

REPUBLIC OF THE PHILIPPINES  
THE HOSPITAL DEVELOPMENT PROJECT  
FEASIBILITY STUDY REPORT

VOLUME 6

FEBRUARY 1980

JAPAN INTERNATIONAL COOPERATION AGENCY

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**CHAPTER XII**

**DRAWINGS**

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XII - 1 DRAWINGS OF STANDARD HOSPITAL

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LIST OF FLOOR AREA

R ... Renovation

NS-35	Hospital Name	A. Main Building										B. Service				C. Quarters				D. Doctor Quarters				E. Dormitory				F. Demolish	G. = A + B + C		H. = D + E		C. + H. Sub Total		Grand Total	
		ANC		OPD		ADN		Ward		Toilet		-1		-2		Morgue		Others		Chief		Doctor		Female		Male			new	old	new	old	new	old		R
		new	old	new	old	new	old	new	old	new	old	new	old	new	old	new	old	new	old	new	old	new	old	new	old	new	old									
		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		R	R	R	R	R			
	450 <sup>B</sup> Standard	2,220		1,110		1,030		7,190				700		340		90		G10 B40	930	220		2,320		1,110		210			13,660		3,860		17,520		17,520	
	300 <sup>B</sup> Standard	2,220		1,110		1,030		4,740				500		340		90		G10 B40	620	220		1,480		770		160			10,700		2,630		13,330		13,330	
	200 <sup>B</sup> Standard	1,590		740		740		2,900				390		250		50		G10	380	220		880		430		120			7,050		1,650		8,700		8,700	
	100 <sup>B</sup> Standard	770		380		370		1,320				290		250		40			170	170		420		260		120			3,590		970		4,560		4,560	

COST OF STANDARD PLAN

(P 1,000)

Hospital	Standard Grade (Bed)		A Building	B Mechanical	C Electrical	D Site Development	E Medical Equipment	F Miscellaneous = YG+0.65H+δ	((% (YG)	G = A+B+C+D	H = G+E (0.65H)	δ	(A) = A(1 + F/H)	(B) = B(1 + F/H)	(C) = C(1 + F/H)	(D) = D(1 + F/H)	(E) = E(1 + F/H)	Total = A+B+C+D+E+F = (A)+(B)+(C)+(D)+(E)
	ANC	WARD																
450 <sup>B</sup> Standard	300	450	41,257	13,895	9,366	1,278	11,247	51,316	1.5 (987)	65,796	(50,078) 77,043	252	68,737	23,150	15,605	2,129	18,738	128,359
300 <sup>B</sup> Standard	300	300	31,776	11,635	7,354	1,150	10,663	41,707	1.5 (779)	51,915	(40,676) 62,578	252	52,954	19,390	12,255	1,916	17,770	104,285
200 <sup>B</sup> Standard	200	200	20,851	8,627	5,173	995	6,828	28,315	1.5 (535)	35,646	(27,608) 42,474	172	34,751	14,378	8,622	1,658	11,380	70,789
100 <sup>B</sup> Standard	100	100	10,815	6,403	3,614	693	4,528	17,351	1.5 (323)	12,525	(16,934) 26,053	93	18,018	10,667	6,021	1,154	7,544	43,404



o Structural framing: Reinforced concrete with columns and beams with 1 or 2 story construction.

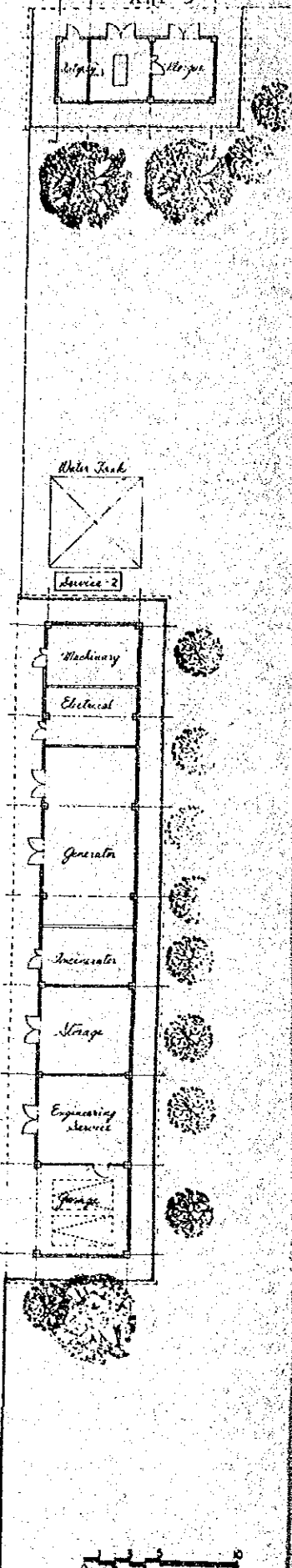
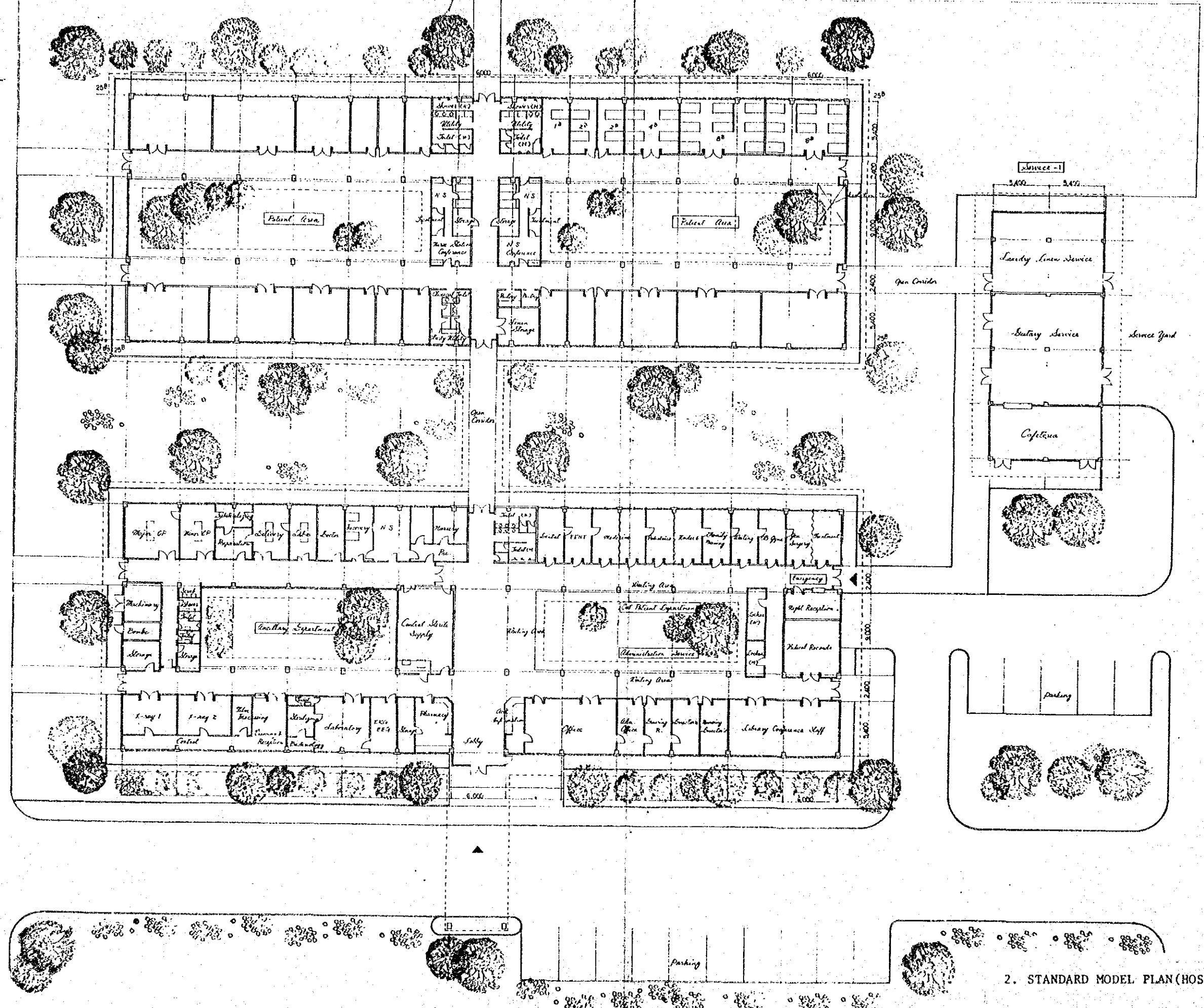
o Exterior finish:

COMPONENT	LOCATION	FINISH
Floor;	Entrance area;	Artificial stone
	Courtyard;	Brick laying with concrete curb
	Berm;	Gravel with 100mm-thick rock curb
Walls:	Exterior end wall;	Exposed concrete with paint finish, and with insulation on interior surface.
	Exterior side walls;	Aluminum sashes (vertical projected windows and louvered windows)
		Wainscot; exposed concrete, with scoring and paint finish.
Roof overhand:		Exposed concrete with paint finish
Roof:	Roof slab;	Waterproofing mortar finish
	Roofing (upper):	Folded steel sheet with resin(Teflon) lining on both surfaces.

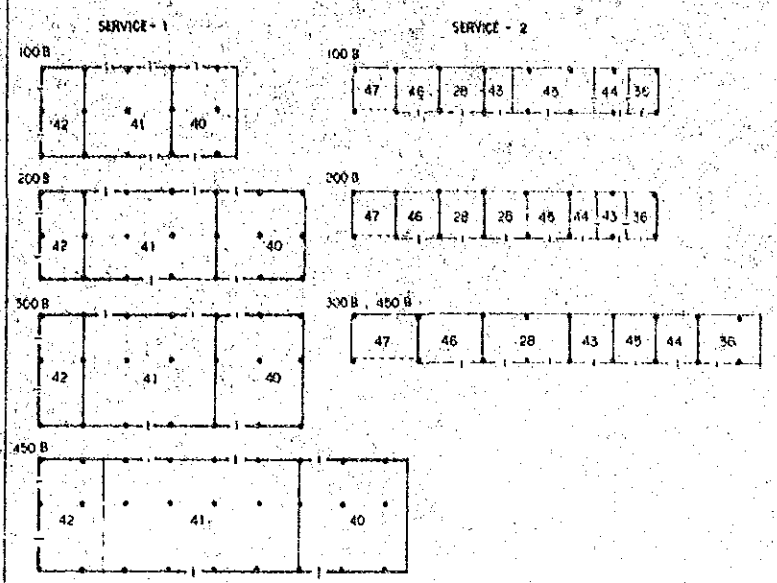
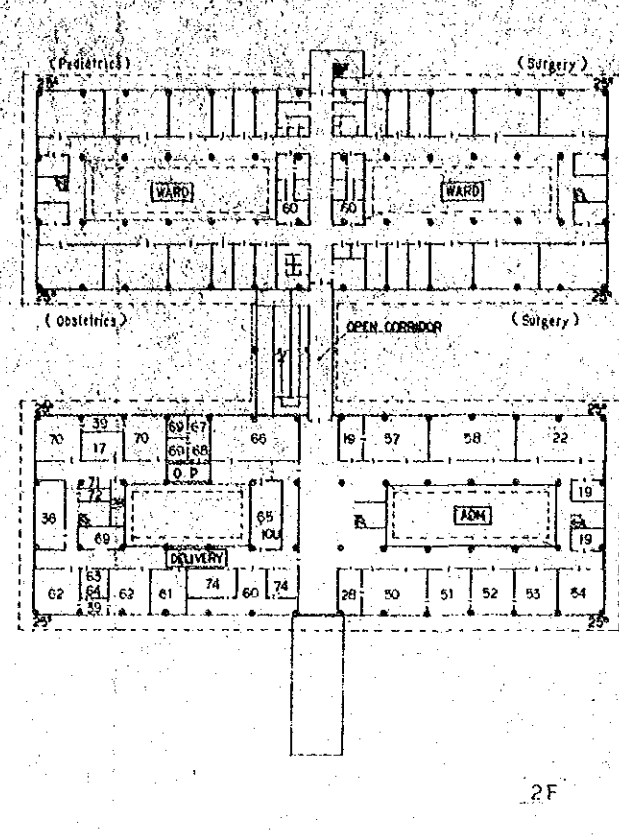
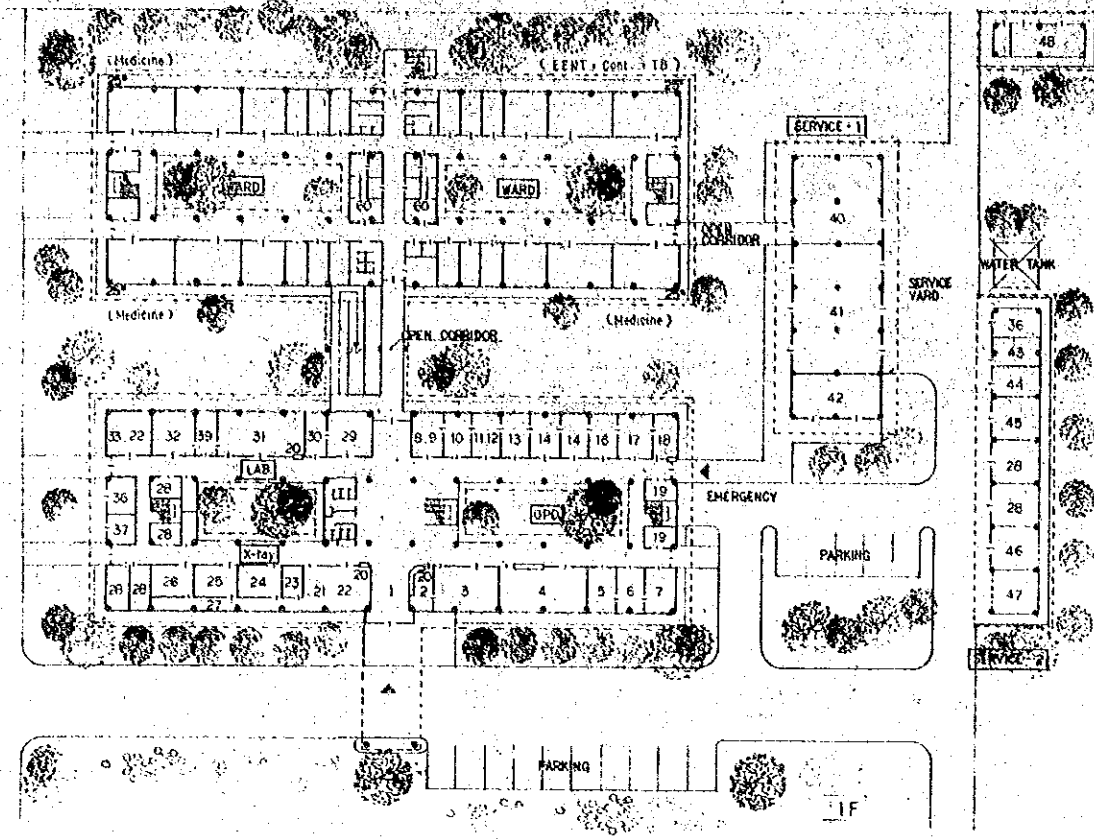
o Interior finish:

