3. Other Data

(1) Evaluation for Requested Medical Equipment

EVALUATION CRITERIA FOR REGESTED MEDICAL EQUIPMENTS

Eva	luation Items		Eval	uation Criteria
A	8asic Need	0	Must	for Medical Care
		Δ	Impr	ove Medical Care
		×	No no	eed for Medical Care
В	Technology	0	Amp I	e Experiences with the Equipment
		Δ	ALit	ttle Experience with the Equipment
		×	No E	xperience with the Equipment
C	Operation and	0	Under	r US\$2,000/year
	Maintenance	Δ	US\$2,	000 to 4,000/year
	Cost	×	More	than US\$4,000/year
D	Environmental	0	No Er	nvironmental Impact
	Impact	Δ	A Lit	ttle Environmental Impact
		×	Conta	emination to the Environment
Ε	Replacement	0		cement or Supplement of the Existir
	and Supplement		Equip Consu	oment umable
	and dapprement	Δ		Equipment with no Experience
F	 Benefit	X		Benefit
ř	Deneric	Ò	-	tle Benefit
		Δ		enefit
0	Centralization	X		te the Centralization
G	ventrarization	0		
		Δ		e to do with the Centralization
	0	X		st the Centralization
H	Specification	0		ble for the Needs
		Δ		o suitable for the Needs
		ΧÍ	Not a	daptable to the Needs

Requested equipment of Bach Mai Hospital

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	Exist. Q'ty																					2	,-			2	-			
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20 20 2	Cate- gory	1	1	1	1	1		H		1	ı	-	111	-	_	-	-	1		1	##	11	ม	į	ı	H	.∨		1	
	Reg. Qʻty	į	3		7	-	-	-		-			1	-	١		•	-		2	•	2	2		2	ı	-	2	S	
Requested equipment of Bacil Mai Prospitat	Equipment Name	Blood congulator	Binocular microscope	Hematocrit centrifuge	Tabletop centrifuge	Automatic blood cell counter	Differential leueocyte counter	Deep freezer	Medical refrigerator	Automatic micropipette set	Incubator	Drying oven	Automatic slide stainer	Blood pipette washer	Colonineter	Rotary shaker	Electric balance	Pipette shuker	Laboratory small items	Blood bank refrigerator	Biochemical auto analyzer	Tabletop centrifuge	Medicine refrigerator	Auto pipette	Auto dilutor set	SpectroCéhotometer	Water softener apparatus	Trolley (Laboratory cart)	Instrument cabinet	
	Department	Hematology Examination																			Biochemistry Examination									
•	ltem No.	1 - 3	S - 2	E - 3	c) - 4	E - 5		3	E - %	6 - B	E - 10	E - 11	E - 12	E . 13	E - 14	. 15	F - 16	17	E - 18	E - 19	E - 1	- 2	8 . 3	E - 4	E - S	9 - E	E - 7	ο¢	6	
	=	HE	311	113	311	HE	HE	31)) TE	HE	HE	IIE	113	11.	311	112	.HE	띺	뛰	11.5	38	BI	32	BE	BE	धः	38	36	JE	

Requested equipment of Bach Mai Hospital

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Department	Equipment Name	Req. Qʻty	Cate- gory	Whole Plan	Exist. Q'ty	4	ထ	Ü	ຍ 	u.	ڻ 	I	Result Q'ty
	Laboratory small items	6	1	l		0	0	0	0	0	0	0	-
Microbiological Examination	Colony counter		1	1		0	0	0	0	0	0	0	
	Binocular microscope	7	1	3		0	0	0	0	 	0	0	3
	incubator	5	1	2		0	0	0	0	0	0	0	2
	Drying oven	2	-	2		0	0	0	0		0	0	2
	Deep (reezer	-	1	-		0	0	0	0 0	0	0	0	
	Anacrobic culture apparatus	1	-			0	0	0	0	0	0	0	
	Table top centrifuge	3	1	2		0	0	0	0	0	0	0	2
	Vortex shaker	က	1	2		0	0	0	0	0	0	0	2
	Electronic balance	-	-	-		0	0	0	0 0	0	0	0	-
	Water bath	6		2		0	0	0	0	0	0	0	2
	Vertical sterilizer		1			0	0	0	0	0	0	0	-
	Micropipette set	-	1			0	0					0	-
	Laboratory small items		-	1		0	0	0	0 0	0	0	0	
Pathological Examination	Fluorescent microscope	F	_	,		0	0	0	×	0	0	0	ļ
	Medicine refrigerator	2	-	2		0	0	0	0 0	0	0	0	2
	Auto micropipette		-	-		0	0	0	0 0	0	0	0	1
	Deep freezer	-				0	0	0	0 0	0 0	0	0	1
	Cryostat	-	=	*~	1	×	0	0	0 0	×	×	0	0
	Binocular microscope	4		4		0	0	0	0 0	0 0	0	0	4
	Tabletop centrifuge		-			0	0	0	0	0	0	0	1
	Tissue fixing shaker	-				0	0	0	0	0	0	0	1
	Rotary microtome	7	=	2	2	×	0	0	0	×	×	0	٥
	Tissue staining set	P-		-		0	0	0	0 0	0 0	0	0	1
	Paraffin oven	e.e.e.e.e.e.e.e.e.e.e.e.e.e.e.e.e.e.e.		ľ		0	0	0	0	0	0	0	-
	Drying oven	2	1	2		0	0	0	0	0	0	0	2
	Slido warmer	3		2		0	0	0) (0 0	0	0	2
	Paraffin bath	7	-	2		0	0	0	\ \ \ \	0	0	0	2
	Electronic balance	2	-	2		0	0	0	0	0	0	0	2
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Requested equipment of Bach Mai Hospital

