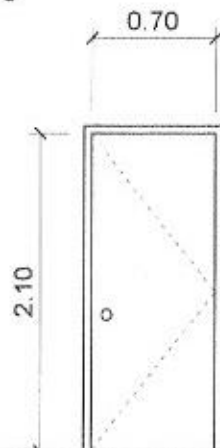
D
2

0.90 X 2.10 PANEL DOOR W/
 $\frac{1}{4}$ " THK. CLEAR GLASS VIEW
WINDOW, W/ COMPLETE
ACCESSORIES
4 SETS



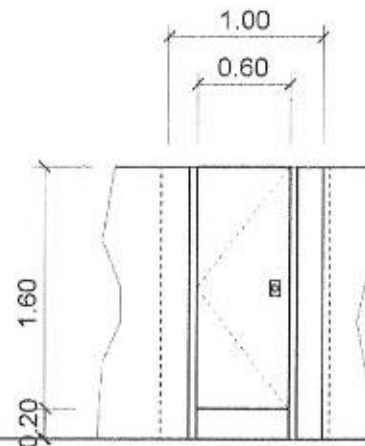
D
3

0.80 X 2.10 POWDER COATED
STEEL DOOR W/ COMPLETE
ACCESSORIES
7 SETS



D
4

0.70 X 2.10 POWDER COATED
STEEL DOOR W/ COMPLETE
ACCESSORIES
1 SET



D
5

0.60 X 1.60 PHENOLIC DOOR PANEL
WITH COMPLETE ACCESSORIES
13 SETS

CADD BY: <i>[Signature]</i> E. N. RODEROS JR. PPU	
END USER: <i>[Signature]</i> S. M. ISIP CIC	OSA

END USER: <i>[Signature]</i> E. O. RODEROS UNIVERSITY REGISTRAR
--

ENDORSED BY: <i>[Signature]</i> R. B. CUBILLA DIRECTOR PLANNING OFFICE

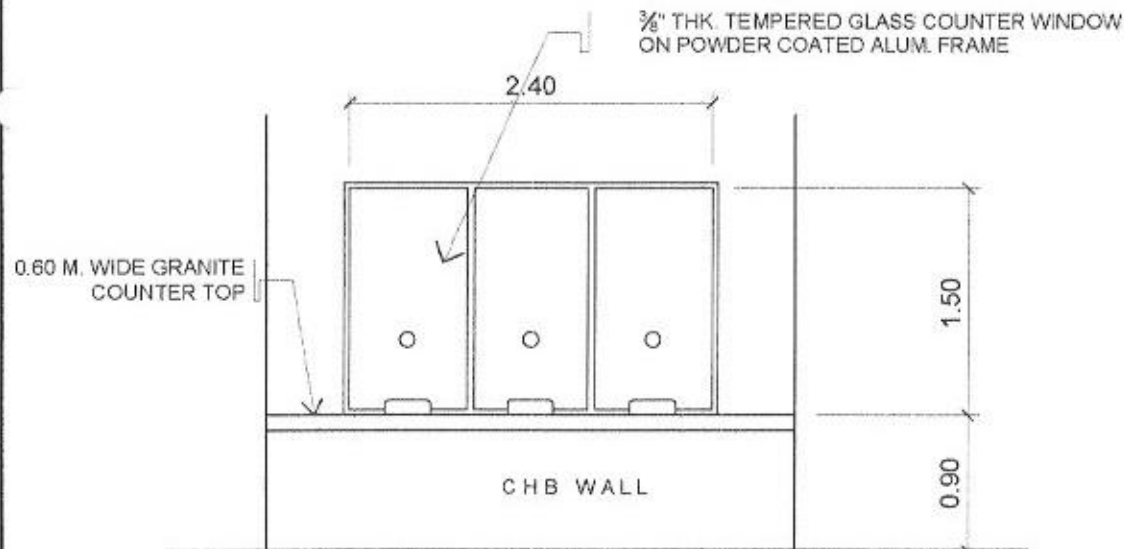
REC. APPROVAL: <i>[Signature]</i> H. O. GARCIA VPASS CVSU
--

APPROVED BY: <i>[Signature]</i> H. D. ROBLES PRES CVSU

PROJECT TITLE/LOCATION: IMPROVEMENT OF STUDENT UNION BUILDING & RELOCATION OF REGISTRAR'S OFFICE CVSU MAIN CAMPUS
--

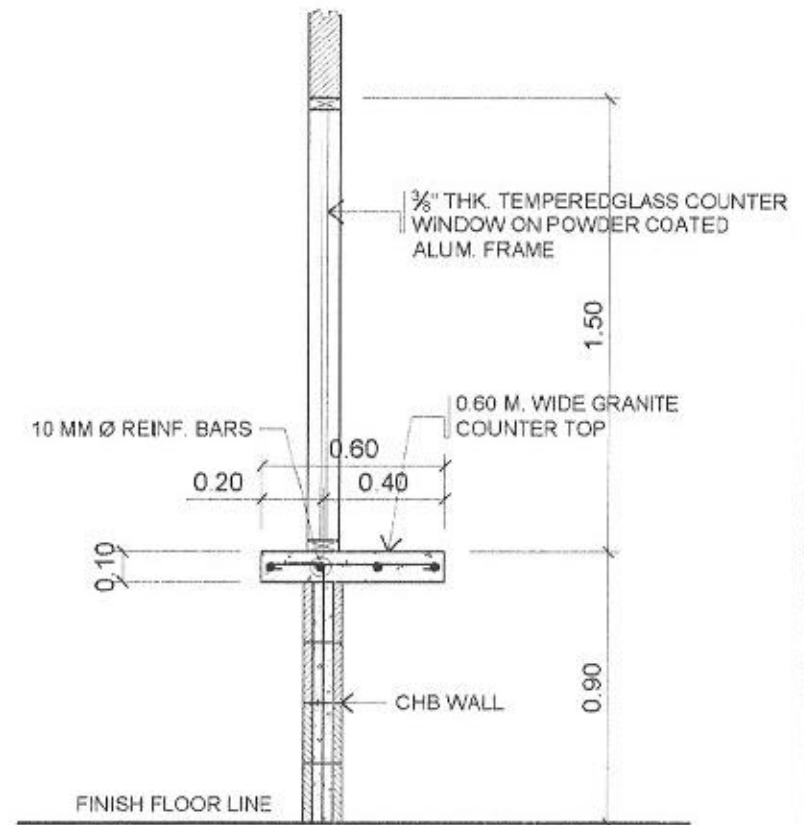
IMPLEMENTING AGENCY: CAVITE STATE UNIVERSITY

SHT NO.: A - 3



W
1

ALUMINUM FIXED COUNTER WINDOW COMPLETE W/
ALL ACCESSORIES W/ $\frac{3}{8}$ " THK CLEAR GLASS AND
12MM SQUARE BAR GRILLS
1 SET



SECTION

DET. SEC. OF COUNTER WINDOW
SCALE 1 : 25 MTS.

DRAWN BY:
E. N. RODEROS JR.
PPU

END USER:
S. M. ISIP
OIC

END USER:
E. O. RODEROS
UNIVERSITY REGISTRAR

ENDORSED BY:
R. B. CUBILLA
DIRECTOR PLANNING OFFICE

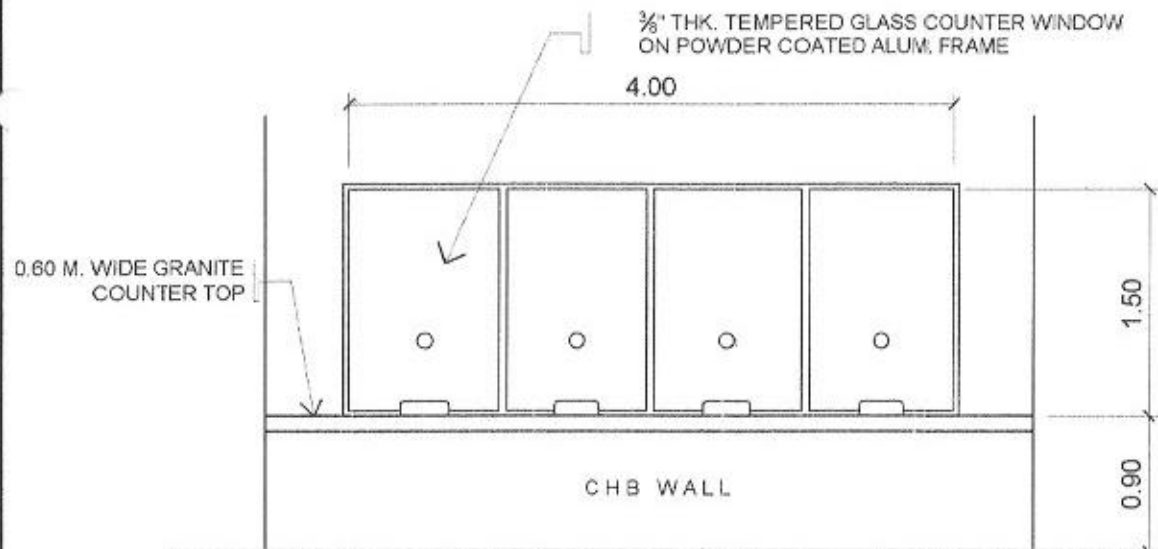
REC. APPROVAL:
H. O. GARCIA
VPASS

APPROVED BY:
H. D. ROBLES
PRES

PROJECT TITLE/LOCATION:
IMPROVEMENT OF STUDENT UNION BUILDING
& RELOCATION OF REGISTRAR'S OFFICE
CVSU MAIN CAMPUS

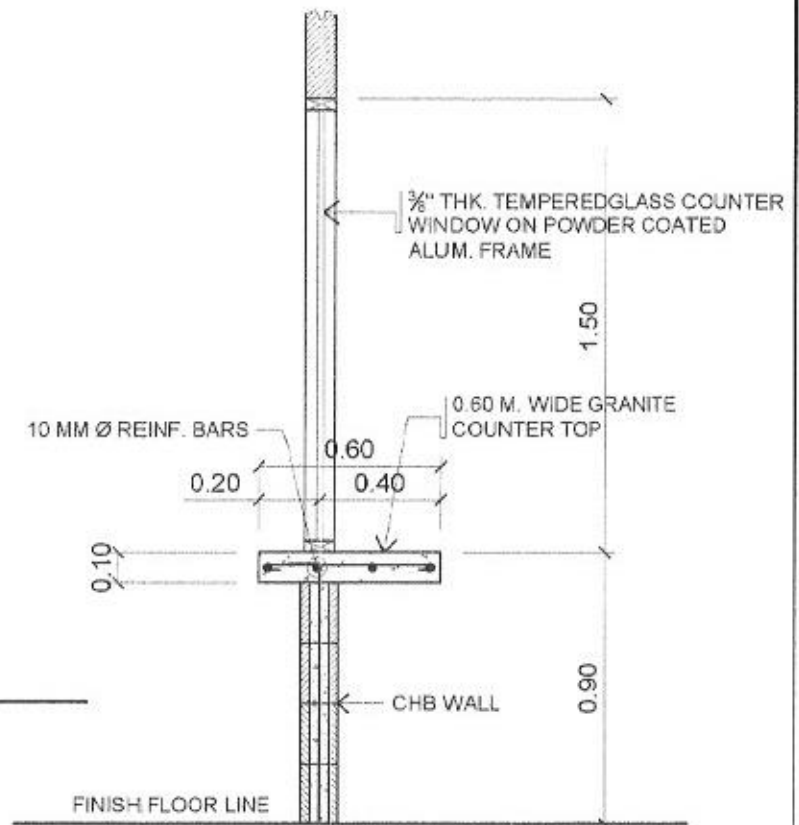
IMPLEMENTING AGENCY:
CAVITE STATE UNIVERSITY

SHT NO:
A - 4



W
2

ALUMINUM FIXED COUNTER WINDOW COMPLETE W/
ALL ACCESSORIES W/ 3/8" THK CLEAR GLASS AND
12MM SQUARE BAR GRILLS
1 SET



SECTION

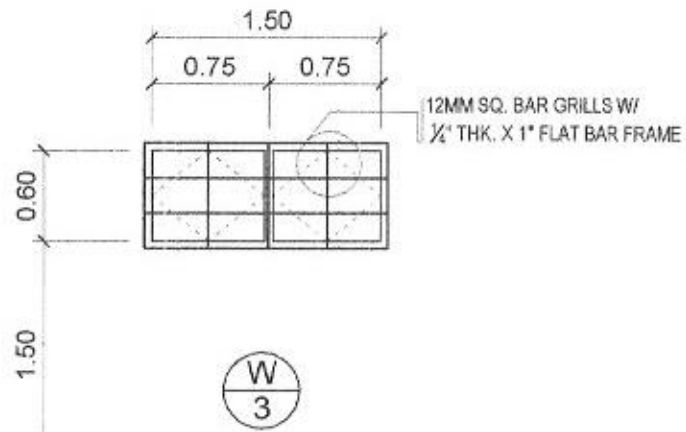


DET. SEC. OF COUNTER WINDOW

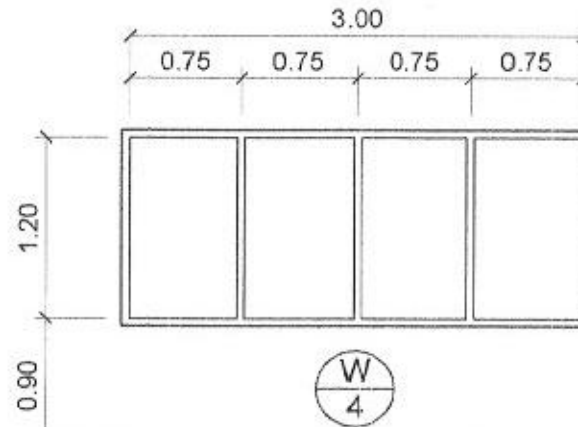
SCALE

1 : 25 MTS.