COMPONENT	LOCATION	FINISH
Floor;	Corridor;	Artificial stone floor and wall base.
	Living area;	Vinyl sheet, with vinyl wall base
Walls;	Interior walls;	Concrete block with mortar and paint finish
	Corridor side;	Steel door, aluminum sashes (louvered window)
Ceiling;	Living area;	Rock wool acoustic board (over gypsum board backing)
	Corridor;	Asbestos cement board with paint finish

o Others: Earthwork; Since Philippines officials indicated that soil bearing capacity is good for northern Luzon Island, foundation without piles is assumed. However, for carrying out this project, boring tests should be made in all sites to assure appropriate design for foundation.

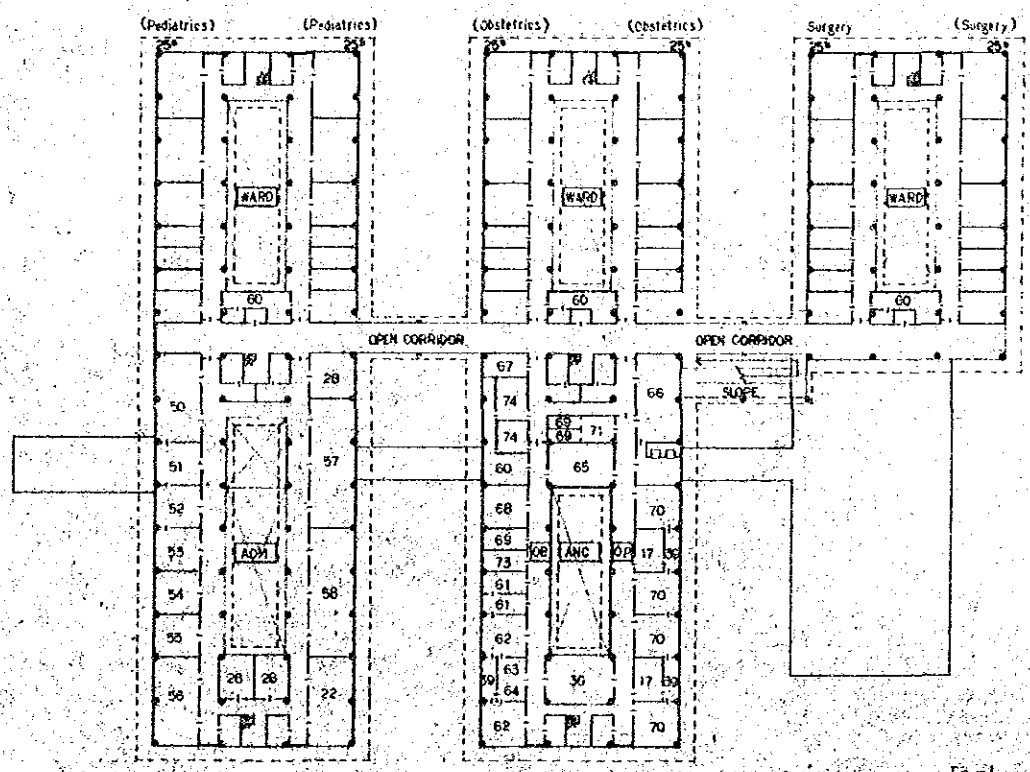
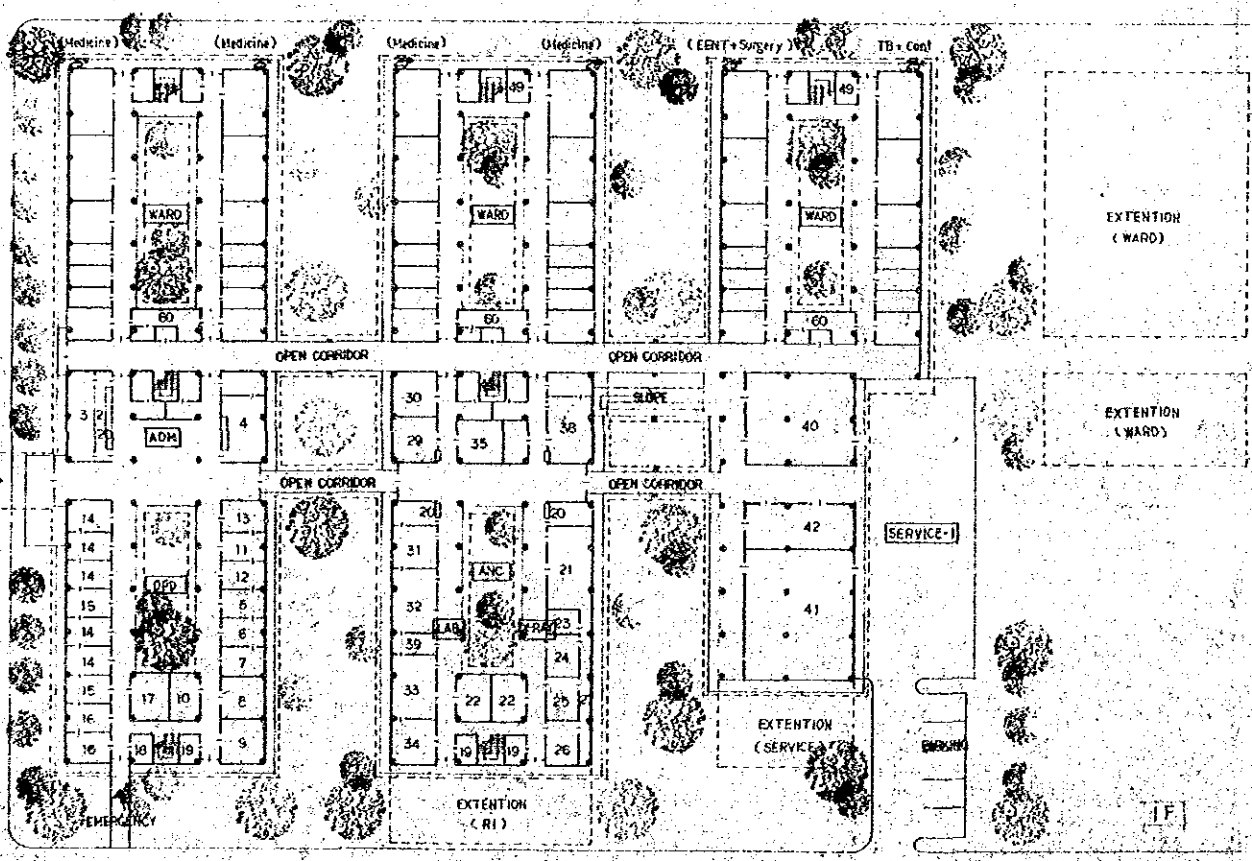


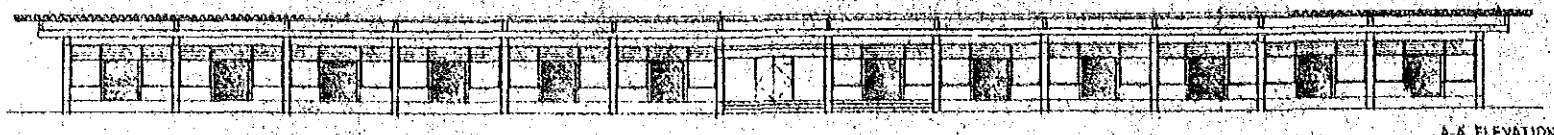
2. STANDARD MODEL PLAN (HOSPITAL) 100B



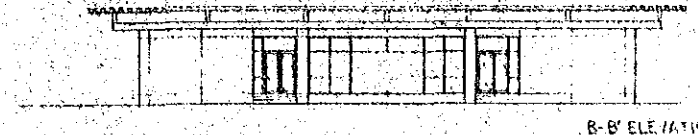
LEGEND

1. City	57. Staff
2. Aut. Inspection	58. Medical Records
3. Office (Adm.)	59. X-ray
4. Pharmacy	60. Nurse Station
5. Family Planning	61. Lab.
6. Billing	62. Delivery
7. OB Gynecology	63. Preparation
8. E. C. U.	64. (Nurses) Bull.
9. ENT	65. ICU
10. Dental	66. Central Sterile Supply
11. Nurses 6	67. Doctor
12. Nutrition	68. Staff
13. Pediatrics	69. House & Toilet
14. Radiology	70. Nurse CP
15. Treatment	71. X-ray
16. Surgery	72. Washing
17. Nurse CP	73. X-ray examination
18. Night reception	74. Nursery
19. Locker	
20. Reception	
21. Training	
22. Conference	
23. Film Processing	
24. X-ray 1	
25. X-ray 2	
26. X-ray 3	
27. Central	
28. Storage	
29. Lab. 1	
30. Lab. 2	
31. Lab. 3	
32. Lab. 4	
33. Lab. 5	
34. Lab. 6	
35. Lab. 7	
36. Machinery	
37. Gas	
38. Physical therapy	
39. Sterilizing	
40. Laundry Linen	
41. Doctor	
42. Cafeteria	
43. Recreational	
44. Electrical	
45. Generator	
46. Engineering Service	
47. Garage	
48. Storage Outpost	
49. Office	
50. Office	
51. Admin. Office	
52. Director's R.	
53. Director's	
54. Training Director	
55. Chief of medical staff	
56. Library	