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Item No.	Department	Equipment Name	0, % Q. Q.	Cate- gory	Whole Plan	Exist. O'ty	∢	8	U	۵	w w	υ.	x	Result O'ty	
21 - E		Automatic tissue processor	-		-		0	0	0	4	×	0	0		nie zanie
		Microtome knife sharpener		-	1		0	0	0	0	0	0	0	-	***
		Incubator		į	-		0	0	0	0	0	0	0	-	
		Vortex shaker	-	1	1		0	0	0	0	0	0	0		
		Magnetic starter		-	l		0	0	0	0	0	0	0	-	,,,,,,
		pił meter	ı	1	l		0	V	0	0	×	0	0	-	Í
		Slide container	3		3		0	0	0	0	0	0	0	ന	7
		Interval timer	6	-	3		0	0	0	0	0	0	0	n	
		Laboratory small items	-				0	0	0	0	0	0	0		
	Radiology Examination		2	H	7	2	0	0	Ø	0	0	0	0	2	·-···
		Fluoroscopic X-ray with remote control	-	355	2	2	×	0	٥	0	×	×	0	0	
1		Automatic film processor	-	==	2		0	0	×	∇	0	0	0		
٠.		Mobile X-ray unit	-	=	2		0	0	0	0	0	0	0		-~T
		Film dryer	-	ı			0	٥	0	0	×	0	0	ç	-
		X-ray examination small item	1	ı	g		0	0	0	0	0	0	0	-	~
RE - 17		Darkroom small items	1	-	-		0	0	0	0	0	0	0	-	~
8 - E2		Angiography system	J	-			0	0	×	0	×	0	0	-	n stept
1	Physical Examination	Holter system	2	-	2		0	0	0	0	0	0	0	2	~~
	\mathbf{T}	Ultrasound scanner (whole body)	ļ	ĸ	4	က	0	0	٥	0	0	0	0	,-	
١.			1	-	ı	para-para-para-	0	0	0	0	0	0	0		
<u></u>		EEC	1		,-		0	◁	◊	0	×	0	0	-	
•		ECG stress test system	l		1		0	0	0	0	0	0	0		-
9 - Y.d		Autospirometer	l	1	1	i rendrance	0	0	0	0	0	0	0		~~~
Ŀ		Electrocardiograph	2	-11	4	2	0	0	0	0	0	0	0	C/ 5380000	over 1
PY - 8		Sphygmomanometer	9	-	9	-	0	0	0	0	0	0	0	9	
EE .	Endoscopy Examination	aparoscope system	-	11			0	0	0	0	0	0	0		T
FE - 2	1	Colonoscope system	1		-	K-180-180	0	0	0	0	0	0	0	-	······
EE . 3		Daodenoscope system	1		ę		0	0	0	0	0	0	0	-	
135 - 4		Cystoscope system	1		-	ngi Suita	0	0	0	0	0	0	0	\$	

Requested equipment of Bach Mai Hospital

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	Equipment Name	Arthrofiberscope system	l'iberscope TV system	l'indoscope cabinet	Endoscopy table	Endoscopy electroxurgical unit	Suction pump	Manual disinfector	ICU bod	Ventilator	Patient monitor	Central monitor	Suction unit	Nebulizer	Infusion pump	Syringe pump	Pulse oximeter	IV hanger	Medical refrigerator	Medicine cabinet	Weighing scale for bed	Patient record cabinet	Stethoscope	Sphygmomunometer	Emergency cart	Атьи-ъак	Feeding pump	Autoclave (Table top type)	Water treatment system (for 2 bed)	Individual dialysis pump system
	Department								Intensive Care Unit																					
	Item No.	· .	9	- 1	∞;	6	2	=	=	7	<u>"</u>	₹.	4	<u>~</u>	9	-	8	6	=	=	- 12	=	<u> </u>	- 15	21	=	81	62	8	- 21
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Requested equipment of Bach Mai Hospital

Equipment Name	%eq. Ç∵Ç	Cate- gory	Whole Plan	Exist. Q'ty	∢	80	U	<u> </u>	ш	L	I	Result Q'ty
Dialyzing solution maxing tank	2	٨	0		×	0	0	0	0	×	×	0
Hemodialysis machine	2	111	2	and the second	0	0	×	0	0	0	O ×	2
viewer	_		1		0	0	0	0	0	0	0	g-w
	2	1	2		0	0	0	٥	0	0	0	2
Universal operation table	ပ	-	9		0	0	0	0	0	0	0 0	9
Operating light	ဖ		Ø	×	0	0	0	0	0	0	0	9
Electrosurgical unit	9	-	9		0	0	0	0	0	0	0 0	9
Anesthesia apparatus with ventilator	သ	-	9		0	0	4	0	0	0	0	9
system for operating system		==			0	0	0	0	0	0	0	
Laperoscopy operating system	-	Ħ	-		0	0	0	0	0	0	0	-
	ဖ		ပ		0	0	0	0	0	0	0	9
Patient monitor	و		9		0	0	0	0	0		0 0	9
	2	ı	2		0	0	0	0	0	0	0	2
Medical refrigerator			-		0	0	0	0	0	0	0 0	
Blood refrigerator		-			0	0	0	0	0	0	0 0	F.
	~		7		0	0	0	0	0	0	0 0	2
table	9		မ		0	0	0	0	0	0	0	9
Operating instrument set		1	မ		0	0	0	0	4	0	0	9
container	-				0	0	0	0	0	0	0	
Sphygmomanometer	9	-	ဖ		0	0	0	0	0	0	0 0	9
	φ		y	-	0	0	0	0	0	0	0	9
	12		12	.10m	0	0	0	0	0	0	0 0	12
	9		ၒ		0	0	0	0	0	0	0	9
тn	ဖ	-	9		0	0	0	0	0	0	0 0	9
	2		2		0	0	0	0	0	0 0	0	2
Recovery bed	2		2		0	0	0	0	0	0	0 0	2
	9		ၑ		0	0	0	0	0	0	0	9
Endotracheal set	-	-	-	-	0	0	0	0	٥	0	0	1
Chair for anesthesia	ဖ	-	9		0	0	0		0	0	0 0	9

Requested equipment of Bach Mai Hospital

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Equipment Name	Operation chair	Foot stool	Instrument cornuge	Instrument cabinet	Electa shelf	Pulse oxymeter	Bottle rack	Medicine rack	Medicine cabinet	Medicine safety box	Water purifier	Balance	Mortal and pastle	Troiley	Cash register	Medical refrigerator	High pressure steam sterilizer	Boiler system	Tube washer	Tube dryer	Washing spray gun system	Glove washer	Drying oven	Electa shelf	Transport trolley	Distribution trolley	Basket trolley	Dressing drum	
tem No. Department							Ръзтиясу										Central Supply and Sterilizing												
N No.	- 27	- 28	2	8	31	- 33		7	3	4	. 5	9	,	∞	6	2	-		-	4		9		80	6	õ	Ξ	12	
ler.	b	ö	히	히	ö	5	풊	ž	폰	E	폱	푮	E	풊	풒	푎	S	6 .	8	S	S	8		8	8	ध	S	S	į