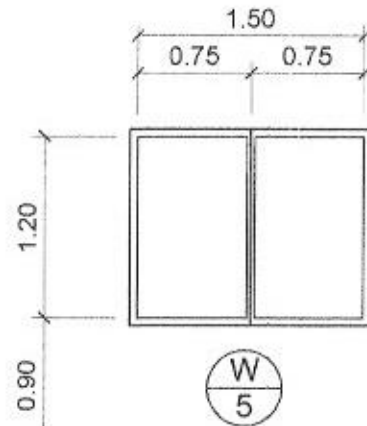
CADD BY: E. N. RODEROS JR. PPLU		ENDORSED BY: R. B. CUBILLA DIRECTOR PLANNING OFFICE		APPROVED BY: H. D. ROBLES PRES		PROJECT TITLE/LOCATION IMPROVEMENT OF STUDENT UNION BUILDING & RELOCATION OF REGISTRAR'S OFFICE CVSU MAIN CAMPUS		IMPLEMENTING AGENCY: CAVITE STATE UNIVERSITY		SHT NO: A - 5
END USER: S. M. ISIL CIC	END USER: E. O. RODEROS UNIVERSITY REGISTRAR		REC. APPROVAL: H. O. GARCIA VPASS							



ALUMINUM CASEMENT WINDOW COMPLETE W/
ALL ACCESSORIES W / 1/4" THK CLEAR GLASS
1 SET



ALUMINUM FIXED WINDOW COMPLETE W/
ALL ACCESSORIES W / 1/4" THK CLEAR GLASS
1 SET



ALUMINUM FIXED WINDOW COMPLETE W/
ALL ACCESSORIES W / 1/4" THK CLEAR GLASS
1 SET

DADO BY:
[Signature]
E. N. RODEROS JR.
PPU

END USER:
[Signature]
S. M. ISIP
OIC OSA

END USER:
[Signature]
E. O. RODEROS
UNIVERSITY REGISTRAR

ENDORSED BY:
[Signature]
R. B. CUBILLA
DIRECTOR PLANNING OFFICE

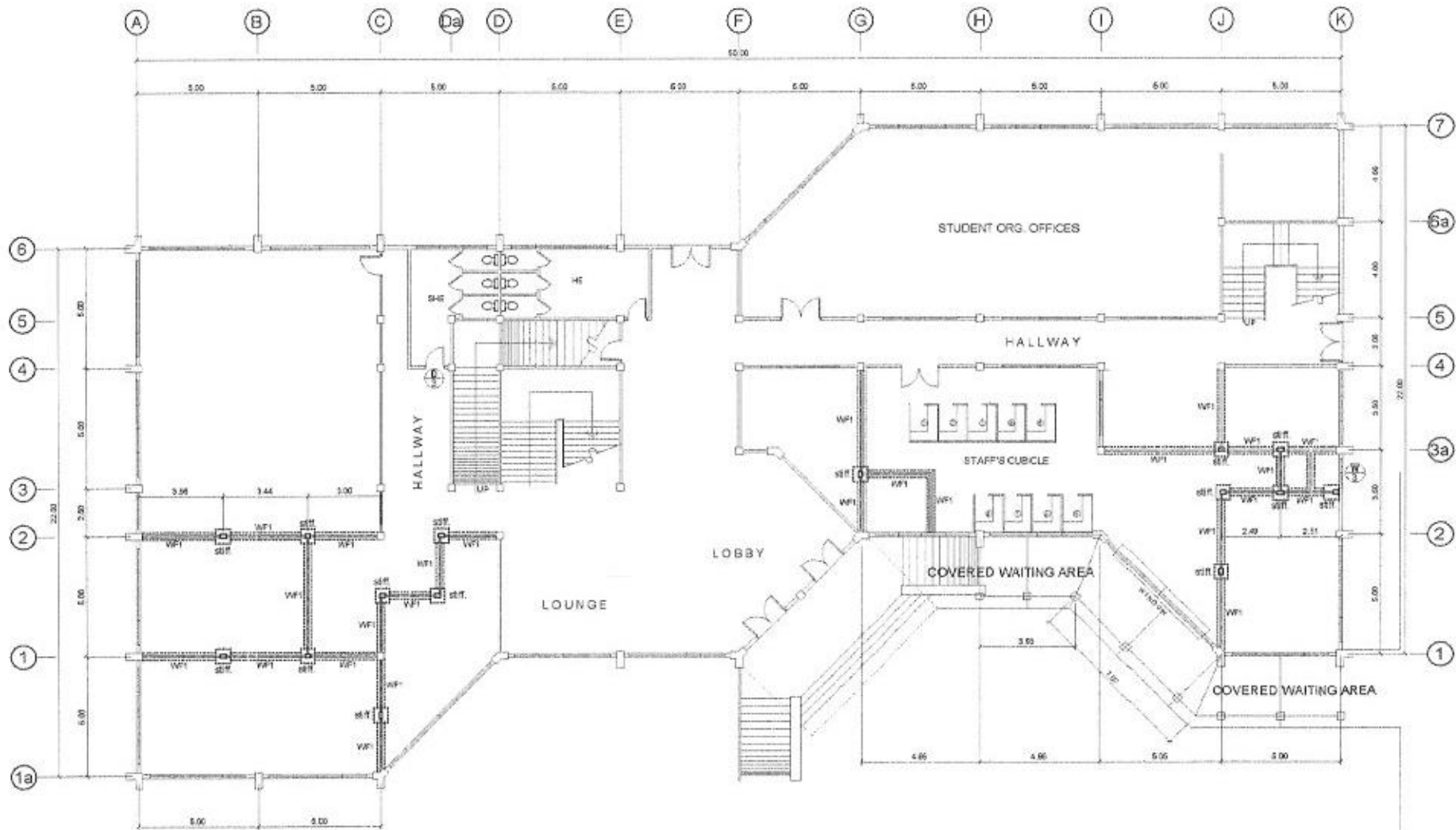
REC. APPROVAL:
[Signature]
H. O. GARCIA
VPASS OVSU

APPROVED BY:
[Signature]
H. D. ROBLES
PRES OVSU

PROJECT TITLE/LOCATION:
IMPROVEMENT OF STUDENT UNION BUILDING
& RELOCATION OF REGISTRAR'S OFFICE
OVSU MAIN CAMPUS

IMPLEMENTING AGENCY:
CAVITE STATE UNIVERSITY

SHT NO.
A - 6



FOUNDATION PLAN OF WALL PARTITION

SCALE

1:250 M.

CADD BY:
E. N. RODEROS JR.
PPU

END USER
S. M. ISP
OIC OSA

END USER
E. O. RODEROS
UNIVERSITY REGISTRAR

ENDORSED BY
R. B. CUBILLA
DIRECTOR PLANNING OFFICE

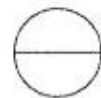
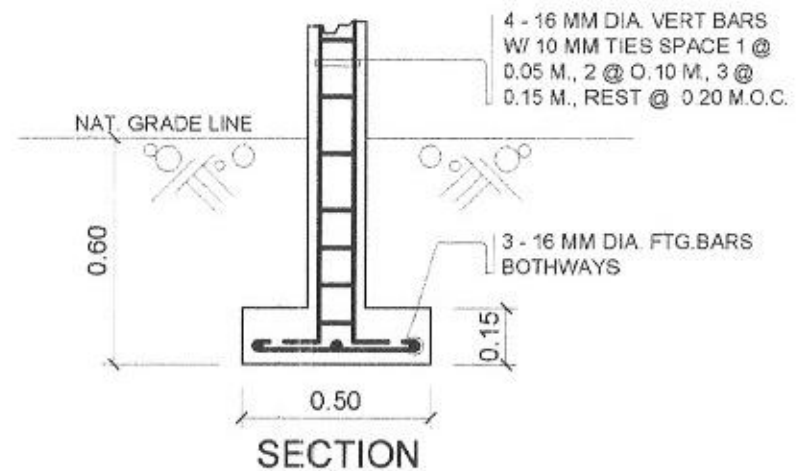
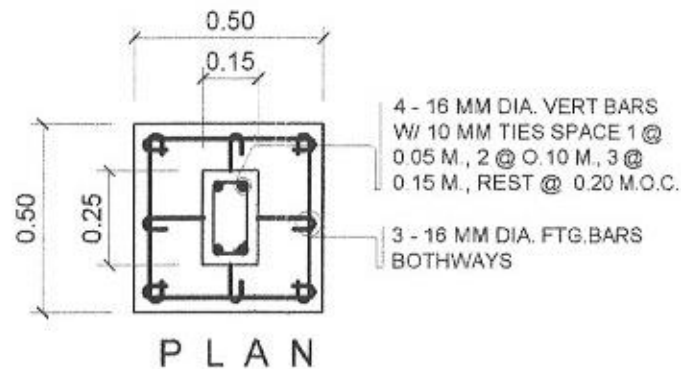
REC. APPROVAL
H. O. GARCIA
VPASS CUSU

APPROVED BY
H. D. ROBLES
PRES CUSU

PROJECT TITLE/LOCATION
IMPROVEMENT OF STUDENT UNION BUILDING
& RELOCATION OF REGISTRAR'S OFFICE
CVSU MAIN CAMPUS

IMPLEMENTING AGENCY
CAVITE STATE UNIVERSITY

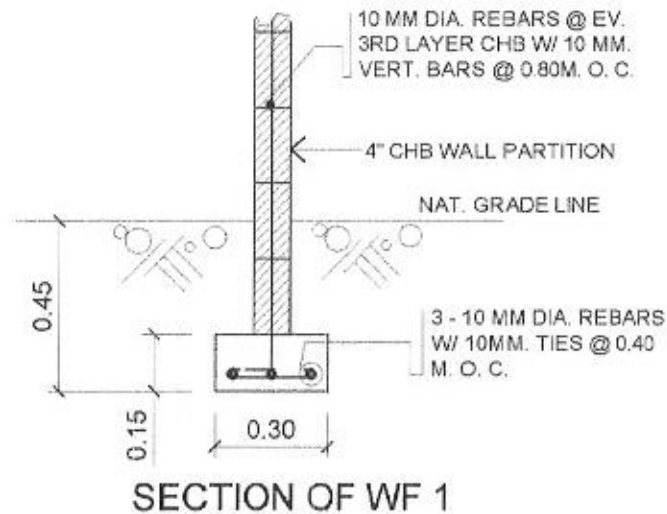
SHT NO.
S - 1



DETAIL OF STIFFENER

SCALE

1 : 20 MTS.



DRAWN BY:
E. N. RODEROS JR.
P.F.U.