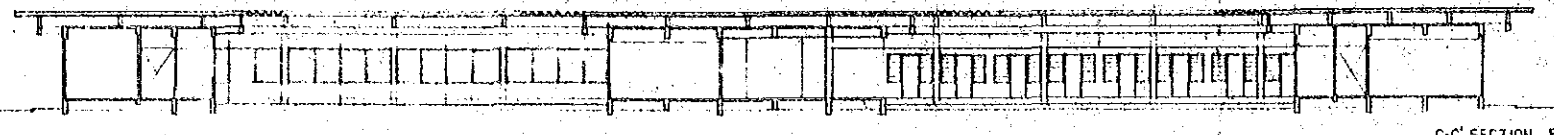




A-A ELEVATION



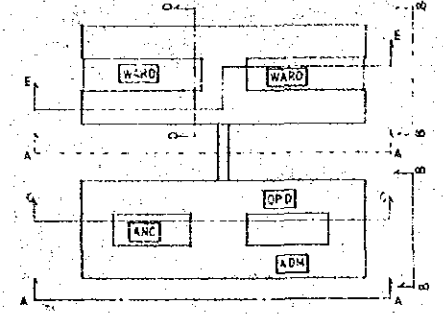
B-B' ELEVATION



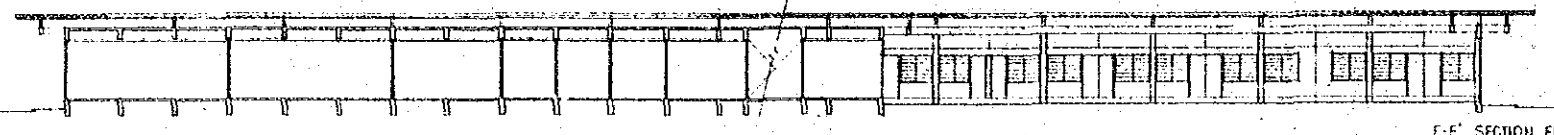
C-C' SECTION ELEVATION



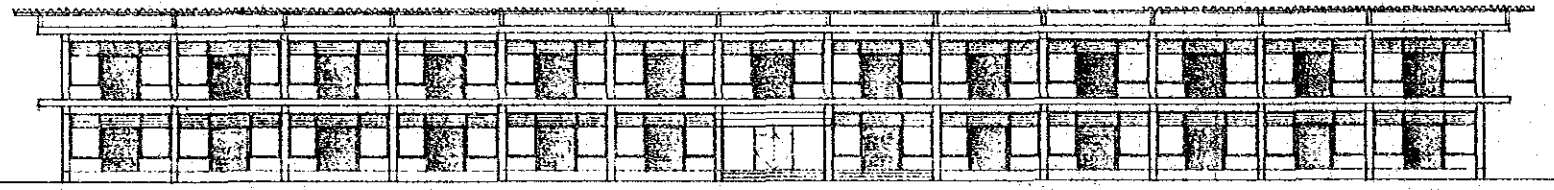
D-D' SECTION



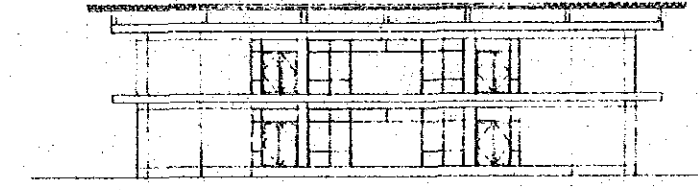
100 BED STANDARD MODEL PLAN



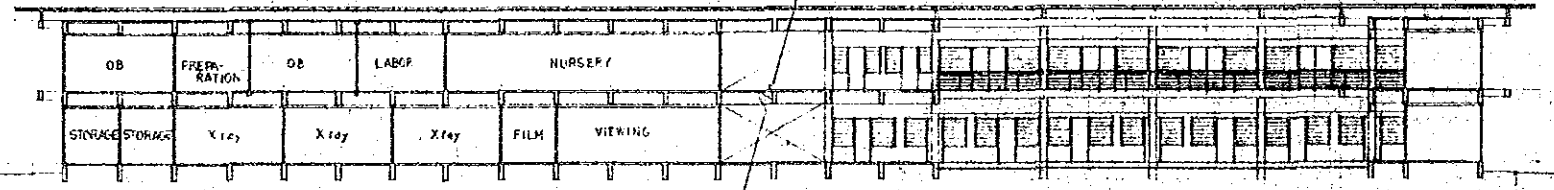
E-E' SECTION ELEVATION



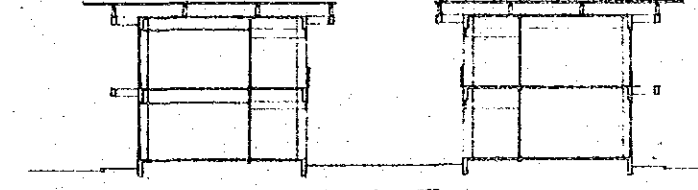
200 BED FACADE



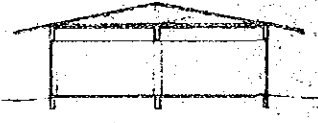
200 BED 300 BED SIDE ELEVATION



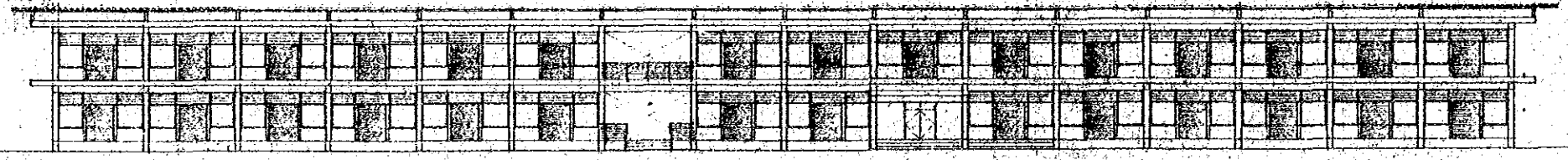
200 BED SECTION ELEVATION



200 BED 300 BED SECTION



SERVICE SECTION



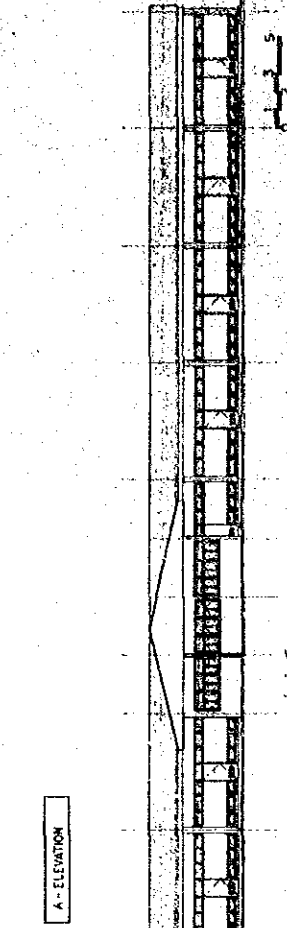
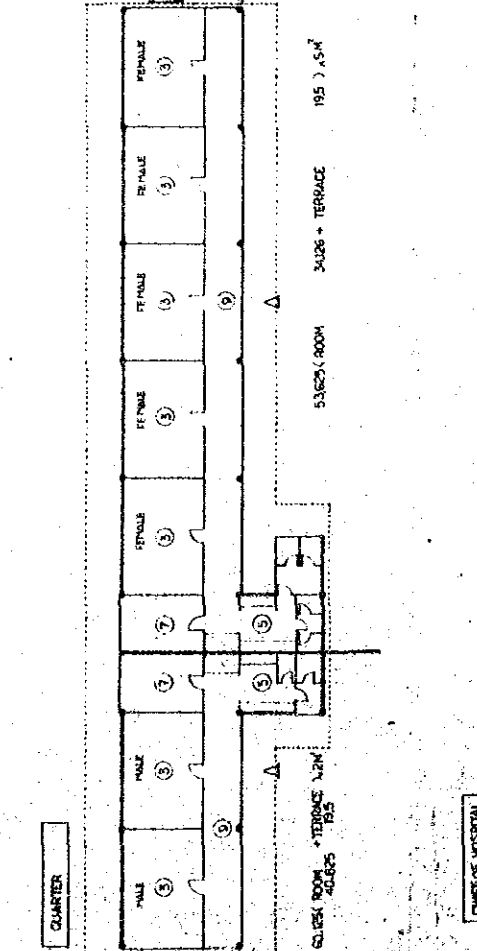
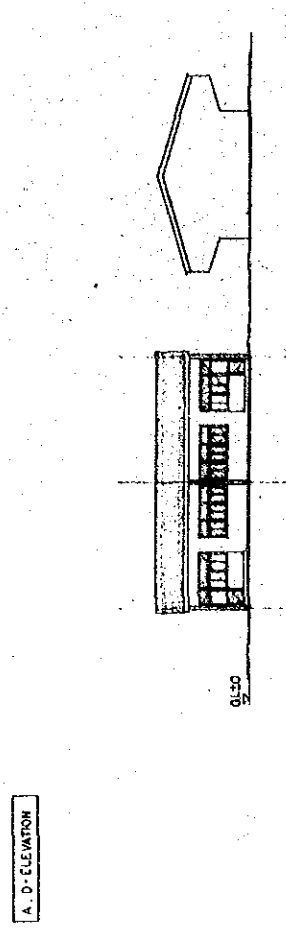
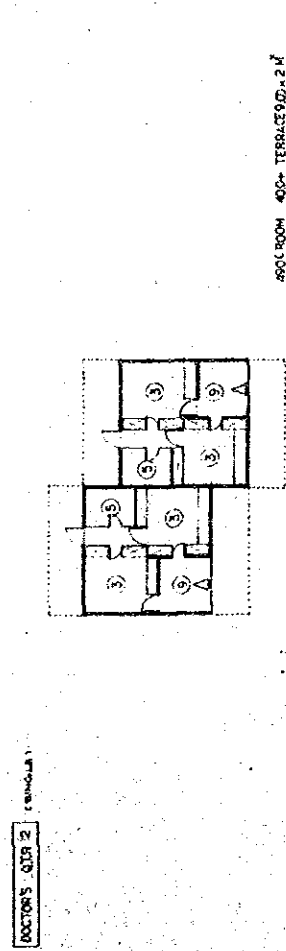
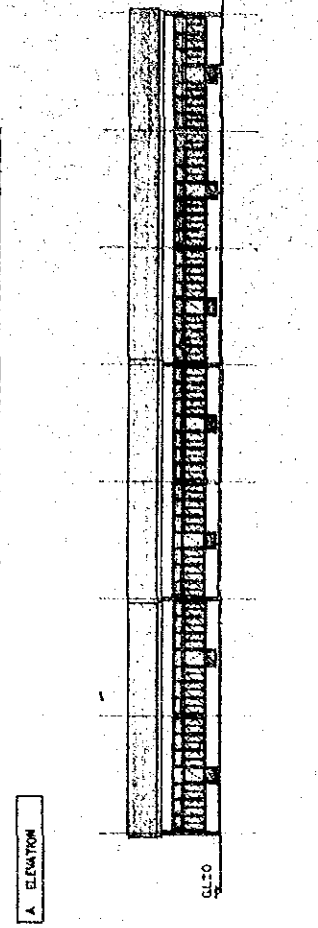
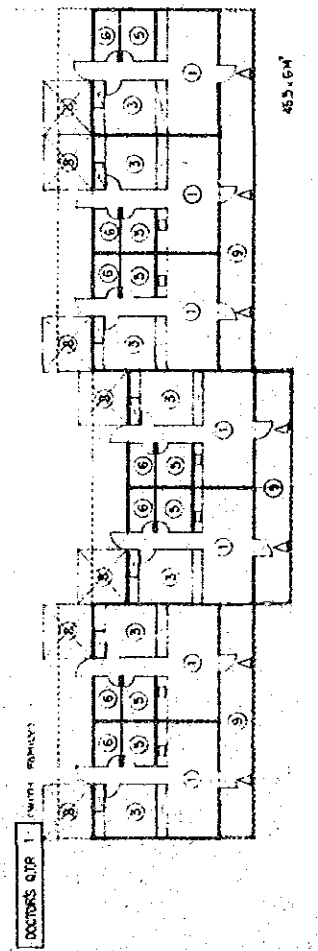
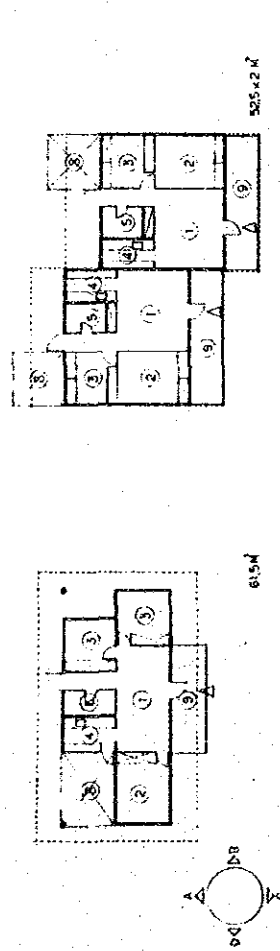
300 BED FACADE