Requested equipment of Bach Mai Hospital

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	į		riqupinent Name	O'ty	cate- gory	Whole Plan	CXIST.	∢	23	ر	Ω	لد		x o	Sesuit O.t.
S)	4.		Small items for sterifization			-		0	0	0	0	0	0	0	g-4
GE .	-	General item	Slide projector	2	-	2		0	0	0	0	×	0	0	2
GE .	2		Overhead projector	2	-	2		0	0	0	0	×	0	0	2
SE	-		Scren	2		2		0	0	0	0	×) 0	0	2
۲.	-	Labour Room	Labour bed	9		9		0	0	0	0	0		0	9
5	- 2		Imigator stand	9		9		0	0	0	0	0	0	0	g
<u>.</u>			Examination light	-		·		0	0	0	0	0	0	0	-
DE .	=	Delivery Room	Delivery bed	C)	1	3		0	0	0	0	0		0	e
DE .	- 2		C'nesthesia apparatus	-		-		0	0	4	0	0	0	0	-
30			Operation light	٣	-	က		0	0	0	0	0	0	0 0	3
DE .	- 4		Delivery instrument set	ന		8		0	0	0	0	0		0	(Y)
30	- 5		Infusion pump	က	1	3		0	0	4	0	0		0	m
E E	৽		Serub station	1	-			0	0	0	٥	0	0	0	-
20	-		Instrument table	ю		3		0	0	0	0	0	0	0	3
DE .	∞		Instrument tray	60		က		0	0	0	0	0	0	0	3
된	٥		Suction unit	m		3		0	0	0	0	0	0	0 0	6)
- E	9.		Febl monitor	~		2		0	0	0	0	0	0	0	2
DE.	Ξ		Vacuum extractor	2	_	2		0	0	0	0	0	0	0 0	2
E	2		irricator stand	т		က		0	0	0	0	0	0	0 0	8
30	=		Infant warmer	2	**-	2		0	◁	0	0	×	0	0	2
30	4		Foot stool	က	~-	3		0	0	0	0	0	0	0 0	3
30	- 15			κì		3		0	0	0	0	0	0	0	3
ם	2			8		8		0	0	0	0	0	0 0	0	3
ĝ	-	New Bom/Pemature Nursery	Infant incubator	4		4		0	0	0	0	0	0	0	4
ĝ	71		Infant ventilator	2	E	2		0	0	٥	0	0	0	0	2
ę.	<u></u>		Phototherapy unit	-		•	_	0	0	0	0	0	0	0 0	,-
호	4		Neonatal monitor	~	=	2		0	0	0	0	0	0	0	2
Ê	S		Infant treatment table	2		7		0	0	0	0	0	0	0	2
· 호	° •		Infant care center	-	e-bura	,-		0	◁	0	0	X	0 0	0 0	1
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Requested equipment of Bach Mai Hospital

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Equipment Name	PO2/PCO2 monitor	Infusion output	Syringe pump	Examination light	Laryngoscope	Weight and height scale	Nebulizer	Medical refrigerator	Nursing bottle warmer	Nursing bottle sterilizer	Instrument cabinet	Emergency cart	Bedside monitor	Ventilator	Defibrillator	Infusion pump	Syrinke pump	Weight and height scale	Instrument cabinet	Diagnostic instruments	Fland driven resuscibag	Suction pump	Nebulizer	Examination light	Pulse oxymeter	FCG	Medical refrigerator	Film illuminator	Revolving stool
Item No. Department													Other Department																
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Requested equipment of Bach Mai Hospital

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81 - 81		Emergency cart	10	1	6	,	0	0	0	0	0 0 0	0	0	0	6
19		Medicine cubinet	10	1	6		0	0	0	0	00000	0	0	0	6
13 - 20		Automatic infant scale	S	1	2		0	0	0	0	×	0	0	×	2
15 - 21		Autoclave (Table top)	0:		6		0	0 0	0	0	0	0	0	0	၈

(2) Technical Note

March 11, 1997

Prof. Dr. Tran Quy Director, Bach Mai Hospital

Re: Technical Note for Basic Design Study on the Project for the Improvement of Bach Mai Hospital in Viet Nam

Dear Dr. Tran Quy,

In line with the Minutes of Discussion signed on 27th February 1997, between Mr. Takimoto, Leader of Basic Design Team, JICA and Dr. Ngo Van Hop, Director General, Department of International Cooperation, Ministry of Health, the Team has carried out further studies in Viet Nam. As the result of the studies, we were able to gather all the information necessary to complete the Basic Design and would like to summarize it in the Technical Note as follows;

- 1. Work Schedule
- 2. Sketch Plan with Comments
- 3. Topographical Survey and Boring Test by Subcontractor
- 4. Site Clearance by GOV
- 5. Monitoring Report on Site Clearance
- 6) The Location of the Main Entrance and its Permit
 - 7. Internal Procedure of GOV Approval on the Basic Design Report
 - 8. Building Permit
 - 9. Mechanical and Electrical Issues
- 10. Existing Medical Equipment
- 11. BMH Master Plan

The final components of the Project, both quantity and specification, will be decided after the analysis in Japan and subject to the approval by the Government of Japan.

Sincerely yours,

Received by

Ichiro Kanagawa/

u//

Ph.D. Ngo Toan Dinh

Project Manager

Vice Director

Basic Design Study Team

Bach Mai Hospital

Technical Note for Basic Design Study on the Project for the Improvement of Bach Mai Hospital in Viet Nam

1. Work Schedule

See the Attachment-1

2. Sketch Plan with Comments

Team showed Sketch Plan (Attachment-2) based on the discussions to BMH, and BMH found the Plan is reasonable and made following comments:

- 2.1 Medical offices...managers for 16 departments including clinical and paraclinical departments need individual offices.
- 2-2 Director's and 3 vice directors' offices are desirable to have individual toilets.
- 2-3 Pediatric ward needs a play room.
- 2-4 Maintenance office is necessary
- 3. Topographical Survey and Boring Test by Subcontractor

A subcontactor for the Topographical Survey and Boring 'Pest, Investment Consultancy and Construction Design Company were selected and the subcontractor will carry out the work in the Site.

BMH will give the permission to the subcontractor for the work and will give any necessary guidance to do the work.

The area of Topographical Survey and the points of Teste are shown in the Atattachment-3.

- 4. Site Clearance by GOV
 - 4-1 The area of the Site Clearance is shown in the Atattachment-4.
 - 4.2 The Items to be included in the Site Clearance are;
 - Demolishion of buildings, wall/fence and any other obstacles in the Site Clearance area. The existing trees to be kept will be told by the Draft Report Team.
 - Relocation of water supply, sewer and drainage pipes and electrical cabling and wiring within the Site Clearance area.
 - 4-3 Dr. Ngo Toan Dinh, Vice Director, is in charge of the Site Clearance.
 - 4-4 The relocation plan of Institute of Clinical Research in Tropical Medicine will be approved by June '97 and the preparation for the move will start. Site Clearance schedule will be prepared simultaneously.

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5. Monitoring Report on Site Clearance

The Monitoring Reports are necessary to be submitted to JICA Hanoi Office, attention to Mr. Okubo, monthly in accordance with the Site Clearance Schedule. Ph.D. Ngo Toan Dinh is the responsible person.

- 6. The Location of the Main Entrance and its Permit (Attachment-4)

 This permit procedure will be through the Building Permit procedure.
- 7. Internal Procedure of GOV Approval on the Basic Design Report (Attachment-6)
- 8. Building Permit / Approval Procedure

"Approval of design" shown in the Attachment-7 is the responsibility of BMH. "Approval of total cost estimate" is not applicable for ODA project, however BMH need to report to GOV.

For the smooth implimentation a localconsultant shall be hired by BMH to assist Japanese consultant inpreparing the detail design and to proceed the approval. This localconsultant need to translate the documents and prepare necessary additional documents for the permit/approval procedure.