END USER:
S. M. ISIP
OIC OSA

END USER:
E. O. RODEROS
UNIVERSITY REGISTRAR

ENDORSED BY:
R. B. CUBILLA
DIRECTOR PLANNING OFFICE

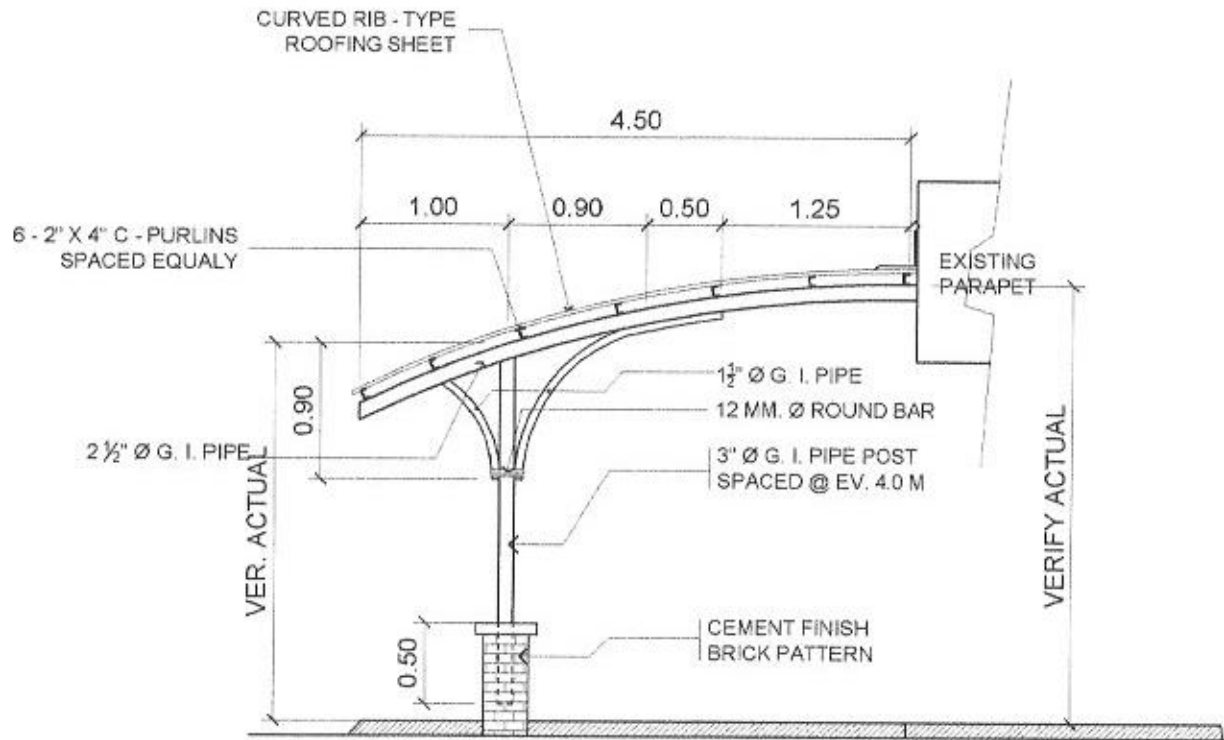
REC. APPROVAL:
H. O. GARCIA
VPASS CYSU

APPROVED BY:
H. D. ROBLES
PRES CYSU

PROJECT TITLE/LOCATION:
IMPROVEMENT OF STUDENT UNION BUILDING
& RELOCATION OF REGISTRAR'S OFFICE
CYSU MAIN CAMPUS

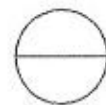
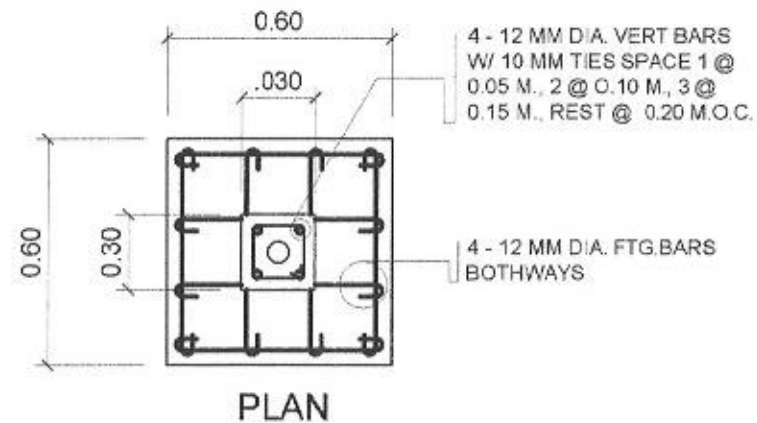
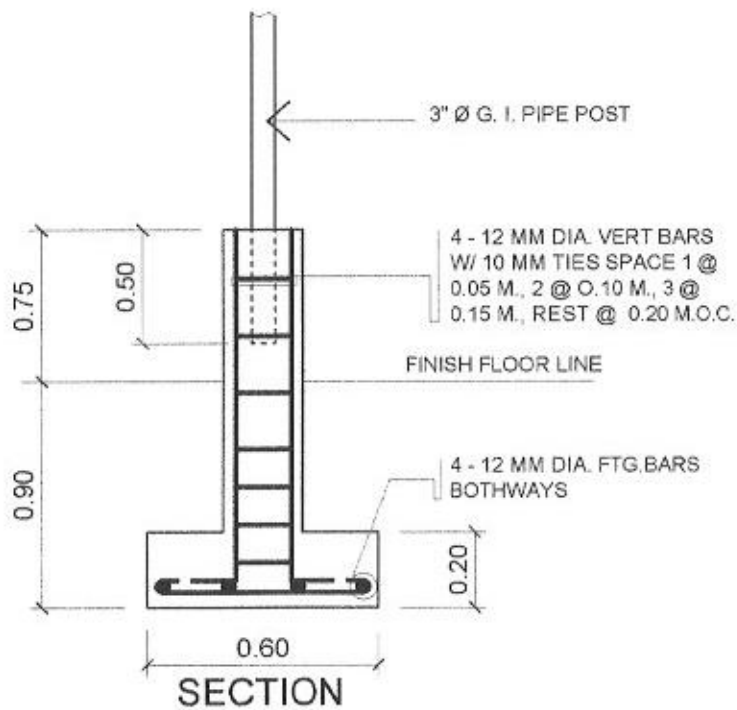
IMPLEMENTING AGENCY:
CAVITE STATE UNIVERSITY

SHT NO.:
S - 2



 **SIDE ELEVATION**
SCALE: 1 : 50 M.

DRAWN BY: E. N. RODEROS JR. PPU		END USER: E. O. RODEROS UNIVERSITY REGISTRAR		ENDORSED BY: R. B. CUBILLA DIRECTOR PLANNING OFFICE		REC. APPROVAL: H. O. GARCIA VPASS		APPROVED BY: H. D. ROBLES PRES		PROJECT TITLE/LOCATION: IMPROVEMENT OF STUDENT UNION BUILDING & RELOCATION OF REGISTRAR'S OFFICE CVSU MAIN CAMPUS		IMPLEMENTING AGENCY: CAVITE STATE UNIVERSITY		SHEET NO.: S - 3	
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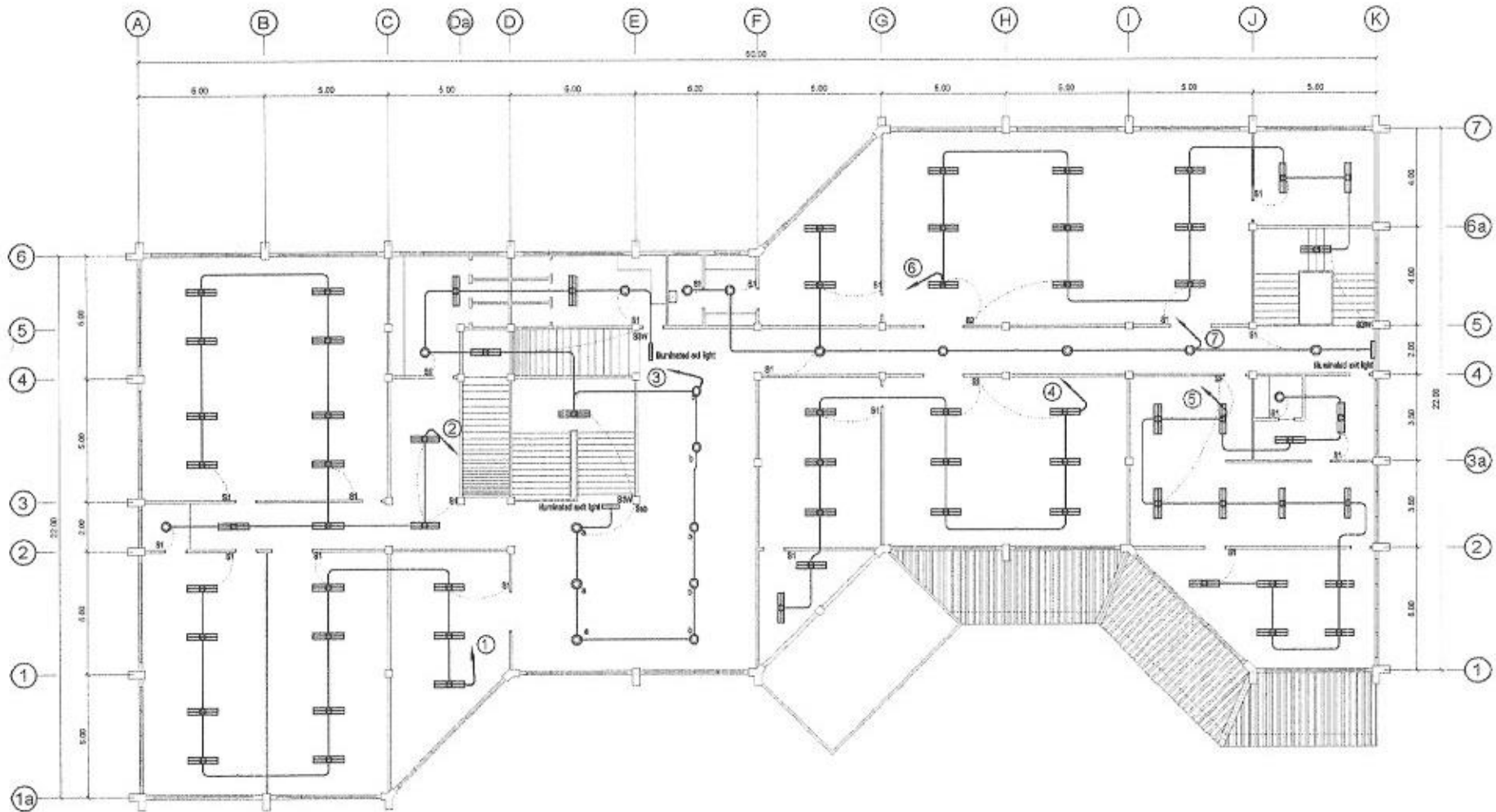


DETAIL OF CONC. PEDESTAL

SCALE

1 : 20 MTS.

CADD BY: E. N. RODEROS JR. PPU	END USER: S. M. ISIP CIC	END USER: E. O. RODEROS UNIVERSITY REGISTRAR	ENDORSED BY: R. B. CUBILLA DIRECTOR PLANNING OFFICE	REC. APPROVAL: H. O. GAROLIA VPASS CVSU	APPROVED BY: H. D. ROBLES PRES CVSU	PROJECT TITLE/LOCATION: IMPROVEMENT OF STUDENT UNION BUILDING & RELOCATION OF REGISTRAR'S OFFICE CVSU MAIN CAMPUS	IMPLEMENTING AGENCY: CAVITE STATE UNIVERSITY	SHT NO: S - 4
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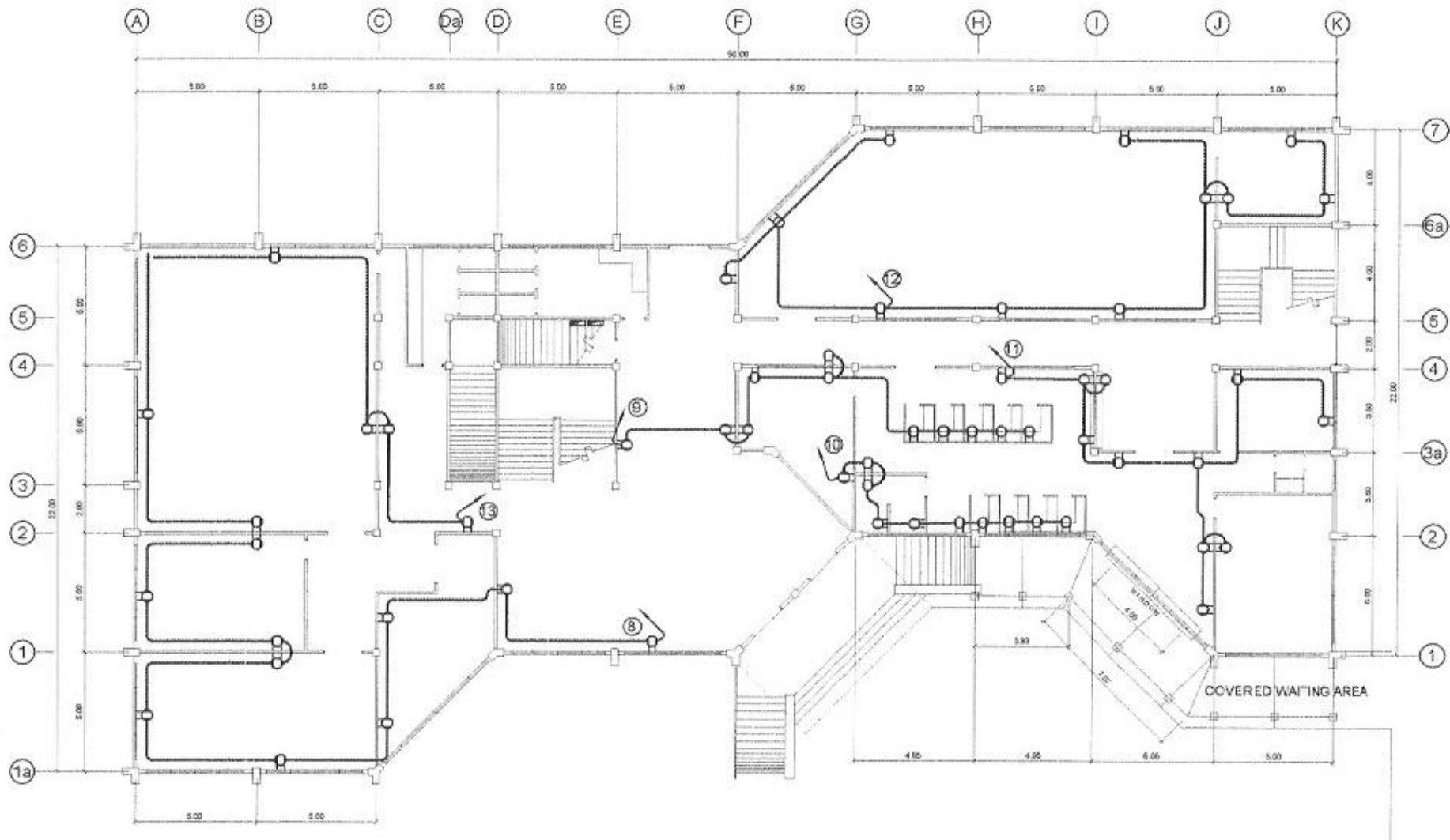
2ND FLOOR LIGHTING LAYOUT

SCALE

1: 250 M.

CADD BY:	
E. N. RODEROS JR.	
PPU	CEIT
PROFESSIONAL ELECTRICAL ENGINEER	
R. P. PENA	
PPU	CEIT
END USER	
S. M. ISIP	
CIC	OSA

END USER	END USER	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/LOCATION	IMPLEMENTING AGENCY:	SHEET NO.
S. M. ISIP	E. O. RODEROS	R. B. CUBILLA	H. O. GARCIA	N. D. ROBLES	IMPROVEMENT OF STUDENT UNION BUILDING & RELOCATION OF REGISTRAR'S OFFICE	CAVITE STATE UNIVERSITY	E - 2
CIC	UNIVERSITY REGISTRAR	DIRECTOR PLANNING OFFICE	VPASS CVSU	PRES CVSU	CVSU MAIN CAMPUS		