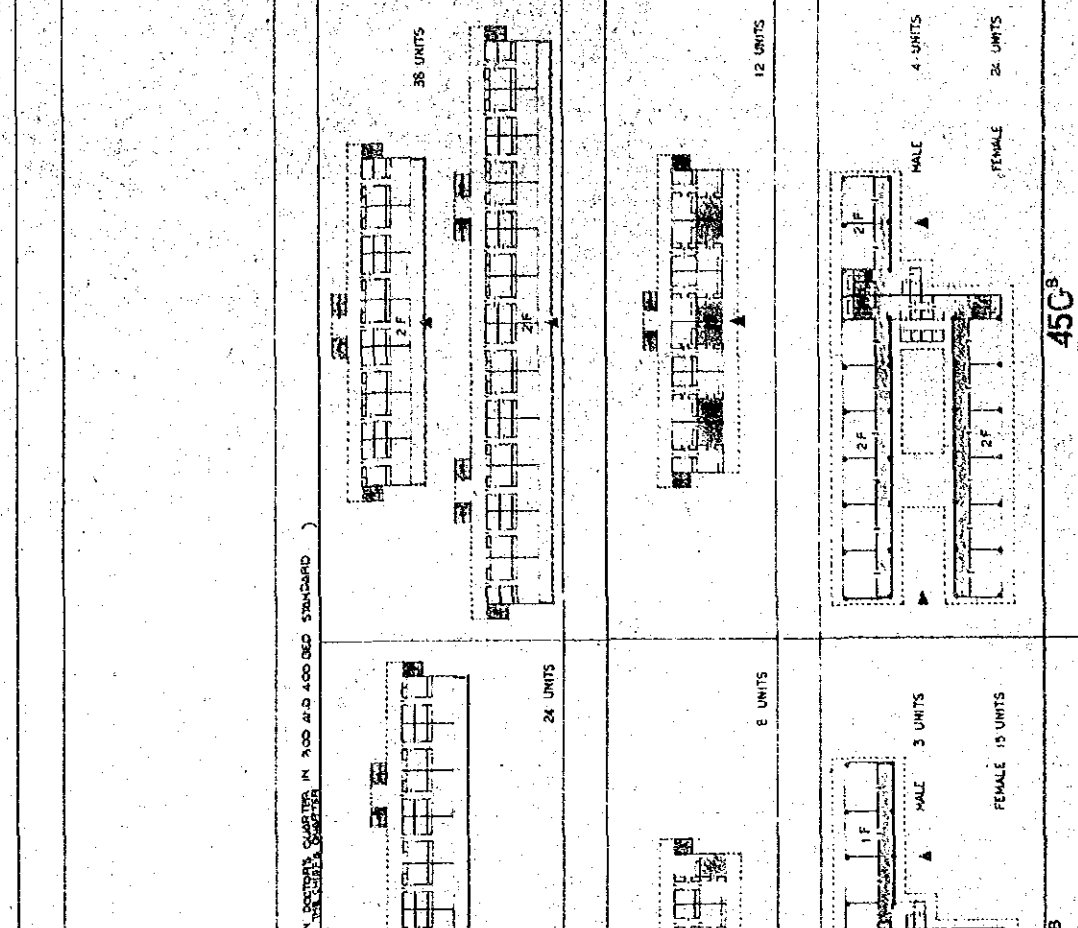
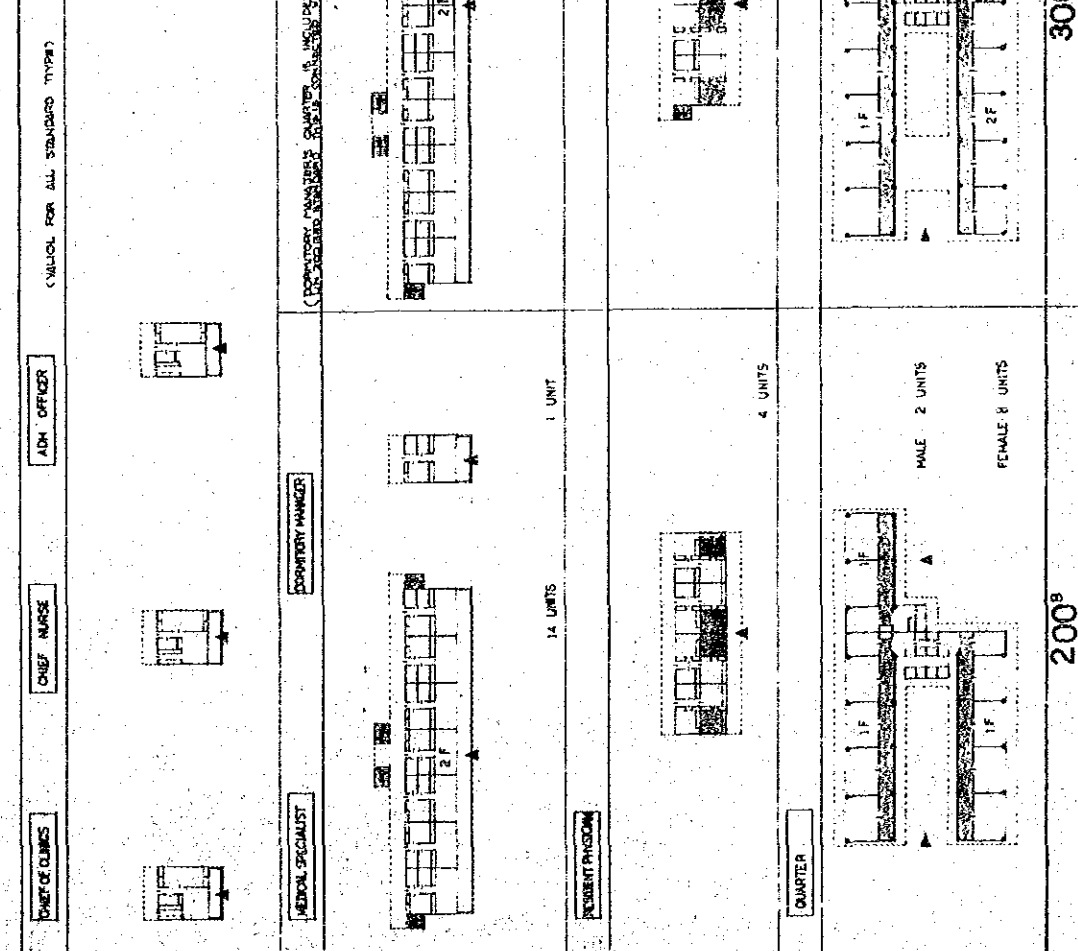
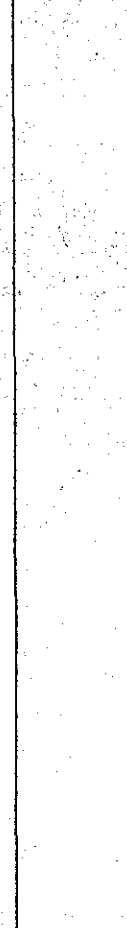
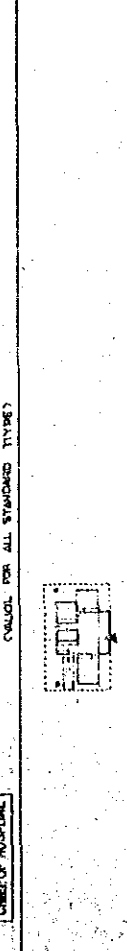
SERVICE-1 FACADE



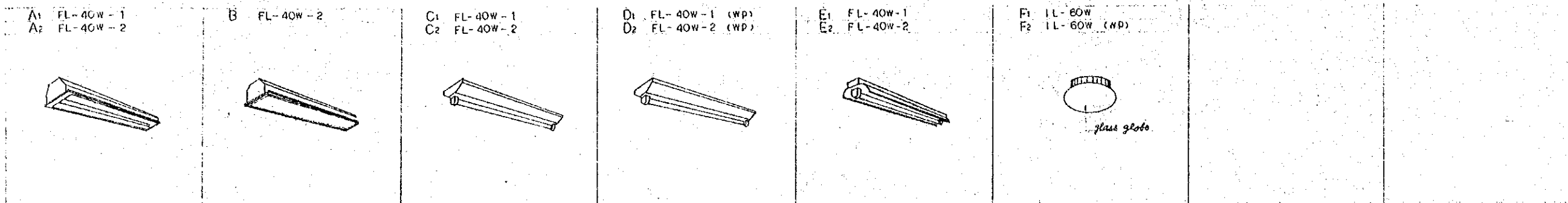
NUMBER	ROOM NAME
1	LIVING
2	MASTERS ROOM
3	BEDROOM
4	BATH
5	KITCHEN
6	DINING
7	DRESSING ROOM
8	STORAGE
9	EXTENSION TERRACE



5. STANDARD MODEL PLAN (RES. QTR) 100B

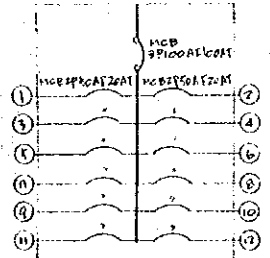


6. STANDARD MODEL PLAN (RES. QTR) 200, 300, 450B

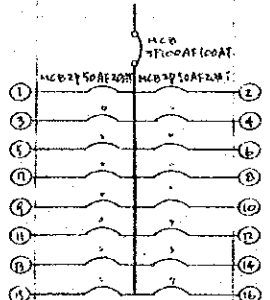


FIXTURE SCHEDULE

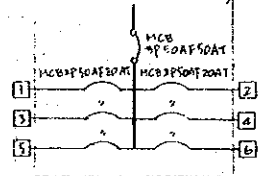
240V 220V 60HZ (General lighting circuit)



240V 220V 60HZ (Medical/Equipment outlet circuit)



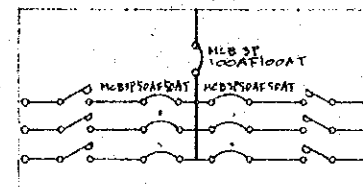
240V 220V 60HZ (Lighting circuit of generator)



LT-1  
LIGHTING STANDARD PANEL

PANEL BOARD	MAIN SWITCHGEAR (M.S.)	BRANCH SWITCHGEAR (B.S.)
L-12 General lighting Medical service Lighting circuit of generator	M.S. MCB 3P 225AF 200AT x 1 " " 100AF 100AT x 1 " " 225AF 200AT x 1	B.S. MCB 2P 100AF 20AT x 10 " " " x 8 " " " x 38
L-13 General lighting Lighting circuit of generator	M.S. " 50AF 50AT x 1 " " " x 1	B.S. " " x 4 " " " x 4
L-14 General lighting Lighting circuit of generator	M.S. " 50AF 50AT x 1 " " " x 1	B.S. " " x 4 " " " x 2
ME-1 Medical equipment service outlet	M.S. " 100AF 50AT x 1	B.S. " " x 6
ME-2 "	M.S. " " x 1	B.S. " " x 6