9. Mechanical and Electrical

Major issues discussed were;

Mechanical--water supply, sewage, medical gas and air-conditioning Electrical--power supply system, telecommunication system

10. Existing Medical Equipment

10-1 The list of the equipments to be moved to the new building (Attachment-8)

10-2 The responsibility to move the equipment rests on GOV

11. BMH Master Plan

BMH gave a summery of Master Plan to the Team. (Artachment -9) The Team had discussion on the Master Plan with BMH management and the summery is as shown below:

- 11-1 The rest of the Master Plan will be fulfilled by GOV eventually.
- 11-2 The facilities for the Institutes will be improved
 Gerontology; the building will be completed within '97 or early '98.
 Clinical Research in Tropical Medicine; the design was finished and BMH is ready to request the budget for the 6 stories as soon as the plan is approved.

... Cardiology; after the Neurology Department is moved, the new building would be built.

Mental Health; the construction of new 3 stories building with 100 beds will start next year.

Dermatology: the facility will be renovated soon.

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11-3 The old Bach Mai zone is now under renovation. After the completion of the New zone, A block will be used for ENT, Dental, Ophtalmology and Traditional Medicine, C block will be used for nursary school, its upgraded college and dormitory for 400 students. Central block will be used for administration. Existing ICU building will be renovated and be used for Training Center.

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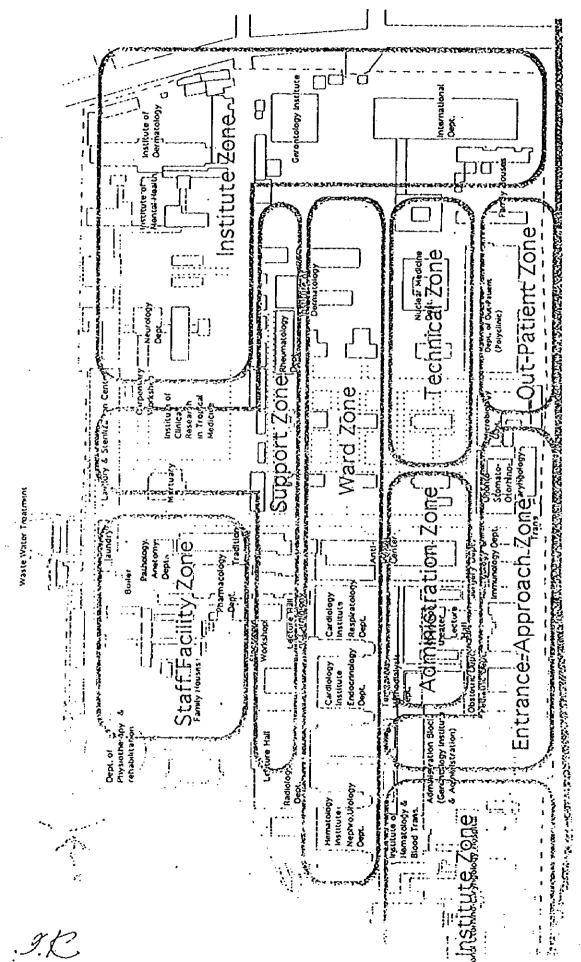
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Assumed Schedule for the Implimentation of the Project (Tentative)

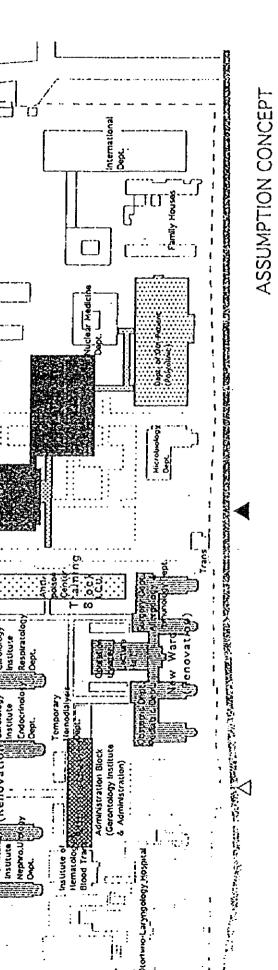
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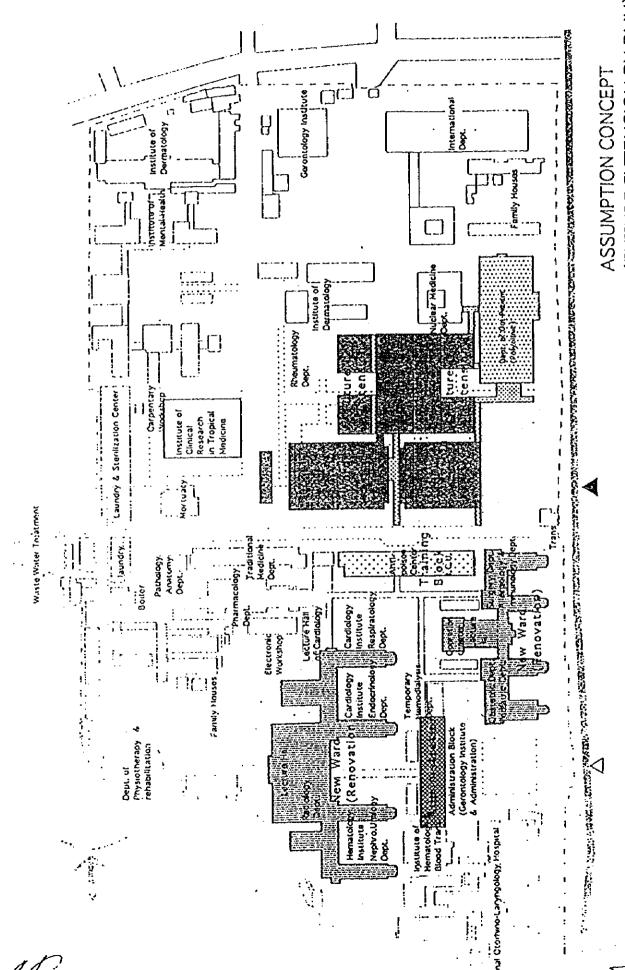
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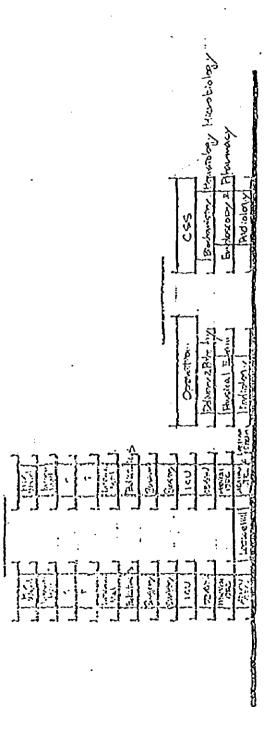
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ASSUMPTION CONCEPT (FUTURE EXTENSION BY BMH)