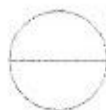
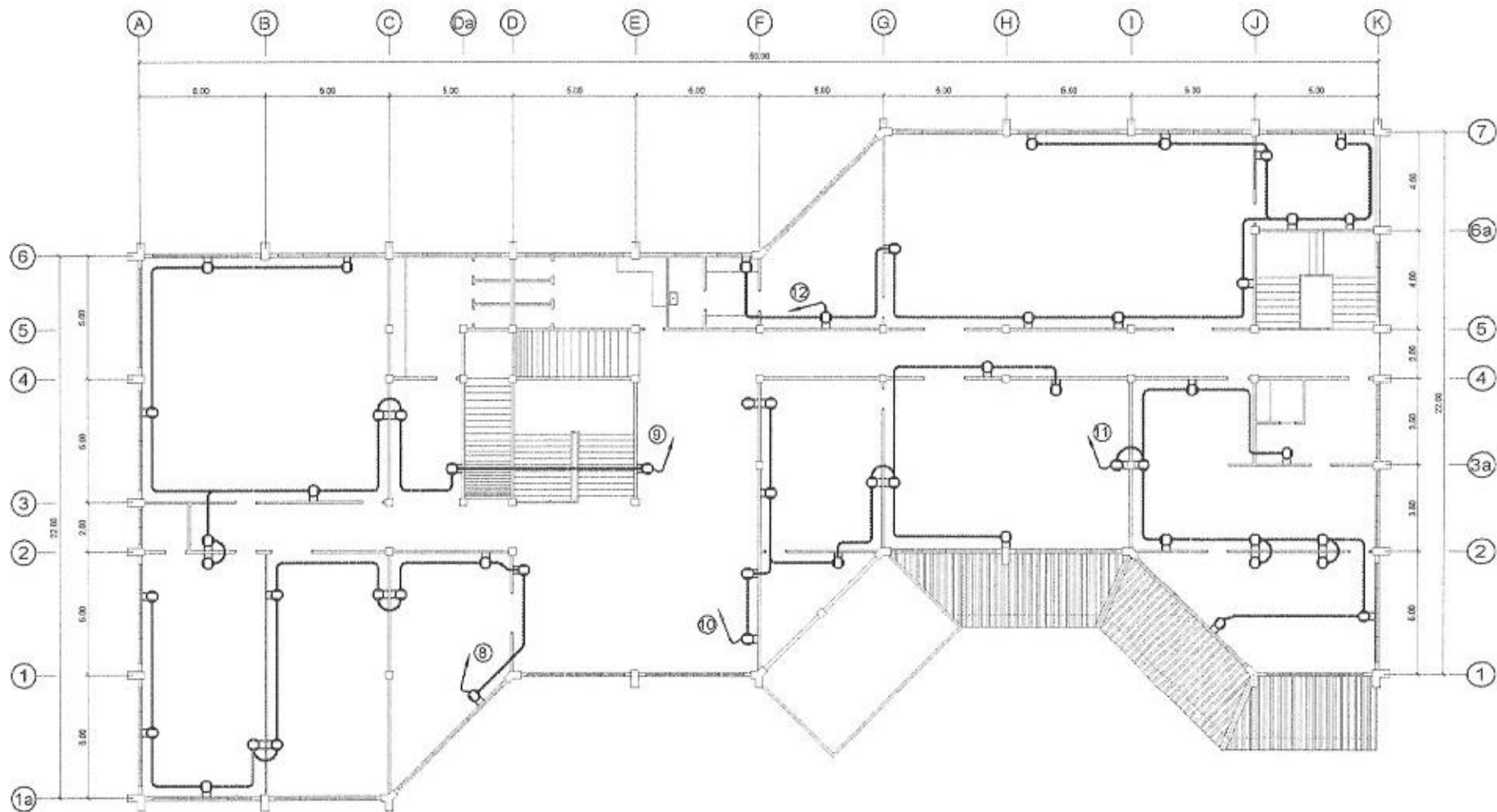
GROUND FLOOR POWER LAYOUT

SCALE

1: 250 M.

CADD BY:
E. N. RODEROS JR.
PPU
PROFESSIONAL ELECTR. ENGR.
R. P. PERA
PPU
CEIT

END USER S. M. ISIP OIC CSA	END USER E. O. RODEROS UNIVERSITY REGISTRAR	ENDORSED BY R. B. CUBILLA DIRECTOR PLANNING OFFICE	REC. APPROVAL H. O. GARCIA VPASS CVSU	APPROVED BY H. D. ROBLES PRES CVSU	PROJECT TITLE/LOCATION IMPROVEMENT OF STUDENT UNION BUILDING & RELOCATION OF REGISTRAR'S OFFICE CVSU MAIN CAMPUS	IMPLEMENTING AGENCY CAVITE STATE UNIVERSITY	SHT NO. E - 3
--------------------------------------	---	---	--	---	---	--	------------------



2ND FLOOR POWER LAYOUT

SCALE

1: 250 M.

CADD BY	<i>[Signature]</i>
E. N. RODEROS JR.	PPU CBT
PROFESSIONAL ELECTR. ENGINEER	
R. P. PERA	PPU CBT
END USER	<i>[Signature]</i>
S. M. ISIP	OSA

END USER	<i>[Signature]</i>
E. O. RODEROS	UNIVERSITY REGISTRAR

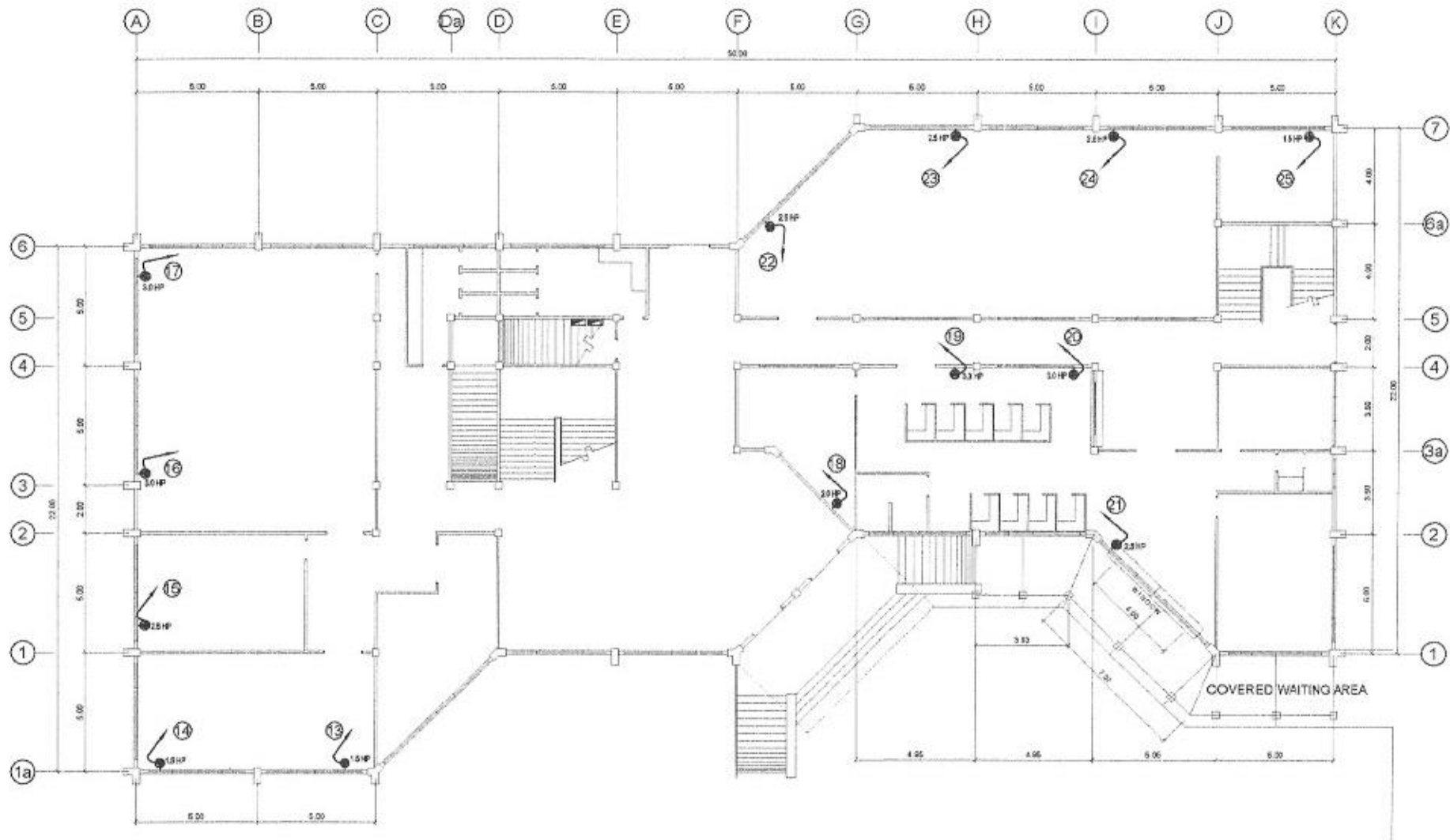
ENDORSED BY:	<i>[Signature]</i>
R. B. CUBILLA	DIRECTOR PLANNING OFFICE

REC. APPROVAL	<i>[Signature]</i>
H. O. GARCIA	VPASS CUSU

APPROVED BY:	<i>[Signature]</i>
H. D. ROBLES	PRES CUSU

PROJECT TITLE/LOCATION	IMPROVEMENT OF STUDENT UNION BUILDING & RELOCATION OF REGISTRAR'S OFFICE
	CUSU MAIN CAMPUS

IMPLEMENTING AGENCY	CAVITE STATE UNIVERSITY
SHT NO.	E - 4



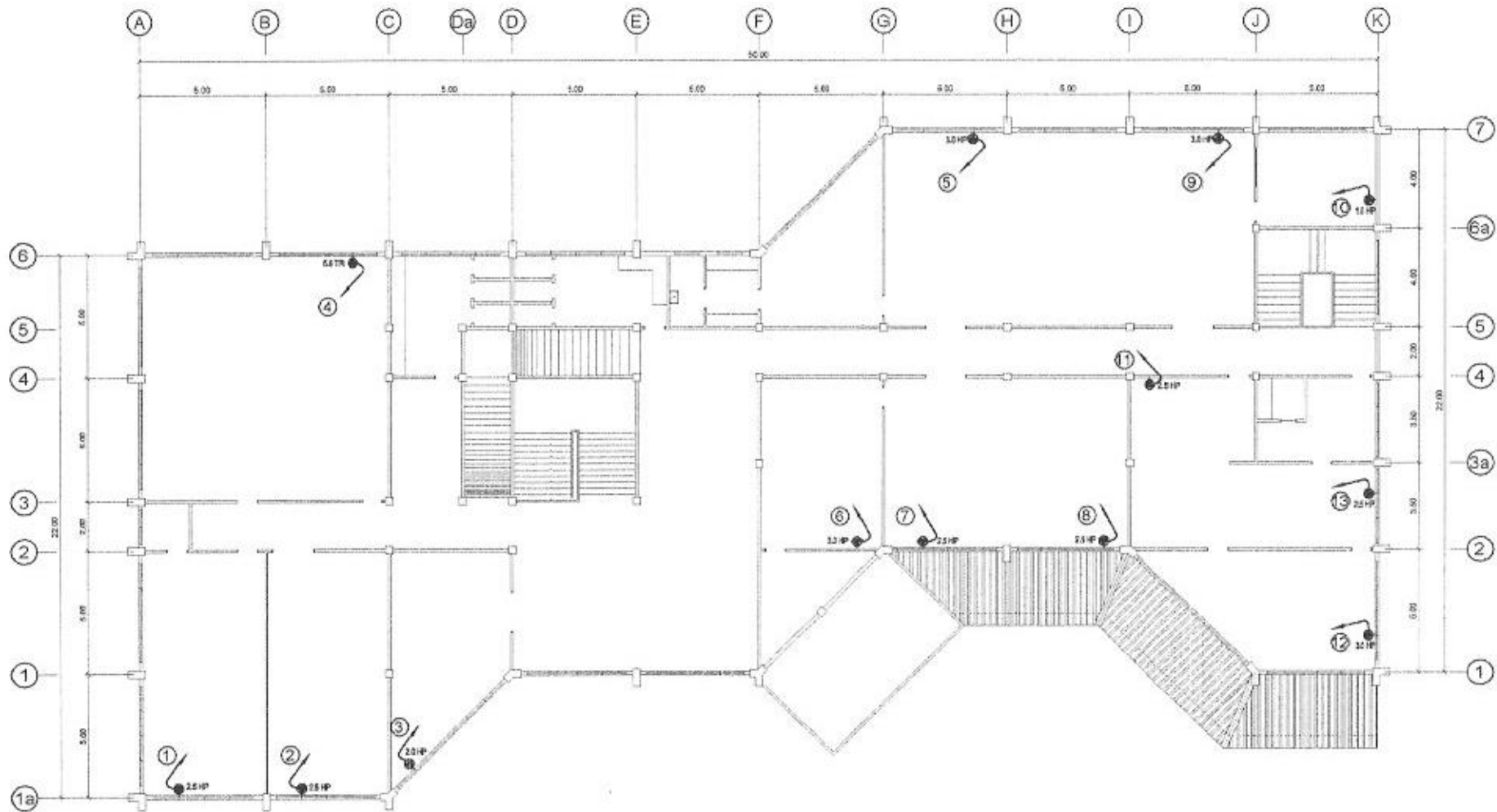
GROUND FLOOR AIRCON LAYOUT

SCALE

1: 250 M.

DRAWN BY:	
E. N. RODEROS JR.	
PPU	CEIT
PROFESSIONAL ELECTR. ENGR.	
R. P. PERA	
PPU	CEIT

END USER	END USER	ENDORSED BY:	REC. APPROVAL	APPROVED BY:	PROJECT TITLE/LOCATION	IMPLEMENTING AGENCY	SHT NO.
S. M. ISP	E. O. RODEROS	R. B. CUBILLA	H. O. GARCIA	H. D. ROBLES	IMPROVEMENT OF STUDENT UNION BUILDING & RELOCATION OF REGISTRAR'S OFFICE	CAVITE STATE UNIVERSITY	E - 5
GIC	UNIVERSITY REGISTRAR	DIRECTOR PLANNING OFFICE	VFAS CYSU	PRES CYSU	CYSU MAIN CAMPUS		



2ND FLOOR AIRCON LAYOUT

SCALE

1: 250 M.

DRAWN BY:	
E. N. RODEROS JR.	
PPU	CEIT
PROFESSIONAL ELECTR. ENGR.	
R. P. ARENA	
PPU	CEIT
END USER	
S. M. ISIP	
OIC	OSA

END USER	END USER	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION	IMPLEMENTING AGENCY	SHT NO.
S. M. ISIP	E. O. RODEROS	R. B. CUBILLA	H. O. GARCIA	H. D. ROBLES	IMPROVEMENT OF STUDENT UNION BUILDING & RELOCATION OF REGISTRAR'S OFFICE	CAVITE STATE UNIVERSITY	E - 6
OIC	UNIVERSITY REGISTRAR	DIRECTOR PLANNING OFFICE	VPASS CVSU	PRES CVSU	CVSU MAIN CAMPUS		

SCHEDULE OF LOADS

PANEL : LPP1
PHASE : 3
VOLTS : 230

CABLE : 3 - 50.0 SQ. MM THHN + G 8.0 SQ MM THHN
CONDUIT : RSC, 50 MM DIA.