240V 220V 60HZ

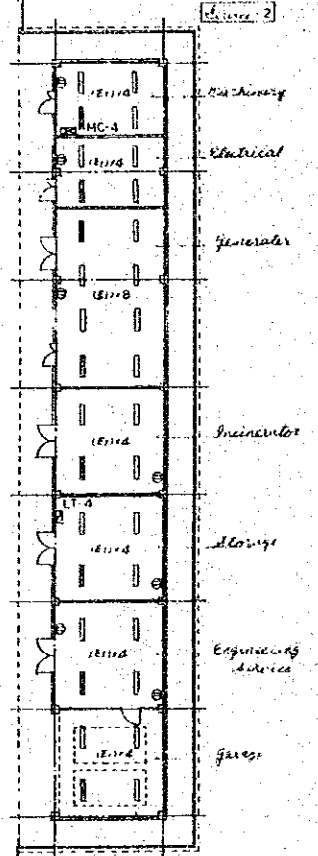
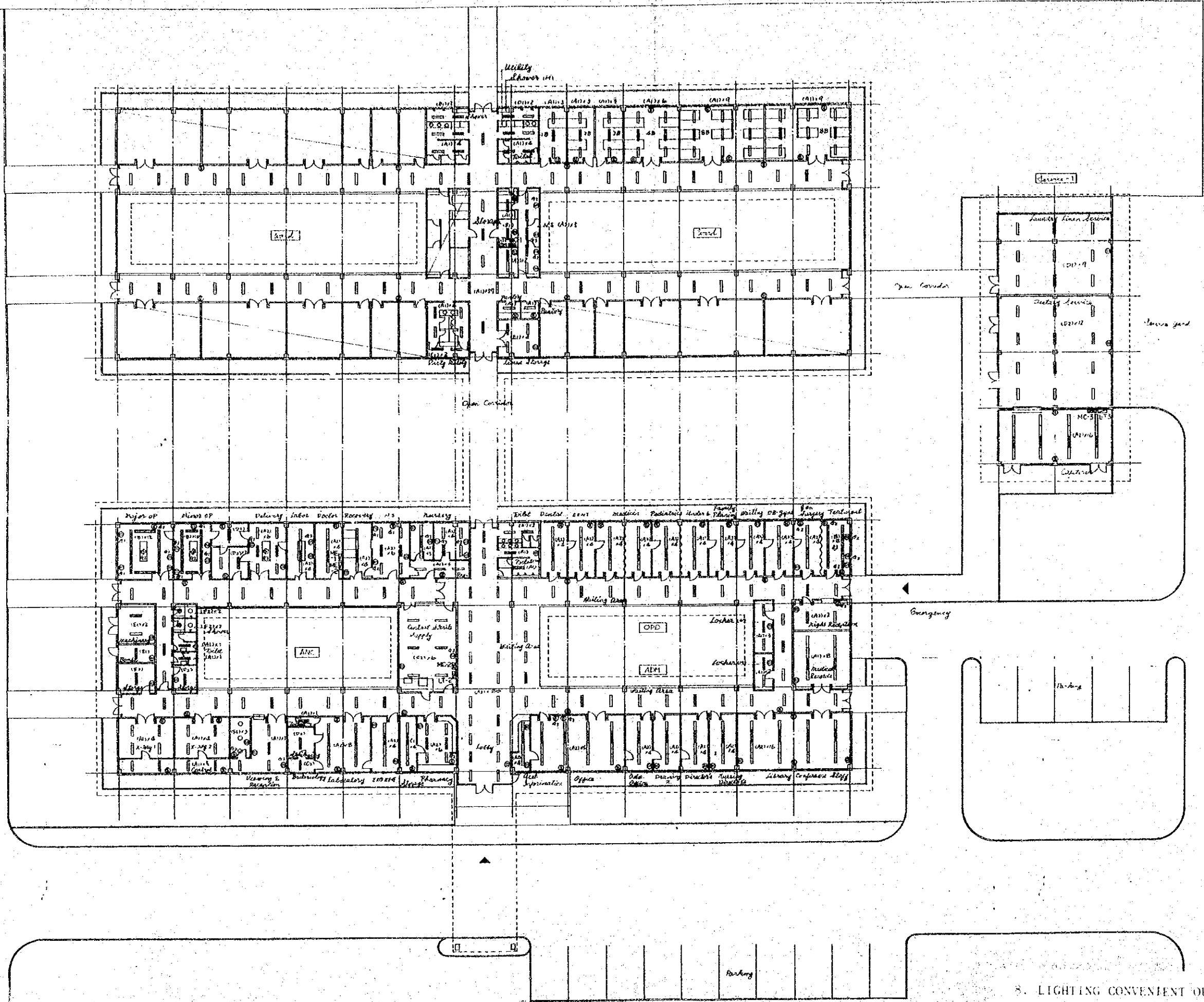
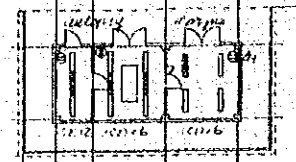


MC-1, 2, 3, 4  
MOTOR CONTROL PANEL

LEGEND

□	FLUORESCENT LAMP
•	" " (GENERATOR CIRCUIT)
○	INCANDESCENT LAMP
⊕	CONVENIENCE OUTLET
⊕ <sub>01</sub>	" (RANK 1 GENERATOR)
⊕ <sub>02</sub>	" (RANK 2 GENERATOR)
⊕ <sub>03</sub>	" (RANK 3 GENERATOR)
⊠	LIGHTING PANEL BOARD
⊞	MOTOR CONTROL PANEL BOARD
⊡	MEDICAL EQUIPMENT PANEL BOARD

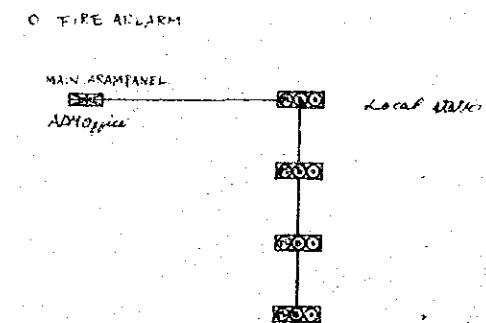
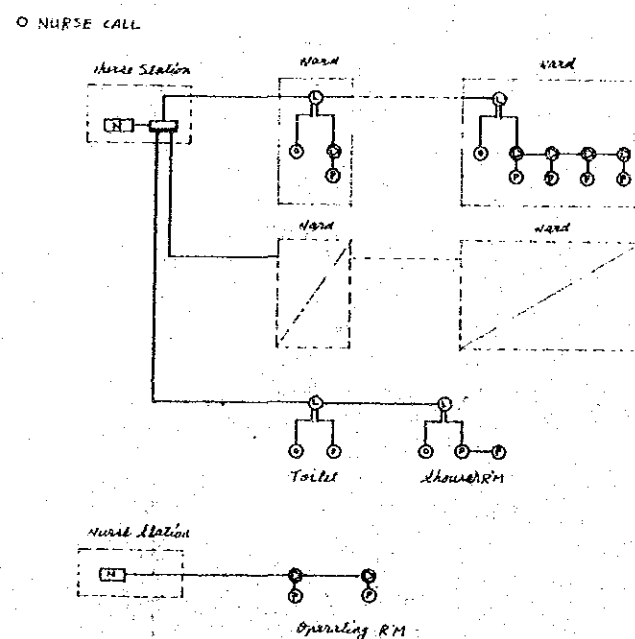
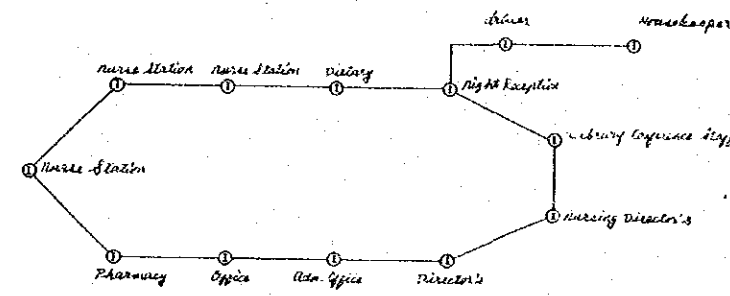
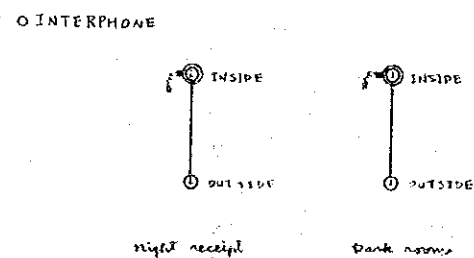
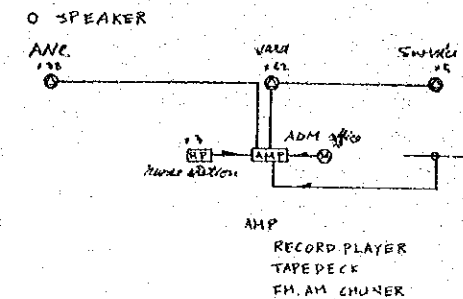
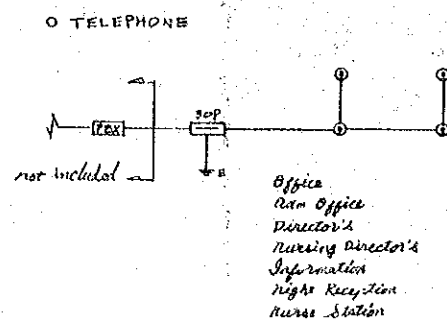




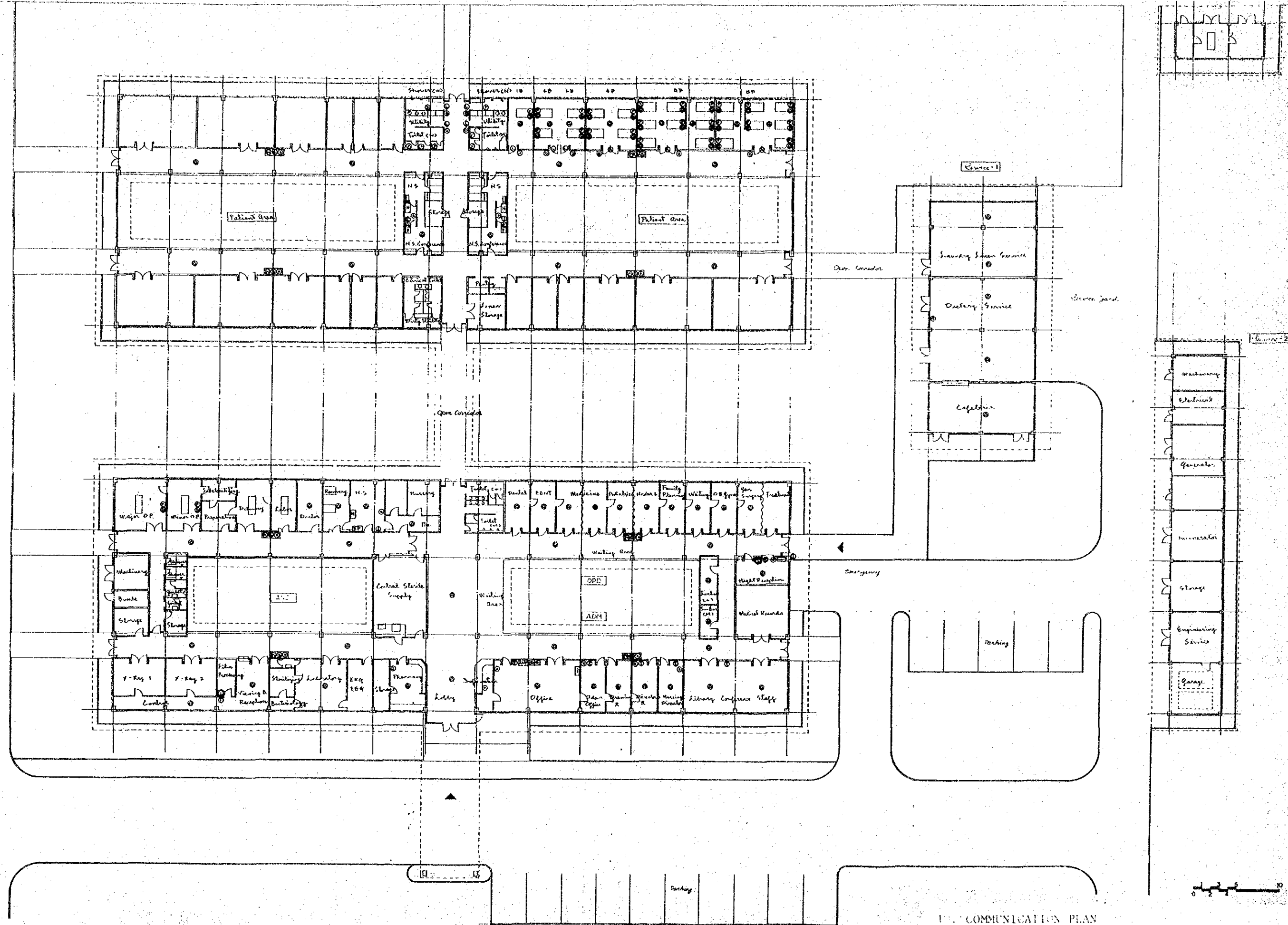
8. LIGHTING CONVENIENT OUTLET PLAN

**LEGEND**

TELEPHONE		terminal board
		Telephone call
SPEAKER		amplifier
		speaker
		microphone
		speaker
INTERPHONE		interphone
NURSE CALL		terminal board
		Nurse Station
		Call button
		speaker
		Room Lamp
		Reset button
FIRE ALARM		signal lamp
		bell
		push switch button
		Local station
		main alarm panel