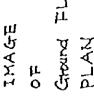
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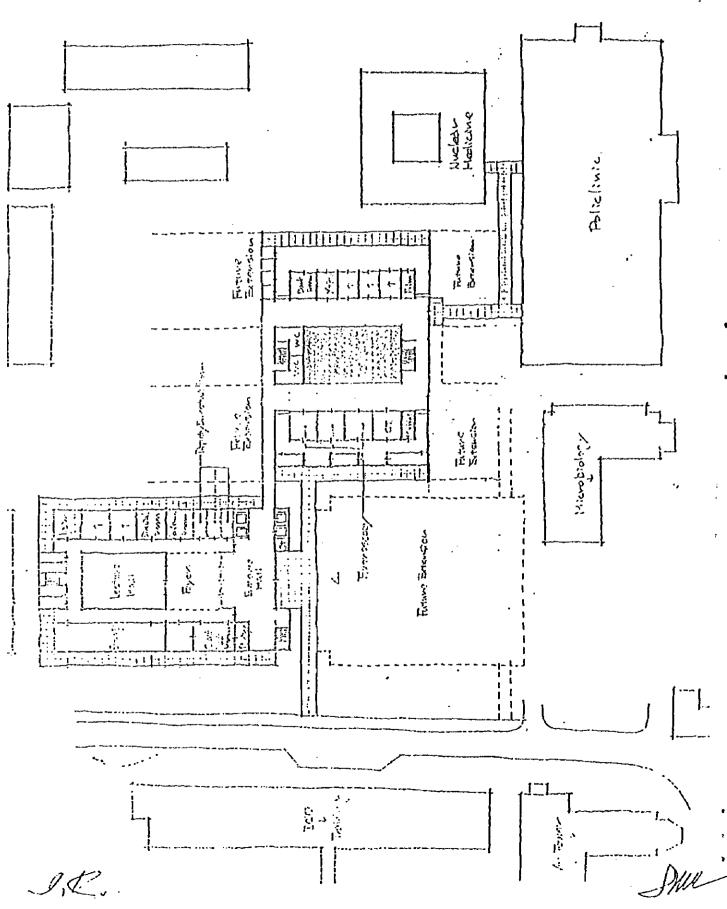
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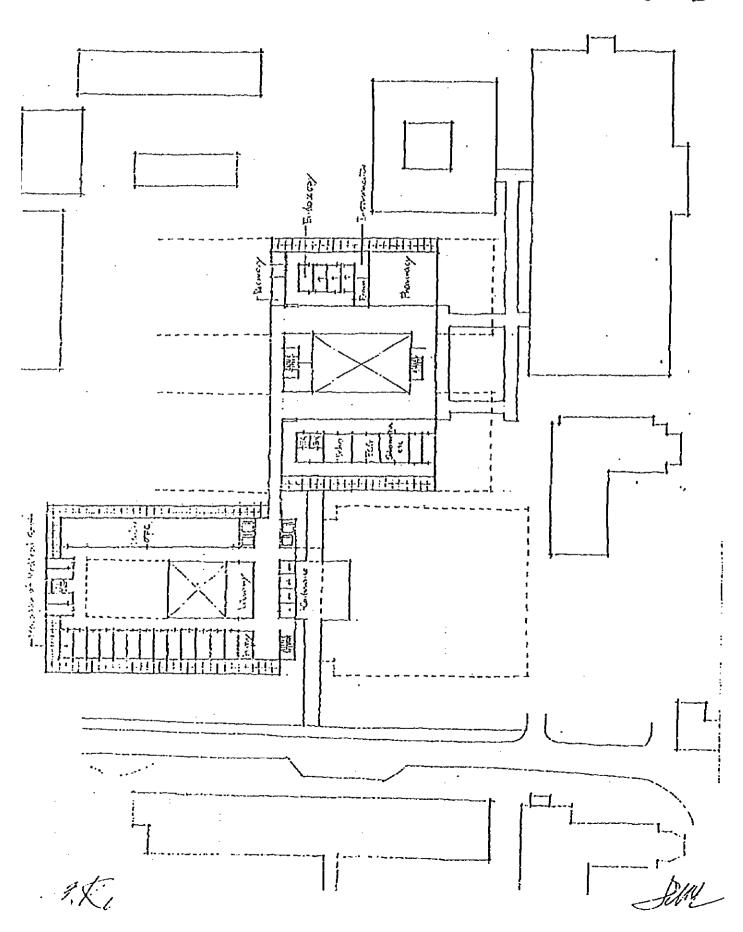