MAIN : 175 AT, 225AF, 3P, 230V, 20 KAIC,CB
ENCLOSURE : NEMA 1
MOUNTING : SURFACE

CKT NO	NO OF OUTLETS	CIRCUIT DESCRIPTION	LOAD RATINGS IN					CIRCUIT PROTECTION	Size of Conductor		Size Of Conduit In MM ø	COLOR CODE
			WATTS	VOLTS	AMPERES				CIRCUIT BREAKER RATING	SQ. MM THHN		
					AB	BC	CA					
1	17	LIGHTING OUTLETS	1700	230	7.39			15AT, 2P,230V, 10 KAIC	2 - 2.0		RSC, 15	1BK,1R
2	18	LIGHTING OUTLETS	1800	230		7.83		15AT, 2P,230V, 10 KAIC	2 - 2.0		RSC, 15	1R,1BLU
3	14	LIGHTING OUTLETS	1400	230			6.09	15AT, 2P,230V, 10 KAIC	2 - 2.0		RSC, 15	1BLU,1BK
4	13	LIGHTING OUTLETS	1300	230	5.65			15AT, 2P,230V, 10 KAIC	2 - 2.0		RSC, 15	1BK,1R
5	15	LIGHTING OUTLETS	1500	230		6.52		15AT, 2P,230V, 10 KAIC	2 - 2.0		RSC, 15	1R,1BLU
6	11	LIGHTING OUTLETS	1100	230			4.78	15AT, 2P,230V, 10 KAIC	2 - 2.0		RSC, 15	1BLU,1BK
7	13	LIGHTING OUTLETS	1300	230		5.65		15AT, 2P,230V, 10 KAIC	2 - 2.0		RSC, 15	1R,1BLU
8	10	CONV. OUTLETS	1800	230	7.83			20AT, 2P,230V, 10 KAIC	2 - 3.5 + G 3.5		RSC, 20	1BK,1R,G
9	11	CONV. OUTLETS	1980	230		8.61		20AT, 2P,230V, 10 KAIC	2 - 3.5 + G 3.5		RSC, 20	1R,1BLU,G
10	10	CONV. OUTLETS	1800	230			7.83	20AT, 2P,230V, 10 KAIC	2 - 3.5 + G 3.5		RSC, 20	1BLU,1BK,G
11	11	CONV. OUTLETS	1980	230		8.61		20AT, 2P,230V, 10 KAIC	2 - 3.5 + G 3.5		RSC, 20	1BLU,1BK,G
12	11	CONV. OUTLETS	1980	230		8.61		20AT, 2P,230V, 10 KAIC	2 - 3.5 + G 3.5		RSC, 20	1BLU,1BK,G
13	1	SPLIT ACU, 1.5 HP	1119	230	10.00			20AT, 2P,230V, 10 KAIC	2 - 3.5 + G 3.5		RSC, 20	1BK,1R,G
14	1	SPLIT ACU, 1.5 HP	1119	230		10.00		20AT, 2P,230V, 10 KAIC	2 - 3.5 + G 3.5		RSC, 20	1R,1BLU,G
15	1	SPLIT ACU, 2.5HP	1865	230			14.00	30AT, 2P,230V, 10 KAIC	2 - 5.5 + G 5.5		RSC, 20	1BLU,1BK,G
16	1	SPLIT ACU, 3.0HP	2238	230	17.00			30AT, 2P,230V, 10 KAIC	2 - 5.5 + G 5.5		RSC, 20	1BK,1R,G
17	1	SPLIT ACU, 3.0HP	2238	230		17.00		30AT, 2P,230V, 10 KAIC	2 - 5.5 + G 5.5		RSC, 20	1R,1BLU,G
18	1	SPLIT ACU, 2HP	1492	230			12.00	20AT, 2P,230V, 10 KAIC	2 - 3.5 + G 3.5		RSC, 20	1BLU,1BK,G
19	1	SPLIT ACU, 3.0HP	2238	230	17.00			30AT, 2P,230V, 10 KAIC	2 - 5.5 + G 5.5		RSC, 20	1BK,1R,G
20	1	SPLIT ACU, 3.0HP	2238	230		17.00		30AT, 2P,230V, 10 KAIC	2 - 5.5 + G 5.5		RSC, 20	1R,1BLU,G
21	1	SPLIT ACU, 2.5HP	1865	230			14.00	30AT, 2P,230V, 10 KAIC	2 - 5.5 + G 5.5		RSC, 20	1BLU,1BK,G
22	1	SPLIT ACU, 2.5HP	1865	230	14.00			30AT, 2P,230V, 10 KAIC	2 - 5.5 + G 5.5		RSC, 20	1BK,1R,G
23	1	SPLIT ACU, 2.5HP	1865	230		14.00		30AT, 2P,230V, 10 KAIC	2 - 5.5 + G 5.5		RSC, 20	1R,1BLU,G
24	1	SPLIT ACU, 2.5HP	1865	230			14.00	30AT, 2P,230V, 10 KAIC	2 - 5.5 + G 5.5		RSC, 20	1BLU,1BK,G
25	1	SPLIT ACU, 1.5 HP	1119	230	10.00			20AT, 2P,230V, 10 KAIC	2 - 3.5 + G 3.5		RSC, 20	1BK,1R,G
26		SPARE										
27		SPARE										
28		SPARE										
29		SPARE										
30		SPARE										
		TOTAL	35818	230	88.87	86.61	69.91	175AT, 3P,230V, 20 KAIC	3- 50.0 + G 8.0		RSC, 50	1BK,1R,G

MAIN FEEDER and CURRENT PROTECTION COMPUTATION:

$$I_{FL} = \frac{1.732 \times 80.91 + 25\% \times 101.1}{\sqrt{3}} = 135.98 \text{ Amperes}$$

PEC 2009 Section 4-60.1.7 Page 8-741 and Sections 4-30.2.4 Page 8-687

use: 3 - 50.0 SQMM THHN (135.98A/150A) + 1 - 8.0 SQMM THW IN 75 MM DIA. RSC

NOTE:

$$I_{cb} = \frac{1.732 \times 18.70 + 25\% \times 101.1}{\sqrt{3}} = 168.49 \text{ Amperes}$$

PEC 2009 Section 4-30.4.2 Page 8-687 and Table 9-4-30.4.2 Page 8-700

use: 175AT, 225AF, 3P, 230V, 20 KAIC, CB

(Inverse Time Delay (ITD) Breakers)

G - Means Ground Wire
1BLK- Color BLACK
1R- Color RED
1BLU- Color BLUE
1G- Color GREEN (Equipment Grounding)

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.

CADD BY	
E. N. RODEROS JR.	
PPU	CE
PROFESSIONAL ELECTR. ENGR.	
R. P. PERA	
PPU	CE
END USER	END USER
S. M. ISIP	E. O. RODEROS
OIC	UNIVERSITY REGISTRAR

ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/LOCATION:	IMPLEMENTING AGENCY:	SHT NO:
R. B. CUBILLA	H. O. GARCIA	H. D. ROBLES	IMPROVEMENT OF STUDENT UNION BUILDING & RELOCATION OF REGISTRAR'S OFFICE	CAVITE STATE UNIVERSITY	E - 7
DIRECTOR PLANNING OFFICE	V.PASS	PRES	CYSU MAIN CAMPUS		

SCHEDULE OF LOADS

PANEL : LPP2
PHASE : 3
VOLTS : 230

CABLE : ¹⁴ 3 - 40 SQ. MM THHN + G ¹⁴ 8.5 SQ MM THHN
CONDUIT : RSC, 25 MM DIA

MAIN : 225AT, 250AF, 3P, 230V, 10 KA/C, CB
ENCLOSURE : NEMA 1
MOUNTING : SURFACE

CKT NO.	NO OF OUTLETS	CIRCUIT DESCRIPTION	LOAD RATINGS IN			CIRCUIT PROTECTION		Size of Conductor		Size Of Conduit In MM	COLOR CODE
			WATTS	VOLTS	AMPERES						
					AB	BC	CA	CIRCUIT BREAKER RATING	SQ MM THHN	SQ MM THHN (G)	
1	11	LIGHTING OUTLETS	1100	230	4.78			15AT, 2P, 230V, 10 KA/C	2 - 2.0	RSC, 15	1BLK, 1R
2	13	LIGHTING OUTLETS	1300	230		5.65		15AT, 2P, 230V, 10 KA/C	2 - 2.0	RSC, 15	1R, 1BLU
3	16	LIGHTING OUTLETS	1600	230			6.96	15AT, 2P, 230V, 10 KA/C	2 - 2.0	RSC, 15	1BLU, 1BLK
4	11	LIGHTING OUTLETS	1100	230	4.78			15AT, 2P, 230V, 10 KA/C	2 - 2.0	RSC, 15	1BLK, 1R
5	14	LIGHTING OUTLETS	1400	230		5.09		15AT, 2P, 230V, 10 KA/C	2 - 2.0	RSC, 15	1R, 1BLU
6	12	LIGHTING OUTLETS	1200	230	5.22			15AT, 2P, 230V, 10 KA/C	2 - 2.0	RSC, 15	1BLK, 1R
7	10	LIGHTING OUTLETS	1000	230	4.35			15AT, 2P, 230V, 10 KA/C	2 - 2.0	RSC, 15	1BLK, 1R
8	11	CONV. OUTLETS	1980	230		8.61		20AT, 2P, 230V, 10 KA/C	2 - 3.5 + G 3.5	RSC, 20	1R, 1BLU, G
9	10	CONV. OUTLETS	1800	230			7.83	20AT, 2P, 230V, 10 KA/C	2 - 3.5 + G 3.5	RSC, 20	1BLU, 1BLK, G
10	11	CONV. OUTLETS	1980	230	8.61			20AT, 2P, 230V, 10 KA/C	2 - 3.5 + G 3.5	RSC, 20	1BLK, 1R, G
11	11	CONV. OUTLETS	1980	230		8.61		20AT, 2P, 230V, 10 KA/C	2 - 3.5 + G 3.5	RSC, 20	1R, 1BLU, G
12	11	CONV. OUTLETS	1980	230			8.61	20AT, 2P, 230V, 10 KA/C	2 - 3.5 + G 3.5	RSC, 20	1BLU, 1BLK, G
13	1	SPLIT ACU, 2.5HP	1665	230	14.00			30AT, 2P, 230V, 10 KA/C	2 - 5.5 + G 5.5	RSC, 20	1BLK, 1R, G
14	1	SPLIT ACU, 2.5HP	1665	230		14.00		30AT, 2P, 230V, 10 KA/C	2 - 5.5 + G 5.5	RSC, 20	1R, 1BLU, G
15	1	SPLIT ACU, 2.5HP	1665	230		14.00		30AT, 2P, 230V, 10 KA/C	2 - 5.5 + G 5.5	RSC, 20	1R, 1BLU, G
16	1	SPLIT ACU, 5TR	2238	230	17.50	17.50	17.50	40AT, 3P, 230V, 10 KA/C	3 - 5.5 + G 5.5	RSC, 20	1BLK, 1R, 1BLU, 1G
17	1	SPLIT ACU, 3.0HP	2238	230			17.00	30AT, 2P, 230V, 10 KA/C	2 - 5.5 + G 5.5	RSC, 20	1BLU, 1BLK, G
18	1	SPLIT ACU, 3.0HP	2238	230			17.00	30AT, 2P, 230V, 10 KA/C	2 - 5.5 + G 5.5	RSC, 20	1BLU, 1BLK, G
19	1	SPLIT ACU, 2.5HP	1665	230	14.00			30AT, 2P, 230V, 10 KA/C	2 - 5.5 + G 5.5	RSC, 20	1BLK, 1R, G
20	1	SPLIT ACU, 2.5HP	1665	230		14.00		30AT, 2P, 230V, 10 KA/C	2 - 5.5 + G 5.5	RSC, 20	1R, 1BLU, G
21	1	SPLIT ACU, 2.5HP	1665	230			14.00	30AT, 2P, 230V, 10 KA/C	2 - 5.5 + G 5.5	RSC, 20	1BLU, 1BLK, G
22	1	SPLIT ACU, 1.5 HP	1119	230	10.00			20AT, 2P, 230V, 10 KA/C	2 - 3.5 + G 3.5	RSC, 20	1BLK, 1R, G
23	1	SPLIT ACU, 2.5HP	1665	230		14.00		30AT, 2P, 230V, 10 KA/C	2 - 5.5 + G 5.5	RSC, 20	1R, 1BLU, G
24	1	SPLIT ACU, 3.0HP	2238	230	17.00			30AT, 2P, 230V, 10 KA/C	2 - 5.5 + G 5.5	RSC, 20	1BLK, 1R, G
25	1	SPLIT ACU, 2.5HP	1665	230			14.00	30AT, 2P, 230V, 10 KA/C	2 - 5.5 + G 5.5	RSC, 20	1BLU, 1BLK, G
26		SPARE									
27		SPARE									
28		SPARE									
29		SPARE									
30		SPARE									
TOTAL			43959	230	100.24	102.46	102.89	225AT, 3P, 230V, 22 KA/C	3 - 80.0 + G 14	RSC, 50	1BLK, 1R, 1BLU, G

MAIN FEEDER and CURRENT PROTECTION COMPUTATION:

$$I_{ys} = \frac{1.732 \times 102.89 + 25\% \times 102.89}{1.0} = 181.71 \text{ Amperes}$$

PEC 2008 Section 4.40.1.7 Page 9 741 and Section 4.30.2.4 Page 9 687

use: 3 - 80.0 SQMM THHN (181.71A/205A) + 1 - 14.0 SQMM THW IN 50 MM DIA. RSC

$$I_{cb} = \frac{1.732 \times 102.89 + 25\% \times 102.89}{1.0} = 213.21 \text{ Amperes}$$

PEC 2008 Section 4.30.4.2 Page 9 687 and Table E 4.30.4.2 Page 9 700

G - Means Ground Wire

NOTE: 1BLK- Color BLACK

1R- Color RED

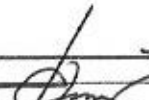
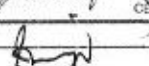
1BLU- Color BLUE

1G- Color GREEN (Equipment Grounding)

use: 225AT, 250AF, 3P, 230V, 22 KA/C, CB

(Inverse Time Delay (ITD) Breakers)

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.