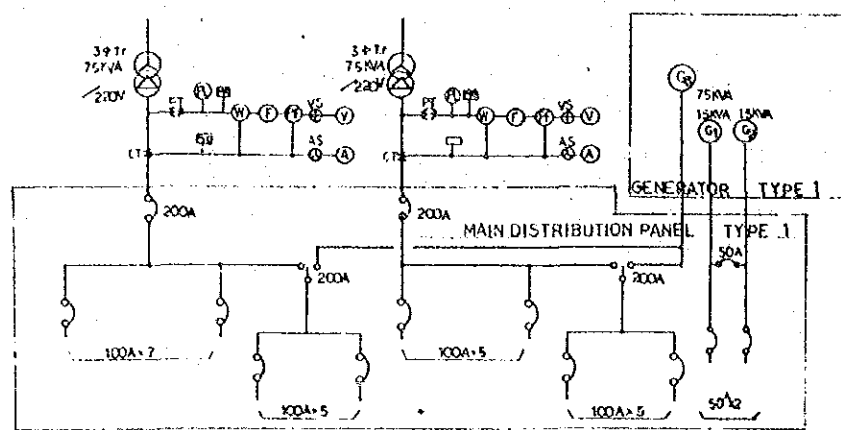


9. INTERPHONE, TELEPHONE, NURSE CALL DIAGRAM



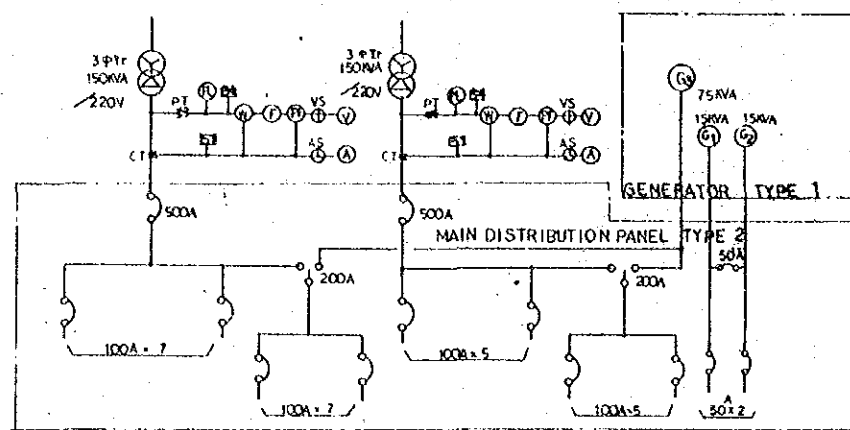
COMMUNICATION PLAN

100BETS SINGLE DIAGRAM



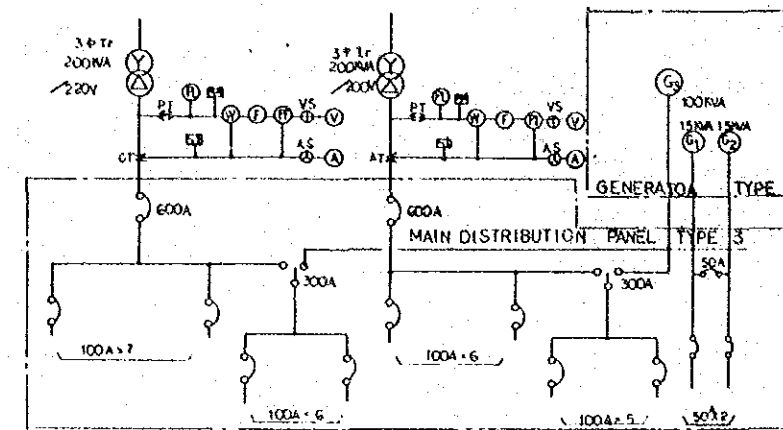
- BONTOC PROVINCIAL HOSPITAL
- BENGUET PROVINCIAL HOSPITAL
- ABRA PROVINCIAL HOSPITAL
- GABRIELA SILANG PROVINCIAL HOSPITAL
- KALINGA APAYAO PROVINCIAL HOSPITAL

200 BETS SINGLE DIAGRAM



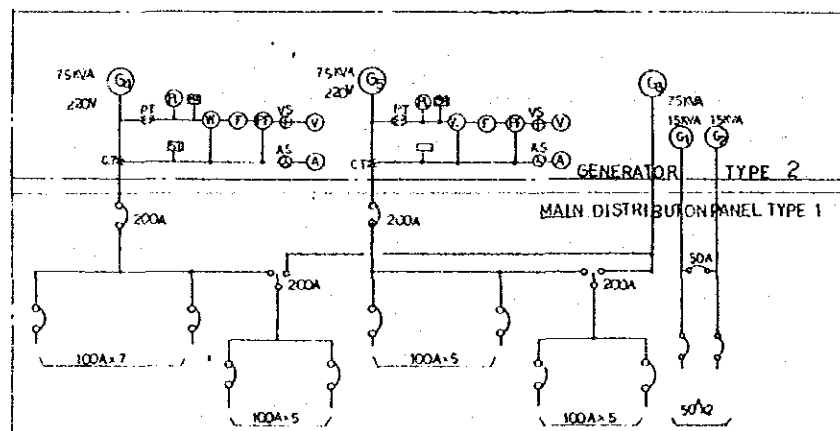
- ILOCOS NORTE PROVINCIAL HOSPITAL
- LA UNION REGIONAL HOSPITAL

300 - 450 BETS SINGLE DIAGRAM



- PANGASINAN MEDICAL CENTER
- BAGUIO MEDICAL CENTER
- CAGAYAN REGIONAL HOSPITAL

100 BETS SINGLE DIAGRAM (NOEXISTING POWER SUPPLY)



- ISABELA PROVINCIAL HOSPITAL
- QUIRINO PROVINCIAL HOSPITAL
- IFUGAO PROVINCIAL HOSPITAL
- NEVA VIZCAYA PROVINCIAL HOSPITAL
- BATANES PROVINCIAL HOSPITAL

LEGEND

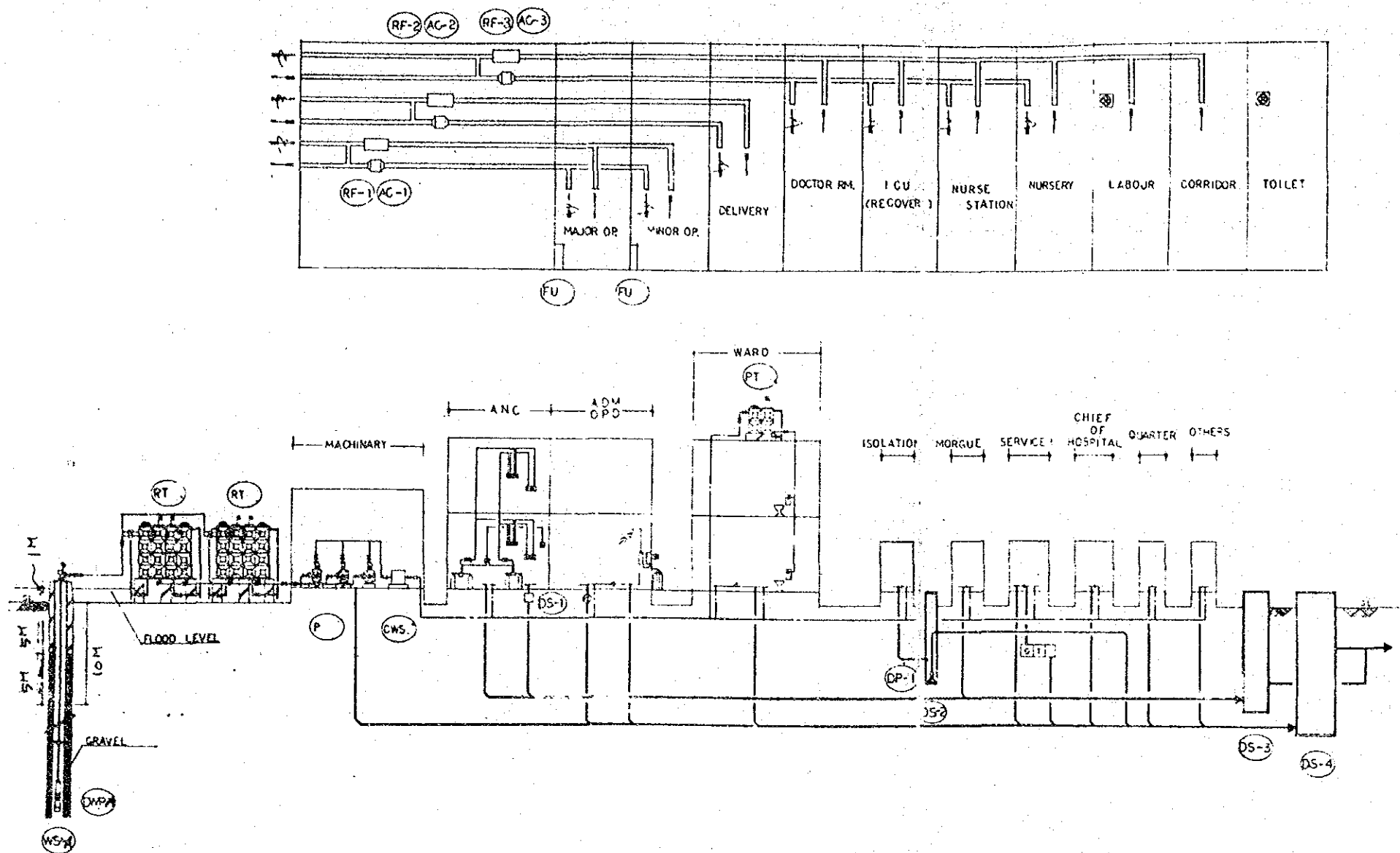
- T<sub>r</sub> TRANSFORMER
- P<sub>T</sub> POTENTIAL TRANSFORMER
- C<sub>T</sub> CURRENT TRANSFORMER
- V<sub>S</sub> VOLTAGE SWITCH
- A<sub>S</sub> AMMETER SWITCH
- ⊙ PILOT LAMP
- ⊙ WATTMETER
- ⊙ FREQUENCY
- ⊙ POWER FACTOR
- ⊙ VOLTMETER
- ⊙ AMMETER
- ⊙ GENERATOR RANK 1, 2, 3
- ⊙ INSUFFICIENT VOLTAGE PROTECTOR
- ⊙ OVER CURRENT PROTECTOR

<p><b>WATER SUPPLY</b></p> <p><b>WATER STORAGE</b> Construct a new deep well at each hospital except for Leguiz, to which city water should be connected directly. Existing wells should be used for emergency.</p> <p><b>WATER MAINS</b> A top of the well casing should be above the flood level in the rainy season. At least two meters under the ground surface should be filled up by concrete or masonry etc. to prevent from infiltration of rain water or surface water.</p> <p><b>DISTRIBUTION SYSTEM</b> For under 200 beds hospitals, distribution pumps are common, but distribution pipes after the pumps should be installed into two groups; toilet flushing water group and drinking water group. For more than 200 beds hospitals, distribution pumps should be also separated into two groups. Classification should be done for drinking water groups. Supplementary elevated tanks on the roof should be used for toilet flushing at multiple when distribution pumps stop.</p> <p><b>WATER HEATER SYSTEM</b> Balance type instantaneous water heater (200 operated) should be used for shower rooms. (Individual installation)</p> <p><b>WATER WASTE</b> Waste water should be discharged to the nearest rivers, sea, etc. after treated by aeration type treatment facilities. Waste water from commensalable departments should be disinfected and stored before treated. Rain water is discharged on the site. Medical waste water pipes should be separated from other ones to reduce the density of medical wastes in the storage tank.</p> <p><b>AIR CONDITIONING</b> Provide necessary air conditioned spaces by architectural and structural planning. There are three groups of air conditioners: Operating rooms, Delivery rooms, and nursery, ICU, etc. Air cooled packaged air conditioners (remote control type) should be used. Air filter units should be installed in operating rooms.</p> <p><b>VENTILATION</b> Necessary ventilated rooms are widely spread in the site. Therefore individual ventilation system should be suitable.</p> <p><b>KITCHENS</b> Adopt the central service system. Install four warmers, five cookers (200), sitting breakfast pans (100), water heaters (100), refrigerators, etc. Disinfection of dishes is necessary.</p> <p><b>LAUNDRY</b> Install washing machines, extractors, etc. Disinfection of linen is necessary.</p> <p><b>WASTELINE GAS</b> Oxygen (O<sub>2</sub>) and nitrous oxide (N<sub>2</sub>O) should be supplied to the following rooms from centralized storage gas cylinders. a. Operating room, Delivery room, ICU, Nursery b. Recovery room, Delivery room Two portable type vacuum apparatus. Recharging cycle is estimated about ten days. Automatic alternative system should be adopted. Therefore maintenance recharging cycle is about twenty days.</p>	<p>Necessary LPG supplied locations are widely spread on the site. Cylinders should be located at each location. LPG supplied location: Laboratory, Central supply room, Kitchen, Laundry, Nursing, Shower room, Water heater, etc.</p> <p><b>INCINERATION</b> Install incinerators to burn solid disposals of the hospital.</p> <p><b>FIRE PROTECTION</b> Install portable type fire extinguishers at each department. If the project meet meet the fire code, necessary facilities should be installed, which are not included in this report.</p>
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<p><b>LPG</b></p>	<p>Necessary LPG supplied locations are widely spread on the site. Cylinders should be located at each location. LPG supplied location: Laboratory, Central supply room, Kitchen, Laundry, Nursing, Shower room, Water heater, etc.</p>
<p><b>INCINERATION</b></p>	<p>Install incinerators to burn solid disposals of the hospital.</p>
<p><b>FIRE PROTECTION</b></p>	<p>Install portable type fire extinguishers at each department. If the project meet meet the fire code, necessary facilities should be installed, which are not included in this report.</p>