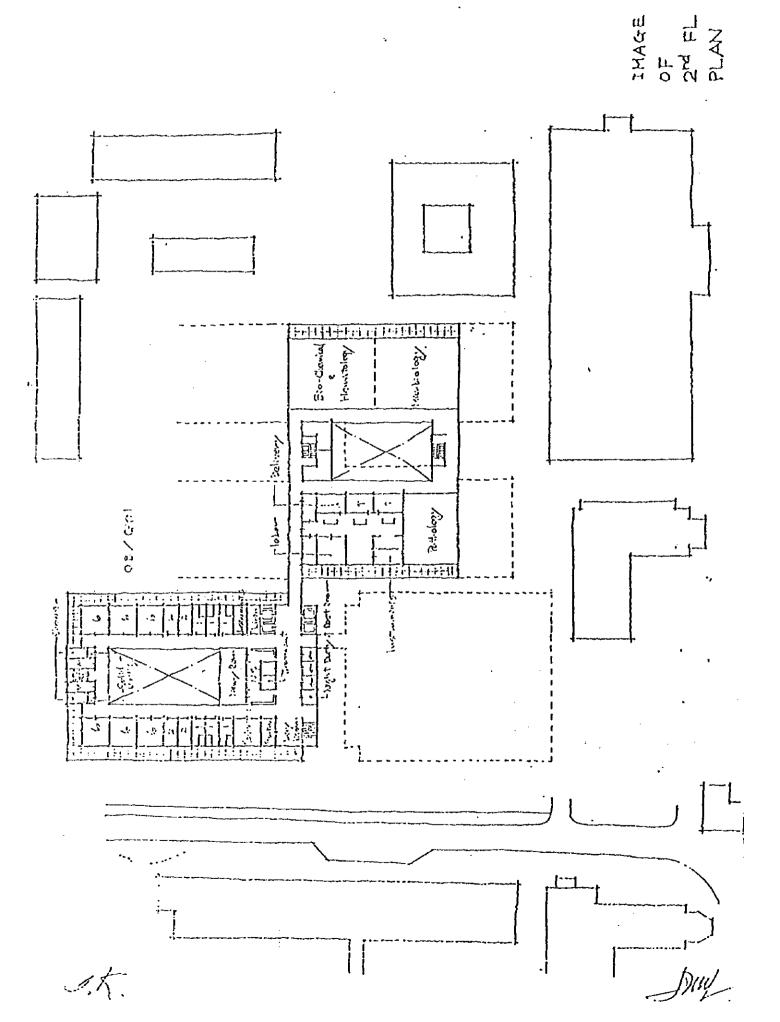
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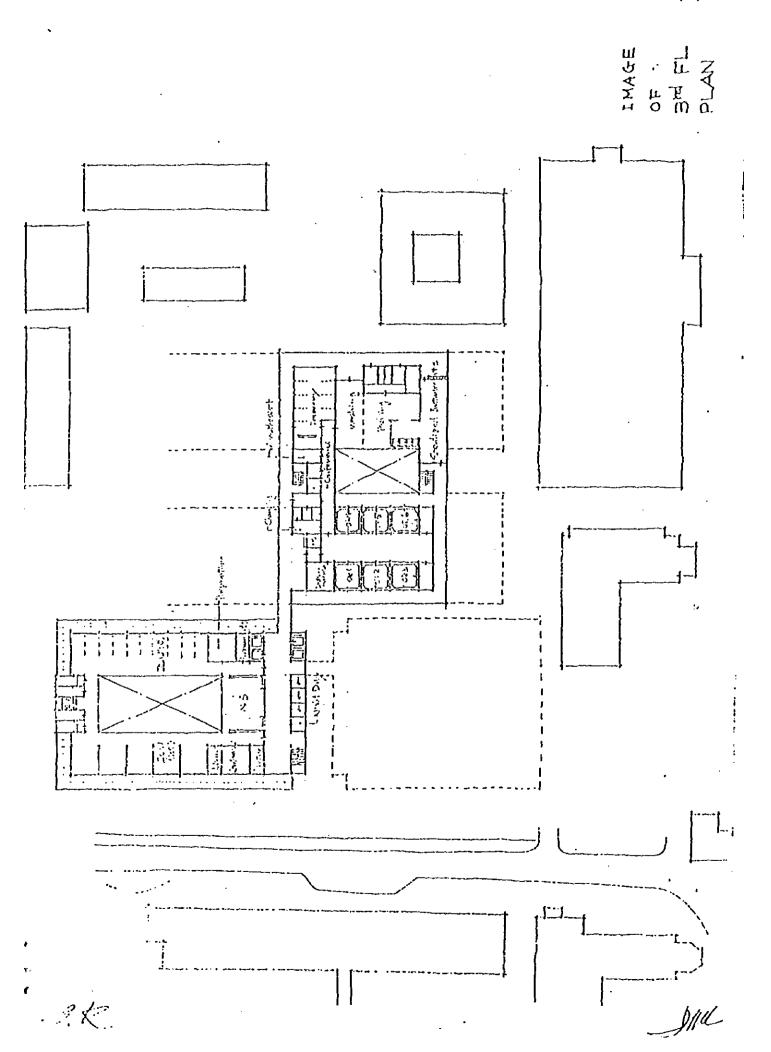
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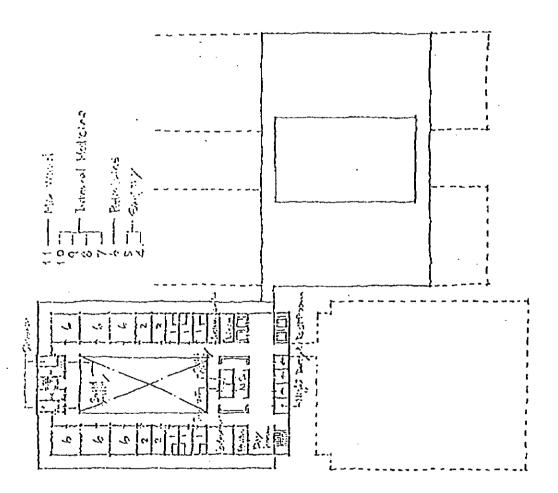