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END USER: 
S. M. ISP
OIC DSA

END USER	END USER	ENDORSED BY:	REC. APPROVAL	APPROVED BY	PROJECT TITLE/ LOCATION	IMPLEMENTING AGENCY	SHI NO
	E. O. RODEROS UNIVERSITY REGISTRAR	R. B. CUBILLA DIRECTOR PLANNING OFFICE	H. O. GARCIA VPA88 CUBO	H. D. ROBLES PRES CUSU	IMPROVEMENT OF STUDENT UNION BUILDING & RELOCATION OF REGISTRAR'S OFFICE CUSU MAIN CAMPUS	CAVITE STATE UNIVERSITY	E - 8

SCHEDULE OF LOADS

PANEL : Main Dist Panel CABLE: 3 - 200.0 SQ. MM THHN + G 22.0 SQ MM THHN MAIN: ^{050 & 400} 250 AT, 250AF, 3P, 230V, 22 KAIC, CB
 PHASE: 1 CONDUIT: RSC, 100 MM DIA. ENCLOSURE : NEMA 1
 VOLTS: 230 MOUNTING: SURFACE

CKT NO.	NO OF OUTLETS	CIRCUIT DESCRIPTION	LOAD RATINGS IN					CIRCUIT PROTECTION	Size of Conductor			Size Of Conduit in MM Ø	COLOR CODE
			WATTS	VOLTS	AMPERES								
					AB	BC	CA						
1	LLP1	LIGHTING POWER PANEL1	35817.76	230	88.87	86.61	89.91	175AT, 3P,230V, 20 KAIC	3- 50.0	+	G 8.0	RSC, 50	1BLK,1R,1BLU,G
2	LPP2	LIGHTING POWER PANEL2	40987.78	230	100.24	102.46	102.89	225AT, 3P,230V, 22 KAIC	3- 80.0	+	G 14	RSC, 65	1ELK,1R,1BLU,G
3		SPARE											
4		SPARE											
5		SPARE											
6		SPARE											
		TOTAL	76805.54	230	189.11	189.07	192.80	350AT, 3P,230V, 35 KAIC	3 - 200	+	G 22 0	RSC, 100	1BLK,1R,1BLU,G

MAIN FEEDER and CURRENT PROTECTION COMPUTATION:

$$I_{FL} = \frac{[192.80 \times 1.732 + 25\% \times 1m]}{DF} = 333.94 \text{ Amperes}$$

PEC 2009 Section 4.40.1.7 Page # 741 and Section 4.30.2.4 Page # 687

use: 3-200.0 SQMM THHN (333.94A/355A)+ 1-22.0 SQMM THW IN 1 - 65 MM DIA. RSC

$$I_{CB} = \frac{[192.80 \times 1.732 + 250\% \times 1m]}{DF} = 333.94 \text{ Amperes}$$

PEC 2009 Section 4.30.4.2 Page # 687 and Table # 4.30.4.2 Page # 700

G - Means Ground Wire

NOTE: 1BLK- Color BLACK

1R- Color RED

1BLU- Color BLUE

1G- Color GREEN (Equipment Grounding)

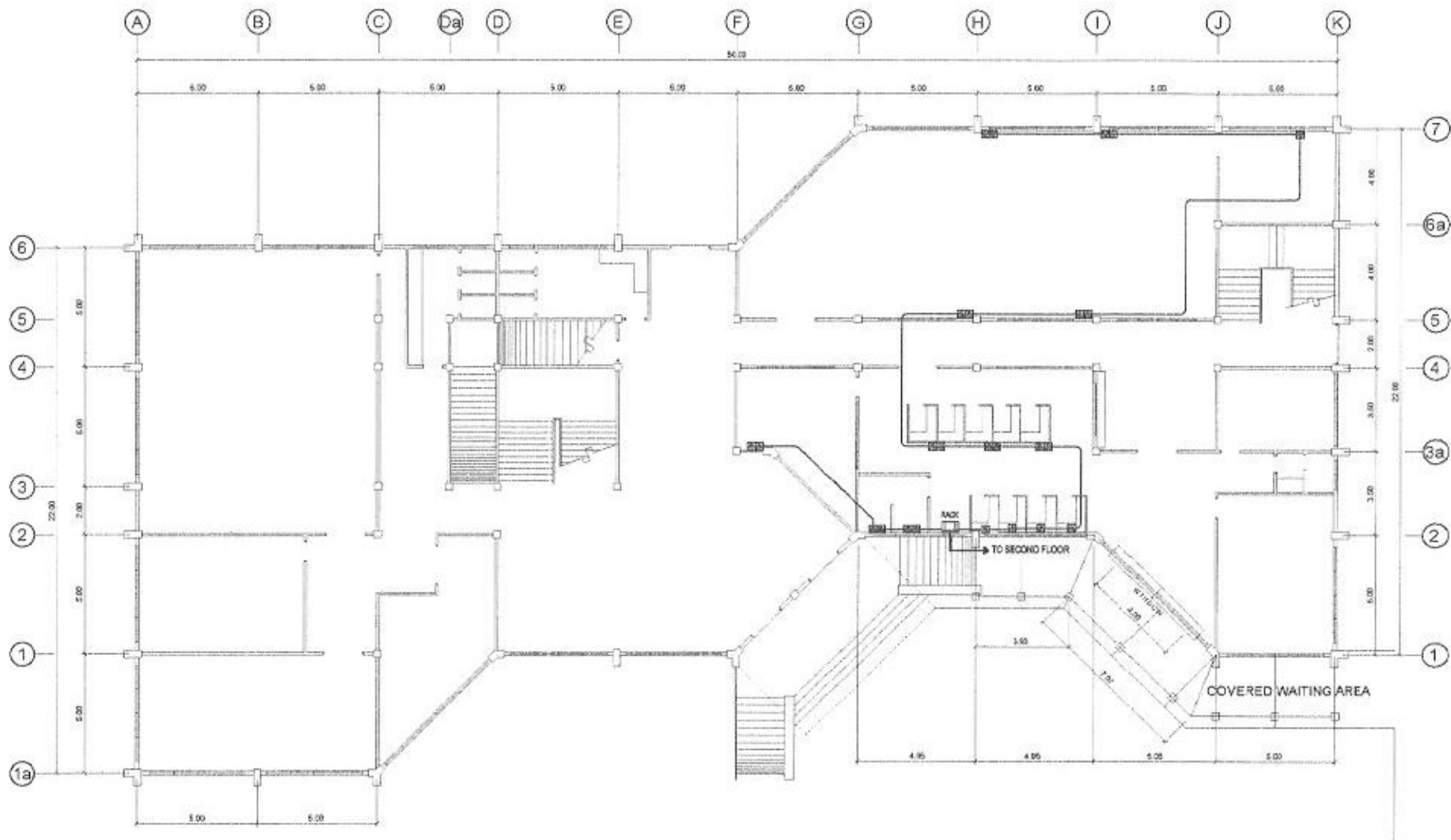
use: 350AT, 400AF, 3P, 230V, 35 KAIC, CB

(Inverse Time Delay (ITD) Breakers

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.

CADD BY: E. N. RODEROS JR. FPU CEIT
PROFESSIONAL ELECTR. ENGR R. B. CUBILLA FPU CEIT
END USER S. M. ISP OIC OSA

END USER E. O. RODEROS UNIVERSITY REGISTRAR	ENDORSED BY: R. B. CUBILLA DIRECTOR PLANNING OFFICE	REC. APPROVAL H. O. GARCIA VPASS CVSU	APPROVED BY: H. D. ROBLES PRES CVSU	PROJECT TITLE/LOCATION IMPROVEMENT OF STUDENT UNION BUILDING & RELOCATION OF REGISTRAR'S OFFICE CVSU MAIN CAMPUS	IMPLEMENTING AGENCY: CAVITE STATE UNIVERSITY	SHT NO: E - 9
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GROUND FLOOR LAN LAYOUT

SCALE

1: 250 M.

LEGEND :

- SINGLE COMP. NET. OUTLET
- DUPLEX COMP. NET. OUTLET
- RACK

DRAWN BY:	
E. N. RODEROS JR.	
PPU	CEIT
REGISTERED ELECT. ENGR.	
E. R. ROCILLO	
PPU	CEIT
END USER	
S. M. ISIP	
OIC	OSA

END USER
E. O. RODEROS
UNIVERSITY REGISTRAR

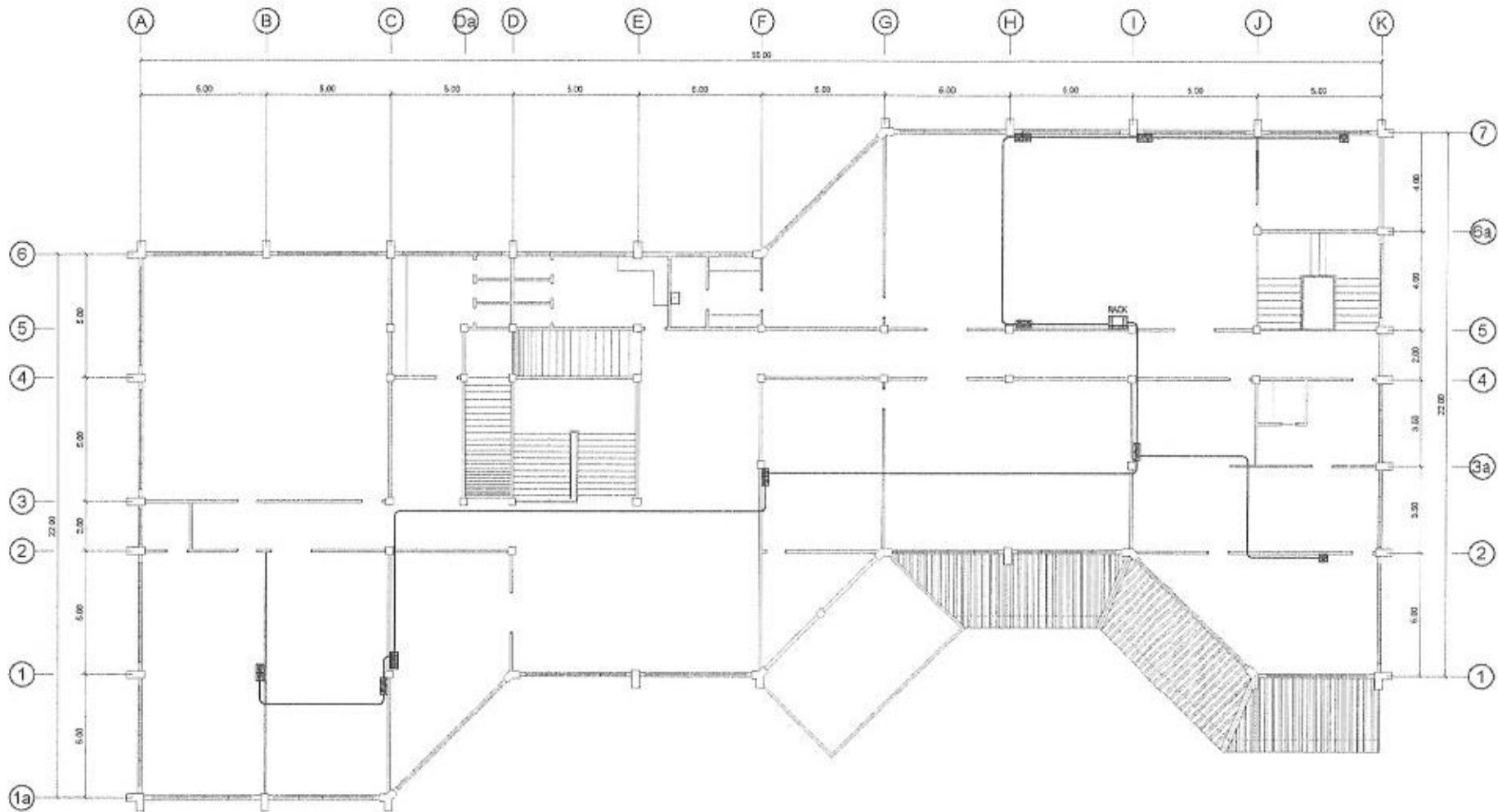
ENDORSED BY:
R. B. CUBILLA
DIRECTOR PLANNING OFFICE

REC. APPROVAL
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VPASS

APPROVED BY:
M. D. ROBLES
PRES CVSU

PROJECT TITLE/LOCATION
IMPROVEMENT OF STUDENT UNION BUILDING & RELOCATION OF REGISTRAR'S OFFICE
CVSU MAIN CAMPUS

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CAVITE STATE UNIVERSITY	E - 10