13. A/C & PLUMBING DIAGRAM

100,200 Beds



MARK	ITEM
WS	WATER SOURCE (WELL)
DWP	DEEP WELL PUMP
RT	RAW WATER TANK
PT	SUPPLEMENTARY ELEVATED TANK
P	DISTRIBUTION PUMP
DP	WASTE WATER PUMP
CWS	WATER SUPPLY APPARATUS
DS - 1	HEAVY METAL TREATMENT
DS - 2	STORAGE, DISINFECTANT TANK
DS - 3	STORAGE TANK
DS - 4	WASTE WATER TREATMENT
AC - 1	AIR CONDITIONER (OP.)
AC - 2	AIR CONDITIONER (Delivery)
AC - 3	AIR CONDITIONER (ICU etc.)
RF - 1	RETURN FAN (OP.)
RF - 2	RETURN FAN (Delivery)
RF - 3	RETURN FAN (ICU etc.)
FU	AIR FILTER UNIT

1. This diagram shows only Water Supply, Hot Water Supply, Drainage, Air Conditioning and Medical Gas facilities.
2. Drainage system shows plan 1.
3. Air Conditioning ; 100 beds hospital has 1 set of AC-1 and RF-1. 200 beds hospital has 2 sets of AC-1 and RF-1.
4. Water Supply ; 100 beds hospital has 1 set of RT. 200 beds hospital has 2 sets of RT.

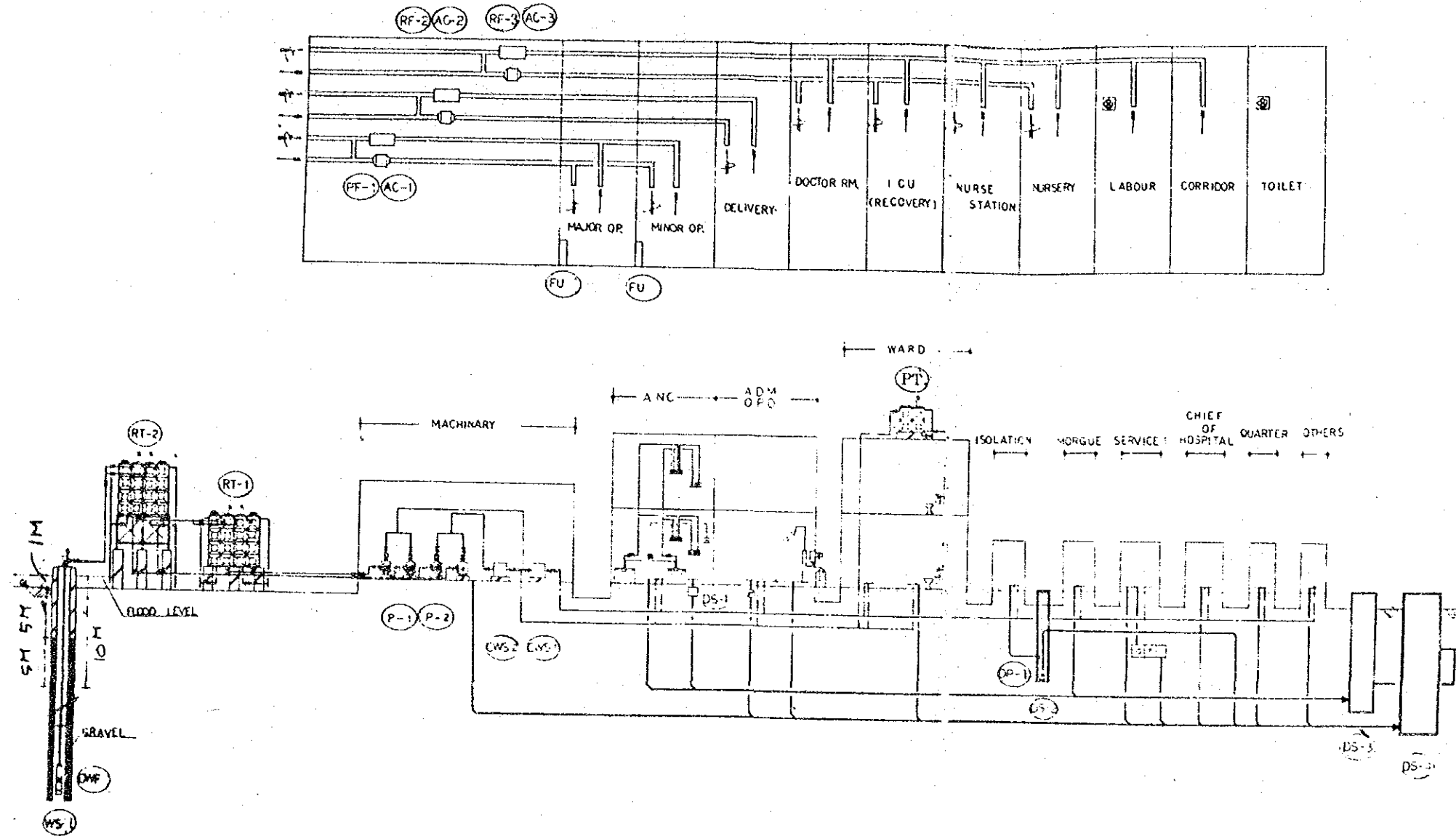
LEGEND

---	WATER SUPPLY PIPE (FOR DRINKING)	□	OUTLET (OXYGEN)
---	WATER SUPPLY PIPE (FOR TOILET FLUSHING)	□	OUTLET (NITROUS OXIDE)
---	HOT WATER SUPPLY PIPE	□	ALARM PANEL
---	WASTE WATER PIPE	□	ELECTRIC PANEL
---	AIR DUCT	□	SHUT-OFF VALVE
---		□	SHOWER HEAD



14. A/C & PLUMBING DIAGRAM

300, 450 BEDS

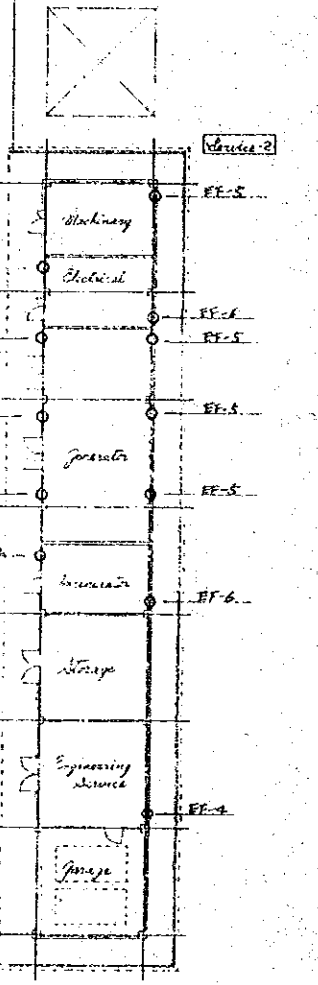
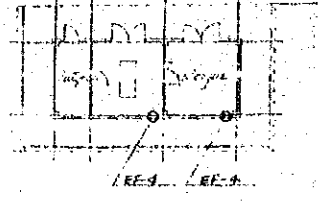
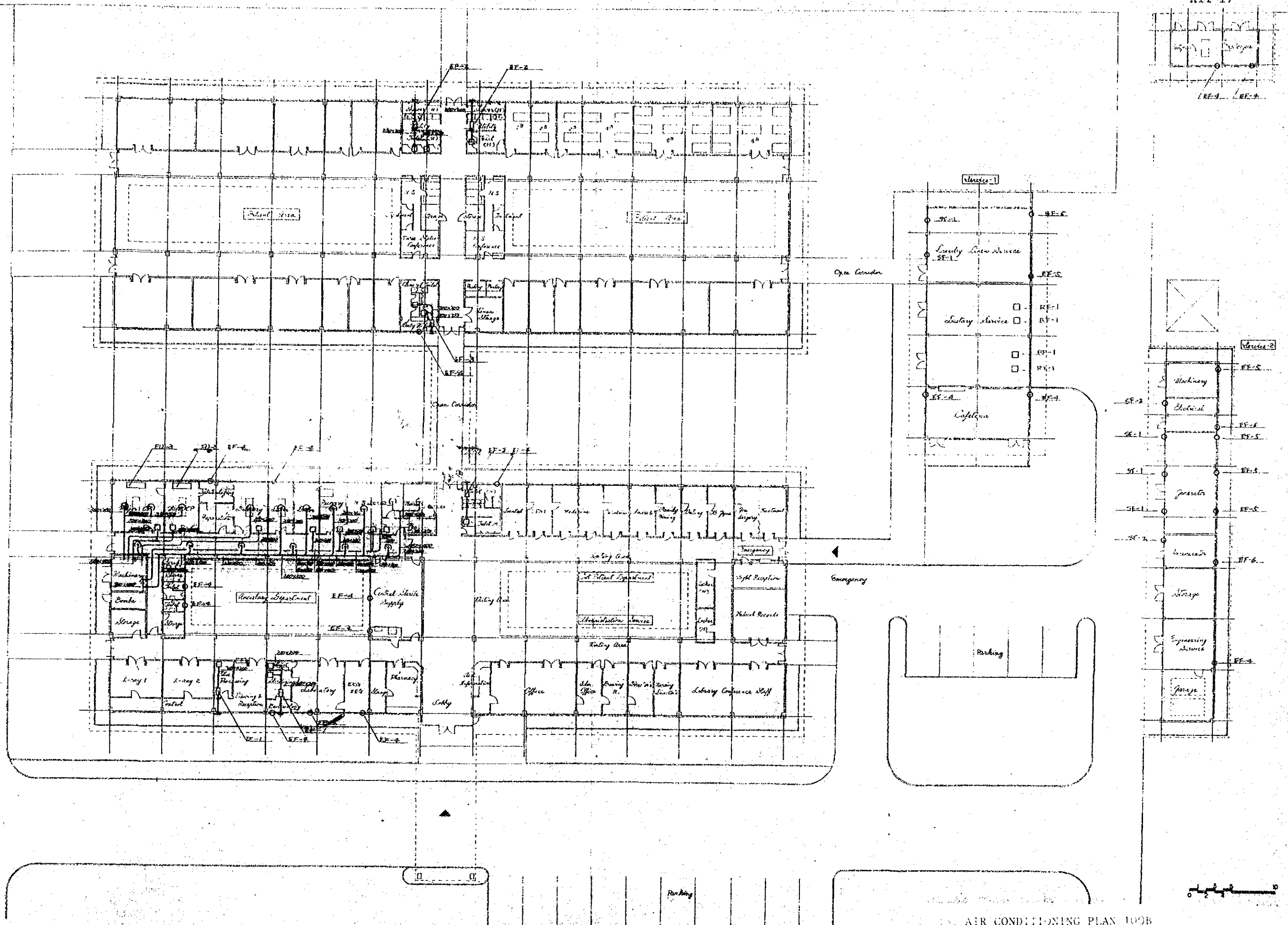