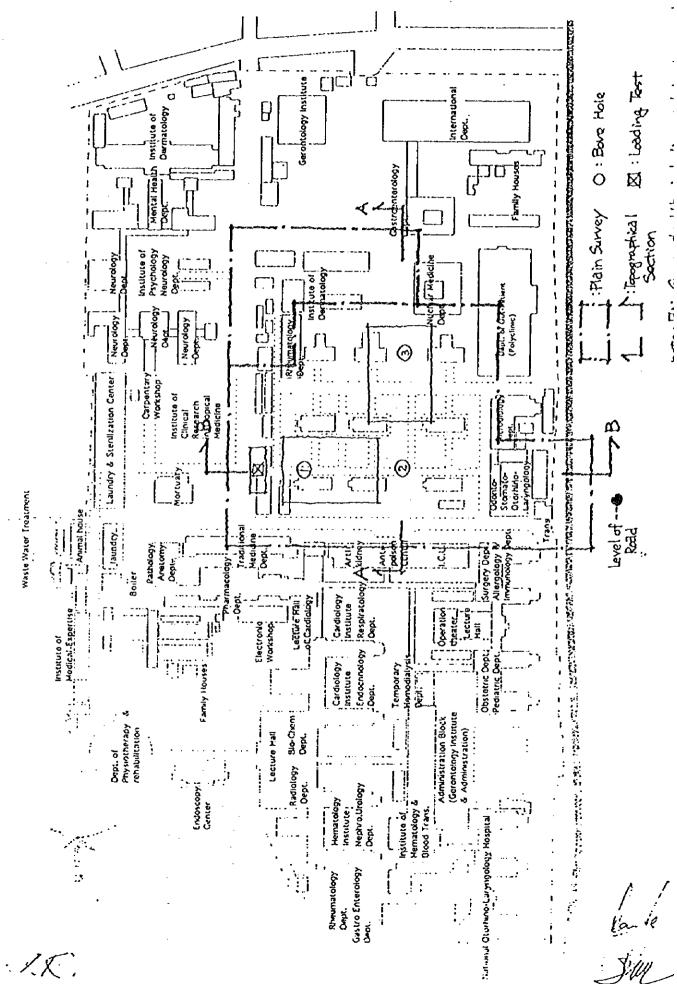






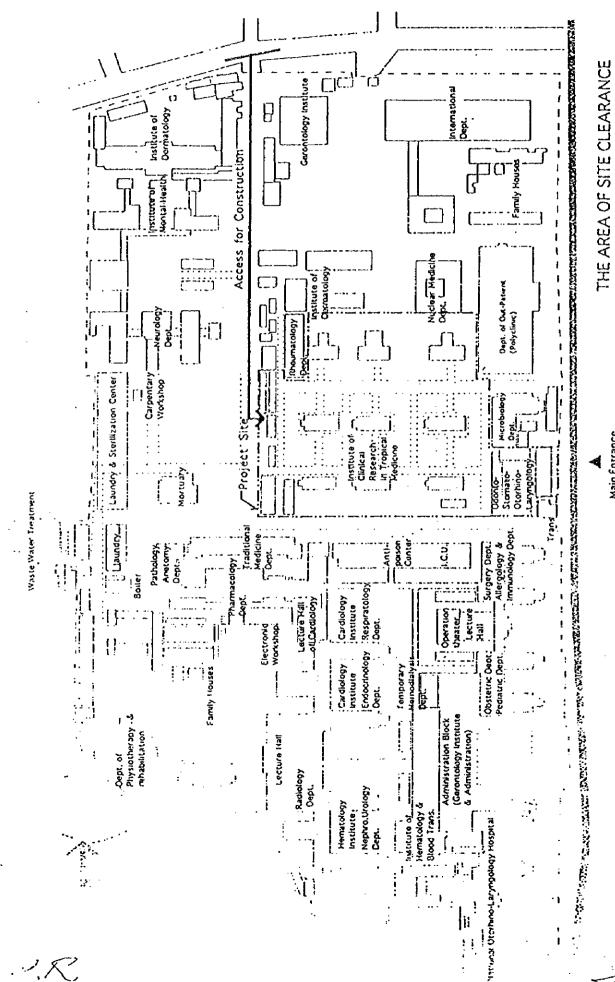
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THE AREA OF SITE CLEARANCE
THE LOCATION OF MAIN ENTRANCE
THE ACCESS FOR CONSTRUCTION

Main Entrance

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PROCEDURES FOR SETTING UP A INVESTMENT PROJECT

- 1. Define the necessity to set up the Investment Project.
- 2. Report on the Pre-Feasibility Study.
- 3. Submit the result of the Pre-Feasibility Study to the Ministry of Health and the Ministry of Planning and Investment for approval.
- Submit it to the Government Office. The decision of the Government is not exceeded 20 days from the submission.
- 4. Report on the Feasibility Study.
- 5. The Ministry of Planning and Investment appraises the Feasibility Study. Appraisal is not exceeded 45 days.
- 6. Submit the Feasibility to the Government Office.

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PROCEDURES FOR CONSTRUCTION LISENCE

1. Technical design documents and implementing design drawings completed following the regulations.

The time of the completion of this step is decided by Design Consultant Organization.

- 2. These design documents should have been appraised on design and total estimated cost.
 - Appraisal Organization: Appraisal Office of the Construction Ministry
 - Duration : not over 40 days
- 3. After appraisal of design documents, there will be step of approval of design and total estimated cost
 - Approval level: Minister of Ministry of Health
 - Duration: not over 15 days
- 4. When these procedures will be completed, there will be step of submition of documents for the construction lisence.

Documents for the construction lisence consists of:

- Proposal for construction lisence (complete the form)
- 3 sets of design documents, each set consists of:
 - + Drawing of the site location
 - + Surface of the land: scale 1/200 1/500
 - + Surface floors: scale 1/100 1/200
 - + Drawing of the rain water drainage system and waste water treatment system: scale 1/100 1/200
- Decision of the approval of technical design by Authorities
 - + Constrution Lisence Authority: Hanoi Chief Architecture Office
 - + Duration: not over 45 days

Note:

If the Group A is approved by the Government will be exampted from construction lisence, but have to complete above procedures.

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	ICAL BLOCK	F. 1	a:	۵.	~
Item No.		Equipment Name	Size(WXDXH)		
XBE .	1 Biochemistry Examination	Urine analyzer	450×450	1	Table cop
	2	ELISA system (Reoder)	950×530	ı	Tabletop
X8E -	•	ELISA system (Monitor)	450×600	,	Table top
X8E -	4	ELISA system (Prioter)	600×350	!	Table top
XBE -	5	Electrolyte analyzer (AVL)	300×250	!	Table top
XRE .	6	Blood gas analyzer (AVL)	400×550	l	Table top
XBE -	7	CO. oxygen analyzer (AVL)	300×500	!	Table top
XBE -	8	Pump for AVL	300 dia.	1	Table top
XBE .	9	Refrigeretor	520×500	1	nstall
XBE -	10	Spectrophotometer	350×450	ı	Table top
XBE .	11	Electric belance	200×320	3	Table top
XBE -	12	Computer	450×600	ţ	Table top
XBE -	13	Printer	330×300	ſ	Table top
XRE -	14	Water stiller	590×450	1	Install
XBE .	15	Water purifier	1100×750	i	instell
X8E -	16	Ultrasound washer	1350×650	1	instell
XBE -	17	Drying over	730×650	1	Table top
XBE -	18	Drying oven	550×480	1	Table top
XHE -	19	Drying oven	530×400	1	Table top
XBE -	20	Autociave	720×550	1	install
XBE -	21	Refrigareted centrifuge	940×850	ł	Table top
XBE .	22	Calorimeter	440×400	1	Table top
XBE -	23	Spectrophotometer	400×330	1	Teble top
XBE -	24	Vacuum refrigerated centrifuge	102 0× 680	ı	Install
XBE -	2.5	Deep freczer	600×670	1	Install
XBE .	26	Contribuge	280×370	ŀ	Table top
XBE -	27	Centrifuge '	440×550	3	Table top
XME -	1 Microbiological Examination	Cooling centrifuge	530×760		Table top
XME -	2	Binocular microscope with camera	250×410	1	Table top
XME -	3	Deep freezer	920×640		Install
XME -	4	Deep Ircezer	860×720	_	Install
XME -	5	ELISA system (Reader)	430X340	i	Table top
XME -	6	ELISA system (Washer)	370×400	ì	Teble top
XME -	7	ELISA system (Incubator)	230×360	1	Table top
XME -	8	Refrigerator	520×560	j	Table top
XME	9	Refrigerator	530×520		Install
XME	10	Clean bench	1270×1100		Install
XME -	11	Clean bench (New)	1390×750		Install .
XME -	12	Incubator (New)	630×330		Table top
XME -	13	Drying oven (New)	550×570		Tabletop
XPE -	I Pathological Examination	Refrigerated cryoster.	700×650		Install
XPE .	2	Rotary microtome	340×480		Table top
NPE	3	Rotary microtome	250×400		Table top
XRE .	I Radiology Examination	General X-ray apparatus			Install
XRE	2	CT scanner			Install
XRE	3	Fluoroscopic X-ray TV unit			Install,
	- 4··*	Automatic film processor			Install
XRE -	5	**			Mobite
XPY -	1 Physical Examination				Mohite
XEE -	1 Endoscopy Framination	X-ray film viewer	1140×90×540	1 1	we]]