2ND FLOOR LAN LAYOUT

SCALE

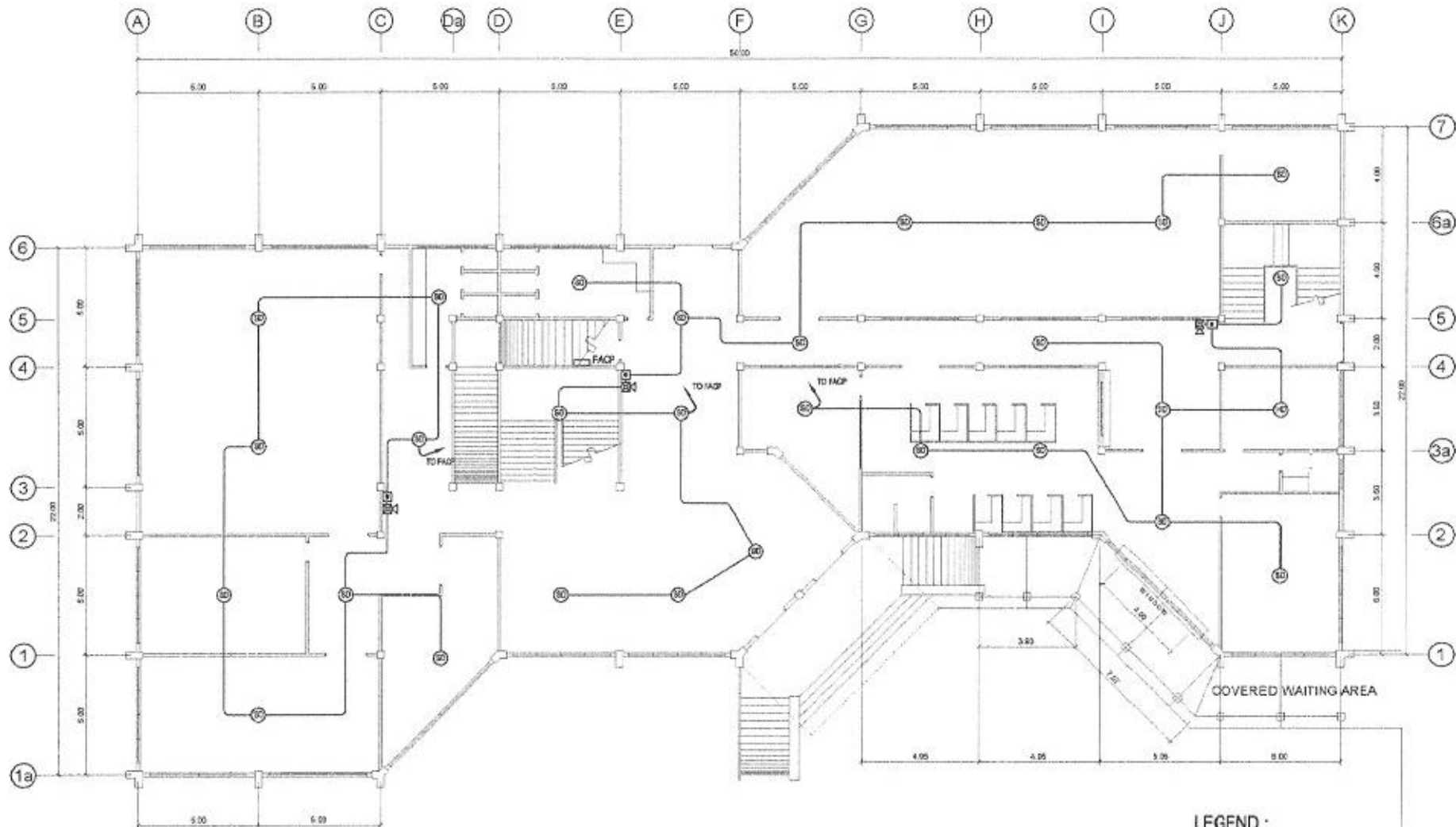
1: 250 M.

LEGEND :

- SINGLE COMP. NET. OUTLET
- DUPLEX COMP. NET. OUTLET
- RACK

CADD BY:	
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REGISTERED ELECTR. ENGR.	
E. R. ROCILLO	CEIT
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S. M. ISP	OSA
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END USER	ENDORSED BY	REC. APPROVAL	APPROVED BY	PROJECT TITLE/LOCATION	IMPLEMENTING AGENCY	SHT NO.
				IMPROVEMENT OF STUDENT UNION BUILDING & RELOCATION OF REGISTRAR'S OFFICE CVSU MAIN CAMPUS	CAVITE STATE UNIVERSITY	E-11
E. O. RODEROS UNIVERSITY REGISTRAR	R. B. CUBILLA DIRECTOR PLANNING OFFICE	H. O. GARCIA VPASS	H. D. ROBLES PRES CVSU			



GROUND FLOOR SMOKE DETECTOR LAYOUT

SCALE

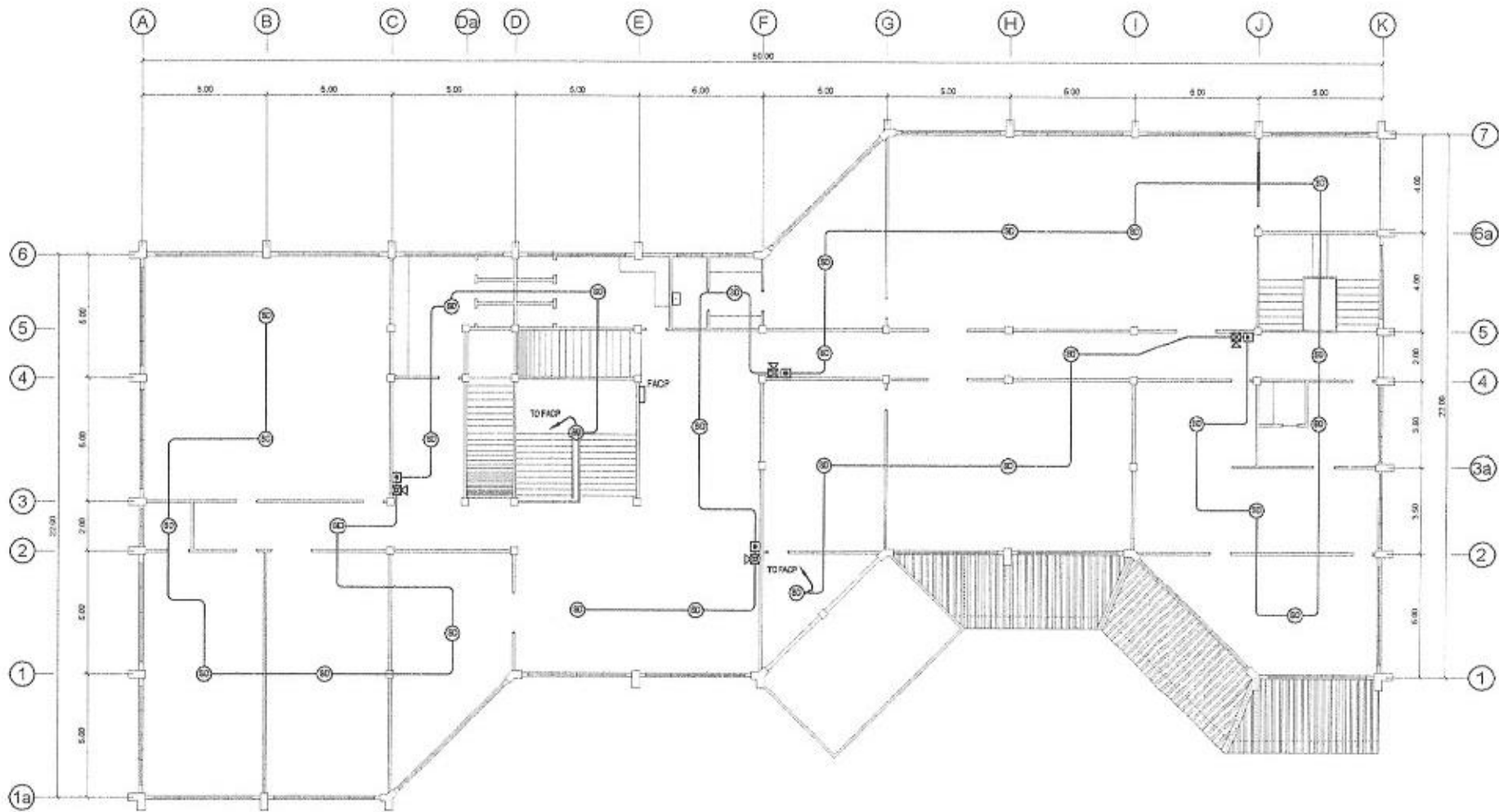
1: 250 M.

LEGEND :

- FACP FIRE ALARM CONTROL PANEL
- (SD) SMOKE DETECTOR (CEILING MOUNTED)
- (HD) HEAT DETECTOR
- MANUAL ALARM CONTROL POINT
- SOUNDER WARNING FLASHER (HOOFER)

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E. R. ROCILLO	
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OSA	UNIVERSITY REGISTRAR

ENDORSED BY:	REG. APPROVAL	APPROVED BY:	PROJECT TITLE/ LOCATION	IMPLEMENTING AGENCY:	SHT NO.
R. B. CUBILLA	H. O. GARCIA	M. D. ROBLES	IMPROVEMENT OF STUDENT UNION BUILDING & RELOCATION OF REGISTRAR'S OFFICE	CAVITE STATE UNIVERSITY	E-12
DIRECTOR PLANNING OFFICE	VPAAS	PRES	CVSU MAIN CAMPUS		



2ND FLOOR SMOKE DETECTOR LAYOUT

SCALE

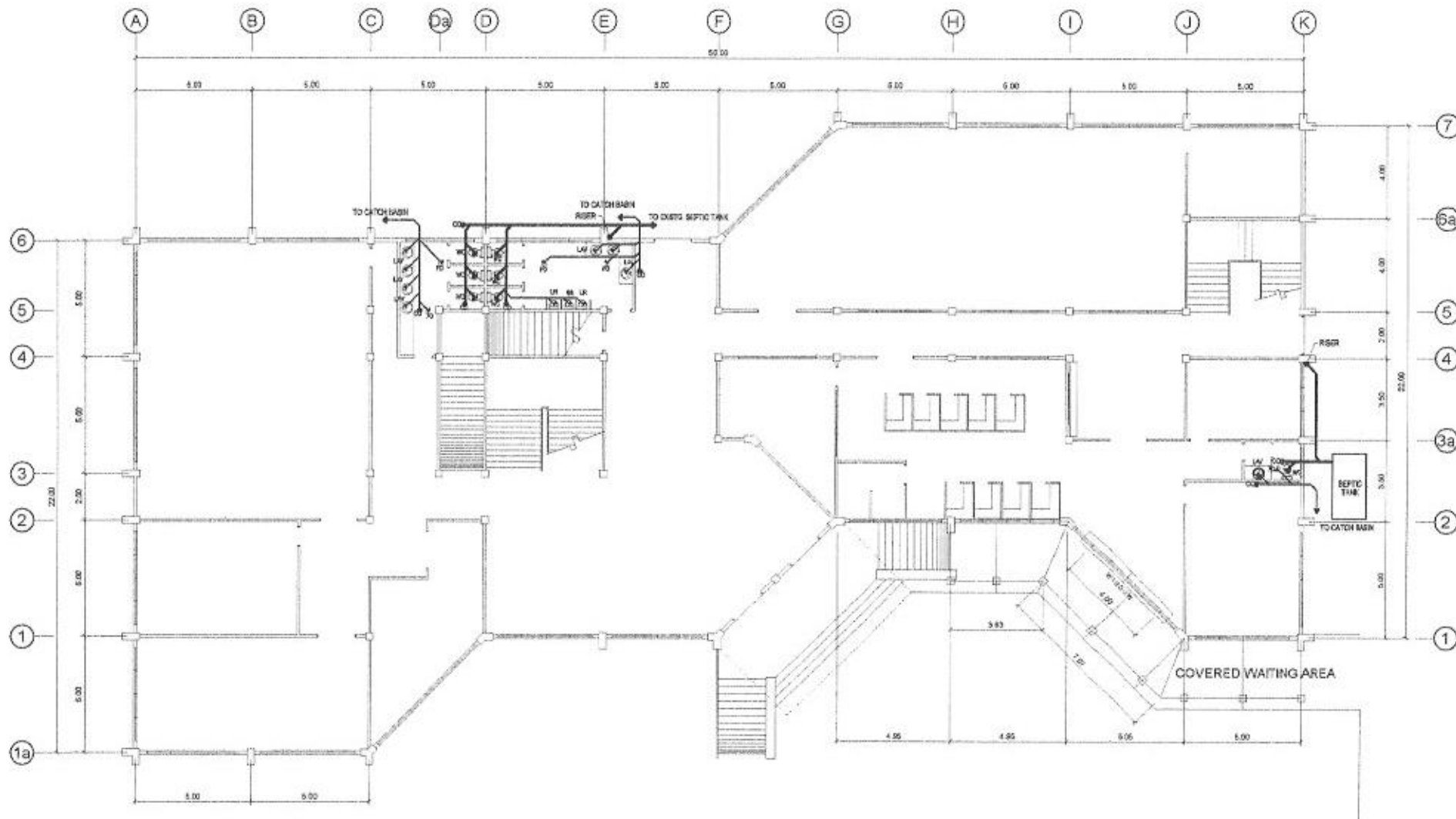
1: 250 M.