MARK	ITEM
WS	WATER SOURCE (WELL)
DWP	DEEP WELL PUMP
RT -1	RAW WATER TANK (Drinking Water)
RT -2	RAW WATER TANK (Toilet Flush Water)
PT	SUPPLEMENTARY ELEVATED TANK
P -1	DISTRIBUTION PUMP (Drinking Water)
P -2	DISTRIBUTION PUMP (Toilet Flush Water)
DP -1	WASTE WATER PUMP
CWS-1	WATER SUPPLY APPARATUS (Drinking Water)
CWS-2	WATER SUPPLY APPARATUS (Toilet Flush Water)
DS -1	HEAVY METAL TREATMENT
DS -2	STORAGE, DISINFECTANT TANK
DS -3	STORAGE TANK
DS -4	WASTE WATER TREATMENT
AC -1	AIR CONDITIONER (OP.)
AC -2	AIR CONDITIONER (Delivery)
AC -3	AIR CONDITIONER (ICU etc.)
RF -1	RETURN FAN (OP.)
RF -2	RETURN FAN (Delivery)
RF -3	RETURN FAN (ICU etc.)
FU	AIR FILTER UNIT

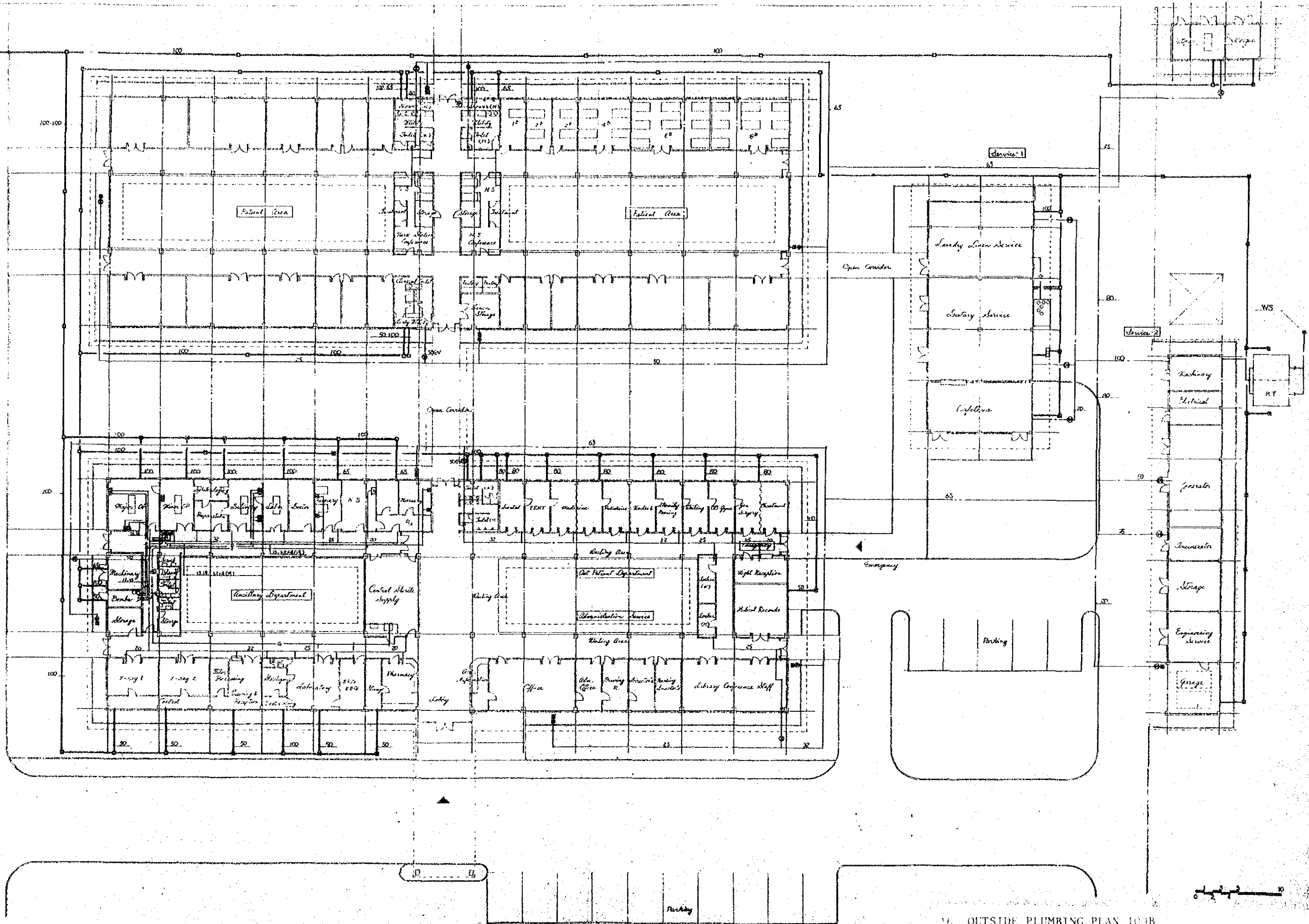
1. This diagram shows only Water Supply, Hot Water Supply, Drainage, Air Conditioning and Medical Gas facilities.
2. Drainage system shows plan 1.
3. Air Conditioning: 300, 450 bed hospital has 3 sets of AC-1 and RF-1.

LEGEND

---	WATER SUPPLY PIPE ( FOR DRINKING )	⊠	OUTLET ( OXIGEN )
---	WATER SUPPLY PIPE ( FOR TOILET FLUSHING )	⊡	OUTLET ( NITROUS OXIDE )
---	HOT WATER SUPPLY PIPE	⊞	ALARM PANEL
---	WASTE WATER PIPE	⊟	ELECTRIC PANEL
---	AIR DUCT	⊠	SHUT-OFF VALVE
---		✓	SHOWER HEAD



AIR CONDITIONING PLAN 100B



10. OUTSIDE PLUMBING PLAN 107B

XII - 2 DRAWINGS OF PROJECT HOSPITAL

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XII-2 DRAWINGS OF PROJECT HOSPITAL

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## BED CAPACITY

Region	Hospital	Present		Project			Increase (D-B)	Memo
		A. Authorized	B. Actual	C. Demand	D. Assessment			
I-1	Pangasinan MC	200	265	450	450	(300)	185	
I-2	Bontoc PH	100	100	200	100		0	
I-3	Baguio MC	350	249	450	450	(300)	201	
I-4	Benguet PH	100	119	200	100	(100)	-19	
I-5	La Union RH	150	150	300	250	(200)	100	
I-6	Abra PH	100	110	100	100		-10	Actual bed capacity is roughly estimated. Further check is necessary.
I-7	Gabriela Silang PH	100	88	200	100		12	
I-8	Don Mariano Marcos MH	200	100	300	100		0	
I-9	Ilocos Norte PH	100	163	200	200		37	
II-1	Cagayan RH	200	200	300	300		100	
II-2	Cagayan Mental H	-	-	144	150		150	
II-3	Kalinga-Apayao PH	100	100	100	100		0	
II-4	Cagayan PH	25	32	100	100		68	
II-5	Isabela PH	100	100	200	150	(100)	50	
II-6	Quirino PH	100	73	100	100		27	
II-7	Ifugao PH	75	75	100	100		25	
II-8	Maj. F. Marcos VH	200	115	200	150		35	
II-9	Nueva Vizcaya PH	50	56	100	100		44	
II-10	Batanes PH	75	75	100	75		0	
	Total	2,325	2,170	3,844	3,175		1,005	



PLAN (I) LIST OF FLOOR AREA

R ... Renovation

	Hospital Name	A. Main Building								B. Service				C. Quarters				D. Doctor Quarters				E. Dormitory				F. Demolish	G.		H.		G. + H.		Grand Total	
		ANC		OPD		ADM		Ward		Toilet		-1		-2		Morgue		Others		Chief		Doctor		Female			Male		= A + B + C	= D + E		Sub Total		
		new	old	new	old	new	old	new	old	new	old	new	old	new	old	new	old	new	old	new	old	new	old	new	old		new	old	new	old	new	old		new
NS-35	450 <sup>B</sup> Standard	2,220	1,110	1,030	7,190			790	340	90				G10 B40 930	220	2,320	1,110	210			13,660	3,860			17,520				17,520					
	300 <sup>B</sup> Standard	2,220	1,110	1,030	4,740			500	340	90				G10 B40 620	220	1,480	770	160			10,700	2,630			13,330				13,330					
	200 <sup>B</sup> Standard	1,590	740	740	2,900			390	250	50				G10 380	220	880	430	120			7,050	1,650			8,700				8,700					
	100 <sup>B</sup> Standard	770	380	370	1,320			290	250	40				170	170	420	260	120			3,590	970			4,560				4,560					
I	1 Pangasinan MC (450 <sup>B</sup> )	2,220	1,110	1,030	6,390			700	340	90				G10 B40 1,090	220	2,320	1,110	210			13,020	3,860			16,880				17,820					
	2 Bontoc P.H. (100 <sup>B</sup> )	50	300	120	290	380	680	290	180			50	280	110	420	260	120			750	1,360	910		1,660	1,360	4,540								
	3 Baguio MC (450 <sup>B</sup> )	2,600	140	1,260	400	1,260	6,370	790	360	90				G10 B40 560					1,450	6,970	6,910		2,460		6,970	6,910	16,340							
	4 Benguet P.H. (100 <sup>B</sup> )	770	380	370	1,130			290	250	40				490	170	420			310	120	1,620	590	540		4,310				5,280					
	5 La Union RH (250 <sup>B</sup> )	1,680		420	860	2,900	180	390	250	50				G10 470	220	880		460	120		700	5,750	510	1,220	460	6,970	970	9,690						
	6 Abra PH (100 <sup>B</sup> )	800		340	420	610	60	290	250	40				100	170	420	100	260	120		1,500	1,480		970	100	2,450	100	3,980						
	7 Gabriela Silang P.H. (100 <sup>B</sup> )	770	380	370	1,320			290	250	40				170	170	420	260	120			2,240	3,590		970		4,560		4,560						
	8 Don Mariano Marcos M.H. (100 <sup>B</sup> )		1*		1*	2,160	1,740		2*			50	60	1,000		130					60	6,720		1,130	60	7,850	7,960							
	9 Ilocos Norte P.H. (200 <sup>B</sup> )	1,590		630	630	2,230	340	430		50				G10 270				420			1,100	4,580	340		420	4,580	760	6,710						
	II	1 Cagayan RH (300 <sup>B</sup> )	2,220	1,110	1,030	4,740			500	340	90				G10 B40 620	220	1,480	770	160			10,700	2,630			13,330				13,330				
2 Cagayan MH (150 <sup>B</sup> )			3*		3*	910	460	340													1,250	1,090			1,250	1,090	2,340							
3 Kalinga Apayao PH (100 <sup>B</sup> )		770	380	370	1,400	580	30	290	250			90	80	170	420			120		240	2,310	600	590	120	2,900	720	4,670							
4 Cagayan PH (100 <sup>B</sup> )		770	380	370	1,320			290	250	40				170	170	420	260	120			3,590	970			4,560			4,560						
5 Isabela PH (150 <sup>B</sup> )		770	380	370	1,570	180	70	290	250	40				170	220	420	160	100			280	2,300	670	800	100	3,100	770	6,020						
6 Quirino PH (100 <sup>B</sup> )		770	380	370	690	240		290	250	40				430	170	460	260	120			1,030	2,530	240	1,010		3,540	240	4,740						
7 Ifugao PH (100 <sup>B</sup> )		770	380	370	700			290	250	40				390	170	420	320	120				3,190		1,030		4,220		4,840						
8 Maj. Marcos Veteran MH (150 <sup>B</sup> )			960		840	420	2,140	290	250	180	40	60	150	220	420	380	120				700	4,600	1,140		1,840	4,600	6,440							
9 Nueva Vizcaya PH (100 <sup>B</sup> )		590	360	40	590			250	250						170	420					340	1,830		590	480	2,420	480	4,160						
10 Batanes PH (75 <sup>B</sup> )		530		170	260	650		250						150							560	1,210				1,210		2,200						
		<p>new construction area (m<sup>2</sup>)                  using area of old facilities (m<sup>2</sup>)                  renovation area (m<sup>2</sup>)</p> <p>MA:Major Change, ME:Medium Change, MI:Minor Change</p>																								Region I	8,610	39,920	15,840	8,520	2,110	48,440	17,950	76,880
																										Region II	2,450	29,610	7,200	8,760	700	38,370	7,900	53,300
																										Total	11,060	69,530	23,040	17,280	2,810	86,860	25,850	130,180