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Item No.	Department	Equipment Name Size(WXDXH)	Qʻty	Туре
XIC -	1 Intensive Care Unit	Patient monitor 400×500	9	Mobile
XIC -	2	Ventifetor 700 dia.	1	Mobile
XIC ·	3	Ventilator 480×450	8	Mobile
XIC ·	4	Ventilator 630 dia.	1	Mobile
XIC .	5	Suction pump unit 480×240	5	Mobile
XIC .	6	Defibrillator 420×530	2	Mobile
XIC -	7	Pulse eximeter 230×270	1	Table top
XIC -	8	Weight scale for ill patient 560×1040	1	Mobile
XIC -	9	Mobile x-ray apparatus 570×1220	1	Mobile '
XIC ·	10	Endoscopy unit trolley 1050×560	4	Mobile
XIC ·	11	Endoscopy light source	2	Mobile
XIC -	12	Endoscopy monitor	2	Mobile
XIC +	13	Endoscopy suction unit	2	Mobile
XIC -	14	Broncoscope	2	Mobile
XIC ·	15	Gastroscope	2	Mohile
XIC -	16	Endoscopy cobinet 480×400	2	Install
XIC -	17	Endoscopy washer 650×660	1	Mobile
XIC -	18	Manual endoscopy washer 610X490	1	Mobile
XIC -	19	Endoscopy cart 740×450	2	Mobile
XIC -	20	Life scope 520×650	1	Mobile
XIC ·	21	Ultrasound scanner 370×560	1	Mobile
XIC -	22 .	X-ray film viewer 1140×90×540	i	wali
XIC -	23	ICU bed (Vietnam made) 770×2100		Mobile
XIC -	24	Endoscopy cert (Vietneun made) 740×450	2	Mobile
XIC -	25	Unbreakable power supply 400×500	i	Table top
XIC -	26	Blood gas analyzer 600×420	i	Table top
XIC ·	27	Spectrophotometer 620×490	í	Table top
XIC -	28	Drying oven 520×490	1	Table top
XIC -	29	Copy machine 720×620	1	Table top
YOT -	1 Operation Theore	Endoscopy system 1080×520	į	Mobile
XOT ·	2	Manual endoscopy washing cart 900×460	i	Mobile
XNP -	1 New Born/Premature Nursery	ECG (3channel) 500×350	l	Mobile
XNP -	2 .	Infant ventilator 560×620	I	Mobile
XNP -	3	Ultrasound scanner 600×420	i	Mobile

Ministry of Health Bach Mai Hospital Our Ref. ____ The Socialist Republic of Vietnam Independence-Freedom-Happiness

To Whom It May Concern.

BRIEF EXPLANATION ON THE "MASTER PLAN" OF BACH MAI HOSPITAL

1. Functions and Duties of Bach Mai hospital:

- Established in 1911, Bach Mai hospital is the biggest polyclinic hospital in the North of Vietnam. Bach Mai is now the final destination that receives patients from all the other municipal hospitals when they could not be given efficacious treatment from those hospitals.
- Not being well-known as a central hospital with highest creditably in giving medical consultation and treatment, Bach Mai is also the only environment providing special training to help educate students from Hanoi Medical University, improve medical expertise for doctors, nurses ... sent from other provinces. Beside, Bach Mai is running a Medical College to train nurses for Bach Mai itself and for other hospitals.
- Being a very good place for scientific researches, a big number of scientific subjects at national or ministerial lever have been carried out at Bach Mai hospital so far.
- Bach Mai hospital is included many key medical institutes, therefore, the leadership of the hospital in providing guidance of technical skills to other municipal hospitals and clinic centers is very important.
- The hospital is also assigned to carry out the function of international cooperation. Namely, to exchange information on medical expertise and hospital's management with many hospitals and institutes of many countries in the world.
- Due to the said important roles and functions of Bach Mai hospital, the Government of Vietnam has issued "Decision #666/TTg dated October 18th, 1995" in order to work out the basic strategy for the development of the hospital;

Quote:

"To upgrade and develop Bach Mai hospital as one of the top referral hospitals in Vietnam, the only place for medical students from Hanoi Medical University to come for practice. After the completion of this project, Bach Mai hospital will be the top referral polyclinic hospital among others in Northern area, with modern equipment, equivalent to that of other countries in the region. To meet the requirement of medical consultation and treatment for patients in the coming years as well as a long-term period.".

Unquote.

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2. Details of Development Plan

- Hospital's general scale intended: 1,320 beds
- The estimated investment capital for Development Plan: VND 508 billion (Background of the above is that our hospital is repeatedly requested by the Ministry to recruit more staff in the near future in order to develop the hospital in accordance with the Government's plan. Therefore, we strongly expect that the number of patients will be sharply increased. However, with the existing conditions of our hospital at this moment, we are very much afraid that there would be in serious shortage of space for patients let alone a big number of hospital staff including those to be newly recruited).

2.1 Hospital's Construction:

- a). Technical Block
- b). Inpatient & Service Ward
- c). Institute of Clinical Research in Tropical Medicine

2.1.1 Construction of Technical Block:

Technical block is expected to be 6 stories with details as follows:

- Central Laboratory included:
 - + Hematology
 - + Bio-Chemistry
 - + Microbiology
 - + Pathology Anatomy
- Imaging Diagnostic Center
 - + E.C.D
 - + E.E.G
 - + Ultrasound
 - + Pneumology Function Exploration
- Endoscopy Center
- Intensive Care Unit
- Operation Theater: about 8 operation theatres intended
- Hemodialisys Dept.: about 20 units intended
- Pharmacy Center
- Blood Bank
- Sterilizing Center
- Administration Section

2.1.2 Inpatient & Service Ward:

The inpatient & service ward is expected to be 9 stories consisting of 4 main departments with approx. 710 beds in total:

Internal Medicine Division

+ Pneumology Dept.	: 60 beds intended
+ Gastro-Enterology Dept.	: 60 beds
+ Nephro-Unology Dept.	: 60 beds ,,
+ Endocrinology Dept.	: 60 beds
+ Neurology Dept.	: 100 beds ,,
+ Reumatology Dept.	: 60 beds 🔒
+ Allergo-Immunology Dept.	: 30 beds ,,
+ Hematology Dept.	: 60 beds

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Surgery Division : 100 beds ...
 Pediatric Division : 60 beds ...
 Obstetrics & Gynecology Division : 60 beds ...

2.1.3 Institute of Clinical Research in Tropical Medicine.

Construction for this institute is intended 5-story height, including inpatient ward and teaching area

Thus, upon the completion of implementation of the said "Master Plan", Bach Mai would have been a completed polyclinic hospital with a good lay-out of 4 sections such as:

- 1). The main block which is consisting of Internal Medicine Division, Surgery Division, Obstetric & Gynecology Division and Pediatric Division.
- 2). Institutes located in Bach Mai hospital:
 - Gerontology Institute
 - Venerelogy Institute
 - Mental Health Neurology Institute
 - Cardiology Institute
 - Clinical Research in Tropical Medicine Institute
 - Hematology & Blood Transfusion Institute
- 3). Other departments in Bach Mai hospital:
 - Rehabilitation Dept.
 - Traditional Medicine Dept.
 - Ododto-Stomadology Dept.
 - Otorhinolaryngology Dept.
 - Ophthalmology Dept.
- 4). Practice and Training Area:
 - Secondary Medical College
 - Practice Center for Medical Student
 - Training Center for Doctors from other hospitals

[END]

July.

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