LEGEND :

- FACP FIRE ALARM CONTROL PANEL
- (SD) SMOKE DETECTOR (CEILING MOUNTED)
- (HD) HEAT DETECTOR
- MANUAL ALARM CONTROL POINT
- SOUNDER W/ XENON FLASHER (HOOTER)

CADD BY:
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REGISTERED ELECT. ENGR.
E. R. ROCILLO
PPU CEIT

END USER	END USER	ENDORSED BY	REC. APPROVAL	APPROVED BY	PROJECT TITLE/LOCATION	IMPLEMENTING AGENCY	SHT NO.
S. M. ISIP	E. O. RODEROS	R. B. CUBILLA	H. O. GARCIA	H. D. ROBLES	IMPROVEMENT OF STUDENT UNION BUILDING & RELOCATION OF REGISTRAR'S OFFICE	CAVITE STATE UNIVERSITY	E - 13
DIC OSA	UNIVERSITY REGISTRAR	DIRECTOR PLANNING OFFICE	VPASS CVSU	PRES CVSU	CVSU MAIN CAMPUS		



GROUND FLOOR SEWER LINE LAYOUT

SCALE

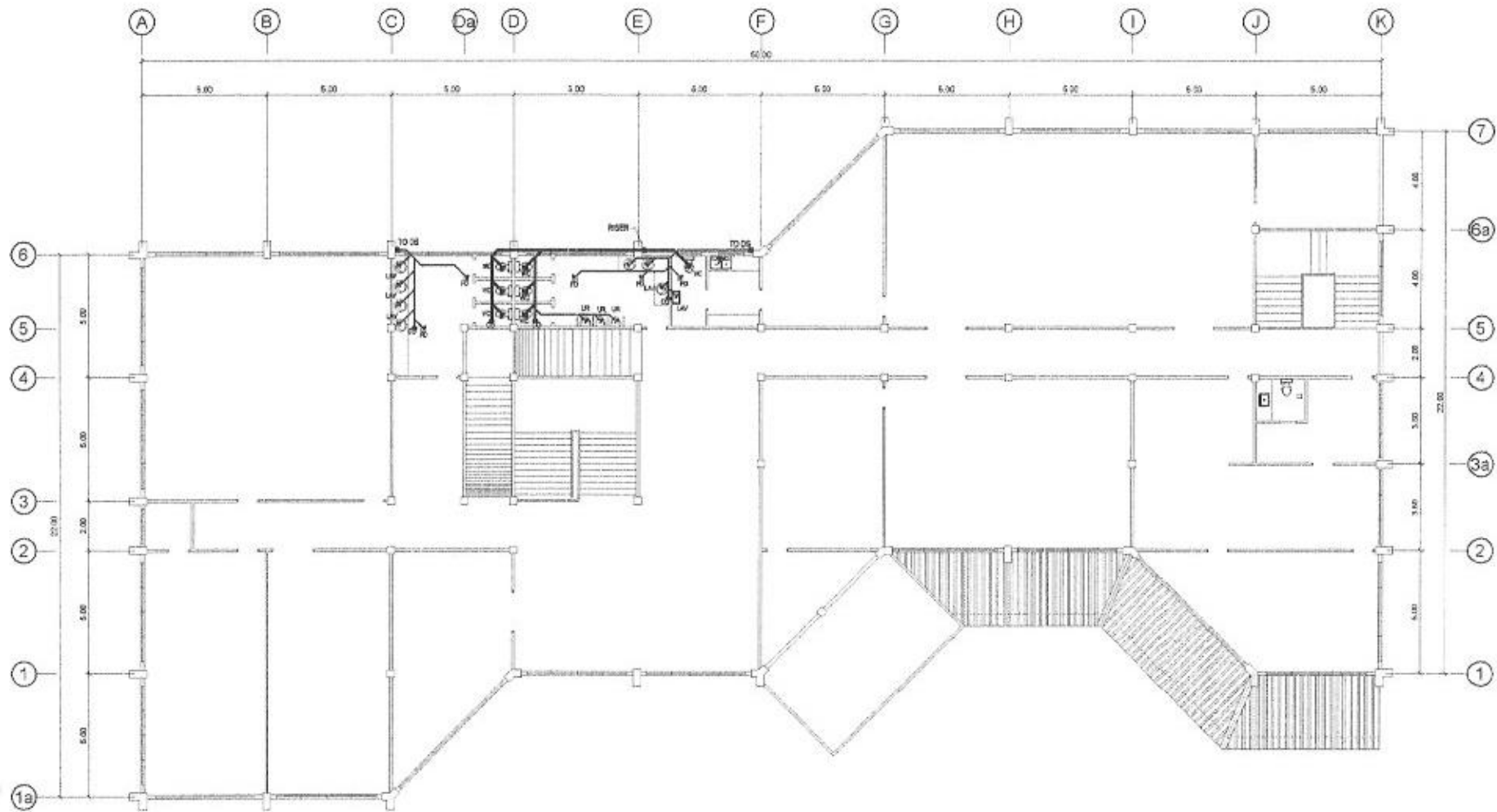
1: 250 M.

DRAWN BY:	
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REGISTERED MASTER PLUMBER	
S. BAYOT JR.	CEIT
PPU	
END USER	END USER
S. M. ISIP	E. O. RODEROS
OC	UNIVERSITY REGISTRAR
CSA	

ENDORSED BY:	REC. APPROVAL
R. B. CUBILLA	H. O. GARCIA
DIRECTOR	VPASS
PLANNING OFFICE	CVSU

APPROVED BY:	PROJECT TITLE/LOCATION:
H. D. ROBLES	IMPROVEMENT OF STUDENT UNION BUILDING
PRES	& RELOCATION OF REGISTRAR'S OFFICE
CVSU	CVSU MAIN CAMPUS

IMPLEMENTING AGENCY:	SHT NO.
CAVITE STATE UNIVERSITY	P - 1



2ND FLOOR SEWER LINE LAYOUT

SCALE

1: 250 M.

CADD BY:	
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PPU	
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S. BAYOT JR.	CEP
PPU	
END USER	
S.M. ISIP	OSA
OIC	

END USER	
E. O. RODEROS	REGISTRAR
UNIVERSITY	

ENDORSED BY:	
R. B. CUBILLA	PLANNING OFFICE
DIRECTOR	

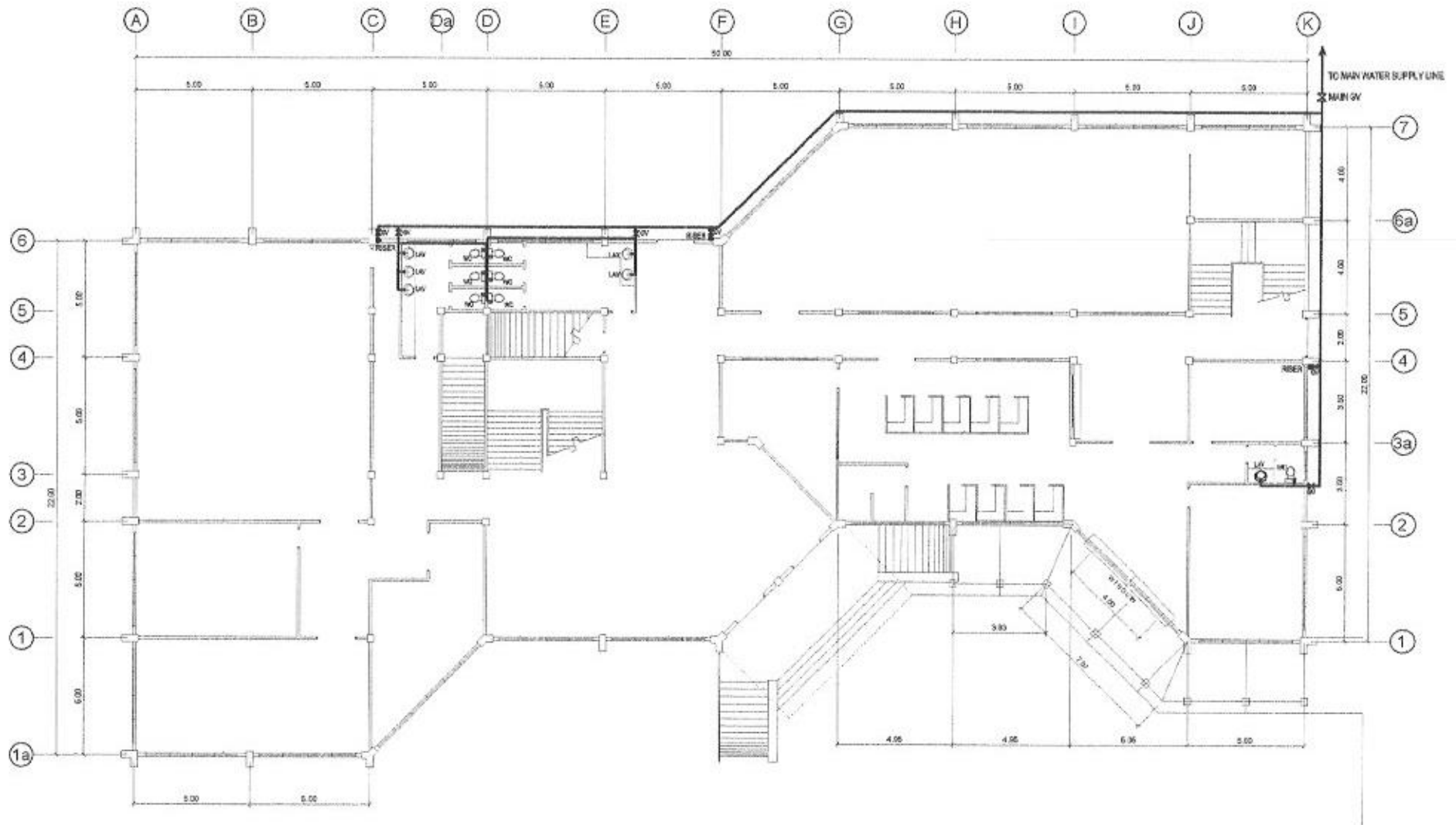
REC. APPROVAL	
H. O. GARCIA	VPA/SS
CVSU	

DESIGNED BY:	
H.D. ROBLES	CVSU
PRES	

PROJECT TITLE/LOCATION	
IMPROVEMENT OF STUDENT UNION BUILDING & RELOCATION OF REGISTRAR'S OFFICE	CVSU MAIN CAMPUS

IMPLEMENTING AGENCY	
CAVITE STATE UNIVERSITY	

SHT NO.	
P - 2	



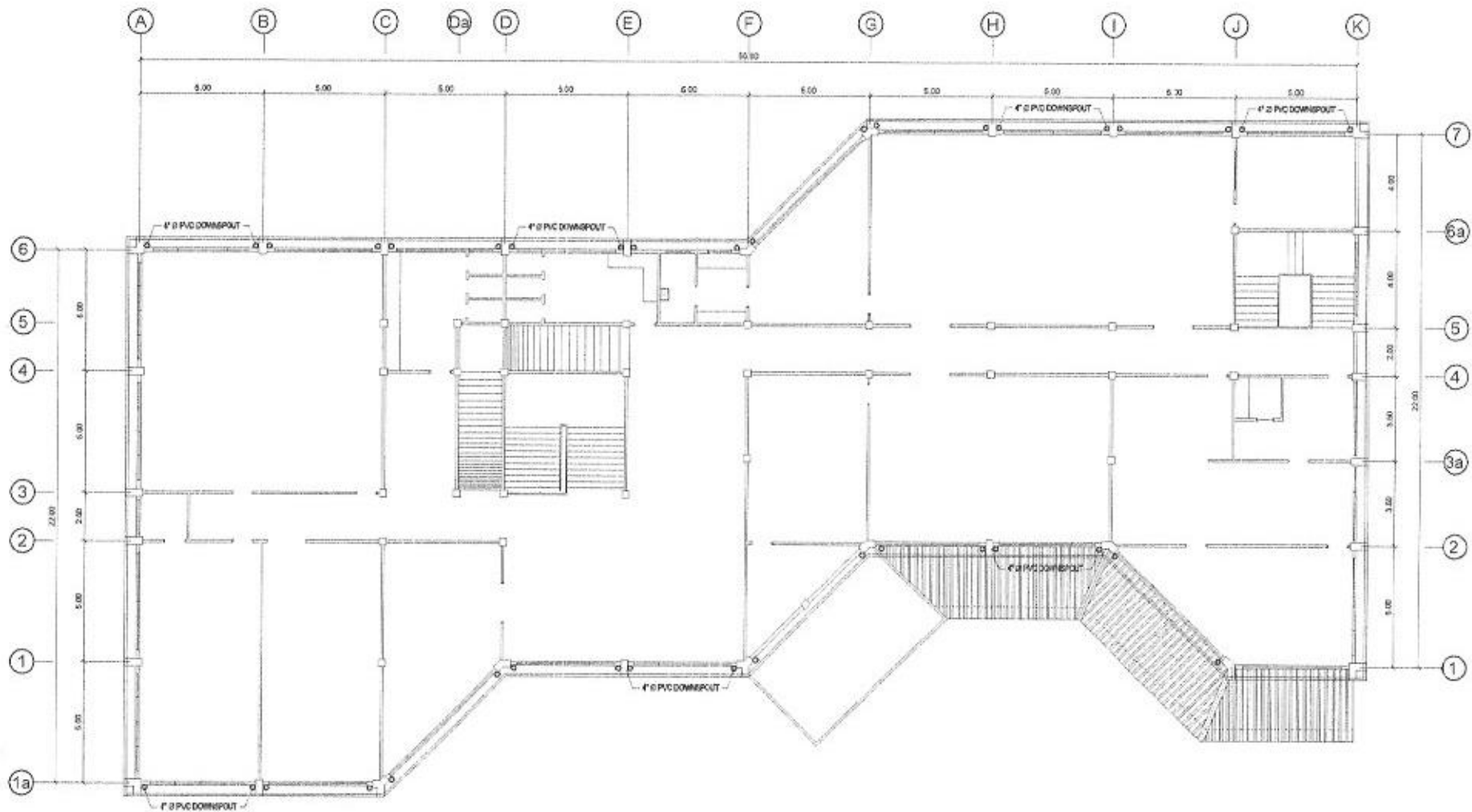
GROUND FLOOR WATER LINE LAYOUT

SCALE

1: 250 M.

CADD BY:	<i>[Signature]</i>
E. N. RODEROS JR.	CEIT
PPU	
REGISTERED MASTER PLUMBER	
S. BAYOT JR.	CEIT
PPU	
END USER	<i>[Signature]</i>
S. M. ISIP	OSA
OIC	

END USER	END USER	ENDORSED BY	REC. APPROVAL	APPROVED BY	PROJECT TITLE/LOCATION	IMPLEMENTING AGENCY	SHT NO.
S. M. ISIP	E. O. RODEROS	R. B. CUBILLA	H. O. GARCIA	J. D. ROBLES	IMPROVEMENT OF STUDENT UNION BUILDING & RELOCATION OF REGISTRAR'S OFFICE	CAVITE STATE UNIVERSITY	P - 3
OSA	UNIVERSITY REGISTRAR	DIRECTOR PLANNING OFFICE	VPASS CVSU	PRES CVSU	CVSU MAIN CAMPUS		



LOCATION OF ADDITIONAL DOWNSPOUTS

SCALE

1: 250 M.

DRAWN BY	
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PPU	CEIT
REGISTERED WATER PLUMBER	
S. BAYOT JR.	
PPU	CEIT
END USER	
S.M. ISIP	
OIC	OSA

END USER	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/LOCATION	IMPLEMENTING AGENCY:	SHT NO.
E. O. RODEROS UNIVERSITY REGISTRAR	R. B. CUBILLA DIRECTOR PLANNING OFFICE	H. O. GARCIA VPASS CYSU	H. D. ROBLES PRES CYSU	IMPROVEMENT OF STUDENT UNION BUILDING & RELOCATION OF REGISTRAR'S OFFICE CYSU MAIN CAMPUS	CAVITE STATE UNIVERSITY	P - 5